



HONEYWELL

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May 18, 2021

Mr. Tracy A. Smith
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7013

RE: Wastebed B/Harbor Brook Site – Railroad Area and Area of Study #2 Revised Construction Completion Report
Order on Consent: Index No. R7-20181025-55 Site No. 734075

Dear Mr. Smith:

Enclosed is the *Railroad Area and Area of Study #2 Revised Construction Completion Report* prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of Honeywell. This report has been revised based on the March 9, 2021 comments from the New York State Department of Environmental Conservation; the responses to these comments are also provided with this cover letter and revised report. In an ongoing effort to be eco-friendly, we are sending this document electronically only unless we hear otherwise from you. Please contact Shane Blauvelt or me at 315-552-9700 or at our respective emails (Shane.Blauvelt@parsons.com or Stephen.Miller@honeywell.com) if you have any questions or comments.

Sincerely,

Stephen J. Miller, P.E.

Syracuse Remediation Program Manager

Attachment

cc: Donald Hesler – NYSDEC Albany
Rebecca Quail – NYSDEC Albany
Robert Nunes – USEPA
Joshua Cook – NYSDEC Region 7
Mark Sergott – NYSDOH
Scarlett McLaughlin – NYSDOH
Christine Vooris – NYSDOH
Margaret Sheen, Esq. – NYSDEC Region 7
Joseph Heath
Jeanne Shenandoah – Onondaga Nation
Hazel Powless – HETF
Alma Lowry
Kerry Dziubek, Esq. – Arnold & Porter

John Mojka – Honeywell
Shane Blauvelt – Honeywell
Christopher Calkins – Ramboll
Tom Conklin – Ramboll

On March 9, 2021 the New York State Department of Environmental Conservation (NYSDEC) sent comments regarding the "Wasted B/Harbor Brook Railroad Area and Area of Study #2 Construction Completion Report (CCR) dated January 2021. Below are the responses to those comments.

Comment 1: General. Compliance with RCRA Subtitle D requirements will need to be discussed in the CCR.

Response: The CCR will be revised per the comment.

Comment 2: Table 1. In the table it states clearing and grubbing was performed from 10/1/19 to 10/3/19. Due to potential Indiana Bat habitat, tree clearing should not have been performed between March 31 and October 31. Was tree cleaning performed within this timeframe? Please clarify. In addition, under the Week of 10/20/2019, revise the event details to state "Installed bridge to access AOS#2/eastern side of OW-4 and initiated clearing/grubbing". Also, any work performed in 2020 (e.g., additional seeding, mulch placement, silt fence removal) should be included in this table.

Response: Table 1 will be revised per the comment. Section 3.3.3 of the CCR has been revised to clarify no tree removal was performed in October 2019.

Comment 3: Figure 2. This figure should be revised to more clearly indicate the covers that were placed in the Railroad Area. Based on the legend, Figure 2 is intended to provide an overview of the work done on the site. However, the area receiving a 1-foot soil cover area is only partially enclosed with the indicated orange line, so it is unclear whether the area to be covered is north or south of this line. The vegetative enhancement area is meant to be indicated by a dotted black line, but this line frequently overlaps with or disappears under other lines (e.g., the edges of the previously remediated areas, silt fences, topographic lines). This makes the limits of the vegetative enhancement area difficult to determine. The figure should be revised using the boundaries and hatching similar to those used in drawings C-102 to C-104. Please revise the figure accordingly.

Response: Figure 2 will be revised to show the areas borders and vegetation enhancement areas more clearly.

Comment 4: Drawing G-001. The statements "DUE TO THE POTENTIAL PRESENCE OF THE INDIANA BAT, TREE CLEARING WILL ONLY OCCUR FROM MARCH 31 TO OCTOBER 31 UNLESS OTHERWISE DIRECTED BY THE ENGINEER" and "TREE REMOVAL SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO START UP TO MINIMIZE POTENTIAL IMPACTS TO INDIANA BATS. TREES MAY NOT BE REMOVED DURING INDIANA BAT SEASON (MARCH 31 TO OCTOBER 31) WITHOUT PRIOR APPROVAL FROM THE ENGINEER" are incorrect as noted in my 10/31/19 letter approving the Railroad Area Remedial Action Construction Work Plan. This should be clarified in the text of the CCR.

Response: The CCR will be revised per the comment; the note on Drawing G-001 was also revised.

Comment 5: Appendix 4. This appendix indicates samples were collected for the LCP site. Please clarify how these samples relate to the work summarized in this CCR.

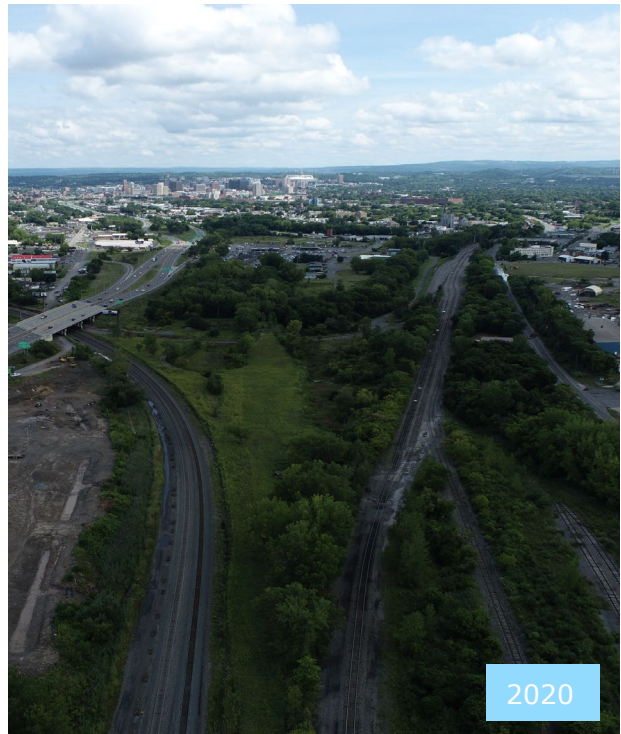
Response: The material characterization samples for the Honeywell portfolio, including the Railroad Area, were initially sampled under a LCP Site project, and samples received the "LCP" moniker for management within the Honeywell EQuIS database. Subsequent analytical data associated with imported fill have been uploaded to the LCP Site for efficiency and to avoid misplacing pertinent analytical data for the imported fill used on the Honeywell Syracuse Portfolio. A note will be added to the Appendix 4 cover sheet to explain that the imported fill data for the Honeywell Syracuse Portfolio is maintained within LCP Site portion of the EQuIS database.

Intended for
Honeywell

Document type
Construction Completion Report

Date
May 2021

RAILROAD AREA AND AREA OF STUDY #2 REVISED CONSTRUCTION COMPLETION REPORT



RAILROAD AREA AND AREA OF STUDY #2 REVISED CONSTRUCTION COMPLETION REPORT

Project name **Wastebed B/Harbor Brook Site**
Project no. **1163/70350**
Recipient **Honeywell**
Document type **Construction Completion Report**
Date **May 18, 2021**
Prepared by **Chuck Sharpe**
Checked by **Tom Conklin, Ed Prossner**
Approved by **Brian White**
Description **Revised Construction Completion Report**

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CERTIFICATIONS

I, Brian White, certify that I am currently a New York State registered professional engineer. I had primary direct responsibility for the implementation of the remedial program activities, and I certify that the Remedial Design was implemented and that construction activities were completed in substantial conformance with the Department of Environmental Remediation-approved Remedial Design Report and subsequent modifications.

072730
NYS Professional Engineer #

05/18/2021
Date

Brian E White
Signature

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LIST OF ACRONYMS

Acronym	Definition
AQM	Air Quality Monitoring
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CPP	Citizen Participation Plan
CQAPP	Construction Quality Assurance Project Plan
HASP	Health and Safety Plan
IRM	Interim Remedial Measure
MMP	Materials Management Plan
NYSDEC	New York State Department of Environmental Conservation
OU	Odor Unit
OW	Open Water
PPM	Parts Per Million
RCRA	Resource Conservation and Recovery Act
SVOC	Semivolatile Organic Compound
SWPPP	Storm Water Pollution Prevention Plan
TCLP	Toxicity Characteristic Leaching Procedure
TVOC	Total Volatile Organic Compound
µg/m ³	Micrograms Per Cubic Meters
VOC	Volatile Organic Compound
WMA	Waste Management Area

1. INTRODUCTION

This Construction Completion Report (CCR) documents the 2019 and 2020 construction activities on the Railroad Area and Area of Study (AOS) #2 portion of the Wastebed B/Harbor Brook Site (Site) in Geddes and Syracuse, New York. The *Upper Harbor Brook IRM Construction Completion Report* (OBG 2014) presented the 2012 construction activities for the Upper Harbor Brook portion of the Wastebed B/Harbor Brook Interim Remedial Measure (IRM), which included the Railroad Area and AOS #2. This report has been prepared in accordance with the requirements of the DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2010) by Ramboll (fka OBG) on behalf of Honeywell International Inc. (Honeywell).

This CCR provides a summary of the Railroad Area and AOS#2 Remedial Action part of the final remedy and closure to the Wastebed B/Harbor Brook Site pursuant to the Record of Decision (ROD) dated September 28, 2018 (NYSDEC and USEPA 2018) and to the Administrative Consent Order (ACO) (R7-20181025-55) entered into by Honeywell, and the New York State Department of Environmental Conservation (NYSDEC) dated November 5, 2018. In addition, it has been developed in general accordance with NYSDEC's Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation (DER-10) (NYSDEC 2010). For the purposes of this document, the Railroad Area and AOS#2 Remedial Action project will be referred to as "the Railroad Area RA".

1.1 Site Location, Description and History

The Railroad Area and AOS #2 are located near the southwestern shore of Onondaga Lake in Geddes and Syracuse, New York (**Figure 1**). The Railroad Area, which is owned by CSX, is situated to the south of the Penn-Can Property and is bounded to the north, south and east by rail tracks. The area is approximately 1,400 ft wide (east to west) and 400 ft deep (north to south). A Site Plan is included as **Figure 2**. Subsequent to the RI investigation, the area ditches, associated wetlands and adjacent upland areas, and the length of Harbor Brook along the Railroad Area were remediated as part of the Upper Harbor Brook Interim Remedial Measure (IRM) under the Wastebed B/Harbor Brook IRM (**Figure 2**).

AOS #2 is situated east of Harbor Brook and south of I-690 between Harbor Brook and the western dike of Wastebeds D and E (**Figure 2**). Subsequent to the RI investigation, the Wastebed D/E ditch and the eastern bank of Harbor Brook were remediated as part of the Upper Harbor Brook IRM conducted as part of the Wastebed B/Harbor Brook IRM.

The Railroad Area and AOS#2 RA includes the following (**Figure 2**):

- An equipment/material staging area on AOS #2
- Clearing/grubbing areas on Railroad Area and AOS #2
- Installation of demarcation layer, brickyard shale, and vegetative cover (topsoil and seed) on the prepared subgrade on areas of Railroad Area
- Hydroseed and mulch cover placed on areas of Railroad Area and AOS #2
- A stabilized slope cover installed to inhibit washouts on areas of Railroad Area and AOS #2

Record drawings are provided in **Appendix 1**.

2. SITE REMEDY SUMMARY

This section includes a summary of the Railroad Area RA objectives, a description of the selected remedy, governing documents, and field modifications. **Table 1** provides a summary of the chronology of events from submitting the design documents through completion of construction.

2.1 Remedial Action Objectives

The goals of this project are to provide a cover that stabilizes the area, provides a cover that sheds run-off stormwater and minimizes erosion of site materials, minimizes potential site impacts to human health and the environment, and is consistent with the long-term community vision for this area including:

- Prevent, or reduce to the extent practicable, ingestion/direct contact with contaminated soil/fill material.
- Prevent, or reduce to the extent practicable, inhalation of or exposure to contaminants volatilizing from contaminated soil/fill material and unacceptable inhalation threat associated with soil vapor. If buildings are constructed at the Site, mitigate impacts to public health resulting from known, or potential, soil vapor intrusion into buildings at the Site.
- Prevent, or reduce to the extent practicable, potential unacceptable risks to human health associated with ingestion of shallow and intermediate groundwater with contaminant levels exceeding drinking water standards.
- Prevent, or reduce to the extent practicable, potential unacceptable risks to human health associated with contact with or inhalation of volatiles from contaminated shallow and intermediate groundwater.
- Prevent, or reduce to the extent practicable, the release of Site-related contaminants to groundwater, surface water and sediment that may cause unacceptable adverse effects on groundwater, surface water or sediment quality in Harbor Brook or Onondaga Lake.
- Prevent, or reduce to the extent practicable, adverse impacts to biota from ingestion/direct contact with contaminated soil/fill material causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

2.2 Description of Selected Remedy

To achieve the selected remedy objectives, the remedial design applicable for the Railroad Area included:

- A 1-ft enhanced cover system and/or vegetation enhancement.
- Institutional controls. Institutional controls in the form of environmental easements and/or restrictive covenants will be used to restrict the land use to commercial/industrial use, restrict groundwater use, and require that intrusive activities in areas where contamination remains are in accordance with a NYSDEC-approved Site Management Plan.
- Continued operation and maintenance (O&M) associated with the Upper Harbor Brook Interim Remedial Measure (IRM) implemented at the Railroad Area. Surface water monitoring in Harbor Brook and Site ditches will also continue under the Upper Harbor Brook IRM. Maintenance and monitoring for the IRMs will include monitoring to document that established criteria are met and to identify the need for corrective action(s), as warranted. Corrective actions for covers may consist of cover repair in areas of disturbance or reapplication of vegetation, as necessary.

Details of the selected remedy components to be installed are presented in the Record Drawings in **Appendix 1**.

2.3 Governing Documents

2.3.1 Contractor Governing Documents

OBG served as the Contractor for construction of this Lakeshore Area RA, developed plans (listed below) and submittals, and reviewed Subcontractor submittals for compliance with the design documents. Work was performed in general compliance with the following plans and subsequent NYSDEC-approved field modifications to the design.

- **Health and Safety Plan.** The Health and Safety Plan (HASP) described the approach and implementation of health and safety procedures (OBG, 2019a).
- **Construction Work Plan.** The NYSDEC-approved Railroad Area Remedial Action Revised Construction Work Plan (CWP), outlined means and methods of construction, project schedule, project organization, and project directory (Ramboll, 2019a). The NYSDEC approved this plan on November 7, 2019. This plan was field modified based upon direct discussion and approval from the NYSDEC.
- **Materials Management Plan.** The plan for imported material was developed within the NYSDEC-approved CWP. The CWP outlined the procedures for material testing and was approved by NYSDEC on November 7, 2019.
- **Storm Water Pollution Prevention Plan.** The Wastebed B Grading and Stormwater Management Stormwater Management Pollution Prevention Plan (SWPPP; OBG, 2015) was developed and approved by the NYSDEC in 2015 in support of the Wastebed B Grading and Stormwater Management – 2015 Activities project.

2.3.2 Other Governing Documents

- **Citizen Participation Plan.** The Citizen Participation Plan (CPP; OBG, 2002) was developed in accordance with NYSDEC's *Citizen Participation in New York's Hazardous Waste Site Remediation Program; A Guidebook*, dated June 1998. The CPP was developed to promote public understanding of departmental responsibilities, planning activities, and remedial activities. The CPP provided an opportunity for the public to submit information that may assist in development of a comprehensive remedial program that is protective of both public health and the environment and responsive to the public's concerns.

A CPP letter was provided to the NYSDEC on November 19, 2018 in response to the Order on Consent No. R7-20181025-55 (effective November 5, 2018; Honeywell, 2018). This letter outlined the CPP activities and was approved by the NYSDEC on December 20, 2018.

2.4 Summary of Field and Work Plan Modifications

During construction, one field modification to the design documents was developed and discussed with and approved by the NYSDEC during the weekly project meetings. The modification was that topsoil replaced the select fill (Brickyard Shale) in the geocell installed on the AOS #2 slope.

Based on discussions between Tracy Smith of the NYSDEC and Tom Conklin of Ramboll, the Wastebed B/Harbor Brook Cover Thickness Verification Preliminary Design Investigation (PDI) and Railroad Area Surface Soil Sampling PDI were performed to:

- Confirm the existing clean fill thickness on the northern portion of AOS #2
- Evaluate the surficial material present on the Railroad Area and AOS #2

The *Wastebed B/Harbor Brook Remedial Design/Remedial Action Cover Thickness Verification – Revised Preliminary Design Investigation Report* (Ramboll, 2020) presents the scope and findings from the thickness evaluation. The *Wastebed B/Harbor Brook Site –Revised Railroad Area Surface Soil Sampling PDI Report* (Ramboll, 2019b) presents the scope and findings from the surficial sampling evaluation.

3. REMEDIAL ACTION

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Construction Work Plan and subsequent NYSDEC-approved field modifications to the design listed in Section 2.4. The following sections represent the completed construction components of the IRM. Record Drawings (**Appendix 1**) were developed based on as-built information.

3.1 Subcontractors and Consultants

The following is a list of Subcontractors and Consultants that performed work during RA construction and a brief summary of their tasks.

- ALS Environmental and SGS Laboratories – Analytical testing of soil samples
- Ramboll – Engineer, Construction Manager, and Contractor
- Riccelli Enterprises, Inc. – Clean fill trucking
- Seedway – Seeding Supplier
- Thew Associates – Surveying (Site Boundaries, Grade Stakes Installation)
- Geocell – US Fabrics

3.2 Pre-Construction Meeting

A pre-construction meeting was conducted by Ramboll on September 30, 2019 to review key topics prior to initiating construction activities for the RA.

3.3 Site Preparation and Mobilization

3.3.1 Utility Marker Layout

Layouts of utilities are shown on the Record Drawings in **Appendix 1**. Ramboll coordinated the location of utilities in the field with Dig Safely New York, as appropriate.

3.3.2 Railroad Coordination

Prior to initiating construction activities, Ramboll coordinated with CSX Transportation and New York, Susquehanna & Western Railway (Susquehanna) regarding the work being performed in the area of the railroad tracks (**Figure 2**). These discussions included obtaining approval for accessing parts of the areas by crossing the Susquehanna tracks and installing a construction fence near the CSX tracks.

3.3.3 Clearing, Grubbing, Rough Grading, and Placement of Grade Stakes

Prior to the placement of imported backfill, rough grading (including brush removal, chipping, and placement on-site) and tree removal was completed at the Site. Tree removal was performed onsite at AOS #2 during March 2019 to allow for the installation of slope stabilization measures and cover and to occur outside the Indiana Bat season. The remainder of the clearing and grubbing (shrubs and grasses) was performed on-site in October 2019.

A survey was completed at 50-ft grid increments to install grade stakes to allow the embankment material (Brickyard Shale) and topsoil to be placed to appropriate depths.

3.4 General Site Controls

Construction was performed in accordance with the NYSDEC-approved CWP developed by Ramboll and subsequent NYSDEC-approved field modifications to the design. Additional plans for general site controls are summarized below.

3.4.1 Erosion and Sedimentation Control

Methods used to manage water in the areas of work were performed in accordance with the Water Management Plan. The areas around perimeters of work areas were managed and inspections documented according to the NYSDEC-approved CWP and SWPPP.

3.5 Site Restoration

Following construction activities, areas disturbed during construction were restored as described in the Technical Specifications and Record Drawings and **Figure 2** or as described in this section. The Site is considered part of a waste management area (WMA; OBG, 2018), and the cover and/or the underlying soil material was required to meet the Resource Conservation and Recovery Act (RCRA) Subtitle D permeability standard (NYSDEC and USEPA, 2018).

- Areas requiring 1-ft (minimum) cover to meet RCRA Subtitle D included the northern area along the CSX tracks, washout areas, and sloped area on AOS #2 (**Appendix 1**, Drawing C-102).
- The following areas did not require cover to meet RCRA Subtitle D based on anticipated site uses, the surface soil not exceeding the Part 375 Commercial SCOs, and existing covers and/or soil fill material meeting the Subtitle D permeability standard (NYSDEC and USEPA, 2018).
 - Those receiving vegetative enhancement only (*i.e.*, railroad bed area between the washout areas and Harbor Brook to the east)
 - Areas on the Site's southern portion adjacent to previously remediated areas

To meet the Subtitle D permeability standard of 1×10^{-5} cm/sec, the placement of Brickyard Shale and/or underlying Solvay waste provided the required vertical hydraulic conductivity. Brickyard Shale was evaluated for the Geddes Brook IRM and yielded a hydraulic conductivity range of 3.00×10^{-7} to 1.91×10^{-5} cm/sec, and Solvay waste has a hydraulic conductivity range of 5.67×10^{-6} to 2.78×10^{-5} cm/sec (OBG, 2019b). The areas described above are presented in the record drawings (**Appendix A**).

3.5.1 Geocell and Embankment Material Placement

Approximately 300 sq ft of 6-inch tall EnviroGrid® EGA20 geocell filled with topsoil was placed on the AOS #2 slope and secured with J-hooks (Record Drawing Sheet C-502 of **Appendix 1**). This geocell was placed on top of 4 inches of topsoil and installed per manufacturer specifications (**Appendix 2**). The subgrade embankment material depth was measured using the grade stakes.

3.5.2 Embankment Material Placement

A minimum of 9 inches of Brickyard Shale was placed over the rough graded area of the Railroad Area Vegetative Soil Cover near the CSX tracks (**Appendix 1**) above a demarcation layer of 160N Mirafi®. The subgrade embankment material depth was measured using the grade stakes.

3.5.3 Topsoil and Seeding

A minimum of 3 inches of topsoil was placed over embankment material (Brickyard Shale) and 2 inches of topsoil over the geocell using the grade stakes to measure depth. The topsoil was seeded to facilitate vegetation grown with Lawn Area and Successional Old Field seed mixes as shown in Technical Specification 31 22 19 Topsoil Seeding and Planting. The Manufacturing Quality Control and Construction Quality Control information for seed is provided in **Appendix 3**.

3.5.4 Mulch and Seeding

The Railroad Area and AOS #2 vegetative enhancement areas were hydro-seeded and covered with mulch. This included the two washout areas on the Railroad Area after an erosion control blanket was installed.

3.5.5 Restoration of Surfaces

Surfaces and other features disturbed or damaged during the performance of the work were restored to pre-construction condition. Where required, topsoil and seeding were placed to minimize the potential for erosion and maintenance of the restored area.

3.6 Imported Backfill

Prior to placement of select fill and topsoil on-site, Ramboll reviewed the names and locations of the sources of the material, affidavits, and test reports of the material were reviewed. As required, samples were collected, tested, and evaluated for compliance with the CQAPP and technical specifications included in the CWP appendices (Ramboll, 2019a). To evaluate compliance, certain samples were submitted for particle size distribution, laboratory compaction characteristics using standard or modified Proctor effort as called out in the design drawings, and/or analyzed for the following:

- Part 375 Volatile Organic Compounds (VOCs) by Method 8260C
- Part 375 Semivolatile Organic Compounds (SVOCs) by Method 8270D
- Part 375 Pesticides by Method 8081B
- Part 375 Polychlorinated Biphenyls (PCBs) by Method 8082A
- Part 375 Herbicides by Method 8151A
- Part 375 Mercury by Method 7471B
- Part 375 Metals by Method 6010C
- Part 375 Trivalent and Hexavalent Chromium by Method 7199
- Part 375 Total Cyanide by Method 9012B
- Total Organic Carbon (TOC) by Lloyd Kahn
- pH by Method 9045C
- Percent Moisture by Method D2216
- Atterberg Limits by ASTM D4318
- pH by ASTM D4972/ASTM D2974
- Organic Content by ASTM D5286/ASTM D2974

Additional fill was brought on-site subsequent to NYSDEC's July 29, 2019 construction work plan comments and was also sampled for emerging contaminants per the methods below.

- 1,4-Dioxane by Method 8270 SIM
- Total and Synthetic Precipitation Leaching Procedure (SPLP) for Per and Polyfluoroalkyl Substances (PFAS) by Modified Method 537 and Method 1312/Modified Method 537

Analytical results for select fill and topsoil materials are provided in **Appendix 4**. A summary table of imported backfill sources with estimated quantities is shown in **Table 2**. Based on a review of the analytical results, the materials met the 6CRR-NY 375-6.8 Table 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (SCOs) or agreement to allow the material on-site was provided by the NYSDEC for materials that had results higher than the Unrestricted SCOs.

The import fill was also compared to the PFAS guidance values in the June 2019 *Sampling for 1,4-Dioxane and Per- and Polyfluoroalkyl Substances (PFAS) Under DEC's Part 375 Remedial Programs* for materials sampled after the guidance document's release. The Oneida topsoil did have some exceedances of the PFAS guidance values (>1.0 mg/kg for Perfluorooctanesulfonic acid); however, the required Synthetic Precipitation Leaching Procedure was performed on these samples and reanalyzed, and these results were determined by the NYSDEC to be acceptable for on-site use.

3.7 Community Air Monitoring Program

CAMP monitoring was not performed during the 2019 Railroad Area RA since no intrusive work was performed.

3.8 Reporting and Documentation

The photo log showing construction progress throughout the RA is provided in **Appendix 5**.

4. QUALITY ASSURANCE/QUALITY CONTROL

Materials used during the remedial action met the Construction Quality Assurance/Construction Quality Control requirements of the NYSDEC-approved CQAPP. Ramboll reviewed and approved the materials brought on-site in conjunction with the NYSDEC, as well as verifying the fieldwork was constructed/installed as designed. The following is a summary of materials testing that are attached in the referenced Appendices:

- Geocell (**Appendix 2**)
- Seed (**Appendix 3**)
- Imported Backfill (**Appendix 4**)

REFERENCES

Blasland & Bouck. 1989. Hydrogeologic Assessment of the Allied Waste Beds in the Syracuse Area, Solvay, New York. Blasland, Bouck & Lee, Syracuse, New York.

Honeywell. 2018. Letter from John McAuliffe of Honeywell to Tracy Smith of NYSDEC providing the Citizen Participation Plan as required by the Order on Consent No. R7-20181025-55. November 19, 2018.

NYSDEC. 2010. DER-10/Technical Guidance for Site Investigation and Remediation. May 2010.

NYSDEC and USEPA. 2018. *Record of Decision. Operable Unit 1 of the Wastebed B/Harbor Brook Subsite of the Onondaga Lake Superfund Site. Town of Geddes, Onondaga County, New York.* September 2018.

OBG. 2019a. *Wastebed B Health & Safety Plan. Syracuse, New York.* O'Brien & Gere Engineers, Inc., Syracuse, New York. September 2019.

OBG. 2019b. *Wastebed B/Harbor Brook Remedial Design/Remedial Action Revised Work Plan.* O'Brien & Gere Engineers, Inc., Syracuse, New York. May 2019.

OBG. 2018. *Wastebed B/Harbor Brook Site Feasibility Study Report. Revised Final Report.* O'Brien & Gere Engineers, Inc., Syracuse, New York. June 2018.

OBG. 2015. *Wastebed B Grading and Stormwater Management Stormwater Management Pollution Prevention Plan.* O'Brien & Gere Engineers, Inc., Syracuse, New York. October 2015.

OBG. 2014. *Upper Harbor Brook IRM Construction Completion Report.* O'Brien & Gere Engineers, Inc., Syracuse, New York. September 2014.

OBG. 2002. *Citizen Participation Plan. Ballfield Site. Geddes, New York.* O'Brien & Gere Engineers, Inc., East Syracuse, New York. August 2002.

Ramboll. 2020. *Wastebed B/Harbor Brook Remedial Design/Remedial Action Cover Thickness Verification – Revised Preliminary Design Investigation Report.* Ramboll, Syracuse, New York. March 2020.

Ramboll. 2019a. *Railroad Area Remedial Action Revised Construction Work Plan.* Ramboll, Syracuse, New York. November 2019.

Ramboll. 2019b. *Wastebed B/Harbor Brook Site – Revised Railroad Area Surface Soil Sampling PDI Report.* Ramboll, Syracuse, New York. August 2019.

TABLES

Table 1
Honeywell
Railroad Area and Area of Study #2 Construction Completion Report
Chronology of Events

Date	Event
March 2019	Tree removal prior to March 31st as part of Wastebed B/Harbor Brook Site-wide effort
9/30/2019	Pre-construction meeting
10/1-3/2019	Initiated clearing/grubbing of vegetative enhancement areas Established equipment/material staging area
Week of 10/6/2019	Initiated topsoil placement Initiated site survey
Week of 10/13/2019	Initiated grading of site to final elevations Installed safety fencing along CSX tracks Initiated topsoil and Brickyard Shale placement
Week of 10/20/2019	Installed bridge to access eastern side of OW-4 and initiated clearing/grubbing Initiated seeding and mulching
Week of 10/27/2019	Installed geocell on OW-4 slope
Week of 11/03/2019	Installed topsoil, seeding, and mulch on OW-4 slope Demobilized from site
October 2020	Additional mulch and seed added to slopes (former bridge area between washout areas and Harbor Brook)

Table 2
Honeywell
Railroad Area and Area of Study #2 Construction Completion Report
Select Fill Quantities

Fill Type	Description	Material Source	Location	Total (tons)	Conversion (ton/yd ³)	Total (yd ³)
Topsoil	Topsoil	Oneida Greenhouse (Oneida, NY)	Veg. Soil Cover/Soil Transition/Veg. Enhancement Area; Slope Cover/Stablization	3,981	1.6	2,488
Type E	Brickyard Shale	Brickyard Quarry (Warners, NY)	Veg. Soil Cover/Soil Transition/Veg. Enhancement Area	3,501	1.6	2,188
Mulch	Mulch	OCCRA Compost Site (Jamesville, NY)	Veg. Enhancement Area	776	1.6	485
Stone	River Rock	Hanson Quarry (Jamesville, NY)	Slope Cover/Stabilization	42	1.0	42
Type F	Run-of-Crusher Stone	Hanson Quarry (Jamesville, NY)	Equipment/Staging Area	529	1.6	331
Stone	#2 Stone	Hanson Quarry (Jamesville, NY)	Stabilized Construction Entrance	37	1.0	37

NOTES: Values are approximate. Totals were recorded as tons. For the purpose of this table, totals were converted to cubic yards using a conversion factor of 1.0 or 1.6 tons per cubic yard.

FIGURES



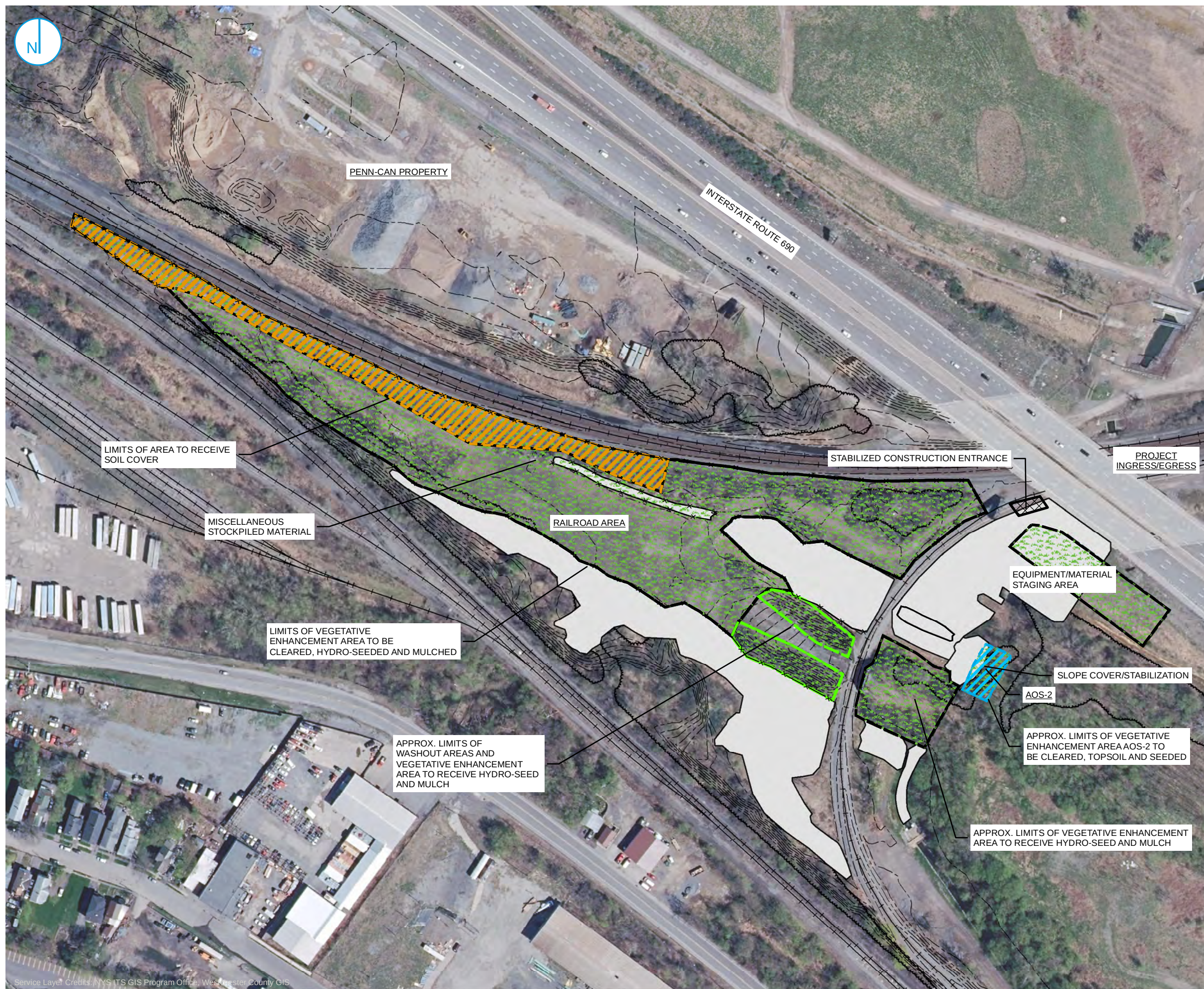
SITE LOCATION

FIGURE 01

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

HONEYWELL INTERNATIONAL INC.
RAILROAD AREA
CONSTRUCTION COMPLETION REPORT
GEDDES AND SYRACUSE, NY

RAMBOLL



Service Layer Credits: NYS ITS GIS Program Office, Westchester County GIS

- EXISTING ELEVATION CONTOURS
- + RAILROAD
- TREE LINE
- ▭ AREAS PREVIOUSLY REMEDIATED
- ▭ PROPERTY BOUNDARY
- ▨ LIMITS OF AREA TO RECEIVE SOIL COVER (APPROX LIMITS)
- ▨ ADDITIONAL AREA OF STUDY BOUNDARY TO RECEIVE SLOPE COVER/STABILIZATION
- ▨ AREA WITH WASHOUTS TO RECEIVE VEGETATIVE ENHANCEMENT
- ▨ AREA TO RECEIVE VEGETATIVE ENHANCEMENT
- ▨ VEGETATION ENHANCEMENT
- ×— SILT FENCE



SITE PLAN

Honeywell International Inc.
Railroad Area
Construction Completion Report
Geddes and Syracuse, NY

FIGURE 02

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY



APPENDICES

APPENDIX 1

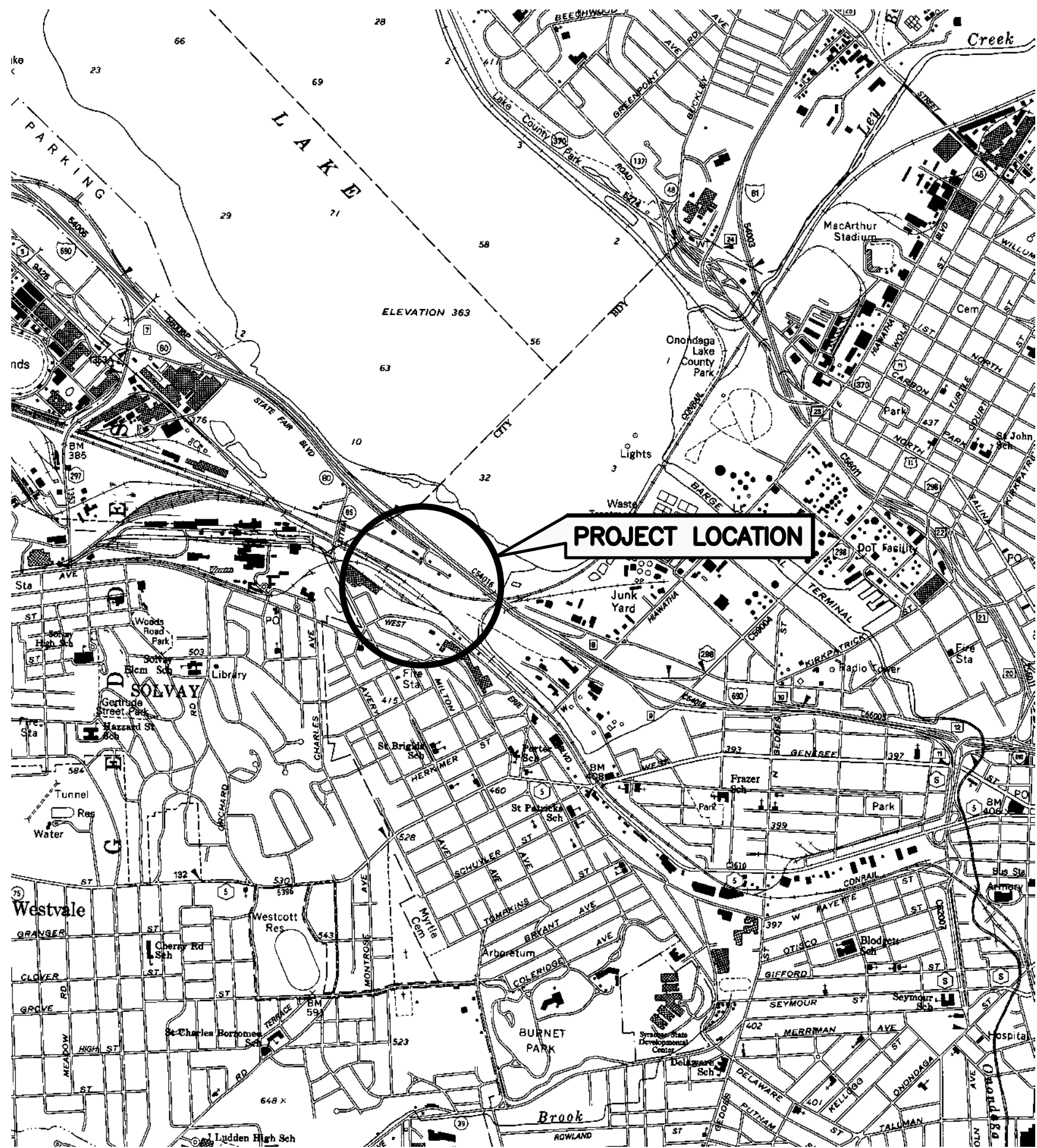
RECORD DRAWINGS



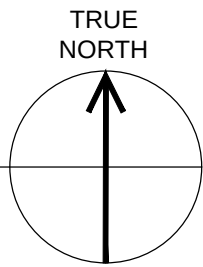
Record Drawings

RAILROAD AREA GEDDES, NEW YORK

REMEDIAL DESIGN



PROJECT LOCATION MAP
NOT TO SCALE



HONEYWELL INTERNATIONAL, INC.
SYRACUSE, NY

JANUARY 2021



O'BRIEN & GERE ENGINEERS, INC.

INDEX TO DRAWINGS

TITLE SHEET	
G-001	GENERAL NOTES, LEGEND & ABBREVIATIONS
C-101	EXISTING SITE PLAN
C-102	SITE PREPARATION PLAN
C-103	PROPOSED GRADING PLAN
C-104	RESTORATION PLANTING LIMITS
C-501	MISCELLANEOUS DETAILS
C-502	MISCELLANEOUS DETAILS



IT IS A VIOLATION OF LAW FOR ANY
PERSON UNLESS ACTING UNDER THE
DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER TO ALTER THIS DOCUMENT.

RECORD DRAWINGS

To the best of our knowledge,
information and belief, these record
drawings substantially represent the
project as constructed.

O'BRIEN & GERE ENGINEERS, INC.

By: _____

GENERAL NOTES - ALL DRAWINGS:

1.

EXACT DIMENSIONS AND LOCATIONS OF ALL STRUCTURES AND UTILITIES ARE CONSIDERED APPROXIMATE ONLY AND SHALL BE VERIFIED AS REQUIRED IN THE FIELD.
2.

OTHER UNDER AND ABOVE GROUND UTILITIES MAY EXIST, THE LOCATIONS, DEPTHS AND EXTENT OF WHICH ARE UNKNOWN. THE LOCATION AND ELEVATION OF ALL UTILITIES WITHIN THE LIMITS OF WORK WILL BE DETERMINED IN THE FIELD PRIOR TO CONSTRUCTION.
3.

CONTACT "DIG SAFELY NY" WITHIN 72 HOURS PRIOR TO THE COMMENCEMENT OF THE WORK. VERIFY THE LOCATION OF ALL UTILITIES AND IF NECESSARY NOTIFY THE AFFECTED UTILITY DEPARTMENTS ONE WEEK PRIOR TO DIGGING IN ANY PORTION OF THE SITE. DIG SAFELY NEW YORK PHONE NUMBER: 1-800-962-7962. WEBSITE: WWW.DIGSAFELYNEWYORK.COM
4.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
5.

THE APPROPRIATE UTILITY COMPANIES WILL BE COORDINATED WITH FOR THE TEMPORARY DE-ENERGIZING, OR INTERRUPTION OF SERVICE, REMOVAL, RELOCATION, REPLACEMENT OF ANY UTILITY POLES, GUY WIRES, UNDERGROUND UTILITIES AND/OR OVERHEAD WIRES WITHIN THE LIMITS OF WORK, OR THAT COULD OTHERWISE INTERFERE WITH THE REMEDIAL ACTIONS.
6.

BE AWARE THAT PORTIONS OF THE WORK MAY BE PERFORMED PROXIMATE TO OVERHEAD POWER LINES. MAINTAIN APPROPRIATE MINIMUM REQUIRED CLEARANCE FROM OVERHEAD ELECTRICAL LINES AND UTILITY POLES. COORDINATE WITH THE UTILITY TO HAVE OVERHEAD ELECTRICAL LINES SHIELDED/PROTECTED AND FLAGGED (AS APPROPRIATE) PRIOR TO THE WORK. GROUND EQUIPMENT (AS NECESSARY) AND PERFORM ALL WORK EFFORTS IN ACCORDANCE WITH THE UTILITY'S PROTOCOLS FOR WORK PERFORMED PROXIMATE TO OVERHEAD ELECTRICAL HAZARDS.
7.

FURNISH AND PLACE PROPER GUARDS FOR PREVENTION OF ACCIDENTS, PROVIDE ALL TRENCH SHORING, SCAFFOLDING, SHIELDING, DUST/FUME PROTECTION, MECHANICAL/ELECTRICAL PROTECTION, SPECIAL GROUNDING, SAFETY RAILINGS, BARRIERS, OR OTHER SAFETY FEATURES REQUIRED.
8.

COORDINATE ANY NECESSARY TRAFFIC CONTROLS AND OBTAIN ANY NECESSARY HIGHWAY WORK PERMITS THAT MAY BE REQUIRED TO PERFORM THE WORK.
9.

ESTABLISH AND MAINTAIN SURVEY CONTROL DURING THE PERFORMANCE OF WORK AND VERIFY EXISTING GRADES.
10.

PROVIDE BYPASS OF FLOW FROM EXISTING DRAINAGE CHANNELS AT ALL TIMES. PROPER EROSION CONTROL TECHNIQUES SHALL BE IMPLEMENTED AS REQUIRED.
11.

RESTORE TO PRE-CONSTRUCTION CONDITIONS OR BETTER ALL SUPPORT AREAS THAT ARE IMPACTED BY REMEDIAL ACTIVITIES, INCLUDING BUT NOT LIMITED TO, EQUIPMENT AND MATERIAL STORAGE AREAS, MATERIAL LOADING AND STAGING AREAS, PARKING AREAS, AND LOCATIONS OF OFFICE TRAILERS, UNLESS OTHERWISE NOTED.
12.

ALL SURFACES DAMAGED OR DESTROYED AS A RESULT OF WORK PERFORMED SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS OR BETTER IN A TIMELY MANNER AND PRIOR TO DEMOBILIZATION.
13.

THE FOLLOWING DUST AND ODOR CONTROL MEASURES MAY BE USED, DEPENDING UPON SPECIFIC CIRCUMSTANCES, FIELD OBSERVATIONS, AND AIR MONITORING RESULTS: WATER SPRAY, POLYETHYLENE SHEETING (FOR COVERING MATERIAL STOCKPILES, ETC.)
14.

CONTRACTOR SHALL RESTORE DISTURBED AREAS IN ACCORDANCE WITH TECHNICAL SPECIFICATION 31 22 19 TOPSOIL SEEDING AND PLANTING AND THE RESTORATION PLANTING LIMITS PLANS.
15.

CLEAN FILL BROUGHT ONTO THE SITE SHALL MEET THE DER-10 GUIDANCE AND NYS PART 375 REQUIREMENTS (LOWER OF COMMERCIAL OR PROTECTION OF GROUNDWATER SCOS), OR AS APPROVED BY NYSDEC.
16.

WORK SHALL BE PERFORMED IN SUBSTANTIVE COMPLIANCE WITH NYSDEC SPDES GP-0-15-002, SECTION 401 AND 404 OF THE CLEAN WATER ACT AND PURSUANT TO THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SUCH THAT PROJECT ACTIVITIES DO NOT RESULT IN SIGNIFICANT IMPACTS TO WATER QUALITY.
17.

COVER SHALL BE PLACED TO MEET THE REQUIREMENTS OF RCRA SUBTITLE D, IF REQUIRED, AND IN ACCORDANCE WITH THE CONSTRUCTION WORK PLAN AND DESIGN. COMPLIANCE WITH RCRA SUBTITLE D REQUIREMENTS WILL BE DISCUSSED IN THE CONSTRUCTION COMPLETION REPORT.

TOPOGRAPHIC SURVEY AND MAPPING NOTES:

1.

TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THE CONTRACT DRAWINGS IS ADOPTED FROM "TOPOGRAPHIC SURVEY FOR A PORTION OF HONEYWELL WASTEBED - B - PENN CAN AREA" PROVIDED BY C.T. MALE ASSOCIATES 50 CENTURY HILL DRIVE, SYRACUSE NY. FIELD WORK PERFORMED ON MAY 10-15, 2018..
2.

NORTH ORIENTATION IS BASED ON GRID NORTH FROM RTK GPS OBSERVATIONS. VERTICAL DATUM IS BASED ON NAVD 1988 DATUM FROM RTK GPS OBSERVATIONS.
3.

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OR UP TO DATE TITLE REPORT AND IS THEREFORE SUBJECT TO ANY EASEMENTS, RESTRICTIONS, COVENANTS OR ANY STATEMENT OF FACTS THAT SUCH DOCUMENTS MAY DISCLOSE.
4.

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM DATA OBTAINED BY FIELD SURVEY, PREVIOUS MAPS AND RECORDS, (AND PAROLE TESTIMONY). THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER UNDERGROUND UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN TO THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION.

CLEARING AND GRUBBING NOTES:

1.

TREE REMOVAL SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO START UP TO MINIMIZE POTENTIAL IMPACTS TO INDIANA BATS. TREES MAY NOT BE REMOVED DURING INDIANA BAT SEASON (MARCH 31 TO OCTOBER 31) WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
2.

ALL CLEARING AND GRUBBING SHALL BE PERFORMED AS REQUIRED IN ACCORDANCE WITH SPECIFICATION SECTION 31 11 00 "CLEARING AND GRUBBING" PRIOR TO ANY EXCAVATION ACTIVITIES TAKING PLACE IN ANY GIVEN AREA.
3.

ALL TREES, UNDERBRUSH, LOGS, STUMPS OR GROWING MATTER ABOVE THE SURFACE OF THE GROUND SHALL BE REMOVED, ONLY TO THE EXTENT NECESSARY TO CONDUCT PROPOSED REMEDIAL ACTIVITIES, IN ACCORDANCE WITH SPECIFICATION SECTION 31 11 00 "CLEARING AND GRUBBING".

VEGETATION MANAGEMENT AND RESTORATION NOTES:

1.

SEE TOPSOIL, SEEDING AND PLANTING SPECIFICATIONS FOR PLANTING AND SEEDING INFORMATION.
2.

AVOID IMPACTS TO THOSE TREES TO REMAIN AS IDENTIFIED ON THE RESTORATION PLANTING LIMITS INCLUDING: COMPACTION OF SOIL WITHIN THE DRIP LINE OF EACH TREE; BREAKING OF LIMBS; DAMAGE TO BARK. VEHICULAR MOVEMENTS AND EQUIPMENT OPERATION WITHIN THE DRIP LINE SHALL BE MINIMIZED.
3.

PRIOR TO PLACEMENT OF FILL IN OTHER AREAS, FILL SHALL BE PLACED AS SPECIFIED AROUND THOSE TREES TO REMAIN.
4.

TREE REMOVAL SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO START UP TO MINIMIZE POTENTIAL IMPACTS TO INDIANA BATS. TREES MAY NOT BE REMOVED DURING INDIANA BAT SEASON (MARCH 31 TO OCTOBER 31) WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
5.

CUT AND PRUNE EXISTING VEGETATION AS NEEDED UTILIZING APPROPRIATE PRUNING METHODS.

ABBREVIATIONS

APPROX.	APPROXIMATE
BLVD	BOULEVARD
BOL	BOLLARD
BOT.	BOTTOM
CIPP	CURED-IN-PLACE PIPE
CB	CATCH BASIN
CLF	CHAIN LINK FENCE
CONC.	CONCRETE
CSP	CORRUGATED STEEL PIPE
DIA.	DIAMETER
DMH	DRAINAGE MANHOLE
ELEV.	ELEVATION
EMH	ELECTRICAL MANHOLE
EXIST.	EXISTING
FRP	FIBERGLASS REINFORCED PLASTIC
FFE	FINISHED FLOOR ELEVATION
GAL	GALLON
GLM	GAS LINE MARKER
GV	GATE VALVE
GW	GROUND WATER
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HORIZ.	HORIZONTAL
HYD	HYDRANT
INC.	INCORPORATED
INV.	INVERT
IRM	INTERIM REMEDIAL MEASURE
MAX.	MAXIMUM
MIN.	MINIMUM
NO.	NUMBER
OCDWEP	ONONDAGA COUNTY DEPARTMENT OF WATER ENVIRONMENT PROTECTION
O/H	OVERHEAD
PSI.	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
S.S.	STAINLESS STEEL
TYP.	TYPICAL
U.G.	UNDERGROUND
VERT.	VERTICAL
W	WATER
W/	WITH
WV	WATER VALVE

LEGEND

	EXISTING OBSERVATION WELL
	EXISTING MONITORING WELL
	EXISTING SEWER VENT
	EXISTING CLEANOUT
	EXISTING WATER VALVE
	EXISTING WATER MANHOLE
	EXISTING DRAINAGE MANHOLE
	EXISTING UTILITY POLE
	EXISTING STORM DRAIN MANHOLE
	EXISTING CONIFEROUS TREE
	EXISTING DECIDUOUS TREE/SHRUB
	EXISTING VEGETATION
	EXISTING SIGN
	EXISTING ELECTRICAL
	EXISTING LIGHT POLE
	EXISTING PETROLEUM LINE
	EXISTING FENCE
	EXISTING WOODS
	EXISTING GUIDE RAIL
	EXISTING STORM LINE AND CATCH BASIN
	EXISTING SANITARY LINE
	EXISTING SANITARY FORCE MAIN
	EXISTING TELEPHONE
	EXISTING EDGE OF WATER
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPERTY LINE OR RIGHT-OF-WAY

RECORD DRAWINGS

To the best of our knowledge, information and belief, these record drawings substantially represent the project as constructed.

O'BRIEN & GERE ENGINEERS, INC.

By: BEW



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IN CHARGE OF	T.CONKLIN				
DESIGNED BY	M.HULL				
CHECKED BY	D.FARBER				
DRAWN BY	M.HULL				
		0	4/13/21	RECORD DRAWING	BEW
		B	11/6/19	NYSDEC COMMENTS INCORPORATED	
		A	8/21/19	ISSUED FOR NYSDEC REVIEW	
		NO.	DATE	REVISION	INT.

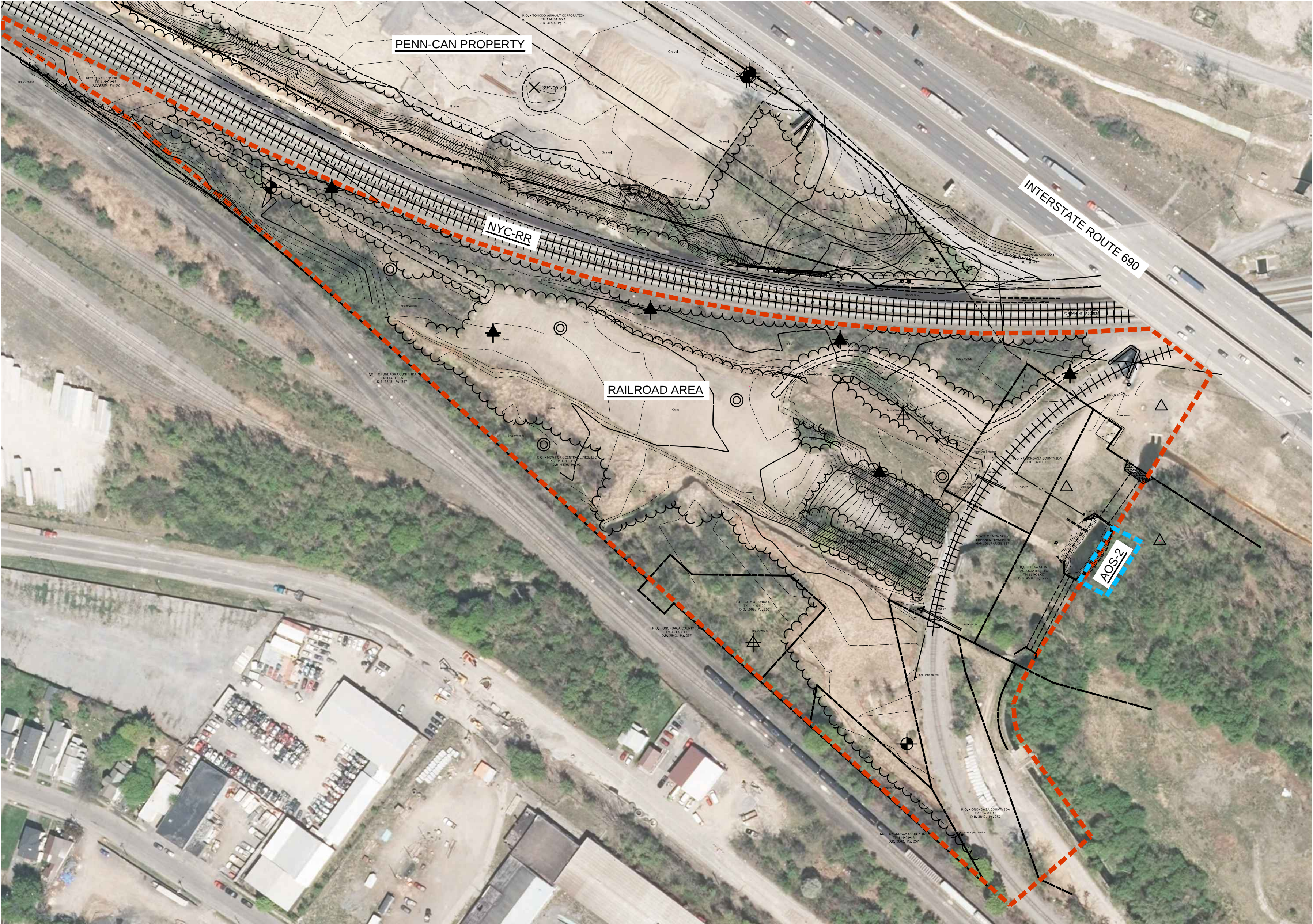
O'BRIEN & GERE ENGINEERS, INC
Syracuse, NY

HONEYWELL INTERNATIONAL, INC.
RAILROAD AREA
REMEDIAL DESIGN
GEDDES, NEW YORK

GENERAL

GENERAL NOTES, LEGEND &
ABBREVIATIONS

FILE NO. 1163.69185	G-001
DATE NOVEMBER 2019	



- LEGEND:**
- PROPERTY BOUNDARY
 - EXISTING ELEVATION CONTOUR
 - RAILROAD TRACKS
 - TREE LINE
 - AREA PREVIOUSLY REMEDIATED
 - RAILROAD AREA BOUNDARY (APPROX LIMITS)
 - ADDITIONAL AREA OF STUDY BOUNDARY TO RECEIVE VEGETATIVE ENHANCEMENT
 - HISTORIC SURFACE SOIL SAMPLE LOCATION
 - RECENT SURFACE SOIL SAMPLE LOCATION
 - HISTORIC GEOPROBE LOCATION
 - HISTORIC BORING LOCATION
 - MONITORING WELL LOCATION

RECORD DRAWINGS
To the best of our knowledge, information and belief, these record drawings substantially represent the project as constructed.

O'BRIEN & GERE ENGINEERS, INC.
By: BEW



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IN CHARGE OF	T.CONKLIN				
DESIGNED BY	M.HULL				
CHECKED BY	D.FARBER				
DRAWN BY	M.HULL				
		0	1/25/21	RECORD DRAWING	BEW
		B	11/6/19	NYSDEC COMMENTS INCORPORATED	
		A	8/21/19	ISSUED FOR NYSDEC REVIEW	
		NO.	DATE	REVISION	INT.

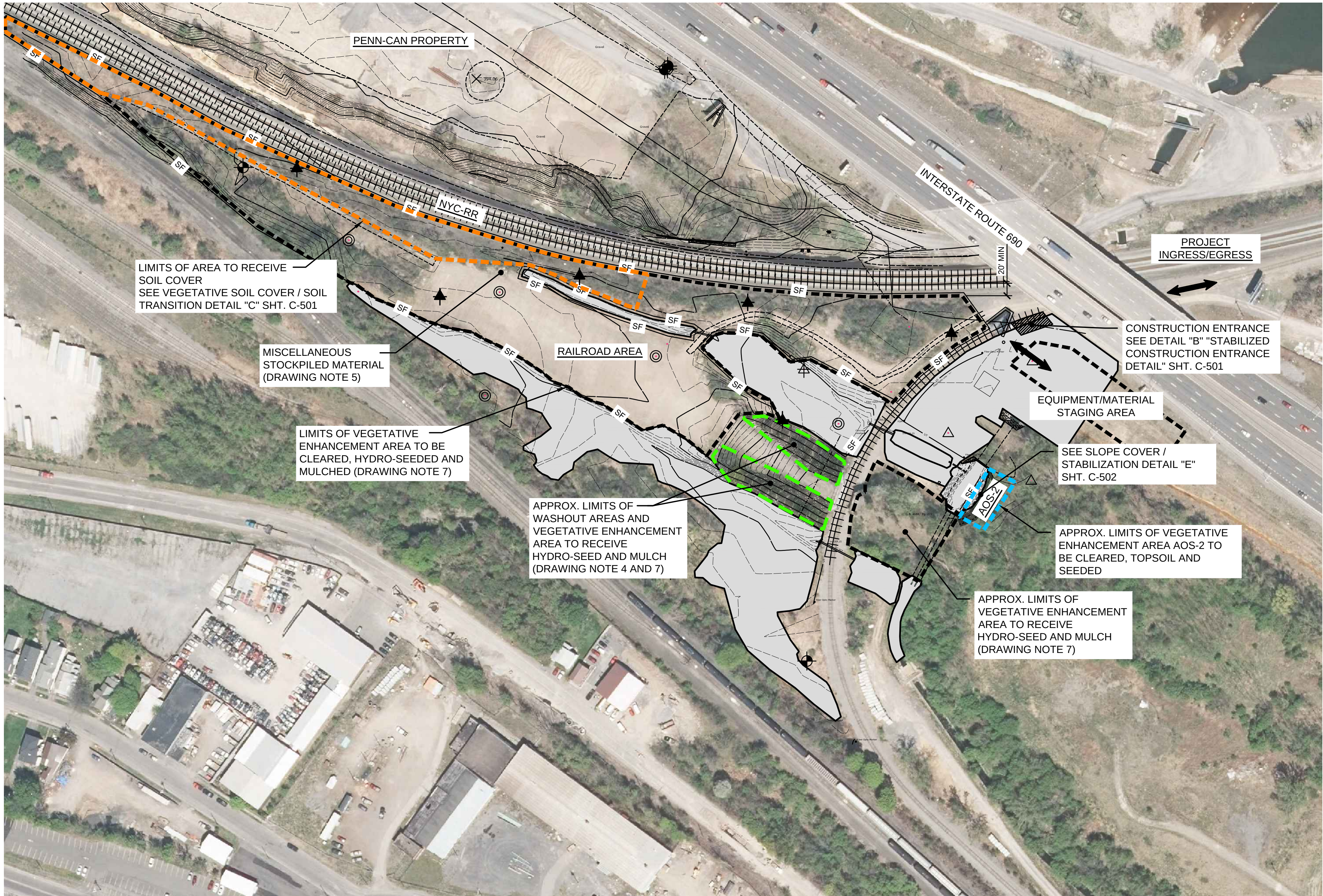


HONEYWELL INTERNATIONAL, INC.
RAILROAD AREA
REMEDIAL DESIGN
GEDDES, NEW YORK

CIVIL

EXISTING SITE PLAN

FILE NO.	1163.69185	C-101
DATE	NOVEMBER 2019	



DRAWING NOTES:

1. UNLESS OTHERWISE NOTED, NO ADDITIONAL WORK IS REQUIRED BASED UPON PREVIOUS INVESTIGATIONS.
2. LIMITS OF SOIL COVER ALONG THE NYC-RR SHALL BE A MINIMUM OF 20 FT FROM CENTERLINE OF RAIL.
3. STAGING AREAS FOR EQUIPMENT, TRAILERS, MATERIAL HANDLING, ETC. IS SHOWN FOR REFERENCE PURPOSES ONLY AND MAY CHANGE BASED UPON FIELD CONDITIONS AND OR WORK SEQUENCE, WITH APPROVAL FROM THE ENGINEER.
4. EXISTING WASHOUTS, WILL BE BACKFILLED AND STABILIZED USING CLEAN, ON-SITE, STOCKPILED MATERIAL, LEFT OVER FROM THE UPPER HARBOR BROOK IRM. REFER TO DETAIL "D" "WASHOUT STABILIZATION DETAIL" SHEET C-501 FOR DETAILS.
5. MISCELLANEOUS CLEAN, PREVIOUSLY APPROVED, ON-SITE, STOCK PILE MATERIAL REMAINING FROM THE UPPER HARBOR BROOK IRM, NOT USED TO STABILIZE WASHOUT AREAS SHALL BE GRADED TO DRAIN.
6. ALL AREAS SPECIFIED TO RECEIVE VEGETATIVE ENHANCEMENT OR SOIL COVER, SHALL BE CLEARED OF TREES AND BRUSH AND/OR BRUSH HOGGED AND RE-SEEDED TO THE EXTENT PRACTICAL.
7. VEGETATIVE ENHANCEMENT AREAS WILL EITHER BE HYDRO-SEEDED AND MULCHED OR RECEIVE TOPSOIL AND SEEDED BASED UPON AVAILABILITY OF SUITABLE MATERIAL.

EROSION AND SEDIMENT CONTROL NOTES:

1. PRIOR TO CONSTRUCTION EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED.
2. ALL SILT FENCE LOCATIONS SHOWN HERE ARE APPROXIMATE ONLY AND SHALL BE PROVIDED AT A MINIMUM.
3. BYPASS OF FLOW FROM EXISTING DRAINAGE CHANNELS WILL BE PROVIDED AT ALL TIMES. PROPER EROSION CONTROL TECHNIQUES SHALL BE IMPLEMENTED AS REQUIRED.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED.
4. REFER TO SHT. C-501 FOR EROSION AND SEDIMENT CONTROL DETAILS.

CLEARING AND GRUBBING NOTES:

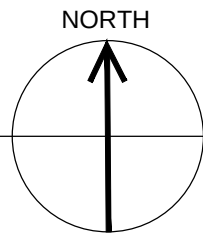
1. ALL CLEARING AND GRUBBING SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION 31 11 00 "CLEARING AND GRUBBING".
2. TREE REMOVAL SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO START UP TO MINIMIZE POTENTIAL IMPACTS TO INDIANA BATS. TREES MAY NOT BE REMOVED DURING INDIANA BAT SEASON (MARCH 31 TO OCTOBER 31) WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND:

- PROPERTY BOUNDARY
- - - - - EXISTING ELEVATION CONTOUR
- + + + + + RAILROAD TRACKS
- ~ ~ ~ ~ ~ TREE LINE
- AREA PREVIOUSLY REMEDIATED
- - - - - LIMITS OF AREA TO RECEIVE SOIL COVER (APPROX LIMITS)
- - - - - ADDITIONAL AREA OF STUDY BOUNDARY TO RECEIVE VEGETATIVE ENHANCEMENT
- - - - - AREA WITH WASHOUTS TO RECEIVE VEGETATIVE ENHANCEMENT
- - - - - AREA TO RECEIVE VEGETATIVE ENHANCEMENT
- - - - - SF SILT FENCE
- ▲ HISTORIC SURFACE SOIL SAMPLE LOCATION
- ▲ RECENT SURFACE SOIL SAMPLE LOCATION
- ⊙ HISTORIC GEOPROBE LOCATION
- △ HISTORIC BORING LOCATION
- ⊕ MONITORING WELL LOCATION

SITE PREPARATION PLAN

1"=100' 100' 0 100'



RECORD DRAWINGS

To the best of our knowledge, information and belief, these record drawings substantially represent the project as constructed.

O'BRIEN & GERE ENGINEERS, INC.

By: BEW



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IN CHARGE OF	T.CONKLIN				
DESIGNED BY	M.HULL				
CHECKED BY	D.FARBER				
DRAWN BY	M.HULL				
		0	1/25/21	RECORD DRAWING	BEW
		B	11/6/19	NYSDEC COMMENTS INCORPORATED	
		A	8/21/19	ISSUED FOR NYSDEC REVIEW	
		NO.	DATE	REVISION	INT.



O'BRIEN & GERE ENGINEERS, INC
Syracuse, NY

HONEYWELL INTERNATIONAL, INC.
RAILROAD AREA
REMEDIAL DESIGN
GEDDES, NEW YORK

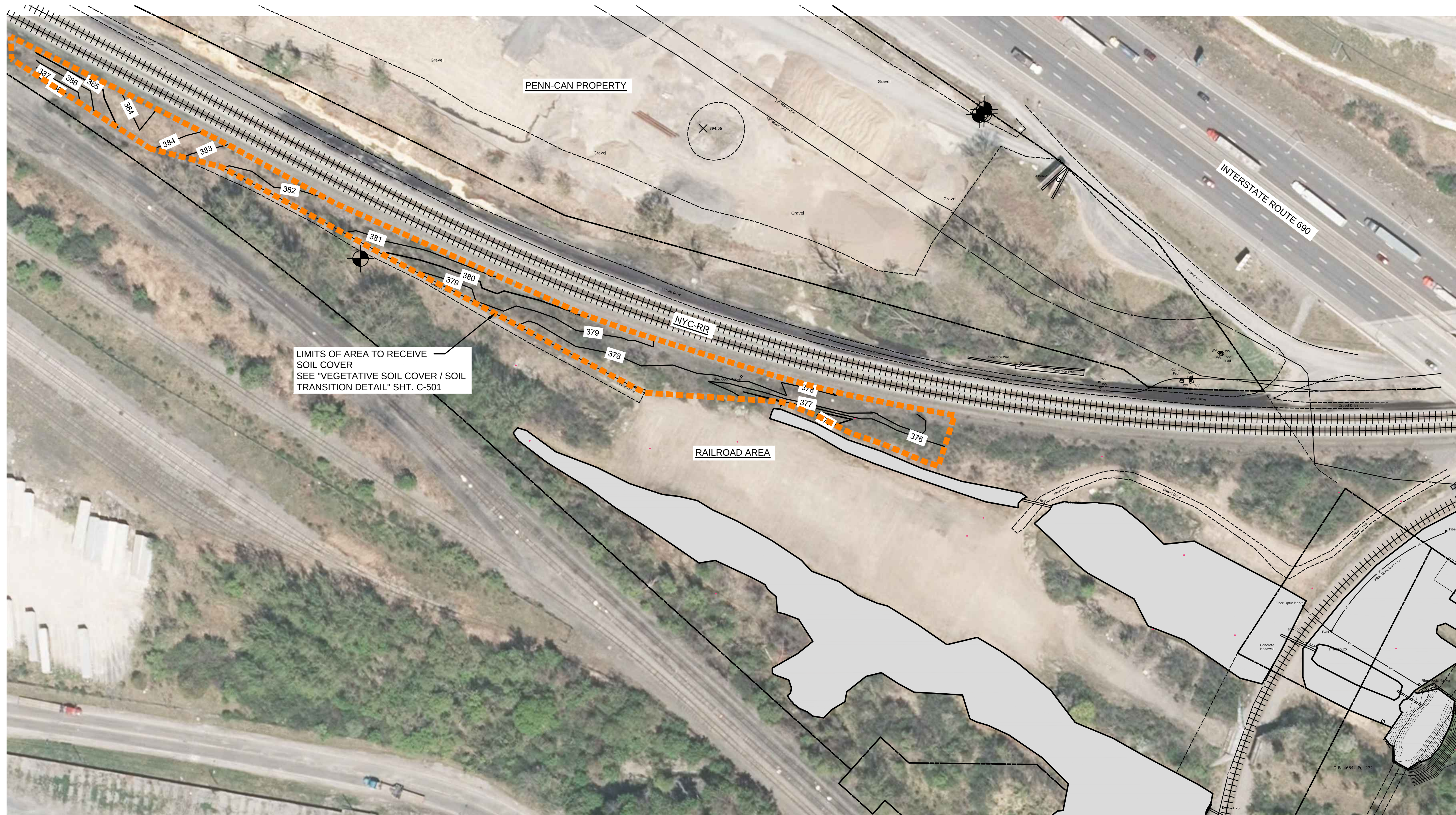
CIVIL

SITE PREPARATION PLAN

FILE NO.
1163.69185

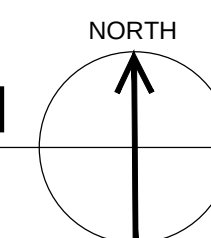
DATE
NOVEMBER 2019

C-102



LIMITS OF AREA TO RECEIVE
SOIL COVER
SEE "VEGETATIVE SOIL COVER / SOIL
TRANSITION DETAIL" SHT. C-501

1"=60' 60' 0 60'



	PROPERTY BOUNDARY
	EXISTING ELEVATION CONTOUR
	RAILROAD TRACKS
	TREE LINE
	AREA PREVIOUSLY REMEDIATED
	LIMITS OF AREA TO RECEIVE SOIL COVER (APPROX LIMITS)
	375 PROPOSED ELEVATION CONTOUR (5 FT INTERVAL)
	374 PROPOSED ELEVATION CONTOUR (1 FT INTERVAL)

To the best of our knowledge,
information and belief, these record
drawings substantially represent the
project as constructed.

By: BEW



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T. WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS.
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IN CHARGE OF		T.CONKLIN				
DESIGNED BY		M.HULL				
CHECKED BY		D.FARBER	0	1/25/21	RECORD DRAWING	BEV
			B	11/6/19	NYSDEC COMMENTS INCORPORATED	
			A	8/21/19	ISSUED FOR NYSDEC REVIEW	
DRAWN BY		M.HULL	NO.	DATE	REVISION	INT



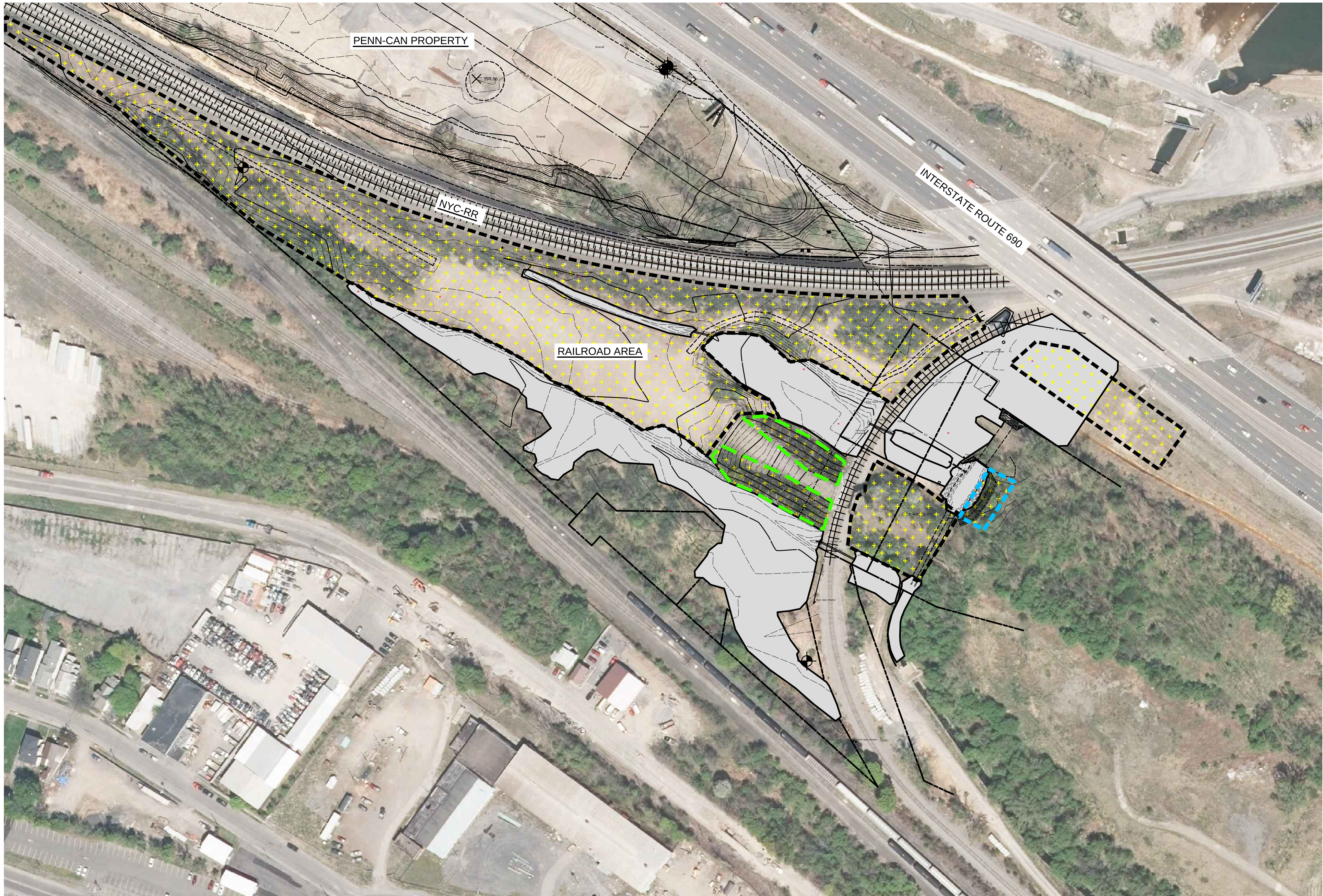
O'BRIEN & GERE ENGINEERS, INC
Syracuse, NY

HONEYWELL INTERNATIONAL, INC.
RAILROAD AREA
30% CONCEPTUAL DESIGN
GEDDES, NEW YORK

PROPOSED GRADING PLAN

DATE
NOVEMBER 2019

C-103

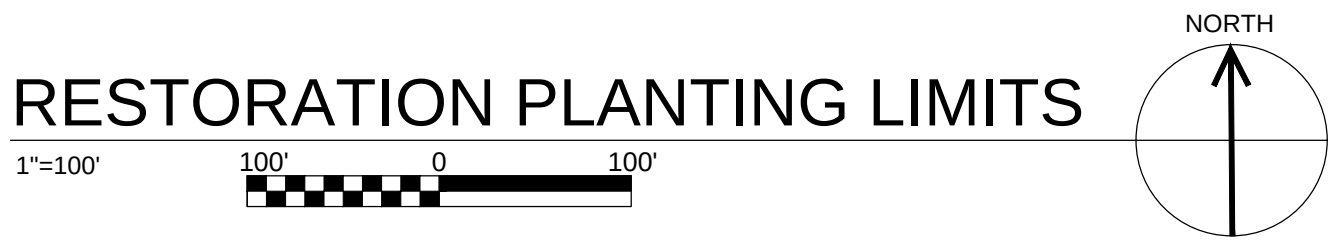


DRAWING NOTES:

1. REFER TO SPECIFICATION 31 22 19 TOPSOIL, SEEDING AND PLANTING FOR VEGETATIVE ENHANCEMENT DETAILS.

LEGEND:

- PROPERTY BOUNDARY
- EXISTING ELEVATION CONTOUR
- RAILROAD TRACKS
- AREA PREVIOUSLY REMEDIATED
- LIMITS OF TO RECEIVE VEGETATIVE ENHANCEMENT
- ADDITIONAL AREA OF STUDY BOUNDARY TO RECEIVE VEGETATIVE ENHANCEMENT
- ADDITIONAL AREA TO RECEIVE VEGETATIVE ENHANCEMENT
- VEGETATIVE ENHANCEMENT



RECORD DRAWINGS

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IN CHARGE OF	T.CONKLIN				
DESIGNED BY	M.HULL				
CHECKED BY	D.FARBER				
DRAWN BY	M.HULL				
		0	1/25/21	RECORD DRAWING	BEW
		B	11/6/19	NYSDEC COMMENTS INCORPORATED	
		A	8/21/19	ISSUED FOR NYSDEC REVIEW	
		NO.	DATE	REVISION	INT.

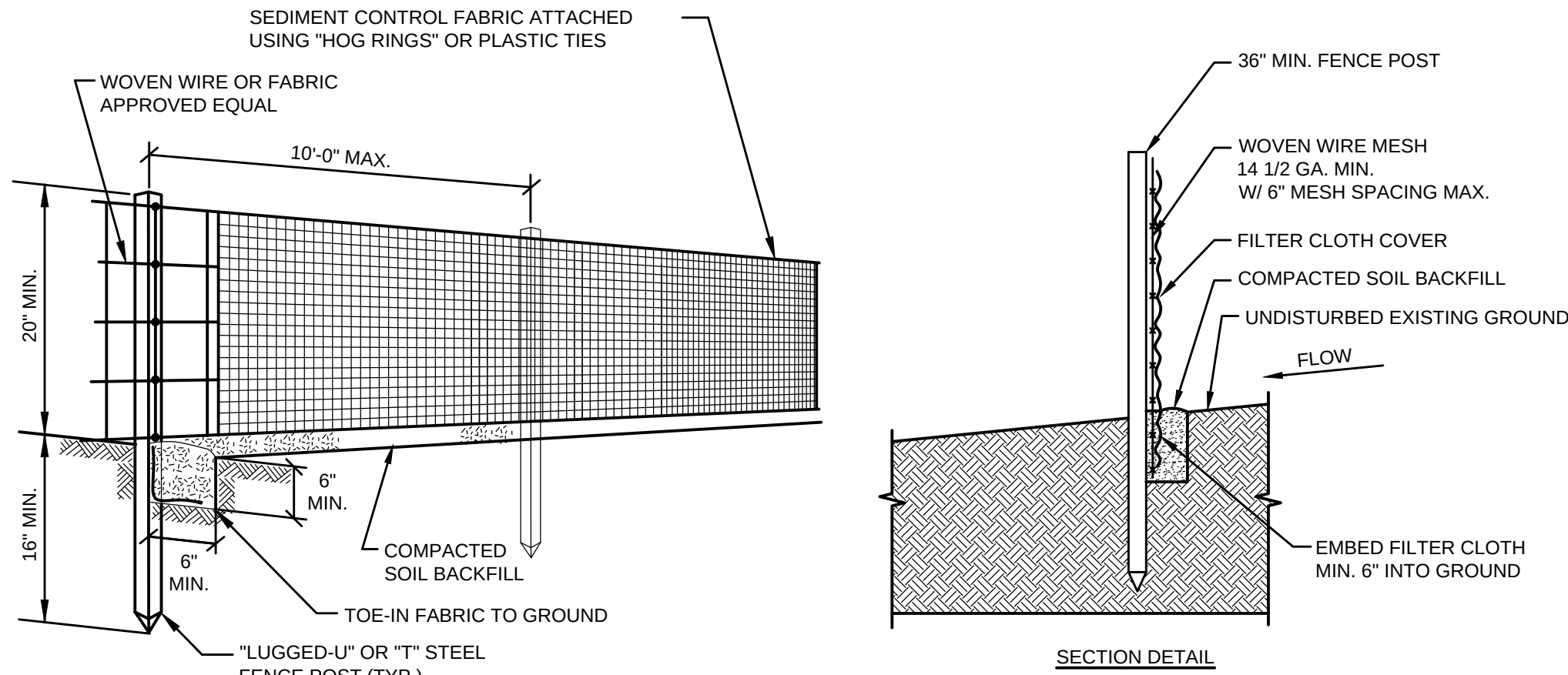

O'BRIEN & GERE ENGINEERS, INC
Syracuse, NY

HONEYWELL INTERNATIONAL, INC.
RAILROAD AREA
REMEDIAL DESIGN
GEDDES, NEW YORK

CIVIL

RESTORATION PLANTING LIMITS

FILE NO.	1163.69185	C-104
DATE	NOVEMBER 2019	



NOTES:

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- FENCE TO BE ALIGNED ALONG CONTOUR AS CLOSELY AS POSSIBLE.
- SILT FENCE MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST EXTEND AT LEAST 10 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
- SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.
- ANY FENCE SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED.

POSTS : STEEL EITHER T OR U TYPE OR 2" HARDWOOD

FENCE : WOVEN WIRE 14.5 GAUGE 6" MAX MESH OPENING

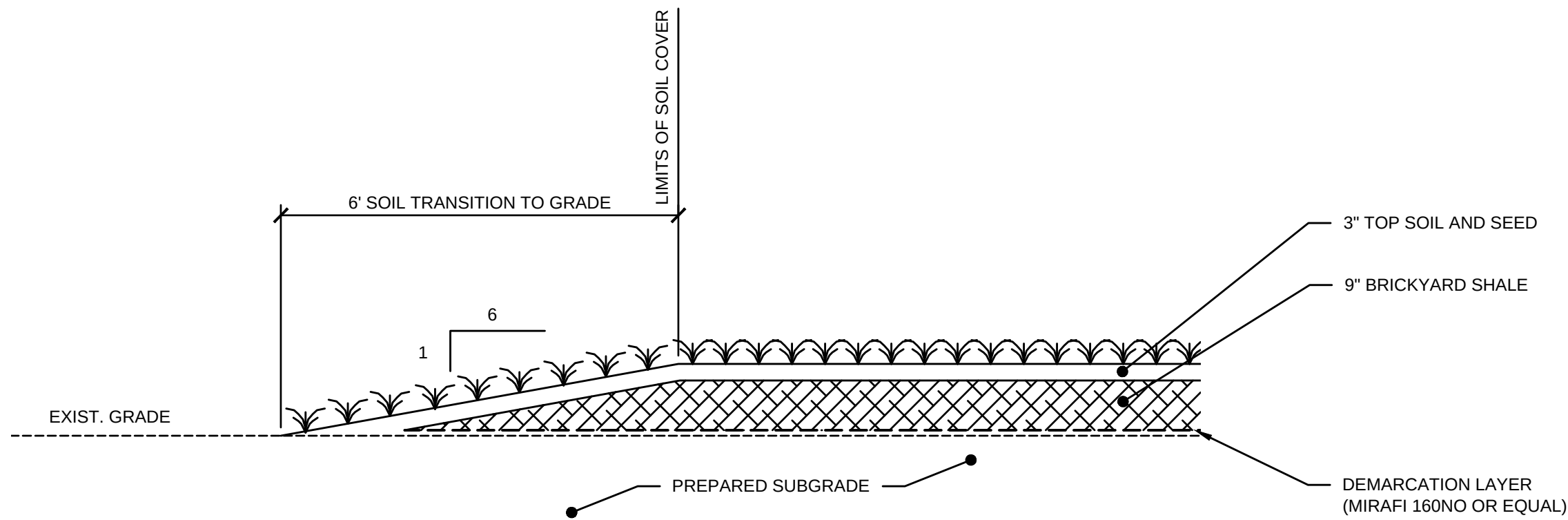
FILTER CLOTH : MINIMUM TENSILE STRENGTH OF 120 LBS. (ASTM D-16826)

PREFABRICATED UNIT : PREFABRICATED FENCE IS ACCEPTABLE OR APPROVED EQUAL.

STANDARD SYMBOL — SF — SF

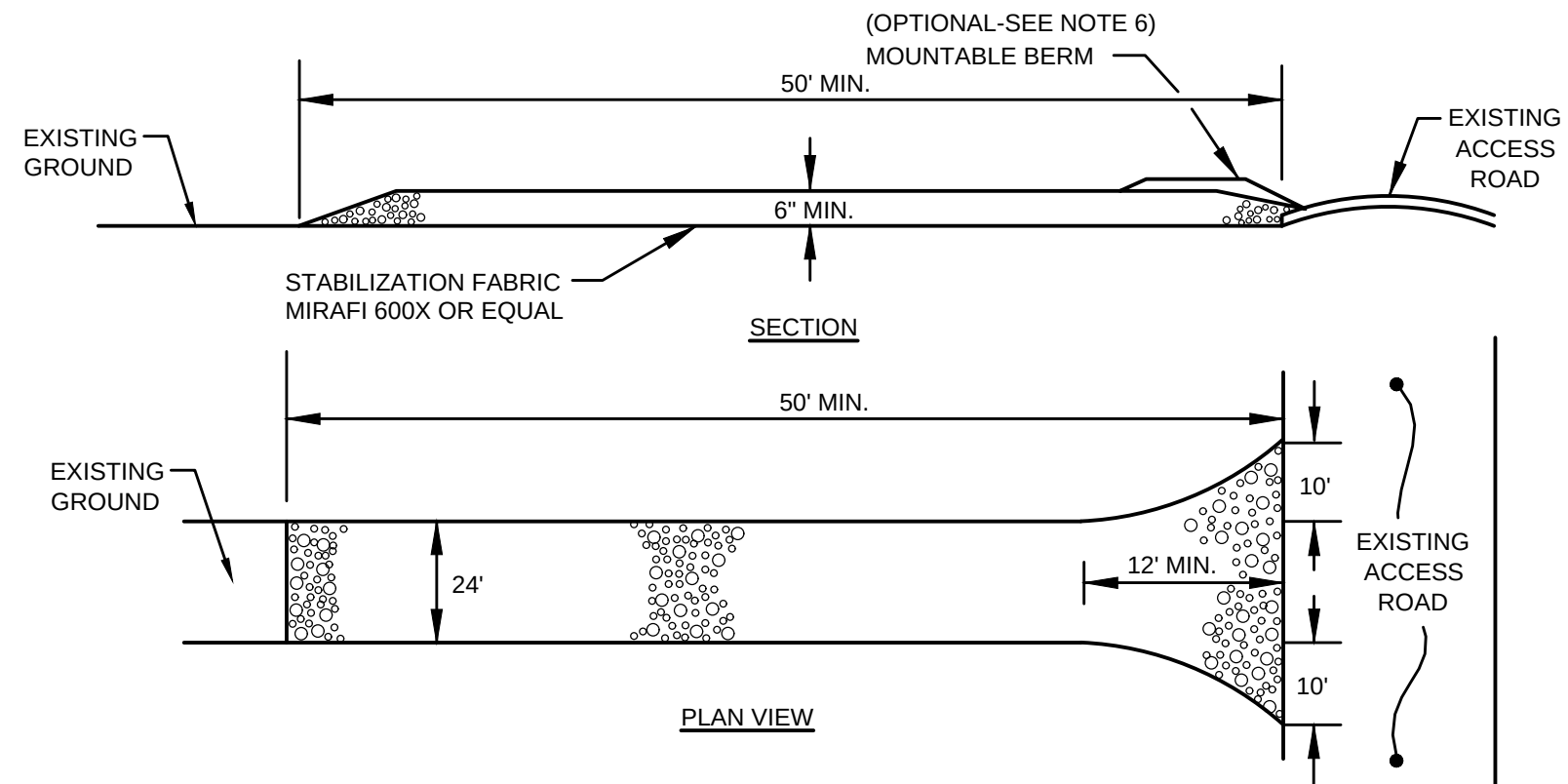
A SILT FENCE DETAIL

NOT TO SCALE



C VEGETATIVE SOIL COVER / SOIL TRANSITION DETAIL

NOT TO SCALE

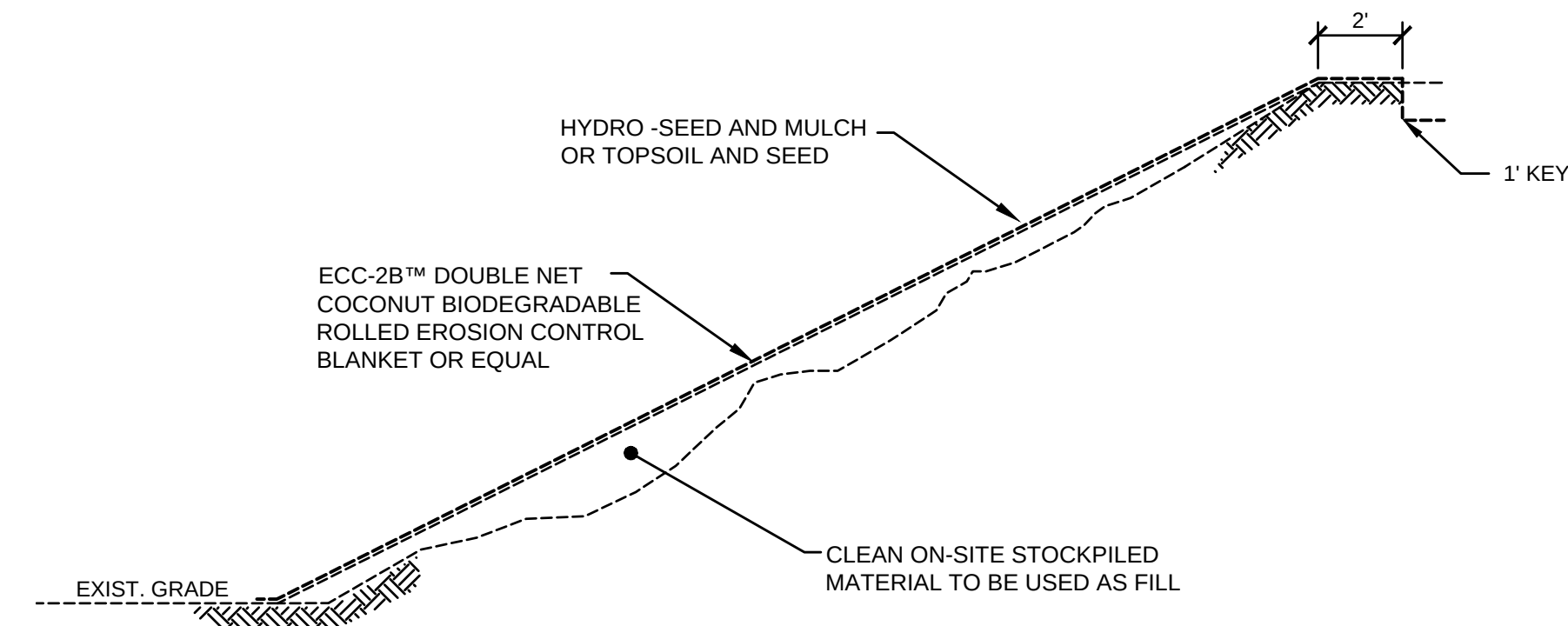


CONSTRUCTION SPECIFICATIONS:

- STONE SIZE - USE 2" STONE.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET
- THICKNESS - NOT LESS THAN SIX (6) INCHES
- WIDTH-(24) TWENTY-FOUR FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE EGRESS OCCURS.
- STABILIZATION FABRIC (MIRAFI 600X OR EQUAL) - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS NOT POSSIBLE, A MOUNTABLE BERM 3' WIDE (MIN.) WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT STORMWATER POLUTION PREVENTION PLAN.

B STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



DETAIL NOTES:

- EXISTING WASHOUTS SHALL BE FILLED WITH CLEAN, PREVIOUSLY APPROVED, ON-SITE MATERIAL REMAINING FROM THE PREVIOUS UPPER HARBOR BROOK IRM WORK. WASHOUT STABILIZATION SLOPE SHALL MATCH EXISTING ADJACENT SLOPE OF BANK.

D WASHOUT STABILIZATION DETAIL

NOT TO SCALE

RECORD DRAWINGS

To the best of our knowledge, information and belief, these record drawings substantially represent the project as constructed.

O'BRIEN & GERE ENGINEERS, INC.

By: BEW



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR TO DETERMINE THE ACTUAL SCALE. DRAWING IS NOT SCALABLE IF NO SCALE BAR IS PRESENT.

IN CHARGE OF	T.CONKLIN								
DESIGNED BY	M.HULL								
CHECKED BY	D.FARBER								
DRAWN BY	M.HULL								
		0	1/25/21	RECORD DRAWING				BEW	
		B	11/6/19	NYSDEC COMMENTS INCORPORATED					
		A	8/21/19	ISSUED FOR NYSDEC REVIEW					
		NO.	DATE	REVISION				INT.	



O'BRIEN & GERE ENGINEERS, INC
Syracuse, NY

HONEYWELL INTERNATIONAL, INC.
RAILROAD AREA
REMEDIAL DESIGN
GEDDES, NEW YORK

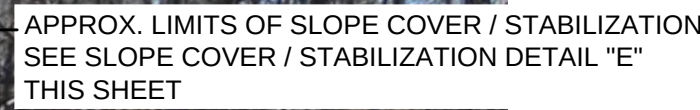
CIVIL

MISCELLANEOUS DETAILS

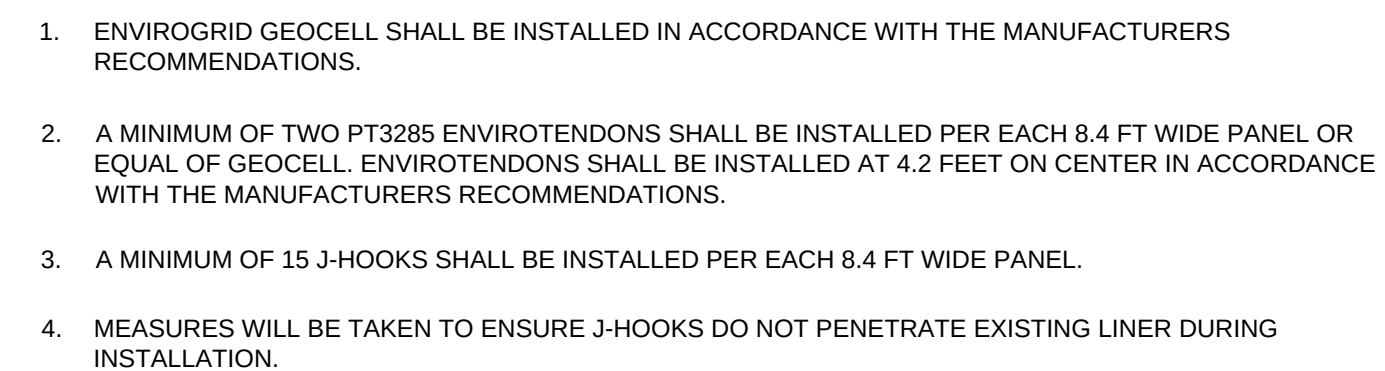
FILE NO.
1163.69185

DATE
NOVEMBER 2019

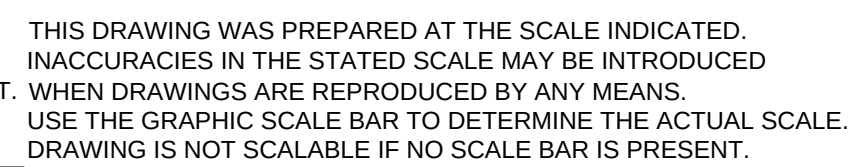
C-501



NOT TO SCALE



NOT TO SCALE

C-502

By: BEW

APPENDIX 2

GEOCELL



Construction Geosynthetics



EGA 20

EnviroGrid® adjustable series is designed to provide more flexibility in section size. Section and cell size will change as each section is expanded to the required dimension. Section length can be increased or decreased by adding or subtracting cells at no additional charge.

EGA 20: 21.4 ft panel length, various cell depths, perforated and textured, 29-cell section length. Standard sections are manufactured from 58 strips of HDPE, resulting in a section length of 29 cells and 10 cells wide. Each strip is the appropriate width and 142 inches (3.6 m) in length. Weld spacing is 14.0 in $\pm$.12 in (355 $\pm$ 3 mm). Cell density is 35 cells per meter squared. Cell walls are textured and if perforations are required 16% $\pm$ 3% of the cell wall is removed.

Dimensional Characteristic	Test Method	Unit	Data
Minimum Polymer Density	ASTM D-1505	g/cm ³ (lb/ft ³)	0.935-0.965 (58.40-60.20)
Environmental Stress Crack Resistance	ASTM D-5397	hrs	>400
Environmental Stress Crack Resistance	ASTM D-1693	hrs	6,000
Carbon Black Content	ASTM D-1603	% by weight	1.5% minimum
Nominal Sheet Thickness (before texturing)	ASTM D-5199	mm (mils)	1.27 (50) -5% +10%
Nominal Sheet Thickness (after texturing)	ASTM D-5199	mm (mils)	1.52 (60) -5% +10%

Physical Property	Unit	Typical Value
Nominal Expanded Cell Size (width x length)	mm (in)	259 (10.2) x 224 (8.8)
Nominal Expanded Cell Area	cm ² (in ²)	289 (44.8)
Nominal Expanded Section (width x length)	m (ft)	2.56 (8.4) x 6.52 (21.4)
Nominal Expanded Section Area (width x length)	m ² (ft ²)	16.7 (180)
Cell Depth	mm (in)	75 (3.0); 100 (4.0); 150 (6.0); 200 (8.0)
Seam Peel Strength	N (lbs)	1,065 (240); 1,420 (320); 2,130 (480); 2,840 (640)
Section Weight	Kg (lbs)	19.5 (43); 25.9 (57); 39 (86); 51.7 (114)
Sections Per Pallet		60; 50; 30; 25
Seam Hang Strength		A 102 mm (4.0 in) weld joint supporting a load of 72.5 kg (160 lbs) for 30 days minimum or a 102 mm (4.0 in) weld joint supporting a load of 72.5 kg (160 lbs) for 7 days minimum while undergoing temperature change from 23o C (74o F) to 54o C (130o F) on a 1 hour cycle.



- **GatorSTRAP®** is more cost effective than steel strapping.
- **GatorSTRAP®** has no sharp edges to cause injuries or tire damage.
- **GatorSTRAP®** is as strong as steel but weighs 75% less.
- **GatorSTRAP®** is easily applied and can be retensioned when necessary.
- **GatorSTRAP®** can be customized with your company name, logo or message.



GatorSTRAP®

"ONCE IT GRABS, IT NEVER LETS GO!"

Woven with pride in the U.S.A.

GatorSTRAP® Heavy Duty Woven Polyester Strapping

ITEM ID	WIDTH	COIL LENGTH	COILS/BOX	COILS/PALLET	BREAK STRENGTH*
2015 ^(#)	5/8"	2,000 ft.	2	54	1,500 lbs.
2075	3/4"	1,650 ft.	2	54	1,800 lbs.
2070	3/4"	1,650 ft.	2	54	2,400 lbs.
2025-AAR Grade 3	3/4"	1,650 ft.	2	54	2,700 lbs.
2030	1"	2,500 ft.	1	27	3,100 lbs.
2035	1 1/4"	600 ft.	4	48	3,285 lbs.
2035-2250	1 1/4"	2,250 ft.	1	27	3,285 lbs.
2040-AAR Grade 4	1 1/4"	600 ft.	4	48	3,800 lbs.
2060	1 1/2"	600 ft.	4	48	4,700 lbs.
2055-AAR Grade 5	1 1/2"	600 ft.	4	48	5,400 lbs.
2055-1500-AAR	1 1/2"	1,500 ft.	1	27	5,400 lbs.

(#) AAR available upon request. *All breaks are nominal +/- 5%.



GatorSTRAP® Extra Grip Phosphate Coated Wire Buckles

ITEM ID	WIDTH	USE ON STRAP	GAUGE	QTY/BOX
3005	16mm	5/8"	0.138	1000
3020	19mm	3/4"	0.157	1000
3025	19mm	3/4"	0.177	500
3030	25mm	1.0" & 1 1/4"	0.197	500
3033	25mm	1.0" & 1 1/4"	0.238	400
3035	32mm	1 1/4" & 1 1/2"	0.275	250



GatorSTRAP® Tensioning Tools

ITEM ID	DESCRIPTION	WIDTH
4011	Manual	All
4026	Small Economy	5/8" to 3/4"
4040	Small Heavy Duty	5/8" to 3/4"
4050	Large Economy	5/8" to 1 1/2"
4051	Large Economy w/Pusher Nose	5/8" to 1 1/2"
4055	Large Heavy Duty	5/8" to 1 1/2"
4060	Super Heavy Duty	5/8" to 1 1/2"
4080	32mm Pneumatic	up to 1 1/4"
4085	50mm Pneumatic	up to 2"
4090	Heavy Duty Battery	5/8" to 2"
4095	Medium Duty Battery	5/8" to 2"



4040 4060



4090 4080

GatorSTRAP® Accessories

ITEM ID	DESCRIPTION
6040	Safety Strap Cutter
6055	Pallet Strap Threading Tool
6071	Rolling Strap Dispenser
6075	Forklift Mounted Strap Dispenser
6080	Driver Kit



6071
Rolling Strap Dispenser



6075
Forklift Mounted Strap Dispenser

GatorSTRAP® Driver and Starter Kits



6080
Available for all products.

CAROLINA STRAPPING
AND BUCKLES COMPANY®



2740 West Franklin Boulevard | Gastonia, NC 28052 | Ph. 704.349.0000 | Fax 704.349.0010

www.CarolinaStrapping.com

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APPENDIX 3

SEED

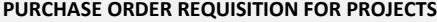


PURCHASE ORDER REQUISITION FOR PROJECTS

Project Sales Tax Classification:	Capital Improvement	Purchase Order #:		Req #:		PO Total	limit	Required Signature	
Client Name:	HONEYWELL, INC.	Ship To Location:	Wastebeds B	Req Date:	6/25/2019		<\$100k	Proj Mgr.	
Client Sales Tax Status:	Taxable	Address:	280 Restoration Way, Geddes NY 13209	Requestor:	Keith Cardinali	\$151,970	<\$500k	Proj Officer	
Client Sales Tax Form Provided:	N/A	Contact Name:	Keith Cardinali	Project Div #:	678		>\$500k	Bus Unit Leader	
Supplier Name:	Seedway LLC	Contact Ph #:	(315) 413-1267	Project #:	70350			Proj Mgr.	
Address:	1734 Railroad Place Hall, NY 14463	Contact Email:	Keith.Cardinali@ramboll.com	Project Name:	Wastebed B			Proj Officer	
Contact Name:	Keith Walters	Ship Method:	Ground	Project Status:	OPEN FULLY ACTIVE			Bus Unit Leader	
Phone #:	315-516-9127	General Comment:							PROSSNER, ED
Email Address:	kwalters@seedway.com								WHITE, B E
REV. 14									WHITE, BRIAN E
10/24/2018									

Press button to be sure ALL PROJECT#'s, and TASK#'s are active in Oracle before submittal

240 Character Maximum Description					DD-MON-YY		Do not use ASAP for dates					
L #	Mfg :: Part # :: Description of Item	UOM	Qty	Price	Date Due at Ship to	Extended Price	Top Task	Sub Task	Expenditure Type	Taxable	Chg#	Comments
1	Upland Seed Mix	POUND	1140	56.85	8-Jul-19	64,809.00	020	101	Materials Site	Taxable		
2	Wetland Seed Mix	POUND	120	63.55	8-Jul-19	7,626.00	020	101	Materials Site	Taxable		
3	Swale Seed Mix	POUND	100	35.50	8-Jul-19	3,550.00	020	101	Materials Site	Taxable		
4						0.00						
5						0.00						
6						0.00						
7	total	LUMP SUM	1	75,985.00		75,985.00	020	101	Freight/ Fuel	Taxable		
8						0.00						
9						0.00						
10						0.00						
11						0.00						
12						0.00						
13						0.00						
14						0.00						
15						0.00						
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57						0.00						
58						0.00						



Req #:		PO Total	limit	Required Signature
Req Date:	6/25/2019		<\$100k Proj Mgr.	
Requestor:	Keith Cardinali	\$151,970	<\$500k Proj Officer	
Project Div #:	678		>\$500k Bus Unit Leader	
Project #:	70350			PROSSNER, ED
Project Name:	Wastebed B		Proj Mgr.	WHITE, B E
Project Status:	OPEN FULLY ACTIVE		Proj Officer	WHITE, BRIAN E
			Bus Unit Leader	

****Press button to be sure ALL PROJECT#'s, and TASK#'s are active in Oracle before submittal****



PURCHASE ORDER REQUISITION FOR PROJECTS

Project Sales Tax Classification: Capital Improvement
Client Name: HONEYWELL, INC.
Client Sales Tax Status: Taxable
Client Sales Tax Form Provided: N/A
Supplier Name: Seedway LLC
Address: 1734 Railroad Place Hall, NY 14463
Contact Name: Keith Walters
Phone #: 315-516-9127
Email Address: kwalters@seedway.com

Purchase Order #:
Ship To Location: Wastebeds B
Address: 280 Restoration Way, Geddes NY 13209
Contact Name: Keith Cardinali
Contact Ph #: (315) 413-1267
Contact Email: Keith.Cardinali@ramboll.com
Ship Method: Ground
General Comment:

Req #:
Req Date: 6/25/2019
Requestor: Keith Cardinali
Project Div #: 678
Project #: 70350
Project Name: Wastebed B
Project Status: OPEN FULLY ACTIVE

PO Total limit
\$151,970 <\$100k Proj Mgr.
<\$500k Proj Officer
>\$500k Bus Unit Leader
Proj Mgr.
Proj Officer
Bus Unit Leader

Required Signature
PROSSNER, ED
WHITE, B E
WHITE, BRIAN E

REV. 14
10/24/2018

Press button to be sure ALL PROJECT#'s, and TASK#'s are active in Oracle before submittal

240 Character Maximum Description					DD-MON-YY		Do not use ASAP for dates					
L #	Mfg :: Part # :: Description of Item	UOM	Qty	Price	Date Due at Ship to	Extended Price	Top Task	Sub Task	Expenditure Type	Taxable	Chg#	Comments
117						0.00						
118						0.00						
119						0.00						
120						0.00						
121						0.00						
122						0.00						
123						0.00						
124						0.00						
125						0.00						
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128						0.00						
129						0.00						
130						0.00						
131						0.00						
132						0.00						
133						0.00						
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136						0.00						
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[illegible]

APPENDIX 4

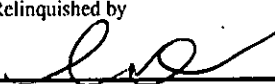
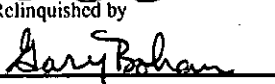
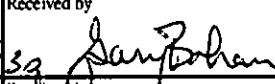
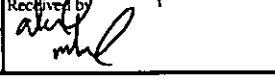
IMPORTED BACKFILL

The material characterization samples for the Honeywell portfolio, including the Railroad Area, were initially sampled under a LCP Site project, and samples received the “LCP” moniker for management within the Honeywell EQUIS database. Subsequent analytical data associated with imported fill have been uploaded to the LCP Site for efficiency and to avoid misplacing pertinent analytical data for the imported fill used on the Honeywell Syracuse Portfolio. These imported fill data will continue to be maintained within LCP Site portion of the EQUIS database for the Honeywell Syracuse Portfolio.

APPENDIX 4A BRICKYARD SHALE

ALS Environmental 1565 Jefferson Road, Building 300, Suite 360 Rochester, New York 14623 (P) (585) 288-5380										Chain Of Custody / Analysis Request															AESI Ref: 38609.59845						
																									COC #: LCP-070119A						
										Privileged & Confidential					Site Name: LCP					Lab Use Only											
										Michael Miller, Chuck Sharpe					Location of Site: Geddes, NY					Lab Proj #											
Client Contact: (name, co., address)										Sampler: Guedna Desir/Matt Skrupa/Chris Hoy					Preservative					Lab ID											
Stephen.Miller@Honeywell.com										P O #										Job No.											
Honeywell International										Analysis Turnaround Time:																					
301 Plainfield Road, Suite 330										Standard -					N																
Syracuse, New York 13212										Rush Charges Authorized for -					Y																
										2 weeks -																					
Hardcopy Report To:										Michael Miller					1 week - Y																
Invoice To:										Steve Miller																					
										Next Day -																					
Sample Identification										Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Con.	Grab/Composite	Field Filtered Sample ?	TCLP VOCs	TCLP SVOCs	TCLP Pesticides and Herbicides	TCLP Metals (including 7470 Hg)	Reactive Sulfide and Reactive Cyanide	Ignitability/ flash point/ pH/Corrosivity	Part 375 VOCs	Part 375 SVOCs	Part 375 Pesticides	Part 375 Herbicides	Part 375 PCBs	Part 375 Metals including Hexavalent Chromium and Mercury	TOC	Total Cyanide
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units																			Lab Sample Numbers		
1	LCP-OG-01	0	1	LCP-070119A-01	7/1/2019	9:05	Soil	Soil	Reg	4	G	N	X								X										
2	LCP-OG-01	0	1	LCP-070119A-02	7/1/2019	9:05	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X		X	X	X	X	X	X	X	X			
3	LCP-OSW-01	0	1	LCP-070119A-03	7/1/2019	11:15	Soil	Soil	Reg	4	G	N	X								X										
4	LCP-OSW-01	0	1	LCP-070119A-04	7/1/2019	11:15	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X		X	X	X	X	X	X	X	X			
5	LCP-OSW-02	0	1	LCP-070119A-05	7/1/2019	11:40	Soil	Soil	Reg	4	G	N	X								X										
6	LCP-OSW-02	0	1	LCP-070119A-06	7/1/2019	11:40	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X		X	X	X	X	X	X	X	X			
7	LCP-OSW-05	0	1	LCP-070119A-07	7/1/2019	12:10	Soil	Soil	Reg	4	G	N	X								X										
8	LCP-OSW-05	0	1	LCP-070119A-08	7/1/2019	12:10	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X		X	X	X	X	X	X	X	X			
9	LCP-OSW-06	0	1	LCP-070119A-09	7/1/2019	12:20	Soil	Soil	Reg	4	G	N	X								X										
10	LCP-OSW-06	0	1	LCP-070119A-10	7/1/2019	12:20	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X		X	X	X	X	X	X	X	X			
11	LCP-BYS-01	0	1	LCP-070119A-11	7/1/2019	13:52	Soil	Soil	Reg	4	G	N	X								X										
12	LCP-BYS-01	0	1	LCP-070119A-12	7/1/2019	13:52	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X		X	X	X	X	X	X	X	X			
Special Instructions: Part 375 Pesticides to include Sylvest.																															
upload to SYRACUSE LCP DU-1 (R30925)																															
Relinquished by										Company		OBG, Part of Ramboll		Received by										Company		ALS		Condition		Custody Seals Intact	
										Date/Time		7/2/2019 15:30												Date/Time		7/2/19 15:30		Cooler Temp.			
Relinquished by										Company		ALS		Received by										Company		AL?		Condition		Custody Seals Intact	
										Date/Time		7/2/19 1735												Date/Time		7/2/19 1735		Cooler Temp.			
Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):																															

R1906195 5
 O'Brien & Gere Engineers, Incorporated
 LCP


ALS Environmental 1565 Jefferson Road, Building 300, Suite 360 Rochester, New York 14623 (P) (585) 288-5380										Chain Of Custody / Analysis Request															AESI Ref: 38609.59845 COC #: LCP-070119A Lab Use Only Lab Proj # Lab ID																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Client Contact: (name, co., address) Stephen.Miller@Honeywell.com Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212										Privileged & Confidential Michael Miller, Chuck Sharpe Site Name: LCP Location of Site: Geddes, NY										Job No.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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R1906195 **5**
 O'Brien & Gere Engineers, Incorporated
 LCP




Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-11
Lab Code: R1906195-011

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,1,2,2-Tetrachloroethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,1,2-Trichloroethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,1-Dichloroethane (1,1-DCA)	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,1-Dichloroethene (1,1-DCE)	5.2 U	5.2	0.31	1.01	07/09/19 14:35	
1,2,3-Trichlorobenzene	5.2 U	5.2	0.55	1.01	07/09/19 14:35	
1,2,4-Trichlorobenzene	5.2 U	5.2	0.44	1.01	07/09/19 14:35	
1,2,4-Trimethylbenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,2-Dibromo-3-chloropropane (DBCP)	5.2 U	5.2	0.31	1.01	07/09/19 14:35	
1,2-Dibromoethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,2-Dichlorobenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,2-Dichloroethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,2-Dichloropropane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,3,5-Trimethylbenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,3-Dichlorobenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
1,4-Dichlorobenzene	5.2 U	5.2	0.23	1.01	07/09/19 14:35	
1,4-Dioxane	100 U	100	21	1.01	07/09/19 14:35	
2-Butanone (MEK)	5.2 U	5.2	2.1	1.01	07/09/19 14:35	
2-Hexanone	5.2 U	5.2	0.38	1.01	07/09/19 14:35	
4-Methyl-2-pentanone	5.2 U	5.2	0.24	1.01	07/09/19 14:35	
Acetone	37	5.2	5.0	1.01	07/09/19 14:35	
Benzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Bromochloromethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Bromodichloromethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Bromoform	5.2 U	5.2	0.53	1.01	07/09/19 14:35	
Bromomethane	5.2 U	5.2	2.2	1.01	07/09/19 14:35	
Carbon Disulfide	5.2 U	5.2	0.31	1.01	07/09/19 14:35	
Carbon Tetrachloride	5.2 U	5.2	0.28	1.01	07/09/19 14:35	
Chlorobenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Chloroethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Chloroform	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Chloromethane	5.2 U	5.2	1.5	1.01	07/09/19 14:35	
Cyclohexane	5.2 U	5.2	0.28	1.01	07/09/19 14:35	
Dibromochloromethane	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Dichlorodifluoromethane (CFC 12)	5.2 U	5.2	0.35	1.01	07/09/19 14:35	
Dichloromethane	5.2 U	5.2	3.0	1.01	07/09/19 14:35	
Ethylbenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Isopropylbenzene (Cumene)	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Methyl Acetate	5.2 U	5.2	0.88	1.01	07/09/19 14:35	
Methyl tert-Butyl Ether	0.24 J	5.2	0.21	1.01	07/09/19 14:35	
Methylcyclohexane	5.2 U	5.2	0.33	1.01	07/09/19 14:35	
Styrene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-11
Lab Code: R1906195-011

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.2 U	5.2	0.24	1.01	07/09/19 14:35	
Toluene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
Trichloroethene (TCE)	5.2 U	5.2	0.23	1.01	07/09/19 14:35	
Trichlorofluoromethane (CFC 11)	5.2 U	5.2	0.28	1.01	07/09/19 14:35	
Vinyl Chloride	5.2 U	5.2	0.48	1.01	07/09/19 14:35	
cis-1,2-Dichloroethene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
cis-1,3-Dichloropropene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
m,p-Xylenes	10 U	10	0.39	1.01	07/09/19 14:35	
n-Butylbenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
n-Propylbenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
o-Xylene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
sec-Butylbenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
tert-Butylbenzene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
trans-1,2-Dichloroethene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	
trans-1,3-Dichloropropene	5.2 U	5.2	0.21	1.01	07/09/19 14:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	86	31 - 154	07/09/19 14:35	
Dibromofluoromethane	95	63 - 138	07/09/19 14:35	
Toluene-d8	98	66 - 138	07/09/19 14:35	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-13
Lab Code: R1906195-013

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,1,2,2-Tetrachloroethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,1,2-Trichloroethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,1-Dichloroethane (1,1-DCA)	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,1-Dichloroethene (1,1-DCE)	6.3 U	6.3	0.37	1.21	07/09/19 14:58	
1,2,3-Trichlorobenzene	6.3 U	6.3	0.65	1.21	07/09/19 14:58	
1,2,4-Trichlorobenzene	6.3 U	6.3	0.53	1.21	07/09/19 14:58	
1,2,4-Trimethylbenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,2-Dibromo-3-chloropropane (DBCP)	6.3 U	6.3	0.37	1.21	07/09/19 14:58	
1,2-Dibromoethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,2-Dichlorobenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,2-Dichloroethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,2-Dichloropropane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,3,5-Trimethylbenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,3-Dichlorobenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
1,4-Dichlorobenzene	6.3 U	6.3	0.28	1.21	07/09/19 14:58	
1,4-Dioxane	130 U	130	25	1.21	07/09/19 14:58	
2-Butanone (MEK)	6.3 U	6.3	2.5	1.21	07/09/19 14:58	
2-Hexanone	6.3 U	6.3	0.45	1.21	07/09/19 14:58	
4-Methyl-2-pentanone	6.3 U	6.3	0.29	1.21	07/09/19 14:58	
Acetone	17	6.3	5.9	1.21	07/09/19 14:58	
Benzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Bromochloromethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Bromodichloromethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Bromoform	6.3 U	6.3	0.63	1.21	07/09/19 14:58	
Bromomethane	6.3 U	6.3	2.7	1.21	07/09/19 14:58	
Carbon Disulfide	6.3 U	6.3	0.37	1.21	07/09/19 14:58	
Carbon Tetrachloride	6.3 U	6.3	0.33	1.21	07/09/19 14:58	
Chlorobenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Chloroethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Chloroform	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Chloromethane	6.3 U	6.3	1.8	1.21	07/09/19 14:58	
Cyclohexane	6.3 U	6.3	0.33	1.21	07/09/19 14:58	
Dibromochloromethane	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Dichlorodifluoromethane (CFC 12)	6.3 U	6.3	0.42	1.21	07/09/19 14:58	
Dichloromethane	6.3 U	6.3	3.5	1.21	07/09/19 14:58	
Ethylbenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Isopropylbenzene (Cumene)	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Methyl Acetate	6.3 U	6.3	1.1	1.21	07/09/19 14:58	
Methyl tert-Butyl Ether	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
Methylcyclohexane	6.3 U	6.3	0.39	1.21	07/09/19 14:58	
Styrene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-13
Lab Code: R1906195-013

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	6.3 U	6.3	0.29	1.21	07/09/19 14:58	
Toluene	0.32 J	6.3	0.25	1.21	07/09/19 14:58	
Trichloroethene (TCE)	6.3 U	6.3	0.28	1.21	07/09/19 14:58	
Trichlorofluoromethane (CFC 11)	6.3 U	6.3	0.33	1.21	07/09/19 14:58	
Vinyl Chloride	6.3 U	6.3	0.58	1.21	07/09/19 14:58	
cis-1,2-Dichloroethene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
cis-1,3-Dichloropropene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
m,p-Xylenes	13 U	13	0.47	1.21	07/09/19 14:58	
n-Butylbenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
n-Propylbenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
o-Xylene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
sec-Butylbenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
tert-Butylbenzene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
trans-1,2-Dichloroethene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	
trans-1,3-Dichloropropene	6.3 U	6.3	0.25	1.21	07/09/19 14:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	31 - 154	07/09/19 14:58	
Dibromofluoromethane	94	63 - 138	07/09/19 14:58	
Toluene-d8	96	66 - 138	07/09/19 14:58	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-15
Lab Code: R1906195-015

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,1,2,2-Tetrachloroethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,1,2-Trichloroethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,1-Dichloroethane (1,1-DCA)	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,1-Dichloroethene (1,1-DCE)	5.1 U	5.1	0.30	.95	07/09/19 15:22	
1,2,3-Trichlorobenzene	5.1 U	5.1	0.53	.95	07/09/19 15:22	
1,2,4-Trichlorobenzene	5.1 U	5.1	0.43	.95	07/09/19 15:22	
1,2,4-Trimethylbenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,2-Dibromo-3-chloropropane (DBCP)	5.1 U	5.1	0.30	.95	07/09/19 15:22	
1,2-Dibromoethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,2-Dichlorobenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,2-Dichloroethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,2-Dichloropropane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,3,5-Trimethylbenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,3-Dichlorobenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
1,4-Dichlorobenzene	5.1 U	5.1	0.23	.95	07/09/19 15:22	
1,4-Dioxane	100 U	100	21	.95	07/09/19 15:22	
2-Butanone (MEK)	5.1 U	5.1	2.1	.95	07/09/19 15:22	
2-Hexanone	5.1 U	5.1	0.37	.95	07/09/19 15:22	
4-Methyl-2-pentanone	5.1 U	5.1	0.24	.95	07/09/19 15:22	
Acetone	17	5.1	4.8	.95	07/09/19 15:22	
Benzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Bromochloromethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Bromodichloromethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Bromoform	5.1 U	5.1	0.51	.95	07/09/19 15:22	
Bromomethane	5.1 U	5.1	2.2	.95	07/09/19 15:22	
Carbon Disulfide	5.1 U	5.1	0.30	.95	07/09/19 15:22	
Carbon Tetrachloride	5.1 U	5.1	0.27	.95	07/09/19 15:22	
Chlorobenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Chloroethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Chloroform	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Chloromethane	5.1 U	5.1	1.5	.95	07/09/19 15:22	
Cyclohexane	5.1 U	5.1	0.27	.95	07/09/19 15:22	
Dibromochloromethane	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Dichlorodifluoromethane (CFC 12)	5.1 U	5.1	0.34	.95	07/09/19 15:22	
Dichloromethane	5.1 U	5.1	2.9	.95	07/09/19 15:22	
Ethylbenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Isopropylbenzene (Cumene)	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Methyl Acetate	5.1 U	5.1	0.86	.95	07/09/19 15:22	
Methyl tert-Butyl Ether	5.1 U	5.1	0.21	.95	07/09/19 15:22	
Methylcyclohexane	5.1 U	5.1	0.32	.95	07/09/19 15:22	
Styrene	5.1 U	5.1	0.21	.95	07/09/19 15:22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-15
Lab Code: R1906195-015

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.1 U	5.1	0.24	.95	07/09/19 15:22	
Toluene	0.23 J	5.1	0.21	.95	07/09/19 15:22	
Trichloroethene (TCE)	5.1 U	5.1	0.23	.95	07/09/19 15:22	
Trichlorofluoromethane (CFC 11)	5.1 U	5.1	0.27	.95	07/09/19 15:22	
Vinyl Chloride	5.1 U	5.1	0.47	.95	07/09/19 15:22	
cis-1,2-Dichloroethene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
cis-1,3-Dichloropropene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
m,p-Xylenes	10 U	10	0.38	.95	07/09/19 15:22	
n-Butylbenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
n-Propylbenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
o-Xylene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
sec-Butylbenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
tert-Butylbenzene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
trans-1,2-Dichloroethene	5.1 U	5.1	0.21	.95	07/09/19 15:22	
trans-1,3-Dichloropropene	5.1 U	5.1	0.21	.95	07/09/19 15:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	31 - 154	07/09/19 15:22	
Dibromofluoromethane	94	63 - 138	07/09/19 15:22	
Toluene-d8	97	66 - 138	07/09/19 15:22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-17
Lab Code: R1906195-017

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,1,2,2-Tetrachloroethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,1,2-Trichloroethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,1-Dichloroethane (1,1-DCA)	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,1-Dichloroethene (1,1-DCE)	5.3 U	5.3	0.31	1.02	07/09/19 15:45	
1,2,3-Trichlorobenzene	5.3 U	5.3	0.55	1.02	07/09/19 15:45	
1,2,4-Trichlorobenzene	5.3 U	5.3	0.45	1.02	07/09/19 15:45	
1,2,4-Trimethylbenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,2-Dibromo-3-chloropropane (DBCP)	5.3 U	5.3	0.31	1.02	07/09/19 15:45	
1,2-Dibromoethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,2-Dichlorobenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,2-Dichloroethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,2-Dichloropropane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,3,5-Trimethylbenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,3-Dichlorobenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
1,4-Dichlorobenzene	5.3 U	5.3	0.24	1.02	07/09/19 15:45	
1,4-Dioxane	110 U	110	22	1.02	07/09/19 15:45	
2-Butanone (MEK)	5.3 U	5.3	2.2	1.02	07/09/19 15:45	
2-Hexanone	5.3 U	5.3	0.38	1.02	07/09/19 15:45	
4-Methyl-2-pentanone	5.3 U	5.3	0.25	1.02	07/09/19 15:45	
Acetone	34	5.3	5.0	1.02	07/09/19 15:45	
Benzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Bromochloromethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Bromodichloromethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Bromoform	5.3 U	5.3	0.53	1.02	07/09/19 15:45	
Bromomethane	5.3 U	5.3	2.3	1.02	07/09/19 15:45	
Carbon Disulfide	5.3 U	5.3	0.31	1.02	07/09/19 15:45	
Carbon Tetrachloride	5.3 U	5.3	0.28	1.02	07/09/19 15:45	
Chlorobenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Chloroethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Chloroform	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Chloromethane	5.3 U	5.3	1.5	1.02	07/09/19 15:45	
Cyclohexane	5.3 U	5.3	0.28	1.02	07/09/19 15:45	
Dibromochloromethane	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Dichlorodifluoromethane (CFC 12)	5.3 U	5.3	0.35	1.02	07/09/19 15:45	
Dichloromethane	5.3 U	5.3	3.0	1.02	07/09/19 15:45	
Ethylbenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Isopropylbenzene (Cumene)	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Methyl Acetate	5.3 U	5.3	0.89	1.02	07/09/19 15:45	
Methyl tert-Butyl Ether	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
Methylcyclohexane	5.3 U	5.3	0.33	1.02	07/09/19 15:45	
Styrene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-17
Lab Code: R1906195-017

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.3 U	5.3	0.25	1.02	07/09/19 15:45	
Toluene	0.33 J	5.3	0.22	1.02	07/09/19 15:45	
Trichloroethene (TCE)	5.3 U	5.3	0.24	1.02	07/09/19 15:45	
Trichlorofluoromethane (CFC 11)	5.3 U	5.3	0.28	1.02	07/09/19 15:45	
Vinyl Chloride	5.3 U	5.3	0.49	1.02	07/09/19 15:45	
cis-1,2-Dichloroethene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
cis-1,3-Dichloropropene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
m,p-Xylenes	11 U	11	0.39	1.02	07/09/19 15:45	
n-Butylbenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
n-Propylbenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
o-Xylene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
sec-Butylbenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
tert-Butylbenzene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
trans-1,2-Dichloroethene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	
trans-1,3-Dichloropropene	5.3 U	5.3	0.22	1.02	07/09/19 15:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	31 - 154	07/09/19 15:45	
Dibromofluoromethane	95	63 - 138	07/09/19 15:45	
Toluene-d8	97	66 - 138	07/09/19 15:45	



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

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ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	340 U	340	81	1	07/12/19 23:30	7/10/19	
2,3,4,6-Tetrachlorophenol	340 U	340	72	1	07/12/19 23:30	7/10/19	
2,4,5-Trichlorophenol	340 U	340	300	1	07/12/19 23:30	7/10/19	
2,4,6-Trichlorophenol	340 U	340	61	1	07/12/19 23:30	7/10/19	
2,4-Dichlorophenol	340 U	340	73	1	07/12/19 23:30	7/10/19	
2,4-Dimethylphenol	340 U	340	75	1	07/12/19 23:30	7/10/19	
2,4-Dinitrophenol	1800 U	1800	130	1	07/12/19 23:30	7/10/19	
2,4-Dinitrotoluene	340 U	340	140	1	07/12/19 23:30	7/10/19	
2,6-Dinitrotoluene	340 U	340	100	1	07/12/19 23:30	7/10/19	
2-Chloronaphthalene	340 U	340	82	1	07/12/19 23:30	7/10/19	
2-Chlorophenol	340 U	340	85	1	07/12/19 23:30	7/10/19	
2-Methylnaphthalene	340 U	340	75	1	07/12/19 23:30	7/10/19	
2-Methylphenol	340 U	340	74	1	07/12/19 23:30	7/10/19	
2-Nitroaniline	1800 U	1800	110	1	07/12/19 23:30	7/10/19	
2-Nitrophenol	340 U	340	99	1	07/12/19 23:30	7/10/19	
3,3'-Dichlorobenzidine	340 U	340	72	1	07/12/19 23:30	7/10/19	
3- and 4-Methylphenol Coelution	340 U	340	66	1	07/12/19 23:30	7/10/19	
3-Nitroaniline	1800 U	1800	73	1	07/12/19 23:30	7/10/19	
4,6-Dinitro-2-methylphenol	1800 U	1800	150	1	07/12/19 23:30	7/10/19	
4-Bromophenyl Phenyl Ether	340 U	340	130	1	07/12/19 23:30	7/10/19	
4-Chloro-3-methylphenol	340 U	340	75	1	07/12/19 23:30	7/10/19	
4-Chloroaniline	340 U	340	81	1	07/12/19 23:30	7/10/19	
4-Chlorophenyl Phenyl Ether	340 U	340	82	1	07/12/19 23:30	7/10/19	
4-Nitroaniline	1800 U	1800	73	1	07/12/19 23:30	7/10/19	
4-Nitrophenol	1800 U	1800	120	1	07/12/19 23:30	7/10/19	
Acenaphthene	340 U	340	77	1	07/12/19 23:30	7/10/19	
Acenaphthylene	340 U	340	91	1	07/12/19 23:30	7/10/19	
Acetophenone	340 U	340	78	1	07/12/19 23:30	7/10/19	
Anthracene	340 U	340	96	1	07/12/19 23:30	7/10/19	
Atrazine	340 U	340	140	1	07/12/19 23:30	7/10/19	
Benz(a)anthracene	340 U	340	110	1	07/12/19 23:30	7/10/19	
Benzaldehyde	1800 U	1800	68	1	07/12/19 23:30	7/10/19	
Benzo(a)pyrene	340 U	340	130	1	07/12/19 23:30	7/10/19	
Benzo(b)fluoranthene	340 U	340	120	1	07/12/19 23:30	7/10/19	
Benzo(g,h,i)perylene	340 U	340	91	1	07/12/19 23:30	7/10/19	
Benzo(k)fluoranthene	340 U	340	130	1	07/12/19 23:30	7/10/19	
Biphenyl	340 U	340	85	1	07/12/19 23:30	7/10/19	
2,2'-Oxybis(1-chloropropane)	340 U	340	140	1	07/12/19 23:30	7/10/19	
Bis(2-chloroethoxy)methane	340 U	340	92	1	07/12/19 23:30	7/10/19	
Bis(2-chloroethyl) Ether	340 U	340	90	1	07/12/19 23:30	7/10/19	
Bis(2-ethylhexyl) Phthalate	520 U	520	92	1	07/12/19 23:30	7/10/19	
Butyl Benzyl Phthalate	340 U	340	86	1	07/12/19 23:30	7/10/19	
Caprolactam	340 U	340	90	1	07/12/19 23:30	7/10/19	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	340 U	340	99	1	07/12/19 23:30	7/10/19	
Chrysene	340 U	340	130	1	07/12/19 23:30	7/10/19	
Di-n-butyl Phthalate	340 U	340	110	1	07/12/19 23:30	7/10/19	
Di-n-octyl Phthalate	340 U	340	110	1	07/12/19 23:30	7/10/19	
Dibenz(a,h)anthracene	340 U	340	110	1	07/12/19 23:30	7/10/19	
Dibenzofuran	340 U	340	68	1	07/12/19 23:30	7/10/19	
Diethyl Phthalate	340 U	340	73	1	07/12/19 23:30	7/10/19	
Dimethyl Phthalate	340 U	340	77	1	07/12/19 23:30	7/10/19	
Fluoranthene	340 U	340	130	1	07/12/19 23:30	7/10/19	
Fluorene	340 U	340	79	1	07/12/19 23:30	7/10/19	
Hexachlorobenzene	340 U	340	110	1	07/12/19 23:30	7/10/19	
Hexachlorobutadiene	340 U	340	84	1	07/12/19 23:30	7/10/19	
Hexachlorocyclopentadiene	340 U	340	75	1	07/12/19 23:30	7/10/19	
Hexachloroethane	340 U	340	89	1	07/12/19 23:30	7/10/19	
Indeno(1,2,3-cd)pyrene	340 U	340	120	1	07/12/19 23:30	7/10/19	
Isophorone	340 U	340	94	1	07/12/19 23:30	7/10/19	
N-Nitrosodi-n-propylamine	340 U	340	92	1	07/12/19 23:30	7/10/19	
N-Nitrosodiphenylamine	340 U	340	230	1	07/12/19 23:30	7/10/19	
Naphthalene	340 U	340	89	1	07/12/19 23:30	7/10/19	
Nitrobenzene	340 U	340	89	1	07/12/19 23:30	7/10/19	
Pentachlorophenol (PCP)	1800 U	1800	120	1	07/12/19 23:30	7/10/19	
Phenanthrene	340 U	340	100	1	07/12/19 23:30	7/10/19	
Phenol	340 U	340	81	1	07/12/19 23:30	7/10/19	
Pyrene	340 U	340	140	1	07/12/19 23:30	7/10/19	
Pyridine	1800 U	1800	42	1	07/12/19 23:30	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	11	10 - 109	07/12/19 23:30	
2-Fluorobiphenyl	24	10 - 102	07/12/19 23:30	
2-Fluorophenol	22	10 - 88	07/12/19 23:30	
Nitrobenzene-d5	21	10 - 95	07/12/19 23:30	
Phenol-d6	21	10 - 145	07/12/19 23:30	
Terphenyl-d14	26	10 - 106	07/12/19 23:30	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	340 U	340	81	1	07/18/19 20:05	7/17/19	*
2,3,4,6-Tetrachlorophenol	340 U	340	71	1	07/18/19 20:05	7/17/19	*
2,4,5-Trichlorophenol	340 U	340	290	1	07/18/19 20:05	7/17/19	*
2,4,6-Trichlorophenol	340 U	340	60	1	07/18/19 20:05	7/17/19	*
2,4-Dichlorophenol	340 U	340	72	1	07/18/19 20:05	7/17/19	*
2,4-Dimethylphenol	340 U	340	75	1	07/18/19 20:05	7/17/19	*
2,4-Dinitrophenol	1700 U	1700	130	1	07/18/19 20:05	7/17/19	*
2,4-Dinitrotoluene	340 U	340	140	1	07/18/19 20:05	7/17/19	*
2,6-Dinitrotoluene	340 U	340	99	1	07/18/19 20:05	7/17/19	*
2-Chloronaphthalene	340 U	340	82	1	07/18/19 20:05	7/17/19	*
2-Chlorophenol	340 U	340	84	1	07/18/19 20:05	7/17/19	*
2-Methylnaphthalene	340 U	340	75	1	07/18/19 20:05	7/17/19	*
2-Methylphenol	340 U	340	74	1	07/18/19 20:05	7/17/19	*
2-Nitroaniline	1700 U	1700	110	1	07/18/19 20:05	7/17/19	*
2-Nitrophenol	340 U	340	98	1	07/18/19 20:05	7/17/19	*
3,3'-Dichlorobenzidine	340 U	340	71	1	07/18/19 20:05	7/17/19	*
3- and 4-Methylphenol Coelution	340 U	340	65	1	07/18/19 20:05	7/17/19	*
3-Nitroaniline	1700 U	1700	72	1	07/18/19 20:05	7/17/19	*
4,6-Dinitro-2-methylphenol	1700 U	1700	150	1	07/18/19 20:05	7/17/19	*
4-Bromophenyl Phenyl Ether	340 U	340	130	1	07/18/19 20:05	7/17/19	*
4-Chloro-3-methylphenol	340 U	340	75	1	07/18/19 20:05	7/17/19	*
4-Chloroaniline	340 U	340	81	1	07/18/19 20:05	7/17/19	*
4-Chlorophenyl Phenyl Ether	340 U	340	82	1	07/18/19 20:05	7/17/19	*
4-Nitroaniline	1700 U	1700	72	1	07/18/19 20:05	7/17/19	*
4-Nitrophenol	1700 U	1700	120	1	07/18/19 20:05	7/17/19	*
Acenaphthene	340 U	340	77	1	07/18/19 20:05	7/17/19	*
Acenaphthylene	340 U	340	90	1	07/18/19 20:05	7/17/19	*
Acetophenone	340 U	340	78	1	07/18/19 20:05	7/17/19	*
Anthracene	340 U	340	95	1	07/18/19 20:05	7/17/19	*
Atrazine	340 U	340	140	1	07/18/19 20:05	7/17/19	*
Benz(a)anthracene	340 U	340	100	1	07/18/19 20:05	7/17/19	*
Benzaldehyde	1700 U	1700	67	1	07/18/19 20:05	7/17/19	*
Benzo(a)pyrene	340 U	340	130	1	07/18/19 20:05	7/17/19	*
Benzo(b)fluoranthene	340 U	340	120	1	07/18/19 20:05	7/17/19	*
Benzo(g,h,i)perylene	340 U	340	90	1	07/18/19 20:05	7/17/19	*
Benzo(k)fluoranthene	340 U	340	130	1	07/18/19 20:05	7/17/19	*
Biphenyl	340 U	340	84	1	07/18/19 20:05	7/17/19	*
2,2'-Oxybis(1-chloropropane)	340 U	340	140	1	07/18/19 20:05	7/17/19	*
Bis(2-chloroethoxy)methane	340 U	340	91	1	07/18/19 20:05	7/17/19	*
Bis(2-chloroethyl) Ether	340 U	340	89	1	07/18/19 20:05	7/17/19	*
Bis(2-ethylhexyl) Phthalate	510 U	510	91	1	07/18/19 20:05	7/17/19	*
Butyl Benzyl Phthalate	340 U	340	85	1	07/18/19 20:05	7/17/19	*
Caprolactam	340 U	340	89	1	07/18/19 20:05	7/17/19	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	340 U	340	98	1	07/18/19 20:05	7/17/19	*
Chrysene	340 U	340	130	1	07/18/19 20:05	7/17/19	*
Di-n-butyl Phthalate	340 U	340	110	1	07/18/19 20:05	7/17/19	*
Di-n-octyl Phthalate	340 U	340	100	1	07/18/19 20:05	7/17/19	*
Dibenz(a,h)anthracene	340 U	340	110	1	07/18/19 20:05	7/17/19	*
Dibenzofuran	340 U	340	67	1	07/18/19 20:05	7/17/19	*
Diethyl Phthalate	340 U	340	72	1	07/18/19 20:05	7/17/19	*
Dimethyl Phthalate	340 U	340	77	1	07/18/19 20:05	7/17/19	*
Fluoranthene	340 U	340	130	1	07/18/19 20:05	7/17/19	*
Fluorene	340 U	340	79	1	07/18/19 20:05	7/17/19	*
Hexachlorobenzene	340 U	340	110	1	07/18/19 20:05	7/17/19	*
Hexachlorobutadiene	340 U	340	83	1	07/18/19 20:05	7/17/19	*
Hexachlorocyclopentadiene	340 U	340	75	1	07/18/19 20:05	7/17/19	*
Hexachloroethane	340 U	340	88	1	07/18/19 20:05	7/17/19	*
Indeno(1,2,3-cd)pyrene	340 U	340	120	1	07/18/19 20:05	7/17/19	*
Isophorone	340 U	340	93	1	07/18/19 20:05	7/17/19	*
N-Nitrosodi-n-propylamine	340 U	340	91	1	07/18/19 20:05	7/17/19	*
N-Nitrosodiphenylamine	340 U	340	230	1	07/18/19 20:05	7/17/19	*
Naphthalene	340 U	340	88	1	07/18/19 20:05	7/17/19	*
Nitrobenzene	340 U	340	88	1	07/18/19 20:05	7/17/19	*
Pentachlorophenol (PCP)	1700 U	1700	120	1	07/18/19 20:05	7/17/19	*
Phenanthrene	340 U	340	99	1	07/18/19 20:05	7/17/19	*
Phenol	340 U	340	81	1	07/18/19 20:05	7/17/19	*
Pyrene	340 U	340	140	1	07/18/19 20:05	7/17/19	*
Pyridine	1700 U	1700	42	1	07/18/19 20:05	7/17/19	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	18	10 - 109	07/18/19 20:05	
2-Fluorobiphenyl	22	10 - 102	07/18/19 20:05	
2-Fluorophenol	20	10 - 88	07/18/19 20:05	
Nitrobenzene-d5	19	10 - 95	07/18/19 20:05	
Phenol-d6	18	10 - 145	07/18/19 20:05	
Terphenyl-d14	29	10 - 106	07/18/19 20:05	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	340 U	340	82	1	07/12/19 23:59	7/10/19	
2,3,4,6-Tetrachlorophenol	340 U	340	72	1	07/12/19 23:59	7/10/19	
2,4,5-Trichlorophenol	340 U	340	300	1	07/12/19 23:59	7/10/19	
2,4,6-Trichlorophenol	340 U	340	61	1	07/12/19 23:59	7/10/19	
2,4-Dichlorophenol	340 U	340	73	1	07/12/19 23:59	7/10/19	
2,4-Dimethylphenol	340 U	340	76	1	07/12/19 23:59	7/10/19	
2,4-Dinitrophenol	1800 U	1800	130	1	07/12/19 23:59	7/10/19	
2,4-Dinitrotoluene	340 U	340	140	1	07/12/19 23:59	7/10/19	
2,6-Dinitrotoluene	340 U	340	110	1	07/12/19 23:59	7/10/19	
2-Chloronaphthalene	340 U	340	83	1	07/12/19 23:59	7/10/19	
2-Chlorophenol	340 U	340	85	1	07/12/19 23:59	7/10/19	
2-Methylnaphthalene	340 U	340	76	1	07/12/19 23:59	7/10/19	
2-Methylphenol	340 U	340	75	1	07/12/19 23:59	7/10/19	
2-Nitroaniline	1800 U	1800	110	1	07/12/19 23:59	7/10/19	
2-Nitrophenol	340 U	340	100	1	07/12/19 23:59	7/10/19	
3,3'-Dichlorobenzidine	340 U	340	72	1	07/12/19 23:59	7/10/19	
3- and 4-Methylphenol Coelution	340 U	340	66	1	07/12/19 23:59	7/10/19	
3-Nitroaniline	1800 U	1800	73	1	07/12/19 23:59	7/10/19	
4,6-Dinitro-2-methylphenol	1800 U	1800	150	1	07/12/19 23:59	7/10/19	
4-Bromophenyl Phenyl Ether	340 U	340	130	1	07/12/19 23:59	7/10/19	
4-Chloro-3-methylphenol	340 U	340	76	1	07/12/19 23:59	7/10/19	
4-Chloroaniline	340 U	340	82	1	07/12/19 23:59	7/10/19	
4-Chlorophenyl Phenyl Ether	340 U	340	83	1	07/12/19 23:59	7/10/19	
4-Nitroaniline	1800 U	1800	73	1	07/12/19 23:59	7/10/19	
4-Nitrophenol	1800 U	1800	120	1	07/12/19 23:59	7/10/19	
Acenaphthene	340 U	340	78	1	07/12/19 23:59	7/10/19	
Acenaphthylene	340 U	340	91	1	07/12/19 23:59	7/10/19	
Acetophenone	340 U	340	79	1	07/12/19 23:59	7/10/19	
Anthracene	340 U	340	96	1	07/12/19 23:59	7/10/19	
Atrazine	340 U	340	140	1	07/12/19 23:59	7/10/19	
Benz(a)anthracene	340 U	340	110	1	07/12/19 23:59	7/10/19	
Benzaldehyde	1800 U	1800	68	1	07/12/19 23:59	7/10/19	
Benzo(a)pyrene	340 U	340	130	1	07/12/19 23:59	7/10/19	
Benzo(b)fluoranthene	340 U	340	120	1	07/12/19 23:59	7/10/19	
Benzo(g,h,i)perylene	340 U	340	91	1	07/12/19 23:59	7/10/19	
Benzo(k)fluoranthene	340 U	340	130	1	07/12/19 23:59	7/10/19	
Biphenyl	340 U	340	85	1	07/12/19 23:59	7/10/19	
2,2'-Oxybis(1-chloropropane)	340 U	340	140	1	07/12/19 23:59	7/10/19	
Bis(2-chloroethoxy)methane	340 U	340	92	1	07/12/19 23:59	7/10/19	
Bis(2-chloroethyl) Ether	340 U	340	90	1	07/12/19 23:59	7/10/19	
Bis(2-ethylhexyl) Phthalate	520 U	520	92	1	07/12/19 23:59	7/10/19	
Butyl Benzyl Phthalate	340 U	340	86	1	07/12/19 23:59	7/10/19	
Caprolactam	340 U	340	90	1	07/12/19 23:59	7/10/19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	340 U	340	100	1	07/12/19 23:59	7/10/19	
Chrysene	340 U	340	130	1	07/12/19 23:59	7/10/19	
Di-n-butyl Phthalate	340 U	340	110	1	07/12/19 23:59	7/10/19	
Di-n-octyl Phthalate	340 U	340	110	1	07/12/19 23:59	7/10/19	
Dibenz(a,h)anthracene	340 U	340	110	1	07/12/19 23:59	7/10/19	
Dibenzofuran	340 U	340	68	1	07/12/19 23:59	7/10/19	
Diethyl Phthalate	340 U	340	73	1	07/12/19 23:59	7/10/19	
Dimethyl Phthalate	340 U	340	78	1	07/12/19 23:59	7/10/19	
Fluoranthene	340 U	340	130	1	07/12/19 23:59	7/10/19	
Fluorene	340 U	340	80	1	07/12/19 23:59	7/10/19	
Hexachlorobenzene	340 U	340	110	1	07/12/19 23:59	7/10/19	
Hexachlorobutadiene	340 U	340	84	1	07/12/19 23:59	7/10/19	
Hexachlorocyclopentadiene	340 U	340	76	1	07/12/19 23:59	7/10/19	
Hexachloroethane	340 U	340	89	1	07/12/19 23:59	7/10/19	
Indeno(1,2,3-cd)pyrene	340 U	340	120	1	07/12/19 23:59	7/10/19	
Isophorone	340 U	340	94	1	07/12/19 23:59	7/10/19	
N-Nitrosodi-n-propylamine	340 U	340	92	1	07/12/19 23:59	7/10/19	
N-Nitrosodiphenylamine	340 U	340	230	1	07/12/19 23:59	7/10/19	
Naphthalene	340 U	340	89	1	07/12/19 23:59	7/10/19	
Nitrobenzene	340 U	340	89	1	07/12/19 23:59	7/10/19	
Pentachlorophenol (PCP)	1800 U	1800	120	1	07/12/19 23:59	7/10/19	
Phenanthrene	340 U	340	110	1	07/12/19 23:59	7/10/19	
Phenol	340 U	340	82	1	07/12/19 23:59	7/10/19	
Pyrene	340 U	340	140	1	07/12/19 23:59	7/10/19	
Pyridine	1800 U	1800	42	1	07/12/19 23:59	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	15	10 - 109	07/12/19 23:59	
2-Fluorobiphenyl	31	10 - 102	07/12/19 23:59	
2-Fluorophenol	30	10 - 88	07/12/19 23:59	
Nitrobenzene-d5	27	10 - 95	07/12/19 23:59	
Phenol-d6	29	10 - 145	07/12/19 23:59	
Terphenyl-d14	33	10 - 106	07/12/19 23:59	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	340 U	340	81	1	07/18/19 20:34	7/17/19	*
2,3,4,6-Tetrachlorophenol	340 U	340	72	1	07/18/19 20:34	7/17/19	*
2,4,5-Trichlorophenol	340 U	340	290	1	07/18/19 20:34	7/17/19	*
2,4,6-Trichlorophenol	340 U	340	61	1	07/18/19 20:34	7/17/19	*
2,4-Dichlorophenol	340 U	340	73	1	07/18/19 20:34	7/17/19	*
2,4-Dimethylphenol	340 U	340	75	1	07/18/19 20:34	7/17/19	*
2,4-Dinitrophenol	1800 U	1800	130	1	07/18/19 20:34	7/17/19	*
2,4-Dinitrotoluene	340 U	340	140	1	07/18/19 20:34	7/17/19	*
2,6-Dinitrotoluene	340 U	340	100	1	07/18/19 20:34	7/17/19	*
2-Chloronaphthalene	340 U	340	82	1	07/18/19 20:34	7/17/19	*
2-Chlorophenol	340 U	340	84	1	07/18/19 20:34	7/17/19	*
2-Methylnaphthalene	340 U	340	75	1	07/18/19 20:34	7/17/19	*
2-Methylphenol	340 U	340	74	1	07/18/19 20:34	7/17/19	*
2-Nitroaniline	1800 U	1800	110	1	07/18/19 20:34	7/17/19	*
2-Nitrophenol	340 U	340	99	1	07/18/19 20:34	7/17/19	*
3,3'-Dichlorobenzidine	340 U	340	72	1	07/18/19 20:34	7/17/19	*
3- and 4-Methylphenol Coelution	340 U	340	66	1	07/18/19 20:34	7/17/19	*
3-Nitroaniline	1800 U	1800	73	1	07/18/19 20:34	7/17/19	*
4,6-Dinitro-2-methylphenol	1800 U	1800	150	1	07/18/19 20:34	7/17/19	*
4-Bromophenyl Phenyl Ether	340 U	340	130	1	07/18/19 20:34	7/17/19	*
4-Chloro-3-methylphenol	340 U	340	75	1	07/18/19 20:34	7/17/19	*
4-Chloroaniline	340 U	340	81	1	07/18/19 20:34	7/17/19	*
4-Chlorophenyl Phenyl Ether	340 U	340	82	1	07/18/19 20:34	7/17/19	*
4-Nitroaniline	1800 U	1800	73	1	07/18/19 20:34	7/17/19	*
4-Nitrophenol	1800 U	1800	120	1	07/18/19 20:34	7/17/19	*
Acenaphthene	340 U	340	77	1	07/18/19 20:34	7/17/19	*
Acenaphthylene	340 U	340	91	1	07/18/19 20:34	7/17/19	*
Acetophenone	340 U	340	78	1	07/18/19 20:34	7/17/19	*
Anthracene	340 U	340	96	1	07/18/19 20:34	7/17/19	*
Atrazine	340 U	340	140	1	07/18/19 20:34	7/17/19	*
Benz(a)anthracene	340 U	340	110	1	07/18/19 20:34	7/17/19	*
Benzaldehyde	1800 U	1800	68	1	07/18/19 20:34	7/17/19	*
Benzo(a)pyrene	340 U	340	130	1	07/18/19 20:34	7/17/19	*
Benzo(b)fluoranthene	340 U	340	120	1	07/18/19 20:34	7/17/19	*
Benzo(g,h,i)perylene	340 U	340	91	1	07/18/19 20:34	7/17/19	*
Benzo(k)fluoranthene	340 U	340	130	1	07/18/19 20:34	7/17/19	*
Biphenyl	340 U	340	84	1	07/18/19 20:34	7/17/19	*
2,2'-Oxybis(1-chloropropane)	340 U	340	140	1	07/18/19 20:34	7/17/19	*
Bis(2-chloroethoxy)methane	340 U	340	92	1	07/18/19 20:34	7/17/19	*
Bis(2-chloroethyl) Ether	340 U	340	90	1	07/18/19 20:34	7/17/19	*
Bis(2-ethylhexyl) Phthalate	520 U	520	92	1	07/18/19 20:34	7/17/19	*
Butyl Benzyl Phthalate	340 U	340	85	1	07/18/19 20:34	7/17/19	*
Caprolactam	340 U	340	90	1	07/18/19 20:34	7/17/19	*

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	340 U	340	99	1	07/18/19 20:34	7/17/19	*
Chrysene	340 U	340	130	1	07/18/19 20:34	7/17/19	*
Di-n-butyl Phthalate	340 U	340	110	1	07/18/19 20:34	7/17/19	*
Di-n-octyl Phthalate	340 U	340	110	1	07/18/19 20:34	7/17/19	*
Dibenz(a,h)anthracene	340 U	340	110	1	07/18/19 20:34	7/17/19	*
Dibenzofuran	340 U	340	68	1	07/18/19 20:34	7/17/19	*
Diethyl Phthalate	340 U	340	73	1	07/18/19 20:34	7/17/19	*
Dimethyl Phthalate	340 U	340	77	1	07/18/19 20:34	7/17/19	*
Fluoranthene	340 U	340	130	1	07/18/19 20:34	7/17/19	*
Fluorene	340 U	340	79	1	07/18/19 20:34	7/17/19	*
Hexachlorobenzene	340 U	340	110	1	07/18/19 20:34	7/17/19	*
Hexachlorobutadiene	340 U	340	83	1	07/18/19 20:34	7/17/19	*
Hexachlorocyclopentadiene	340 U	340	75	1	07/18/19 20:34	7/17/19	*
Hexachloroethane	340 U	340	88	1	07/18/19 20:34	7/17/19	*
Indeno(1,2,3-cd)pyrene	340 U	340	120	1	07/18/19 20:34	7/17/19	*
Isophorone	340 U	340	94	1	07/18/19 20:34	7/17/19	*
N-Nitrosodi-n-propylamine	340 U	340	92	1	07/18/19 20:34	7/17/19	*
N-Nitrosodiphenylamine	340 U	340	230	1	07/18/19 20:34	7/17/19	*
Naphthalene	340 U	340	88	1	07/18/19 20:34	7/17/19	*
Nitrobenzene	340 U	340	88	1	07/18/19 20:34	7/17/19	*
Pentachlorophenol (PCP)	1800 U	1800	120	1	07/18/19 20:34	7/17/19	*
Phenanthrene	340 U	340	100	1	07/18/19 20:34	7/17/19	*
Phenol	340 U	340	81	1	07/18/19 20:34	7/17/19	*
Pyrene	340 U	340	140	1	07/18/19 20:34	7/17/19	*
Pyridine	1800 U	1800	42	1	07/18/19 20:34	7/17/19	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	36	10 - 109	07/18/19 20:34	
2-Fluorobiphenyl	26	10 - 102	07/18/19 20:34	
2-Fluorophenol	36	10 - 88	07/18/19 20:34	
Nitrobenzene-d5	32	10 - 95	07/18/19 20:34	
Phenol-d6	36	10 - 145	07/18/19 20:34	
Terphenyl-d14	38	10 - 106	07/18/19 20:34	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	360 U	360	85	1	07/17/19 18:27	7/10/19	
2,3,4,6-Tetrachlorophenol	360 U	360	76	1	07/17/19 18:27	7/10/19	
2,4,5-Trichlorophenol	360 U	360	310	1	07/17/19 18:27	7/10/19	
2,4,6-Trichlorophenol	360 U	360	64	1	07/17/19 18:27	7/10/19	
2,4-Dichlorophenol	360 U	360	77	1	07/17/19 18:27	7/10/19	
2,4-Dimethylphenol	360 U	360	79	1	07/17/19 18:27	7/10/19	
2,4-Dinitrophenol	1800 U	1800	140	1	07/17/19 18:27	7/10/19	
2,4-Dinitrotoluene	360 U	360	150	1	07/17/19 18:27	7/10/19	
2,6-Dinitrotoluene	360 U	360	110	1	07/17/19 18:27	7/10/19	
2-Chloronaphthalene	360 U	360	86	1	07/17/19 18:27	7/10/19	
2-Chlorophenol	360 U	360	89	1	07/17/19 18:27	7/10/19	
2-Methylnaphthalene	360 U	360	79	1	07/17/19 18:27	7/10/19	
2-Methylphenol	360 U	360	78	1	07/17/19 18:27	7/10/19	
2-Nitroaniline	1800 U	1800	110	1	07/17/19 18:27	7/10/19	
2-Nitrophenol	360 U	360	110	1	07/17/19 18:27	7/10/19	
3,3'-Dichlorobenzidine	360 U	360	76	1	07/17/19 18:27	7/10/19	
3- and 4-Methylphenol Coelution	360 U	360	69	1	07/17/19 18:27	7/10/19	
3-Nitroaniline	1800 U	1800	77	1	07/17/19 18:27	7/10/19	
4,6-Dinitro-2-methylphenol	1800 U	1800	160	1	07/17/19 18:27	7/10/19	
4-Bromophenyl Phenyl Ether	360 U	360	140	1	07/17/19 18:27	7/10/19	
4-Chloro-3-methylphenol	360 U	360	79	1	07/17/19 18:27	7/10/19	
4-Chloroaniline	360 U	360	85	1	07/17/19 18:27	7/10/19	
4-Chlorophenyl Phenyl Ether	360 U	360	86	1	07/17/19 18:27	7/10/19	
4-Nitroaniline	1800 U	1800	77	1	07/17/19 18:27	7/10/19	
4-Nitrophenol	1800 U	1800	120	1	07/17/19 18:27	7/10/19	
Acenaphthene	360 U	360	81	1	07/17/19 18:27	7/10/19	
Acenaphthylene	360 U	360	95	1	07/17/19 18:27	7/10/19	
Acetophenone	360 U	360	82	1	07/17/19 18:27	7/10/19	
Anthracene	360 U	360	110	1	07/17/19 18:27	7/10/19	
Atrazine	360 U	360	150	1	07/17/19 18:27	7/10/19	
Benz(a)anthracene	360 U	360	110	1	07/17/19 18:27	7/10/19	
Benzaldehyde	1800 U	1800	71	1	07/17/19 18:27	7/10/19	
Benzo(a)pyrene	360 U	360	140	1	07/17/19 18:27	7/10/19	
Benzo(b)fluoranthene	360 U	360	120	1	07/17/19 18:27	7/10/19	
Benzo(g,h,i)perylene	360 U	360	95	1	07/17/19 18:27	7/10/19	
Benzo(k)fluoranthene	360 U	360	140	1	07/17/19 18:27	7/10/19	
Biphenyl	360 U	360	89	1	07/17/19 18:27	7/10/19	
2,2'-Oxybis(1-chloropropane)	360 U	360	150	1	07/17/19 18:27	7/10/19	
Bis(2-chloroethoxy)methane	360 U	360	96	1	07/17/19 18:27	7/10/19	
Bis(2-chloroethyl) Ether	360 U	360	94	1	07/17/19 18:27	7/10/19	
Bis(2-ethylhexyl) Phthalate	540 U	540	96	1	07/17/19 18:27	7/10/19	
Butyl Benzyl Phthalate	360 U	360	90	1	07/17/19 18:27	7/10/19	
Caprolactam	360 U	360	94	1	07/17/19 18:27	7/10/19	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	360 U	360	110	1	07/17/19 18:27	7/10/19	
Chrysene	360 U	360	140	1	07/17/19 18:27	7/10/19	
Di-n-butyl Phthalate	360 U	360	110	1	07/17/19 18:27	7/10/19	
Di-n-octyl Phthalate	360 U	360	110	1	07/17/19 18:27	7/10/19	
Dibenz(a,h)anthracene	360 U	360	110	1	07/17/19 18:27	7/10/19	
Dibenzofuran	360 U	360	71	1	07/17/19 18:27	7/10/19	
Diethyl Phthalate	360 U	360	77	1	07/17/19 18:27	7/10/19	
Dimethyl Phthalate	360 U	360	81	1	07/17/19 18:27	7/10/19	
Fluoranthene	360 U	360	140	1	07/17/19 18:27	7/10/19	
Fluorene	360 U	360	83	1	07/17/19 18:27	7/10/19	
Hexachlorobenzene	360 U	360	110	1	07/17/19 18:27	7/10/19	
Hexachlorobutadiene	360 U	360	88	1	07/17/19 18:27	7/10/19	
Hexachlorocyclopentadiene	360 U	360	79	1	07/17/19 18:27	7/10/19	
Hexachloroethane	360 U	360	93	1	07/17/19 18:27	7/10/19	
Indeno(1,2,3-cd)pyrene	360 U	360	120	1	07/17/19 18:27	7/10/19	
Isophorone	360 U	360	98	1	07/17/19 18:27	7/10/19	
N-Nitrosodi-n-propylamine	360 U	360	96	1	07/17/19 18:27	7/10/19	
N-Nitrosodiphenylamine	360 U	360	240	1	07/17/19 18:27	7/10/19	
Naphthalene	360 U	360	93	1	07/17/19 18:27	7/10/19	
Nitrobenzene	360 U	360	93	1	07/17/19 18:27	7/10/19	
Pentachlorophenol (PCP)	1800 U	1800	120	1	07/17/19 18:27	7/10/19	
Phenanthrene	360 U	360	110	1	07/17/19 18:27	7/10/19	
Phenol	360 U	360	85	1	07/17/19 18:27	7/10/19	
Pyrene	360 U	360	150	1	07/17/19 18:27	7/10/19	
Pyridine	1800 U	1800	44	1	07/17/19 18:27	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	17	10 - 109	07/17/19 18:27	
2-Fluorobiphenyl	23	10 - 102	07/17/19 18:27	
2-Fluorophenol	25	10 - 88	07/17/19 18:27	
Nitrobenzene-d5	23	10 - 95	07/17/19 18:27	
Phenol-d6	21	10 - 145	07/17/19 18:27	
Terphenyl-d14	23	10 - 106	07/17/19 18:27	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	350 U	350	84	1	07/20/19 14:02	7/17/19	*
2,3,4,6-Tetrachlorophenol	350 U	350	74	1	07/20/19 14:02	7/17/19	*
2,4,5-Trichlorophenol	350 U	350	300	1	07/20/19 14:02	7/17/19	*
2,4,6-Trichlorophenol	350 U	350	63	1	07/20/19 14:02	7/17/19	*
2,4-Dichlorophenol	350 U	350	75	1	07/20/19 14:02	7/17/19	*
2,4-Dimethylphenol	350 U	350	78	1	07/20/19 14:02	7/17/19	*
2,4-Dinitrophenol	1800 U	1800	130	1	07/20/19 14:02	7/17/19	*
2,4-Dinitrotoluene	350 U	350	140	1	07/20/19 14:02	7/17/19	*
2,6-Dinitrotoluene	350 U	350	110	1	07/20/19 14:02	7/17/19	*
2-Chloronaphthalene	350 U	350	85	1	07/20/19 14:02	7/17/19	*
2-Chlorophenol	350 U	350	87	1	07/20/19 14:02	7/17/19	*
2-Methylnaphthalene	350 U	350	78	1	07/20/19 14:02	7/17/19	*
2-Methylphenol	350 U	350	77	1	07/20/19 14:02	7/17/19	*
2-Nitroaniline	1800 U	1800	110	1	07/20/19 14:02	7/17/19	*
2-Nitrophenol	350 U	350	110	1	07/20/19 14:02	7/17/19	*
3,3'-Dichlorobenzidine	350 U	350	74	1	07/20/19 14:02	7/17/19	*
3- and 4-Methylphenol Coelution	350 U	350	68	1	07/20/19 14:02	7/17/19	*
3-Nitroaniline	1800 U	1800	75	1	07/20/19 14:02	7/17/19	*
4,6-Dinitro-2-methylphenol	1800 U	1800	150	1	07/20/19 14:02	7/17/19	*
4-Bromophenyl Phenyl Ether	350 U	350	130	1	07/20/19 14:02	7/17/19	*
4-Chloro-3-methylphenol	350 U	350	78	1	07/20/19 14:02	7/17/19	*
4-Chloroaniline	350 U	350	84	1	07/20/19 14:02	7/17/19	*
4-Chlorophenyl Phenyl Ether	350 U	350	85	1	07/20/19 14:02	7/17/19	*
4-Nitroaniline	1800 U	1800	75	1	07/20/19 14:02	7/17/19	*
4-Nitrophenol	1800 U	1800	120	1	07/20/19 14:02	7/17/19	*
Acenaphthene	350 U	350	80	1	07/20/19 14:02	7/17/19	*
Acenaphthylene	350 U	350	94	1	07/20/19 14:02	7/17/19	*
Acetophenone	350 U	350	81	1	07/20/19 14:02	7/17/19	*
Anthracene	350 U	350	99	1	07/20/19 14:02	7/17/19	*
Atrazine	350 U	350	140	1	07/20/19 14:02	7/17/19	*
Benz(a)anthracene	350 U	350	110	1	07/20/19 14:02	7/17/19	*
Benzaldehyde	1800 U	1800	70	1	07/20/19 14:02	7/17/19	*
Benzo(a)pyrene	350 U	350	130	1	07/20/19 14:02	7/17/19	*
Benzo(b)fluoranthene	350 U	350	120	1	07/20/19 14:02	7/17/19	*
Benzo(g,h,i)perylene	350 U	350	94	1	07/20/19 14:02	7/17/19	*
Benzo(k)fluoranthene	350 U	350	130	1	07/20/19 14:02	7/17/19	*
Biphenyl	350 U	350	87	1	07/20/19 14:02	7/17/19	*
2,2'-Oxybis(1-chloropropane)	350 U	350	140	1	07/20/19 14:02	7/17/19	*
Bis(2-chloroethoxy)methane	350 U	350	95	1	07/20/19 14:02	7/17/19	*
Bis(2-chloroethyl) Ether	350 U	350	93	1	07/20/19 14:02	7/17/19	*
Bis(2-ethylhexyl) Phthalate	540 U	540	95	1	07/20/19 14:02	7/17/19	*
Butyl Benzyl Phthalate	350 U	350	88	1	07/20/19 14:02	7/17/19	*
Caprolactam	350 U	350	93	1	07/20/19 14:02	7/17/19	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	350 U	350	110	1	07/20/19 14:02	7/17/19	*
Chrysene	350 U	350	130	1	07/20/19 14:02	7/17/19	*
Di-n-butyl Phthalate	350 U	350	110	1	07/20/19 14:02	7/17/19	*
Di-n-octyl Phthalate	350 U	350	110	1	07/20/19 14:02	7/17/19	*
Dibenz(a,h)anthracene	350 U	350	110	1	07/20/19 14:02	7/17/19	*
Dibenzofuran	350 U	350	70	1	07/20/19 14:02	7/17/19	*
Diethyl Phthalate	350 U	350	75	1	07/20/19 14:02	7/17/19	*
Dimethyl Phthalate	350 U	350	80	1	07/20/19 14:02	7/17/19	*
Fluoranthene	350 U	350	130	1	07/20/19 14:02	7/17/19	*
Fluorene	350 U	350	82	1	07/20/19 14:02	7/17/19	*
Hexachlorobenzene	350 U	350	110	1	07/20/19 14:02	7/17/19	*
Hexachlorobutadiene	350 U	350	86	1	07/20/19 14:02	7/17/19	*
Hexachlorocyclopentadiene	350 U	350	78	1	07/20/19 14:02	7/17/19	*
Hexachloroethane	350 U	350	92	1	07/20/19 14:02	7/17/19	*
Indeno(1,2,3-cd)pyrene	350 U	350	120	1	07/20/19 14:02	7/17/19	*
Isophorone	350 U	350	97	1	07/20/19 14:02	7/17/19	*
N-Nitrosodi-n-propylamine	350 U	350	95	1	07/20/19 14:02	7/17/19	*
N-Nitrosodiphenylamine	350 U	350	240	1	07/20/19 14:02	7/17/19	*
Naphthalene	350 U	350	92	1	07/20/19 14:02	7/17/19	*
Nitrobenzene	350 U	350	92	1	07/20/19 14:02	7/17/19	*
Pentachlorophenol (PCP)	1800 U	1800	120	1	07/20/19 14:02	7/17/19	*
Phenanthrene	350 U	350	110	1	07/20/19 14:02	7/17/19	*
Phenol	350 U	350	84	1	07/20/19 14:02	7/17/19	*
Pyrene	350 U	350	140	1	07/20/19 14:02	7/17/19	*
Pyridine	1800 U	1800	43	1	07/20/19 14:02	7/17/19	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	22	10 - 109	07/20/19 14:02	
2-Fluorobiphenyl	21	10 - 102	07/20/19 14:02	
2-Fluorophenol	27	10 - 88	07/20/19 14:02	
Nitrobenzene-d5	24	10 - 95	07/20/19 14:02	
Phenol-d6	27	10 - 145	07/20/19 14:02	
Terphenyl-d14	32	10 - 106	07/20/19 14:02	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	340 U	340	82	1	07/17/19 18:56	7/10/19	
2,3,4,6-Tetrachlorophenol	340 U	340	73	1	07/17/19 18:56	7/10/19	
2,4,5-Trichlorophenol	340 U	340	300	1	07/17/19 18:56	7/10/19	
2,4,6-Trichlorophenol	340 U	340	61	1	07/17/19 18:56	7/10/19	
2,4-Dichlorophenol	340 U	340	74	1	07/17/19 18:56	7/10/19	
2,4-Dimethylphenol	340 U	340	76	1	07/17/19 18:56	7/10/19	
2,4-Dinitrophenol	1800 U	1800	130	1	07/17/19 18:56	7/10/19	
2,4-Dinitrotoluene	340 U	340	140	1	07/17/19 18:56	7/10/19	
2,6-Dinitrotoluene	340 U	340	110	1	07/17/19 18:56	7/10/19	
2-Chloronaphthalene	340 U	340	83	1	07/17/19 18:56	7/10/19	
2-Chlorophenol	340 U	340	85	1	07/17/19 18:56	7/10/19	
2-Methylnaphthalene	340 U	340	76	1	07/17/19 18:56	7/10/19	
2-Methylphenol	340 U	340	75	1	07/17/19 18:56	7/10/19	
2-Nitroaniline	1800 U	1800	110	1	07/17/19 18:56	7/10/19	
2-Nitrophenol	340 U	340	100	1	07/17/19 18:56	7/10/19	
3,3'-Dichlorobenzidine	340 U	340	73	1	07/17/19 18:56	7/10/19	
3- and 4-Methylphenol Coelution	340 U	340	66	1	07/17/19 18:56	7/10/19	
3-Nitroaniline	1800 U	1800	74	1	07/17/19 18:56	7/10/19	
4,6-Dinitro-2-methylphenol	1800 U	1800	150	1	07/17/19 18:56	7/10/19	
4-Bromophenyl Phenyl Ether	340 U	340	130	1	07/17/19 18:56	7/10/19	
4-Chloro-3-methylphenol	340 U	340	76	1	07/17/19 18:56	7/10/19	
4-Chloroaniline	340 U	340	82	1	07/17/19 18:56	7/10/19	
4-Chlorophenyl Phenyl Ether	340 U	340	83	1	07/17/19 18:56	7/10/19	
4-Nitroaniline	1800 U	1800	74	1	07/17/19 18:56	7/10/19	
4-Nitrophenol	1800 U	1800	120	1	07/17/19 18:56	7/10/19	
Acenaphthene	340 U	340	78	1	07/17/19 18:56	7/10/19	
Acenaphthylene	340 U	340	91	1	07/17/19 18:56	7/10/19	
Acetophenone	340 U	340	79	1	07/17/19 18:56	7/10/19	
Anthracene	340 U	340	97	1	07/17/19 18:56	7/10/19	
Atrazine	340 U	340	140	1	07/17/19 18:56	7/10/19	
Benz(a)anthracene	340 U	340	110	1	07/17/19 18:56	7/10/19	
Benzaldehyde	1800 U	1800	68	1	07/17/19 18:56	7/10/19	
Benzo(a)pyrene	340 U	340	130	1	07/17/19 18:56	7/10/19	
Benzo(b)fluoranthene	340 U	340	120	1	07/17/19 18:56	7/10/19	
Benzo(g,h,i)perylene	340 U	340	91	1	07/17/19 18:56	7/10/19	
Benzo(k)fluoranthene	340 U	340	130	1	07/17/19 18:56	7/10/19	
Biphenyl	340 U	340	85	1	07/17/19 18:56	7/10/19	
2,2'-Oxybis(1-chloropropane)	340 U	340	140	1	07/17/19 18:56	7/10/19	
Bis(2-chloroethoxy)methane	340 U	340	92	1	07/17/19 18:56	7/10/19	
Bis(2-chloroethyl) Ether	340 U	340	90	1	07/17/19 18:56	7/10/19	
Bis(2-ethylhexyl) Phthalate	520 U	520	92	1	07/17/19 18:56	7/10/19	
Butyl Benzyl Phthalate	340 U	340	86	1	07/17/19 18:56	7/10/19	
Caprolactam	340 U	340	90	1	07/17/19 18:56	7/10/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	340 U	340	100	1	07/17/19 18:56	7/10/19	
Chrysene	340 U	340	130	1	07/17/19 18:56	7/10/19	
Di-n-butyl Phthalate	340 U	340	110	1	07/17/19 18:56	7/10/19	
Di-n-octyl Phthalate	340 U	340	110	1	07/17/19 18:56	7/10/19	
Dibenz(a,h)anthracene	340 U	340	110	1	07/17/19 18:56	7/10/19	
Dibenzofuran	340 U	340	68	1	07/17/19 18:56	7/10/19	
Diethyl Phthalate	340 U	340	74	1	07/17/19 18:56	7/10/19	
Dimethyl Phthalate	340 U	340	78	1	07/17/19 18:56	7/10/19	
Fluoranthene	340 U	340	130	1	07/17/19 18:56	7/10/19	
Fluorene	340 U	340	80	1	07/17/19 18:56	7/10/19	
Hexachlorobenzene	340 U	340	110	1	07/17/19 18:56	7/10/19	
Hexachlorobutadiene	340 U	340	84	1	07/17/19 18:56	7/10/19	
Hexachlorocyclopentadiene	340 U	340	76	1	07/17/19 18:56	7/10/19	
Hexachloroethane	340 U	340	89	1	07/17/19 18:56	7/10/19	
Indeno(1,2,3-cd)pyrene	340 U	340	120	1	07/17/19 18:56	7/10/19	
Isophorone	340 U	340	95	1	07/17/19 18:56	7/10/19	
N-Nitrosodi-n-propylamine	340 U	340	92	1	07/17/19 18:56	7/10/19	
N-Nitrosodiphenylamine	340 U	340	230	1	07/17/19 18:56	7/10/19	
Naphthalene	340 U	340	89	1	07/17/19 18:56	7/10/19	
Nitrobenzene	340 U	340	89	1	07/17/19 18:56	7/10/19	
Pentachlorophenol (PCP)	1800 U	1800	120	1	07/17/19 18:56	7/10/19	
Phenanthrene	340 U	340	110	1	07/17/19 18:56	7/10/19	
Phenol	340 U	340	82	1	07/17/19 18:56	7/10/19	
Pyrene	340 U	340	140	1	07/17/19 18:56	7/10/19	
Pyridine	1800 U	1800	42	1	07/17/19 18:56	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	23	10 - 109	07/17/19 18:56	
2-Fluorobiphenyl	32	10 - 102	07/17/19 18:56	
2-Fluorophenol	31	10 - 88	07/17/19 18:56	
Nitrobenzene-d5	32	10 - 95	07/17/19 18:56	
Phenol-d6	30	10 - 145	07/17/19 18:56	
Terphenyl-d14	32	10 - 106	07/17/19 18:56	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	340 U	340	82	1	07/20/19 14:32	7/17/19	*
2,3,4,6-Tetrachlorophenol	340 U	340	72	1	07/20/19 14:32	7/17/19	*
2,4,5-Trichlorophenol	340 U	340	300	1	07/20/19 14:32	7/17/19	*
2,4,6-Trichlorophenol	340 U	340	61	1	07/20/19 14:32	7/17/19	*
2,4-Dichlorophenol	340 U	340	73	1	07/20/19 14:32	7/17/19	*
2,4-Dimethylphenol	340 U	340	75	1	07/20/19 14:32	7/17/19	*
2,4-Dinitrophenol	1800 U	1800	130	1	07/20/19 14:32	7/17/19	*
2,4-Dinitrotoluene	340 U	340	140	1	07/20/19 14:32	7/17/19	*
2,6-Dinitrotoluene	340 U	340	100	1	07/20/19 14:32	7/17/19	*
2-Chloronaphthalene	340 U	340	83	1	07/20/19 14:32	7/17/19	*
2-Chlorophenol	340 U	340	85	1	07/20/19 14:32	7/17/19	*
2-Methylnaphthalene	340 U	340	75	1	07/20/19 14:32	7/17/19	*
2-Methylphenol	340 U	340	74	1	07/20/19 14:32	7/17/19	*
2-Nitroaniline	1800 U	1800	110	1	07/20/19 14:32	7/17/19	*
2-Nitrophenol	340 U	340	99	1	07/20/19 14:32	7/17/19	*
3,3'-Dichlorobenzidine	340 U	340	72	1	07/20/19 14:32	7/17/19	*
3- and 4-Methylphenol Coelution	340 U	340	66	1	07/20/19 14:32	7/17/19	*
3-Nitroaniline	1800 U	1800	73	1	07/20/19 14:32	7/17/19	*
4,6-Dinitro-2-methylphenol	1800 U	1800	150	1	07/20/19 14:32	7/17/19	*
4-Bromophenyl Phenyl Ether	340 U	340	130	1	07/20/19 14:32	7/17/19	*
4-Chloro-3-methylphenol	340 U	340	75	1	07/20/19 14:32	7/17/19	*
4-Chloroaniline	340 U	340	82	1	07/20/19 14:32	7/17/19	*
4-Chlorophenyl Phenyl Ether	340 U	340	83	1	07/20/19 14:32	7/17/19	*
4-Nitroaniline	1800 U	1800	73	1	07/20/19 14:32	7/17/19	*
4-Nitrophenol	1800 U	1800	120	1	07/20/19 14:32	7/17/19	*
Acenaphthene	340 U	340	77	1	07/20/19 14:32	7/17/19	*
Acenaphthylene	340 U	340	91	1	07/20/19 14:32	7/17/19	*
Acetophenone	340 U	340	78	1	07/20/19 14:32	7/17/19	*
Anthracene	340 U	340	96	1	07/20/19 14:32	7/17/19	*
Atrazine	340 U	340	140	1	07/20/19 14:32	7/17/19	*
Benz(a)anthracene	340 U	340	110	1	07/20/19 14:32	7/17/19	*
Benzaldehyde	1800 U	1800	68	1	07/20/19 14:32	7/17/19	*
Benzo(a)pyrene	340 U	340	130	1	07/20/19 14:32	7/17/19	*
Benzo(b)fluoranthene	340 U	340	120	1	07/20/19 14:32	7/17/19	*
Benzo(g,h,i)perylene	340 U	340	91	1	07/20/19 14:32	7/17/19	*
Benzo(k)fluoranthene	340 U	340	130	1	07/20/19 14:32	7/17/19	*
Biphenyl	340 U	340	85	1	07/20/19 14:32	7/17/19	*
2,2'-Oxybis(1-chloropropane)	340 U	340	140	1	07/20/19 14:32	7/17/19	*
Bis(2-chloroethoxy)methane	340 U	340	92	1	07/20/19 14:32	7/17/19	*
Bis(2-chloroethyl) Ether	340 U	340	90	1	07/20/19 14:32	7/17/19	*
Bis(2-ethylhexyl) Phthalate	520 U	520	92	1	07/20/19 14:32	7/17/19	*
Butyl Benzyl Phthalate	340 U	340	86	1	07/20/19 14:32	7/17/19	*
Caprolactam	340 U	340	90	1	07/20/19 14:32	7/17/19	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	340 U	340	99	1	07/20/19 14:32	7/17/19	*
Chrysene	340 U	340	130	1	07/20/19 14:32	7/17/19	*
Di-n-butyl Phthalate	340 U	340	110	1	07/20/19 14:32	7/17/19	*
Di-n-octyl Phthalate	340 U	340	110	1	07/20/19 14:32	7/17/19	*
Dibenz(a,h)anthracene	340 U	340	110	1	07/20/19 14:32	7/17/19	*
Dibenzofuran	340 U	340	68	1	07/20/19 14:32	7/17/19	*
Diethyl Phthalate	340 U	340	73	1	07/20/19 14:32	7/17/19	*
Dimethyl Phthalate	340 U	340	77	1	07/20/19 14:32	7/17/19	*
Fluoranthene	340 U	340	130	1	07/20/19 14:32	7/17/19	*
Fluorene	340 U	340	79	1	07/20/19 14:32	7/17/19	*
Hexachlorobenzene	340 U	340	110	1	07/20/19 14:32	7/17/19	*
Hexachlorobutadiene	340 U	340	84	1	07/20/19 14:32	7/17/19	*
Hexachlorocyclopentadiene	340 U	340	75	1	07/20/19 14:32	7/17/19	*
Hexachloroethane	340 U	340	89	1	07/20/19 14:32	7/17/19	*
Indeno(1,2,3-cd)pyrene	340 U	340	120	1	07/20/19 14:32	7/17/19	*
Isophorone	340 U	340	94	1	07/20/19 14:32	7/17/19	*
N-Nitrosodi-n-propylamine	340 U	340	92	1	07/20/19 14:32	7/17/19	*
N-Nitrosodiphenylamine	340 U	340	230	1	07/20/19 14:32	7/17/19	*
Naphthalene	340 U	340	89	1	07/20/19 14:32	7/17/19	*
Nitrobenzene	340 U	340	89	1	07/20/19 14:32	7/17/19	*
Pentachlorophenol (PCP)	1800 U	1800	120	1	07/20/19 14:32	7/17/19	*
Phenanthrene	340 U	340	100	1	07/20/19 14:32	7/17/19	*
Phenol	340 U	340	82	1	07/20/19 14:32	7/17/19	*
Pyrene	340 U	340	140	1	07/20/19 14:32	7/17/19	*
Pyridine	1800 U	1800	42	1	07/20/19 14:32	7/17/19	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	20	10 - 109	07/20/19 14:32	
2-Fluorobiphenyl	21	10 - 102	07/20/19 14:32	
2-Fluorophenol	21	10 - 88	07/20/19 14:32	
Nitrobenzene-d5	19	10 - 95	07/20/19 14:32	
Phenol-d6	20	10 - 145	07/20/19 14:32	
Terphenyl-d14	35	10 - 106	07/20/19 14:32	



Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
4,4'-DDE	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
4,4'-DDT	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Aldrin	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Dieldrin	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Endosulfan I	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Endosulfan II	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Endosulfan Sulfate	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Endrin	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Endrin Aldehyde	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Endrin Ketone	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Heptachlor	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Heptachlor Epoxide	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Methoxychlor	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
Toxaphene	170 U	170	99	5	07/12/19 22:22	7/8/19	
alpha-BHC	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
alpha-Chlordane	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
beta-BHC	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
delta-BHC	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
gamma-BHC (Lindane)	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	
gamma-Chlordane	8.8 U	8.8	4.4	5	07/12/19 22:22	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	37	10 - 145	07/12/19 22:22	
Tetrachloro-m-xylene	54	10 - 123	07/12/19 22:22	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
4,4'-DDE	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
4,4'-DDT	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Aldrin	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Dieldrin	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Endosulfan I	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Endosulfan II	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Endosulfan Sulfate	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Endrin	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Endrin Aldehyde	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Endrin Ketone	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Heptachlor	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Heptachlor Epoxide	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Methoxychlor	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
Toxaphene	35 U	35	20	1	07/12/19 22:40	7/8/19	
alpha-BHC	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
alpha-Chlordane	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
beta-BHC	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
delta-BHC	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
gamma-BHC (Lindane)	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	
gamma-Chlordane	1.8 U	1.8	0.88	1	07/12/19 22:40	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	37	10 - 145	07/12/19 22:40	
Tetrachloro-m-xylene	61	10 - 123	07/12/19 22:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
4,4'-DDE	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
4,4'-DDT	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Aldrin	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Dieldrin	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Endosulfan I	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Endosulfan II	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Endosulfan Sulfate	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Endrin	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Endrin Aldehyde	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Endrin Ketone	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Heptachlor	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Heptachlor Epoxide	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Methoxychlor	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
Toxaphene	35 U	35	21	1	07/13/19 00:07	7/8/19	
alpha-BHC	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
alpha-Chlordane	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
beta-BHC	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
delta-BHC	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
gamma-BHC (Lindane)	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	
gamma-Chlordane	1.8 U	1.8	0.90	1	07/13/19 00:07	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	31	10 - 145	07/13/19 00:07	
Tetrachloro-m-xylene	36	10 - 123	07/13/19 00:07	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
4,4'-DDE	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
4,4'-DDT	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Aldrin	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Dieldrin	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Endosulfan I	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Endosulfan II	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Endosulfan Sulfate	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Endrin	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Endrin Aldehyde	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Endrin Ketone	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Heptachlor	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Heptachlor Epoxide	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Methoxychlor	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
Toxaphene	34 U	34	20	1	07/13/19 00:25	7/8/19	
alpha-BHC	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
alpha-Chlordane	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
beta-BHC	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
delta-BHC	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
gamma-BHC (Lindane)	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	
gamma-Chlordane	1.7 U	1.7	0.87	1	07/13/19 00:25	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	30	10 - 145	07/13/19 00:25	
Tetrachloro-m-xylene	45	10 - 123	07/13/19 00:25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	34 U	34	18	1	07/10/19 19:34	7/8/19	
Aroclor 1221	69 U	69	35	1	07/10/19 19:34	7/8/19	
Aroclor 1232	34 U	34	20	1	07/10/19 19:34	7/8/19	
Aroclor 1242	34 U	34	18	1	07/10/19 19:34	7/8/19	
Aroclor 1248	34 U	34	27	1	07/10/19 19:34	7/8/19	
Aroclor 1254	34 U	34	19	1	07/10/19 19:34	7/8/19	
Aroclor 1260	34 U	34	18	1	07/10/19 19:34	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	42	22 - 128	07/10/19 19:34	
Tetrachloro-m-xylene	38	14 - 119	07/10/19 19:34	

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dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	35 U	35	18	1	07/10/19 19:54	7/8/19	
Aroclor 1221	70 U	70	35	1	07/10/19 19:54	7/8/19	
Aroclor 1232	35 U	35	21	1	07/10/19 19:54	7/8/19	
Aroclor 1242	35 U	35	18	1	07/10/19 19:54	7/8/19	
Aroclor 1248	35 U	35	27	1	07/10/19 19:54	7/8/19	
Aroclor 1254	35 U	35	19	1	07/10/19 19:54	7/8/19	
Aroclor 1260	35 U	35	18	1	07/10/19 19:54	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	62	22 - 128	07/10/19 19:54	
Tetrachloro-m-xylene	57	14 - 119	07/10/19 19:54	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	35 U	35	19	1	07/10/19 20:34	7/8/19	
Aroclor 1221	71 U	71	36	1	07/10/19 20:34	7/8/19	
Aroclor 1232	35 U	35	21	1	07/10/19 20:34	7/8/19	
Aroclor 1242	35 U	35	19	1	07/10/19 20:34	7/8/19	
Aroclor 1248	35 U	35	28	1	07/10/19 20:34	7/8/19	
Aroclor 1254	35 U	35	20	1	07/10/19 20:34	7/8/19	
Aroclor 1260	35 U	35	19	1	07/10/19 20:34	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	48	22 - 128	07/10/19 20:34	
Tetrachloro-m-xylene	33	14 - 119	07/10/19 20:34	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	34 U	34	18	1	07/10/19 20:53	7/8/19	
Aroclor 1221	69 U	69	34	1	07/10/19 20:53	7/8/19	
Aroclor 1232	34 U	34	20	1	07/10/19 20:53	7/8/19	
Aroclor 1242	34 U	34	18	1	07/10/19 20:53	7/8/19	
Aroclor 1248	34 U	34	27	1	07/10/19 20:53	7/8/19	
Aroclor 1254	34 U	34	19	1	07/10/19 20:53	7/8/19	
Aroclor 1260	34 U	34	18	1	07/10/19 20:53	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	47	22 - 128	07/10/19 20:53	
Tetrachloro-m-xylene	43	14 - 119	07/10/19 20:53	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	10 U	10	3.5	1	07/12/19 18:04	7/10/19	
Pentachlorophenol (PCP)	10 U	10	5.2	1	07/12/19 18:04	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	62	10 - 151	07/12/19 18:04	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	10 U	10	3.5	1	07/12/19 18:21	7/10/19	
Pentachlorophenol (PCP)	10 U	10	5.2	1	07/12/19 18:21	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	70	10 - 151	07/12/19 18:21	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	11 U	11	3.7	1	07/12/19 18:38	7/10/19	
Pentachlorophenol (PCP)	11 U	11	5.4	1	07/12/19 18:38	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	43	10 - 151	07/12/19 18:38	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	10 U	10	3.6	1	07/12/19 18:55	7/10/19	
Pentachlorophenol (PCP)	10 U	10	5.3	1	07/12/19 18:55	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	46	10 - 151	07/12/19 18:55	



Metals

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	17000	mg/Kg	20	13	1	07/12/19 11:54	07/08/19	
Antimony, Total	6010C	6.1 U	mg/Kg	6.1	0.6	1	07/12/19 11:54	07/08/19	
Arsenic, Total	6010C	3.6	mg/Kg	1.0	0.8	1	07/12/19 11:54	07/08/19	
Barium, Total	6010C	47.3	mg/Kg	2.0	1.0	1	07/12/19 11:54	07/08/19	
Beryllium, Total	6010C	0.52	mg/Kg	0.30	0.03	1	07/12/19 11:54	07/08/19	
Cadmium, Total	6010C	0.26 J	mg/Kg	0.51	0.08	1	07/12/19 11:54	07/08/19	
Calcium, Total	6010C	19000	mg/Kg	100	40	1	07/12/19 11:54	07/08/19	
Chromium, Total	6010C	28.4	mg/Kg	1.0	0.4	1	07/12/19 11:54	07/08/19	
Cobalt, Total	6010C	7.6	mg/Kg	5.1	0.2	1	07/12/19 11:54	07/08/19	
Copper, Total	6010C	3.1	mg/Kg	2.0	0.7	1	07/12/19 11:54	07/08/19	
Iron, Total	6010C	35900	mg/Kg	200	140	10	07/12/19 12:53	07/08/19	
Lead, Total	6010C	1.9 J	mg/Kg	5.1	0.5	1	07/12/19 11:54	07/08/19	
Magnesium, Total	6010C	17600	mg/Kg	100	20	1	07/12/19 11:54	07/08/19	
Manganese, Total	6010C	238	mg/Kg	2.0	1.6	1	07/12/19 11:54	07/08/19	
Mercury, Total	7471B	0.032 U	mg/Kg	0.032	0.006	1	07/11/19 12:42	07/10/19	
Nickel, Total	6010C	36.9	mg/Kg	4.1	0.7	1	07/12/19 11:54	07/08/19	
Potassium, Total	6010C	2310	mg/Kg	200	10	1	07/12/19 11:54	07/08/19	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	0.6	1	07/12/19 11:54	07/08/19	
Silver, Total	6010C	1.0 U	mg/Kg	1.0	0.08	1	07/12/19 11:54	07/08/19	
Sodium, Total	6010C	70 J	mg/Kg	100	60	1	07/12/19 11:54	07/08/19	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	0.7	1	07/12/19 11:54	07/08/19	
Vanadium, Total	6010C	22.1	mg/Kg	5.1	0.8	1	07/12/19 11:54	07/08/19	
Zinc, Total	6010C	40.6	mg/Kg	2.0	1.5	1	07/12/19 11:54	07/08/19	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	14700	mg/Kg	20	12	1	07/12/19 11:57	07/08/19	
Antimony, Total	6010C	6.0 U	mg/Kg	6.0	0.6	1	07/12/19 11:57	07/08/19	
Arsenic, Total	6010C	2.77	mg/Kg	0.99	0.70	1	07/12/19 11:57	07/08/19	
Barium, Total	6010C	42.7	mg/Kg	2.0	1.0	1	07/12/19 11:57	07/08/19	
Beryllium, Total	6010C	0.47	mg/Kg	0.30	0.03	1	07/12/19 11:57	07/08/19	
Cadmium, Total	6010C	0.14 J	mg/Kg	0.50	0.08	1	07/12/19 11:57	07/08/19	
Calcium, Total	6010C	33700	mg/Kg	990	320	10	07/12/19 16:49	07/08/19	
Chromium, Total	6010C	23.6	mg/Kg	0.99	0.35	1	07/12/19 11:57	07/08/19	
Cobalt, Total	6010C	6.0	mg/Kg	5.0	0.2	1	07/12/19 11:57	07/08/19	
Copper, Total	6010C	2.5	mg/Kg	2.0	0.7	1	07/12/19 11:57	07/08/19	
Iron, Total	6010C	26900	mg/Kg	200	130	10	07/12/19 16:49	07/08/19	
Lead, Total	6010C	1.9 J	mg/Kg	5.0	0.4	1	07/12/19 11:57	07/08/19	
Magnesium, Total	6010C	22600	mg/Kg	99	13	1	07/12/19 11:57	07/08/19	
Manganese, Total	6010C	332	mg/Kg	2.0	1.5	1	07/12/19 11:57	07/08/19	
Mercury, Total	7471B	0.034 U	mg/Kg	0.034	0.006	1	07/11/19 12:45	07/10/19	
Nickel, Total	6010C	29.6	mg/Kg	4.0	0.7	1	07/12/19 11:57	07/08/19	
Potassium, Total	6010C	2490	mg/Kg	200	10	1	07/12/19 11:57	07/08/19	
Selenium, Total	6010C	0.58 J	mg/Kg	1.0	0.54	1	07/12/19 11:57	07/08/19	
Silver, Total	6010C	0.99 U	mg/Kg	0.99	0.08	1	07/12/19 11:57	07/08/19	
Sodium, Total	6010C	83 J	mg/Kg	100	52	1	07/12/19 11:57	07/08/19	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	0.65	1	07/12/19 11:57	07/08/19	
Vanadium, Total	6010C	18.0	mg/Kg	5.0	0.8	1	07/12/19 11:57	07/08/19	
Zinc, Total	6010C	31.6	mg/Kg	2.0	1.4	1	07/12/19 11:57	07/08/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	12800	mg/Kg	21	13	1	07/12/19 12:01	07/08/19	
Antimony, Total	6010C	6.3 U	mg/Kg	6.3	0.6	1	07/12/19 12:01	07/08/19	
Arsenic, Total	6010C	2.6	mg/Kg	1.0	0.8	1	07/12/19 12:01	07/08/19	
Barium, Total	6010C	152	mg/Kg	2.1	1.1	1	07/12/19 12:01	07/08/19	
Beryllium, Total	6010C	0.43	mg/Kg	0.31	0.04	1	07/12/19 12:01	07/08/19	
Cadmium, Total	6010C	0.15 J	mg/Kg	0.52	0.08	1	07/12/19 12:01	07/08/19	
Calcium, Total	6010C	41200	mg/Kg	1000	400	10	07/12/19 12:59	07/08/19	
Chromium, Total	6010C	20.6	mg/Kg	1.0	0.4	1	07/12/19 12:01	07/08/19	
Cobalt, Total	6010C	5.4	mg/Kg	5.2	0.2	1	07/12/19 12:01	07/08/19	
Copper, Total	6010C	2.6	mg/Kg	2.1	0.7	1	07/12/19 12:01	07/08/19	
Iron, Total	6010C	24000	mg/Kg	210	140	10	07/12/19 12:59	07/08/19	
Lead, Total	6010C	1.2 J	mg/Kg	5.2	0.5	1	07/12/19 12:01	07/08/19	
Magnesium, Total	6010C	24900	mg/Kg	100	20	1	07/12/19 12:01	07/08/19	
Manganese, Total	6010C	343	mg/Kg	2.1	1.6	1	07/12/19 12:01	07/08/19	
Mercury, Total	7471B	0.035 U	mg/Kg	0.035	0.007	1	07/11/19 12:47	07/10/19	
Nickel, Total	6010C	25.9	mg/Kg	4.2	0.7	1	07/12/19 12:01	07/08/19	
Potassium, Total	6010C	2390	mg/Kg	210	20	1	07/12/19 12:01	07/08/19	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	0.6	1	07/12/19 12:01	07/08/19	
Silver, Total	6010C	1.0 U	mg/Kg	1.0	0.08	1	07/12/19 12:01	07/08/19	
Sodium, Total	6010C	100 J	mg/Kg	100	60	1	07/12/19 12:01	07/08/19	
Thallium, Total	6010C	0.7 J	mg/Kg	1.0	0.7	1	07/12/19 12:01	07/08/19	
Vanadium, Total	6010C	17.1	mg/Kg	5.2	0.8	1	07/12/19 12:01	07/08/19	
Zinc, Total	6010C	30.1	mg/Kg	2.1	1.5	1	07/12/19 12:01	07/08/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	15200	mg/Kg	19	12	1	07/12/19 12:10	07/08/19	
Antimony, Total	6010C	5.7 U	mg/Kg	5.7	0.6	1	07/12/19 12:10	07/08/19	
Arsenic, Total	6010C	4.85	mg/Kg	0.96	0.70	1	07/12/19 12:10	07/08/19	
Barium, Total	6010C	58.8	mg/Kg	1.9	1.0	1	07/12/19 12:10	07/08/19	
Beryllium, Total	6010C	0.50	mg/Kg	0.29	0.03	1	07/12/19 12:10	07/08/19	
Cadmium, Total	6010C	0.23 J	mg/Kg	0.48	0.08	1	07/12/19 12:10	07/08/19	
Calcium, Total	6010C	33900	mg/Kg	960	320	10	07/12/19 13:03	07/08/19	
Chromium, Total	6010C	26.0	mg/Kg	0.96	0.35	1	07/12/19 12:10	07/08/19	
Cobalt, Total	6010C	6.1	mg/Kg	4.8	0.2	1	07/12/19 12:10	07/08/19	
Copper, Total	6010C	2.1	mg/Kg	1.9	0.7	1	07/12/19 12:10	07/08/19	
Iron, Total	6010C	31900	mg/Kg	200	130	10	07/12/19 13:03	07/08/19	
Lead, Total	6010C	1.9 J	mg/Kg	4.8	0.4	1	07/12/19 12:10	07/08/19	
Magnesium, Total	6010C	22200	mg/Kg	96	13	1	07/12/19 12:10	07/08/19	
Manganese, Total	6010C	393	mg/Kg	2.0	1.5	1	07/12/19 12:10	07/08/19	
Mercury, Total	7471B	0.032 U	mg/Kg	0.032	0.006	1	07/11/19 12:50	07/10/19	
Nickel, Total	6010C	30.3	mg/Kg	3.8	0.7	1	07/12/19 12:10	07/08/19	
Potassium, Total	6010C	2690	mg/Kg	190	10	1	07/12/19 12:10	07/08/19	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	0.54	1	07/12/19 12:10	07/08/19	
Silver, Total	6010C	0.96 U	mg/Kg	0.96	0.08	1	07/12/19 12:10	07/08/19	
Sodium, Total	6010C	89 J	mg/Kg	100	52	1	07/12/19 12:10	07/08/19	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	0.65	1	07/12/19 12:10	07/08/19	
Vanadium, Total	6010C	22.0	mg/Kg	4.8	0.8	1	07/12/19 12:10	07/08/19	
Zinc, Total	6010C	33.0	mg/Kg	2.0	1.4	1	07/12/19 12:10	07/08/19	



General Chemistry

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-11
Lab Code: R1906195-011

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	96.8	Percent	-	-	1	07/05/19 08:30	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	1800	mg/Kg	1800	700	1	07/10/19 20:03	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.41 U	mg/Kg	0.41	0.05	1	07/12/19 02:27	07/09/19	
Chromium, Hexavalent	7199	0.41 U	mg/Kg	0.41	0.05	1	07/12/19 02:17	07/09/19	
Chromium, Trivalent	Calculation	28.4	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.24 U	mg/Kg	0.24	0.05	1	07/05/19 15:38	07/05/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-12
Lab Code: R1906195-012

Service Request: R1906195
Date Collected: 07/01/19 13:52
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Total Solids	ALS SOP	96.8	Percent	-	-	1	07/05/19 08:30	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-13
Lab Code: R1906195-013

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	96.8	Percent	-	-	1	07/05/19 08:30	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	800 J	mg/Kg	1600	600	1	07/10/19 20:07	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.41 U	mg/Kg	0.41	0.05	1	07/12/19 03:05	07/09/19	
Chromium, Hexavalent	7199	0.41 U	mg/Kg	0.41	0.05	1	07/12/19 02:56	07/09/19	
Chromium, Trivalent	Calculation	23.6	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.28 U	mg/Kg	0.28	0.05	1	07/05/19 15:38	07/05/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-14
Lab Code: R1906195-014

Service Request: R1906195
Date Collected: 07/01/19 14:12
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Total Solids	ALS SOP	96.8	Percent	-	-	1	07/05/19 08:30	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-15
Lab Code: R1906195-015

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	93.7	Percent	-	-	1	07/05/19 08:30	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	1600 J	mg/Kg	1700	700	1	07/15/19 18:29	NA	
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	1080	mg/Kg	460	170	1	07/18/19 12:36	NA	*

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.41 U	mg/Kg	0.41	0.05	1	07/12/19 03:22	07/09/19	
Chromium, Hexavalent	7199	0.41 U	mg/Kg	0.41	0.05	1	07/12/19 03:13	07/09/19	
Chromium, Trivalent	Calculation	20.6	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.31 U	mg/Kg	0.31	0.05	1	07/05/19 15:39	07/05/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-16
Lab Code: R1906195-016

Service Request: R1906195
Date Collected: 07/01/19 14:30
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Total Solids	ALS SOP	93.7	Percent	-	-	1	07/05/19 08:30	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-17
Lab Code: R1906195-017

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	96.8	Percent	-	-	1	07/05/19 08:30	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	300 U	mg/Kg	300	110	1	07/15/19 18:34	NA	
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	490	mg/Kg	480	180	1	07/18/19 12:42	NA	*

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.40 U	mg/Kg	0.40	0.05	1	07/12/19 03:39	07/09/19	
Chromium, Hexavalent	7199	0.40 U	mg/Kg	0.40	0.05	1	07/12/19 03:30	07/09/19	
Chromium, Trivalent	Calculation	26.0	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.30 U	mg/Kg	0.30	0.05	1	07/05/19 15:40	07/05/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-18
Lab Code: R1906195-018

Service Request: R1906195
Date Collected: 07/01/19 14:45
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Total Solids	ALS SOP	96.8	Percent	-	-	1	07/05/19 08:30	NA	



Volatile Organic Compounds by GC/MS

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-03
Lab Code: R1909194-003

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,1,2,2-Tetrachloroethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,1,2-Trichloroethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,1-Dichloroethane (1,1-DCA)	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,1-Dichloroethene (1,1-DCE)	5.9 U	5.9	0.35	1.1	09/28/19 12:07	
1,2,3-Trichlorobenzene	5.9 U	5.9	0.62	1.1	09/28/19 12:07	
1,2,4-Trichlorobenzene	5.9 U	5.9	0.50	1.1	09/28/19 12:07	
1,2,4-Trimethylbenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,2-Dibromo-3-chloropropane (DBCP)	5.9 U	5.9	0.35	1.1	09/28/19 12:07	
1,2-Dibromoethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,2-Dichlorobenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,2-Dichloroethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,2-Dichloropropane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,3,5-Trimethylbenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,3-Dichlorobenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
1,4-Dichlorobenzene	5.9 U	5.9	0.26	1.1	09/28/19 12:07	
1,4-Dioxane	120 U	120	24	1.1	09/28/19 12:07	
2-Butanone (MEK)	5.9 U	5.9	2.4	1.1	09/28/19 12:07	
2-Hexanone	5.9 U	5.9	0.43	1.1	09/28/19 12:07	
4-Methyl-2-pentanone	5.9 U	5.9	0.28	1.1	09/28/19 12:07	
Acetone	24	5.9	5.6	1.1	09/28/19 12:07	
Benzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Bromochloromethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Bromodichloromethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Bromoform	5.9 U	5.9	0.59	1.1	09/28/19 12:07	
Bromomethane	5.9 U	5.9	2.5	1.1	09/28/19 12:07	
Carbon Disulfide	5.9 U	5.9	0.35	1.1	09/28/19 12:07	
Carbon Tetrachloride	5.9 U	5.9	0.31	1.1	09/28/19 12:07	
Chlorobenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Chloroethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Chloroform	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Chloromethane	5.9 U	5.9	1.7	1.1	09/28/19 12:07	
Cyclohexane	5.9 U	5.9	0.31	1.1	09/28/19 12:07	
Dibromochloromethane	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Dichlorodifluoromethane (CFC 12)	5.9 U	5.9	0.39	1.1	09/28/19 12:07	
Dichloromethane	5.9 U	5.9	3.3	1.1	09/28/19 12:07	
Ethylbenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Isopropylbenzene (Cumene)	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Methyl Acetate	28	5.9	0.99	1.1	09/28/19 12:07	
Methyl tert-Butyl Ether	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Methylcyclohexane	5.9 U	5.9	0.37	1.1	09/28/19 12:07	
Styrene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-03
Lab Code: R1909194-003

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.9 U	5.9	0.28	1.1	09/28/19 12:07	
Toluene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
Trichloroethene (TCE)	5.9 U	5.9	0.26	1.1	09/28/19 12:07	
Trichlorofluoromethane (CFC 11)	5.9 U	5.9	0.31	1.1	09/28/19 12:07	
Vinyl Chloride	5.9 U	5.9	0.55	1.1	09/28/19 12:07	
cis-1,2-Dichloroethene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
cis-1,3-Dichloropropene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
m,p-Xylenes	12 U	12	0.44	1.1	09/28/19 12:07	
n-Butylbenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
n-Propylbenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
o-Xylene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
sec-Butylbenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
tert-Butylbenzene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
trans-1,2-Dichloroethene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	
trans-1,3-Dichloropropene	5.9 U	5.9	0.24	1.1	09/28/19 12:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	31 - 154	09/28/19 12:07	
Dibromofluoromethane	104	63 - 138	09/28/19 12:07	
Toluene-d8	101	66 - 138	09/28/19 12:07	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-05
Lab Code: R1909194-005

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,1,2,2-Tetrachloroethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,1,2-Trichloroethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,1,2-Trichloro-1,2,2-trifluoroethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,1-Dichloroethane (1,1-DCA)	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,1-Dichloroethene (1,1-DCE)	7.0 U	7.0	0.41	1.27	09/28/19 12:30	
1,2,3-Trichlorobenzene	7.0 U	7.0	0.73	1.27	09/28/19 12:30	
1,2,4-Trichlorobenzene	7.0 U	7.0	0.59	1.27	09/28/19 12:30	
1,2,4-Trimethylbenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,2-Dibromo-3-chloropropane (DBCP)	7.0 U	7.0	0.41	1.27	09/28/19 12:30	
1,2-Dibromoethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,2-Dichlorobenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,2-Dichloroethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,2-Dichloropropane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,3,5-Trimethylbenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,3-Dichlorobenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
1,4-Dichlorobenzene	7.0 U	7.0	0.31	1.27	09/28/19 12:30	
1,4-Dioxane	140 U	140	29	1.27	09/28/19 12:30	
2-Butanone (MEK)	4.4 J	7.0	2.9	1.27	09/28/19 12:30	
2-Hexanone	7.0 U	7.0	0.51	1.27	09/28/19 12:30	
4-Methyl-2-pentanone	7.0 U	7.0	0.33	1.27	09/28/19 12:30	
Acetone	150	7.0	6.6	1.27	09/28/19 12:30	
Benzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Bromochloromethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Bromodichloromethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Bromoform	7.0 U	7.0	0.71	1.27	09/28/19 12:30	
Bromomethane	7.0 U	7.0	3.0	1.27	09/28/19 12:30	
Carbon Disulfide	0.43 J	7.0	0.41	1.27	09/28/19 12:30	
Carbon Tetrachloride	7.0 U	7.0	0.37	1.27	09/28/19 12:30	
Chlorobenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Chloroethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Chloroform	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Chloromethane	7.0 U	7.0	2.0	1.27	09/28/19 12:30	
Cyclohexane	7.0 U	7.0	0.37	1.27	09/28/19 12:30	
Dibromochloromethane	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Dichlorodifluoromethane (CFC 12)	7.0 U	7.0	0.47	1.27	09/28/19 12:30	
Dichloromethane	7.0 U	7.0	4.0	1.27	09/28/19 12:30	
Ethylbenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Isopropylbenzene (Cumene)	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Methyl Acetate	370 E	7.0	1.2	1.27	09/28/19 12:30	
Methyl tert-Butyl Ether	0.30 J	7.0	0.29	1.27	09/28/19 12:30	
Methylcyclohexane	7.0 U	7.0	0.44	1.27	09/28/19 12:30	
Styrene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-05
Lab Code: R1909194-005

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	7.0 U	7.0	0.33	1.27	09/28/19 12:30	
Toluene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
Trichloroethene (TCE)	7.0 U	7.0	0.31	1.27	09/28/19 12:30	
Trichlorofluoromethane (CFC 11)	7.0 U	7.0	0.37	1.27	09/28/19 12:30	
Vinyl Chloride	7.0 U	7.0	0.65	1.27	09/28/19 12:30	
cis-1,2-Dichloroethene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
cis-1,3-Dichloropropene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
m,p-Xylenes	14 U	14	0.52	1.27	09/28/19 12:30	
n-Butylbenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
n-Propylbenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
o-Xylene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
sec-Butylbenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
tert-Butylbenzene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
trans-1,2-Dichloroethene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	
trans-1,3-Dichloropropene	7.0 U	7.0	0.29	1.27	09/28/19 12:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	86	31 - 154	09/28/19 12:30	
Dibromofluoromethane	102	63 - 138	09/28/19 12:30	
Toluene-d8	100	66 - 138	09/28/19 12:30	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-05
Lab Code: R1909194-005

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	690 U	690	28	125.5	10/01/19 18:03	
1,1,2,2-Tetrachloroethane	690 U	690	28	125.5	10/01/19 18:03	
1,1,2-Trichloroethane	690 U	690	28	125.5	10/01/19 18:03	
1,1,2-Trichloro-1,2,2-trifluoroethane	690 U	690	28	125.5	10/01/19 18:03	
1,1-Dichloroethane (1,1-DCA)	690 U	690	28	125.5	10/01/19 18:03	
1,1-Dichloroethene (1,1-DCE)	690 U	690	41	125.5	10/01/19 18:03	
1,2,3-Trichlorobenzene	690 U	690	73	125.5	10/01/19 18:03	
1,2,4-Trichlorobenzene	690 U	690	59	125.5	10/01/19 18:03	
1,2,4-Trimethylbenzene	66 DJ	690	28	125.5	10/01/19 18:03	
1,2-Dibromo-3-chloropropane (DBCP)	690 U	690	41	125.5	10/01/19 18:03	
1,2-Dibromoethane	690 U	690	28	125.5	10/01/19 18:03	
1,2-Dichlorobenzene	690 U	690	28	125.5	10/01/19 18:03	
1,2-Dichloroethane	690 U	690	28	125.5	10/01/19 18:03	
1,2-Dichloropropane	690 U	690	28	125.5	10/01/19 18:03	
1,3,5-Trimethylbenzene	690 U	690	28	125.5	10/01/19 18:03	
1,3-Dichlorobenzene	690 U	690	28	125.5	10/01/19 18:03	
1,4-Dichlorobenzene	690 U	690	31	125.5	10/01/19 18:03	
1,4-Dioxane	14000 U	14000	2800	125.5	10/01/19 18:03	
2-Butanone (MEK)	690 U	690	280	125.5	10/01/19 18:03	
2-Hexanone	690 U	690	50	125.5	10/01/19 18:03	
4-Methyl-2-pentanone	690 U	690	32	125.5	10/01/19 18:03	
Acetone	690 U	690	660	125.5	10/01/19 18:03	
Benzene	690 U	690	28	125.5	10/01/19 18:03	
Bromochloromethane	690 U	690	28	125.5	10/01/19 18:03	
Bromodichloromethane	690 U	690	28	125.5	10/01/19 18:03	
Bromoform	690 U	690	70	125.5	10/01/19 18:03	
Bromomethane	690 U	690	300	125.5	10/01/19 18:03	
Carbon Disulfide	690 U	690	41	125.5	10/01/19 18:03	
Carbon Tetrachloride	690 U	690	37	125.5	10/01/19 18:03	
Chlorobenzene	690 U	690	28	125.5	10/01/19 18:03	
Chloroethane	690 U	690	28	125.5	10/01/19 18:03	
Chloroform	690 U	690	28	125.5	10/01/19 18:03	
Chloromethane	690 U	690	200	125.5	10/01/19 18:03	
Cyclohexane	690 U	690	37	125.5	10/01/19 18:03	
Dibromochloromethane	690 U	690	28	125.5	10/01/19 18:03	
Dichlorodifluoromethane (CFC 12)	690 U	690	46	125.5	10/01/19 18:03	
Dichloromethane	690 U	690	390	125.5	10/01/19 18:03	
Ethylbenzene	690 U	690	28	125.5	10/01/19 18:03	
Isopropylbenzene (Cumene)	690 U	690	28	125.5	10/01/19 18:03	
Methyl Acetate	460 DJ	690	120	125.5	10/01/19 18:03	
Methyl tert-Butyl Ether	690 U	690	28	125.5	10/01/19 18:03	
Methylcyclohexane	690 U	690	43	125.5	10/01/19 18:03	
Styrene	690 U	690	28	125.5	10/01/19 18:03	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-05
Lab Code: R1909194-005

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	460 DJ	690	32	125.5	10/01/19 18:03	
Toluene	690 U	690	28	125.5	10/01/19 18:03	
Trichloroethene (TCE)	690 U	690	31	125.5	10/01/19 18:03	
Trichlorofluoromethane (CFC 11)	690 U	690	37	125.5	10/01/19 18:03	
Vinyl Chloride	690 U	690	64	125.5	10/01/19 18:03	
cis-1,2-Dichloroethene	690 U	690	28	125.5	10/01/19 18:03	
cis-1,3-Dichloropropene	690 U	690	28	125.5	10/01/19 18:03	
m,p-Xylenes	1400 U	1400	52	125.5	10/01/19 18:03	
n-Butylbenzene	690 U	690	28	125.5	10/01/19 18:03	
n-Propylbenzene	690 U	690	28	125.5	10/01/19 18:03	
o-Xylene	690 U	690	28	125.5	10/01/19 18:03	
sec-Butylbenzene	690 U	690	28	125.5	10/01/19 18:03	
tert-Butylbenzene	690 U	690	28	125.5	10/01/19 18:03	
trans-1,2-Dichloroethene	690 U	690	28	125.5	10/01/19 18:03	
trans-1,3-Dichloropropene	690 U	690	28	125.5	10/01/19 18:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	31 - 154	10/01/19 18:03	
Dibromofluoromethane	88	63 - 138	10/01/19 18:03	
Toluene-d8	100	66 - 138	10/01/19 18:03	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-07
Lab Code: R1909194-007

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,1,2,2-Tetrachloroethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,1,2-Trichloroethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,1,2-Trichloro-1,2,2-trifluoroethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,1-Dichloroethane (1,1-DCA)	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,1-Dichloroethene (1,1-DCE)	6.2 U	6.2	0.36	1.16	09/28/19 12:53	
1,2,3-Trichlorobenzene	6.2 U	6.2	0.65	1.16	09/28/19 12:53	
1,2,4-Trichlorobenzene	6.2 U	6.2	0.52	1.16	09/28/19 12:53	
1,2,4-Trimethylbenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,2-Dibromo-3-chloropropane (DBCP)	6.2 U	6.2	0.36	1.16	09/28/19 12:53	
1,2-Dibromoethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,2-Dichlorobenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,2-Dichloroethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,2-Dichloropropane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,3,5-Trimethylbenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,3-Dichlorobenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
1,4-Dichlorobenzene	6.2 U	6.2	0.28	1.16	09/28/19 12:53	
1,4-Dioxane	120 U	120	25	1.16	09/28/19 12:53	
2-Butanone (MEK)	6.2 U	6.2	2.5	1.16	09/28/19 12:53	
2-Hexanone	6.2 U	6.2	0.45	1.16	09/28/19 12:53	
4-Methyl-2-pentanone	6.2 U	6.2	0.29	1.16	09/28/19 12:53	
Acetone	6.2 U	6.2	5.9	1.16	09/28/19 12:53	
Benzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Bromochloromethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Bromodichloromethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Bromoform	6.2 U	6.2	0.62	1.16	09/28/19 12:53	
Bromomethane	6.2 U	6.2	2.6	1.16	09/28/19 12:53	
Carbon Disulfide	0.72 J	6.2	0.36	1.16	09/28/19 12:53	
Carbon Tetrachloride	6.2 U	6.2	0.33	1.16	09/28/19 12:53	
Chlorobenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Chloroethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Chloroform	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Chloromethane	6.2 U	6.2	1.8	1.16	09/28/19 12:53	
Cyclohexane	6.2 U	6.2	0.33	1.16	09/28/19 12:53	
Dibromochloromethane	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Dichlorodifluoromethane (CFC 12)	6.2 U	6.2	0.41	1.16	09/28/19 12:53	
Dichloromethane	6.2 U	6.2	3.5	1.16	09/28/19 12:53	
Ethylbenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Isopropylbenzene (Cumene)	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Methyl Acetate	2.1 J	6.2	1.1	1.16	09/28/19 12:53	
Methyl tert-Butyl Ether	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Methylcyclohexane	6.2 U	6.2	0.39	1.16	09/28/19 12:53	
Styrene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-07
Lab Code: R1909194-007

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	6.2 U	6.2	0.29	1.16	09/28/19 12:53	
Toluene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
Trichloroethene (TCE)	6.2 U	6.2	0.28	1.16	09/28/19 12:53	
Trichlorofluoromethane (CFC 11)	6.2 U	6.2	0.33	1.16	09/28/19 12:53	
Vinyl Chloride	6.2 U	6.2	0.57	1.16	09/28/19 12:53	
cis-1,2-Dichloroethene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
cis-1,3-Dichloropropene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
m,p-Xylenes	12 U	12	0.46	1.16	09/28/19 12:53	
n-Butylbenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
n-Propylbenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
o-Xylene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
sec-Butylbenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
tert-Butylbenzene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
trans-1,2-Dichloroethene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	
trans-1,3-Dichloropropene	6.2 U	6.2	0.25	1.16	09/28/19 12:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	31 - 154	09/28/19 12:53	
Dibromofluoromethane	101	63 - 138	09/28/19 12:53	
Toluene-d8	99	66 - 138	09/28/19 12:53	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-09
Lab Code: R1909194-009

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,1,2,2-Tetrachloroethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,1,2-Trichloroethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,1-Dichloroethane (1,1-DCA)	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,1-Dichloroethene (1,1-DCE)	5.8 U	5.8	0.34	1.12	09/28/19 13:17	
1,2,3-Trichlorobenzene	5.8 U	5.8	0.61	1.12	09/28/19 13:17	
1,2,4-Trichlorobenzene	5.8 U	5.8	0.49	1.12	09/28/19 13:17	
1,2,4-Trimethylbenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,2-Dibromo-3-chloropropane (DBCP)	5.8 U	5.8	0.34	1.12	09/28/19 13:17	
1,2-Dibromoethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,2-Dichlorobenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,2-Dichloroethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,2-Dichloropropane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,3,5-Trimethylbenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,3-Dichlorobenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
1,4-Dichlorobenzene	5.8 U	5.8	0.26	1.12	09/28/19 13:17	
1,4-Dioxane	120 U	120	24	1.12	09/28/19 13:17	
2-Butanone (MEK)	4.3 J	5.8	2.4	1.12	09/28/19 13:17	
2-Hexanone	5.8 U	5.8	0.42	1.12	09/28/19 13:17	
4-Methyl-2-pentanone	5.8 U	5.8	0.27	1.12	09/28/19 13:17	
Acetone	130	5.8	5.5	1.12	09/28/19 13:17	
Benzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Bromochloromethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Bromodichloromethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Bromoform	5.8 U	5.8	0.58	1.12	09/28/19 13:17	
Bromomethane	5.8 U	5.8	2.5	1.12	09/28/19 13:17	
Carbon Disulfide	5.8 U	5.8	0.34	1.12	09/28/19 13:17	
Carbon Tetrachloride	5.8 U	5.8	0.31	1.12	09/28/19 13:17	
Chlorobenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Chloroethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Chloroform	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Chloromethane	5.8 U	5.8	1.7	1.12	09/28/19 13:17	
Cyclohexane	5.8 U	5.8	0.31	1.12	09/28/19 13:17	
Dibromochloromethane	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Dichlorodifluoromethane (CFC 12)	5.8 U	5.8	0.39	1.12	09/28/19 13:17	
Dichloromethane	5.8 U	5.8	3.3	1.12	09/28/19 13:17	
Ethylbenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Isopropylbenzene (Cumene)	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
Methyl Acetate	250 E	5.8	0.98	1.12	09/28/19 13:17	
Methyl tert-Butyl Ether	0.40 J	5.8	0.24	1.12	09/28/19 13:17	
Methylcyclohexane	5.8 U	5.8	0.36	1.12	09/28/19 13:17	
Styrene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-09
Lab Code: R1909194-009

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.8 U	5.8	0.27	1.12	09/28/19 13:17	
Toluene	0.24 J	5.8	0.24	1.12	09/28/19 13:17	
Trichloroethene (TCE)	5.8 U	5.8	0.26	1.12	09/28/19 13:17	
Trichlorofluoromethane (CFC 11)	5.8 U	5.8	0.31	1.12	09/28/19 13:17	
Vinyl Chloride	5.8 U	5.8	0.54	1.12	09/28/19 13:17	
cis-1,2-Dichloroethene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
cis-1,3-Dichloropropene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
m,p-Xylenes	12 U	12	0.43	1.12	09/28/19 13:17	
n-Butylbenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
n-Propylbenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
o-Xylene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
sec-Butylbenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
tert-Butylbenzene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
trans-1,2-Dichloroethene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	
trans-1,3-Dichloropropene	5.8 U	5.8	0.24	1.12	09/28/19 13:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	31 - 154	09/28/19 13:17	
Dibromofluoromethane	102	63 - 138	09/28/19 13:17	
Toluene-d8	99	66 - 138	09/28/19 13:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-09
Lab Code: R1909194-009

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	750 U	750	30	145	10/01/19 18:25	
1,1,2,2-Tetrachloroethane	750 U	750	30	145	10/01/19 18:25	
1,1,2-Trichloroethane	750 U	750	30	145	10/01/19 18:25	
1,1,2-Trichloro-1,2,2-trifluoroethane	750 U	750	30	145	10/01/19 18:25	
1,1-Dichloroethane (1,1-DCA)	750 U	750	30	145	10/01/19 18:25	
1,1-Dichloroethene (1,1-DCE)	750 U	750	44	145	10/01/19 18:25	
1,2,3-Trichlorobenzene	750 U	750	78	145	10/01/19 18:25	
1,2,4-Trichlorobenzene	750 U	750	63	145	10/01/19 18:25	
1,2,4-Trimethylbenzene	36 DJ	750	30	145	10/01/19 18:25	
1,2-Dibromo-3-chloropropane (DBCP)	750 U	750	44	145	10/01/19 18:25	
1,2-Dibromoethane	750 U	750	30	145	10/01/19 18:25	
1,2-Dichlorobenzene	750 U	750	30	145	10/01/19 18:25	
1,2-Dichloroethane	750 U	750	30	145	10/01/19 18:25	
1,2-Dichloropropane	750 U	750	30	145	10/01/19 18:25	
1,3,5-Trimethylbenzene	750 U	750	30	145	10/01/19 18:25	
1,3-Dichlorobenzene	750 U	750	30	145	10/01/19 18:25	
1,4-Dichlorobenzene	750 U	750	33	145	10/01/19 18:25	
1,4-Dioxane	15000 U	15000	3000	145	10/01/19 18:25	
2-Butanone (MEK)	750 U	750	300	145	10/01/19 18:25	
2-Hexanone	750 U	750	54	145	10/01/19 18:25	
4-Methyl-2-pentanone	750 U	750	35	145	10/01/19 18:25	
Acetone	750 U	750	710	145	10/01/19 18:25	
Benzene	750 U	750	30	145	10/01/19 18:25	
Bromochloromethane	750 U	750	30	145	10/01/19 18:25	
Bromodichloromethane	750 U	750	30	145	10/01/19 18:25	
Bromoform	750 U	750	75	145	10/01/19 18:25	
Bromomethane	750 U	750	320	145	10/01/19 18:25	
Carbon Disulfide	750 U	750	44	145	10/01/19 18:25	
Carbon Tetrachloride	750 U	750	39	145	10/01/19 18:25	
Chlorobenzene	750 U	750	30	145	10/01/19 18:25	
Chloroethane	750 U	750	30	145	10/01/19 18:25	
Chloroform	750 U	750	30	145	10/01/19 18:25	
Chloromethane	750 U	750	210	145	10/01/19 18:25	
Cyclohexane	750 U	750	39	145	10/01/19 18:25	
Dibromochloromethane	750 U	750	30	145	10/01/19 18:25	
Dichlorodifluoromethane (CFC 12)	750 U	750	50	145	10/01/19 18:25	
Dichloromethane	750 U	750	420	145	10/01/19 18:25	
Ethylbenzene	750 U	750	30	145	10/01/19 18:25	
Isopropylbenzene (Cumene)	750 U	750	30	145	10/01/19 18:25	
Methyl Acetate	190 DJ	750	130	145	10/01/19 18:25	
Methyl tert-Butyl Ether	750 U	750	30	145	10/01/19 18:25	
Methylcyclohexane	750 U	750	47	145	10/01/19 18:25	
Styrene	750 U	750	30	145	10/01/19 18:25	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-09
Lab Code: R1909194-009

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	150 DJ	750	35	145	10/01/19 18:25	
Toluene	750 U	750	30	145	10/01/19 18:25	
Trichloroethene (TCE)	750 U	750	33	145	10/01/19 18:25	
Trichlorofluoromethane (CFC 11)	750 U	750	39	145	10/01/19 18:25	
Vinyl Chloride	750 U	750	69	145	10/01/19 18:25	
cis-1,2-Dichloroethene	750 U	750	30	145	10/01/19 18:25	
cis-1,3-Dichloropropene	750 U	750	30	145	10/01/19 18:25	
m,p-Xylenes	1500 U	1500	56	145	10/01/19 18:25	
n-Butylbenzene	750 U	750	30	145	10/01/19 18:25	
n-Propylbenzene	750 U	750	30	145	10/01/19 18:25	
o-Xylene	750 U	750	30	145	10/01/19 18:25	
sec-Butylbenzene	750 U	750	30	145	10/01/19 18:25	
tert-Butylbenzene	750 U	750	30	145	10/01/19 18:25	
trans-1,2-Dichloroethene	750 U	750	30	145	10/01/19 18:25	
trans-1,3-Dichloropropene	750 U	750	30	145	10/01/19 18:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	31 - 154	10/01/19 18:25	
Dibromofluoromethane	91	63 - 138	10/01/19 18:25	
Toluene-d8	102	66 - 138	10/01/19 18:25	



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	350 U	350	84	1	09/26/19 00:40	9/24/19	
2,3,4,6-Tetrachlorophenol	350 U	350	74	1	09/26/19 00:40	9/24/19	
2,4,5-Trichlorophenol	350 U	350	300	1	09/26/19 00:40	9/24/19	
2,4,6-Trichlorophenol	350 U	350	62	1	09/26/19 00:40	9/24/19	
2,4-Dichlorophenol	350 U	350	75	1	09/26/19 00:40	9/24/19	
2,4-Dimethylphenol	350 U	350	77	1	09/26/19 00:40	9/24/19	
2,4-Dinitrophenol	1800 U	1800	130	1	09/26/19 00:40	9/24/19	
2,4-Dinitrotoluene	350 U	350	140	1	09/26/19 00:40	9/24/19	
2,6-Dinitrotoluene	350 U	350	110	1	09/26/19 00:40	9/24/19	
2-Chloronaphthalene	350 U	350	85	1	09/26/19 00:40	9/24/19	
2-Chlorophenol	350 U	350	87	1	09/26/19 00:40	9/24/19	
2-Methylnaphthalene	350 U	350	77	1	09/26/19 00:40	9/24/19	
2-Methylphenol	350 U	350	76	1	09/26/19 00:40	9/24/19	
2-Nitroaniline	1800 U	1800	110	1	09/26/19 00:40	9/24/19	
2-Nitrophenol	350 U	350	110	1	09/26/19 00:40	9/24/19	
3,3'-Dichlorobenzidine	350 U	350	74	1	09/26/19 00:40	9/24/19	
3- and 4-Methylphenol Coelution	350 U	350	68	1	09/26/19 00:40	9/24/19	
3-Nitroaniline	1800 U	1800	75	1	09/26/19 00:40	9/24/19	
4,6-Dinitro-2-methylphenol	1800 U	1800	150	1	09/26/19 00:40	9/24/19	
4-Bromophenyl Phenyl Ether	350 U	350	130	1	09/26/19 00:40	9/24/19	
4-Chloro-3-methylphenol	350 U	350	77	1	09/26/19 00:40	9/24/19	
4-Chloroaniline	350 U	350	84	1	09/26/19 00:40	9/24/19	
4-Chlorophenyl Phenyl Ether	350 U	350	85	1	09/26/19 00:40	9/24/19	
4-Nitroaniline	1800 U	1800	75	1	09/26/19 00:40	9/24/19	
4-Nitrophenol	1800 U	1800	120	1	09/26/19 00:40	9/24/19	
Acenaphthene	350 U	350	80	1	09/26/19 00:40	9/24/19	
Acenaphthylene	350 U	350	93	1	09/26/19 00:40	9/24/19	
Acetophenone	350 U	350	81	1	09/26/19 00:40	9/24/19	
Anthracene	350 U	350	99	1	09/26/19 00:40	9/24/19	
Atrazine	350 U	350	140	1	09/26/19 00:40	9/24/19	
Benz(a)anthracene	350 U	350	110	1	09/26/19 00:40	9/24/19	
Benzaldehyde	1800 U	1800	70	1	09/26/19 00:40	9/24/19	
Benzo(a)pyrene	350 U	350	130	1	09/26/19 00:40	9/24/19	
Benzo(b)fluoranthene	350 U	350	120	1	09/26/19 00:40	9/24/19	
Benzo(g,h,i)perylene	350 U	350	93	1	09/26/19 00:40	9/24/19	
Benzo(k)fluoranthene	350 U	350	130	1	09/26/19 00:40	9/24/19	
Biphenyl	350 U	350	87	1	09/26/19 00:40	9/24/19	
2,2'-Oxybis(1-chloropropane)	350 U	350	140	1	09/26/19 00:40	9/24/19	
Bis(2-chloroethoxy)methane	350 U	350	94	1	09/26/19 00:40	9/24/19	
Bis(2-chloroethyl) Ether	350 U	350	92	1	09/26/19 00:40	9/24/19	
Bis(2-ethylhexyl) Phthalate	530 U	530	94	1	09/26/19 00:40	9/24/19	
Butyl Benzyl Phthalate	350 U	350	88	1	09/26/19 00:40	9/24/19	
Caprolactam	350 U	350	92	1	09/26/19 00:40	9/24/19	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	350 U	350	110	1	09/26/19 00:40	9/24/19	
Chrysene	350 U	350	130	1	09/26/19 00:40	9/24/19	
Di-n-butyl Phthalate	350 U	350	110	1	09/26/19 00:40	9/24/19	
Di-n-octyl Phthalate	350 U	350	110	1	09/26/19 00:40	9/24/19	
Dibenz(a,h)anthracene	350 U	350	110	1	09/26/19 00:40	9/24/19	
Dibenzofuran	350 U	350	70	1	09/26/19 00:40	9/24/19	
Diethyl Phthalate	350 U	350	75	1	09/26/19 00:40	9/24/19	
Dimethyl Phthalate	350 U	350	80	1	09/26/19 00:40	9/24/19	
Fluoranthene	350 U	350	130	1	09/26/19 00:40	9/24/19	
Fluorene	350 U	350	82	1	09/26/19 00:40	9/24/19	
Hexachlorobenzene	350 U	350	110	1	09/26/19 00:40	9/24/19	
Hexachlorobutadiene	350 U	350	86	1	09/26/19 00:40	9/24/19	
Hexachlorocyclopentadiene	350 U	350	77	1	09/26/19 00:40	9/24/19	
Hexachloroethane	350 U	350	91	1	09/26/19 00:40	9/24/19	
Indeno(1,2,3-cd)pyrene	350 U	350	120	1	09/26/19 00:40	9/24/19	
Isophorone	350 U	350	97	1	09/26/19 00:40	9/24/19	
N-Nitrosodi-n-propylamine	350 U	350	94	1	09/26/19 00:40	9/24/19	
N-Nitrosodiphenylamine	350 U	350	240	1	09/26/19 00:40	9/24/19	
Naphthalene	350 U	350	91	1	09/26/19 00:40	9/24/19	
Nitrobenzene	350 U	350	91	1	09/26/19 00:40	9/24/19	
Pentachlorophenol (PCP)	1800 U	1800	120	1	09/26/19 00:40	9/24/19	
Phenanthrene	350 U	350	110	1	09/26/19 00:40	9/24/19	
Phenol	350 U	350	84	1	09/26/19 00:40	9/24/19	
Pyrene	350 U	350	140	1	09/26/19 00:40	9/24/19	
Pyridine	1800 U	1800	43	1	09/26/19 00:40	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	41	10 - 109	09/26/19 00:40	
2-Fluorobiphenyl	26	10 - 102	09/26/19 00:40	
2-Fluorophenol	27	10 - 88	09/26/19 00:40	
Nitrobenzene-d5	21	10 - 95	09/26/19 00:40	
Phenol-d6	35	10 - 145	09/26/19 00:40	
Terphenyl-d14	59	10 - 106	09/26/19 00:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	370 U	370	87	1	09/26/19 01:09	9/24/19	
2,3,4,6-Tetrachlorophenol	370 U	370	77	1	09/26/19 01:09	9/24/19	
2,4,5-Trichlorophenol	370 U	370	320	1	09/26/19 01:09	9/24/19	
2,4,6-Trichlorophenol	370 U	370	65	1	09/26/19 01:09	9/24/19	
2,4-Dichlorophenol	370 U	370	78	1	09/26/19 01:09	9/24/19	
2,4-Dimethylphenol	370 U	370	80	1	09/26/19 01:09	9/24/19	
2,4-Dinitrophenol	1900 U	1900	140	1	09/26/19 01:09	9/24/19	
2,4-Dinitrotoluene	370 U	370	150	1	09/26/19 01:09	9/24/19	
2,6-Dinitrotoluene	370 U	370	110	1	09/26/19 01:09	9/24/19	
2-Chloronaphthalene	370 U	370	88	1	09/26/19 01:09	9/24/19	
2-Chlorophenol	370 U	370	90	1	09/26/19 01:09	9/24/19	
2-Methylnaphthalene	370 U	370	80	1	09/26/19 01:09	9/24/19	
2-Methylphenol	370 U	370	79	1	09/26/19 01:09	9/24/19	
2-Nitroaniline	1900 U	1900	110	1	09/26/19 01:09	9/24/19	
2-Nitrophenol	370 U	370	110	1	09/26/19 01:09	9/24/19	
3,3'-Dichlorobenzidine	370 U	370	77	1	09/26/19 01:09	9/24/19	
3- and 4-Methylphenol Coelution	370 U	370	70	1	09/26/19 01:09	9/24/19	
3-Nitroaniline	1900 U	1900	78	1	09/26/19 01:09	9/24/19	
4,6-Dinitro-2-methylphenol	1900 U	1900	160	1	09/26/19 01:09	9/24/19	
4-Bromophenyl Phenyl Ether	370 U	370	140	1	09/26/19 01:09	9/24/19	
4-Chloro-3-methylphenol	370 U	370	80	1	09/26/19 01:09	9/24/19	
4-Chloroaniline	370 U	370	87	1	09/26/19 01:09	9/24/19	
4-Chlorophenyl Phenyl Ether	370 U	370	88	1	09/26/19 01:09	9/24/19	
4-Nitroaniline	1900 U	1900	78	1	09/26/19 01:09	9/24/19	
4-Nitrophenol	1900 U	1900	130	1	09/26/19 01:09	9/24/19	
Acenaphthene	370 U	370	83	1	09/26/19 01:09	9/24/19	
Acenaphthylene	370 U	370	97	1	09/26/19 01:09	9/24/19	
Acetophenone	370 U	370	84	1	09/26/19 01:09	9/24/19	
Anthracene	370 U	370	110	1	09/26/19 01:09	9/24/19	
Atrazine	370 U	370	150	1	09/26/19 01:09	9/24/19	
Benz(a)anthracene	370 U	370	110	1	09/26/19 01:09	9/24/19	
Benzaldehyde	1900 U	1900	73	1	09/26/19 01:09	9/24/19	
Benzo(a)pyrene	370 U	370	140	1	09/26/19 01:09	9/24/19	
Benzo(b)fluoranthene	370 U	370	130	1	09/26/19 01:09	9/24/19	
Benzo(g,h,i)perylene	370 U	370	97	1	09/26/19 01:09	9/24/19	
Benzo(k)fluoranthene	370 U	370	140	1	09/26/19 01:09	9/24/19	
Biphenyl	370 U	370	90	1	09/26/19 01:09	9/24/19	
2,2'-Oxybis(1-chloropropane)	370 U	370	150	1	09/26/19 01:09	9/24/19	
Bis(2-chloroethoxy)methane	370 U	370	98	1	09/26/19 01:09	9/24/19	
Bis(2-chloroethyl) Ether	370 U	370	96	1	09/26/19 01:09	9/24/19	
Bis(2-ethylhexyl) Phthalate	560 U	560	98	1	09/26/19 01:09	9/24/19	
Butyl Benzyl Phthalate	370 U	370	92	1	09/26/19 01:09	9/24/19	
Caprolactam	370 U	370	96	1	09/26/19 01:09	9/24/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	370 U	370	110	1	09/26/19 01:09	9/24/19	
Chrysene	370 U	370	140	1	09/26/19 01:09	9/24/19	
Di-n-butyl Phthalate	370 U	370	120	1	09/26/19 01:09	9/24/19	
Di-n-octyl Phthalate	370 U	370	110	1	09/26/19 01:09	9/24/19	
Dibenz(a,h)anthracene	370 U	370	110	1	09/26/19 01:09	9/24/19	
Dibenzofuran	370 U	370	73	1	09/26/19 01:09	9/24/19	
Diethyl Phthalate	370 U	370	78	1	09/26/19 01:09	9/24/19	
Dimethyl Phthalate	370 U	370	83	1	09/26/19 01:09	9/24/19	
Fluoranthene	370 U	370	140	1	09/26/19 01:09	9/24/19	
Fluorene	370 U	370	85	1	09/26/19 01:09	9/24/19	
Hexachlorobenzene	370 U	370	120	1	09/26/19 01:09	9/24/19	
Hexachlorobutadiene	370 U	370	89	1	09/26/19 01:09	9/24/19	
Hexachlorocyclopentadiene	370 U	370	80	1	09/26/19 01:09	9/24/19	
Hexachloroethane	370 U	370	95	1	09/26/19 01:09	9/24/19	
Indeno(1,2,3-cd)pyrene	370 U	370	130	1	09/26/19 01:09	9/24/19	
Isophorone	370 U	370	100	1	09/26/19 01:09	9/24/19	
N-Nitrosodi-n-propylamine	370 U	370	98	1	09/26/19 01:09	9/24/19	
N-Nitrosodiphenylamine	370 U	370	250	1	09/26/19 01:09	9/24/19	
Naphthalene	370 U	370	95	1	09/26/19 01:09	9/24/19	
Nitrobenzene	370 U	370	95	1	09/26/19 01:09	9/24/19	
Pentachlorophenol (PCP)	1900 U	1900	130	1	09/26/19 01:09	9/24/19	
Phenanthrene	370 U	370	110	1	09/26/19 01:09	9/24/19	
Phenol	370 U	370	87	1	09/26/19 01:09	9/24/19	
Pyrene	370 U	370	150	1	09/26/19 01:09	9/24/19	
Pyridine	1900 U	1900	45	1	09/26/19 01:09	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	36	10 - 109	09/26/19 01:09	
2-Fluorobiphenyl	26	10 - 102	09/26/19 01:09	
2-Fluorophenol	31	10 - 88	09/26/19 01:09	
Nitrobenzene-d5	23	10 - 95	09/26/19 01:09	
Phenol-d6	35	10 - 145	09/26/19 01:09	
Terphenyl-d14	65	10 - 106	09/26/19 01:09	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	360 U	360	86	1	09/26/19 01:38	9/24/19	
2,3,4,6-Tetrachlorophenol	360 U	360	76	1	09/26/19 01:38	9/24/19	
2,4,5-Trichlorophenol	360 U	360	310	1	09/26/19 01:38	9/24/19	
2,4,6-Trichlorophenol	360 U	360	64	1	09/26/19 01:38	9/24/19	
2,4-Dichlorophenol	360 U	360	77	1	09/26/19 01:38	9/24/19	
2,4-Dimethylphenol	360 U	360	79	1	09/26/19 01:38	9/24/19	
2,4-Dinitrophenol	1900 U	1900	140	1	09/26/19 01:38	9/24/19	
2,4-Dinitrotoluene	360 U	360	150	1	09/26/19 01:38	9/24/19	
2,6-Dinitrotoluene	360 U	360	110	1	09/26/19 01:38	9/24/19	
2-Chloronaphthalene	360 U	360	87	1	09/26/19 01:38	9/24/19	
2-Chlorophenol	360 U	360	89	1	09/26/19 01:38	9/24/19	
2-Methylnaphthalene	360 U	360	79	1	09/26/19 01:38	9/24/19	
2-Methylphenol	360 U	360	78	1	09/26/19 01:38	9/24/19	
2-Nitroaniline	1900 U	1900	110	1	09/26/19 01:38	9/24/19	
2-Nitrophenol	360 U	360	110	1	09/26/19 01:38	9/24/19	
3,3'-Dichlorobenzidine	360 U	360	76	1	09/26/19 01:38	9/24/19	
3- and 4-Methylphenol Coelution	360 U	360	69	1	09/26/19 01:38	9/24/19	
3-Nitroaniline	1900 U	1900	77	1	09/26/19 01:38	9/24/19	
4,6-Dinitro-2-methylphenol	1900 U	1900	160	1	09/26/19 01:38	9/24/19	
4-Bromophenyl Phenyl Ether	360 U	360	140	1	09/26/19 01:38	9/24/19	
4-Chloro-3-methylphenol	360 U	360	79	1	09/26/19 01:38	9/24/19	
4-Chloroaniline	360 U	360	86	1	09/26/19 01:38	9/24/19	
4-Chlorophenyl Phenyl Ether	360 U	360	87	1	09/26/19 01:38	9/24/19	
4-Nitroaniline	1900 U	1900	77	1	09/26/19 01:38	9/24/19	
4-Nitrophenol	1900 U	1900	130	1	09/26/19 01:38	9/24/19	
Acenaphthene	360 U	360	81	1	09/26/19 01:38	9/24/19	
Acenaphthylene	360 U	360	96	1	09/26/19 01:38	9/24/19	
Acetophenone	360 U	360	83	1	09/26/19 01:38	9/24/19	
Anthracene	360 U	360	110	1	09/26/19 01:38	9/24/19	
Atrazine	360 U	360	150	1	09/26/19 01:38	9/24/19	
Benz(a)anthracene	360 U	360	110	1	09/26/19 01:38	9/24/19	
Benzaldehyde	1900 U	1900	72	1	09/26/19 01:38	9/24/19	
Benzo(a)pyrene	360 U	360	140	1	09/26/19 01:38	9/24/19	
Benzo(b)fluoranthene	360 U	360	130	1	09/26/19 01:38	9/24/19	
Benzo(g,h,i)perylene	360 U	360	96	1	09/26/19 01:38	9/24/19	
Benzo(k)fluoranthene	360 U	360	140	1	09/26/19 01:38	9/24/19	
Biphenyl	360 U	360	89	1	09/26/19 01:38	9/24/19	
2,2'-Oxybis(1-chloropropane)	360 U	360	150	1	09/26/19 01:38	9/24/19	
Bis(2-chloroethoxy)methane	360 U	360	97	1	09/26/19 01:38	9/24/19	
Bis(2-chloroethyl) Ether	360 U	360	95	1	09/26/19 01:38	9/24/19	
Bis(2-ethylhexyl) Phthalate	550 U	550	97	1	09/26/19 01:38	9/24/19	
Butyl Benzyl Phthalate	360 U	360	90	1	09/26/19 01:38	9/24/19	
Caprolactam	360 U	360	95	1	09/26/19 01:38	9/24/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	360 U	360	110	1	09/26/19 01:38	9/24/19	
Chrysene	360 U	360	140	1	09/26/19 01:38	9/24/19	
Di-n-butyl Phthalate	360 U	360	110	1	09/26/19 01:38	9/24/19	
Di-n-octyl Phthalate	360 U	360	110	1	09/26/19 01:38	9/24/19	
Dibenz(a,h)anthracene	360 U	360	110	1	09/26/19 01:38	9/24/19	
Dibenzofuran	360 U	360	72	1	09/26/19 01:38	9/24/19	
Diethyl Phthalate	360 U	360	77	1	09/26/19 01:38	9/24/19	
Dimethyl Phthalate	360 U	360	81	1	09/26/19 01:38	9/24/19	
Fluoranthene	360 U	360	140	1	09/26/19 01:38	9/24/19	
Fluorene	360 U	360	84	1	09/26/19 01:38	9/24/19	
Hexachlorobenzene	360 U	360	110	1	09/26/19 01:38	9/24/19	
Hexachlorobutadiene	360 U	360	88	1	09/26/19 01:38	9/24/19	
Hexachlorocyclopentadiene	360 U	360	79	1	09/26/19 01:38	9/24/19	
Hexachloroethane	360 U	360	93	1	09/26/19 01:38	9/24/19	
Indeno(1,2,3-cd)pyrene	360 U	360	130	1	09/26/19 01:38	9/24/19	
Isophorone	360 U	360	99	1	09/26/19 01:38	9/24/19	
N-Nitrosodi-n-propylamine	360 U	360	97	1	09/26/19 01:38	9/24/19	
N-Nitrosodiphenylamine	360 U	360	250	1	09/26/19 01:38	9/24/19	
Naphthalene	360 U	360	93	1	09/26/19 01:38	9/24/19	
Nitrobenzene	360 U	360	93	1	09/26/19 01:38	9/24/19	
Pentachlorophenol (PCP)	1900 U	1900	130	1	09/26/19 01:38	9/24/19	
Phenanthrene	360 U	360	110	1	09/26/19 01:38	9/24/19	
Phenol	360 U	360	86	1	09/26/19 01:38	9/24/19	
Pyrene	360 U	360	150	1	09/26/19 01:38	9/24/19	
Pyridine	1900 U	1900	44	1	09/26/19 01:38	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	43	10 - 109	09/26/19 01:38	
2-Fluorobiphenyl	25	10 - 102	09/26/19 01:38	
2-Fluorophenol	29	10 - 88	09/26/19 01:38	
Nitrobenzene-d5	21	10 - 95	09/26/19 01:38	
Phenol-d6	35	10 - 145	09/26/19 01:38	
Terphenyl-d14	68	10 - 106	09/26/19 01:38	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	350 U	350	83	1	09/27/19 15:23	9/24/19	
2,3,4,6-Tetrachlorophenol	350 U	350	74	1	09/27/19 15:23	9/24/19	
2,4,5-Trichlorophenol	350 U	350	300	1	09/27/19 15:23	9/24/19	
2,4,6-Trichlorophenol	350 U	350	62	1	09/27/19 15:23	9/24/19	
2,4-Dichlorophenol	350 U	350	75	1	09/27/19 15:23	9/24/19	
2,4-Dimethylphenol	350 U	350	77	1	09/27/19 15:23	9/24/19	
2,4-Dinitrophenol	1800 U	1800	130	1	09/27/19 15:23	9/24/19	
2,4-Dinitrotoluene	350 U	350	140	1	09/27/19 15:23	9/24/19	
2,6-Dinitrotoluene	350 U	350	110	1	09/27/19 15:23	9/24/19	
2-Chloronaphthalene	350 U	350	84	1	09/27/19 15:23	9/24/19	
2-Chlorophenol	350 U	350	86	1	09/27/19 15:23	9/24/19	
2-Methylnaphthalene	350 U	350	77	1	09/27/19 15:23	9/24/19	
2-Methylphenol	350 U	350	76	1	09/27/19 15:23	9/24/19	
2-Nitroaniline	1800 U	1800	110	1	09/27/19 15:23	9/24/19	
2-Nitrophenol	350 U	350	110	1	09/27/19 15:23	9/24/19	
3,3'-Dichlorobenzidine	350 U	350	74	1	09/27/19 15:23	9/24/19	
3- and 4-Methylphenol Coelution	350 U	350	67	1	09/27/19 15:23	9/24/19	
3-Nitroaniline	1800 U	1800	75	1	09/27/19 15:23	9/24/19	
4,6-Dinitro-2-methylphenol	1800 U	1800	150	1	09/27/19 15:23	9/24/19	
4-Bromophenyl Phenyl Ether	350 U	350	130	1	09/27/19 15:23	9/24/19	
4-Chloro-3-methylphenol	350 U	350	77	1	09/27/19 15:23	9/24/19	
4-Chloroaniline	350 U	350	83	1	09/27/19 15:23	9/24/19	
4-Chlorophenyl Phenyl Ether	350 U	350	84	1	09/27/19 15:23	9/24/19	
4-Nitroaniline	1800 U	1800	75	1	09/27/19 15:23	9/24/19	
4-Nitrophenol	1800 U	1800	120	1	09/27/19 15:23	9/24/19	
Acenaphthene	350 U	350	79	1	09/27/19 15:23	9/24/19	
Acenaphthylene	350 U	350	93	1	09/27/19 15:23	9/24/19	
Acetophenone	350 U	350	80	1	09/27/19 15:23	9/24/19	
Anthracene	350 U	350	98	1	09/27/19 15:23	9/24/19	
Atrazine	350 U	350	140	1	09/27/19 15:23	9/24/19	
Benz(a)anthracene	350 U	350	110	1	09/27/19 15:23	9/24/19	
Benzaldehyde	1800 U	1800	69	1	09/27/19 15:23	9/24/19	
Benzo(a)pyrene	350 U	350	130	1	09/27/19 15:23	9/24/19	
Benzo(b)fluoranthene	350 U	350	120	1	09/27/19 15:23	9/24/19	
Benzo(g,h,i)perylene	350 U	350	93	1	09/27/19 15:23	9/24/19	
Benzo(k)fluoranthene	350 U	350	130	1	09/27/19 15:23	9/24/19	
Biphenyl	350 U	350	86	1	09/27/19 15:23	9/24/19	
2,2'-Oxybis(1-chloropropane)	350 U	350	140	1	09/27/19 15:23	9/24/19	
Bis(2-chloroethoxy)methane	350 U	350	94	1	09/27/19 15:23	9/24/19	
Bis(2-chloroethyl) Ether	350 U	350	92	1	09/27/19 15:23	9/24/19	
Bis(2-ethylhexyl) Phthalate	530 U	530	94	1	09/27/19 15:23	9/24/19	
Butyl Benzyl Phthalate	350 U	350	87	1	09/27/19 15:23	9/24/19	
Caprolactam	350 U	350	92	1	09/27/19 15:23	9/24/19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	350 U	350	110	1	09/27/19 15:23	9/24/19	
Chrysene	350 U	350	130	1	09/27/19 15:23	9/24/19	
Di-n-butyl Phthalate	350 U	350	110	1	09/27/19 15:23	9/24/19	
Di-n-octyl Phthalate	350 U	350	110	1	09/27/19 15:23	9/24/19	
Dibenz(a,h)anthracene	350 U	350	110	1	09/27/19 15:23	9/24/19	
Dibenzofuran	350 U	350	69	1	09/27/19 15:23	9/24/19	
Diethyl Phthalate	350 U	350	75	1	09/27/19 15:23	9/24/19	
Dimethyl Phthalate	350 U	350	79	1	09/27/19 15:23	9/24/19	
Fluoranthene	350 U	350	130	1	09/27/19 15:23	9/24/19	
Fluorene	350 U	350	81	1	09/27/19 15:23	9/24/19	
Hexachlorobenzene	350 U	350	110	1	09/27/19 15:23	9/24/19	
Hexachlorobutadiene	350 U	350	85	1	09/27/19 15:23	9/24/19	
Hexachlorocyclopentadiene	350 U	350	77	1	09/27/19 15:23	9/24/19	
Hexachloroethane	350 U	350	91	1	09/27/19 15:23	9/24/19	
Indeno(1,2,3-cd)pyrene	350 U	350	120	1	09/27/19 15:23	9/24/19	
Isophorone	350 U	350	96	1	09/27/19 15:23	9/24/19	
N-Nitrosodi-n-propylamine	350 U	350	94	1	09/27/19 15:23	9/24/19	
N-Nitrosodiphenylamine	350 U	350	240	1	09/27/19 15:23	9/24/19	
Naphthalene	350 U	350	91	1	09/27/19 15:23	9/24/19	
Nitrobenzene	350 U	350	91	1	09/27/19 15:23	9/24/19	
Pentachlorophenol (PCP)	1800 U	1800	120	1	09/27/19 15:23	9/24/19	
Phenanthrene	350 U	350	110	1	09/27/19 15:23	9/24/19	
Phenol	350 U	350	83	1	09/27/19 15:23	9/24/19	
Pyrene	350 U	350	140	1	09/27/19 15:23	9/24/19	
Pyridine	1800 U	1800	43	1	09/27/19 15:23	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	57	10 - 109	09/27/19 15:23	
2-Fluorobiphenyl	27	10 - 102	09/27/19 15:23	
2-Fluorophenol	35	10 - 88	09/27/19 15:23	
Nitrobenzene-d5	24	10 - 95	09/27/19 15:23	
Phenol-d6	44	10 - 145	09/27/19 15:23	
Terphenyl-d14	69	10 - 106	09/27/19 15:23	



Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
4,4'-DDE	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
4,4'-DDT	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Aldrin	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Dieldrin	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Endosulfan I	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Endosulfan II	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Endosulfan Sulfate	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Endrin	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Endrin Aldehyde	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Endrin Ketone	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Heptachlor	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Heptachlor Epoxide	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Methoxychlor	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
Toxaphene	70 U	70	41	2	10/05/19 06:58	9/24/19	
alpha-BHC	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
alpha-Chlordane	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
beta-BHC	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
delta-BHC	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
gamma-BHC (Lindane)	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	
gamma-Chlordane	3.6 U	3.6	1.8	2	10/05/19 06:58	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	69	10 - 145	10/05/19 06:58	
Tetrachloro-m-xylene	75	10 - 123	10/05/19 06:58	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
4,4'-DDE	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
4,4'-DDT	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Aldrin	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Dieldrin	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Endosulfan I	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Endosulfan II	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Endosulfan Sulfate	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Endrin	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Endrin Aldehyde	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Endrin Ketone	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Heptachlor	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Heptachlor Epoxide	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Methoxychlor	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
Toxaphene	36 U	36	21	1	10/07/19 20:18	9/24/19	
alpha-BHC	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
alpha-Chlordane	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
beta-BHC	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
delta-BHC	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
gamma-BHC (Lindane)	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	
gamma-Chlordane	1.9 U	1.9	0.93	1	10/07/19 20:18	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	89	10 - 145	10/07/19 20:18	
Tetrachloro-m-xylene	87	10 - 123	10/07/19 20:18	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
4,4'-DDE	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
4,4'-DDT	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Aldrin	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Dieldrin	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Endosulfan I	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Endosulfan II	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Endosulfan Sulfate	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Endrin	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Endrin Aldehyde	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Endrin Ketone	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Heptachlor	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Heptachlor Epoxide	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Methoxychlor	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
Toxaphene	36 U	36	21	1	10/07/19 20:37	9/24/19	
alpha-BHC	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
alpha-Chlordane	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
beta-BHC	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
delta-BHC	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
gamma-BHC (Lindane)	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	
gamma-Chlordane	1.9 U	1.9	0.92	1	10/07/19 20:37	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	93	10 - 145	10/07/19 20:37	
Tetrachloro-m-xylene	90	10 - 123	10/07/19 20:37	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
4,4'-DDE	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
4,4'-DDT	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Aldrin	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Dieldrin	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Endosulfan I	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Endosulfan II	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Endosulfan Sulfate	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Endrin	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Endrin Aldehyde	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Endrin Ketone	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Heptachlor	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Heptachlor Epoxide	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Methoxychlor	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
Toxaphene	36 U	36	21	1	10/07/19 20:55	9/24/19	
alpha-BHC	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
alpha-Chlordane	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
beta-BHC	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
delta-BHC	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
gamma-BHC (Lindane)	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	
gamma-Chlordane	1.8 U	1.8	0.91	1	10/07/19 20:55	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	79	10 - 145	10/07/19 20:55	
Tetrachloro-m-xylene	75	10 - 123	10/07/19 20:55	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 08:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-02
Lab Code: R1909194-002

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	41 U	41	21	1	09/25/19 21:00	9/24/19	
Aroclor 1221	82 U	82	41	1	09/25/19 21:00	9/24/19	
Aroclor 1232	41 U	41	24	1	09/25/19 21:00	9/24/19	
Aroclor 1242	41 U	41	21	1	09/25/19 21:00	9/24/19	
Aroclor 1248	41 U	41	32	1	09/25/19 21:00	9/24/19	
Aroclor 1254	41 U	41	23	1	09/25/19 21:00	9/24/19	
Aroclor 1260	41 U	41	21	1	09/25/19 21:00	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	82	22 - 128	09/25/19 21:00	
Tetrachloro-m-xylene	85	14 - 119	09/25/19 21:00	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	35 U	35	19	1	09/25/19 21:20	9/24/19	
Aroclor 1221	72 U	72	36	1	09/25/19 21:20	9/24/19	
Aroclor 1232	35 U	35	21	1	09/25/19 21:20	9/24/19	
Aroclor 1242	35 U	35	19	1	09/25/19 21:20	9/24/19	
Aroclor 1248	35 U	35	28	1	09/25/19 21:20	9/24/19	
Aroclor 1254	35 U	35	20	1	09/25/19 21:20	9/24/19	
Aroclor 1260	35 U	35	19	1	09/25/19 21:20	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	70	22 - 128	09/25/19 21:20	
Tetrachloro-m-xylene	52	14 - 119	09/25/19 21:20	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	36 U	36	19	1	09/25/19 21:40	9/24/19	
Aroclor 1221	74 U	74	37	1	09/25/19 21:40	9/24/19	
Aroclor 1232	36 U	36	22	1	09/25/19 21:40	9/24/19	
Aroclor 1242	36 U	36	19	1	09/25/19 21:40	9/24/19	
Aroclor 1248	36 U	36	29	1	09/25/19 21:40	9/24/19	
Aroclor 1254	36 U	36	20	1	09/25/19 21:40	9/24/19	
Aroclor 1260	36 U	36	19	1	09/25/19 21:40	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	81	22 - 128	09/25/19 21:40	
Tetrachloro-m-xylene	93	14 - 119	09/25/19 21:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	36 U	36	19	1	09/25/19 22:00	9/24/19	
Aroclor 1221	73 U	73	36	1	09/25/19 22:00	9/24/19	
Aroclor 1232	36 U	36	21	1	09/25/19 22:00	9/24/19	
Aroclor 1242	36 U	36	19	1	09/25/19 22:00	9/24/19	
Aroclor 1248	36 U	36	28	1	09/25/19 22:00	9/24/19	
Aroclor 1254	36 U	36	20	1	09/25/19 22:00	9/24/19	
Aroclor 1260	36 U	36	19	1	09/25/19 22:00	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	83	22 - 128	09/25/19 22:00	
Tetrachloro-m-xylene	92	14 - 119	09/25/19 22:00	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	36 U	36	19	1	09/25/19 22:21	9/24/19	
Aroclor 1221	72 U	72	36	1	09/25/19 22:21	9/24/19	
Aroclor 1232	36 U	36	21	1	09/25/19 22:21	9/24/19	
Aroclor 1242	36 U	36	19	1	09/25/19 22:21	9/24/19	
Aroclor 1248	36 U	36	28	1	09/25/19 22:21	9/24/19	
Aroclor 1254	36 U	36	20	1	09/25/19 22:21	9/24/19	
Aroclor 1260	36 U	36	19	1	09/25/19 22:21	9/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	75	22 - 128	09/25/19 22:21	
Tetrachloro-m-xylene	79	14 - 119	09/25/19 22:21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	11 U	11	3.7	1	09/26/19 18:37	9/25/19	
Pentachlorophenol (PCP)	11 U	11	5.4	1	09/26/19 18:37	9/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	71	10 - 151	09/26/19 18:37	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	11 U	11	3.8	1	09/26/19 18:54	9/25/19	
Pentachlorophenol (PCP)	11 U	11	5.5	1	09/26/19 18:54	9/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	60	10 - 151	09/26/19 18:54	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	11 U	11	3.8	1	09/26/19 19:10	9/25/19	
Pentachlorophenol (PCP)	11 U	11	5.5	1	09/26/19 19:10	9/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	63	10 - 151	09/26/19 19:10	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	11 U	11	3.7	1	09/26/19 19:27	9/25/19	
Pentachlorophenol (PCP)	11 U	11	5.3	1	09/26/19 19:27	9/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	67	10 - 151	09/26/19 19:27	



Metals

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	9850	mg/Kg	21	13	1	09/30/19 18:06	09/25/19	
Antimony, Total	6010C	6.4 U	mg/Kg	6.4	0.6	1	09/30/19 18:06	09/25/19	
Arsenic, Total	6010C	3.8	mg/Kg	1.1	0.8	1	09/30/19 18:06	09/25/19	
Barium, Total	6010C	324	mg/Kg	2.1	1.1	1	09/30/19 18:06	09/25/19	
Beryllium, Total	6010C	0.35 B	mg/Kg	0.32	0.04	1	09/30/19 18:06	09/25/19	
Cadmium, Total	6010C	0.16 BJ	mg/Kg	0.54	0.08	1	09/30/19 18:06	09/25/19	
Calcium, Total	6010C	37600	mg/Kg	1100	400	10	09/30/19 19:21	09/25/19	
Chromium, Total	6010C	16.5	mg/Kg	1.1	0.4	1	09/30/19 18:06	09/25/19	
Cobalt, Total	6010C	4.3 J	mg/Kg	5.4	0.3	1	09/30/19 18:06	09/25/19	
Copper, Total	6010C	2.4	mg/Kg	2.1	0.7	1	09/30/19 18:06	09/25/19	
Iron, Total	6010C	19000	mg/Kg	210	140	10	09/30/19 19:21	09/25/19	
Lead, Total	6010C	2.1 J	mg/Kg	5.4	0.5	1	09/30/19 18:06	09/25/19	
Magnesium, Total	6010C	20000	mg/Kg	110	20	1	09/30/19 18:06	09/25/19	
Manganese, Total	6010C	290	mg/Kg	2.1	1.7	1	09/30/19 18:06	09/25/19	
Mercury, Total	7471B	0.010 BJ	mg/Kg	0.033	0.006	1	09/25/19 12:32	09/24/19	
Nickel, Total	6010C	21.1	mg/Kg	4.3	0.8	1	09/30/19 18:06	09/25/19	
Potassium, Total	6010C	1990	mg/Kg	210	20	1	09/30/19 18:06	09/25/19	
Selenium, Total	6010C	1.1 U	mg/Kg	1.1	0.6	1	09/30/19 18:06	09/25/19	
Silver, Total	6010C	1.1 U	mg/Kg	1.1	0.08	1	09/30/19 18:06	09/25/19	
Sodium, Total	6010C	60 J	mg/Kg	110	60	1	09/30/19 18:06	09/25/19	
Thallium, Total	6010C	1.0 J	mg/Kg	1.1	0.7	1	09/30/19 18:06	09/25/19	
Vanadium, Total	6010C	13.6	mg/Kg	5.4	0.8	1	09/30/19 18:06	09/25/19	
Zinc, Total	6010C	20.4	mg/Kg	2.1	1.5	1	09/30/19 18:06	09/25/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	12000	mg/Kg	20	12	1	09/30/19 18:09	09/25/19	
Antimony, Total	6010C	6.0 U	mg/Kg	6.0	0.6	1	09/30/19 18:09	09/25/19	
Arsenic, Total	6010C	4.16	mg/Kg	1.0	0.70	1	09/30/19 18:09	09/25/19	
Barium, Total	6010C	169	mg/Kg	2.0	1.0	1	09/30/19 18:09	09/25/19	
Beryllium, Total	6010C	0.43	mg/Kg	0.30	0.03	1	09/30/19 18:09	09/25/19	
Cadmium, Total	6010C	0.16 BJ	mg/Kg	0.50	0.08	1	09/30/19 18:09	09/25/19	
Calcium, Total	6010C	37200	mg/Kg	1000	320	10	09/30/19 19:24	09/25/19	
Chromium, Total	6010C	18.9	mg/Kg	1.0	0.35	1	09/30/19 18:09	09/25/19	
Cobalt, Total	6010C	6.7	mg/Kg	5.0	0.2	1	09/30/19 18:09	09/25/19	
Copper, Total	6010C	7.9	mg/Kg	2.0	0.7	1	09/30/19 18:09	09/25/19	
Iron, Total	6010C	22700	mg/Kg	200	130	10	09/30/19 19:24	09/25/19	
Lead, Total	6010C	5.8	mg/Kg	5.0	0.4	1	09/30/19 18:09	09/25/19	
Magnesium, Total	6010C	23500	mg/Kg	100	13	1	09/30/19 18:09	09/25/19	
Manganese, Total	6010C	308	mg/Kg	2.0	1.5	1	09/30/19 18:09	09/25/19	
Mercury, Total	7471B	0.010 BJ	mg/Kg	0.035	0.007	1	09/25/19 12:34	09/24/19	
Nickel, Total	6010C	25.5	mg/Kg	4.0	0.7	1	09/30/19 18:09	09/25/19	
Potassium, Total	6010C	2250	mg/Kg	200	10	1	09/30/19 18:09	09/25/19	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	0.54	1	09/30/19 18:09	09/25/19	
Silver, Total	6010C	1.0 U	mg/Kg	1.0	0.08	1	09/30/19 18:09	09/25/19	
Sodium, Total	6010C	80 J	mg/Kg	100	52	1	09/30/19 18:09	09/25/19	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	0.65	1	09/30/19 18:09	09/25/19	
Vanadium, Total	6010C	16.2	mg/Kg	5.0	0.8	1	09/30/19 18:09	09/25/19	
Zinc, Total	6010C	40.5	mg/Kg	2.0	1.4	1	09/30/19 18:09	09/25/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	11000	mg/Kg	22	13	1	09/30/19 18:12	09/25/19	
Antimony, Total	6010C	6.5 U	mg/Kg	6.5	0.6	1	09/30/19 18:12	09/25/19	
Arsenic, Total	6010C	3.6	mg/Kg	1.1	0.8	1	09/30/19 18:12	09/25/19	
Barium, Total	6010C	118	mg/Kg	2.2	1.1	1	09/30/19 18:12	09/25/19	
Beryllium, Total	6010C	0.39 B	mg/Kg	0.32	0.04	1	09/30/19 18:12	09/25/19	
Cadmium, Total	6010C	0.16 BJ	mg/Kg	0.54	0.08	1	09/30/19 18:12	09/25/19	
Calcium, Total	6010C	47900	mg/Kg	1100	400	10	09/30/19 19:27	09/25/19	
Chromium, Total	6010C	17.5	mg/Kg	1.1	0.4	1	09/30/19 18:12	09/25/19	
Cobalt, Total	6010C	6.4	mg/Kg	5.4	0.3	1	09/30/19 18:12	09/25/19	
Copper, Total	6010C	7.3	mg/Kg	2.2	0.7	1	09/30/19 18:12	09/25/19	
Iron, Total	6010C	20700	mg/Kg	220	140	10	09/30/19 19:27	09/25/19	
Lead, Total	6010C	4.0 J	mg/Kg	5.4	0.5	1	09/30/19 18:12	09/25/19	
Magnesium, Total	6010C	23100	mg/Kg	110	20	1	09/30/19 18:12	09/25/19	
Manganese, Total	6010C	311	mg/Kg	2.2	1.7	1	09/30/19 18:12	09/25/19	
Mercury, Total	7471B	0.010 BJ	mg/Kg	0.033	0.006	1	09/25/19 12:37	09/24/19	
Nickel, Total	6010C	22.9	mg/Kg	4.3	0.8	1	09/30/19 18:12	09/25/19	
Potassium, Total	6010C	2070	mg/Kg	220	20	1	09/30/19 18:12	09/25/19	
Selenium, Total	6010C	1.1 U	mg/Kg	1.1	0.6	1	09/30/19 18:12	09/25/19	
Silver, Total	6010C	1.1 U	mg/Kg	1.1	0.08	1	09/30/19 18:12	09/25/19	
Sodium, Total	6010C	80 J	mg/Kg	110	60	1	09/30/19 18:12	09/25/19	
Thallium, Total	6010C	1.1 U	mg/Kg	1.1	0.7	1	09/30/19 18:12	09/25/19	
Vanadium, Total	6010C	15.3	mg/Kg	5.4	0.8	1	09/30/19 18:12	09/25/19	
Zinc, Total	6010C	33.1	mg/Kg	2.2	1.6	1	09/30/19 18:12	09/25/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	12400	mg/Kg	19	12	1	09/30/19 18:22	09/25/19	
Antimony, Total	6010C	5.8 U	mg/Kg	5.8	0.6	1	09/30/19 18:22	09/25/19	
Arsenic, Total	6010C	6.22	mg/Kg	0.96	0.70	1	09/30/19 18:22	09/25/19	
Barium, Total	6010C	57.4	mg/Kg	1.9	1.0	1	09/30/19 18:22	09/25/19	
Beryllium, Total	6010C	0.45	mg/Kg	0.29	0.03	1	09/30/19 18:22	09/25/19	
Cadmium, Total	6010C	0.16 BJ	mg/Kg	0.48	0.08	1	09/30/19 18:22	09/25/19	
Calcium, Total	6010C	38600	mg/Kg	960	320	10	09/30/19 19:30	09/25/19	
Chromium, Total	6010C	20.9	mg/Kg	0.96	0.35	1	09/30/19 18:22	09/25/19	
Cobalt, Total	6010C	5.5	mg/Kg	4.8	0.2	1	09/30/19 18:22	09/25/19	
Copper, Total	6010C	1.9 J	mg/Kg	1.9	0.7	1	09/30/19 18:22	09/25/19	
Iron, Total	6010C	25000	mg/Kg	200	130	10	09/30/19 19:30	09/25/19	
Lead, Total	6010C	1.8 J	mg/Kg	4.8	0.4	1	09/30/19 18:22	09/25/19	
Magnesium, Total	6010C	22200	mg/Kg	96	13	1	09/30/19 18:22	09/25/19	
Manganese, Total	6010C	359	mg/Kg	2.0	1.5	1	09/30/19 18:22	09/25/19	
Mercury, Total	7471B	0.008 BJ	mg/Kg	0.034	0.007	1	09/25/19 12:45	09/24/19	
Nickel, Total	6010C	25.9	mg/Kg	3.9	0.7	1	09/30/19 18:22	09/25/19	
Potassium, Total	6010C	2230	mg/Kg	190	10	1	09/30/19 18:22	09/25/19	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	0.54	1	09/30/19 18:22	09/25/19	
Silver, Total	6010C	0.96 U	mg/Kg	0.96	0.08	1	09/30/19 18:22	09/25/19	
Sodium, Total	6010C	70 J	mg/Kg	100	52	1	09/30/19 18:22	09/25/19	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	0.65	1	09/30/19 18:22	09/25/19	
Vanadium, Total	6010C	18.5	mg/Kg	4.8	0.8	1	09/30/19 18:22	09/25/19	
Zinc, Total	6010C	25.9	mg/Kg	2.0	1.4	1	09/30/19 18:22	09/25/19	



General Chemistry

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-03
Lab Code: R1909194-003

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	93.7	Percent	-	-	1	09/27/19 06:00	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	670	mg/Kg	590	220	1	10/01/19 21:54	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.41 U	mg/Kg	0.41	0.05	1	10/10/19 22:41	10/09/19	
Chromium, Hexavalent	7199	0.41 U	mg/Kg	0.41	0.05	1	10/10/19 22:32	10/09/19	
Chromium, Trivalent	Calculation	16.5	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.24 U	mg/Kg	0.24	0.05	1	09/27/19 01:04	09/26/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-04
Lab Code: R1909194-004

Service Request: R1909194
Date Collected: 09/20/19 10:20
Date Received: 09/20/19 17:00

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date	
								Extracted	Q
pH	9045D	7.63	pH Units	-	-	1	09/24/19 09:20	NA	H
Total Solids	ALS SOP	93.4	Percent	-	-	1	09/27/19 06:00	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-05
Lab Code: R1909194-005

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	90.6	Percent	-	-	1	09/27/19 06:00	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	1160	mg/Kg	560	210	1	10/01/19 22:00	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.42 U	mg/Kg	0.42	0.05	1	10/10/19 23:10	10/09/19	
Chromium, Hexavalent	7199	0.42 U	mg/Kg	0.42	0.05	1	10/10/19 23:19	10/09/19	
Chromium, Trivalent	Calculation	18.9	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.31 U	mg/Kg	0.31	0.05	1	09/27/19 01:08	09/26/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-06
Lab Code: R1909194-006

Service Request: R1909194
Date Collected: 09/20/19 10:35
Date Received: 09/20/19 17:00

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
pH	9045D	7.71	pH Units	-	-	1	09/24/19 09:20	NA	H
Total Solids	ALS SOP	91.0	Percent	-	-	1	09/27/19 06:00	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-07
Lab Code: R1909194-007

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	93.9	Percent	-	-	1	09/27/19 06:00	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	900	mg/Kg	590	220	1	10/01/19 22:06	NA	

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dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.44 U	mg/Kg	0.44	0.05	1	10/10/19 23:36	10/09/19	
Chromium, Hexavalent	7199	0.44 U	mg/Kg	0.44	0.05	1	10/10/19 23:27	10/09/19	
Chromium, Trivalent	Calculation	17.5	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.31 U	mg/Kg	0.31	0.05	1	09/27/19 01:09	09/26/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-08
Lab Code: R1909194-008

Service Request: R1909194
Date Collected: 09/20/19 10:50
Date Received: 09/20/19 17:00

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
pH	9045D	7.57	pH Units	-	-	1	09/24/19 09:20	NA	H
Total Solids	ALS SOP	91.1	Percent	-	-	1	09/27/19 06:00	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-09
Lab Code: R1909194-009

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	96.7	Percent	-	-	1	09/27/19 06:00	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	670	mg/Kg	350	130	1	10/04/19 21:46	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.42 U	mg/Kg	0.42	0.05	1	10/10/19 23:53	10/09/19	
Chromium, Hexavalent	7199	0.42 U	mg/Kg	0.42	0.05	1	10/10/19 23:44	10/09/19	
Chromium, Trivalent	Calculation	20.9	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.24 U	mg/Kg	0.24	0.05	1	09/27/19 01:10	09/26/19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-092019A-10
Lab Code: R1909194-010

Service Request: R1909194
Date Collected: 09/20/19 11:10
Date Received: 09/20/19 17:00

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
pH	9045D	7.75	pH Units	-	-	1	09/24/19 09:20	NA	H
Total Solids	ALS SOP	94.4	Percent	-	-	1	09/27/19 06:00	NA	

SO
FEB

FX# 1045 6295 0681

SGS 2235 US Highway 130 Dayton, NJ 08810 (P) (732) 329 0200		Chain Of Custody / Analysis Request										Lab ID: 30460 59945 COC #: LCP-070119 Lab Use: Lab Prep: Lab ID:			
Client Contact: (name, co., address) Stephen Miller@Honeywell.com Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212		Privileged & Confidential		Site Name: LCP		Location of Site: Geddes, NY						Job No: JC90989			
Hardcopy Report To: Michael Miller		Sample To: Michael Miller, Chuck Sharpe		P O #		Site Code		Preservative						Lab Sample Numbers	
Invoice To: Steve Miller		Analysis Turnaround Time:		Standard -		Rush Charges Authorized for -		Field Filtered Sample *						SW827/SIM [1,4-Dioxane]	
		2 weeks -		Y		1 week -		Y						Modified Method 517	
		Next Day -													
Sample Identification		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		# of Cont.		Units	
Location ID		Depth (ft)		Depth (ft)		Field Sample ID									
1	LCP-OG-01	0	1	LCP-070119-01	7/1/2019	8:55	Soil	Soil	Reg	2	G	N	X	X	
2	LCP-OSW-01	0	1	LCP-070119-02	7/1/2019	11:10	Soil	Soil	Reg	2	G	X	X	X	
3	LCP-OSW-02	0	1	LCP-070119-03	7/1/2019	11:35	Soil	Soil	Reg	2	G	X	X	X	
4	LCP-OSW-05	0	1	LCP-070119-04	7/1/2019	12:00	Soil	Soil	Reg	2	G	X	X	X	
5	LCP-OSW-06	0	1	LCP-070119-05	7/1/2019	12:18	Soil	Soil	Reg	2	G	X	X	X	
6	LCP-BYS-01	0	1	LCP-070119-06	7/1/2019	13:52	Soil	Soil	Reg	2	G	X	X	X	
7	LCP-BYS-02	0	1	LCP-070119-07	7/1/2019	14:08	Soil	Soil	Reg	2	G	X	X	X	
8	LCP-BYS-03	0	1	LCP-070119-08	7/1/2019	14:25	Soil	Soil	Reg	2	G	X	X	X	
9	LCP-BYS-04	0	1	LCP-070119-09	7/1/2019	14:45	Soil	Soil	Reg	2	G	X	X	X	
10	LCP-EB-SPOON-070119	—	—	LCP-070119-10	7/1/2019	15:00	QC	Water	EB	3	G	X	X	X	
11	LCP-EB-BOWL-070119	—	—	LCP-070119-11	7/1/2019	15:10	QC	Water	EB	3	G	X	X	X	
12	LCP-FRB-070119	—	—	LCP-070119-12	7/1/2019	15:15	QC	Water	EB	1	G	N	X	X	
Special Instructions: FB															
RELINQUISHED BY: Relinquished by: [Signature] Date/Time: 7/1/19 16:20 Company: OBG, Part of Ramboll Received by: [Signature] Date/Time: 7/1/19 16:20 Company: [Signature] Date/Time: 7/1/19 16:20 Condition: [Signature] Date/Time: 7/1/19 16:20 Cooler Temp. [Signature] Date/Time: 7/1/19 16:20 Custody Seals Intact [Signature] Date/Time: 7/1/19 16:20															
PRESERVATIVES: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; [8 = Other (specify):]															

rel. FX 7/2/19 9:20 Recd [Signature] 60780

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	LCP-070119-06		
Lab Sample ID:	JC90989-6	Date Sampled:	07/01/19
Matrix:	SO - Soil	Date Received:	07/02/19
Method:	SW846 8270D BY SIM SW846 3546	Percent Solids:	93.5
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P77925.D	1	07/09/19 20:54	HSS	07/08/19 16:30	OP21368	E3P3648
Run #2							

	Initial Weight	Final Volume
Run #1	31.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.5	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		10-146%
321-60-8	2-Fluorobiphenyl	74%		10-149%
1718-51-0	Terphenyl-d14	88%		10-170%

ND = Not detected MDL = Method Detection Limit
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 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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	LCP-070119-06	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-6	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	93.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q32219.D	1	07/10/19 21:43	AFL	07/08/19 13:00	F:OP75793	F:S2Q510
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.1	0.27	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.1	0.21	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.1	0.21	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.1	0.27	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.1	0.27	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.1	0.27	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.1	0.27	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.1	0.27	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.1	0.27	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.1	0.27	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.1	0.27	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.1	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.1	0.27	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.1	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.1	0.27	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.1	0.27	ug/kg	
754-91-6	PFOSA	ND	1.1	0.27	ug/kg	
2355-31-9	MeFOSAA	ND	2.7	0.53	ug/kg	
2991-50-6	EtFOSAA	ND	2.7	0.53	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	85%		50-150%
	13C5-PFPeA	86%		50-150%
	13C5-PFHxA	87%		50-150%
	13C4-PFHpA	86%		50-150%
	13C8-PFOA	90%		50-150%
	13C9-PFNA	93%		50-150%
	13C6-PFDA	91%		50-150%
	13C7-PFUnDA	91%		50-150%

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Report of Analysis

Client Sample ID:	LCP-070119-06	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-6	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	93.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	97%		50-150%
	13C2-PFTeDA	99%		50-150%
	13C3-PFBS	87%		50-150%
	13C3-PFHxS	88%		50-150%
	13C8-PFOS	88%		50-150%
	13C8-FOSA	89%		50-150%
	d3-MeFOSAA	95%		50-150%
	13C2-6:2FTS	88%		50-150%
	13C2-8:2FTS	88%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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SGS North America Inc.

Report of Analysis

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Client Sample ID:	LCP-070119-07	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-7	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	95.6
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P77926.D	1	07/09/19 21:14	HSS	07/08/19 16:30	OP21368	E3P3648
Run #2							

	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.3	1.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		10-146%
321-60-8	2-Fluorobiphenyl	75%		10-149%
1718-51-0	Terphenyl-d14	89%		10-170%

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	LCP-070119-07	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-7	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	95.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q32220.D	1	07/10/19 21:57	AFL	07/08/19 13:00	F:OP75793	F:S2Q510
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.01 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.0	0.26	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.0	0.21	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.0	0.21	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.0	0.26	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.0	0.26	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.0	0.26	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.0	0.26	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.0	0.26	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.0	0.26	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.0	0.26	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.0	0.26	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.0	0.26	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.0	0.26	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.0	0.26	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.0	0.26	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.0	0.26	ug/kg	
754-91-6	PFOSA	ND	1.0	0.26	ug/kg	
2355-31-9	MeFOSAA	ND	2.6	0.52	ug/kg	
2991-50-6	EtFOSAA	ND	2.6	0.52	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.26	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		50-150%
	13C5-PFPeA	89%		50-150%
	13C5-PFHxA	90%		50-150%
	13C4-PFHpA	90%		50-150%
	13C8-PFOA	93%		50-150%
	13C9-PFNA	97%		50-150%
	13C6-PFDA	94%		50-150%
	13C7-PFUnDA	94%		50-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LCP-070119-07	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-7	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	95.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	99%		50-150%
	13C2-PFTeDA	99%		50-150%
	13C3-PFBS	90%		50-150%
	13C3-PFHxS	90%		50-150%
	13C8-PFOS	90%		50-150%
	13C8-FOSA	88%		50-150%
	d3-MeFOSAA	101%		50-150%
	13C2-6:2FTS	90%		50-150%
	13C2-8:2FTS	90%		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
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SGS North America Inc.

Report of Analysis

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Client Sample ID:	LCP-070119-08	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-8	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	96.4
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P77927.D	1	07/09/19 21:35	HSS	07/08/19 16:30	OP21368	E3P3648
Run #2							

Run #	Initial Weight	Final Volume
Run #1	31.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.3	1.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		10-146%
321-60-8	2-Fluorobiphenyl	75%		10-149%
1718-51-0	Terphenyl-d14	83%		10-170%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
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SGS North America Inc.

Report of Analysis

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Client Sample ID:	LCP-070119-08	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-8	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	96.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q32223.D	1	07/10/19 22:42	AFL	07/08/19 13:00	F:OP75793	F:S2Q510
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.03 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.0	0.26	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.0	0.20	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.0	0.20	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.0	0.26	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.0	0.26	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.0	0.26	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.0	0.26	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.0	0.26	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.0	0.26	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.0	0.26	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.0	0.26	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.0	0.26	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.0	0.26	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.0	0.26	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.0	0.26	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.0	0.26	ug/kg	
754-91-6	PFOSA	ND	1.0	0.26	ug/kg	
2355-31-9	MeFOSAA	ND	2.6	0.51	ug/kg	
2991-50-6	EtFOSAA	ND	2.6	0.51	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.26	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	87%		50-150%
	13C5-PFPeA	87%		50-150%
	13C5-PFHxA	89%		50-150%
	13C4-PFHpA	88%		50-150%
	13C8-PFOA	91%		50-150%
	13C9-PFNA	94%		50-150%
	13C6-PFDA	94%		50-150%
	13C7-PFUnDA	93%		50-150%

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Report of Analysis

Client Sample ID:	LCP-070119-08	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-8	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	96.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	98%		50-150%
	13C2-PFTeDA	100%		50-150%
	13C3-PFBS	89%		50-150%
	13C3-PFHxS	89%		50-150%
	13C8-PFOS	89%		50-150%
	13C8-FOSA	92%		50-150%
	d3-MeFOSAA	100%		50-150%
	13C2-6:2FTS	90%		50-150%
	13C2-8:2FTS	90%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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SGS North America Inc.

Report of Analysis

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Client Sample ID:	LCP-070119-09	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-9	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	96.0
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P77928.D	1	07/09/19 21:56	HSS	07/08/19 16:30	OP21368	E3P3648
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.4	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		10-146%
321-60-8	2-Fluorobiphenyl	76%		10-149%
1718-51-0	Terphenyl-d14	85%		10-170%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	LCP-070119-09	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-9	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	96.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q32224.D	1	07/10/19 22:57	AFL	07/08/19 13:00	F:OP75793	F:S2Q510
Run #2							

	Initial Weight	Final Volume
Run #1	2.05 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.0	0.25	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.0	0.20	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.0	0.20	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.0	0.25	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.0	0.25	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.0	0.25	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.0	0.25	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.0	0.25	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.0	0.25	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.0	0.25	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.0	0.25	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.0	0.25	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.0	0.25	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.0	0.25	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.0	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.0	0.25	ug/kg	
754-91-6	PFOSA	ND	1.0	0.25	ug/kg	
2355-31-9	MeFOSAA	ND	2.5	0.51	ug/kg	
2991-50-6	EtFOSAA	ND	2.5	0.51	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	78%		50-150%
	13C5-PFPeA	78%		50-150%
	13C5-PFHxA	80%		50-150%
	13C4-PFHpA	79%		50-150%
	13C8-PFOA	82%		50-150%
	13C9-PFNA	86%		50-150%
	13C6-PFDA	83%		50-150%
	13C7-PFUnDA	83%		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:	LCP-070119-09	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-9	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	96.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	84%		50-150%
	13C2-PFTeDA	82%		50-150%
	13C3-PFBS	80%		50-150%
	13C3-PFHxS	81%		50-150%
	13C8-PFOS	80%		50-150%
	13C8-FOSA	85%		50-150%
	d3-MeFOSAA	88%		50-150%
	13C2-6:2FTS	80%		50-150%
	13C2-8:2FTS	79%		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

PN

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E93 T1

INITIAL ASSESSMENT 3/10/06
LABEL VERIFICATION

Rel: FX 9/21/19 9:30 REC: 

SGS Sample Receipt Summary

Job Number: JC95459

Client: Honeywell

Project: Portfolio Material Characterization

Date / Time Received: 9/21/2019 9:30:00 AM

Delivery Method: FedEx

Airbill #s: 115759354884

Cooler Temps (Raw Measured) °C: Cooler 1: (2.7);

Cooler Temps (Corrected) °C: Cooler 1: (2.6);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: ☒ ☐ | 3. COC Present: ☒ ☐ |
| 2. Custody Seals Intact: ☒ ☐ | 4. Smpl Dates/Time OK: ☒ ☐ |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ ☐ | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 1 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: ☐ ☒ ☐ | |
| 2. Trip Blank listed on COC: ☐ ☒ ☐ | |
| 3. Samples preserved properly: ☒ ☐ ☐ | |
| 4. VOCs headspace free: ☐ ☐ ☒ | |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: ☒ ☐ | |
| 2. Container labeling complete: ☒ ☐ | |
| 3. Sample container label / COC agree: ☐ ☒ | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: ☒ ☐ | |
| 2. All containers accounted for: ☒ ☐ | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|--|--|
| 1. Analysis requested is clear: ☒ ☐ | |
| 2. Bottles received for unspecified tests: ☐ ☒ | |
| 3. Sufficient volume recvd for analysis: ☒ ☐ | |
| 4. Compositing instructions clear: ☐ ☐ ☒ | |
| 5. Filtering instructions clear: ☐ ☐ ☒ | |

Test Strip Lot #s:

pH 1-12: 229517

pH 12+: 208717

Other: (Specify)

Comments

- 1: Received sample labeled as PMC-092019-02. Collection date/time OK.
- 2: Received sample labeled as PMC-092019-03. Collection date/time OK.
- 3: Received sample labeled as PMC-092019-04. Collection date/time OK.
- 4: Received sample labeled as PMC-092019-05. Collection date/time OK.
- 5: Received sample labeled as PMC-092019-06. Collection date/time OK.

SM089-02 Rev. Date 12/1/16

JC95459: Chain of Custody

Page 2 of 3



SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	PMC-092019-02		
Lab Sample ID:	JC95459-2	Date Sampled:	09/20/19
Matrix:	SO - Soil	Date Received:	09/21/19
Method:	SW846 8270D BY SIM SW846 3546	Percent Solids:	86.0
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M87223.D	1	09/30/19 21:27	HSS	09/28/19 22:50	OP23014A	E4M4051
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.8	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	95%		10-146%
321-60-8	2-Fluorobiphenyl	68%		10-149%
1718-51-0	Terphenyl-d14	89%		10-170%

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	PMC-092019-03	Date Sampled:	09/20/19
Lab Sample ID:	JC95459-3	Date Received:	09/21/19
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P33731.D	1	10/02/19 18:42	HSS	10/01/19 14:50	OP23065A	E4P1832
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane ^a	ND	4.0	1.2	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	65%		10-146%		
321-60-8	2-Fluorobiphenyl	53%		10-149%		
1718-51-0	Terphenyl-d14	77%		10-170%		

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes.

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	PMC-092019-04	Date Sampled:	09/20/19
Lab Sample ID:	JC95459-4	Date Received:	09/21/19
Matrix:	SO - Soil	Percent Solids:	90.1
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M87231.D	1	10/01/19 10:41	HSS	09/28/19 22:50	OP23014A	E4M4052
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.7	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		10-146%
321-60-8	2-Fluorobiphenyl	53%		10-149%
1718-51-0	Terphenyl-d14	83%		10-170%

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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	PMC-092019-05	Date Sampled:	09/20/19
Lab Sample ID:	JC95459-5	Date Received:	09/21/19
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M87232.D	1	10/01/19 11:04	HSS	09/28/19 22:50	OP23014A	E4M4052
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.9	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		10-146%
321-60-8	2-Fluorobiphenyl	52%		10-149%
1718-51-0	Terphenyl-d14	80%		10-170%

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

Fx#1157 5035 5240

SGS		Chain Of Custody/Analysis Request										ALSC Ref: 3009	
2235 US Highway 130 Dayton, NJ 08810 (P) (732) 329 0200		Project Name: Portfolio Material Characterization - Clean Soil Sampling Lab Project Name: OBGNY: Portfolio Material Characterization, Geddes, NY										PMI-09249	
Client Contact: (name, co, address)		Facility Name:		Syracuse - LCP-OU-1								Site Code: R30925	
Stephen Miller @bushnell.com Honeywell International 301 Plainfield Road, Suite 130 Syracuse, New York 13212		Sample: MFC, CD		Location of Site: Syracuse, NY		Preservative							
Sampling Company: OBG, Part of Ramboll		PO#		Analysis Turnaround Time: Standard -		Risk Charges Anticipated for -		Turn Around Time Required -		2-week			
Hardship Report To: [Redacted] Hardcopy only if requested		Steve Miller		Sample Date		Sample Time		Matrix Code		Medium Code			
Sample Identification		Sample Date		Sample Time		Matrix Code		Medium Code		Sample Type			
Sps_Loc_Code		Start Depth (ft)		End Depth (ft)		Sps_Sample_Code		Date		Time			
1	LCP-FRB-092419	---	---	PMI-092419-01	9/24/09	9:05	QC	Water	EB	No	No		
2	LCP-GYPSUMT0PS-06	---	---	PMI-092419-02	9/24/09	9:10	Soil	Soil	Reg	No	No		
3	LCP-BYS-05	---	---	PMI-092419-03	9/24/09	10:10	Soil	Soil	Reg	No	No		
4	LCP-BYS-06	---	---	PMI-092419-04	9/24/09	10:10	Soil	Soil	Reg	No	No		
5	LCP-BYS-07	---	---	PMI-092419-05	9/24/09	10:30	Soil	Soil	Reg	No	No		
6	LCP-BYS-08	---	---	PMI-092419-06	9/24/09	10:40	Soil	Soil	Reg	No	No		
7													
8													
9													
10													
11													
12													

Special Instructions: (Add SPLP until directed by Per. per Tenn.)

FOR INTERNAL USE ONLY:
LCP-GYPSUMT0PS = Gypsum Express Topsoil; LCP-BYS = ReCell Bedrock Shale

Relinquished by: Guadalupe Desir	Company: OBG, Part of Ramboll	Received by: [Signature]	Company: [Blank]	Condition: [Blank]	Custody Seal: Intact
Date/Time: 13/09/2009	Date/Time: 13/09/2009	Date/Time: 13/09/2009	Date/Time: 13/09/2009	Cooker Temp: [Blank]	Custody Seal: Intact
Relinquished by: [Signature]	Company: [Blank]	Received by: [Signature]	Company: [Blank]	Condition: Intact	Custody Seal: Intact
Date/Time: 14/09/2009	Date/Time: 14/09/2009	Date/Time: 14/09/2009	Date/Time: 14/09/2009	Cooker Temp: 0.9°C	Custody Seal: Intact

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

EC-7

Rel: EY 9/25/19 10:40 Rec: 

Initial Assessment 30/3/20
Label Verification _____

Report of Analysis

Page 1 of 2

Client Sample ID:	PMC-092419-03	Date Sampled:	09/24/19
Lab Sample ID:	JC95425-18	Date Received:	09/24/19
Matrix:	SO - Soil	Percent Solids:	79.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q10031.D	1	10/01/19 17:18	AFL	09/30/19 12:00	F:OP77054	F:S3Q178
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.3	0.32	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.3	0.26	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.3	0.26	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.3	0.32	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.3	0.32	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.3	0.32	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.3	0.32	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.3	0.32	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.3	0.32	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.3	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.3	0.32	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.3	0.32	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.3	0.32	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.3	0.32	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.3	0.32	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.3	0.32	ug/kg	
754-91-6	PFOSA	ND	1.3	0.32	ug/kg	
2355-31-9	MeFOSAA	ND	3.2	0.64	ug/kg	
2991-50-6	EtFOSAA	ND	3.2	0.64	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%		50-150%
	13C5-PFPeA	84%		50-150%
	13C5-PFHxA	88%		50-150%
	13C4-PFHpA	93%		50-150%
	13C8-PFOA	97%		50-150%
	13C9-PFNA	99%		50-150%
	13C6-PFDA	99%		50-150%
	13C7-PFUnDA	99%		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:	PMC-092419-03	Date Sampled:	09/24/19
Lab Sample ID:	JC95425-18	Date Received:	09/24/19
Matrix:	SO - Soil	Percent Solids:	79.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	110%		50-150%
	13C2-PFTeDA	117%		50-150%
	13C3-PFBS	85%		50-150%
	13C3-PFHxS	87%		50-150%
	13C8-PFOS	93%		50-150%
	13C8-FOSA	103%		50-150%
	d3-MeFOSAA	96%		50-150%
	13C2-6:2FTS	89%		50-150%
	13C2-8:2FTS	89%		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

4.18
4

Report of Analysis

Page 1 of 2

Client Sample ID:	PMC-092419-04	Date Sampled:	09/24/19
Lab Sample ID:	JC95425-19	Date Received:	09/24/19
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q10032.D	1	10/01/19 17:33	AFL	09/30/19 12:00	F:OP77054	F:S3Q178
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.2	0.30	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.2	0.24	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.2	0.24	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.2	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.2	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.2	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.2	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.2	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.2	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.2	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.2	0.30	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.2	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.2	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.2	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.2	0.30	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.2	0.30	ug/kg	
754-91-6	PFOSA	ND	1.2	0.30	ug/kg	
2355-31-9	MeFOSAA	ND	3.0	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	3.0	0.60	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	73%		50-150%
	13C5-PFPeA	80%		50-150%
	13C5-PFHxA	83%		50-150%
	13C4-PFHpA	87%		50-150%
	13C8-PFOA	91%		50-150%
	13C9-PFNA	94%		50-150%
	13C6-PFDA	94%		50-150%
	13C7-PFUnDA	92%		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:	PMC-092419-04	Date Sampled:	09/24/19
Lab Sample ID:	JC95425-19	Date Received:	09/24/19
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	104%		50-150%
	13C2-PFTeDA	109%		50-150%
	13C3-PFBS	80%		50-150%
	13C3-PFHxS	83%		50-150%
	13C8-PFOS	88%		50-150%
	13C8-FOSA	96%		50-150%
	d3-MeFOSAA	93%		50-150%
	13C2-6:2FTS	84%		50-150%
	13C2-8:2FTS	85%		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

4.19
4

Report of Analysis

Page 1 of 2

Client Sample ID:	PMC-092419-05	Date Sampled:	09/24/19
Lab Sample ID:	JC95425-20	Date Received:	09/24/19
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q10035.D	1	10/01/19 18:19	AFL	09/30/19 12:00	F:OP77054	F:S3Q178
Run #2							

	Initial Weight	Final Volume
Run #1	2.02 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.2	0.30	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.2	0.24	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.2	0.24	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.2	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.2	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.2	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.2	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.2	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.2	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.2	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.2	0.30	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.2	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.2	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.2	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.2	0.30	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.2	0.30	ug/kg	
754-91-6	PFOSA	ND	1.2	0.30	ug/kg	
2355-31-9	MeFOSAA	ND	3.0	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	3.0	0.60	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	69%		50-150%
	13C5-PFPeA	80%		50-150%
	13C5-PFHxA	86%		50-150%
	13C4-PFHpA	91%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	100%		50-150%
	13C6-PFDA	100%		50-150%
	13C7-PFUnDA	97%		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:	PMC-092419-05	Date Sampled:	09/24/19
Lab Sample ID:	JC95425-20	Date Received:	09/24/19
Matrix:	SO - Soil	Percent Solids:	83.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	107%		50-150%
	13C2-PFTeDA	114%		50-150%
	13C3-PFBS	83%		50-150%
	13C3-PFHxS	86%		50-150%
	13C8-PFOS	93%		50-150%
	13C8-FOSA	97%		50-150%
	d3-MeFOSAA	97%		50-150%
	13C2-6:2FTS	88%		50-150%
	13C2-8:2FTS	91%		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

Page 1 of 2

Client Sample ID:	PMC-092419-06	Date Sampled:	09/24/19
Lab Sample ID:	JC95425-21	Date Received:	09/24/19
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q10036.D	1	10/01/19 18:34	AFL	09/30/19 12:00	F:OP77054	F:S3Q178
Run #2							

	Initial Weight	Final Volume
Run #1	1.95 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.2	0.31	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.2	0.24	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.2	0.24	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.2	0.31	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.2	0.31	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.2	0.31	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.2	0.31	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.2	0.31	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.2	0.31	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.2	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.2	0.31	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.2	0.31	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.2	0.31	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.2	0.31	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.2	0.31	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.2	0.31	ug/kg	
754-91-6	PFOSA	ND	1.2	0.31	ug/kg	
2355-31-9	MeFOSAA	ND	3.1	0.61	ug/kg	
2991-50-6	EtFOSAA	ND	3.1	0.61	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	91%		50-150%
	13C5-PFPeA	98%		50-150%
	13C5-PFHxA	102%		50-150%
	13C4-PFHpA	106%		50-150%
	13C8-PFOA	110%		50-150%
	13C9-PFNA	115%		50-150%
	13C6-PFDA	115%		50-150%
	13C7-PFUnDA	111%		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:	PMC-092419-06	Date Sampled:	09/24/19
Lab Sample ID:	JC95425-21	Date Received:	09/24/19
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	129%		50-150%
	13C2-PFTeDA	126%		50-150%
	13C3-PFBS	97%		50-150%
	13C3-PFHxS	100%		50-150%
	13C8-PFOS	105%		50-150%
	13C8-FOSA	119%		50-150%
	d3-MeFOSAA	111%		50-150%
	13C2-6:2FTS	102%		50-150%
	13C2-8:2FTS	103%		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

4.21
4

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, NY 13209

Mail: P.O. Box 117, Warners, N.Y. 13164

Phone: (315) 638-2706 Fax: (315) 638-1544



GEOTECHNICAL TESTING RESULTS

July 24, 2019

O'Brien & Gere Engineers
333 West Washington Street
Syracuse, NY 13221
<via email>

Attn: Guedna Desir

Re.: Laboratory Soils Testing
LCP (LCP-070119B)
Geddes, NY

Dear Guedna,

Pursuant to your request, Kenney Geotechnical Engineering Services, PLLC has completed the laboratory testing for the referenced project. Testing included Particle Size Analysis (ASTM D422), Atterberg Limits (ASTM D4318), pH Content (ASTM D4972), and Organic Content (ASTM D5268). The detailed laboratory results are attached.

Thank you for the opportunity to be of service, and please contact me at your convenience with any questions you may have.

Respectfully submitted,
KENNEY GEOTECHNICAL ENGINEERING SERVICES, PLLC

Christopher M. Kenney, P.E.



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-01			100.0	98.8	95.5	94.3	93.3	90.7	84.8	67.2	56.5

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

REMARKS: _____

PREWASH _____
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY _____
NOT PREWASHED _____



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

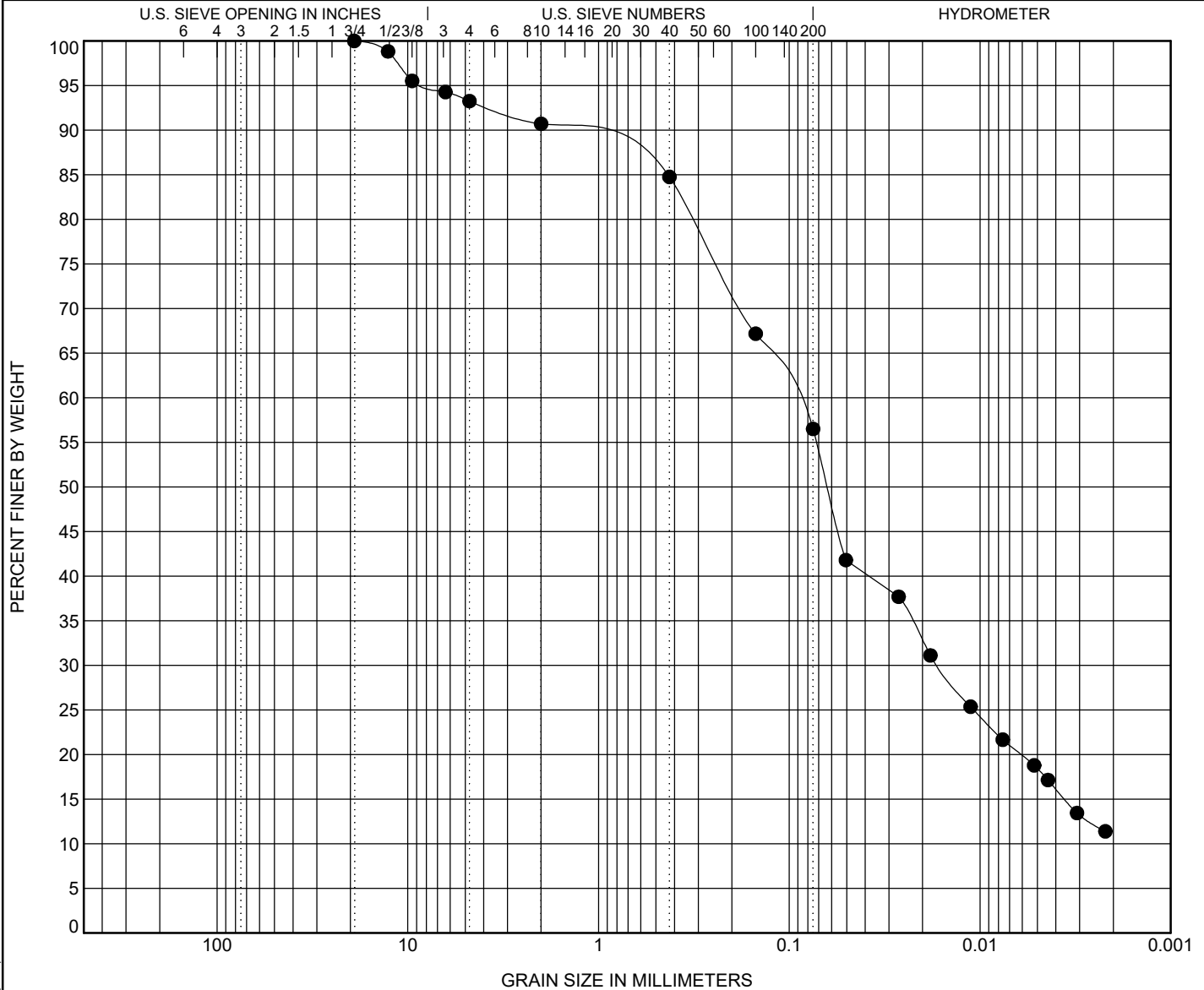
GRAIN SIZE DISTRIBUTION

CLIENT O-BRIEN & GERE

PROJECT NAME LCP

PROJECT NUMBER 2018-141

PROJECT LOCATION SYRACUSE, NY



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu	
●	LCP-070119B-01	1.0	SANDY LEAN CLAY(CL)					36	18	18		
☒												
▲												
★												
◎												
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay			
●	LCP-070119B-01	1.0	19.1	0.094	0.017		6.7	36.7	38.1	18.4		
☒												
▲												
★												
◎												

GRAIN SIZE - GINT STD US LAB.GDT - 7/22/19 09:01 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\2019-XXX OBG.GPJ



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-08		100.0	95.5	91.4	74.8	74.8	66.9	41.8	30.0	22.2	19.0

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS: Gravel sized particles broke into smaller particles during sample wash and sieve procedures.

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-09		100.0	97.8	89.1	70.3	70.3	62.1	38.2	22.9	16.8	14.3

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS: Gravel sized particles broke into smaller particles during sample wash and sieve procedures.

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

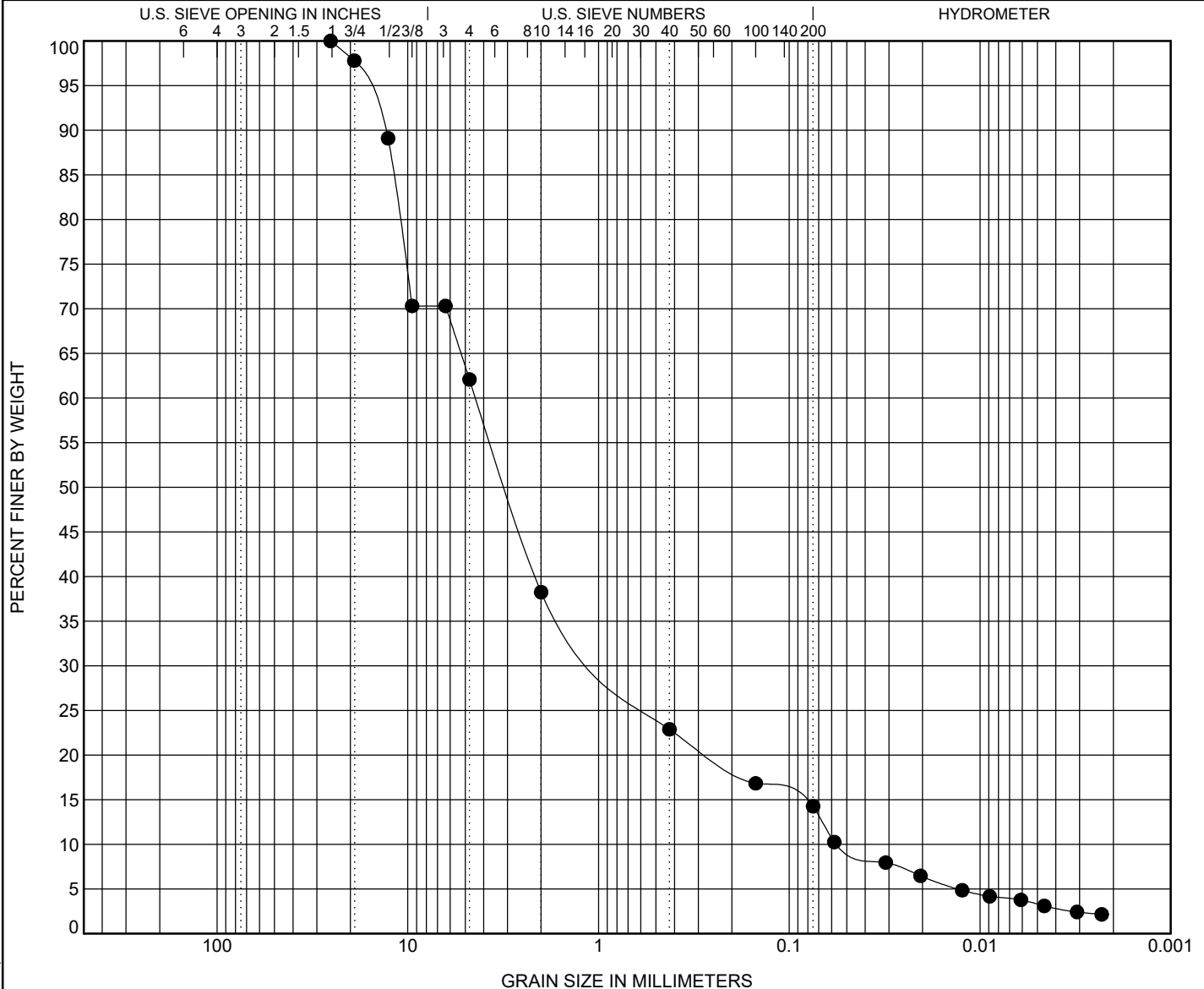
GRAIN SIZE DISTRIBUTION

CLIENT O-BRIEN & GERE

PROJECT NAME LCP

PROJECT NUMBER 2018-141

PROJECT LOCATION SYRACUSE, NY



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu	
●	LCP-070119B-09	1.0	SILTY, CLAYEY SAND with GRAVEL(SC-SM)					22	17	5	3.17	81.22
☒												
▲												
★												
◎												
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay			
●	LCP-070119B-09	1.0	25.4	4.405	0.871	0.054	37.9	47.8	11.0	3.3		
☒												
▲												
★												
◎												

GRAIN SIZE - GINT STD US LAB.GDT - 7/22/19 09:01 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\2019-XXX OBG.GPJ



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-10		100.0	94.6	73.0	73.0	61.0	38.0	37.6	26.5	16.7	13.8

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS: Gravel sized particles broke into smaller particles during sample wash and sieve procedures.

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-11		100.0	91.3	84.0	59.2	53.6	39.5	19.3	13.4	13.1	12.8

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

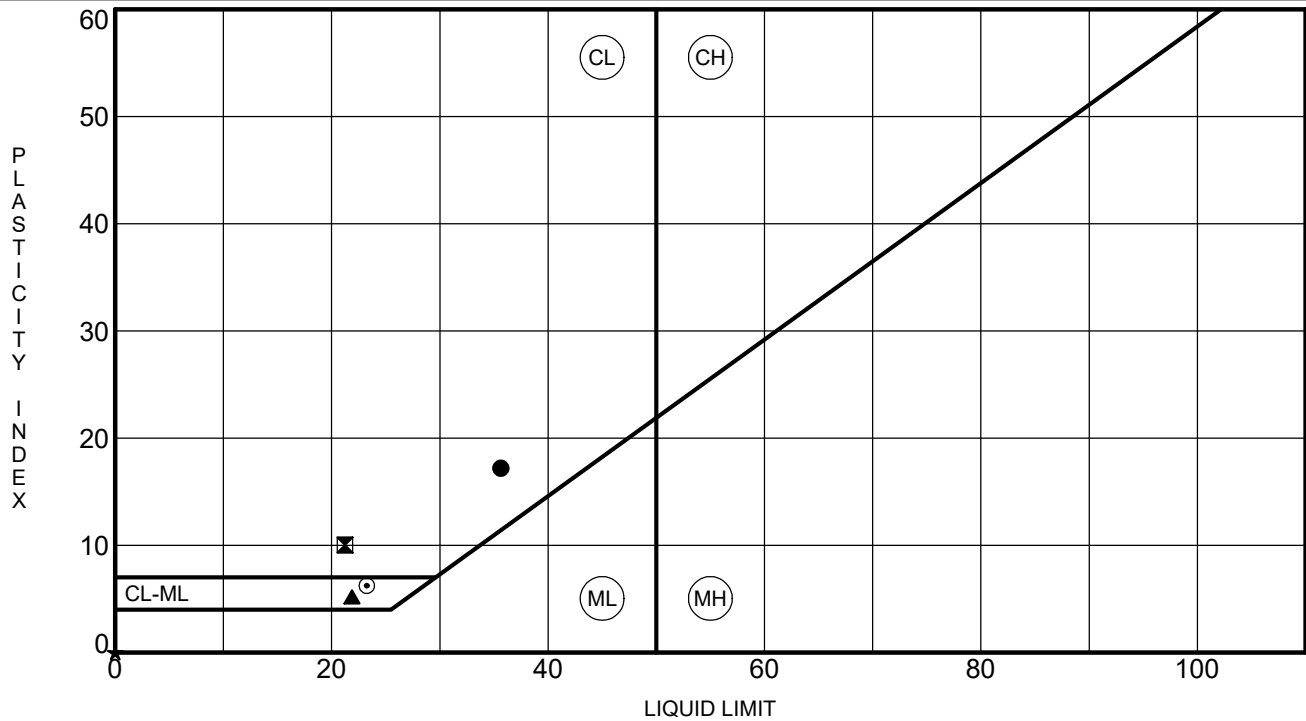
REMARKS: Gravel sized particles broke into smaller particles during sample wash and sieve procedures.

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED

ATTERBERG LIMITS' RESULTS

PROJECT NAME LCP

PROJECT LOCATION SYRACUSE, NY

[illegible]

ATTERBERG LIMITS - GINT STD US LAB.GDT - 7/22/19 07:58 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\2019-XXX OBG.GPJ

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, N.Y. 13209

Mail: P.O. Box 117 Warners, N.Y. 13209

Phone: (315) 638-2706 Fax: (315) 638-1544



Moisture Content Testing

Client: O'Brien & Gere Engineering **Project Name:** LCP
Project Number: 2018-141 **Project Location:** Geddes, New York

TEST METHOD: ASTM D2974 (via D5268)

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

Sample ID	Moisture Content (%)
LCP-070119B-01	26.7
LCP-070119B-08	5.8
LCP-070119B-09	3.7
LCP-070119B-10	5.9
LCP-070119B-11	4.9

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, N.Y. 13209

Mail: P.O. Box 117 Warners, N.Y. 13209

Phone: (315) 638-2706 Fax: (315) 638-1544



Organic Content Testing

Client: O'Brien & Gere Engineering **Project Name:** LCP
Project Number: 2018-141 **Project Location:** Geddes, New York

TEST METHOD: ASTM D5268

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

Sample ID	Organic Content (% by mass)
LCP-070119B-01	5.6

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, N.Y. 13209

Mail: P.O. Box 117 Warners, N.Y. 13209

Phone: (315) 638-2706



pH Testing

Client: O'Brien & Gere Engineering **Project Name:** LCP
Project Number: 2018-141 **Project Location:** Geddes, New York

TEST METHOD: ASTM D4972; METHOD A & B

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

Sample ID	pH of Soil (in water)
LCP-070119B-01	7.4



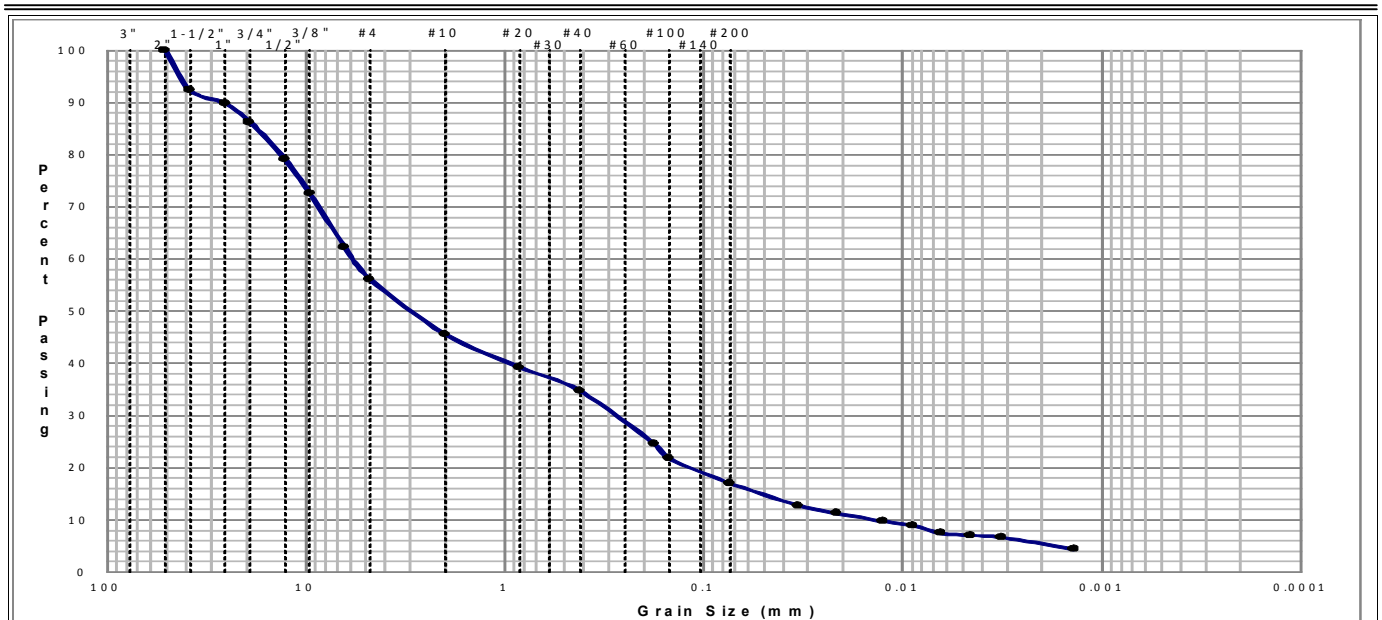
ATLANTIC TESTING LABORATORIES

PARTICLE SIZE ANALYSIS REPORT No.: ST4103SL-022-09-19 Rev 1

Client: O'Brien & Gere Engineers, Inc.
Project: 2019 Laboratory Soil Analysis
Syracuse, New York

Sample Date: September 20, 2019
Sampled By: CLIENT
Service Order No.: 13549
Sample No.: ST4103S-22

Location: LCP-BYS-01

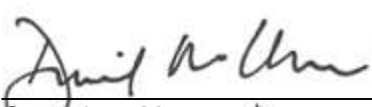


% Gravel				% Sand			% Fines	
% +3"	Coarse	Medium	Fine	Coarse	Medium	Fine	Silt	Clay
--	10	11	23	11	11	18	10	7
SIEVE SIZE	PERCENT FINER	SPEC.*		OUT OF SPEC. (X)	Soil Description Silty, Clayey Gravel with Sand Atterberg Limits PL= 18 LL= 23 PI= 5 Coefficients D₈₅ = 17.7661 D₆₀ = 5.6929 D₅₀ = 2.8681 D₃₀ = 0.2801 D₁₅ = 0.0505 D₁₀ = 0.0134 C_u = 424.0789 C_c = 1.0273 Classification USCS= GC-GM AASHTO= A-1-b Remarks Delivered by O. Adams on 10-11-19 ASTM D-422			
		LOW	HIGH					
2 in	100							
1 1/2 in	92							
1.00 in	90							
3/4 in	86							
1/2 in	79							
3/8 in	73							
1/4 in	62							
No. 4	56							
No. 10	46							
No. 20	39							
No. 40	35							
No. 80	25							
No. 100	22							
No. 200	17							

*

(no specification provided)

* (no specification provided)

Reviewed by: 
 Operations Manager
 dowens@atlantictesting.com

Date: Dec 03, 2019



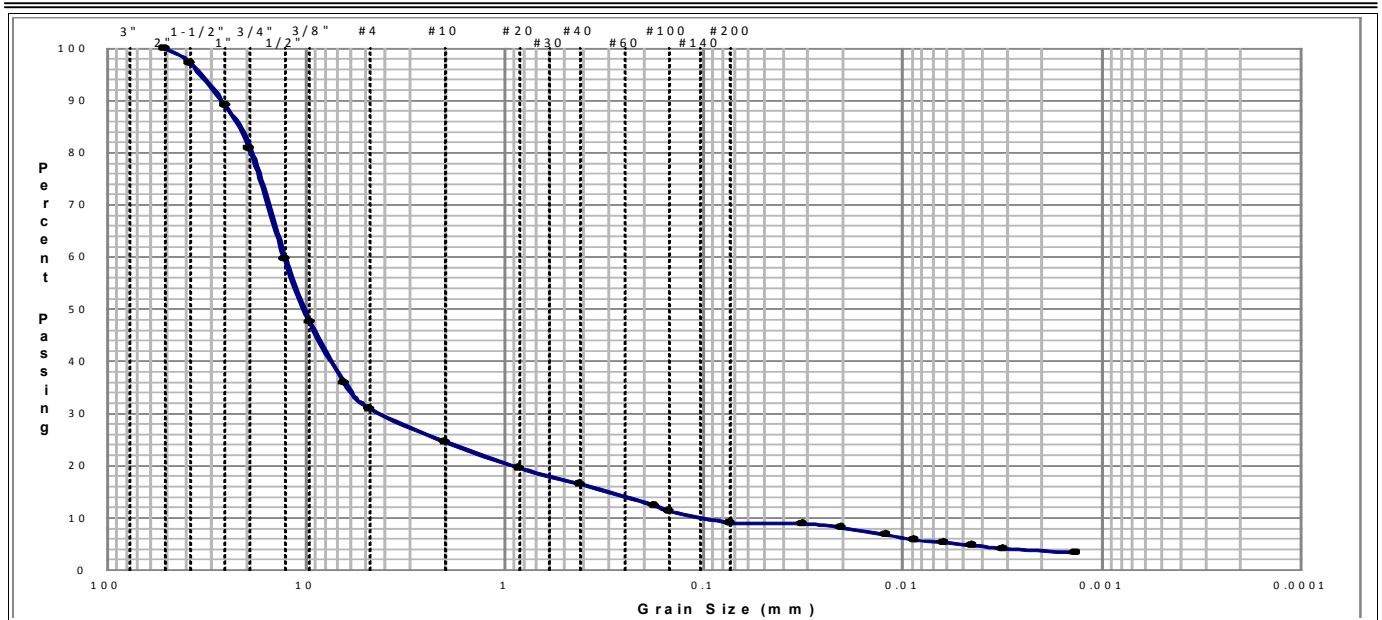
ATLANTIC TESTING LABORATORIES

PARTICLE SIZE ANALYSIS REPORT No.: ST4103SL-023-09-19 Rev 1

Client: O'Brien & Gere Engineers, Inc.
Project: 2019 Laboratory Soil Analysis
Syracuse, New York

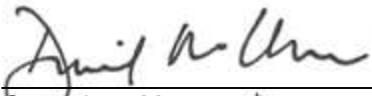
Sample Date: September 20, 2019
Sampled By: CLIENT
Service Order No.: 13549
Sample No.: ST4103S-23

Location: LCP-BYS-02



% Gravel				% Sand			% Fines	
% +3"	Coarse	Medium	Fine	Coarse	Medium	Fine	Silt	Clay
--	11	29	29	6	8	7	4	5
SIEVE SIZE	PERCENT FINER	SPEC.*		OUT OF SPEC. (X)		<u>Soil Description</u> Poorly-Graded Gravel with Silt and Sand <u>Atterberg Limits</u> PL= 12 LL= 15 PI= 3 <u>Coefficients</u> D ₈₅ = 22.0470 D ₆₀ = 12.7588 D ₅₀ = 10.0872 D ₃₀ = 4.1990 D ₁₅ = 0.3041 D ₁₀ = 0.0994 C _u = 128.3342 C _c = 13.9003 <u>Classification</u> USCS= GP-GM AASHTO= A-1-a <u>Remarks</u> Delivered by O. Adams on 10-11-19 ASTM D-422		
2 in	100							
1 1/2 in	97							
1.00 in	89							
3/4 in	81							
1/2 in	60							
3/8 in	48							
1/4 in	36							
No. 4	31							
No. 10	25							
No. 20	20							
No. 40	17							
No. 80	12							
No. 100	11							
No. 200	9.1							

* (no specification provided)

Reviewed by: 
 Operations Manager
 dowens@atlantictesting.com

Date: Dec 03, 2019



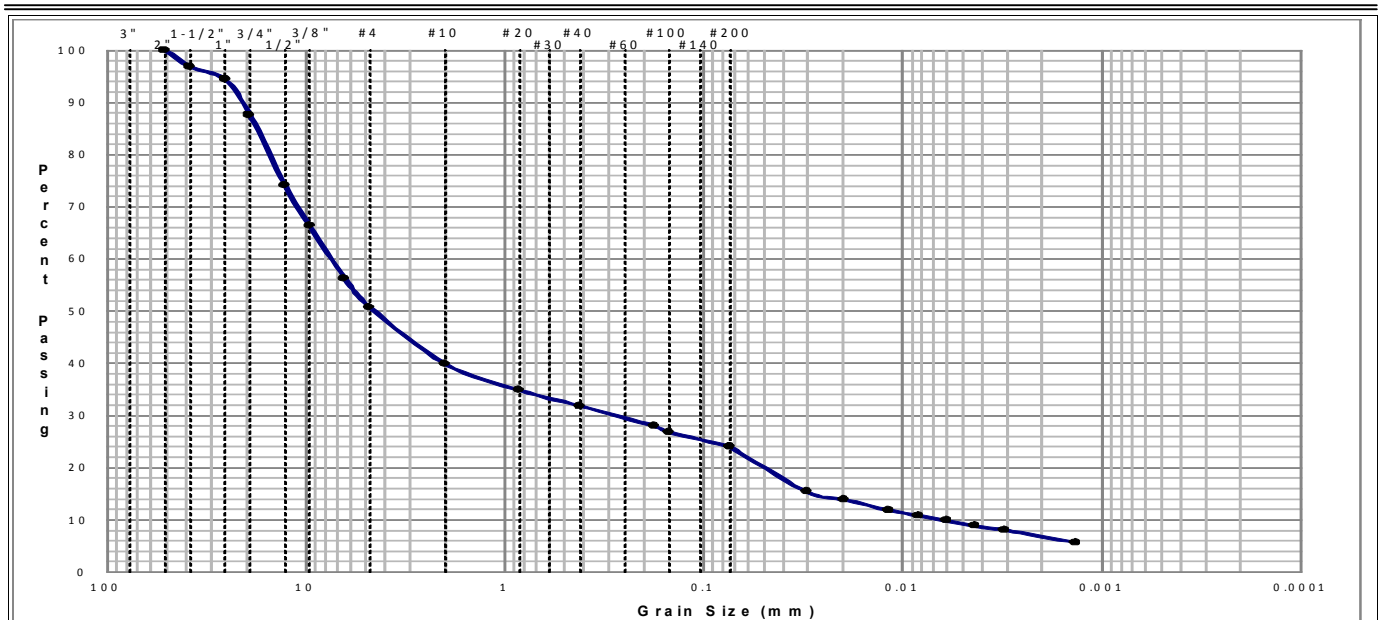
ATLANTIC TESTING LABORATORIES

PARTICLE SIZE ANALYSIS REPORT No.: ST4103SL-024-09-19 Rev 1

Client: O'Brien & Gere Engineers, Inc.
Project: 2019 Laboratory Soil Analysis
Syracuse, New York

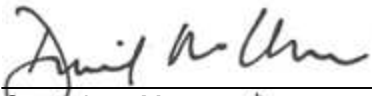
Sample Date: September 20, 2019
Sampled By: CLIENT
Service Order No.: 13549
Sample No.: ST4103S-24

Location: LCP-BYS-03



% Gravel				% Sand			% Fines	
% +3"	Coarse	Medium	Fine	Coarse	Medium	Fine	Silt	Clay
--	6	20	23	11	8	8	15	9
SIEVE SIZE	PERCENT FINER	SPEC.*		OUT OF SPEC. (X)		<u>Soil Description</u> Silty, Clayey Gravel with Sand <u>Atterberg Limits</u> PL= 15 LL= 19 PI= 4 <u>Coefficients</u> D ₈₅ = 17.6212 D ₆₀ = 7.3718 D ₅₀ = 4.4796 D ₃₀ = 0.2759 D ₁₅ = 0.0271 D ₁₀ = 0.0062 C _u = 1182.683 C _c = 1.6577 <u>Classification</u> USCS= GC-GM AASHTO= A-1-b <u>Remarks</u> Delivered by O. Adams on 10-11-19 ASTM D-422		
2 in	100	LOW	HIGH					
1 1/2 in	97							
1.00 in	94							
3/4 in	88							
1/2 in	74							
3/8 in	66							
1/4 in	56							
No. 4	51							
No. 10	40							
No. 20	35							
No. 40	32							
No. 80	28							
No. 100	27							
No. 200	24							

* (no specification provided)

Reviewed by: 
 Operations Manager
 dowens@atlantictesting.com

Date: Dec 03, 2019

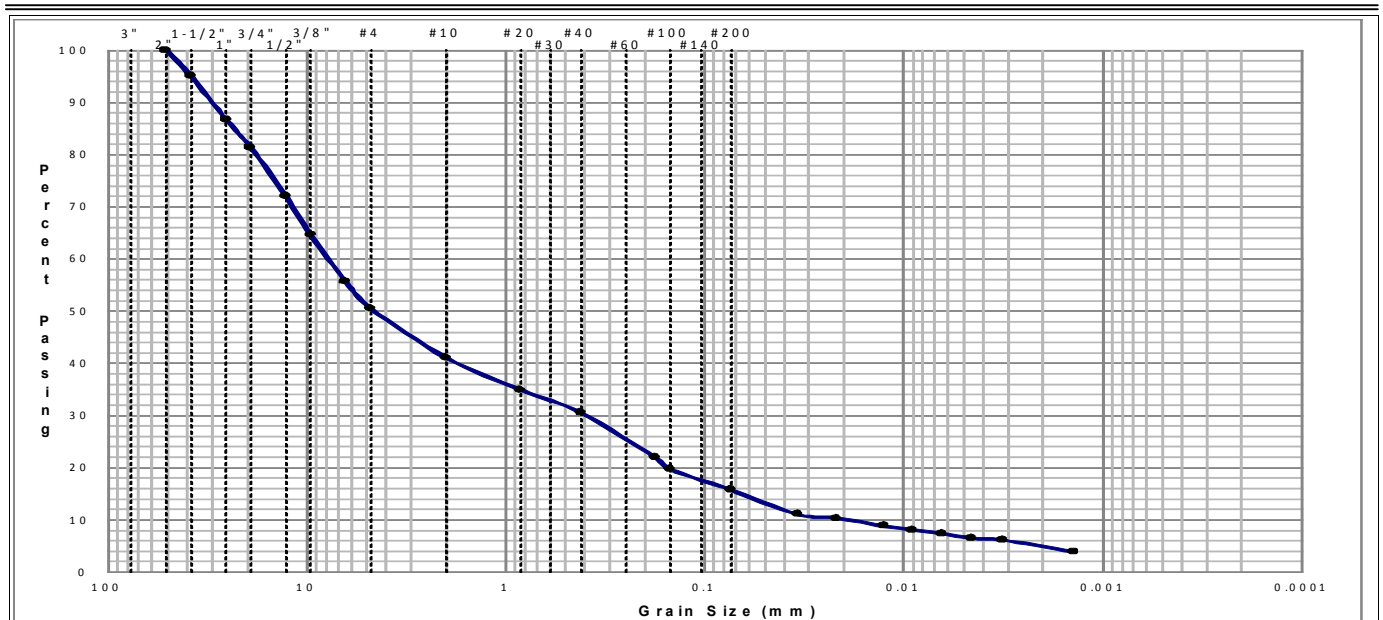
ATLANTIC TESTING LABORATORIES

PARTICLE SIZE ANALYSIS REPORT No.: ST4103SL-025-09-19

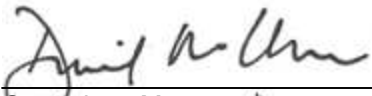
Client: O'Brien & Gere Engineers, Inc.
Project: 2019 Laboratory Soil Analysis
Syracuse, New York

Sample Date: September 20, 2019
Sampled By: CLIENT
Service Order No.: 13549
Sample No.: ST4103S-25

Location: LCP-BYS-04



% Gravel				% Sand			% Fines	
% +3"	Coarse	Medium	Fine	Coarse	Medium	Fine	Silt	Clay
--	13	15	21	9	11	15	9	7
SIEVE SIZE	PERCENT FINER	SPEC.*		OUT OF SPEC. (X)	Soil Description <			

Reviewed by: 
 Operations Manager
 dowens@atlantictesting.com

Date: Dec 03, 2019



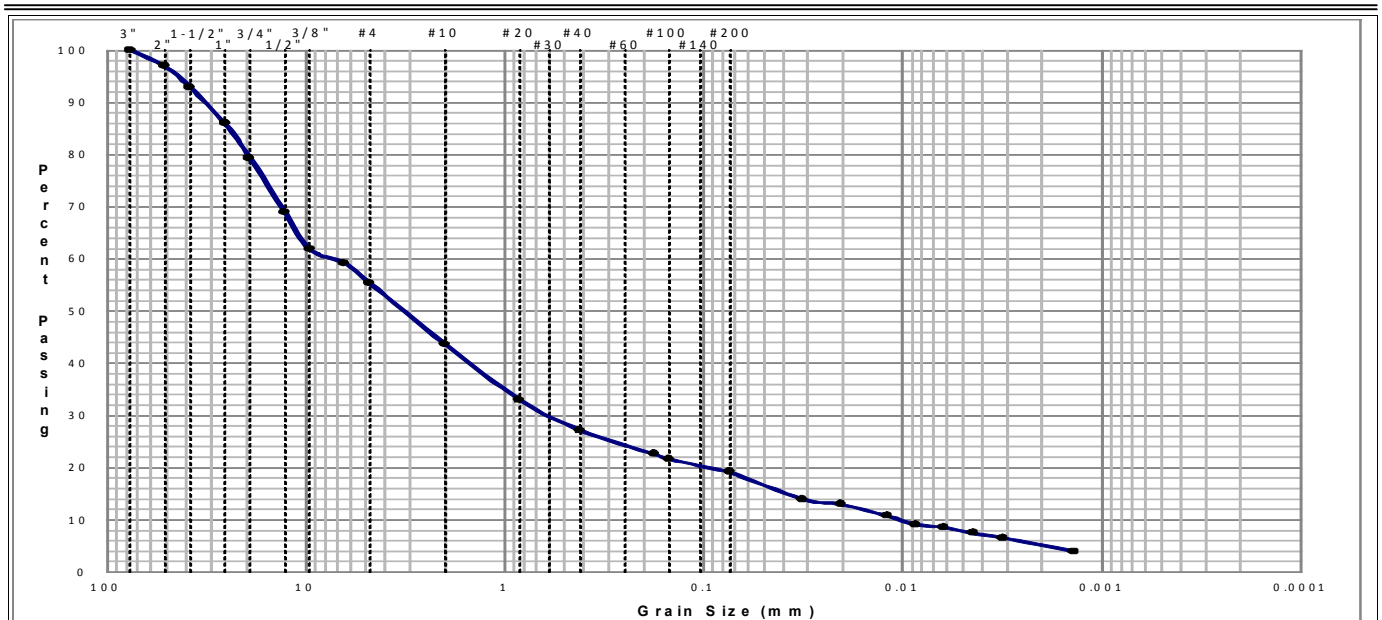
ATLANTIC TESTING LABORATORIES

PARTICLE SIZE ANALYSIS REPORT No.: ST4103SL-026-09-19 Rev 1

Client: O'Brien & Gere Engineers, Inc.
Project: 2019 Laboratory Soil Analysis
Syracuse, New York

Sample Date: September 20, 2019
Sampled By: CLIENT
Service Order No.: 13549
Sample No.: ST4103S-26

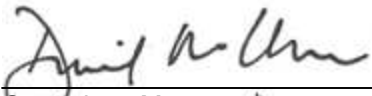
Location: LCP-BYS-05



% Gravel				% Sand			% Fines	
% +3"	Coarse	Medium	Fine	Coarse	Medium	Fine	Silt	Clay
--	14	17	14	12	17	8	11	8
SIEVE SIZE	PERCENT FINER	SPEC.*		OUT OF SPEC. (X)	<u>Soil Description</u> Silty, Clayey Gravel with Sand <u>Atterberg Limits</u> PL= 20 LL= 27 PI= 7 <u>Coefficients</u> D₈₅= 24.3971 D₆₀= 7.1801 D₅₀= 3.1829 D₃₀= 0.5847 D₁₅= 0.0372 D₁₀= 0.0102 C_u = 701.0114 C_c = 4.6487 <u>Classification</u> USCS= GC-GM AASHTO= A-2-4 <u>Remarks</u> Delivered by O. Adams on 10-11-19 ASTM D-422			
		LOW	HIGH					
3 in	100							
2 in	97							
1 1/2 in	93							
1.00 in	86							
3/4 in	79							
1/2 in	69							
3/8 in	62							
1/4 in	59							
No. 4	55							
No. 10	44							
No. 20	33							
No. 40	27							
No. 80	23							
No. 100	22							
No. 200	19							

* (no specification provided)

* (no specification provided)

Reviewed by: 
 Operations Manager
 dowens@atlantictesting.com

Date: Dec 03, 2019

APPENDIX 4B

OCCRA MULCH

ALS Environmental 1565 Jefferson Road, Building 300, Suite 360 Rochester, New York 14623 (P) (585) 288-5380				Chain Of Custody/Analysis Request Project Name: Portfolio Material Characterization - Clean Soil Sampling Lab Project Name: Portfolio Material Characterization														AESI Ref: 38609.59845 COC #: PMC-101119A																																																																																																																																					
				Privileged & Confidential														Facility Name: Syracuse - LCP-OU-1		Lab Use Only																																																																																																																																			
Client Contact: (name, co., address) Stephen Miller @ Honeywell.com Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212				Sampler: Charles Sharpe, Chris Hoy, Ronnie Held Sampling Company: OBG, Part of Ramboll P.O.#				Location of Site: Syracuse, NY				Site Code: R30925		Lab Proj # Lab ID																																																																																																																																									
Hardcopy Report To: Hardcopy report only if requested Invoice To: Steve Miller				Analysis Turnaround Time: Standard - Y Rush Charges Authorized for: N Turn Around Time Required - 2-week				<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Composite (Yes/No)</th> <th>Filter Type (Yes/Filtered, No/Unfiltered)</th> <th>TCLP VOCs</th> <th>TCLP SVOCs</th> <th>TCLP Pesticides and Herbicides</th> <th>TCLP Metals (including 7470 Hg)</th> <th>Reactive Sulfide and Reactive Cyanide/Fluoride/Flash point</th> <th>pH/Conductivity</th> <th>Part 375 VOCs</th> <th>Part 375 SVOCs</th> <th>Part 375 Pesticides</th> <th>Part 375 Herbicides (2,4,5-TP)</th> <th>Part 375 PCBs</th> <th>Part 375 Metals including Hexavalent Chromium and Mercury</th> <th>TOC</th> <th>Total Cyanide</th> <th>Total Phosphorus</th> </tr> <tr> <td colspan="17"> Units No No Yes No No No X X X X X X X X X </td> </tr> </table>														Composite (Yes/No)	Filter Type (Yes/Filtered, No/Unfiltered)	TCLP VOCs	TCLP SVOCs	TCLP Pesticides and Herbicides	TCLP Metals (including 7470 Hg)	Reactive Sulfide and Reactive Cyanide/Fluoride/Flash point	pH/Conductivity	Part 375 VOCs	Part 375 SVOCs	Part 375 Pesticides	Part 375 Herbicides (2,4,5-TP)	Part 375 PCBs	Part 375 Metals including Hexavalent Chromium and Mercury	TOC	Total Cyanide	Total Phosphorus	Units No No Yes No No No X X X X X X X X X																																																																																																																
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Sample Identification <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sys_Loc_Code</th> <th>Start Depth (ft)</th> <th>End Depth (ft)</th> <th>Sys_Sample_Code</th> <th>Sample Date</th> <th>Sample Time</th> <th>Matrix Code</th> <th>Medium Code</th> <th>Sample Type</th> <th># of Cont.</th> </tr> </thead> <tbody> <tr> <td>1. LCP-OCCRACOMP-01</td> <td>---</td> <td>---</td> <td>PMC-101119A-01</td> <td>10/11/2019</td> <td>0920</td> <td>Soil</td> <td>Soil</td> <td>Reg</td> <td></td> </tr> <tr> <td>2. LCP-OCCRACOMP-01</td> <td>---</td> <td>---</td> <td>PMC-101119A-02</td> <td>10/11/2019</td> <td>0920</td> <td>Soil</td> <td>Soil</td> <td>Reg</td> <td></td> </tr> <tr> <td>3. PMC-TB-101119</td> <td>---</td> <td>---</td> <td>PMC-101119A-03</td> <td>10/11/2019</td> <td></td> <td>QC</td> <td>Water</td> <td>TD</td> <td></td> </tr> <tr><td>4.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>11.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>12.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>				Sys_Loc_Code	Start Depth (ft)	End Depth (ft)	Sys_Sample_Code	Sample Date	Sample Time	Matrix Code	Medium Code	Sample Type	# of Cont.	1. LCP-OCCRACOMP-01	---	---	PMC-101119A-01	10/11/2019	0920	Soil	Soil	Reg		2. LCP-OCCRACOMP-01	---	---	PMC-101119A-02	10/11/2019	0920	Soil	Soil	Reg		3. PMC-TB-101119	---	---	PMC-101119A-03	10/11/2019		QC	Water	TD		4.										5.										6.										7.										8.										9.										10.										11.										12.										Special Instructions:				FOR INTERNAL USE ONLY: LCP-OCCRACOMP = OCCRA Compost material													
Sys_Loc_Code	Start Depth (ft)	End Depth (ft)	Sys_Sample_Code	Sample Date	Sample Time	Matrix Code	Medium Code	Sample Type	# of Cont.																																																																																																																																														
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Relinquished by Guedna Desir 				Company: OBG, Part of Ramboll Date/Time: 10/11/19		Received by:		Company: ALS Date/Time: 10/19/19		Condition:		Custody Seals Intact																																																																																																																																											
Relinquished by:				Company:		Received by:		Company:		Condition:		Custody Seals Intact																																																																																																																																											
Date/Time:				Date/Time:		Date/Time:		Date/Time:		Cooler Temp.:		Cooler Temp.:																																																																																																																																											

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

R1910019 5
 O'Brien & Gere Engineers, Incorporated
 Syracuse - LCP-OU-1



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-01
Lab Code: R1910019-001

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	16 U	16	0.64	1.26	10/15/19 15:36	
1,1,2,2-Tetrachloroethane	16 U	16	0.64	1.26	10/15/19 15:36	
1,1,2-Trichloroethane	16 U	16	0.64	1.26	10/15/19 15:36	
1,1,2-Trichloro-1,2,2-trifluoroethane	16 U	16	0.64	1.26	10/15/19 15:36	
1,1-Dichloroethane (1,1-DCA)	16 U	16	0.64	1.26	10/15/19 15:36	
1,1-Dichloroethene (1,1-DCE)	16 U	16	0.93	1.26	10/15/19 15:36	
1,2,3-Trichlorobenzene	16 U	16	1.7	1.26	10/15/19 15:36	
1,2,4-Trichlorobenzene	16 U	16	1.4	1.26	10/15/19 15:36	
1,2,4-Trimethylbenzene	16 U	16	0.64	1.26	10/15/19 15:36	
1,2-Dibromo-3-chloropropane (DBCP)	16 U	16	0.93	1.26	10/15/19 15:36	
1,2-Dibromoethane	16 U	16	0.64	1.26	10/15/19 15:36	
1,2-Dichlorobenzene	16 U	16	0.64	1.26	10/15/19 15:36	
1,2-Dichloroethane	16 U	16	0.64	1.26	10/15/19 15:36	
1,2-Dichloropropane	16 U	16	0.64	1.26	10/15/19 15:36	
1,3,5-Trimethylbenzene	16 U	16	0.64	1.26	10/15/19 15:36	
1,3-Dichlorobenzene	16 U	16	0.64	1.26	10/15/19 15:36	
1,4-Dichlorobenzene	16 U	16	0.71	1.26	10/15/19 15:36	
1,4-Dioxane	320 U	320	64	1.26	10/15/19 15:36	
2-Butanone (MEK)	16 U	16	6.4	1.26	10/15/19 15:36	
2-Hexanone	16 U	16	1.2	1.26	10/15/19 15:36	
4-Methyl-2-pentanone	16 U	16	0.74	1.26	10/15/19 15:36	
Acetone	28	16	16	1.26	10/15/19 15:36	
Benzene	16 U	16	0.64	1.26	10/15/19 15:36	
Bromochloromethane	16 U	16	0.64	1.26	10/15/19 15:36	
Bromodichloromethane	16 U	16	0.64	1.26	10/15/19 15:36	
Bromoform	16 U	16	1.6	1.26	10/15/19 15:36	
Bromomethane	16 U	16	6.8	1.26	10/15/19 15:36	
Carbon Disulfide	16 U	16	0.93	1.26	10/15/19 15:36	
Carbon Tetrachloride	16 U	16	0.84	1.26	10/15/19 15:36	
Chlorobenzene	16 U	16	0.64	1.26	10/15/19 15:36	
Chloroethane	16 U	16	0.64	1.26	10/15/19 15:36	
Chloroform	16 U	16	0.64	1.26	10/15/19 15:36	
Chloromethane	16 U	16	4.5	1.26	10/15/19 15:36	
Cyclohexane	16 U	16	0.84	1.26	10/15/19 15:36	
Dibromochloromethane	16 U	16	0.64	1.26	10/15/19 15:36	
Dichlorodifluoromethane (CFC 12)	16 U	16	1.1	1.26	10/15/19 15:36	
Dichloromethane	16 U	16	9.0	1.26	10/15/19 15:36	
Ethylbenzene	16 U	16	0.64	1.26	10/15/19 15:36	
Isopropylbenzene (Cumene)	16 U	16	0.64	1.26	10/15/19 15:36	
Methyl Acetate	16 U	16	2.7	1.26	10/15/19 15:36	
Methyl tert-Butyl Ether	0.87 J	16	0.64	1.26	10/15/19 15:36	
Methylcyclohexane	16 U	16	1.0	1.26	10/15/19 15:36	
Styrene	16 U	16	0.64	1.26	10/15/19 15:36	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-01
Lab Code: R1910019-001

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	16 U	16	0.74	1.26	10/15/19 15:36	
Toluene	0.68 J	16	0.64	1.26	10/15/19 15:36	
Trichloroethene (TCE)	16 U	16	0.71	1.26	10/15/19 15:36	
Trichlorofluoromethane (CFC 11)	16 U	16	0.84	1.26	10/15/19 15:36	
Vinyl Chloride	16 U	16	1.5	1.26	10/15/19 15:36	
cis-1,2-Dichloroethene	16 U	16	0.64	1.26	10/15/19 15:36	
cis-1,3-Dichloropropene	16 U	16	0.64	1.26	10/15/19 15:36	
m,p-Xylenes	32 U	32	1.2	1.26	10/15/19 15:36	
n-Butylbenzene	16 U	16	0.64	1.26	10/15/19 15:36	
n-Propylbenzene	16 U	16	0.64	1.26	10/15/19 15:36	
o-Xylene	16 U	16	0.64	1.26	10/15/19 15:36	
sec-Butylbenzene	16 U	16	0.64	1.26	10/15/19 15:36	
tert-Butylbenzene	16 U	16	0.64	1.26	10/15/19 15:36	
trans-1,2-Dichloroethene	16 U	16	0.64	1.26	10/15/19 15:36	
trans-1,3-Dichloropropene	16 U	16	0.64	1.26	10/15/19 15:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	55	31 - 154	10/15/19 15:36	
Dibromofluoromethane	106	63 - 138	10/15/19 15:36	
Toluene-d8	93	66 - 138	10/15/19 15:36	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-01
Lab Code: R1910019-001

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	18 U	18	0.74	1.45	10/15/19 19:04	
1,1,2,2-Tetrachloroethane	18 U	18	0.74	1.45	10/15/19 19:04	
1,1,2-Trichloroethane	18 U	18	0.74	1.45	10/15/19 19:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	18 U	18	0.74	1.45	10/15/19 19:04	
1,1-Dichloroethane (1,1-DCA)	18 U	18	0.74	1.45	10/15/19 19:04	
1,1-Dichloroethene (1,1-DCE)	18 U	18	1.1	1.45	10/15/19 19:04	
1,2,3-Trichlorobenzene	18 U	18	2.0	1.45	10/15/19 19:04	
1,2,4-Trichlorobenzene	18 U	18	1.6	1.45	10/15/19 19:04	
1,2,4-Trimethylbenzene	18 U	18	0.74	1.45	10/15/19 19:04	
1,2-Dibromo-3-chloropropane (DBCP)	18 U	18	1.1	1.45	10/15/19 19:04	
1,2-Dibromoethane	18 U	18	0.74	1.45	10/15/19 19:04	
1,2-Dichlorobenzene	18 U	18	0.74	1.45	10/15/19 19:04	
1,2-Dichloroethane	18 U	18	0.74	1.45	10/15/19 19:04	
1,2-Dichloropropane	18 U	18	0.74	1.45	10/15/19 19:04	
1,3,5-Trimethylbenzene	18 U	18	0.74	1.45	10/15/19 19:04	
1,3-Dichlorobenzene	18 U	18	0.74	1.45	10/15/19 19:04	
1,4-Dichlorobenzene	18 U	18	0.81	1.45	10/15/19 19:04	
1,4-Dioxane	370 U	370	74	1.45	10/15/19 19:04	
2-Butanone (MEK)	13 J	18	7.4	1.45	10/15/19 19:04	
2-Hexanone	18 U	18	1.4	1.45	10/15/19 19:04	
4-Methyl-2-pentanone	18 U	18	0.85	1.45	10/15/19 19:04	
Acetone	150	18	18	1.45	10/15/19 19:04	
Benzene	18 U	18	0.74	1.45	10/15/19 19:04	
Bromochloromethane	18 U	18	0.74	1.45	10/15/19 19:04	
Bromodichloromethane	18 U	18	0.74	1.45	10/15/19 19:04	
Bromoform	18 U	18	1.9	1.45	10/15/19 19:04	
Bromomethane	18 U	18	7.8	1.45	10/15/19 19:04	
Carbon Disulfide	18 U	18	1.1	1.45	10/15/19 19:04	
Carbon Tetrachloride	18 U	18	0.96	1.45	10/15/19 19:04	
Chlorobenzene	18 U	18	0.74	1.45	10/15/19 19:04	
Chloroethane	18 U	18	0.74	1.45	10/15/19 19:04	
Chloroform	18 U	18	0.74	1.45	10/15/19 19:04	
Chloromethane	18 U	18	5.2	1.45	10/15/19 19:04	
Cyclohexane	18 U	18	0.96	1.45	10/15/19 19:04	
Dibromochloromethane	18 U	18	0.74	1.45	10/15/19 19:04	
Dichlorodifluoromethane (CFC 12)	18 U	18	1.3	1.45	10/15/19 19:04	
Dichloromethane	18 U	18	11	1.45	10/15/19 19:04	
Ethylbenzene	18 U	18	0.74	1.45	10/15/19 19:04	
Isopropylbenzene (Cumene)	18 U	18	0.74	1.45	10/15/19 19:04	
Methyl Acetate	5.3 J	18	3.1	1.45	10/15/19 19:04	
Methyl tert-Butyl Ether	3.2 J	18	0.74	1.45	10/15/19 19:04	
Methylcyclohexane	18 U	18	1.2	1.45	10/15/19 19:04	
Styrene	18 U	18	0.74	1.45	10/15/19 19:04	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-01
Lab Code: R1910019-001

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	18 U	18	0.85	1.45	10/15/19 19:04	
Toluene	18 U	18	0.74	1.45	10/15/19 19:04	
Trichloroethene (TCE)	18 U	18	0.81	1.45	10/15/19 19:04	
Trichlorofluoromethane (CFC 11)	18 U	18	0.96	1.45	10/15/19 19:04	
Vinyl Chloride	18 U	18	1.7	1.45	10/15/19 19:04	
cis-1,2-Dichloroethene	18 U	18	0.74	1.45	10/15/19 19:04	
cis-1,3-Dichloropropene	18 U	18	0.74	1.45	10/15/19 19:04	
m,p-Xylenes	37 U	37	1.4	1.45	10/15/19 19:04	
n-Butylbenzene	18 U	18	0.74	1.45	10/15/19 19:04	
n-Propylbenzene	18 U	18	0.74	1.45	10/15/19 19:04	
o-Xylene	18 U	18	0.74	1.45	10/15/19 19:04	
sec-Butylbenzene	18 U	18	0.74	1.45	10/15/19 19:04	
tert-Butylbenzene	18 U	18	0.74	1.45	10/15/19 19:04	
trans-1,2-Dichloroethene	18 U	18	0.74	1.45	10/15/19 19:04	
trans-1,3-Dichloropropene	18 U	18	0.74	1.45	10/15/19 19:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	53	31 - 154	10/15/19 19:04	
Dibromofluoromethane	104	63 - 138	10/15/19 19:04	
Toluene-d8	94	66 - 138	10/15/19 19:04	



Semivolatile Organic Compounds by GC/MS

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	780 U	780	190	1	10/22/19 18:32	10/15/19	
2,3,4,6-Tetrachlorophenol	780 U	780	170	1	10/22/19 18:32	10/15/19	
2,4,5-Trichlorophenol	780 U	780	670	1	10/22/19 18:32	10/15/19	
2,4,6-Trichlorophenol	780 U	780	140	1	10/22/19 18:32	10/15/19	
2,4-Dichlorophenol	780 U	780	170	1	10/22/19 18:32	10/15/19	
2,4-Dimethylphenol	780 U	780	180	1	10/22/19 18:32	10/15/19	
2,4-Dinitrophenol	4000 U	4000	290	1	10/22/19 18:32	10/15/19	
2,4-Dinitrotoluene	780 U	780	310	1	10/22/19 18:32	10/15/19	
2,6-Dinitrotoluene	780 U	780	230	1	10/22/19 18:32	10/15/19	
2-Chloronaphthalene	780 U	780	190	1	10/22/19 18:32	10/15/19	
2-Chlorophenol	780 U	780	200	1	10/22/19 18:32	10/15/19	
2-Methylnaphthalene	780 U	780	180	1	10/22/19 18:32	10/15/19	
2-Methylphenol	780 U	780	170	1	10/22/19 18:32	10/15/19	
2-Nitroaniline	4000 U	4000	240	1	10/22/19 18:32	10/15/19	
2-Nitrophenol	780 U	780	230	1	10/22/19 18:32	10/15/19	
3,3'-Dichlorobenzidine	780 U	780	170	1	10/22/19 18:32	10/15/19	
3- and 4-Methylphenol Coelution	780 U	780	150	1	10/22/19 18:32	10/15/19	
3-Nitroaniline	4000 U	4000	170	1	10/22/19 18:32	10/15/19	
4,6-Dinitro-2-methylphenol	4000 U	4000	340	1	10/22/19 18:32	10/15/19	
4-Bromophenyl Phenyl Ether	780 U	780	290	1	10/22/19 18:32	10/15/19	
4-Chloro-3-methylphenol	780 U	780	180	1	10/22/19 18:32	10/15/19	
4-Chloroaniline	780 U	780	190	1	10/22/19 18:32	10/15/19	
4-Chlorophenyl Phenyl Ether	780 U	780	190	1	10/22/19 18:32	10/15/19	
4-Nitroaniline	4000 U	4000	170	1	10/22/19 18:32	10/15/19	
4-Nitrophenol	4000 U	4000	260	1	10/22/19 18:32	10/15/19	
Acenaphthene	780 U	780	180	1	10/22/19 18:32	10/15/19	
Acenaphthylene	780 U	780	210	1	10/22/19 18:32	10/15/19	
Acetophenone	780 U	780	180	1	10/22/19 18:32	10/15/19	
Anthracene	780 U	780	220	1	10/22/19 18:32	10/15/19	
Atrazine	780 U	780	310	1	10/22/19 18:32	10/15/19	
Benz(a)anthracene	780 U	780	230	1	10/22/19 18:32	10/15/19	
Benzaldehyde	4000 U	4000	160	1	10/22/19 18:32	10/15/19	
Benzo(a)pyrene	780 U	780	290	1	10/22/19 18:32	10/15/19	
Benzo(b)fluoranthene	310 J	780	260	1	10/22/19 18:32	10/15/19	
Benzo(g,h,i)perylene	780 U	780	210	1	10/22/19 18:32	10/15/19	
Benzo(k)fluoranthene	780 U	780	290	1	10/22/19 18:32	10/15/19	
Biphenyl	780 U	780	200	1	10/22/19 18:32	10/15/19	
2,2'-Oxybis(1-chloropropane)	780 U	780	310	1	10/22/19 18:32	10/15/19	
Bis(2-chloroethoxy)methane	780 U	780	210	1	10/22/19 18:32	10/15/19	
Bis(2-chloroethyl) Ether	780 U	780	210	1	10/22/19 18:32	10/15/19	
Bis(2-ethylhexyl) Phthalate	1200 U	1200	210	1	10/22/19 18:32	10/15/19	
Butyl Benzyl Phthalate	780 U	780	200	1	10/22/19 18:32	10/15/19	
Caprolactam	780 U	780	210	1	10/22/19 18:32	10/15/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	780 U	780	230	1	10/22/19 18:32	10/15/19	
Chrysene	780 U	780	290	1	10/22/19 18:32	10/15/19	
Di-n-butyl Phthalate	780 U	780	240	1	10/22/19 18:32	10/15/19	
Di-n-octyl Phthalate	780 U	780	230	1	10/22/19 18:32	10/15/19	
Dibenz(a,h)anthracene	780 U	780	240	1	10/22/19 18:32	10/15/19	
Dibenzofuran	780 U	780	160	1	10/22/19 18:32	10/15/19	
Diethyl Phthalate	780 U	780	170	1	10/22/19 18:32	10/15/19	
Dimethyl Phthalate	780 U	780	180	1	10/22/19 18:32	10/15/19	
Fluoranthene	780 U	780	290	1	10/22/19 18:32	10/15/19	
Fluorene	780 U	780	180	1	10/22/19 18:32	10/15/19	
Hexachlorobenzene	780 U	780	240	1	10/22/19 18:32	10/15/19	
Hexachlorobutadiene	780 U	780	190	1	10/22/19 18:32	10/15/19	
Hexachlorocyclopentadiene	780 U	780	180	1	10/22/19 18:32	10/15/19	
Hexachloroethane	780 U	780	210	1	10/22/19 18:32	10/15/19	
Indeno(1,2,3-cd)pyrene	780 U	780	260	1	10/22/19 18:32	10/15/19	
Isophorone	780 U	780	220	1	10/22/19 18:32	10/15/19	
N-Nitrosodi-n-propylamine	780 U	780	210	1	10/22/19 18:32	10/15/19	
N-Nitrosodiphenylamine	780 U	780	520	1	10/22/19 18:32	10/15/19	
Naphthalene	780 U	780	210	1	10/22/19 18:32	10/15/19	
Nitrobenzene	780 U	780	210	1	10/22/19 18:32	10/15/19	
Pentachlorophenol (PCP)	4000 U	4000	260	1	10/22/19 18:32	10/15/19	
Phenanthrene	780 U	780	230	1	10/22/19 18:32	10/15/19	
Phenol	780 U	780	190	1	10/22/19 18:32	10/15/19	
Pyrene	780 U	780	310	1	10/22/19 18:32	10/15/19	
Pyridine	4000 U	4000	95	1	10/22/19 18:32	10/15/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	28	10 - 109	10/22/19 18:32	
2-Fluorobiphenyl	17	10 - 102	10/22/19 18:32	
2-Fluorophenol	32	10 - 88	10/22/19 18:32	
Nitrobenzene-d5	24	10 - 95	10/22/19 18:32	
Phenol-d6	39	10 - 145	10/22/19 18:32	
Terphenyl-d14	19	10 - 106	10/22/19 18:32	



Semivolatile Organic Compounds by GC

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	38 U	38	19	10	10/23/19 02:17	10/17/19	
4,4'-DDE	38 U	38	19	10	10/23/19 02:17	10/17/19	
4,4'-DDT	38 U	38	19	10	10/23/19 02:17	10/17/19	
Aldrin	38 U	38	19	10	10/23/19 02:17	10/17/19	
Dieldrin	38 U	38	19	10	10/23/19 02:17	10/17/19	
Endosulfan I	38 U	38	19	10	10/23/19 02:17	10/17/19	
Endosulfan II	38 U	38	19	10	10/23/19 02:17	10/17/19	
Endosulfan Sulfate	38 U	38	19	10	10/23/19 02:17	10/17/19	
Endrin	38 U	38	19	10	10/23/19 02:17	10/17/19	
Endrin Aldehyde	38 U	38	19	10	10/23/19 02:17	10/17/19	
Endrin Ketone	38 U	38	19	10	10/23/19 02:17	10/17/19	
Heptachlor	38 U	38	19	10	10/23/19 02:17	10/17/19	
Heptachlor Epoxide	38 U	38	19	10	10/23/19 02:17	10/17/19	
Methoxychlor	38 U	38	19	10	10/23/19 02:17	10/17/19	
Toxaphene	740 U	740	430	10	10/23/19 02:17	10/17/19	
alpha-BHC	38 U	38	19	10	10/23/19 02:17	10/17/19	
alpha-Chlordane	38 U	38	19	10	10/23/19 02:17	10/17/19	
beta-BHC	38 U	38	19	10	10/23/19 02:17	10/17/19	
delta-BHC	38 U	38	19	10	10/23/19 02:17	10/17/19	
gamma-BHC (Lindane)	38 U	38	19	10	10/23/19 02:17	10/17/19	
gamma-Chlordane	38 U	38	19	10	10/23/19 02:17	10/17/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	52	10 - 145	10/23/19 02:17	
Tetrachloro-m-xylene	63	10 - 123	10/23/19 02:17	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	74 U	74	39	1	10/18/19 18:57	10/17/19	
Aroclor 1221	150 U	150	75	1	10/18/19 18:57	10/17/19	
Aroclor 1232	74 U	74	44	1	10/18/19 18:57	10/17/19	
Aroclor 1242	74 U	74	39	1	10/18/19 18:57	10/17/19	
Aroclor 1248	74 U	74	58	1	10/18/19 18:57	10/17/19	
Aroclor 1254	74 U	74	41	1	10/18/19 18:57	10/17/19	
Aroclor 1260	74 U	74	39	1	10/18/19 18:57	10/17/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	44	22 - 128	10/18/19 18:57	
Tetrachloro-m-xylene	50	14 - 119	10/18/19 18:57	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	120 U	120	40	5	10/24/19 14:50	10/16/19	
Pentachlorophenol (PCP)	120 U	120	59	5	10/24/19 14:50	10/16/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	39	10 - 151	10/24/19 14:50	



Metals

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	3440	mg/Kg	45	28	1	10/21/19 18:24	10/16/19	
Antimony, Total	6010C	14 U	mg/Kg	14	2	1	10/19/19 00:33	10/16/19	
Arsenic, Total	6010C	3.6	mg/Kg	2.3	1.6	1	10/21/19 18:24	10/16/19	
Barium, Total	6010C	57.8	mg/Kg	4.5	2.2	1	10/19/19 00:33	10/16/19	
Beryllium, Total	6010C	0.18 J	mg/Kg	0.68	0.07	1	10/19/19 00:33	10/16/19	
Cadmium, Total	6010C	0.4 J	mg/Kg	1.1	0.2	1	10/19/19 00:33	10/16/19	
Calcium, Total	6010C	113000	mg/Kg	2300	800	10	10/19/19 02:01	10/16/19	
Chromium, Total	6010C	7.9	mg/Kg	2.3	0.8	1	10/19/19 00:33	10/16/19	
Cobalt, Total	6010C	3 J	mg/Kg	11	0.5	1	10/19/19 00:33	10/16/19	
Copper, Total	6010C	26.3	mg/Kg	4.5	1.5	1	10/19/19 00:33	10/16/19	
Iron, Total	6010C	6280	mg/Kg	45	30	1	10/19/19 00:33	10/16/19	
Lead, Total	6010C	14	mg/Kg	11	1.0	1	10/19/19 00:33	10/16/19	
Magnesium, Total	6010C	19000	mg/Kg	230	30	1	10/19/19 00:33	10/16/19	
Manganese, Total	6010C	284	mg/Kg	4.5	3.4	1	10/19/19 00:33	10/16/19	
Mercury, Total	7471B	0.110	mg/Kg	0.078	0.014	1	10/17/19 11:16	10/16/19	
Nickel, Total	6010C	7.7 J	mg/Kg	9.0	1.5	1	10/19/19 00:33	10/16/19	
Potassium, Total	6010C	4500	mg/Kg	450	30	1	10/19/19 00:33	10/16/19	
Selenium, Total	6010C	2.3 U	mg/Kg	2.3	1.3	1	10/19/19 00:33	10/16/19	
Silver, Total	6010C	2.3 U	mg/Kg	2.3	0.2	1	10/19/19 00:33	10/16/19	
Sodium, Total	6010C	580	mg/Kg	230	120	1	10/19/19 00:33	10/16/19	
Thallium, Total	6010C	4.3	mg/Kg	2.3	1.5	1	10/19/19 00:33	10/16/19	
Vanadium, Total	6010C	16	mg/Kg	11	2	1	10/19/19 00:33	10/16/19	
Zinc, Total	6010C	68.0	mg/Kg	4.5	3.2	1	10/19/19 00:33	10/16/19	



General Chemistry

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-101119A-01
Lab Code: R1910019-001

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	39.4	Percent	-	-	1	10/18/19 10:30	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	2060000 E	mg/Kg	31000	12000	1	10/22/19 20:10	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.91 U	mg/Kg	0.91	0.10	1	10/28/19 17:18	10/25/19	
Chromium, Hexavalent	7199	0.91 U	mg/Kg	0.91	0.10	1	10/28/19 17:09	10/25/19	
Chromium, Trivalent	Calculation	7.9	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.17 J	mg/Kg	0.63	0.10	1	10/17/19 22:30	10/17/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Syracuse - LCP-OU-1
Sample Matrix: Soil

Sample Name: PMC-101119A-02
Lab Code: R1910019-002

Service Request: R1910019
Date Collected: 10/11/19 09:20
Date Received: 10/14/19 10:15

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date	
								Extracted	Q
pH	9045D	7.82	pH Units	-	-	1	10/17/19 13:00	NA	H
Total Solids	ALS SOP	42.5	Percent	-	-	1	10/18/19 10:30	NA	

JC96718 12843453 4886

SW-10719-47

SGS
2235 US Highway 130
Dayton, NJ 08810
(P) (732) 329 0200

Client Contact: (name, co., address)
Stephen Miller @ Honeywell.com
Honeywell International
301 Plainfield Road, Suite 330
Syracuse, New York 13212

Hardcopy Report To: Hardcopy only if requested
Invoice To: Steve Miller

Project Name: Portfolio Material Characterization - Clean Soil Sampling
Lab Project Name: OBGNY: Portfolio Material Characterization, Geddes, NY

Facility Name: Syracuse - LCP-OU-1
Location of Site: Syracuse, NY
Site Code: R30925

EDD To: Charles Sharpe, Chris Hoy, Ronnie Hekel
Sampler: MP, MB, GD
Sampling Company: OBG, Part of Ramboll
P O #

Analysis Turnaround Time:
Standard - Y
Rush Charges Authorized for - N
Turn Around Time Required - 2-week

Preservative
SW8270SM [1,4-Dioxane]
SW1312 SPLP/Modified Method 337

Sample Identification			Sample Date	Sample Time	Matrix Code	Medium Code	Sample Type	# of Cont.	Units	Modified Method 337	Job No.
Sys_Loc_Code	Start Depth (ft)	End Depth (ft)	Sys_Sample_Code								
1 LCP-FRB-101119	---	---	PMC-101119-01	10/11/2019	9:05	QC	Water	FB	No	No	X
2 LCP-OCRCRACOMP-01	---	---	PMC-101119-02	10/11/2019	9:20	Soil	Soil	Reg	No	No	X X X
3 LCP-OCRCRACOMP-02	---	---	PMC-101119-03	10/11/2019	9:35	Soil	Soil	Reg	No	No	X X X
4											
5											
6											
7											
8											
9											
10											
11											
12											

Special Instructions: Hold SPLP until directed by Project Team

FOR INTERNAL USE ONLY:
LCP-OCRCRACOMP = OCCRA Compost material

Relinquished by: Guedna Desir
13:00 Company
Date/Time: 10/11/19
Received by: OBG, Part of Ramboll
Date/Time: 10/11/19

Relinquished by: 10-11-19 Company
Date/Time: 13:40
Received by: Fedex
Date/Time: 10/12/19 10:40

Condition: 13:00 Company
Cooler Temp: 10/11/19
Custody Seals Intact: 10/12/19 10:40

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

REC'D BY FEDX 10/12/19 10:40 REC'D BY
10/12/19

JC96718: Chain of Custody

Page 1 of 2

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	PMC-101119-02	Date Sampled:	10/11/19
Lab Sample ID:	JC96718-2	Date Received:	10/12/19
Matrix:	SO - Soil	Percent Solids:	52.9
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3P80934.D	2	10/16/19 14:26	CS	10/15/19 07:59	OP23347A	E3P3786
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	12	3.9	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	68%		10-146%		
321-60-8	2-Fluorobiphenyl	55%		10-149%		
1718-51-0	Terphenyl-d14	58%		10-170%		

(a) Dilution required due to viscosity of the extract matrix.

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	PMC-101119-02	Date Sampled:	10/11/19
Lab Sample ID:	JC96718-2	Date Received:	10/12/19
Matrix:	SO - Soil	Percent Solids:	52.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q37873.D	1	10/18/19 23:30	AFL	10/17/19 14:30	F:OP77332	F:S2Q588
Run #2							

	Initial Weight	Final Volume
Run #1	1.96 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.9	0.48	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.9	0.39	ug/kg	
307-24-4	Perfluorohexanoic acid	0.592	1.9	0.39	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.9	0.48	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.48	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.48	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.48	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.48	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.48	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.48	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.48	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.48	ug/kg	
754-91-6	PFOSA	ND	1.9	0.48	ug/kg	
2355-31-9	MeFOSAA	ND	4.8	0.96	ug/kg	
2991-50-6	EtFOSAA	ND	4.8	0.96	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.9	0.48	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.9	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	63%		50-150%
	13C5-PFPeA	64%		50-150%
	13C5-PFHxA	60%		50-150%
	13C4-PFHpA	59%		50-150%
	13C8-PFOA	62%		50-150%
	13C9-PFNA	60%		50-150%
	13C6-PFDA	64%		50-150%
	13C7-PFUnDA	57%		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:	PMC-101119-02	Date Sampled:	10/11/19
Lab Sample ID:	JC96718-2	Date Received:	10/12/19
Matrix:	SO - Soil	Percent Solids:	52.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	65%		50-150%
	13C2-PFTeDA	55%		50-150%
	13C3-PFBS	64%		50-150%
	13C3-PFHxS	62%		50-150%
	13C8-PFOS	60%		50-150%
	13C8-FOSA	57%		50-150%
	d3-MeFOSAA	58%		50-150%
	13C2-6:2FTS	61%		50-150%
	13C2-8:2FTS	73%		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

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	PMC-101119-03	Date Sampled:	10/11/19
Lab Sample ID:	JC96718-3	Date Received:	10/12/19
Matrix:	SO - Soil	Percent Solids:	53.7
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3P80935.D	2	10/16/19 14:47	CS	10/15/19 07:59	OP23347A	E3P3786
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	12	3.8	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	55%		10-146%		
321-60-8	2-Fluorobiphenyl	46%		10-149%		
1718-51-0	Terphenyl-d14	48%		10-170%		

(a) Dilution required due to viscosity of the extract matrix.

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	PMC-101119-03	Date Sampled:	10/11/19
Lab Sample ID:	JC96718-3	Date Received:	10/12/19
Matrix:	SO - Soil	Percent Solids:	53.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q37874.D	1	10/18/19 23:45	AFL	10/17/19 14:30	F:OP77332	F:S2Q588
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.9	0.47	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.9	0.37	ug/kg	
307-24-4	Perfluorohexanoic acid	0.519	1.9	0.37	ug/kg	J
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.47	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.47	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.9	0.47	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.47	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.47	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.47	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.47	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.47	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.47	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.47	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.47	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.47	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.47	ug/kg	
754-91-6	PFOSA	ND	1.9	0.47	ug/kg	
2355-31-9	MeFOSAA	ND	4.7	0.93	ug/kg	
2991-50-6	EtFOSAA	ND	4.7	0.93	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.9	0.47	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.9	0.47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	64%		50-150%
	13C5-PFPeA	65%		50-150%
	13C5-PFHxA	62%		50-150%
	13C4-PFHpA	60%		50-150%
	13C8-PFOA	63%		50-150%
	13C9-PFNA	61%		50-150%
	13C6-PFDA	64%		50-150%
	13C7-PFUnDA	59%		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:	PMC-101119-03	Date Sampled:	10/11/19
Lab Sample ID:	JC96718-3	Date Received:	10/12/19
Matrix:	SO - Soil	Percent Solids:	53.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

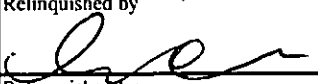
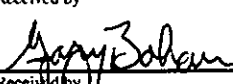
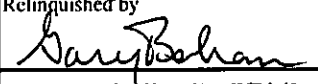
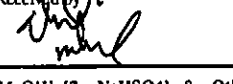
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	66%		50-150%
	13C2-PFTeDA	55%		50-150%
	13C3-PFBS	64%		50-150%
	13C3-PFHxS	62%		50-150%
	13C8-PFOS	61%		50-150%
	13C8-FOSA	56%		50-150%
	d3-MeFOSAA	56%		50-150%
	13C2-6:2FTS	62%		50-150%
	13C2-8:2FTS	72%		50-150%

(a) Analysis performed at SGS Orlando, FL.

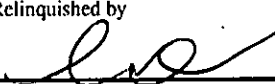
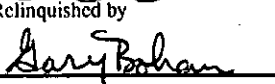
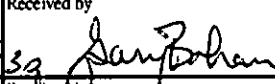
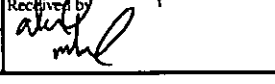
ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

APPENDIX 4C

ONEIDA TOPSOIL

ALS Environmental 1565 Jefferson Road, Building 300, Suite 360 Rochester, New York 14623 (P) (585) 288-5380										Chain Of Custody / Analysis Request															AESI Ref: 38609.59845								
																									COC #: LCP-070119A								
Client Contact: (name, co., address) Stephen.Miller@Honeywell.com Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212										Privileged & Confidential Michael Miller, Chuck Sharpe					Site Name: LCP					Lab Use Only													
										Location of Site: Geddes, NY					Lab Proj #		Lab ID																
Hardcopy Report To: Michael Miller Invoice To: Steve Miller										Sampler: Guedna Desir/Matt Skrupa/Chris Hoy P O # Site Code Analysis Turnaround Time: Standard - N Rush Charges Authorized for - Y 2 weeks - 1 week - Y Next Day -					Job No.																		
Sample Identification										Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Con.	Grab/Composite	Field Filtered Sample ?	Preservative	TCCLP VOCs	TCCLP SVOCs	TCCLP Pesticides and Herbicides	TCCLP Metals (including 7470 Hg)	Reactive Sulfide and Reactive Cyanide	Ignitability/ flash point/ pH/Corrosivity	Part 375 VOCs	Part 375 SVOCs	Part 375 Pesticides	Part 375 Herbicides	Part 375 PCBs	Part 375 Metals including Hexavalent Chromium and Mercury	TOC	Total Cyanide	Lab Sample Numbers
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units																							
1	LCP-OG-01	0	1	LCP-070119A-01	7/1/2019	9:05	Soil	Soil	Reg	4	G	N	X										X										
2	LCP-OG-01	0	1	LCP-070119A-02	7/1/2019	9:05	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
3	LCP-OSW-01	0	1	LCP-070119A-03	7/1/2019	11:15	Soil	Soil	Reg	4	G	N	X									X											
4	LCP-OSW-01	0	1	LCP-070119A-04	7/1/2019	11:15	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
5	LCP-OSW-02	0	1	LCP-070119A-05	7/1/2019	11:40	Soil	Soil	Reg	4	G	N	X									X											
6	LCP-OSW-02	0	1	LCP-070119A-06	7/1/2019	11:40	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
7	LCP-OSW-05	0	1	LCP-070119A-07	7/1/2019	12:10	Soil	Soil	Reg	4	G	N	X									X											
8	LCP-OSW-05	0	1	LCP-070119A-08	7/1/2019	12:10	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
9	LCP-OSW-06	0	1	LCP-070119A-09	7/1/2019	12:20	Soil	Soil	Reg	4	G	N	X									X											
10	LCP-OSW-06	0	1	LCP-070119A-10	7/1/2019	12:20	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
11	LCP-BYS-01	0	1	LCP-070119A-11	7/1/2019	13:52	Soil	Soil	Reg	4	G	N	X									X											
12	LCP-BYS-01	0	1	LCP-070119A-12	7/1/2019	13:52	Soil	Soil	Reg	6	C	N		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
Special Instructions: Part 375 Pesticides to include Sylvest.																																	
upload to SYRACUSE LCP DU-1 (R30925)																																	
Relinquished by: 										Company: OBG, Part of Ramboll		Received by: 		Company: ALS		Condition:		Custody Seals Intact:															
Date/Time: 7/2/2019 15:30										Date/Time: 7/2/19 15:30		Cooler Temp.:																					
Relinquished by: 										Company: ALS		Received by: 		Company: AL?		Condition:		Custody Seals Intact:															
Date/Time: 7/2/19 1735										Date/Time: 7/2/19 1735		Cooler Temp.:																					
Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):																																	

R1906195 5
 O'Brien & Gere Engineers, Incorporated
 LCP


ALS Environmental 1565 Jefferson Road, Building 300, Suite 360 Rochester, New York 14623 (P) (585) 288-5380										Chain Of Custody / Analysis Request															AESI Ref: 38609.59845 COC #: LCP-070119A Lab Use Only Lab Proj # Lab ID																																																																																																																																																																																																																																																																								
Client Contact: (name, co., address) Stephen.Miller@Honeywell.com Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212										Privileged & Confidential Michael Miller, Chuck Sharpe Site Name: LCP Location of Site: Geddes, NY										Job No.																																																																																																																																																																																																																																																																													
Analysis Turnaround Time: Standard - N Rush Charges Authorized for - Y 2 weeks - 1 week - Y Next Day -										<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Field Filtered Sample ?</th> <th>TCLP VOCs</th> <th>TCLP SVOCs</th> <th>TCLP Pesticides and Herbicides</th> <th>TCLP Metals (including 7470 Hg)</th> <th>Reactive Sulfide and Reactive Cyanide</th> <th>Ignitability/Flash point/ pH/Corrosivity</th> <th>Part 375 VOCs</th> <th>Part 375 SVOCs</th> <th>Part 375 Pesticides</th> <th>Part 375 Herbicides</th> <th>Part 375 PCBs</th> <th>Part 375 Metals including Hexavalent Chromium and Mercury</th> <th>TOC</th> <th>Total Cyanide</th> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>															Field Filtered Sample ?	TCLP VOCs	TCLP SVOCs	TCLP Pesticides and Herbicides	TCLP Metals (including 7470 Hg)	Reactive Sulfide and Reactive Cyanide	Ignitability/Flash point/ pH/Corrosivity	Part 375 VOCs	Part 375 SVOCs	Part 375 Pesticides	Part 375 Herbicides	Part 375 PCBs	Part 375 Metals including Hexavalent Chromium and Mercury	TOC	Total Cyanide																																																																																																																																																																																																																																																										
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Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):																																																																																																																																																																																																																																																																																																	

R1906195 **5**
 O'Brien & Gere Engineers, Incorporated
 LCP




Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-01
Lab Code: R1906195-001

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,1,2,2-Tetrachloroethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,1,2-Trichloroethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,1-Dichloroethane (1,1-DCA)	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,1-Dichloroethene (1,1-DCE)	4.9 U	4.9	0.29	.74	07/09/19 12:39	
1,2,3-Trichlorobenzene	4.9 U	4.9	0.52	.74	07/09/19 12:39	
1,2,4-Trichlorobenzene	4.9 U	4.9	0.42	.74	07/09/19 12:39	
1,2,4-Trimethylbenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,2-Dibromo-3-chloropropane (DBCP)	4.9 U	4.9	0.29	.74	07/09/19 12:39	
1,2-Dibromoethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,2-Dichlorobenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,2-Dichloroethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,2-Dichloropropane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,3,5-Trimethylbenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,3-Dichlorobenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
1,4-Dichlorobenzene	4.9 U	4.9	0.22	.74	07/09/19 12:39	
1,4-Dioxane	98 U	98	20	.74	07/09/19 12:39	
2-Butanone (MEK)	8.4	4.9	2.0	.74	07/09/19 12:39	
2-Hexanone	4.9 U	4.9	0.36	.74	07/09/19 12:39	
4-Methyl-2-pentanone	4.9 U	4.9	0.23	.74	07/09/19 12:39	
Acetone	49	4.9	4.7	.74	07/09/19 12:39	
Benzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Bromochloromethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Bromodichloromethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Bromoform	4.9 U	4.9	0.50	.74	07/09/19 12:39	
Bromomethane	4.9 U	4.9	2.1	.74	07/09/19 12:39	
Carbon Disulfide	0.45 J	4.9	0.29	.74	07/09/19 12:39	
Carbon Tetrachloride	4.9 U	4.9	0.26	.74	07/09/19 12:39	
Chlorobenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Chloroethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Chloroform	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Chloromethane	4.9 U	4.9	1.4	.74	07/09/19 12:39	
Cyclohexane	4.9 U	4.9	0.26	.74	07/09/19 12:39	
Dibromochloromethane	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Dichlorodifluoromethane (CFC 12)	4.9 U	4.9	0.33	.74	07/09/19 12:39	
Dichloromethane	4.9 U	4.9	2.8	.74	07/09/19 12:39	
Ethylbenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Isopropylbenzene (Cumene)	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Methyl Acetate	4.9 U	4.9	0.83	.74	07/09/19 12:39	
Methyl tert-Butyl Ether	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Methylcyclohexane	4.9 U	4.9	0.31	.74	07/09/19 12:39	
Styrene	4.9 U	4.9	0.20	.74	07/09/19 12:39	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

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Date Received: 07/02/19 17:35

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Lab Code: R1906195-001

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	4.9 U	4.9	0.23	.74	07/09/19 12:39	
Toluene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
Trichloroethene (TCE)	4.9 U	4.9	0.22	.74	07/09/19 12:39	
Trichlorofluoromethane (CFC 11)	4.9 U	4.9	0.26	.74	07/09/19 12:39	
Vinyl Chloride	4.9 U	4.9	0.46	.74	07/09/19 12:39	
cis-1,2-Dichloroethene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
cis-1,3-Dichloropropene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
m,p-Xylenes	9.8 U	9.8	0.37	.74	07/09/19 12:39	
n-Butylbenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
n-Propylbenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
o-Xylene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
sec-Butylbenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
tert-Butylbenzene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
trans-1,2-Dichloroethene	4.9 U	4.9	0.20	.74	07/09/19 12:39	
trans-1,3-Dichloropropene	4.9 U	4.9	0.20	.74	07/09/19 12:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	70	31 - 154	07/09/19 12:39	
Dibromofluoromethane	96	63 - 138	07/09/19 12:39	
Toluene-d8	97	66 - 138	07/09/19 12:39	



Semivolatile Organic Compounds by GC/MS

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Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 09:05
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Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	440 U	440	110	1	07/12/19 21:08	7/10/19	
2,3,4,6-Tetrachlorophenol	440 U	440	92	1	07/12/19 21:08	7/10/19	
2,4,5-Trichlorophenol	440 U	440	380	1	07/12/19 21:08	7/10/19	
2,4,6-Trichlorophenol	440 U	440	78	1	07/12/19 21:08	7/10/19	
2,4-Dichlorophenol	440 U	440	94	1	07/12/19 21:08	7/10/19	
2,4-Dimethylphenol	440 U	440	96	1	07/12/19 21:08	7/10/19	
2,4-Dinitrophenol	2300 U	2300	160	1	07/12/19 21:08	7/10/19	
2,4-Dinitrotoluene	440 U	440	180	1	07/12/19 21:08	7/10/19	
2,6-Dinitrotoluene	440 U	440	130	1	07/12/19 21:08	7/10/19	
2-Chloronaphthalene	440 U	440	110	1	07/12/19 21:08	7/10/19	
2-Chlorophenol	440 U	440	110	1	07/12/19 21:08	7/10/19	
2-Methylnaphthalene	440 U	440	96	1	07/12/19 21:08	7/10/19	
2-Methylphenol	440 U	440	95	1	07/12/19 21:08	7/10/19	
2-Nitroaniline	2300 U	2300	140	1	07/12/19 21:08	7/10/19	
2-Nitrophenol	440 U	440	130	1	07/12/19 21:08	7/10/19	
3,3'-Dichlorobenzidine	440 U	440	92	1	07/12/19 21:08	7/10/19	
3- and 4-Methylphenol Coelution	440 U	440	84	1	07/12/19 21:08	7/10/19	
3-Nitroaniline	2300 U	2300	94	1	07/12/19 21:08	7/10/19	
4,6-Dinitro-2-methylphenol	2300 U	2300	190	1	07/12/19 21:08	7/10/19	
4-Bromophenyl Phenyl Ether	440 U	440	160	1	07/12/19 21:08	7/10/19	
4-Chloro-3-methylphenol	440 U	440	96	1	07/12/19 21:08	7/10/19	
4-Chloroaniline	440 U	440	110	1	07/12/19 21:08	7/10/19	
4-Chlorophenyl Phenyl Ether	440 U	440	110	1	07/12/19 21:08	7/10/19	
4-Nitroaniline	2300 U	2300	94	1	07/12/19 21:08	7/10/19	
4-Nitrophenol	2300 U	2300	150	1	07/12/19 21:08	7/10/19	
Acenaphthene	440 U	440	99	1	07/12/19 21:08	7/10/19	
Acenaphthylene	440 U	440	120	1	07/12/19 21:08	7/10/19	
Acetophenone	440 U	440	100	1	07/12/19 21:08	7/10/19	
Anthracene	440 U	440	130	1	07/12/19 21:08	7/10/19	
Atrazine	440 U	440	180	1	07/12/19 21:08	7/10/19	
Benz(a)anthracene	440 U	440	130	1	07/12/19 21:08	7/10/19	
Benzaldehyde	2300 U	2300	87	1	07/12/19 21:08	7/10/19	
Benzo(a)pyrene	440 U	440	160	1	07/12/19 21:08	7/10/19	
Benzo(b)fluoranthene	440 U	440	150	1	07/12/19 21:08	7/10/19	
Benzo(g,h,i)perylene	440 U	440	120	1	07/12/19 21:08	7/10/19	
Benzo(k)fluoranthene	440 U	440	160	1	07/12/19 21:08	7/10/19	
Biphenyl	440 U	440	110	1	07/12/19 21:08	7/10/19	
2,2'-Oxybis(1-chloropropane)	440 U	440	180	1	07/12/19 21:08	7/10/19	
Bis(2-chloroethoxy)methane	440 U	440	120	1	07/12/19 21:08	7/10/19	
Bis(2-chloroethyl) Ether	440 U	440	120	1	07/12/19 21:08	7/10/19	
Bis(2-ethylhexyl) Phthalate	670 U	670	120	1	07/12/19 21:08	7/10/19	
Butyl Benzyl Phthalate	440 U	440	110	1	07/12/19 21:08	7/10/19	
Caprolactam	440 U	440	120	1	07/12/19 21:08	7/10/19	

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Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	440 U	440	130	1	07/12/19 21:08	7/10/19	
Chrysene	440 U	440	160	1	07/12/19 21:08	7/10/19	
Di-n-butyl Phthalate	440 U	440	140	1	07/12/19 21:08	7/10/19	
Di-n-octyl Phthalate	440 U	440	130	1	07/12/19 21:08	7/10/19	
Dibenz(a,h)anthracene	440 U	440	140	1	07/12/19 21:08	7/10/19	
Dibenzofuran	440 U	440	87	1	07/12/19 21:08	7/10/19	
Diethyl Phthalate	440 U	440	94	1	07/12/19 21:08	7/10/19	
Dimethyl Phthalate	440 U	440	99	1	07/12/19 21:08	7/10/19	
Fluoranthene	440 U	440	160	1	07/12/19 21:08	7/10/19	
Fluorene	440 U	440	110	1	07/12/19 21:08	7/10/19	
Hexachlorobenzene	440 U	440	140	1	07/12/19 21:08	7/10/19	
Hexachlorobutadiene	440 U	440	110	1	07/12/19 21:08	7/10/19	
Hexachlorocyclopentadiene	440 U	440	96	1	07/12/19 21:08	7/10/19	
Hexachloroethane	440 U	440	120	1	07/12/19 21:08	7/10/19	
Indeno(1,2,3-cd)pyrene	440 U	440	150	1	07/12/19 21:08	7/10/19	
Isophorone	440 U	440	120	1	07/12/19 21:08	7/10/19	
N-Nitrosodi-n-propylamine	440 U	440	120	1	07/12/19 21:08	7/10/19	
N-Nitrosodiphenylamine	440 U	440	300	1	07/12/19 21:08	7/10/19	
Naphthalene	440 U	440	120	1	07/12/19 21:08	7/10/19	
Nitrobenzene	440 U	440	120	1	07/12/19 21:08	7/10/19	
Pentachlorophenol (PCP)	2300 U	2300	150	1	07/12/19 21:08	7/10/19	
Phenanthrene	440 U	440	130	1	07/12/19 21:08	7/10/19	
Phenol	440 U	440	110	1	07/12/19 21:08	7/10/19	
Pyrene	440 U	440	180	1	07/12/19 21:08	7/10/19	
Pyridine	2300 U	2300	54	1	07/12/19 21:08	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	19	10 - 109	07/12/19 21:08	
2-Fluorobiphenyl	22	10 - 102	07/12/19 21:08	
2-Fluorophenol	23	10 - 88	07/12/19 21:08	
Nitrobenzene-d5	22	10 - 95	07/12/19 21:08	
Phenol-d6	17	10 - 145	07/12/19 21:08	
Terphenyl-d14	23	10 - 106	07/12/19 21:08	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	430 U	430	110	1	07/18/19 17:38	7/17/19	*
2,3,4,6-Tetrachlorophenol	430 U	430	91	1	07/18/19 17:38	7/17/19	*
2,4,5-Trichlorophenol	430 U	430	370	1	07/18/19 17:38	7/17/19	*
2,4,6-Trichlorophenol	430 U	430	77	1	07/18/19 17:38	7/17/19	*
2,4-Dichlorophenol	430 U	430	92	1	07/18/19 17:38	7/17/19	*
2,4-Dimethylphenol	430 U	430	95	1	07/18/19 17:38	7/17/19	*
2,4-Dinitrophenol	2200 U	2200	160	1	07/18/19 17:38	7/17/19	*
2,4-Dinitrotoluene	430 U	430	180	1	07/18/19 17:38	7/17/19	*
2,6-Dinitrotoluene	430 U	430	130	1	07/18/19 17:38	7/17/19	*
2-Chloronaphthalene	430 U	430	110	1	07/18/19 17:38	7/17/19	*
2-Chlorophenol	430 U	430	110	1	07/18/19 17:38	7/17/19	*
2-Methylnaphthalene	430 U	430	95	1	07/18/19 17:38	7/17/19	*
2-Methylphenol	430 U	430	94	1	07/18/19 17:38	7/17/19	*
2-Nitroaniline	2200 U	2200	130	1	07/18/19 17:38	7/17/19	*
2-Nitrophenol	430 U	430	130	1	07/18/19 17:38	7/17/19	*
3,3'-Dichlorobenzidine	430 U	430	91	1	07/18/19 17:38	7/17/19	*
3- and 4-Methylphenol Coelution	430 U	430	83	1	07/18/19 17:38	7/17/19	*
3-Nitroaniline	2200 U	2200	92	1	07/18/19 17:38	7/17/19	*
4,6-Dinitro-2-methylphenol	2200 U	2200	190	1	07/18/19 17:38	7/17/19	*
4-Bromophenyl Phenyl Ether	430 U	430	160	1	07/18/19 17:38	7/17/19	*
4-Chloro-3-methylphenol	430 U	430	95	1	07/18/19 17:38	7/17/19	*
4-Chloroaniline	430 U	430	110	1	07/18/19 17:38	7/17/19	*
4-Chlorophenyl Phenyl Ether	430 U	430	110	1	07/18/19 17:38	7/17/19	*
4-Nitroaniline	2200 U	2200	92	1	07/18/19 17:38	7/17/19	*
4-Nitrophenol	2200 U	2200	150	1	07/18/19 17:38	7/17/19	*
Acenaphthene	430 U	430	98	1	07/18/19 17:38	7/17/19	*
Acenaphthylene	430 U	430	120	1	07/18/19 17:38	7/17/19	*
Acetophenone	430 U	430	99	1	07/18/19 17:38	7/17/19	*
Anthracene	430 U	430	130	1	07/18/19 17:38	7/17/19	*
Atrazine	430 U	430	180	1	07/18/19 17:38	7/17/19	*
Benz(a)anthracene	430 U	430	130	1	07/18/19 17:38	7/17/19	*
Benzaldehyde	2200 U	2200	86	1	07/18/19 17:38	7/17/19	*
Benzo(a)pyrene	430 U	430	160	1	07/18/19 17:38	7/17/19	*
Benzo(b)fluoranthene	430 U	430	150	1	07/18/19 17:38	7/17/19	*
Benzo(g,h,i)perylene	430 U	430	120	1	07/18/19 17:38	7/17/19	*
Benzo(k)fluoranthene	430 U	430	160	1	07/18/19 17:38	7/17/19	*
Biphenyl	430 U	430	110	1	07/18/19 17:38	7/17/19	*
2,2'-Oxybis(1-chloropropane)	430 U	430	180	1	07/18/19 17:38	7/17/19	*
Bis(2-chloroethoxy)methane	430 U	430	120	1	07/18/19 17:38	7/17/19	*
Bis(2-chloroethyl) Ether	430 U	430	120	1	07/18/19 17:38	7/17/19	*
Bis(2-ethylhexyl) Phthalate	660 U	660	120	1	07/18/19 17:38	7/17/19	*
Butyl Benzyl Phthalate	430 U	430	110	1	07/18/19 17:38	7/17/19	*
Caprolactam	430 U	430	120	1	07/18/19 17:38	7/17/19	*

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	430 U	430	130	1	07/18/19 17:38	7/17/19	*
Chrysene	430 U	430	160	1	07/18/19 17:38	7/17/19	*
Di-n-butyl Phthalate	430 U	430	140	1	07/18/19 17:38	7/17/19	*
Di-n-octyl Phthalate	430 U	430	130	1	07/18/19 17:38	7/17/19	*
Dibenz(a,h)anthracene	430 U	430	130	1	07/18/19 17:38	7/17/19	*
Dibenzofuran	430 U	430	86	1	07/18/19 17:38	7/17/19	*
Diethyl Phthalate	430 U	430	92	1	07/18/19 17:38	7/17/19	*
Dimethyl Phthalate	430 U	430	98	1	07/18/19 17:38	7/17/19	*
Fluoranthene	430 U	430	160	1	07/18/19 17:38	7/17/19	*
Fluorene	430 U	430	100	1	07/18/19 17:38	7/17/19	*
Hexachlorobenzene	430 U	430	140	1	07/18/19 17:38	7/17/19	*
Hexachlorobutadiene	430 U	430	110	1	07/18/19 17:38	7/17/19	*
Hexachlorocyclopentadiene	430 U	430	95	1	07/18/19 17:38	7/17/19	*
Hexachloroethane	430 U	430	120	1	07/18/19 17:38	7/17/19	*
Indeno(1,2,3-cd)pyrene	430 U	430	150	1	07/18/19 17:38	7/17/19	*
Isophorone	430 U	430	120	1	07/18/19 17:38	7/17/19	*
N-Nitrosodi-n-propylamine	430 U	430	120	1	07/18/19 17:38	7/17/19	*
N-Nitrosodiphenylamine	430 U	430	290	1	07/18/19 17:38	7/17/19	*
Naphthalene	430 U	430	120	1	07/18/19 17:38	7/17/19	*
Nitrobenzene	430 U	430	120	1	07/18/19 17:38	7/17/19	*
Pentachlorophenol (PCP)	2200 U	2200	150	1	07/18/19 17:38	7/17/19	*
Phenanthrene	430 U	430	130	1	07/18/19 17:38	7/17/19	*
Phenol	430 U	430	110	1	07/18/19 17:38	7/17/19	*
Pyrene	430 U	430	180	1	07/18/19 17:38	7/17/19	*
Pyridine	2200 U	2200	53	1	07/18/19 17:38	7/17/19	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	37	10 - 109	07/18/19 17:38	
2-Fluorobiphenyl	31	10 - 102	07/18/19 17:38	
2-Fluorophenol	33	10 - 88	07/18/19 17:38	
Nitrobenzene-d5	31	10 - 95	07/18/19 17:38	
Phenol-d6	30	10 - 145	07/18/19 17:38	
Terphenyl-d14	41	10 - 106	07/18/19 17:38	



Semivolatile Organic Compounds by GC

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
4,4'-DDE	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
4,4'-DDT	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Aldrin	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Dieldrin	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Endosulfan I	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Endosulfan II	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Endosulfan Sulfate	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Endrin	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Endrin Aldehyde	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Endrin Ketone	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Heptachlor	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Heptachlor Epoxide	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Methoxychlor	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
Toxaphene	44 U	44	26	1	07/12/19 20:54	7/8/19	
alpha-BHC	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
alpha-Chlordane	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
beta-BHC	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
delta-BHC	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
gamma-BHC (Lindane)	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	
gamma-Chlordane	2.3 U	2.3	1.2	1	07/12/19 20:54	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	24	10 - 145	07/12/19 20:54	
Tetrachloro-m-xylene	37	10 - 123	07/12/19 20:54	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	44 U	44	23	1	07/10/19 17:53	7/8/19	
Aroclor 1221	89 U	89	44	1	07/10/19 17:53	7/8/19	
Aroclor 1232	44 U	44	26	1	07/10/19 17:53	7/8/19	
Aroclor 1242	44 U	44	23	1	07/10/19 17:53	7/8/19	
Aroclor 1248	44 U	44	34	1	07/10/19 17:53	7/8/19	
Aroclor 1254	44 U	44	24	1	07/10/19 17:53	7/8/19	
Aroclor 1260	44 U	44	23	1	07/10/19 17:53	7/8/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	31	22 - 128	07/10/19 17:53	
Tetrachloro-m-xylene	28	14 - 119	07/10/19 17:53	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Units: ug/Kg
Basis: Dry

Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4,5-TP	13 U	13	4.5	1	07/12/19 15:32	7/10/19	
Pentachlorophenol (PCP)	13 U	13	6.6	1	07/12/19 15:32	7/10/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	68	10 - 151	07/12/19 15:32	



Metals

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	12600	mg/Kg	25	15	1	07/12/19 11:18	07/08/19	
Antimony, Total	6010C	7.4 U	mg/Kg	7.4	0.7	1	07/12/19 11:18	07/08/19	
Arsenic, Total	6010C	5.1	mg/Kg	1.2	0.9	1	07/12/19 11:18	07/08/19	
Barium, Total	6010C	64.7	mg/Kg	2.5	1.3	1	07/12/19 11:18	07/08/19	
Beryllium, Total	6010C	0.62	mg/Kg	0.37	0.04	1	07/12/19 11:18	07/08/19	
Cadmium, Total	6010C	0.35 J	mg/Kg	0.62	0.10	1	07/12/19 11:18	07/08/19	
Calcium, Total	6010C	9700	mg/Kg	1200	400	10	07/12/19 12:17	07/08/19	
Chromium, Total	6010C	21.4	mg/Kg	1.2	0.5	1	07/12/19 11:18	07/08/19	
Cobalt, Total	6010C	8.1	mg/Kg	6.2	0.3	1	07/12/19 11:18	07/08/19	
Copper, Total	6010C	35.8	mg/Kg	2.5	0.8	1	07/12/19 11:18	07/08/19	
Iron, Total	6010C	23100	mg/Kg	250	170	10	07/12/19 12:17	07/08/19	
Lead, Total	6010C	12.6	mg/Kg	6.2	0.5	1	07/12/19 11:18	07/08/19	
Magnesium, Total	6010C	7240	mg/Kg	120	20	1	07/12/19 11:18	07/08/19	
Manganese, Total	6010C	472	mg/Kg	2.5	1.9	1	07/12/19 11:18	07/08/19	
Mercury, Total	7471B	0.053	mg/Kg	0.041	0.008	1	07/11/19 12:24	07/10/19	
Nickel, Total	6010C	20.2	mg/Kg	5.0	0.9	1	07/12/19 11:18	07/08/19	
Potassium, Total	6010C	2340	mg/Kg	250	20	1	07/12/19 11:18	07/08/19	
Selenium, Total	6010C	1.2 U	mg/Kg	1.2	0.7	1	07/12/19 11:18	07/08/19	
Silver, Total	6010C	1.2 U	mg/Kg	1.2	0.09	1	07/12/19 11:18	07/08/19	
Sodium, Total	6010C	120 U	mg/Kg	120	70	1	07/12/19 11:18	07/08/19	
Thallium, Total	6010C	1.2 U	mg/Kg	1.2	0.9	1	07/12/19 11:18	07/08/19	
Vanadium, Total	6010C	22.6	mg/Kg	6.2	0.9	1	07/12/19 11:18	07/08/19	
Zinc, Total	6010C	72.0	mg/Kg	2.5	1.8	1	07/12/19 11:18	07/08/19	



General Chemistry

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-01
Lab Code: R1906195-001

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	75.3	Percent	-	-	1	07/05/19 08:30	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	26700	mg/Kg	1700	700	1	07/10/19 18:44	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.53 U	mg/Kg	0.53	0.06	1	07/12/19 00:43	07/09/19	
Chromium, Hexavalent	7199	0.53 U	mg/Kg	0.53	0.06	1	07/12/19 00:34	07/09/19	
Chromium, Trivalent	Calculation	21.4	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.17 J	mg/Kg	0.35	0.06	1	07/05/19 15:31	07/05/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: LCP
Sample Matrix: Soil

Sample Name: LCP-070119A-02
Lab Code: R1906195-002

Service Request: R1906195
Date Collected: 07/01/19 09:05
Date Received: 07/02/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Total Solids	ALS SOP	76.0	Percent	-	-	1	07/05/19 08:30	NA	

ALS Environmental

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Chain Of Custody / Analysis Request

AESI Ref: 38609.59845

COC #: PMC-072219A

Lab Use Only

Lab Proj #

Lab ID

Client Contact: (name, co., address)

Stephen.Miller@Honeywell.com

Honeywell International

301 Plainfield Road, Suite 330

Syracuse, New York 13212

Privileged & Confidential

Michael Miller, Chuck Sharpe

Site Name:

Portfolio Material Characterization

Location of Site:

Syracuse, NY

Sampler: CH/GD/AB

P O #

Site Code

Analysis Turnaround Time:

Standard -

N

Rush Charges Authorized for -

Y

2 weeks -

1 week -

Y

Next Day -

Backup/Report To:

Michael Miller

Invoice To:

Steve Miller

Sample Identification

Location ID		Start Depth (ft)	End Depth (ft)	Field Sample ID						Units																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												</
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Special Instructions: Part 375 Pesticides to include Sylvest.

uploaded to LCP00-1 R30925

Relinquished by	Company	OBG, Part of Ramboll	Received by	Company	ALS	Condition		Custody Seals Intact	
	Date/Time	7/23/19 1530		Date/Time	7/23/19 1530	Cooler Temp.			
Relinquished by	Company	ALS	Received by	Company	ALS	Condition		Custody Seals Intact	
	Date/Time	7/23/19 1735		Date/Time	7/23/19 1735	Cooler Temp.			

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

R1906881

5

O'Brien & Gere Engineers, Incorporated
Portfolio Materials Characterization



ALS Environmental 1565 Jefferson Road, Building 300, Suite 360 Rochester, New York 14623 (P) (585) 288-5380										Chain Of Custody / Analysis Request										AES1 Ref: -38609.59845 -	
										COC #: PMC-072219A		Lab Use Only									
Client Contact: (name, co., address) Stephen.Miller@Honeywell.com Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212										Privileged & Confidential		Site Name: Portfolio Material Characterization		Location of Site: Syracuse, NY		Lab Proj # Lab ID					
Hardcopy Report To: Michael Miller Invoice To: Steve Miller										Add Ons: Michael Miller, Chuck Sharpe		Sampler: CH/GD/AT		P O #		Site Code					
Analysis Turnaround Time: Standard - N Rush Charges Authorized for - Y 2 weeks - 1 week - Y Next Day -										Grab/Composite		Field Filtered Sample ?		Preservative		Job No.					
Sample Identification										Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		# of Cont.	
Location ID										Start Depth (ft)		End Depth (ft)		Field Sample ID		Units		Lab Sample Numbers			
1	LCP-OG-03	0	1	PMC-072219A-13	7/22/2019	12:00	Soil	Soil	Reg	4	G	N									
2	LCP-OG-03	0	1	PMC-072219A-14	7/22/2019	12:00	Soil	Soil	Reg	3	C	N					X	X	X	X	
3	LCP-OG-04	0	1	PMC-072219A-15	7/22/2019	12:25	Soil	Soil	Reg	4	G	N									
4	LCP-OG-04	0	1	PMC-072219A-16	7/22/2019	12:25	Soil	Soil	Reg	3	C	N					X	X	X	X	
5	PMC-FD-072219A	0	1	PMC-072219A-17	7/22/2019	-	QC	Soil	FD	4	G	N					X				
6	PMC-FD-072219A	0	1	PMC-072219A-18	7/22/2019	-	QC	Soil	FD	3	C	N					X	X	X	X	
7	LCP-OG-05	0	1	PMC-072219A-19	7/22/2019	12:45	Soil	Soil	Reg	4	G	N					X				
8	LCP-OG-05	0	1	PMC-072219A-20	7/22/2019	12:45	Soil	Soil	Reg	3	C	N					X	X	X	X	
9	LCP-OG-05	0	1	PMC-072219A-21	7/22/2019	12:45	QC	Soil	MS/MSD	4	G	N					X				
	LCP-OG-05	0	1	PMC-072219A-22	7/22/2019	12:45	QC	Soil	MS/MSD	3	C	N					X	X	X	X	
	LCP-OG-06	0	1	PMC-072219A-23	7/22/2019	13:00	Soil	Soil	Reg	4	G	N					X				
	LCP-OG-06	0	1	PMC-072219A-24	7/22/2019	13:00	Soil	Soil	Reg	3	C	N					X	X	X	X	
Special Instructions: Part 375 Pesticides to include Syltex.																					
Relinquished by		Company		OBG, Part of Ramboll		Received by		Company		ALS		Condition				Custody Seals Intact					
		Date/Time		7/23/19 15:30		Date/Time		7/23/19 15:30				Cooler Temp.									
Relinquished by		Company		ALS		Received by		Company		ALS		Condition				Custody Seals Intact					
		Date/Time		7/23/19 17:35		Date/Time		7/23/19 17:35				Cooler Temp.									
Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):																					



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-11
Lab Code: R1906881-011

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,1,2,2-Tetrachloroethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,1,2-Trichloroethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,1,2-Trichloro-1,2,2-trifluoroethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,1-Dichloroethane (1,1-DCA)	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,1-Dichloroethene (1,1-DCE)	4.9 U	4.9	0.29	.81	07/25/19 20:17	
1,2,3-Trichlorobenzene	4.9 U	4.9	0.51	.81	07/25/19 20:17	
1,2,4-Trichlorobenzene	4.9 U	4.9	0.41	.81	07/25/19 20:17	
1,2,4-Trimethylbenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,2-Dibromo-3-chloropropane (DBCP)	4.9 U	4.9	0.29	.81	07/25/19 20:17	
1,2-Dibromoethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,2-Dichlorobenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,2-Dichloroethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,2-Dichloropropane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,3,5-Trimethylbenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,3-Dichlorobenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
1,4-Dichlorobenzene	4.9 U	4.9	0.22	.81	07/25/19 20:17	
1,4-Dioxane	97 U	97	20	.81	07/25/19 20:17	
2-Butanone (MEK)	4.9 U	4.9	2.0	.81	07/25/19 20:17	
2-Hexanone	4.9 U	4.9	0.36	.81	07/25/19 20:17	
4-Methyl-2-pentanone	4.9 U	4.9	0.23	.81	07/25/19 20:17	
Acetone	6.2	4.9	4.6	.81	07/25/19 20:17	
Benzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Bromochloromethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Bromodichloromethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Bromoform	4.9 U	4.9	0.49	.81	07/25/19 20:17	
Bromomethane	4.9 U	4.9	2.1	.81	07/25/19 20:17	
Carbon Disulfide	4.9 U	4.9	0.29	.81	07/25/19 20:17	
Carbon Tetrachloride	4.9 U	4.9	0.26	.81	07/25/19 20:17	
Chlorobenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Chloroethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Chloroform	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Chloromethane	4.9 U	4.9	1.4	.81	07/25/19 20:17	
Cyclohexane	4.9 U	4.9	0.26	.81	07/25/19 20:17	
Dibromochloromethane	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Dichlorodifluoromethane (CFC 12)	4.9 U	4.9	0.33	.81	07/25/19 20:17	
Dichloromethane	4.9 U	4.9	2.8	.81	07/25/19 20:17	
Ethylbenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Isopropylbenzene (Cumene)	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Methyl Acetate	4.9 U	4.9	0.82	.81	07/25/19 20:17	
Methyl tert-Butyl Ether	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Methylcyclohexane	4.9 U	4.9	0.31	.81	07/25/19 20:17	
Styrene	4.9 U	4.9	0.20	.81	07/25/19 20:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-11
Lab Code: R1906881-011

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	4.9 U	4.9	0.23	.81	07/25/19 20:17	
Toluene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
Trichloroethene (TCE)	4.9 U	4.9	0.22	.81	07/25/19 20:17	
Trichlorofluoromethane (CFC 11)	4.9 U	4.9	0.26	.81	07/25/19 20:17	
Vinyl Chloride	4.9 U	4.9	0.45	.81	07/25/19 20:17	
cis-1,2-Dichloroethene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
cis-1,3-Dichloropropene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
m,p-Xylenes	9.7 U	9.7	0.37	.81	07/25/19 20:17	
n-Butylbenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
n-Propylbenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
o-Xylene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
sec-Butylbenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
tert-Butylbenzene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
trans-1,2-Dichloroethene	4.9 U	4.9	0.20	.81	07/25/19 20:17	
trans-1,3-Dichloropropene	4.9 U	4.9	0.20	.81	07/25/19 20:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	75	31 - 154	07/25/19 20:17	
Dibromofluoromethane	97	63 - 138	07/25/19 20:17	
Toluene-d8	97	66 - 138	07/25/19 20:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-13
Lab Code: R1906881-013

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,1,2,2-Tetrachloroethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,1,2-Trichloroethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,1-Dichloroethane (1,1-DCA)	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,1-Dichloroethene (1,1-DCE)	5.4 U	5.4	0.32	.85	07/25/19 20:40	
1,2,3-Trichlorobenzene	5.4 U	5.4	0.57	.85	07/25/19 20:40	
1,2,4-Trichlorobenzene	5.4 U	5.4	0.46	.85	07/25/19 20:40	
1,2,4-Trimethylbenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,2-Dibromo-3-chloropropane (DBCP)	5.4 U	5.4	0.32	.85	07/25/19 20:40	
1,2-Dibromoethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,2-Dichlorobenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,2-Dichloroethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,2-Dichloropropane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,3,5-Trimethylbenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,3-Dichlorobenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
1,4-Dichlorobenzene	5.4 U	5.4	0.24	.85	07/25/19 20:40	
1,4-Dioxane	110 U	110	22	.85	07/25/19 20:40	
2-Butanone (MEK)	5.4 U	5.4	2.2	.85	07/25/19 20:40	
2-Hexanone	5.4 U	5.4	0.40	.85	07/25/19 20:40	
4-Methyl-2-pentanone	5.4 U	5.4	0.25	.85	07/25/19 20:40	
Acetone	5.4 U	5.4	5.2	.85	07/25/19 20:40	
Benzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Bromochloromethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Bromodichloromethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Bromoform	5.4 U	5.4	0.55	.85	07/25/19 20:40	
Bromomethane	5.4 U	5.4	2.3	.85	07/25/19 20:40	
Carbon Disulfide	5.4 U	5.4	0.32	.85	07/25/19 20:40	
Carbon Tetrachloride	5.4 U	5.4	0.29	.85	07/25/19 20:40	
Chlorobenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Chloroethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Chloroform	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Chloromethane	5.4 U	5.4	1.6	.85	07/25/19 20:40	
Cyclohexane	5.4 U	5.4	0.29	.85	07/25/19 20:40	
Dibromochloromethane	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Dichlorodifluoromethane (CFC 12)	5.4 U	5.4	0.36	.85	07/25/19 20:40	
Dichloromethane	5.4 U	5.4	3.1	.85	07/25/19 20:40	
Ethylbenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Isopropylbenzene (Cumene)	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Methyl Acetate	5.4 U	5.4	0.92	.85	07/25/19 20:40	
Methyl tert-Butyl Ether	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Methylcyclohexane	5.4 U	5.4	0.34	.85	07/25/19 20:40	
Styrene	5.4 U	5.4	0.22	.85	07/25/19 20:40	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-13
Lab Code: R1906881-013

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.4 U	5.4	0.25	.85	07/25/19 20:40	
Toluene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
Trichloroethene (TCE)	5.4 U	5.4	0.24	.85	07/25/19 20:40	
Trichlorofluoromethane (CFC 11)	5.4 U	5.4	0.29	.85	07/25/19 20:40	
Vinyl Chloride	5.4 U	5.4	0.50	.85	07/25/19 20:40	
cis-1,2-Dichloroethene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
cis-1,3-Dichloropropene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
m,p-Xylenes	11 U	11	0.41	.85	07/25/19 20:40	
n-Butylbenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
n-Propylbenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
o-Xylene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
sec-Butylbenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
tert-Butylbenzene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
trans-1,2-Dichloroethene	5.4 U	5.4	0.22	.85	07/25/19 20:40	
trans-1,3-Dichloropropene	5.4 U	5.4	0.22	.85	07/25/19 20:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	69	31 - 154	07/25/19 20:40	
Dibromofluoromethane	95	63 - 138	07/25/19 20:40	
Toluene-d8	96	66 - 138	07/25/19 20:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-15
Lab Code: R1906881-015

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,1,2,2-Tetrachloroethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,1,2-Trichloroethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,1-Dichloroethane (1,1-DCA)	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,1-Dichloroethene (1,1-DCE)	5.5 U	5.5	0.33	.83	07/25/19 21:03	
1,2,3-Trichlorobenzene	5.5 U	5.5	0.58	.83	07/25/19 21:03	
1,2,4-Trichlorobenzene	5.5 U	5.5	0.47	.83	07/25/19 21:03	
1,2,4-Trimethylbenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,2-Dibromo-3-chloropropane (DBCP)	5.5 U	5.5	0.33	.83	07/25/19 21:03	
1,2-Dibromoethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,2-Dichlorobenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,2-Dichloroethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,2-Dichloropropane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,3,5-Trimethylbenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,3-Dichlorobenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
1,4-Dichlorobenzene	5.5 U	5.5	0.25	.83	07/25/19 21:03	
1,4-Dioxane	110 U	110	23	.83	07/25/19 21:03	
2-Butanone (MEK)	5.5 U	5.5	2.3	.83	07/25/19 21:03	
2-Hexanone	5.5 U	5.5	0.40	.83	07/25/19 21:03	
4-Methyl-2-pentanone	5.5 U	5.5	0.26	.83	07/25/19 21:03	
Acetone	5.5 U	5.5	5.3	.83	07/25/19 21:03	
Benzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Bromochloromethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Bromodichloromethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Bromoform	5.5 U	5.5	0.56	.83	07/25/19 21:03	
Bromomethane	5.5 U	5.5	2.4	.83	07/25/19 21:03	
Carbon Disulfide	5.5 U	5.5	0.33	.83	07/25/19 21:03	
Carbon Tetrachloride	5.5 U	5.5	0.29	.83	07/25/19 21:03	
Chlorobenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Chloroethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Chloroform	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Chloromethane	5.5 U	5.5	1.6	.83	07/25/19 21:03	
Cyclohexane	5.5 U	5.5	0.29	.83	07/25/19 21:03	
Dibromochloromethane	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Dichlorodifluoromethane (CFC 12)	5.5 U	5.5	0.37	.83	07/25/19 21:03	
Dichloromethane	5.5 U	5.5	3.1	.83	07/25/19 21:03	
Ethylbenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Isopropylbenzene (Cumene)	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Methyl Acetate	2.6 J	5.5	0.93	.83	07/25/19 21:03	
Methyl tert-Butyl Ether	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Methylcyclohexane	5.5 U	5.5	0.35	.83	07/25/19 21:03	
Styrene	5.5 U	5.5	0.23	.83	07/25/19 21:03	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-15
Lab Code: R1906881-015

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.5 U	5.5	0.26	.83	07/25/19 21:03	
Toluene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
Trichloroethene (TCE)	5.5 U	5.5	0.25	.83	07/25/19 21:03	
Trichlorofluoromethane (CFC 11)	5.5 U	5.5	0.29	.83	07/25/19 21:03	
Vinyl Chloride	5.5 U	5.5	0.51	.83	07/25/19 21:03	
cis-1,2-Dichloroethene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
cis-1,3-Dichloropropene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
m,p-Xylenes	11 U	11	0.41	.83	07/25/19 21:03	
n-Butylbenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
n-Propylbenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
o-Xylene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
sec-Butylbenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
tert-Butylbenzene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
trans-1,2-Dichloroethene	5.5 U	5.5	0.23	.83	07/25/19 21:03	
trans-1,3-Dichloropropene	5.5 U	5.5	0.23	.83	07/25/19 21:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	77	31 - 154	07/25/19 21:03	
Dibromofluoromethane	96	63 - 138	07/25/19 21:03	
Toluene-d8	98	66 - 138	07/25/19 21:03	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-19,21
Lab Code: R1906881-019

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,1,2,2-Tetrachloroethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,1,2-Trichloroethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,1-Dichloroethane (1,1-DCA)	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,1-Dichloroethene (1,1-DCE)	5.9 U	5.9	0.35	.85	07/28/19 17:50	
1,2,3-Trichlorobenzene	5.9 U	5.9	0.62	.85	07/28/19 17:50	
1,2,4-Trichlorobenzene	5.9 U	5.9	0.50	.85	07/28/19 17:50	
1,2,4-Trimethylbenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,2-Dibromo-3-chloropropane (DBCP)	5.9 U	5.9	0.35	.85	07/28/19 17:50	
1,2-Dibromoethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,2-Dichlorobenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,2-Dichloroethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,2-Dichloropropane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,3,5-Trimethylbenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,3-Dichlorobenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
1,4-Dichlorobenzene	5.9 U	5.9	0.27	.85	07/28/19 17:50	
1,4-Dioxane	120 U	120	24	.85	07/28/19 17:50	
2-Butanone (MEK)	5.9 U	5.9	2.4	.85	07/28/19 17:50	
2-Hexanone	5.9 U	5.9	0.43	.85	07/28/19 17:50	
4-Methyl-2-pentanone	5.9 U	5.9	0.28	.85	07/28/19 17:50	
Acetone	5.9 U	5.9	5.6	.85	07/28/19 17:50	
Benzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Bromochloromethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Bromodichloromethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Bromoform	5.9 U	5.9	0.60	.85	07/28/19 17:50	
Bromomethane	5.9 U	5.9	2.5	.85	07/28/19 17:50	
Carbon Disulfide	5.9 U	5.9	0.35	.85	07/28/19 17:50	
Carbon Tetrachloride	5.9 U	5.9	0.31	.85	07/28/19 17:50	
Chlorobenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Chloroethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Chloroform	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Chloromethane	5.9 U	5.9	1.7	.85	07/28/19 17:50	
Cyclohexane	5.9 U	5.9	0.31	.85	07/28/19 17:50	
Dibromochloromethane	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Dichlorodifluoromethane (CFC 12)	5.9 U	5.9	0.40	.85	07/28/19 17:50	
Dichloromethane	5.9 U	5.9	3.4	.85	07/28/19 17:50	
Ethylbenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Isopropylbenzene (Cumene)	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Methyl Acetate	5.9 U	5.9	1.0	.85	07/28/19 17:50	
Methyl tert-Butyl Ether	5.9 U	5.9	0.24	.85	07/28/19 17:50	
Methylcyclohexane	5.9 U	5.9	0.37	.85	07/28/19 17:50	
Styrene	5.9 U	5.9	0.24	.85	07/28/19 17:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-19,21
Lab Code: R1906881-019

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.9 U	5.9	0.28	.85	07/28/19 17:50	
Toluene	0.27 J	5.9	0.24	.85	07/28/19 17:50	
Trichloroethene (TCE)	5.9 U	5.9	0.27	.85	07/28/19 17:50	
Trichlorofluoromethane (CFC 11)	5.9 U	5.9	0.31	.85	07/28/19 17:50	
Vinyl Chloride	5.9 U	5.9	0.55	.85	07/28/19 17:50	
cis-1,2-Dichloroethene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
cis-1,3-Dichloropropene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
m,p-Xylenes	12 U	12	0.44	.85	07/28/19 17:50	
n-Butylbenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
n-Propylbenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
o-Xylene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
sec-Butylbenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
tert-Butylbenzene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
trans-1,2-Dichloroethene	5.9 U	5.9	0.24	.85	07/28/19 17:50	
trans-1,3-Dichloropropene	5.9 U	5.9	0.24	.85	07/28/19 17:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	67	31 - 154	07/28/19 17:50	
Dibromofluoromethane	97	63 - 138	07/28/19 17:50	
Toluene-d8	95	66 - 138	07/28/19 17:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-23
Lab Code: R1906881-021

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,1,2,2-Tetrachloroethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,1,2-Trichloroethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,1-Dichloroethane (1,1-DCA)	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,1-Dichloroethene (1,1-DCE)	5.7 U	5.7	0.33	.82	07/28/19 18:13	
1,2,3-Trichlorobenzene	5.7 U	5.7	0.59	.82	07/28/19 18:13	
1,2,4-Trichlorobenzene	5.7 U	5.7	0.48	.82	07/28/19 18:13	
1,2,4-Trimethylbenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,2-Dibromo-3-chloropropane (DBCP)	5.7 U	5.7	0.33	.82	07/28/19 18:13	
1,2-Dibromoethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,2-Dichlorobenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,2-Dichloroethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,2-Dichloropropane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,3,5-Trimethylbenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,3-Dichlorobenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
1,4-Dichlorobenzene	5.7 U	5.7	0.25	.82	07/28/19 18:13	
1,4-Dioxane	110 U	110	23	.82	07/28/19 18:13	
2-Butanone (MEK)	5.7 U	5.7	2.3	.82	07/28/19 18:13	
2-Hexanone	5.7 U	5.7	0.41	.82	07/28/19 18:13	
4-Methyl-2-pentanone	5.7 U	5.7	0.27	.82	07/28/19 18:13	
Acetone	5.7 U	5.7	5.4	.82	07/28/19 18:13	
Benzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Bromochloromethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Bromodichloromethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Bromoform	5.7 U	5.7	0.57	.82	07/28/19 18:13	
Bromomethane	5.7 U	5.7	2.4	.82	07/28/19 18:13	
Carbon Disulfide	5.7 U	5.7	0.33	.82	07/28/19 18:13	
Carbon Tetrachloride	5.7 U	5.7	0.30	.82	07/28/19 18:13	
Chlorobenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Chloroethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Chloroform	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Chloromethane	5.7 U	5.7	1.6	.82	07/28/19 18:13	
Cyclohexane	5.7 U	5.7	0.30	.82	07/28/19 18:13	
Dibromochloromethane	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Dichlorodifluoromethane (CFC 12)	5.7 U	5.7	0.38	.82	07/28/19 18:13	
Dichloromethane	5.7 U	5.7	3.2	.82	07/28/19 18:13	
Ethylbenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Isopropylbenzene (Cumene)	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Methyl Acetate	5.7 U	5.7	0.96	.82	07/28/19 18:13	
Methyl tert-Butyl Ether	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Methylcyclohexane	5.7 U	5.7	0.36	.82	07/28/19 18:13	
Styrene	5.7 U	5.7	0.23	.82	07/28/19 18:13	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-23
Lab Code: R1906881-021

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.7 U	5.7	0.27	.82	07/28/19 18:13	
Toluene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
Trichloroethene (TCE)	5.7 U	5.7	0.25	.82	07/28/19 18:13	
Trichlorofluoromethane (CFC 11)	5.7 U	5.7	0.30	.82	07/28/19 18:13	
Vinyl Chloride	5.7 U	5.7	0.53	.82	07/28/19 18:13	
cis-1,2-Dichloroethene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
cis-1,3-Dichloropropene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
m,p-Xylenes	11 U	11	0.42	.82	07/28/19 18:13	
n-Butylbenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
n-Propylbenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
o-Xylene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
sec-Butylbenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
tert-Butylbenzene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
trans-1,2-Dichloroethene	5.7 U	5.7	0.23	.82	07/28/19 18:13	
trans-1,3-Dichloropropene	5.7 U	5.7	0.23	.82	07/28/19 18:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	71	31 - 154	07/28/19 18:13	
Dibromofluoromethane	97	63 - 138	07/28/19 18:13	
Toluene-d8	96	66 - 138	07/28/19 18:13	



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-12
Lab Code: R1906881-012

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	400 U	400	95	1	08/01/19 19:34	7/31/19	
2,3,4,6-Tetrachlorophenol	400 U	400	84	1	08/01/19 19:34	7/31/19	
2,4,5-Trichlorophenol	400 U	400	340	1	08/01/19 19:34	7/31/19	
2,4,6-Trichlorophenol	400 U	400	71	1	08/01/19 19:34	7/31/19	
2,4-Dichlorophenol	400 U	400	85	1	08/01/19 19:34	7/31/19	
2,4-Dimethylphenol	400 U	400	88	1	08/01/19 19:34	7/31/19	
2,4-Dinitrophenol	2100 U	2100	150	1	08/01/19 19:34	7/31/19	
2,4-Dinitrotoluene	400 U	400	160	1	08/01/19 19:34	7/31/19	
2,6-Dinitrotoluene	400 U	400	120	1	08/01/19 19:34	7/31/19	
2-Chloronaphthalene	400 U	400	96	1	08/01/19 19:34	7/31/19	
2-Chlorophenol	400 U	400	99	1	08/01/19 19:34	7/31/19	
2-Methylnaphthalene	400 U	400	88	1	08/01/19 19:34	7/31/19	
2-Methylphenol	400 U	400	87	1	08/01/19 19:34	7/31/19	
2-Nitroaniline	2100 U	2100	120	1	08/01/19 19:34	7/31/19	
2-Nitrophenol	400 U	400	120	1	08/01/19 19:34	7/31/19	
3,3'-Dichlorobenzidine	400 U	400	84	1	08/01/19 19:34	7/31/19	
3- and 4-Methylphenol Coelution	400 U	400	77	1	08/01/19 19:34	7/31/19	
3-Nitroaniline	2100 U	2100	85	1	08/01/19 19:34	7/31/19	
4,6-Dinitro-2-methylphenol	2100 U	2100	170	1	08/01/19 19:34	7/31/19	
4-Bromophenyl Phenyl Ether	400 U	400	150	1	08/01/19 19:34	7/31/19	
4-Chloro-3-methylphenol	400 U	400	88	1	08/01/19 19:34	7/31/19	
4-Chloroaniline	400 U	400	95	1	08/01/19 19:34	7/31/19	
4-Chlorophenyl Phenyl Ether	400 U	400	96	1	08/01/19 19:34	7/31/19	
4-Nitroaniline	2100 U	2100	85	1	08/01/19 19:34	7/31/19	
4-Nitrophenol	2100 U	2100	140	1	08/01/19 19:34	7/31/19	
Acenaphthene	400 U	400	90	1	08/01/19 19:34	7/31/19	
Acenaphthylene	400 U	400	110	1	08/01/19 19:34	7/31/19	
Acetophenone	400 U	400	91	1	08/01/19 19:34	7/31/19	
Anthracene	400 U	400	120	1	08/01/19 19:34	7/31/19	
Atrazine	400 U	400	160	1	08/01/19 19:34	7/31/19	
Benz(a)anthracene	400 U	400	120	1	08/01/19 19:34	7/31/19	
Benzaldehyde	2100 U	2100	79	1	08/01/19 19:34	7/31/19	
Benzo(a)pyrene	400 U	400	150	1	08/01/19 19:34	7/31/19	
Benzo(b)fluoranthene	400 U	400	140	1	08/01/19 19:34	7/31/19	
Benzo(g,h,i)perylene	400 U	400	110	1	08/01/19 19:34	7/31/19	
Benzo(k)fluoranthene	400 U	400	150	1	08/01/19 19:34	7/31/19	
Biphenyl	400 U	400	99	1	08/01/19 19:34	7/31/19	
2,2'-Oxybis(1-chloropropane)	400 U	400	160	1	08/01/19 19:34	7/31/19	
Bis(2-chloroethoxy)methane	400 U	400	110	1	08/01/19 19:34	7/31/19	
Bis(2-chloroethyl) Ether	400 U	400	110	1	08/01/19 19:34	7/31/19	
Bis(2-ethylhexyl) Phthalate	610 U	610	110	1	08/01/19 19:34	7/31/19	
Butyl Benzyl Phthalate	400 U	400	100	1	08/01/19 19:34	7/31/19	
Caprolactam	400 U	400	110	1	08/01/19 19:34	7/31/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-12
Lab Code: R1906881-012

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	400 U	400	120	1	08/01/19 19:34	7/31/19	
Chrysene	400 U	400	150	1	08/01/19 19:34	7/31/19	
Di-n-butyl Phthalate	400 U	400	130	1	08/01/19 19:34	7/31/19	
Di-n-octyl Phthalate	400 U	400	120	1	08/01/19 19:34	7/31/19	
Dibenz(a,h)anthracene	400 U	400	120	1	08/01/19 19:34	7/31/19	
Dibenzofuran	400 U	400	79	1	08/01/19 19:34	7/31/19	
Diethyl Phthalate	400 U	400	85	1	08/01/19 19:34	7/31/19	
Dimethyl Phthalate	400 U	400	90	1	08/01/19 19:34	7/31/19	
Fluoranthene	400 U	400	150	1	08/01/19 19:34	7/31/19	
Fluorene	400 U	400	93	1	08/01/19 19:34	7/31/19	
Hexachlorobenzene	400 U	400	130	1	08/01/19 19:34	7/31/19	
Hexachlorobutadiene	400 U	400	98	1	08/01/19 19:34	7/31/19	
Hexachlorocyclopentadiene	400 U	400	88	1	08/01/19 19:34	7/31/19	
Hexachloroethane	400 U	400	110	1	08/01/19 19:34	7/31/19	
Indeno(1,2,3-cd)pyrene	400 U	400	140	1	08/01/19 19:34	7/31/19	
Isophorone	400 U	400	110	1	08/01/19 19:34	7/31/19	
N-Nitrosodi-n-propylamine	400 U	400	110	1	08/01/19 19:34	7/31/19	
N-Nitrosodiphenylamine	400 U	400	270	1	08/01/19 19:34	7/31/19	
Naphthalene	400 U	400	110	1	08/01/19 19:34	7/31/19	
Nitrobenzene	400 U	400	110	1	08/01/19 19:34	7/31/19	
Pentachlorophenol (PCP)	2100 U	2100	140	1	08/01/19 19:34	7/31/19	
Phenanthrene	400 U	400	120	1	08/01/19 19:34	7/31/19	
Phenol	400 U	400	95	1	08/01/19 19:34	7/31/19	
Pyrene	400 U	400	160	1	08/01/19 19:34	7/31/19	
Pyridine	2100 U	2100	49	1	08/01/19 19:34	7/31/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	44	10 - 109	08/01/19 19:34	
2-Fluorobiphenyl	43	10 - 102	08/01/19 19:34	
2-Fluorophenol	42	10 - 88	08/01/19 19:34	
Nitrobenzene-d5	43	10 - 95	08/01/19 19:34	
Phenol-d6	40	10 - 145	08/01/19 19:34	
Terphenyl-d14	57	10 - 106	08/01/19 19:34	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-14
Lab Code: R1906881-014

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	410 U	410	98	1	08/01/19 20:02	7/31/19	
2,3,4,6-Tetrachlorophenol	410 U	410	87	1	08/01/19 20:02	7/31/19	
2,4,5-Trichlorophenol	410 U	410	350	1	08/01/19 20:02	7/31/19	
2,4,6-Trichlorophenol	410 U	410	73	1	08/01/19 20:02	7/31/19	
2,4-Dichlorophenol	410 U	410	88	1	08/01/19 20:02	7/31/19	
2,4-Dimethylphenol	410 U	410	90	1	08/01/19 20:02	7/31/19	
2,4-Dinitrophenol	2100 U	2100	150	1	08/01/19 20:02	7/31/19	
2,4-Dinitrotoluene	410 U	410	170	1	08/01/19 20:02	7/31/19	
2,6-Dinitrotoluene	410 U	410	120	1	08/01/19 20:02	7/31/19	
2-Chloronaphthalene	410 U	410	99	1	08/01/19 20:02	7/31/19	
2-Chlorophenol	410 U	410	110	1	08/01/19 20:02	7/31/19	
2-Methylnaphthalene	410 U	410	90	1	08/01/19 20:02	7/31/19	
2-Methylphenol	410 U	410	89	1	08/01/19 20:02	7/31/19	
2-Nitroaniline	2100 U	2100	130	1	08/01/19 20:02	7/31/19	
2-Nitrophenol	410 U	410	120	1	08/01/19 20:02	7/31/19	
3,3'-Dichlorobenzidine	410 U	410	87	1	08/01/19 20:02	7/31/19	
3- and 4-Methylphenol Coelution	410 U	410	79	1	08/01/19 20:02	7/31/19	
3-Nitroaniline	2100 U	2100	88	1	08/01/19 20:02	7/31/19	
4,6-Dinitro-2-methylphenol	2100 U	2100	180	1	08/01/19 20:02	7/31/19	
4-Bromophenyl Phenyl Ether	410 U	410	150	1	08/01/19 20:02	7/31/19	
4-Chloro-3-methylphenol	410 U	410	90	1	08/01/19 20:02	7/31/19	
4-Chloroaniline	410 U	410	98	1	08/01/19 20:02	7/31/19	
4-Chlorophenyl Phenyl Ether	410 U	410	99	1	08/01/19 20:02	7/31/19	
4-Nitroaniline	2100 U	2100	88	1	08/01/19 20:02	7/31/19	
4-Nitrophenol	2100 U	2100	140	1	08/01/19 20:02	7/31/19	
Acenaphthene	410 U	410	93	1	08/01/19 20:02	7/31/19	
Acenaphthylene	410 U	410	110	1	08/01/19 20:02	7/31/19	
Acetophenone	410 U	410	94	1	08/01/19 20:02	7/31/19	
Anthracene	410 U	410	120	1	08/01/19 20:02	7/31/19	
Atrazine	410 U	410	170	1	08/01/19 20:02	7/31/19	
Benz(a)anthracene	410 U	410	130	1	08/01/19 20:02	7/31/19	
Benzaldehyde	2100 U	2100	82	1	08/01/19 20:02	7/31/19	
Benzo(a)pyrene	410 U	410	150	1	08/01/19 20:02	7/31/19	
Benzo(b)fluoranthene	410 U	410	140	1	08/01/19 20:02	7/31/19	
Benzo(g,h,i)perylene	410 U	410	110	1	08/01/19 20:02	7/31/19	
Benzo(k)fluoranthene	410 U	410	150	1	08/01/19 20:02	7/31/19	
Biphenyl	410 U	410	110	1	08/01/19 20:02	7/31/19	
2,2'-Oxybis(1-chloropropane)	410 U	410	170	1	08/01/19 20:02	7/31/19	
Bis(2-chloroethoxy)methane	410 U	410	110	1	08/01/19 20:02	7/31/19	
Bis(2-chloroethyl) Ether	410 U	410	110	1	08/01/19 20:02	7/31/19	
Bis(2-ethylhexyl) Phthalate	620 U	620	110	1	08/01/19 20:02	7/31/19	
Butyl Benzyl Phthalate	410 U	410	110	1	08/01/19 20:02	7/31/19	
Caprolactam	410 U	410	110	1	08/01/19 20:02	7/31/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-14
Lab Code: R1906881-014

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	410 U	410	120	1	08/01/19 20:02	7/31/19	
Chrysene	410 U	410	150	1	08/01/19 20:02	7/31/19	
Di-n-butyl Phthalate	410 U	410	130	1	08/01/19 20:02	7/31/19	
Di-n-octyl Phthalate	410 U	410	130	1	08/01/19 20:02	7/31/19	
Dibenz(a,h)anthracene	410 U	410	130	1	08/01/19 20:02	7/31/19	
Dibenzofuran	410 U	410	82	1	08/01/19 20:02	7/31/19	
Diethyl Phthalate	410 U	410	88	1	08/01/19 20:02	7/31/19	
Dimethyl Phthalate	410 U	410	93	1	08/01/19 20:02	7/31/19	
Fluoranthene	410 U	410	150	1	08/01/19 20:02	7/31/19	
Fluorene	410 U	410	95	1	08/01/19 20:02	7/31/19	
Hexachlorobenzene	410 U	410	130	1	08/01/19 20:02	7/31/19	
Hexachlorobutadiene	410 U	410	100	1	08/01/19 20:02	7/31/19	
Hexachlorocyclopentadiene	410 U	410	90	1	08/01/19 20:02	7/31/19	
Hexachloroethane	410 U	410	110	1	08/01/19 20:02	7/31/19	
Indeno(1,2,3-cd)pyrene	410 U	410	140	1	08/01/19 20:02	7/31/19	
Isophorone	410 U	410	120	1	08/01/19 20:02	7/31/19	
N-Nitrosodi-n-propylamine	410 U	410	110	1	08/01/19 20:02	7/31/19	
N-Nitrosodiphenylamine	410 U	410	280	1	08/01/19 20:02	7/31/19	
Naphthalene	410 U	410	110	1	08/01/19 20:02	7/31/19	
Nitrobenzene	410 U	410	110	1	08/01/19 20:02	7/31/19	
Pentachlorophenol (PCP)	2100 U	2100	140	1	08/01/19 20:02	7/31/19	
Phenanthrene	410 U	410	120	1	08/01/19 20:02	7/31/19	
Phenol	410 U	410	98	1	08/01/19 20:02	7/31/19	
Pyrene	410 U	410	170	1	08/01/19 20:02	7/31/19	
Pyridine	2100 U	2100	50	1	08/01/19 20:02	7/31/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	41	10 - 109	08/01/19 20:02	
2-Fluorobiphenyl	38	10 - 102	08/01/19 20:02	
2-Fluorophenol	33	10 - 88	08/01/19 20:02	
Nitrobenzene-d5	35	10 - 95	08/01/19 20:02	
Phenol-d6	33	10 - 145	08/01/19 20:02	
Terphenyl-d14	59	10 - 106	08/01/19 20:02	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-16
Lab Code: R1906881-016

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	430 U	430	110	1	08/01/19 20:30	7/31/19	
2,3,4,6-Tetrachlorophenol	430 U	430	90	1	08/01/19 20:30	7/31/19	
2,4,5-Trichlorophenol	430 U	430	370	1	08/01/19 20:30	7/31/19	
2,4,6-Trichlorophenol	430 U	430	76	1	08/01/19 20:30	7/31/19	
2,4-Dichlorophenol	430 U	430	92	1	08/01/19 20:30	7/31/19	
2,4-Dimethylphenol	430 U	430	94	1	08/01/19 20:30	7/31/19	
2,4-Dinitrophenol	2200 U	2200	160	1	08/01/19 20:30	7/31/19	
2,4-Dinitrotoluene	430 U	430	170	1	08/01/19 20:30	7/31/19	
2,6-Dinitrotoluene	430 U	430	130	1	08/01/19 20:30	7/31/19	
2-Chloronaphthalene	430 U	430	110	1	08/01/19 20:30	7/31/19	
2-Chlorophenol	430 U	430	110	1	08/01/19 20:30	7/31/19	
2-Methylnaphthalene	430 U	430	94	1	08/01/19 20:30	7/31/19	
2-Methylphenol	430 U	430	93	1	08/01/19 20:30	7/31/19	
2-Nitroaniline	2200 U	2200	130	1	08/01/19 20:30	7/31/19	
2-Nitrophenol	430 U	430	130	1	08/01/19 20:30	7/31/19	
3,3'-Dichlorobenzidine	430 U	430	90	1	08/01/19 20:30	7/31/19	
3- and 4-Methylphenol Coelution	430 U	430	83	1	08/01/19 20:30	7/31/19	
3-Nitroaniline	2200 U	2200	92	1	08/01/19 20:30	7/31/19	
4,6-Dinitro-2-methylphenol	2200 U	2200	190	1	08/01/19 20:30	7/31/19	
4-Bromophenyl Phenyl Ether	430 U	430	160	1	08/01/19 20:30	7/31/19	
4-Chloro-3-methylphenol	430 U	430	94	1	08/01/19 20:30	7/31/19	
4-Chloroaniline	430 U	430	110	1	08/01/19 20:30	7/31/19	
4-Chlorophenyl Phenyl Ether	430 U	430	110	1	08/01/19 20:30	7/31/19	
4-Nitroaniline	2200 U	2200	92	1	08/01/19 20:30	7/31/19	
4-Nitrophenol	2200 U	2200	150	1	08/01/19 20:30	7/31/19	
Acenaphthene	430 U	430	97	1	08/01/19 20:30	7/31/19	
Acenaphthylene	430 U	430	120	1	08/01/19 20:30	7/31/19	
Acetophenone	430 U	430	98	1	08/01/19 20:30	7/31/19	
Anthracene	430 U	430	120	1	08/01/19 20:30	7/31/19	
Atrazine	430 U	430	170	1	08/01/19 20:30	7/31/19	
Benz(a)anthracene	430 U	430	130	1	08/01/19 20:30	7/31/19	
Benzaldehyde	2200 U	2200	85	1	08/01/19 20:30	7/31/19	
Benzo(a)pyrene	430 U	430	160	1	08/01/19 20:30	7/31/19	
Benzo(b)fluoranthene	430 U	430	150	1	08/01/19 20:30	7/31/19	
Benzo(g,h,i)perylene	430 U	430	120	1	08/01/19 20:30	7/31/19	
Benzo(k)fluoranthene	430 U	430	160	1	08/01/19 20:30	7/31/19	
Biphenyl	430 U	430	110	1	08/01/19 20:30	7/31/19	
2,2'-Oxybis(1-chloropropane)	430 U	430	170	1	08/01/19 20:30	7/31/19	
Bis(2-chloroethoxy)methane	430 U	430	120	1	08/01/19 20:30	7/31/19	
Bis(2-chloroethyl) Ether	430 U	430	120	1	08/01/19 20:30	7/31/19	
Bis(2-ethylhexyl) Phthalate	650 U	650	120	1	08/01/19 20:30	7/31/19	
Butyl Benzyl Phthalate	430 U	430	110	1	08/01/19 20:30	7/31/19	
Caprolactam	430 U	430	120	1	08/01/19 20:30	7/31/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-16
Lab Code: R1906881-016

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	430 U	430	130	1	08/01/19 20:30	7/31/19	
Chrysene	430 U	430	160	1	08/01/19 20:30	7/31/19	
Di-n-butyl Phthalate	430 U	430	140	1	08/01/19 20:30	7/31/19	
Di-n-octyl Phthalate	430 U	430	130	1	08/01/19 20:30	7/31/19	
Dibenz(a,h)anthracene	430 U	430	130	1	08/01/19 20:30	7/31/19	
Dibenzofuran	430 U	430	85	1	08/01/19 20:30	7/31/19	
Diethyl Phthalate	430 U	430	92	1	08/01/19 20:30	7/31/19	
Dimethyl Phthalate	430 U	430	97	1	08/01/19 20:30	7/31/19	
Fluoranthene	430 U	430	160	1	08/01/19 20:30	7/31/19	
Fluorene	430 U	430	100	1	08/01/19 20:30	7/31/19	
Hexachlorobenzene	430 U	430	140	1	08/01/19 20:30	7/31/19	
Hexachlorobutadiene	430 U	430	110	1	08/01/19 20:30	7/31/19	
Hexachlorocyclopentadiene	430 U	430	94	1	08/01/19 20:30	7/31/19	
Hexachloroethane	430 U	430	120	1	08/01/19 20:30	7/31/19	
Indeno(1,2,3-cd)pyrene	430 U	430	150	1	08/01/19 20:30	7/31/19	
Isophorone	430 U	430	120	1	08/01/19 20:30	7/31/19	
N-Nitrosodi-n-propylamine	430 U	430	120	1	08/01/19 20:30	7/31/19	
N-Nitrosodiphenylamine	430 U	430	290	1	08/01/19 20:30	7/31/19	
Naphthalene	430 U	430	120	1	08/01/19 20:30	7/31/19	
Nitrobenzene	430 U	430	120	1	08/01/19 20:30	7/31/19	
Pentachlorophenol (PCP)	2200 U	2200	150	1	08/01/19 20:30	7/31/19	
Phenanthrene	430 U	430	130	1	08/01/19 20:30	7/31/19	
Phenol	430 U	430	110	1	08/01/19 20:30	7/31/19	
Pyrene	430 U	430	170	1	08/01/19 20:30	7/31/19	
Pyridine	2200 U	2200	53	1	08/01/19 20:30	7/31/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	51	10 - 109	08/01/19 20:30	
2-Fluorobiphenyl	41	10 - 102	08/01/19 20:30	
2-Fluorophenol	42	10 - 88	08/01/19 20:30	
Nitrobenzene-d5	42	10 - 95	08/01/19 20:30	
Phenol-d6	41	10 - 145	08/01/19 20:30	
Terphenyl-d14	66	10 - 106	08/01/19 20:30	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-20,22
Lab Code: R1906881-020

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	460 U	460	110	1	08/01/19 21:25	7/31/19	
2,3,4,6-Tetrachlorophenol	460 U	460	98	1	08/01/19 21:25	7/31/19	
2,4,5-Trichlorophenol	460 U	460	400	1	08/01/19 21:25	7/31/19	
2,4,6-Trichlorophenol	460 U	460	82	1	08/01/19 21:25	7/31/19	
2,4-Dichlorophenol	460 U	460	99	1	08/01/19 21:25	7/31/19	
2,4-Dimethylphenol	460 U	460	110	1	08/01/19 21:25	7/31/19	
2,4-Dinitrophenol	2400 U	2400	170	1	08/01/19 21:25	7/31/19	
2,4-Dinitrotoluene	460 U	460	190	1	08/01/19 21:25	7/31/19	
2,6-Dinitrotoluene	460 U	460	140	1	08/01/19 21:25	7/31/19	
2-Chloronaphthalene	460 U	460	120	1	08/01/19 21:25	7/31/19	
2-Chlorophenol	460 U	460	120	1	08/01/19 21:25	7/31/19	
2-Methylnaphthalene	460 U	460	110	1	08/01/19 21:25	7/31/19	
2-Methylphenol	460 U	460	100	1	08/01/19 21:25	7/31/19	
2-Nitroaniline	2400 U	2400	140	1	08/01/19 21:25	7/31/19	
2-Nitrophenol	460 U	460	140	1	08/01/19 21:25	7/31/19	
3,3'-Dichlorobenzidine	460 U	460	98	1	08/01/19 21:25	7/31/19	
3- and 4-Methylphenol Coelution	460 U	460	89	1	08/01/19 21:25	7/31/19	
3-Nitroaniline	2400 U	2400	99	1	08/01/19 21:25	7/31/19	
4,6-Dinitro-2-methylphenol	2400 U	2400	200	1	08/01/19 21:25	7/31/19	
4-Bromophenyl Phenyl Ether	460 U	460	170	1	08/01/19 21:25	7/31/19	
4-Chloro-3-methylphenol	460 U	460	110	1	08/01/19 21:25	7/31/19	
4-Chloroaniline	460 U	460	110	1	08/01/19 21:25	7/31/19	
4-Chlorophenyl Phenyl Ether	460 U	460	120	1	08/01/19 21:25	7/31/19	
4-Nitroaniline	2400 U	2400	99	1	08/01/19 21:25	7/31/19	
4-Nitrophenol	2400 U	2400	160	1	08/01/19 21:25	7/31/19	
Acenaphthene	460 U	460	110	1	08/01/19 21:25	7/31/19	
Acenaphthylene	460 U	460	130	1	08/01/19 21:25	7/31/19	
Acetophenone	460 U	460	110	1	08/01/19 21:25	7/31/19	
Anthracene	460 U	460	130	1	08/01/19 21:25	7/31/19	
Atrazine	460 U	460	190	1	08/01/19 21:25	7/31/19	
Benz(a)anthracene	460 U	460	140	1	08/01/19 21:25	7/31/19	
Benzaldehyde	2400 U	2400	92	1	08/01/19 21:25	7/31/19	
Benzo(a)pyrene	460 U	460	170	1	08/01/19 21:25	7/31/19	
Benzo(b)fluoranthene	460 U	460	160	1	08/01/19 21:25	7/31/19	
Benzo(g,h,i)perylene	460 U	460	130	1	08/01/19 21:25	7/31/19	
Benzo(k)fluoranthene	460 U	460	170	1	08/01/19 21:25	7/31/19	
Biphenyl	460 U	460	120	1	08/01/19 21:25	7/31/19	
2,2'-Oxybis(1-chloropropane)	460 U	460	190	1	08/01/19 21:25	7/31/19	
Bis(2-chloroethoxy)methane	460 U	460	130	1	08/01/19 21:25	7/31/19	
Bis(2-chloroethyl) Ether	460 U	460	130	1	08/01/19 21:25	7/31/19	
Bis(2-ethylhexyl) Phthalate	700 U	700	130	1	08/01/19 21:25	7/31/19	
Butyl Benzyl Phthalate	460 U	460	120	1	08/01/19 21:25	7/31/19	
Caprolactam	460 U	460	130	1	08/01/19 21:25	7/31/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-20,22
Lab Code: R1906881-020

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	460 U	460	140	1	08/01/19 21:25	7/31/19	
Chrysene	460 U	460	170	1	08/01/19 21:25	7/31/19	
Di-n-butyl Phthalate	460 U	460	150	1	08/01/19 21:25	7/31/19	
Di-n-octyl Phthalate	460 U	460	140	1	08/01/19 21:25	7/31/19	
Dibenz(a,h)anthracene	460 U	460	140	1	08/01/19 21:25	7/31/19	
Dibenzofuran	460 U	460	92	1	08/01/19 21:25	7/31/19	
Diethyl Phthalate	460 U	460	99	1	08/01/19 21:25	7/31/19	
Dimethyl Phthalate	460 U	460	110	1	08/01/19 21:25	7/31/19	
Fluoranthene	460 U	460	170	1	08/01/19 21:25	7/31/19	
Fluorene	460 U	460	110	1	08/01/19 21:25	7/31/19	
Hexachlorobenzene	460 U	460	150	1	08/01/19 21:25	7/31/19	
Hexachlorobutadiene	460 U	460	120	1	08/01/19 21:25	7/31/19	
Hexachlorocyclopentadiene	460 U	460	110	1	08/01/19 21:25	7/31/19	
Hexachloroethane	460 U	460	120	1	08/01/19 21:25	7/31/19	
Indeno(1,2,3-cd)pyrene	460 U	460	160	1	08/01/19 21:25	7/31/19	
Isophorone	460 U	460	130	1	08/01/19 21:25	7/31/19	
N-Nitrosodi-n-propylamine	460 U	460	130	1	08/01/19 21:25	7/31/19	
N-Nitrosodiphenylamine	460 U	460	310	1	08/01/19 21:25	7/31/19	
Naphthalene	460 U	460	120	1	08/01/19 21:25	7/31/19	
Nitrobenzene	460 U	460	120	1	08/01/19 21:25	7/31/19	
Pentachlorophenol (PCP)	2400 U	2400	160	1	08/01/19 21:25	7/31/19	
Phenanthrene	460 U	460	140	1	08/01/19 21:25	7/31/19	
Phenol	460 U	460	110	1	08/01/19 21:25	7/31/19	
Pyrene	460 U	460	190	1	08/01/19 21:25	7/31/19	
Pyridine	2400 U	2400	57	1	08/01/19 21:25	7/31/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	55	10 - 109	08/01/19 21:25	
2-Fluorobiphenyl	26	10 - 102	08/01/19 21:25	
2-Fluorophenol	43	10 - 88	08/01/19 21:25	
Nitrobenzene-d5	38	10 - 95	08/01/19 21:25	
Phenol-d6	45	10 - 145	08/01/19 21:25	
Terphenyl-d14	34	10 - 106	08/01/19 21:25	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-24
Lab Code: R1906881-022

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	500 U	500	120	1	08/01/19 21:53	7/31/19	
2,3,4,6-Tetrachlorophenol	500 U	500	110	1	08/01/19 21:53	7/31/19	
2,4,5-Trichlorophenol	500 U	500	430	1	08/01/19 21:53	7/31/19	
2,4,6-Trichlorophenol	500 U	500	88	1	08/01/19 21:53	7/31/19	
2,4-Dichlorophenol	500 U	500	110	1	08/01/19 21:53	7/31/19	
2,4-Dimethylphenol	500 U	500	110	1	08/01/19 21:53	7/31/19	
2,4-Dinitrophenol	2600 U	2600	190	1	08/01/19 21:53	7/31/19	
2,4-Dinitrotoluene	500 U	500	200	1	08/01/19 21:53	7/31/19	
2,6-Dinitrotoluene	500 U	500	150	1	08/01/19 21:53	7/31/19	
2-Chloronaphthalene	500 U	500	120	1	08/01/19 21:53	7/31/19	
2-Chlorophenol	500 U	500	130	1	08/01/19 21:53	7/31/19	
2-Methylnaphthalene	500 U	500	110	1	08/01/19 21:53	7/31/19	
2-Methylphenol	500 U	500	110	1	08/01/19 21:53	7/31/19	
2-Nitroaniline	2600 U	2600	150	1	08/01/19 21:53	7/31/19	
2-Nitrophenol	500 U	500	150	1	08/01/19 21:53	7/31/19	
3,3'-Dichlorobenzidine	500 U	500	110	1	08/01/19 21:53	7/31/19	
3- and 4-Methylphenol Coelution	500 U	500	95	1	08/01/19 21:53	7/31/19	
3-Nitroaniline	2600 U	2600	110	1	08/01/19 21:53	7/31/19	
4,6-Dinitro-2-methylphenol	2600 U	2600	220	1	08/01/19 21:53	7/31/19	
4-Bromophenyl Phenyl Ether	500 U	500	190	1	08/01/19 21:53	7/31/19	
4-Chloro-3-methylphenol	500 U	500	110	1	08/01/19 21:53	7/31/19	
4-Chloroaniline	500 U	500	120	1	08/01/19 21:53	7/31/19	
4-Chlorophenyl Phenyl Ether	500 U	500	120	1	08/01/19 21:53	7/31/19	
4-Nitroaniline	2600 U	2600	110	1	08/01/19 21:53	7/31/19	
4-Nitrophenol	2600 U	2600	170	1	08/01/19 21:53	7/31/19	
Acenaphthene	500 U	500	120	1	08/01/19 21:53	7/31/19	
Acenaphthylene	500 U	500	140	1	08/01/19 21:53	7/31/19	
Acetophenone	500 U	500	120	1	08/01/19 21:53	7/31/19	
Anthracene	500 U	500	140	1	08/01/19 21:53	7/31/19	
Atrazine	500 U	500	200	1	08/01/19 21:53	7/31/19	
Benz(a)anthracene	500 U	500	150	1	08/01/19 21:53	7/31/19	
Benzaldehyde	2600 U	2600	98	1	08/01/19 21:53	7/31/19	
Benzo(a)pyrene	500 U	500	190	1	08/01/19 21:53	7/31/19	
Benzo(b)fluoranthene	500 U	500	170	1	08/01/19 21:53	7/31/19	
Benzo(g,h,i)perylene	500 U	500	140	1	08/01/19 21:53	7/31/19	
Benzo(k)fluoranthene	500 U	500	190	1	08/01/19 21:53	7/31/19	
Biphenyl	500 U	500	130	1	08/01/19 21:53	7/31/19	
2,2'-Oxybis(1-chloropropane)	500 U	500	200	1	08/01/19 21:53	7/31/19	
Bis(2-chloroethoxy)methane	500 U	500	140	1	08/01/19 21:53	7/31/19	
Bis(2-chloroethyl) Ether	500 U	500	130	1	08/01/19 21:53	7/31/19	
Bis(2-ethylhexyl) Phthalate	750 U	750	140	1	08/01/19 21:53	7/31/19	
Butyl Benzyl Phthalate	500 U	500	130	1	08/01/19 21:53	7/31/19	
Caprolactam	500 U	500	130	1	08/01/19 21:53	7/31/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-24
Lab Code: R1906881-022

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	500 U	500	150	1	08/01/19 21:53	7/31/19	
Chrysene	500 U	500	190	1	08/01/19 21:53	7/31/19	
Di-n-butyl Phthalate	500 U	500	160	1	08/01/19 21:53	7/31/19	
Di-n-octyl Phthalate	500 U	500	150	1	08/01/19 21:53	7/31/19	
Dibenz(a,h)anthracene	500 U	500	150	1	08/01/19 21:53	7/31/19	
Dibenzofuran	500 U	500	98	1	08/01/19 21:53	7/31/19	
Diethyl Phthalate	500 U	500	110	1	08/01/19 21:53	7/31/19	
Dimethyl Phthalate	500 U	500	120	1	08/01/19 21:53	7/31/19	
Fluoranthene	500 U	500	190	1	08/01/19 21:53	7/31/19	
Fluorene	500 U	500	120	1	08/01/19 21:53	7/31/19	
Hexachlorobenzene	500 U	500	160	1	08/01/19 21:53	7/31/19	
Hexachlorobutadiene	500 U	500	130	1	08/01/19 21:53	7/31/19	
Hexachlorocyclopentadiene	500 U	500	110	1	08/01/19 21:53	7/31/19	
Hexachloroethane	500 U	500	130	1	08/01/19 21:53	7/31/19	
Indeno(1,2,3-cd)pyrene	500 U	500	170	1	08/01/19 21:53	7/31/19	
Isophorone	500 U	500	140	1	08/01/19 21:53	7/31/19	
N-Nitrosodi-n-propylamine	500 U	500	140	1	08/01/19 21:53	7/31/19	
N-Nitrosodiphenylamine	500 U	500	340	1	08/01/19 21:53	7/31/19	
Naphthalene	500 U	500	130	1	08/01/19 21:53	7/31/19	
Nitrobenzene	500 U	500	130	1	08/01/19 21:53	7/31/19	
Pentachlorophenol (PCP)	2600 U	2600	170	1	08/01/19 21:53	7/31/19	
Phenanthrene	500 U	500	150	1	08/01/19 21:53	7/31/19	
Phenol	500 U	500	120	1	08/01/19 21:53	7/31/19	
Pyrene	500 U	500	200	1	08/01/19 21:53	7/31/19	
Pyridine	2600 U	2600	61	1	08/01/19 21:53	7/31/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	49	10 - 109	08/01/19 21:53	
2-Fluorobiphenyl	26	10 - 102	08/01/19 21:53	
2-Fluorophenol	40	10 - 88	08/01/19 21:53	
Nitrobenzene-d5	36	10 - 95	08/01/19 21:53	
Phenol-d6	44	10 - 145	08/01/19 21:53	
Terphenyl-d14	43	10 - 106	08/01/19 21:53	



Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-12
Lab Code: R1906881-012

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
4,4'-DDE	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
4,4'-DDT	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Aldrin	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Dieldrin	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Endosulfan I	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Endosulfan II	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Endosulfan Sulfate	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Endrin	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Endrin Aldehyde	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Endrin Ketone	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Heptachlor	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Heptachlor Epoxide	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Methoxychlor	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
Toxaphene	40 U	40	23	1	07/30/19 13:21	7/24/19	
alpha-BHC	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
alpha-Chlordane	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
beta-BHC	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
delta-BHC	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
gamma-BHC (Lindane)	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	
gamma-Chlordane	2.1 U	2.1	1.1	1	07/30/19 13:21	7/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	59	10 - 145	07/30/19 13:21	
Tetrachloro-m-xylene	60	10 - 123	07/30/19 13:21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-14
Lab Code: R1906881-014

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
4,4'-DDE	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
4,4'-DDT	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Aldrin	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Dieldrin	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Endosulfan I	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Endosulfan II	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Endosulfan Sulfate	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Endrin	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Endrin Aldehyde	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Endrin Ketone	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Heptachlor	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Heptachlor Epoxide	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Methoxychlor	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
Toxaphene	41 U	41	24	1	07/31/19 11:34	7/25/19	
alpha-BHC	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
alpha-Chlordane	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
beta-BHC	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
delta-BHC	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
gamma-BHC (Lindane)	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	
gamma-Chlordane	2.1 U	2.1	1.1	1	07/31/19 11:34	7/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	52	10 - 145	07/31/19 11:34	
Tetrachloro-m-xylene	51	10 - 123	07/31/19 11:34	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-16
Lab Code: R1906881-016

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
4,4'-DDE	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
4,4'-DDT	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Aldrin	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Dieldrin	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Endosulfan I	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Endosulfan II	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Endosulfan Sulfate	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Endrin	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Endrin Aldehyde	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Endrin Ketone	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Heptachlor	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Heptachlor Epoxide	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Methoxychlor	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
Toxaphene	43 U	43	25	1	07/31/19 11:52	7/25/19	
alpha-BHC	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
alpha-Chlordane	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
beta-BHC	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
delta-BHC	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
gamma-BHC (Lindane)	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	
gamma-Chlordane	2.2 U	2.2	1.1	1	07/31/19 11:52	7/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	59	10 - 145	07/31/19 11:52	
Tetrachloro-m-xylene	30	10 - 123	07/31/19 11:52	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-20,22
Lab Code: R1906881-020

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
4,4'-DDE	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
4,4'-DDT	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Aldrin	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Dieldrin	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Endosulfan I	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Endosulfan II	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Endosulfan Sulfate	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Endrin	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Endrin Aldehyde	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Endrin Ketone	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Heptachlor	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Heptachlor Epoxide	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Methoxychlor	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
Toxaphene	46 U	46	27	1	07/31/19 12:27	7/25/19	
alpha-BHC	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
alpha-Chlordane	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
beta-BHC	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
delta-BHC	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
gamma-BHC (Lindane)	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	
gamma-Chlordane	2.4 U	2.4	1.2	1	07/31/19 12:27	7/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	135	10 - 145	07/31/19 12:27	
Tetrachloro-m-xylene	123	10 - 123	07/31/19 12:27	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-24
Lab Code: R1906881-022

Units: ug/Kg
Basis: Dry

Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
4,4'-DDE	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
4,4'-DDT	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Aldrin	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Dieldrin	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Endosulfan I	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Endosulfan II	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Endosulfan Sulfate	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Endrin	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Endrin Aldehyde	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Endrin Ketone	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Heptachlor	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Heptachlor Epoxide	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Methoxychlor	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
Toxaphene	50 U	50	29	1	07/31/19 13:20	7/25/19	
alpha-BHC	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
alpha-Chlordane	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
beta-BHC	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
delta-BHC	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
gamma-BHC (Lindane)	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	
gamma-Chlordane	2.6 U	2.6	1.3	1	07/31/19 13:20	7/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	26	10 - 145	07/31/19 13:20	
Tetrachloro-m-xylene	33	10 - 123	07/31/19 13:20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-12
Lab Code: R1906881-012

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	40 U	40	21	1	07/30/19 01:56	7/24/19	
Aroclor 1221	81 U	81	40	1	07/30/19 01:56	7/24/19	
Aroclor 1232	40 U	40	24	1	07/30/19 01:56	7/24/19	
Aroclor 1242	40 U	40	21	1	07/30/19 01:56	7/24/19	
Aroclor 1248	40 U	40	31	1	07/30/19 01:56	7/24/19	
Aroclor 1254	40 U	40	22	1	07/30/19 01:56	7/24/19	
Aroclor 1260	40 U	40	21	1	07/30/19 01:56	7/24/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	80	22 - 128	07/30/19 01:56	
Tetrachloro-m-xylene	54	14 - 119	07/30/19 01:56	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-14
Lab Code: R1906881-014

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	41 U	41	22	1	07/30/19 17:07	7/25/19	
Aroclor 1221	84 U	84	42	1	07/30/19 17:07	7/25/19	
Aroclor 1232	41 U	41	25	1	07/30/19 17:07	7/25/19	
Aroclor 1242	41 U	41	22	1	07/30/19 17:07	7/25/19	
Aroclor 1248	41 U	41	33	1	07/30/19 17:07	7/25/19	
Aroclor 1254	41 U	41	23	1	07/30/19 17:07	7/25/19	
Aroclor 1260	41 U	41	22	1	07/30/19 17:07	7/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	59	22 - 128	07/30/19 17:07	
Tetrachloro-m-xylene	40	14 - 119	07/30/19 17:07	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-16
Lab Code: R1906881-016

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	43 U	43	23	1	07/30/19 17:27	7/25/19	
Aroclor 1221	87 U	87	43	1	07/30/19 17:27	7/25/19	
Aroclor 1232	43 U	43	25	1	07/30/19 17:27	7/25/19	
Aroclor 1242	43 U	43	23	1	07/30/19 17:27	7/25/19	
Aroclor 1248	43 U	43	34	1	07/30/19 17:27	7/25/19	
Aroclor 1254	43 U	43	24	1	07/30/19 17:27	7/25/19	
Aroclor 1260	43 U	43	23	1	07/30/19 17:27	7/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	68	22 - 128	07/30/19 17:27	
Tetrachloro-m-xylene	24	14 - 119	07/30/19 17:27	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-20,22
Lab Code: R1906881-020

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	46 U	46	24	1	07/30/19 18:07	7/25/19	
Aroclor 1221	94 U	94	47	1	07/30/19 18:07	7/25/19	
Aroclor 1232	46 U	46	27	1	07/30/19 18:07	7/25/19	
Aroclor 1242	46 U	46	24	1	07/30/19 18:07	7/25/19	
Aroclor 1248	46 U	46	36	1	07/30/19 18:07	7/25/19	
Aroclor 1254	46 U	46	26	1	07/30/19 18:07	7/25/19	
Aroclor 1260	46 U	46	24	1	07/30/19 18:07	7/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	77	22 - 128	07/30/19 18:07	
Tetrachloro-m-xylene	68	14 - 119	07/30/19 18:07	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-24
Lab Code: R1906881-022

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	50 U	50	26	1	07/30/19 19:26	7/25/19	
Aroclor 1221	100 U	100	51	1	07/30/19 19:26	7/25/19	
Aroclor 1232	50 U	50	29	1	07/30/19 19:26	7/25/19	
Aroclor 1242	50 U	50	26	1	07/30/19 19:26	7/25/19	
Aroclor 1248	50 U	50	39	1	07/30/19 19:26	7/25/19	
Aroclor 1254	50 U	50	28	1	07/30/19 19:26	7/25/19	
Aroclor 1260	50 U	50	26	1	07/30/19 19:26	7/25/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	31	22 - 128	07/30/19 19:26	
Tetrachloro-m-xylene	24	14 - 119	07/30/19 19:26	



Metals

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-12
Lab Code: R1906881-012

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	8900	mg/Kg	230	140	10	07/26/19 19:14	07/24/19	
Antimony, Total	6010C	6.9 U	mg/Kg	6.9	0.7	1	07/26/19 17:21	07/24/19	
Arsenic, Total	6010C	4.8	mg/Kg	1.1	0.9	1	07/26/19 17:21	07/24/19	
Barium, Total	6010C	49.0	mg/Kg	2.3	1.2	1	07/26/19 17:21	07/24/19	
Beryllium, Total	6010C	0.52	mg/Kg	0.34	0.04	1	07/26/19 17:21	07/24/19	
Cadmium, Total	6010C	0.47 BJ	mg/Kg	0.57	0.09	1	07/26/19 17:21	07/24/19	
Calcium, Total	6010C	3980	mg/Kg	110	40	1	07/26/19 17:21	07/24/19	
Chromium, Total	6010C	17.4	mg/Kg	1.1	0.5	1	07/26/19 17:21	07/24/19	
Cobalt, Total	6010C	7.1	mg/Kg	5.7	0.3	1	07/26/19 17:21	07/24/19	
Copper, Total	6010C	26.8	mg/Kg	2.3	0.8	1	07/26/19 17:21	07/24/19	
Iron, Total	6010C	19200	mg/Kg	230	150	10	07/26/19 19:14	07/24/19	
Lead, Total	6010C	14.0	mg/Kg	5.7	0.5	1	07/26/19 17:21	07/24/19	
Magnesium, Total	6010C	6140	mg/Kg	110	20	1	07/26/19 17:21	07/24/19	
Manganese, Total	6010C	442	mg/Kg	2.3	1.8	1	07/26/19 17:21	07/24/19	
Mercury, Total	7471B	0.046	mg/Kg	0.039	0.007	1	07/31/19 11:56	07/30/19	
Nickel, Total	6010C	17.7	mg/Kg	4.6	0.8	1	07/26/19 17:21	07/24/19	
Potassium, Total	6010C	1480	mg/Kg	230	20	1	07/26/19 17:21	07/24/19	
Selenium, Total	6010C	1.1 U	mg/Kg	1.1	0.7	1	07/26/19 17:21	07/24/19	
Silver, Total	6010C	1.1 U	mg/Kg	1.1	0.09	1	07/26/19 17:21	07/24/19	
Sodium, Total	6010C	110 U	mg/Kg	110	60	1	07/26/19 17:21	07/24/19	
Thallium, Total	6010C	1.1 U	mg/Kg	1.1	0.8	1	07/26/19 17:21	07/24/19	
Vanadium, Total	6010C	19.4	mg/Kg	5.7	0.9	1	07/26/19 17:21	07/24/19	
Zinc, Total	6010C	50.4	mg/Kg	2.3	1.7	1	07/26/19 17:21	07/24/19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-14
Lab Code: R1906881-014

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	9110	mg/Kg	230	140	10	07/26/19 19:17	07/24/19	
Antimony, Total	6010C	6.9 U	mg/Kg	6.9	0.7	1	07/26/19 17:30	07/24/19	
Arsenic, Total	6010C	6.0	mg/Kg	1.2	0.9	1	07/26/19 17:30	07/24/19	
Barium, Total	6010C	72.2	mg/Kg	2.3	1.2	1	07/26/19 17:30	07/24/19	
Beryllium, Total	6010C	0.57	mg/Kg	0.35	0.04	1	07/26/19 17:30	07/24/19	
Cadmium, Total	6010C	0.61 B	mg/Kg	0.58	0.09	1	07/26/19 17:30	07/24/19	
Calcium, Total	6010C	31700	mg/Kg	1200	400	10	07/26/19 19:17	07/24/19	
Chromium, Total	6010C	18.1	mg/Kg	1.2	0.5	1	07/26/19 17:30	07/24/19	
Cobalt, Total	6010C	7.9	mg/Kg	5.8	0.3	1	07/26/19 17:30	07/24/19	
Copper, Total	6010C	59.1	mg/Kg	2.3	0.8	1	07/26/19 17:30	07/24/19	
Iron, Total	6010C	19700	mg/Kg	230	150	10	07/26/19 19:17	07/24/19	
Lead, Total	6010C	12.2	mg/Kg	5.8	0.5	1	07/26/19 17:30	07/24/19	
Magnesium, Total	6010C	9800	mg/Kg	120	20	1	07/26/19 17:30	07/24/19	
Manganese, Total	6010C	577	mg/Kg	2.3	1.8	1	07/26/19 17:30	07/24/19	
Mercury, Total	7471B	0.049	mg/Kg	0.040	0.007	1	07/31/19 11:59	07/30/19	
Nickel, Total	6010C	20.5	mg/Kg	4.6	0.8	1	07/26/19 17:30	07/24/19	
Potassium, Total	6010C	1990	mg/Kg	230	20	1	07/26/19 17:30	07/24/19	
Selenium, Total	6010C	1.2 U	mg/Kg	1.2	0.7	1	07/26/19 17:30	07/24/19	
Silver, Total	6010C	1.2 U	mg/Kg	1.2	0.09	1	07/26/19 17:30	07/24/19	
Sodium, Total	6010C	60 J	mg/Kg	120	60	1	07/26/19 17:30	07/24/19	
Thallium, Total	6010C	1.2 U	mg/Kg	1.2	0.8	1	07/26/19 17:30	07/24/19	
Vanadium, Total	6010C	18.5	mg/Kg	5.8	0.9	1	07/26/19 17:30	07/24/19	
Zinc, Total	6010C	80.8	mg/Kg	2.3	1.7	1	07/26/19 17:30	07/24/19	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-16
Lab Code: R1906881-016

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	9330	mg/Kg	240	150	10	07/26/19 19:21	07/24/19	
Antimony, Total	6010C	7.1 U	mg/Kg	7.1	0.7	1	07/26/19 17:34	07/24/19	
Arsenic, Total	6010C	4.9	mg/Kg	1.2	0.9	1	07/26/19 17:34	07/24/19	
Barium, Total	6010C	63.2	mg/Kg	2.4	1.2	1	07/26/19 17:34	07/24/19	
Beryllium, Total	6010C	0.56	mg/Kg	0.36	0.04	1	07/26/19 17:34	07/24/19	
Cadmium, Total	6010C	0.56 BJ	mg/Kg	0.59	0.09	1	07/26/19 17:34	07/24/19	
Calcium, Total	6010C	18600	mg/Kg	120	40	1	07/26/19 17:34	07/24/19	
Chromium, Total	6010C	18.2	mg/Kg	1.2	0.5	1	07/26/19 17:34	07/24/19	
Cobalt, Total	6010C	7.4	mg/Kg	5.9	0.3	1	07/26/19 17:34	07/24/19	
Copper, Total	6010C	44.9	mg/Kg	2.4	0.8	1	07/26/19 17:34	07/24/19	
Iron, Total	6010C	19300	mg/Kg	240	160	10	07/26/19 19:21	07/24/19	
Lead, Total	6010C	12.3	mg/Kg	5.9	0.5	1	07/26/19 17:34	07/24/19	
Magnesium, Total	6010C	7100	mg/Kg	120	20	1	07/26/19 17:34	07/24/19	
Manganese, Total	6010C	481	mg/Kg	2.4	1.8	1	07/26/19 17:34	07/24/19	
Mercury, Total	7471B	0.060	mg/Kg	0.041	0.008	1	07/31/19 12:01	07/30/19	
Nickel, Total	6010C	18.8	mg/Kg	4.8	0.8	1	07/26/19 17:34	07/24/19	
Potassium, Total	6010C	1870	mg/Kg	240	20	1	07/26/19 17:34	07/24/19	
Selenium, Total	6010C	1.2 U	mg/Kg	1.2	0.7	1	07/26/19 17:34	07/24/19	
Silver, Total	6010C	1.2 U	mg/Kg	1.2	0.09	1	07/26/19 17:34	07/24/19	
Sodium, Total	6010C	120 U	mg/Kg	120	70	1	07/26/19 17:34	07/24/19	
Thallium, Total	6010C	1.2 U	mg/Kg	1.2	0.8	1	07/26/19 17:34	07/24/19	
Vanadium, Total	6010C	19.3	mg/Kg	5.9	0.9	1	07/26/19 17:34	07/24/19	
Zinc, Total	6010C	64.8	mg/Kg	2.4	1.7	1	07/26/19 17:34	07/24/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-20,22
Lab Code: R1906881-020

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	9820	mg/Kg	280	170	10	07/26/19 19:27	07/24/19	
Antimony, Total	6010C	8.4 U	mg/Kg	8.4	0.8	1	07/26/19 17:40	07/24/19	
Arsenic, Total	6010C	5.0	mg/Kg	1.4	1	1	07/26/19 17:40	07/24/19	
Barium, Total	6010C	68.5	mg/Kg	2.8	1.4	1	07/26/19 17:40	07/24/19	
Beryllium, Total	6010C	0.60	mg/Kg	0.42	0.05	1	07/26/19 17:40	07/24/19	
Cadmium, Total	6010C	0.66 BJ	mg/Kg	0.70	0.11	1	07/26/19 17:40	07/24/19	
Calcium, Total	6010C	30300	mg/Kg	1400	500	10	07/26/19 19:27	07/24/19	
Chromium, Total	6010C	21.4	mg/Kg	1.4	0.5	1	07/26/19 17:40	07/24/19	
Cobalt, Total	6010C	7.8	mg/Kg	7.0	0.3	1	07/26/19 17:40	07/24/19	
Copper, Total	6010C	45.6	mg/Kg	2.8	0.9	1	07/26/19 17:40	07/24/19	
Iron, Total	6010C	22000	mg/Kg	280	190	10	07/26/19 19:27	07/24/19	
Lead, Total	6010C	13.1	mg/Kg	7.0	0.6	1	07/26/19 17:40	07/24/19	
Magnesium, Total	6010C	10200	mg/Kg	140	20	1	07/26/19 17:40	07/24/19	
Manganese, Total	6010C	375	mg/Kg	2.8	2.2	1	07/26/19 17:40	07/24/19	
Mercury, Total	7471B	0.062	mg/Kg	0.043	0.008	1	07/31/19 12:11	07/30/19	
Nickel, Total	6010C	20.9	mg/Kg	5.6	0.99	1	07/26/19 17:40	07/24/19	
Potassium, Total	6010C	2510	mg/Kg	280	20	1	07/26/19 17:40	07/24/19	
Selenium, Total	6010C	1.4 U	mg/Kg	1.4	0.8	1	07/26/19 17:40	07/24/19	
Silver, Total	6010C	1.4 U	mg/Kg	1.4	0.1	1	07/26/19 17:40	07/24/19	
Sodium, Total	6010C	140 U	mg/Kg	140	80	1	07/26/19 17:40	07/24/19	
Thallium, Total	6010C	1.4 U	mg/Kg	1.4	0.97	1	07/26/19 17:40	07/24/19	
Vanadium, Total	6010C	19.7	mg/Kg	7.0	1	1	07/26/19 17:40	07/24/19	
Zinc, Total	6010C	100	mg/Kg	2.8	2.0	1	07/26/19 17:40	07/24/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-24
Lab Code: R1906881-022

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	10600	mg/Kg	280	180	10	07/26/19 19:50	07/24/19	
Antimony, Total	6010C	8.5 U	mg/Kg	8.5	0.8	1	07/26/19 17:56	07/24/19	
Arsenic, Total	6010C	5.7	mg/Kg	1.4	1	1	07/26/19 17:56	07/24/19	
Barium, Total	6010C	81.7	mg/Kg	2.8	1.4	1	07/26/19 17:56	07/24/19	
Beryllium, Total	6010C	0.64	mg/Kg	0.43	0.05	1	07/26/19 17:56	07/24/19	
Cadmium, Total	6010C	0.70 BJ	mg/Kg	0.71	0.11	1	07/26/19 17:56	07/24/19	
Calcium, Total	6010C	39800	mg/Kg	1400	500	10	07/26/19 19:50	07/24/19	
Chromium, Total	6010C	21.3	mg/Kg	1.4	0.5	1	07/26/19 17:56	07/24/19	
Cobalt, Total	6010C	9.3	mg/Kg	7.1	0.3	1	07/26/19 17:56	07/24/19	
Copper, Total	6010C	49.2	mg/Kg	2.8	0.9	1	07/26/19 17:56	07/24/19	
Iron, Total	6010C	22600	mg/Kg	280	190	10	07/26/19 19:50	07/24/19	
Lead, Total	6010C	12.5	mg/Kg	7.1	0.6	1	07/26/19 17:56	07/24/19	
Magnesium, Total	6010C	13600	mg/Kg	140	20	1	07/26/19 17:56	07/24/19	
Manganese, Total	6010C	639	mg/Kg	2.8	2.2	1	07/26/19 17:56	07/24/19	
Mercury, Total	7471B	0.061	mg/Kg	0.049	0.009	1	07/31/19 12:19	07/30/19	
Nickel, Total	6010C	24.9	mg/Kg	5.7	1.0	1	07/26/19 17:56	07/24/19	
Potassium, Total	6010C	2620	mg/Kg	280	20	1	07/26/19 17:56	07/24/19	
Selenium, Total	6010C	1.4 U	mg/Kg	1.4	0.8	1	07/26/19 17:56	07/24/19	
Silver, Total	6010C	1.4 U	mg/Kg	1.4	0.2	1	07/26/19 17:56	07/24/19	
Sodium, Total	6010C	140 U	mg/Kg	140	80	1	07/26/19 17:56	07/24/19	
Thallium, Total	6010C	1.4 U	mg/Kg	1.4	0.98	1	07/26/19 17:56	07/24/19	
Vanadium, Total	6010C	21.4	mg/Kg	7.1	1.1	1	07/26/19 17:56	07/24/19	
Zinc, Total	6010C	91.9	mg/Kg	2.8	2.0	1	07/26/19 17:56	07/24/19	



General Chemistry

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-12
Lab Code: R1906881-012

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	24200	mg/Kg	2000	800	1	07/31/19 19:36	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-12
Lab Code: R1906881-012

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.48 U	mg/Kg	0.48	0.06	1	07/31/19 14:38	07/29/19	
Chromium, Hexavalent	7199	0.48 U	mg/Kg	0.48	0.06	1	07/31/19 14:28	07/29/19	
Chromium, Trivalent	Calculation	14.4	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.17 J	mg/Kg	0.32	0.05	1	07/26/19 20:41	07/26/19	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-12
Lab Code: R1906881-012

Service Request: R1906881
Date Collected: 07/22/19 11:50
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
pH	9045D	7.55	pH Units	-	-	1	07/26/19 15:30	NA	H
Total Solids	ALS SOP	82.4	Percent	-	-	1	07/30/19 09:27	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-13
Lab Code: R1906881-013

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	78.2	Percent	-	-	1	07/29/19 10:40	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-14
Lab Code: R1906881-014

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	31600	mg/Kg	1300	500	1	07/31/19 19:45	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-14
Lab Code: R1906881-014

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.49 U	mg/Kg	0.49	0.06	1	07/31/19 14:45	07/29/19	
Chromium, Hexavalent	7199	0.49 U	mg/Kg	0.49	0.06	1	07/31/19 14:55	07/29/19	
Chromium, Trivalent	Calculation	14.6	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.32 J	mg/Kg	0.37	0.06	1	07/26/19 20:42	07/26/19	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-14
Lab Code: R1906881-014

Service Request: R1906881
Date Collected: 07/22/19 12:00
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
pH	9045D	7.90	pH Units	-	-	1	07/26/19 15:30	NA	H
Total Solids	ALS SOP	80.3	Percent	-	-	1	07/30/19 09:27	NA	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-15
Lab Code: R1906881-015

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	75.0	Percent	-	-	1	07/29/19 10:40	

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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-16
Lab Code: R1906881-016

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	28200	mg/Kg	1300	500	1	07/31/19 19:53	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Sample Name: PMC-072219A-16
Lab Code: R1906881-016

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.51 U	mg/Kg	0.51	0.06	1	07/31/19 15:12	07/29/19	
Chromium, Hexavalent	7199	0.51 U	mg/Kg	0.51	0.06	1	07/31/19 15:02	07/29/19	
Chromium, Trivalent	Calculation	13.9	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.23 J	mg/Kg	0.32	0.05	1	07/26/19 20:43	07/26/19	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-16
Lab Code: R1906881-016

Service Request: R1906881
Date Collected: 07/22/19 12:25
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
pH	9045D	7.80	pH Units	-	-	1	07/26/19 15:30	NA	H
Total Solids	ALS SOP	76.4	Percent	-	-	1	07/30/19 09:27	NA	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-19,21
Lab Code: R1906881-019

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	71.8	Percent	-	-	1	07/29/19 10:40	

ALS Group USA, Corp.
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Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-20,22
Lab Code: R1906881-020

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	44000	mg/Kg	1400	600	1	07/31/19 20:10	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil
Sample Name: PMC-072219A-20,22
Lab Code: R1906881-020

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35
Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.55 U	mg/Kg	0.55	0.06	1	07/31/19 10:59	07/29/19	
Chromium, Hexavalent	7199	0.55 U	mg/Kg	0.55	0.06	1	07/31/19 11:08	07/29/19	
Chromium, Trivalent	Calculation	15.2	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.37 J	mg/Kg	0.40	0.06	1	07/26/19 20:44	07/26/19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-20,22
Lab Code: R1906881-020

Service Request: R1906881
Date Collected: 07/22/19 12:45
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
pH	9045D	7.66	pH Units	-	-	1	07/26/19 15:30	NA	H
Total Solids	ALS SOP	71.2	Percent	-	-	1	07/30/19 09:27	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-23
Lab Code: R1906881-021

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	72.5	Percent	-	-	1	07/29/19 10:40	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil
Sample Name: PMC-072219A-24
Lab Code: R1906881-022

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35
Basis: Dry, per Method

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	32300	mg/Kg	1000	400	1	07/31/19 20:50	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil
Sample Name: PMC-072219A-24
Lab Code: R1906881-022

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35
Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chromium, Hexavalent	7199	0.60 U	mg/Kg	0.60	0.07	1	07/31/19 16:07	07/29/19	
Chromium, Hexavalent	7199	0.60 U	mg/Kg	0.60	0.07	1	07/31/19 15:58	07/29/19	
Chromium, Trivalent	Calculation	14.1	mg/Kg	1.0	-	1	NA	NA	
Cyanide, Total	9012B	0.34	mg/Kg	0.33	0.05	1	07/26/19 20:48	07/26/19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: O'Brien & Gere Engineers, Incorporated
Project: Portfolio Materials Characterization
Sample Matrix: Soil

Sample Name: PMC-072219A-24
Lab Code: R1906881-022

Service Request: R1906881
Date Collected: 07/22/19 13:00
Date Received: 07/23/19 17:35

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
pH	9045D	7.89	pH Units	-	-	1	07/26/19 15:30	NA	H
Total Solids	ALS SOP	66.3	Percent	-	-	1	07/30/19 09:27	NA	

SO
FEB

FX# 1045 6295 0681

SGS 2235 US Highway 130 Dayton, NJ 08810 (P) (732) 329 0200		Chain Of Custody / Analysis Request										Lab ID: 30460 59945 COC #: LCP-070119 Lab Use: Lab Prep: Lab ID:			
Client Contact: (name, co., address) Stephen Miller@Honeywell.com Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212		Privileged & Confidential		Site Name: LCP		Location of Site: Geddes, NY						Job No: JC90989			
Hardcopy Report To: Michael Miller		Sample: Michael Miller, Chuck Sharpe		P O #		Site Code		Preservative						Lab Sample Numbers	
Invoice To: Steve Miller		Analysis Turnaround Time:		Standard -		Rush Charges Authorized for -		Field Filtered Sample *						SW827/SIM [1,4-Dioxane]	
		2 weeks -		Y		1 week -		Y						Modified Method 517	
		Next Day -													
Sample Identification		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		# of Cont.		Units	
Location ID		Depth (ft)		Depth (ft)		Field Sample ID									
1	LCP-OG-01	0	1	LCP-070119-01	7/1/2019	8:55	Soil	Soil	Reg	2	G	N	X	X	
2	LCP-OSW-01	0	1	LCP-070119-02	7/1/2019	11:10	Soil	Soil	Reg	2	G	X	X	X	
3	LCP-OSW-02	0	1	LCP-070119-03	7/1/2019	11:35	Soil	Soil	Reg	2	G	X	X	X	
4	LCP-OSW-05	0	1	LCP-070119-04	7/1/2019	12:00	Soil	Soil	Reg	2	G	X	X	X	
5	LCP-OSW-06	0	1	LCP-070119-05	7/1/2019	12:18	Soil	Soil	Reg	2	G	X	X	X	
6	LCP-BYS-01	0	1	LCP-070119-06	7/1/2019	13:52	Soil	Soil	Reg	2	G	X	X	X	
7	LCP-BYS-02	0	1	LCP-070119-07	7/1/2019	14:08	Soil	Soil	Reg	2	G	X	X	X	
8	LCP-BYS-03	0	1	LCP-070119-08	7/1/2019	14:25	Soil	Soil	Reg	2	G	X	X	X	
9	LCP-BYS-04	0	1	LCP-070119-09	7/1/2019	14:45	Soil	Soil	Reg	2	G	X	X	X	
10	LCP-EB-SPOON-070119	—	—	LCP-070119-10	7/1/2019	15:00	QC	Water	EB	3	G	X	X	X	
11	LCP-EB-BOWL-070119	—	—	LCP-070119-11	7/1/2019	15:10	QC	Water	EB	3	G	X	X	X	
12	LCP-FRB-070119	—	—	LCP-070119-12	7/1/2019	15:15	QC	Water	EB	1	G	N	X	X	
Special Instructions: FB															
RELINQUISHED BY: Relinquished by: [Signature] Date/Time: 7/1/19 16:20 Company: OBG, Part of Ramboll Received by: [Signature] Date/Time: 7/1/19 16:20 Company: [Signature] Date/Time: 7/1/19 16:20 Condition: [Signature] Date/Time: 7/1/19 16:20 Cooler Temp.: [Signature] Date/Time: 7/1/19 16:20 Custody Seals Intact: [Signature] Date/Time: 7/1/19 16:20															
PRESERVATIVES: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; [8 = Other (specify):]															

rel. FX 7/2/19 9:20 Recd [Signature] 60780

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	LCP-070119-01	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-1	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	81.9
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P77920.D	1	07/09/19 19:09	HSS	07/08/19 16:30	OP21368	E3P3648
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	4.0	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		10-146%
321-60-8	2-Fluorobiphenyl	76%		10-149%
1718-51-0	Terphenyl-d14	86%		10-170%

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	LCP-070119-01	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-1	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	81.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q32214.D	1	07/10/19 20:29	AFL	07/08/19 13:00	F:OP75793	F:S2Q510
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.2	0.31	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.2	0.24	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.2	0.24	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.2	0.31	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.2	0.31	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.2	0.31	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.2	0.31	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.2	0.31	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.2	0.31	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.2	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.2	0.31	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.2	0.31	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.2	0.31	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.2	0.31	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.505	1.2	0.31	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	1.2	0.31	ug/kg	
754-91-6	PFOSA	ND	1.2	0.31	ug/kg	
2355-31-9	MeFOSAA	ND	3.1	0.61	ug/kg	
2991-50-6	EtFOSAA	ND	3.1	0.61	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	85%		50-150%
	13C5-PFPeA	86%		50-150%
	13C5-PFHxA	87%		50-150%
	13C4-PFHpA	87%		50-150%
	13C8-PFOA	90%		50-150%
	13C9-PFNA	96%		50-150%
	13C6-PFDA	92%		50-150%
	13C7-PFUnDA	91%		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:	LCP-070119-01	Date Sampled:	07/01/19
Lab Sample ID:	JC90989-1	Date Received:	07/02/19
Matrix:	SO - Soil	Percent Solids:	81.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	95%		50-150%
	13C2-PFTeDA	94%		50-150%
	13C3-PFBS	87%		50-150%
	13C3-PFHxS	87%		50-150%
	13C8-PFOS	88%		50-150%
	13C8-FOSA	75%		50-150%
	d3-MeFOSAA	99%		50-150%
	13C2-6:2FTS	87%		50-150%
	13C2-8:2FTS	88%		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

SO
W W

SGS		Chain Of Custody / Analysis Request										AESI Ref: 38609.59845					
2235 US Highway 130 Dayton, NJ 08810 (P) (732) 329 0200		Privileged & Confidential										COC #: PMC-072219					
Client Contact: (name, co., address)		Site Name: Portfolio Material Characterization										Lab Use Only					
Stephen Miller@Honeywell.com		Location of Site: Syracuse, NY										Lab Proj #:					
Honeywell International		Sampler: CH/GD/AB										Lab ID:					
301 Plainfield Road, Suite 330		P O #										Job No:					
Syracuse, New York 13212		Site Code										JC92069					
Hardcopy Report To: Michael Miller		Analysis Turnaround Time:															
Invoice To: Steve Miller		Standard - N															
		Rush Charges Authorized for - Y															
		2 weeks -															
		1 week - Y															
		Next Day -															
Sample Identification												Grab/Composite		Field Filtered Sample			
Sample Date												Modified Method 537		SW827083M [1,4-Dioxane]			
Sample Time												SW1112 SPLD Modified Method 537					
Sample Type																	
Sample Matrix																	
Sample Purpose																	
# of Cont.																	
Units																	
Lab Sample Numbers																	
1	LCP-GYPSUMTS-01	0	1	PMC-072219-01	7/22/2019	8:50	Soil	Soil	Reg	2	G	N	X	X	X		
2	LCP-GYPSUMTS-02	0	1	PMC-072219-02	7/22/2019	9:20	Soil	Soil	Reg	2	G	N	X	X	X		
3	LCP-GYPSUMTS-03	0	1	PMC-072219-03	7/22/2019	9:35	Soil	Soil	Reg	2	G	N	X	X	X		
4	LCP-GYPSUMTS-04	0	1	PMC-072219-04	7/22/2019	9:49	Soil	Soil	Reg	2	G	N	X	X	X		
5	LCP-GYPSUMTS-05	0	1	PMC-072219-05	7/22/2019	10:05	Soil	Soil	Reg	2	G	N	X	X	X		
6	LCP-OG-02	0	1	PMC-072219-06	7/22/2019	11:40	Soil	Soil	Reg	2	G	N	X	X	X		
7	LCP-OG-03	0	1	PMC-072219-07	7/22/2019	12:00	Soil	Soil	Reg	2	G	N	X	X	X		
8	LCP-OG-04	0	1	PMC-072219-08	7/22/2019	12:25	Soil	Soil	Reg	2	G	N	X	X	X		
9	LCP-FD-072219	0	1	PMC-072219-09	7/22/2019	-	QC	Soil	FD	2	G	N	X	X	X		
10	LCP-OG-05	0	1	PMC-072219-10	7/22/2019	12:45	Soil	Soil	Reg	2	G	N	X	X	X		
11	LCP-OG-05	0	1	PMC-072219-11	7/22/2019	12:45	QC	Soil	MS/MSD	2	G	N	X	X	X		
12	LCP-OG-06	0	1	PMC-072219-12	7/22/2019	13:00	Soil	Soil	Reg	2	G	N	X	X	X		

Special Instructions: Hold SPLP until directed by project team.

Relinquished by:	Company	OBG, Part of	Received by:	Company	Condition	Custody Seals Intact
Guedna Desir		Ramboll	Fedex			
Date/Time		7/22/19 17:30		Date/Time	Cooler Temp.	
Relinquished by:	Company		Received by:	Company	Condition	Custody Seals Intact
Fedex						
Date/Time		7/22/19 10:00		Date/Time	Cooler Temp.	

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

Fx: 1019 8802 4953

Bottle #: 3W-071619-24

Initial Assessment AP 1-B

Label Verification

3.3°C - 5.3°C
10:30
18

JC92069: Chain of Custody

Page 1 of 5

SGS 2235 US Highway 130 Dayton, NJ 08810 (P) (732) 329 0200		Chain Of Custody / Analysis Request										AEST Ref: 38609.59645 COC #: PMC-072219 Lab Use Only Lab ID:			
Client Contact: (name, co., address) Stephen Miller@Honeywell.com Honeywell International 301 Plainfield Road, Suite 330 Syracuse, New York 13212		EDD To: Michael Miller, Chuck Sharpe Sampler: CH/GD/AB P O # Site Code Analysis Turnaround Time: Standard - N Rush Charges Authorized for - Y 2 weeks - 1 week - Y Next Day -		Site Name: Portfolio Material Characterization Location of Site: Syracuse, NY Job No. 072219 Lab Proj # Lab ID											
Hardcopy Report To: Michael Miller Invoice To: Steve Miller		Sample Identification		Sample Date Sample Time Sample Type Sample Matrix Sample Purpose # of Cont.		Field Filtered Sample # Modified Method 537 SW12765IM [1.4-Dioxane] SW1312 SPLP Modified Method 537									
Location ID Start Depth (ft) End Depth (ft) Field Sample ID		Sample Date Sample Time Sample Type Sample Matrix Sample Purpose # of Cont.		Units G N X X X G N X X X G N X X X G N X X X G N X X X G N X X X G N X X G N X											
1 LCP-I.LINDGF-01 2 LCP-I.LINDGF-02 3 LCP-I.LINDGF-03 4 LCP-I.LINDGF-04 5 LCP-I.LINDGF-05 6 LCP-I.LINDBR-01 7 LCP-FB-072219 8 LCP-FRB-072219 9 10 11 12		7/22/2019 15:00 Soil Soil Reg 2 7/22/2019 15:20 Soil Soil Reg 2 7/22/2019 15:40 Soil Soil Reg 2 7/22/2019 15:50 Soil Soil Reg 2 7/22/2019 16:00 Soil Soil Reg 2 7/22/2019 16:10 Soil Soil Reg 2 7/22/2019 11:40 QC Water EB 3 7/22/2019 8:45 QC Water FB 2		Lab Sample Numbers											
Special Instructions: Hold SPLP until directed by project team.															
Relinquished by: Guedna Desir Date/Time: 7/22/19 17:30 Company:		OBG, Part of Ramboll Received by: Fedex Date/Time: 7/23/19 0:00 Company:		Condition: Cooler Temp. Custody Seals Intact											
Relinquished by: Fedex Date/Time: 7/23/19 0:00 Company:		Received by: [Signature] Date/Time: 7/23/19 0:00 Company:		Condition: Cooler Temp. Custody Seals Intact											
Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):															

Fr: 1019 2901 8657
 Bottle # SW-071619-24

Initial Assessment AR2-B
 Label Verification

3.2°C
 IR30
 IP

JC92069: Chain of Custody

Page 2 of 5

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	PMC-072219-06	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-6	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M85971.D	1	07/25/19 03:39	CS	07/24/19 15:35	OP21718	E4M3979
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.9	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	56%		10-146%
321-60-8	2-Fluorobiphenyl	51%		10-149%
1718-51-0	Terphenyl-d14	56%		10-170%

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	PMC-072219-06	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-6	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q33352.D	1	07/31/19 01:28	AFL	07/27/19 06:30	F:OP76078	F:S2Q528
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.05 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.2	0.29	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.2	0.23	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.2	0.23	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.2	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.2	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.2	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.2	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.2	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.2	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.2	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.2	0.29	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.2	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.2	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.2	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.686	1.2	0.29	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	1.2	0.29	ug/kg	
754-91-6	PFOSA	ND	1.2	0.29	ug/kg	
2355-31-9	MeFOSAA	ND	2.9	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	2.9	0.58	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		50-150%
	13C5-PFPeA	78%		50-150%
	13C5-PFHxA	80%		50-150%
	13C4-PFHpA	82%		50-150%
	13C8-PFOA	82%		50-150%
	13C9-PFNA	82%		50-150%
	13C6-PFDA	91%		50-150%
	13C7-PFUnDA	90%		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:	PMC-072219-06	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-6	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	92%		50-150%
	13C2-PFTeDA	83%		50-150%
	13C3-PFBS	81%		50-150%
	13C3-PFHxS	82%		50-150%
	13C8-PFOS	85%		50-150%
	13C8-FOSA	79%		50-150%
	d3-MeFOSAA	90%		50-150%
	13C2-6:2FTS	80%		50-150%
	13C2-8:2FTS	92%		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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	PMC-072219-06	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-6R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q35586.D	1	09/07/19 11:26	AFL	08/30/19 08:45	F:OP76624	F:S2Q556
Run #2							

Run	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	0.00647		0.016	0.0040	ug/l	JB
2706-90-3	Perfluoropentanoic acid	ND		0.0080	0.0040	ug/l	
307-24-4	Perfluorohexanoic acid	ND		0.0080	0.0040	ug/l	
375-85-9	Perfluoroheptanoic acid	ND		0.0080	0.0040	ug/l	
335-67-1	Perfluorooctanoic acid	0.00955		0.0080	0.0040	ug/l	
375-95-1	Perfluorononanoic acid	ND		0.0080	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	ND		0.0080	0.0040	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND		0.0080	0.0040	ug/l	
307-55-1	Perfluorododecanoic acid	ND		0.0080	0.0040	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND		0.0080	0.0040	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND		0.0080	0.0040	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND		0.0080	0.0040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND		0.0080	0.0040	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0080	0.0040	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0117		0.0080	0.0040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND		0.0080	0.0040	ug/l	
754-91-6	PFOSA	ND		0.0080	0.0040	ug/l	
2355-31-9	MeFOSAA	ND		0.016	0.0080	ug/l	
2991-50-6	EtFOSAA	ND		0.016	0.0080	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	82%		30-140%
	13C5-PFPeA	81%		40-140%
	13C5-PFHxA	82%		50-150%
	13C4-PFHpA	84%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	86%		50-150%
	13C6-PFDA	88%		50-150%
	13C7-PFUnDA	78%		50-150%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

MCL = Maximum Contamination Level (not available)

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:	PMC-072219-06	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-6R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	72%		50-150%
	13C2-PFTeDA	69%		40-150%
	13C3-PFBS	81%		50-150%
	13C3-PFHxS	82%		50-150%
	13C8-PFOS	83%		50-150%
	13C8-FOSA	84%		30-140%
	d3-MeFOSAA	80%		50-150%
	13C2-6:2FTS	83%		50-150%
	13C2-8:2FTS	106%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (not available) 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:	PMC-072219-06	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-6R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	83.6
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dry Weight, SPLP Leachate ^a	0.03760		kg	1	10/17/19	AFL	SW846 1312
Volume, SPLP Leachate ^a	0.9000		l	1	10/17/19	AFL	SW846 1312
Weight, SPLP Leachate ^a	0.04500		kg	1	10/17/19	AFL	SW846 1312
pH, SPLP Leachate ^a	8.35		su	1	10/17/19	AFL	SW846 1312

(a) Result reported for SPLP Leachate SW846 1312. Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

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Client Sample ID:	PMC-072219-07	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-7	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	79.1
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M85981.D	1	07/25/19 07:04	CS	07/24/19 15:35	OP21718	E4M3979
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	4.2	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		10-146%
321-60-8	2-Fluorobiphenyl	75%		10-149%
1718-51-0	Terphenyl-d14	86%		10-170%

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	PMC-072219-07	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-7	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	79.1
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q33353.D	1	07/31/19 01:43	AFL	07/27/19 06:30	F:OP76078	F:S2Q528
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.3	0.32	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.3	0.25	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.3	0.25	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.3	0.32	ug/kg	
335-67-1	Perfluorooctanoic acid	0.602	1.3	0.32	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	1.3	0.32	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.3	0.32	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.3	0.32	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.3	0.32	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.3	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.3	0.32	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.3	0.32	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.3	0.32	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.3	0.32	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	3.47	1.3	0.32	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.3	0.32	ug/kg	
754-91-6	PFOSA	ND	1.3	0.32	ug/kg	
2355-31-9	MeFOSAA	ND	3.2	0.63	ug/kg	
2991-50-6	EtFOSAA	ND	3.2	0.63	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	74% ^b		50-150%
	13C5-PFPeA	73% ^b		50-150%
	13C5-PFHxA	74% ^b		50-150%
	13C4-PFHpA	76% ^b		50-150%
	13C8-PFOA	75% ^b		50-150%
	13C9-PFNA	73% ^b		50-150%
	13C6-PFDA	81% ^b		50-150%
	13C7-PFUnDA	84% ^b		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:	PMC-072219-07	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-7	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	79.1
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	87% ^b		50-150%
	13C2-PFTeDA	75% ^b		50-150%
	13C3-PFBS	75% ^b		50-150%
	13C3-PFHxS	75% ^b		50-150%
	13C8-PFOS	77% ^b		50-150%
	13C8-FOSA	71% ^b		50-150%
	d3-MeFOSAA	79% ^b		50-150%
	13C2-6:2FTS	74% ^b		50-150%
	13C2-8:2FTS	81% ^c		50-150%

- (a) Analysis performed at SGS Orlando, FL.
(b) Corrected for double ID standard addition.
(c) Corrected for double ID standard addition. Corrected for double ID standard addition.

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

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Report of Analysis

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Client Sample ID:	PMC-072219-07	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-7R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	79.1
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q35588.D	1	09/07/19 11:57	AFL	08/30/19 08:45	F:OP76624	F:S2Q556
Run #2							

Run	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	0.00876		0.016	0.0040	ug/l	JB
2706-90-3	Perfluoropentanoic acid	0.00540		0.0080	0.0040	ug/l	JB
307-24-4	Perfluorohexanoic acid	ND		0.0080	0.0040	ug/l	
375-85-9	Perfluoroheptanoic acid	ND		0.0080	0.0040	ug/l	
335-67-1	Perfluorooctanoic acid	0.0164		0.0080	0.0040	ug/l	
375-95-1	Perfluorononanoic acid	ND		0.0080	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	ND		0.0080	0.0040	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND		0.0080	0.0040	ug/l	
307-55-1	Perfluorododecanoic acid	ND		0.0080	0.0040	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND		0.0080	0.0040	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND		0.0080	0.0040	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND		0.0080	0.0040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND		0.0080	0.0040	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0080	0.0040	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0354		0.0080	0.0040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND		0.0080	0.0040	ug/l	
754-91-6	PFOSA	ND		0.0080	0.0040	ug/l	
2355-31-9	MeFOSAA	ND		0.016	0.0080	ug/l	
2991-50-6	EtFOSAA	ND		0.016	0.0080	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		30-140%
	13C5-PFPeA	92%		40-140%
	13C5-PFHxA	93%		50-150%
	13C4-PFHpA	95%		50-150%
	13C8-PFOA	98%		50-150%
	13C9-PFNA	98%		50-150%
	13C6-PFDA	98%		50-150%
	13C7-PFUnDA	90%		50-150%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

MCL = Maximum Contamination Level (not available)

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:	PMC-072219-07	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-7R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	79.1
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	83%		50-150%
	13C2-PFTeDA	80%		40-150%
	13C3-PFBS	91%		50-150%
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	95%		50-150%
	13C8-FOSA	98%		30-140%
	d3-MeFOSAA	90%		50-150%
	13C2-6:2FTS	95%		50-150%
	13C2-8:2FTS	102%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (not available) 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:	PMC-072219-07	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-7R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	79.1
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dry Weight, SPLP Leachate ^a	0.03560		kg	1	10/17/19	AFL	SW846 1312
Volume, SPLP Leachate ^a	0.9000		l	1	10/17/19	AFL	SW846 1312
Weight, SPLP Leachate ^a	0.04500		kg	1	10/17/19	AFL	SW846 1312
pH, SPLP Leachate ^a	8.23		su	1	10/17/19	AFL	SW846 1312

(a) Result reported for SPLP Leachate SW846 1312. Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	PMC-072219-08	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-8	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	77.4
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M85972.D	1	07/25/19 03:59	CS	07/24/19 15:35	OP21718	E4M3979
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	4.2	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		10-146%
321-60-8	2-Fluorobiphenyl	68%		10-149%
1718-51-0	Terphenyl-d14	77%		10-170%

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	PMC-072219-08	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-8	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	77.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q33354.D	1	07/31/19 01:58	AFL	07/27/19 06:30	F:OP76078	F:S2Q528
Run #2							

Run #	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.3	0.32	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.3	0.26	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.3	0.26	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.3	0.32	ug/kg	
335-67-1	Perfluorooctanoic acid	0.471	1.3	0.32	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	1.3	0.32	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.3	0.32	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.3	0.32	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.3	0.32	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.3	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.3	0.32	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.3	0.32	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.3	0.32	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.3	0.32	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	2.92	1.3	0.32	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.3	0.32	ug/kg	
754-91-6	PFOSA	ND	1.3	0.32	ug/kg	
2355-31-9	MeFOSAA	ND	3.2	0.65	ug/kg	
2991-50-6	EtFOSAA	ND	3.2	0.65	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.32	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		50-150%
	13C5-PFPeA	79%		50-150%
	13C5-PFHxA	80%		50-150%
	13C4-PFHpA	82%		50-150%
	13C8-PFOA	83%		50-150%
	13C9-PFNA	81%		50-150%
	13C6-PFDA	90%		50-150%
	13C7-PFUnDA	91%		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:	PMC-072219-08	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-8	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	77.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	94%		50-150%
	13C2-PFTeDA	85%		50-150%
	13C3-PFBS	82%		50-150%
	13C3-PFHxS	81%		50-150%
	13C8-PFOS	85%		50-150%
	13C8-FOSA	76%		50-150%
	d3-MeFOSAA	89%		50-150%
	13C2-6:2FTS	81%		50-150%
	13C2-8:2FTS	91%		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

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Report of Analysis

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Client Sample ID:	PMC-072219-08	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-8R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	77.4
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q35589.D	1	09/07/19 12:13	AFL	08/30/19 08:45	F:OP76624	F:S2Q556
Run #2							

Run	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	0.00954		0.016	0.0040	ug/l	JB
2706-90-3	Perfluoropentanoic acid	0.00552		0.0080	0.0040	ug/l	JB
307-24-4	Perfluorohexanoic acid	ND		0.0080	0.0040	ug/l	
375-85-9	Perfluoroheptanoic acid	ND		0.0080	0.0040	ug/l	
335-67-1	Perfluorooctanoic acid	0.0166		0.0080	0.0040	ug/l	
375-95-1	Perfluorononanoic acid	ND		0.0080	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	ND		0.0080	0.0040	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND		0.0080	0.0040	ug/l	
307-55-1	Perfluorododecanoic acid	ND		0.0080	0.0040	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND		0.0080	0.0040	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND		0.0080	0.0040	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND		0.0080	0.0040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND		0.0080	0.0040	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0080	0.0040	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0396		0.0080	0.0040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND		0.0080	0.0040	ug/l	
754-91-6	PFOSA	ND		0.0080	0.0040	ug/l	
2355-31-9	MeFOSAA	ND		0.016	0.0080	ug/l	
2991-50-6	EtFOSAA	ND		0.016	0.0080	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	86%		30-140%
	13C5-PFPeA	86%		40-140%
	13C5-PFHxA	88%		50-150%
	13C4-PFHpA	89%		50-150%
	13C8-PFOA	92%		50-150%
	13C9-PFNA	91%		50-150%
	13C6-PFDA	91%		50-150%
	13C7-PFUnDA	83%		50-150%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

MCL = Maximum Contamination Level (not available)

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:	PMC-072219-08	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-8R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	77.4
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	77%		50-150%
	13C2-PFTeDA	72%		40-150%
	13C3-PFBS	85%		50-150%
	13C3-PFHxS	86%		50-150%
	13C8-PFOS	89%		50-150%
	13C8-FOSA	91%		30-140%
	d3-MeFOSAA	83%		50-150%
	13C2-6:2FTS	89%		50-150%
	13C2-8:2FTS	94%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (not available) 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:	PMC-072219-08	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-8R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	77.4
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dry Weight, SPLP Leachate ^a	0.03480		kg	1	10/17/19	AFL	SW846 1312
Volume, SPLP Leachate ^a	0.9000		l	1	10/17/19	AFL	SW846 1312
Weight, SPLP Leachate ^a	0.04500		kg	1	10/17/19	AFL	SW846 1312
pH, SPLP Leachate ^a	8.36		su	1	10/17/19	AFL	SW846 1312

(a) Result reported for SPLP Leachate SW846 1312. Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	PMC-072219-10	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-10	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	71.9
Method:	SW846 8270D BY SIM SW846 3546		
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M85970.D	1	07/25/19 03:18	CS	07/24/19 15:35	OP21718	E4M3979
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	4.6	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	58%		10-146%
321-60-8	2-Fluorobiphenyl	54%		10-149%
1718-51-0	Terphenyl-d14	59%		10-170%

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	PMC-072219-10	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-10	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	71.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q33358.D	1	07/31/19 02:57	AFL	07/27/19 06:30	F:OP76078	F:S2Q528
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.03 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.4	0.34	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.4	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.4	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.4	0.34	ug/kg	
335-67-1	Perfluorooctanoic acid	0.903	1.4	0.34	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	1.4	0.34	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.4	0.34	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.4	0.34	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.4	0.34	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.4	0.34	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.4	0.34	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.4	0.34	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.4	0.34	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.4	0.34	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	5.21	1.4	0.34	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.4	0.34	ug/kg	
754-91-6	PFOSA	ND	1.4	0.34	ug/kg	
2355-31-9	MeFOSAA	ND	3.4	0.69	ug/kg	
2991-50-6	EtFOSAA	ND	3.4	0.69	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.4	0.34	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.4	0.34	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	73%		50-150%
	13C5-PFPeA	71%		50-150%
	13C5-PFHxA	73%		50-150%
	13C4-PFHpA	75%		50-150%
	13C8-PFOA	75%		50-150%
	13C9-PFNA	73%		50-150%
	13C6-PFDA	81%		50-150%
	13C7-PFUnDA	85%		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:	PMC-072219-10	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-10	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	71.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	87%		50-150%
	13C2-PFTeDA	76%		50-150%
	13C3-PFBS	74%		50-150%
	13C3-PFHxS	74%		50-150%
	13C8-PFOS	76%		50-150%
	13C8-FOSA	74%		50-150%
	d3-MeFOSAA	80%		50-150%
	13C2-6:2FTS	74%		50-150%
	13C2-8:2FTS	82%		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

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Client Sample ID:	PMC-072219-10	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-10R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	71.9
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q35591.D	1	09/07/19 12:45	AFL	08/30/19 08:45	F:OP76624	F:S2Q556
Run #2							

Run	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND		0.016	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND		0.0080	0.0040	ug/l	
307-24-4	Perfluorohexanoic acid	ND		0.0080	0.0040	ug/l	
375-85-9	Perfluoroheptanoic acid	ND		0.0080	0.0040	ug/l	
335-67-1	Perfluorooctanoic acid	0.00881		0.0080	0.0040	ug/l	
375-95-1	Perfluorononanoic acid	ND		0.0080	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	ND		0.0080	0.0040	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND		0.0080	0.0040	ug/l	
307-55-1	Perfluorododecanoic acid	ND		0.0080	0.0040	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND		0.0080	0.0040	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND		0.0080	0.0040	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND		0.0080	0.0040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND		0.0080	0.0040	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0080	0.0040	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0393		0.0080	0.0040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND		0.0080	0.0040	ug/l	
754-91-6	PFOSA	ND		0.0080	0.0040	ug/l	
2355-31-9	MeFOSAA	ND		0.016	0.0080	ug/l	
2991-50-6	EtFOSAA	ND		0.016	0.0080	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	91%		30-140%
	13C5-PFPeA	92%		40-140%
	13C5-PFHxA	93%		50-150%
	13C4-PFHpA	94%		50-150%
	13C8-PFOA	97%		50-150%
	13C9-PFNA	96%		50-150%
	13C6-PFDA	99%		50-150%
	13C7-PFUnDA	87%		50-150%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

MCL = Maximum Contamination Level (not available)

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: PMC-072219-10**Lab Sample ID:** JC92069-10R**Date Sampled:** 07/22/19**Matrix:** SO - Soil**Date Received:** 07/23/19**Method:** EPA 537M BY ID EPA 537 MOD**Percent Solids:** 71.9**Project:** OBGNY: Portfolio Material Characterization, Geddes, NY

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	80%		50-150%
	13C2-PFTeDA	76%		40-150%
	13C3-PFBS	91%		50-150%
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	94%		50-150%
	13C8-FOSA	96%		30-140%
	d3-MeFOSAA	90%		50-150%
	13C2-6:2FTS	94%		50-150%
	13C2-8:2FTS	112%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit

MCL = Maximum Contamination Level (not available)

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:	PMC-072219-10	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-10R	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	71.9
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dry Weight, SPLP Leachate ^a	0.03240		kg	1	10/17/19	AFL	SW846 1312
Volume, SPLP Leachate ^a	0.9000		l	1	10/17/19	AFL	SW846 1312
Weight, SPLP Leachate ^a	0.04500		kg	1	10/17/19	AFL	SW846 1312
pH, SPLP Leachate ^a	8.69		su	1	10/17/19	AFL	SW846 1312

(a) Result reported for SPLP Leachate SW846 1312. Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	PMC-072219-12		
Lab Sample ID:	JC92069-11	Date Sampled:	07/22/19
Matrix:	SO - Soil	Date Received:	07/23/19
Method:	SW846 8270D BY SIM SW846 3546	Percent Solids:	73.6
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M85974.D	1	07/25/19 04:40	CS	07/24/19 15:35	OP21718	E4M3979
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	4.5	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		10-146%
321-60-8	2-Fluorobiphenyl	75%		10-149%
1718-51-0	Terphenyl-d14	82%		10-170%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	PMC-072219-12	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-11	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	73.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q33359.D	1	07/31/19 03:12	AFL	07/27/19 06:30	F:OP76078	F:S2Q528
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.03 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.3	0.33	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.3	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.3	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.3	0.33	ug/kg	
335-67-1	Perfluorooctanoic acid	0.664	1.3	0.33	ug/kg	J
375-95-1	Perfluorononanoic acid	ND	1.3	0.33	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.3	0.33	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.3	0.33	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.3	0.33	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.3	0.33	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.3	0.33	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.3	0.33	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.3	0.33	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.3	0.33	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	3.58	1.3	0.33	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.3	0.33	ug/kg	
754-91-6	PFOSA	ND	1.3	0.33	ug/kg	
2355-31-9	MeFOSAA	ND	3.3	0.67	ug/kg	
2991-50-6	EtFOSAA	ND	3.3	0.67	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.33	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	83%		50-150%
	13C5-PFPeA	81%		50-150%
	13C5-PFHxA	83%		50-150%
	13C4-PFHpA	85%		50-150%
	13C8-PFOA	84%		50-150%
	13C9-PFNA	83%		50-150%
	13C6-PFDA	91%		50-150%
	13C7-PFUnDA	96%		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:	PMC-072219-12	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-11	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	73.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	98%		50-150%
	13C2-PFTeDA	90%		50-150%
	13C3-PFBS	84%		50-150%
	13C3-PFHxS	84%		50-150%
	13C8-PFOS	87%		50-150%
	13C8-FOSA	78%		50-150%
	d3-MeFOSAA	90%		50-150%
	13C2-6:2FTS	83%		50-150%
	13C2-8:2FTS	92%		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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	PMC-072219-12	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-11T	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	73.6
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q37052.D	1	10/06/19 15:59	AFL	10/04/19 15:30	F:OP77162	F:S2Q577
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	0.139		0.016	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0138		0.0080	0.0040	ug/l	
307-24-4	Perfluorohexanoic acid	0.00448		0.0080	0.0040	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND		0.0080	0.0040	ug/l	
335-67-1	Perfluorooctanoic acid	0.0200		0.0080	0.0040	ug/l	
375-95-1	Perfluorononanoic acid	ND		0.0080	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	ND		0.0080	0.0040	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND		0.0080	0.0040	ug/l	
307-55-1	Perfluorododecanoic acid	ND		0.0080	0.0040	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND		0.0080	0.0040	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND		0.0080	0.0040	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND		0.0080	0.0040	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND		0.0080	0.0040	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0080	0.0040	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0404		0.0080	0.0040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND		0.0080	0.0040	ug/l	
754-91-6	PFOSA	ND		0.0080	0.0040	ug/l	
2355-31-9	MeFOSAA	ND		0.016	0.0080	ug/l	
2991-50-6	EtFOSAA	ND		0.016	0.0080	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.016	0.0040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		30-140%
	13C5-PFPeA	97%		40-140%
	13C5-PFHxA	97%		50-150%
	13C4-PFHpA	98%		50-150%
	13C8-PFOA	104%		50-150%
	13C9-PFNA	107%		50-150%
	13C6-PFDA	113%		50-150%
	13C7-PFUnDA	94%		50-150%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

MCL = Maximum Contamination Level (not available)

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:	PMC-072219-12	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-11T	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	73.6
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	OBGNY: Portfolio Material Characterization, Geddes, NY		

PFAS List

SPLP Leachate method SW846 1312

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFDoDA	88%		50-150%
	13C2-PFTeDA	87%		40-150%
	13C3-PFBS	98%		50-150%
	13C3-PFHxS	103%		50-150%
	13C8-PFOS	104%		50-150%
	13C8-FOSA	76%		30-140%
	d3-MeFOSAA	92%		50-150%
	13C2-6:2FTS	101%		50-150%
	13C2-8:2FTS	102%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (not available) 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:	PMC-072219-12	Date Sampled:	07/22/19
Lab Sample ID:	JC92069-11T	Date Received:	07/23/19
Matrix:	SO - Soil	Percent Solids:	73.6
Project:	OBGNYS: Portfolio Material Characterization, Geddes, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dry Weight, SPLP Leachate ^a	0.033100		kg	1	10/04/19 17:00	AFL	SW846 1312
Volume, SPLP Leachate ^a	0.90000		l	1	10/04/19 17:00	AFL	SW846 1312
Weight, SPLP Leachate ^a	0.045000		kg	1	10/04/19 17:00	AFL	SW846 1312
pH, SPLP Leachate ^a	7.18		su	1	10/04/19 17:00	AFL	SW846 1312

(a) Result reported for SPLP Leachate SW846 1312. Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

4.17
4

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, NY 13209

Mail: P.O. Box 117, Warners, N.Y. 13164

Phone: (315) 638-2706 Fax: (315) 638-1544



GEOTECHNICAL TESTING RESULTS

July 24, 2019

O'Brien & Gere Engineers
333 West Washington Street
Syracuse, NY 13221
<via email>

Attn: Guedna Desir

Re.: Laboratory Soils Testing
LCP (LCP-070119B)
Geddes, NY

Dear Guedna,

Pursuant to your request, Kenney Geotechnical Engineering Services, PLLC has completed the laboratory testing for the referenced project. Testing included Particle Size Analysis (ASTM D422), Atterberg Limits (ASTM D4318), pH Content (ASTM D4972), and Organic Content (ASTM D5268). The detailed laboratory results are attached.

Thank you for the opportunity to be of service, and please contact me at your convenience with any questions you may have.

Respectfully submitted,
KENNEY GEOTECHNICAL ENGINEERING SERVICES, PLLC

Christopher M. Kenney, P.E.



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-01			100.0	98.8	95.5	94.3	93.3	90.7	84.8	67.2	56.5

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

REMARKS: _____

PREWASH _____
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY _____
NOT PREWASHED _____



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

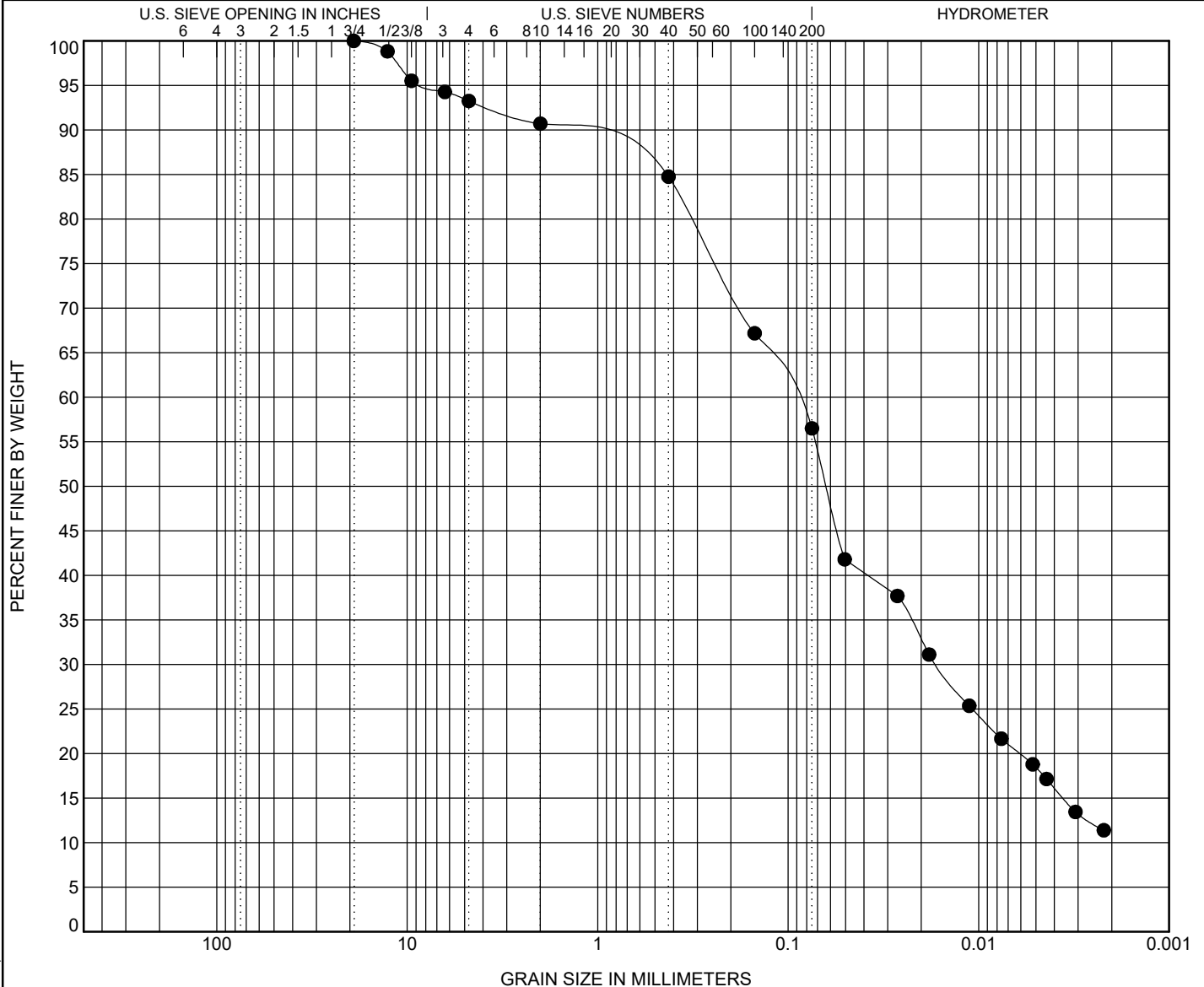
GRAIN SIZE DISTRIBUTION

CLIENT O-BRIEN & GERE

PROJECT NAME LCP

PROJECT NUMBER 2018-141

PROJECT LOCATION SYRACUSE, NY



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu	
●	LCP-070119B-01	1.0	SANDY LEAN CLAY(CL)					36	18	18		
☒												
▲												
★												
◎												
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay			
●	LCP-070119B-01	1.0	19.1	0.094	0.017		6.7	36.7	38.1	18.4		
☒												
▲												
★												
◎												

GRAIN SIZE - GINT STD US LAB.GDT - 7/22/19 09:01 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\2019-XXX OBG.GPJ



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-08		100.0	95.5	91.4	74.8	74.8	66.9	41.8	30.0	22.2	19.0

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS: Gravel sized particles broke into smaller particles during sample wash and sieve procedures.

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

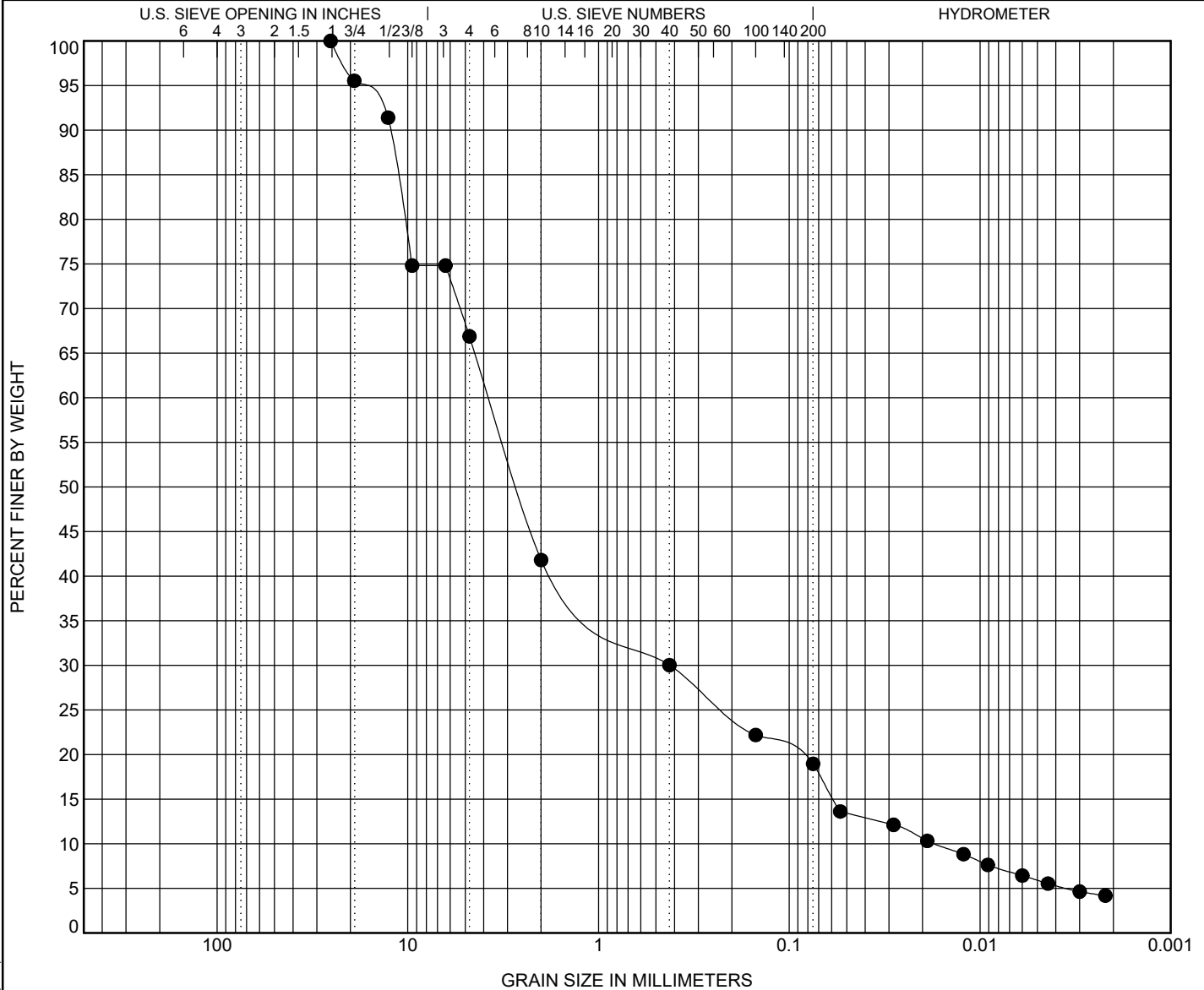
GRAIN SIZE DISTRIBUTION

CLIENT O-BRIEN & GERE

PROJECT NAME LCP

PROJECT NUMBER 2018-141

PROJECT LOCATION SYRACUSE, NY





Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-09		100.0	97.8	89.1	70.3	70.3	62.1	38.2	22.9	16.8	14.3

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS: Gravel sized particles broke into smaller particles during sample wash and sieve procedures.

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

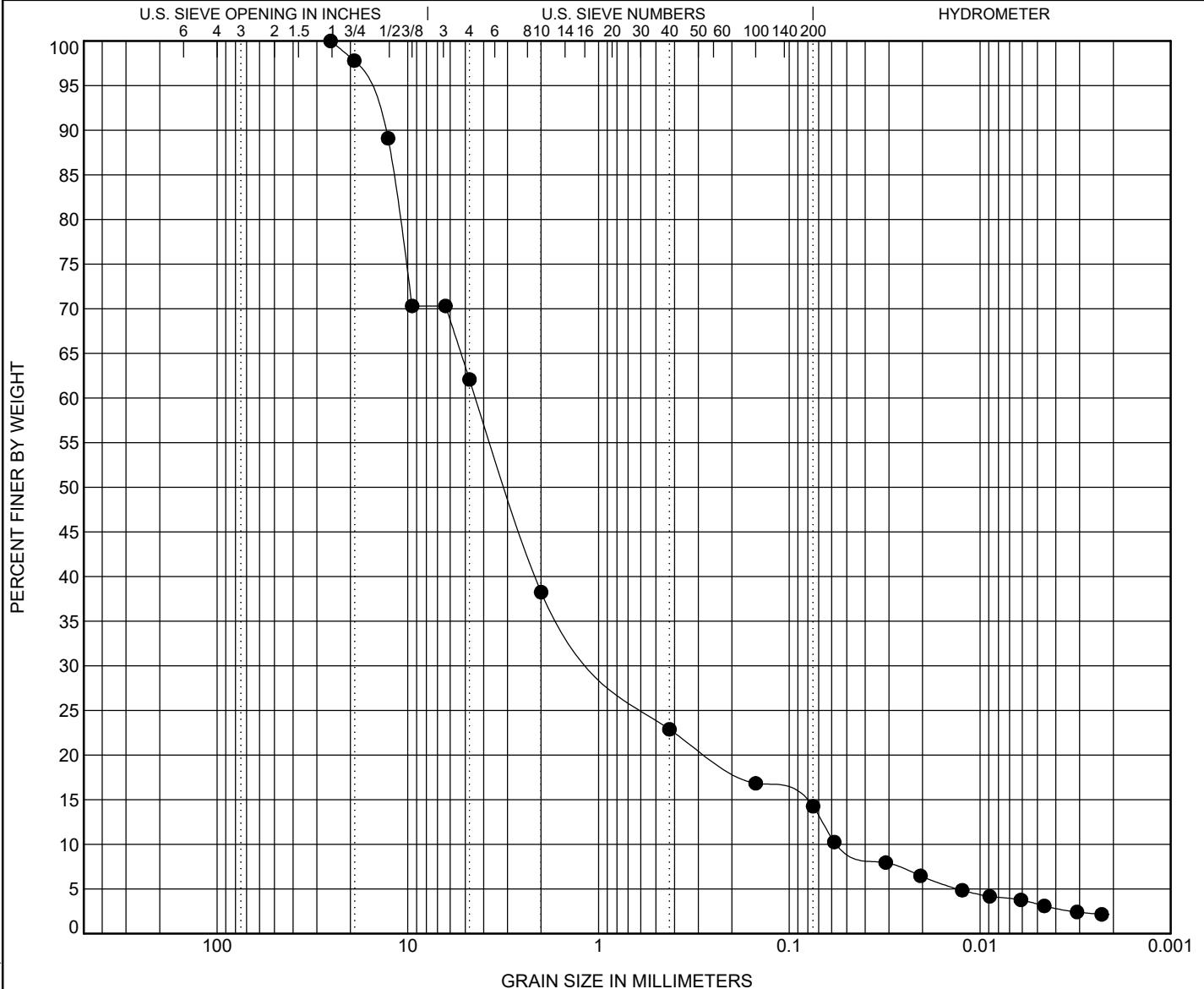
GRAIN SIZE DISTRIBUTION

CLIENT O-BRIEN & GERE

PROJECT NAME LCP

PROJECT NUMBER 2018-141

PROJECT LOCATION SYRACUSE, NY



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu
● LCP-070119B-09	1.0	SILTY, CLAYEY SAND with GRAVEL(SC-SM)					22	17	5	3.17	81.22
☒											
▲											
★											
◎											
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt		%Clay	
● LCP-070119B-09	1.0	25.4	4.405	0.871	0.054	37.9	47.8	11.0		3.3	
☒											
▲											
★											
◎											

GRAIN SIZE - GINT STD US LAB.GDT - 7/22/19 09:01 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\2019-XXX OBG.GPJ



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-10		100.0	94.6	73.0	73.0	61.0	38.0	37.6	26.5	16.7	13.8

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS: Gravel sized particles broke into smaller particles during sample wash and sieve procedures.

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

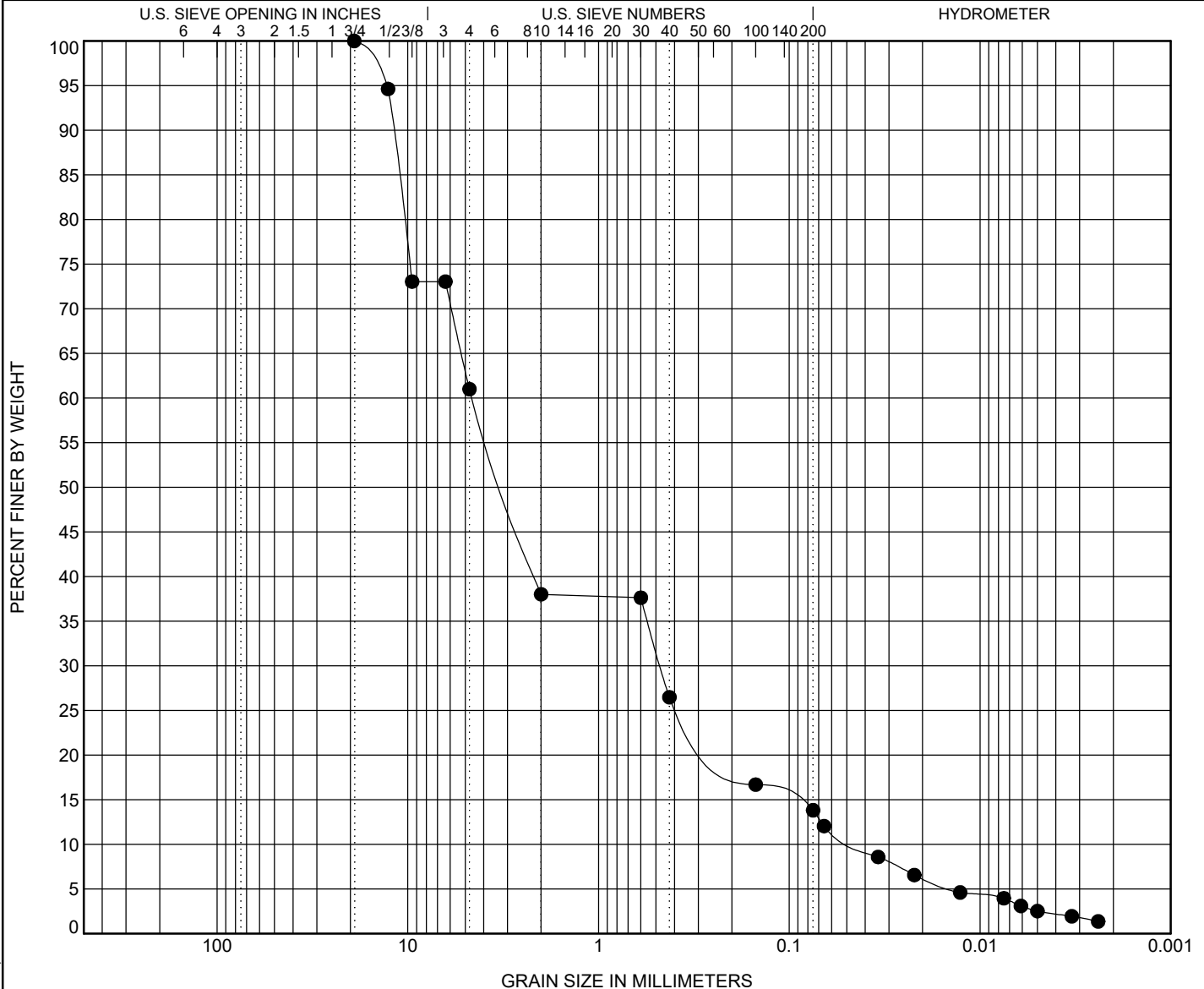
GRAIN SIZE DISTRIBUTION

CLIENT O-BRIEN & GERE

PROJECT NAME LCP

PROJECT NUMBER 2018-141

PROJECT LOCATION SYRACUSE, NY



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu
● LCP-070119B-10	1.0	SILTY SAND with GRAVEL (SM)					NP	NP	NP	1.10	102.38
☒											
▲											
★											
◎											
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt		%Clay	
● LCP-070119B-10	1.0	19.1	4.576	0.474	0.045	39.0	47.2	11.3		2.5	
☒											
▲											
★											
◎											

GRAIN SIZE - GINT STD US LAB.GDT - 7/22/19 09:01 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\2019-XXX OBG.GPJ



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2018-141

Project Name: LCP
Project Location: Geddes, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
LCP-070119B-11		100.0	91.3	84.0	59.2	53.6	39.5	19.3	13.4	13.1	12.8

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS: Gravel sized particles broke into smaller particles during sample wash and sieve procedures.

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

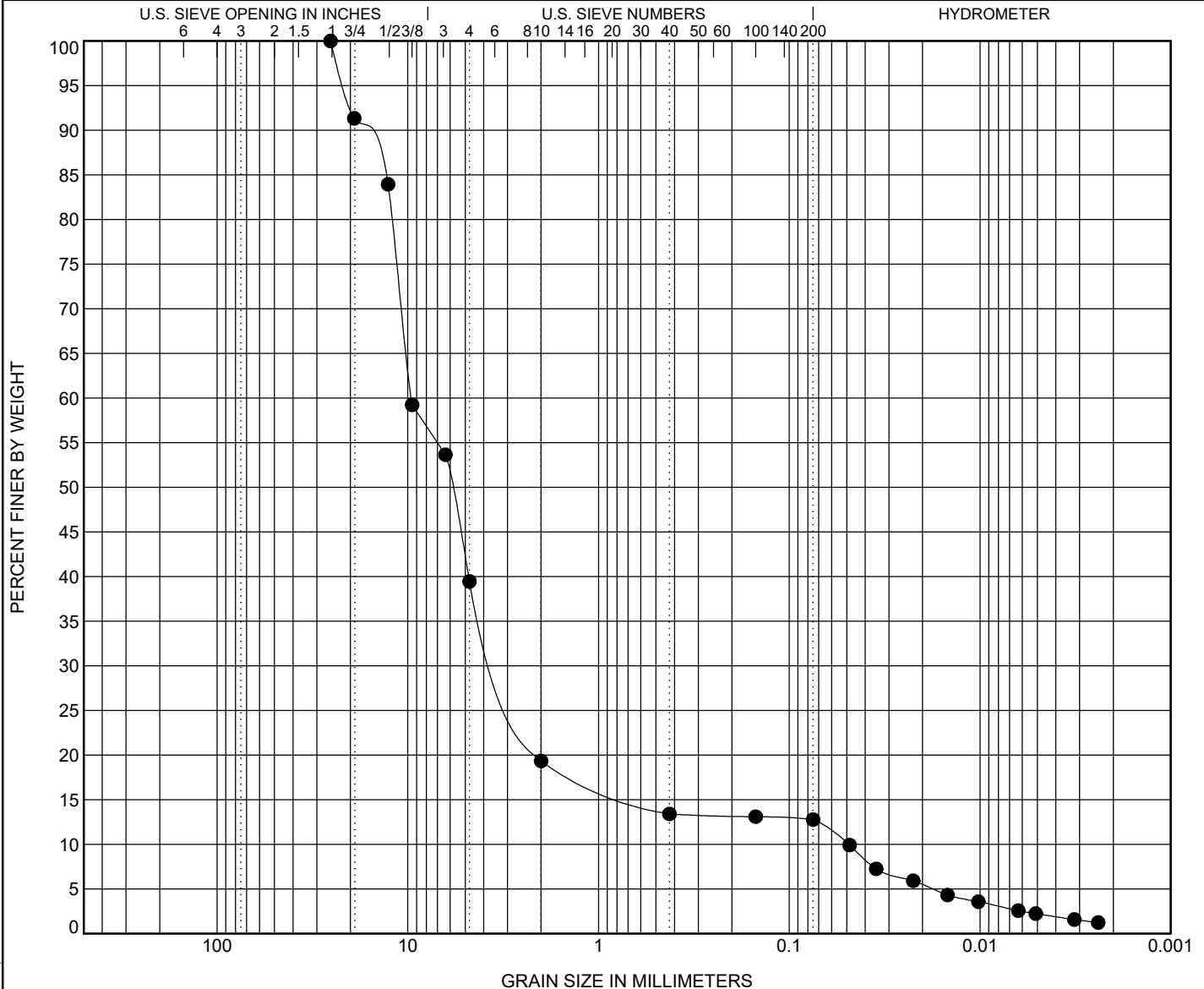
GRAIN SIZE DISTRIBUTION

CLIENT O-BRIEN & GERE

PROJECT NAME LCP

PROJECT NUMBER 2018-141

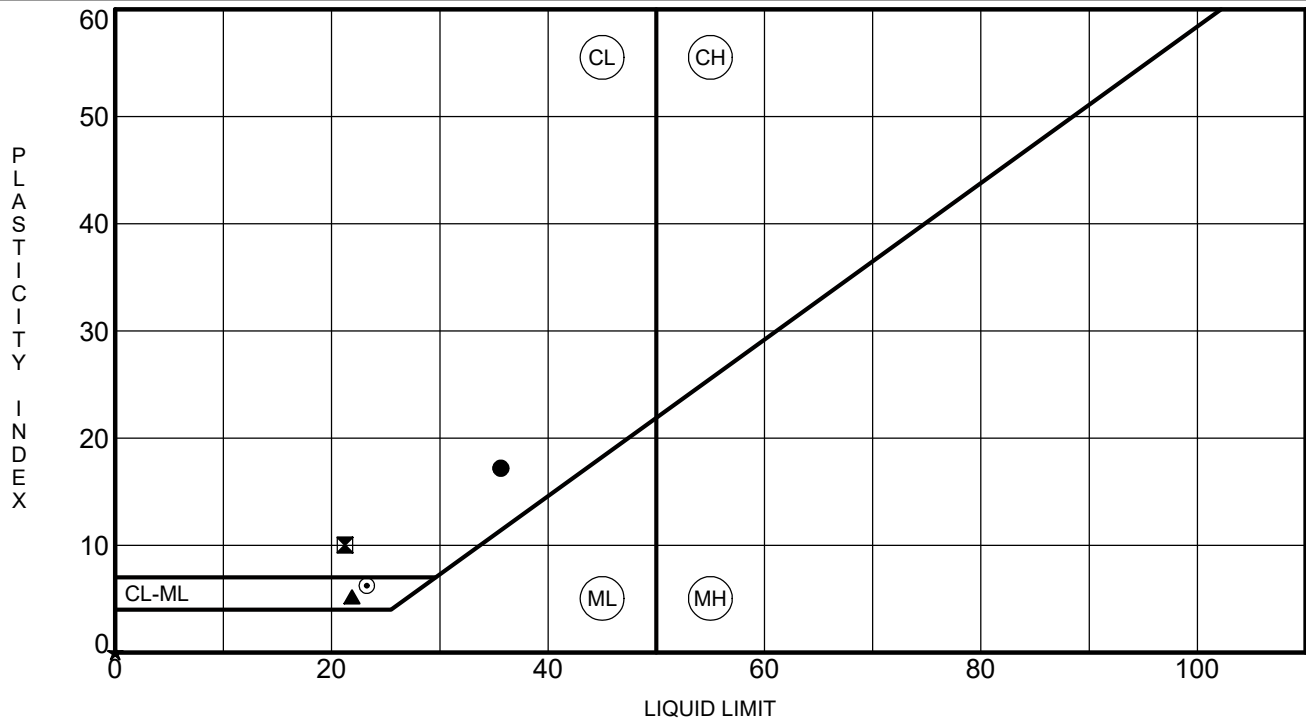
PROJECT LOCATION SYRACUSE, NY



ATTERBERG LIMITS' RESULTS

PROJECT NAME LCP

PROJECT LOCATION SYRACUSE, NY

[illegible]

ATTERBERG LIMITS - GINT STD US LAB.GDT - 7/22/19 07:58 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\2019-XXX OBG.GPJ

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, N.Y. 13209

Mail: P.O. Box 117 Warners, N.Y. 13209

Phone: (315) 638-2706 Fax: (315) 638-1544



Moisture Content Testing

Client: O'Brien & Gere Engineering **Project Name:** LCP
Project Number: 2018-141 **Project Location:** Geddes, New York

TEST METHOD: ASTM D2974 (via D5268)

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

Sample ID	Moisture Content (%)
LCP-070119B-01	26.7
LCP-070119B-08	5.8
LCP-070119B-09	3.7
LCP-070119B-10	5.9
LCP-070119B-11	4.9

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, N.Y. 13209

Mail: P.O. Box 117 Warners, N.Y. 13209

Phone: (315) 638-2706 Fax: (315) 638-1544



Organic Content Testing

Client: O'Brien & Gere Engineering **Project Name:** LCP
Project Number: 2018-141 **Project Location:** Geddes, New York

TEST METHOD: ASTM D5268

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

Sample ID	Organic Content (% by mass)
LCP-070119B-01	5.6

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, N.Y. 13209

Mail: P.O. Box 117 Warners, N.Y. 13209

Phone: (315) 638-2706



pH Testing

Client: O'Brien & Gere Engineering **Project Name:** LCP
Project Number: 2018-141 **Project Location:** Geddes, New York

TEST METHOD: ASTM D4972; METHOD A & B

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

Sample ID	pH of Soil (in water)
LCP-070119B-01	7.4

Kenney Geotechnical Engineering Services, PLLC

Office: 6901 Herman Road, Syracuse, NY 13209

Mail: P.O. Box 117, Warners, N.Y. 13164

Phone: (315) 638-2706 Fax: (315) 638-1544



GEOTECHNICAL TESTING RESULTS

August 5, 2019

O'Brien & Gere Engineers
333 West Washington Street
Syracuse, NY 13221
<via email>

Attn: Guedna Desir

Re.: Laboratory Soils Testing
Portfolio Material Characterization
Syracuse, NY

Dear Guedna,

Pursuant to your request, Kenney Geotechnical Engineering Services, PLLC has completed the laboratory testing for the referenced project. Testing included Particle Size Analysis (ASTM D422), Atterberg Limits (ASTM D4318), pH Content (ASTM D4972), and Organic Content (ASTM D5268). The detailed laboratory results are attached.

Thank you for the opportunity to be of service, and please contact me at your convenience with any questions you may have.

Respectfully submitted,
KENNEY GEOTECHNICAL ENGINEERING SERVICES, PLLC

Christopher M. Kenney, P.E.



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2019-113

Project Name: Portfolio Material Characterization
Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-01			100.0	95.8	94.3	92.2	91.0	88.2	82.6	68.1	57.8

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

REMARKS: _____

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY _____
NOT PREWASHED _____



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

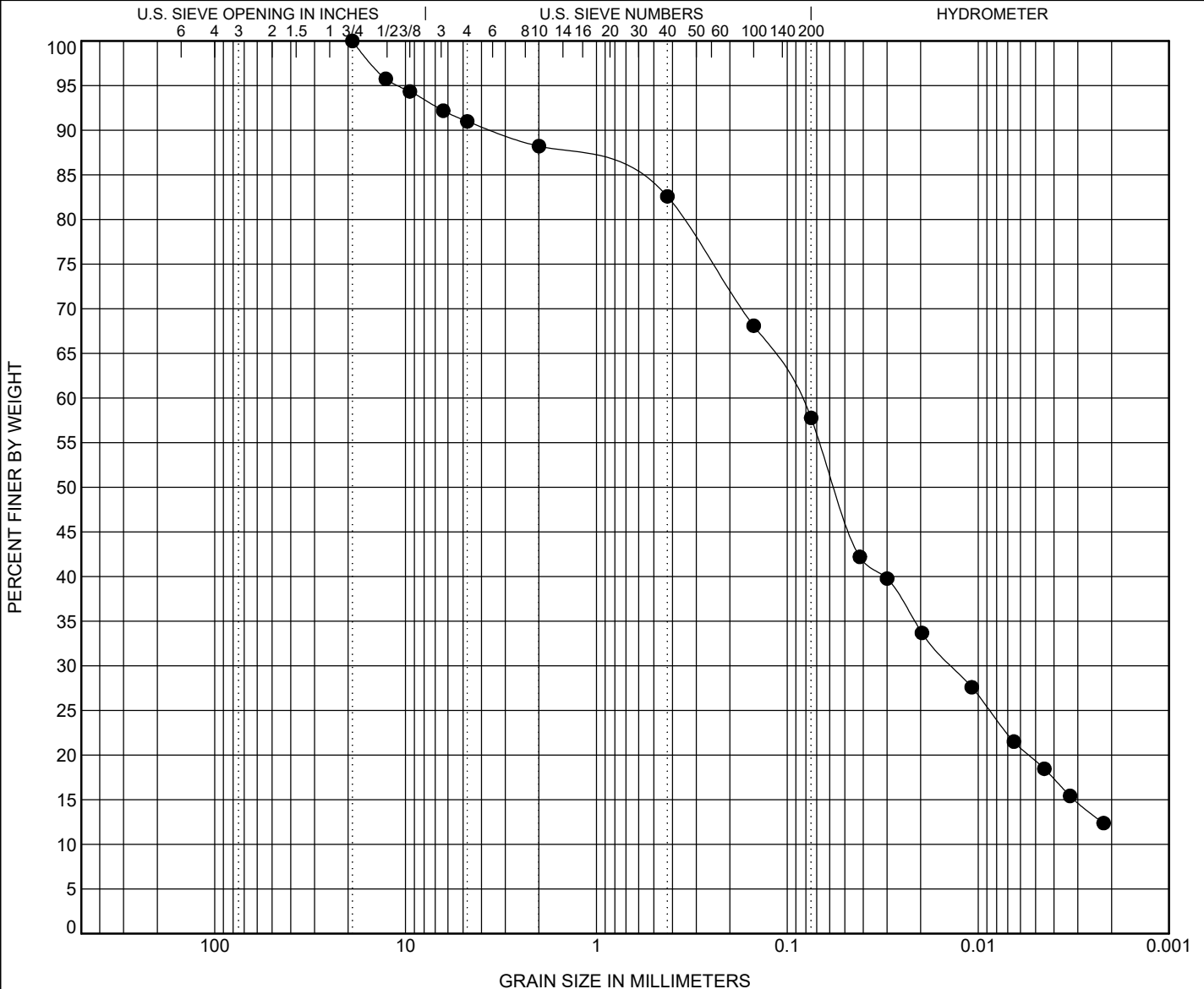
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification				LL	PL	PI	Cc	Cu
●	PMC072319A-01	1.0	SANDY SILT(ML)				NP	NP	NP	
☒										
▲										
★										
◎										
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
●	PMC072319A-01	1.0	19	0.087	0.014	9.0	33.2	38.4	19.3	
☒										
▲										
★										
◎										

GRAIN SIZE - GINT STD US LAB.GDT - 8/2/19 12:56 - \\192.168.0.250\PUBLIC\2019\SPECIAL INSPECTIONS\2019-113_O'BRIEN & GERE LAB TESTING\07-23-2019 DROP OFF\GINT\2019-113_OBG LAB TESTING 7-23 DROPOFF.GPJ



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering

Project Number: 2019-113

Project Name: Portfolio Material Characterization

Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-02			100.0	93.9	92.4	91.1	90.9	88.4	93.5	70.2	58.6

PERFORMED BY: R. Stachowiak

CHECKED BY: C. Kenney, P.E.

PREWASH

REMARKS:

ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY
NOT PREWASHED



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

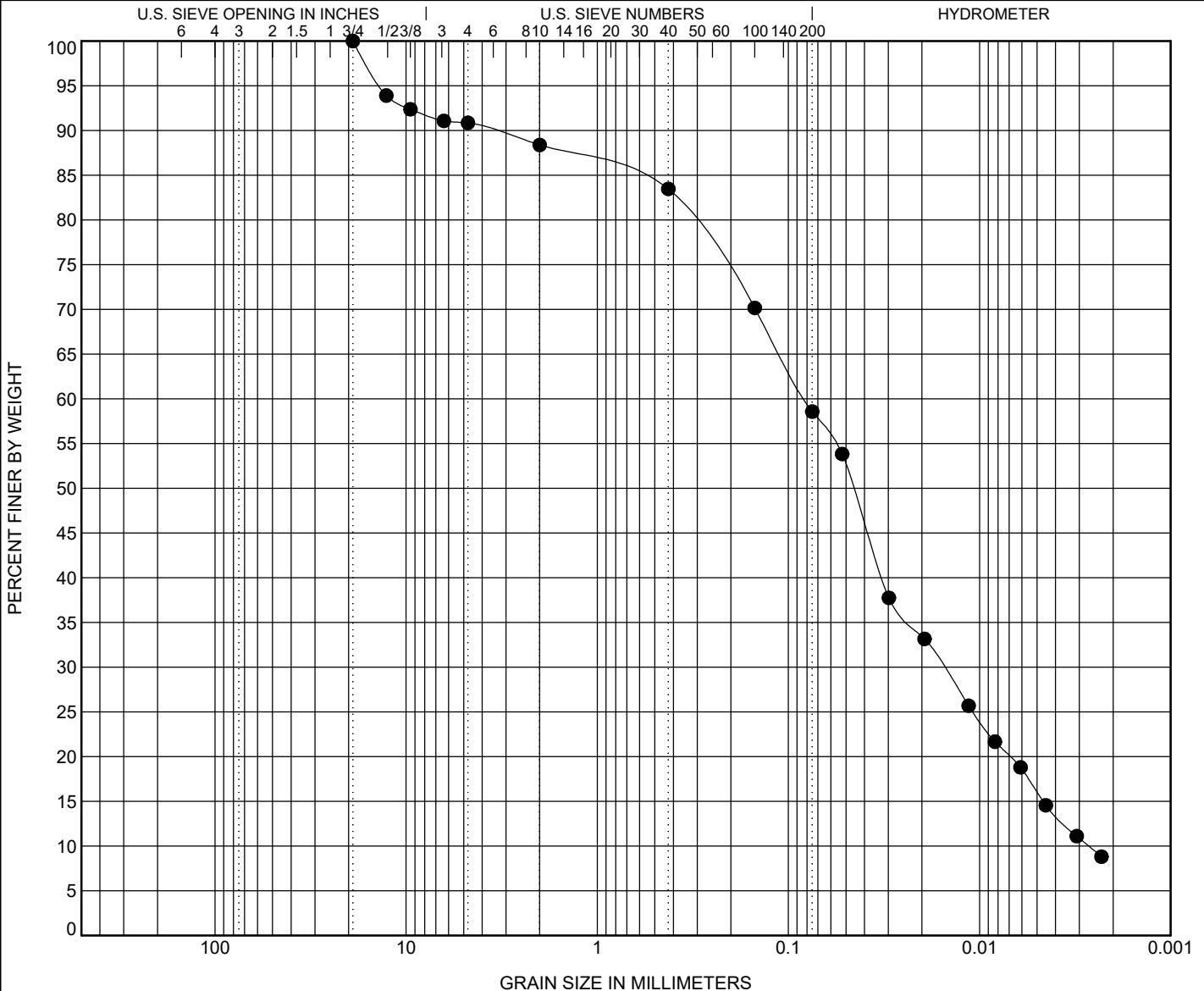
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu
● PMC072319A-02 1.0		SANDY SILT (ML)					NP	NP	NP	1.10	30.43
☒											
▲											
★											
◎											
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt		%Clay	
● PMC072319A-02 1.0		19	0.082	0.015	0.003	9.1	32.3	42.5		16.0	
☒											
▲											
★											
◎											

GRAIN SIZE - GINT STD US LAB.GDT - 8/2/19 12:57 - \\192.168.0.250\PUBLIC\2019\SPECIAL INSPECTIONS\2019-113_O'BRIEN & GERE LAB TESTING\07-23-2019 DROP OFF\GINT\2019-113_OBG LAB TESTING 7-23 DROP OFF.GPJ



Kenney Geotechnical Services, PLLC
6901 Herman Road
Syracuse, NY 13209
Telephone: 315-638-2706
Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering

Project Number: 2019-113

Project Name: Portfolio Material Characterization

Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-03	100.0	90.4	90.4	89.7	89.1	88.0	87.3	85.3	80.5	66.6	58.1

PERFORMED BY: R. Stachowiak

CHECKED BY: C. Kenney, P.E.

PREWASH

REMARKS:

ENTIRE SAMPLE X

MASS RETAINED ON #200 ONLY

NOT PREWASHED



Kenney Geotechnical Engineering Services, PLLC
6901 Herman Road
Syracuse, NY 13209
315-638-2706

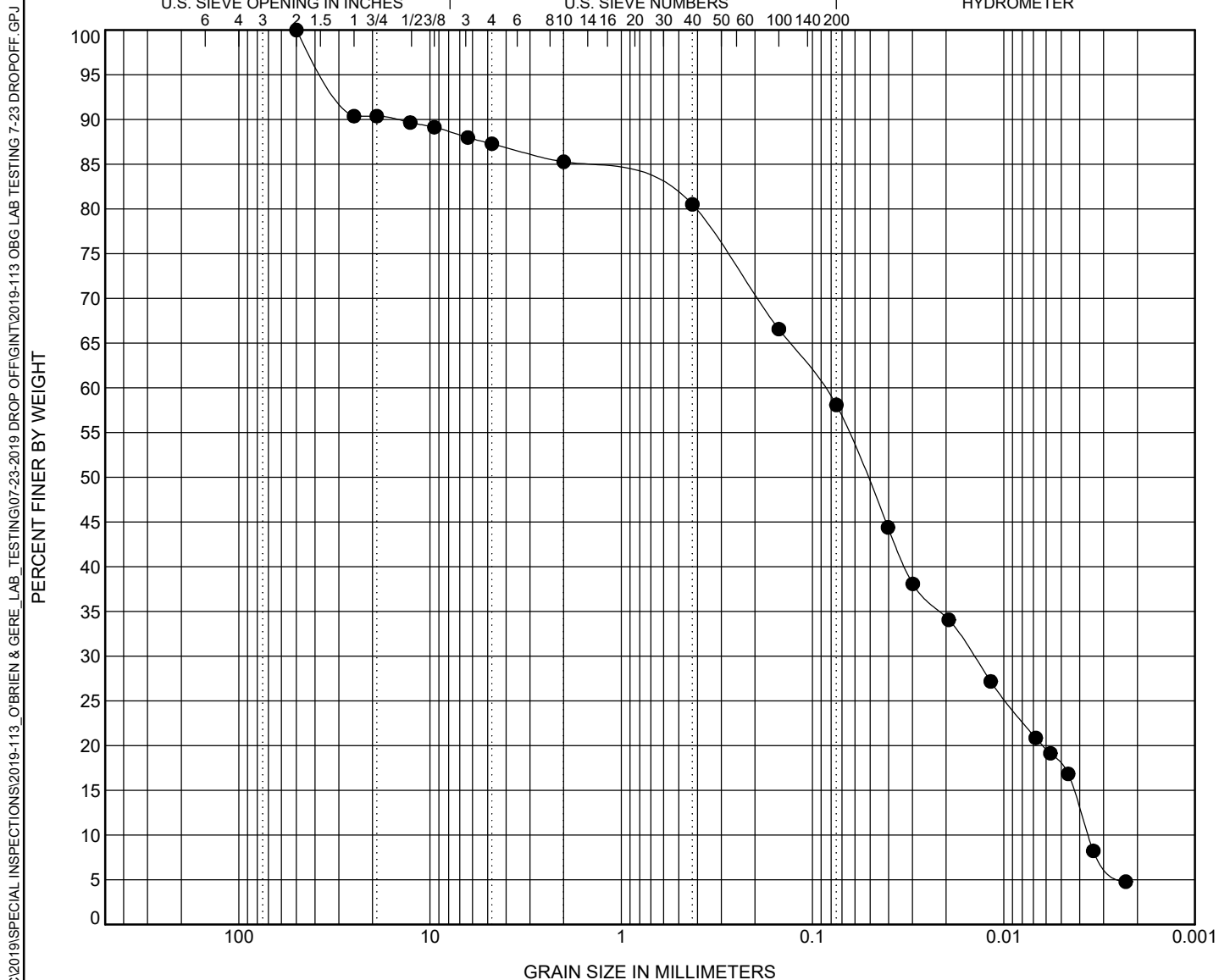
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification				LL	PL	PI	Cc	Cu
● PMC072319A-03 1.0		SANDY SILT (ML)				40	33	7	0.65	24.24
☒										
▲										
★										
◎										
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
● PMC072319A-03 1.0		50	0.088	0.014	0.004	12.7	29.2	40.4	17.7	
☒										
▲										
★										
◎										



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SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering

Project Number: 2019-113

Project Name: Portfolio Material Characterization

Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-04			100.0	98.6	98.3	96.8	96.0	94.0	88.7	74.0	62.5

PERFORMED BY: R. Stachowiak

CHECKED BY: C. Kenney, P.E.

REMARKS:

PREWASH
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY _____
NOT PREWASHED _____



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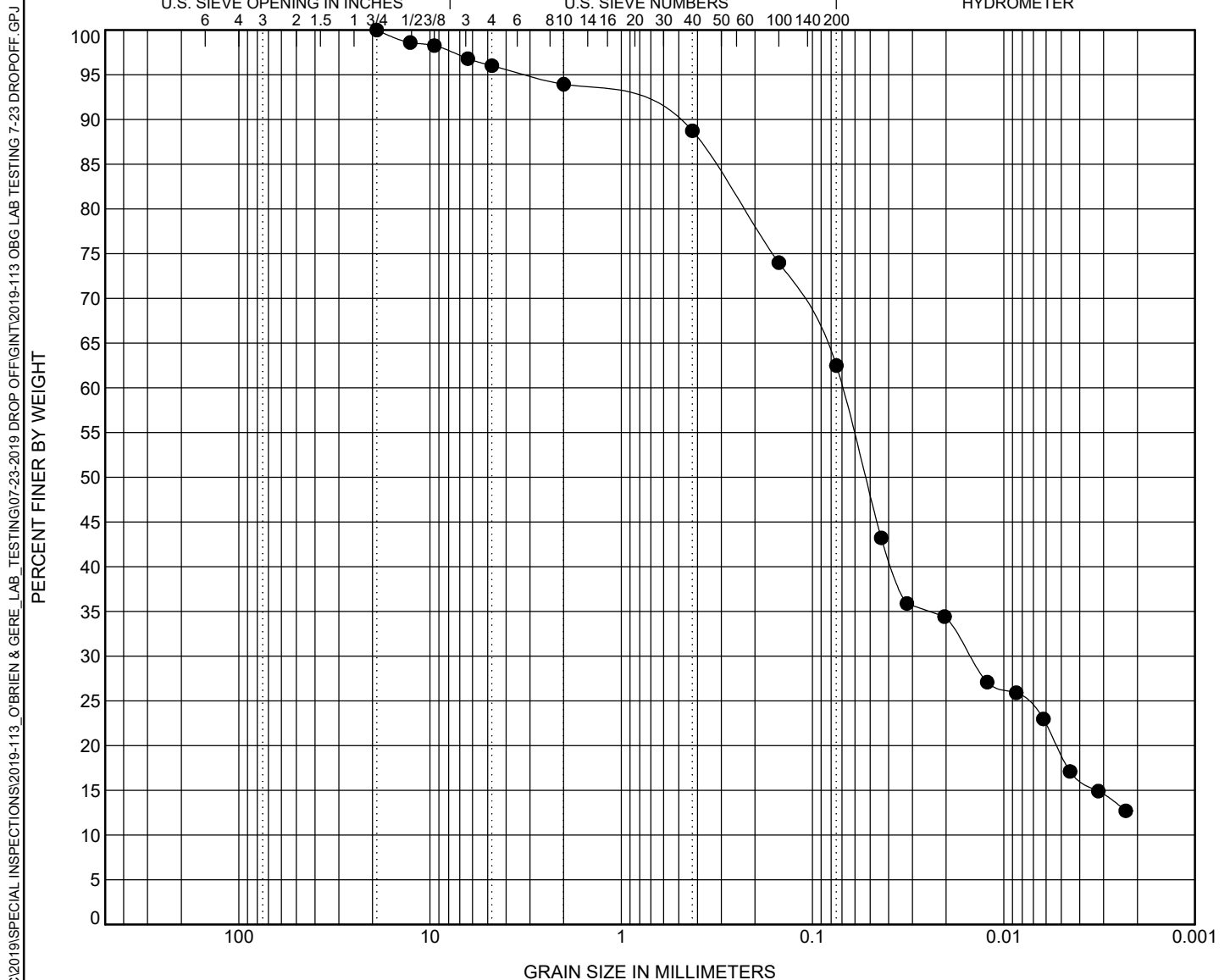
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification				LL	PL	PI	Cc	Cu
●	PMC072319A-04	1.0	SANDY SILT (ML)				40	33	7	
☒										
▲										
★										
◎										
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
●	PMC072319A-04	1.0	19	0.07	0.015	4.0	33.5	43.4	19.0	
☒										
▲										
★										
◎										

GRAIN SIZE - GINT STD US LAB.GDT - 8/2/19 12:57 - \\192.168.0.250\PUBLIC\2019\SPECIAL INSPECTIONS\2019-113_O'BRIEN & GERE LAB TESTING\07-23-2019 DROP OFF\GINT\2019-113_OBG LAB TESTING 7-23 DROPOFF.GPJ



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SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2019-113

Project Name: Portfolio Material Characterization
Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-05		100.0	93.4	91.3	90.7	88.1	87.0	83.0	76.3	63.1	52.4

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

REMARKS: _____

PREWASH _____
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY _____
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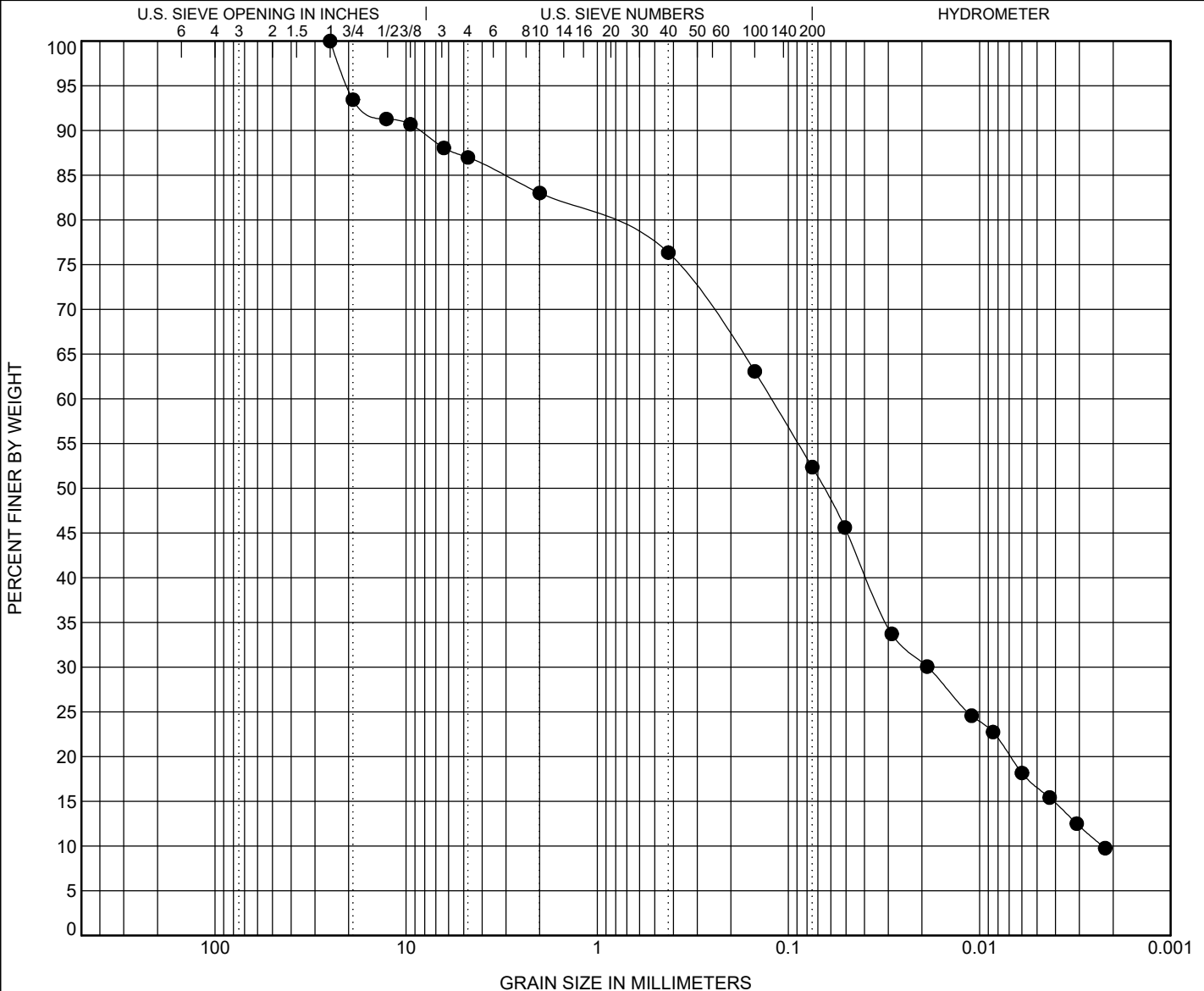
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu
● PMC072319A-05 1.0		SANDY SILT (ML)					NP	NP	NP	1.25	54.26
☒											
▲											
★											
◎											
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt		%Clay	
● PMC072319A-05 1.0		25	0.123	0.019	0.002	13.0	34.6	35.7		16.7	
☒											
▲											
★											
◎											

GRAIN SIZE - GINT STD US LAB.GDT - 8/2/19 12:57 - \\192.168.0.250\PUBLIC\2019\SPECIAL INSPECTIONS\2019-113_O'BRIEN & GERE LAB TESTING\07-23-2019 DROP OFF\GINT\2019-113_OBG LAB TESTING 7-23 DROP OFF.GPJ



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SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2019-113

Project Name: Portfolio Material Characterization
Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-06					100.0	99.3	98.7	97.6	92.6	81.7	69.8

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS:

PREWASH
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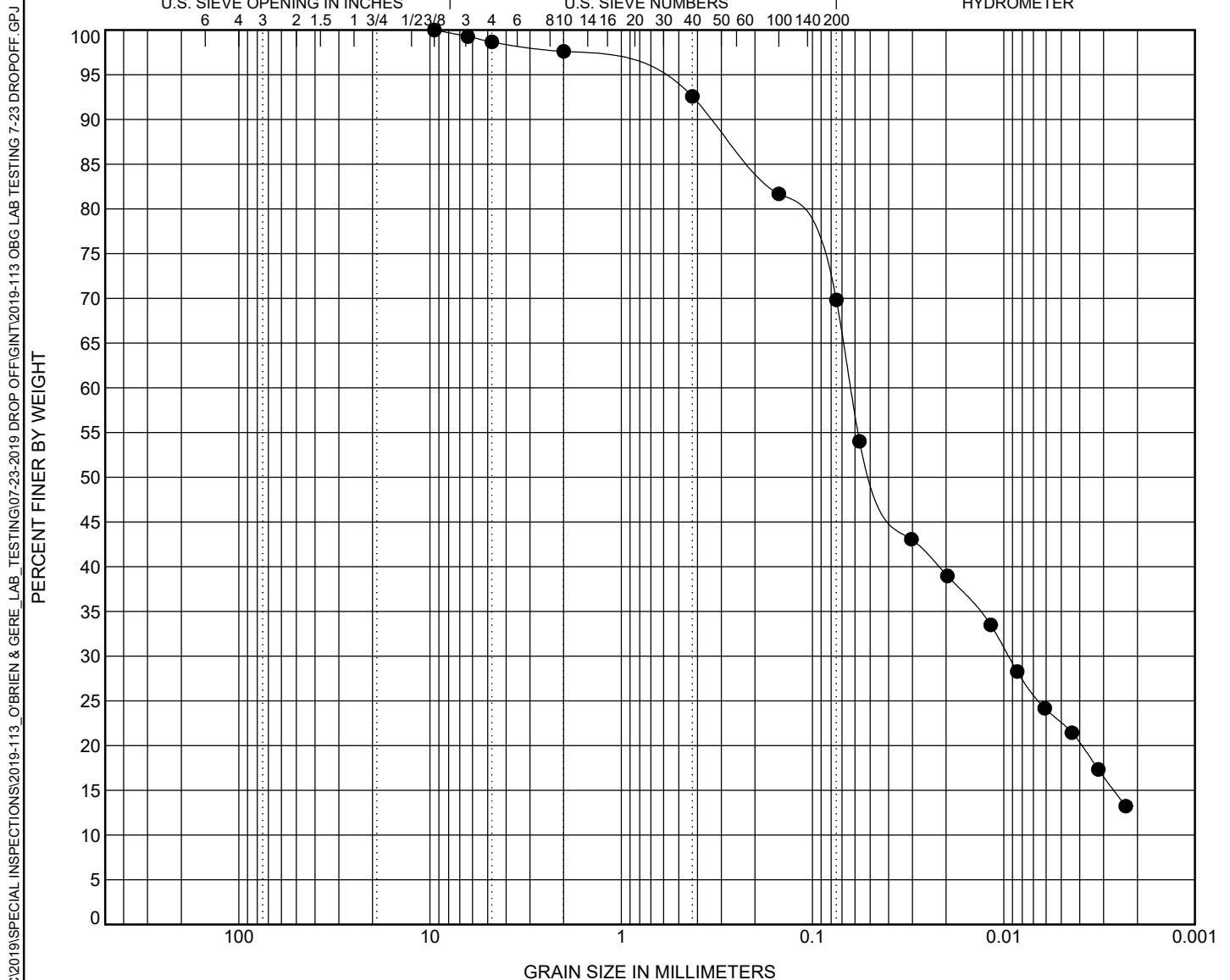
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION





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Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2019-113

Project Name: Portfolio Material Characterization
Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-07		100.0	98.0	97.3	96.2	94.6	93.3	89.9	83.3	69.0	59.2

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

REMARKS: _____

PREWASH _____
ENTIRE SAMPLE X
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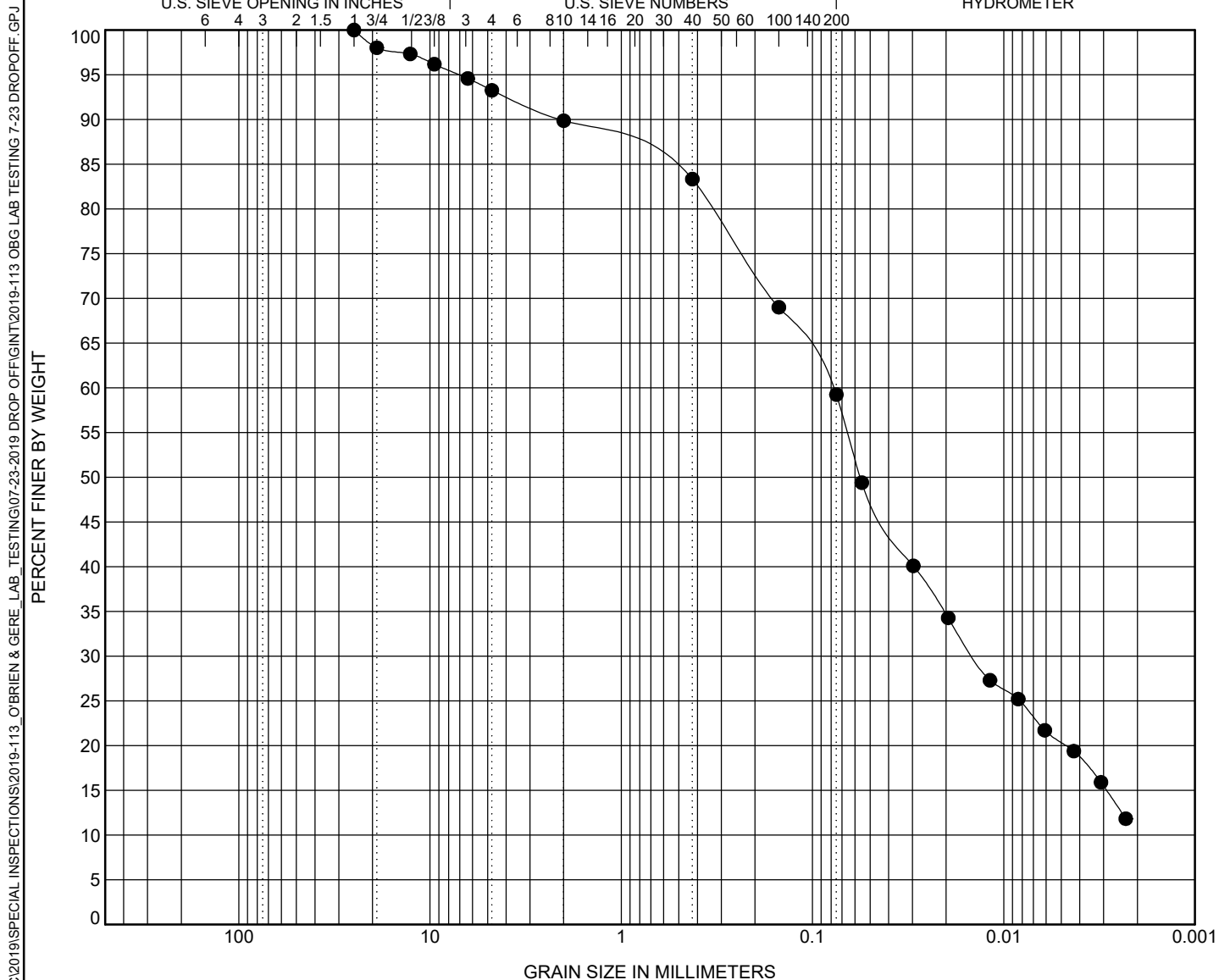
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu
●	PMC072319A-071.0	SANDY SILT(ML)					38	28	10		
☒											
▲											
★											
◎											
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
●	PMC072319A-071.0	25	0.079	0.014		6.7	34.0	38.9	20.4		
☒											
▲											
★											
◎											

GRAIN SIZE - GINT STD US LAB.GDT - 8/2/19 12:57 - \\192.168.0.250\PUBLIC\2019\SPECIAL INSPECTIONS\2019-113_O'BRIEN & GERE LAB TESTING\07-23-2019 DROP OFF\GINT\2019-113_OBG LAB TESTING 7-23 DROP OFF.GPJ



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SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2019-113

Project Name: Portfolio Material Characterization
Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-08				100.0	99.7	98.5	98.3	97.0	93.4	81.6	70.4

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS:

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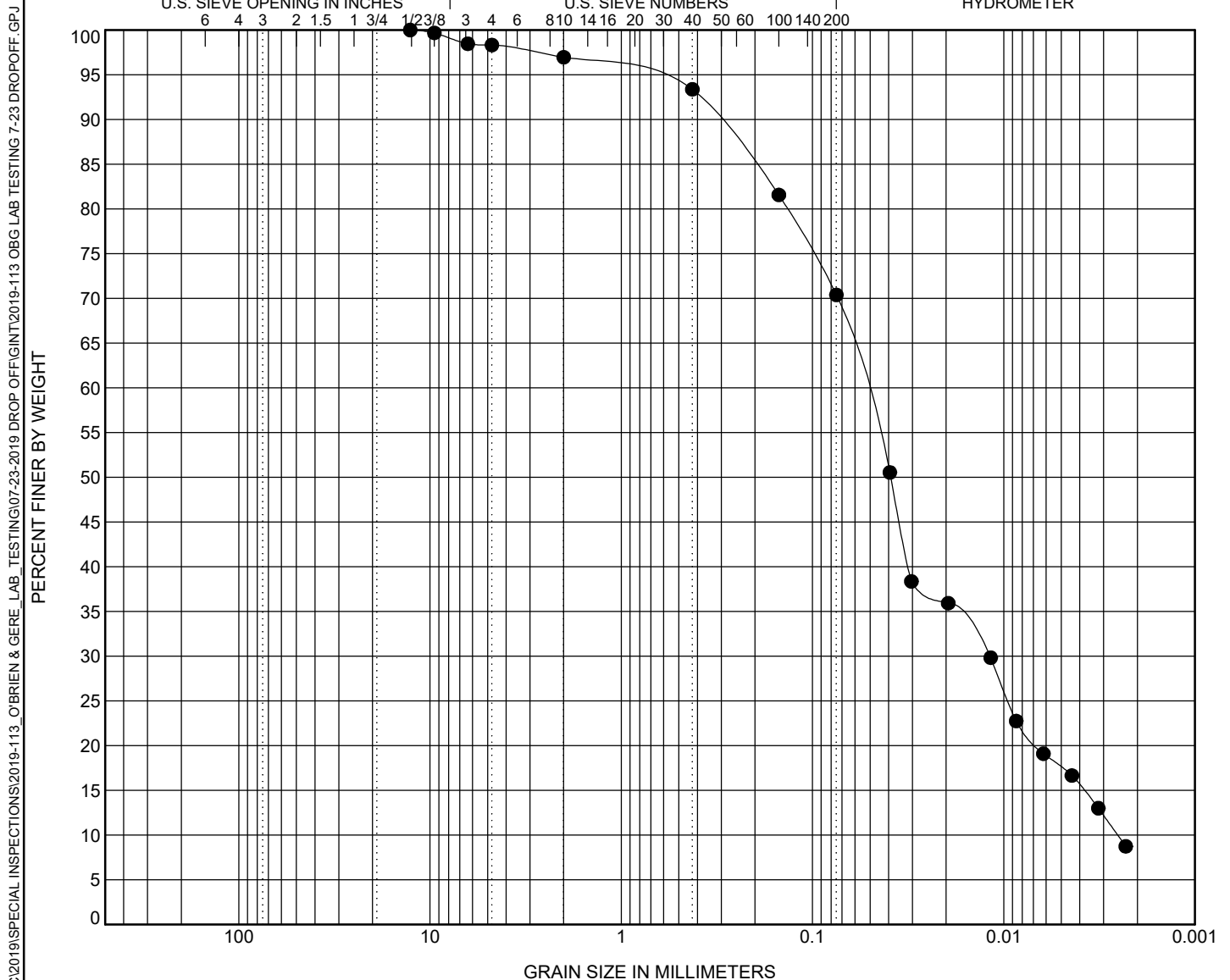
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu	
●	PMC072319A-08	1.0	SILT with SAND(ML)					NP	NP	NP	1.04	21.11
☒												
▲												
★												
◎												
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay			
●	PMC072319A-08	1.0	12.7	0.054	0.012	0.003	1.7	27.9	52.8	17.6		
☒												
▲												
★												
◎												

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SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering

Project Number: 2019-113

Project Name: Portfolio Material Characterization

Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-09			100.0	96.9	96.6	95.3	94.2	92.1	87.3	74.6	65.7

PERFORMED BY: R. Stachowiak

CHECKED BY: C. Kenney, P.E.

REMARKS:

PREWASH
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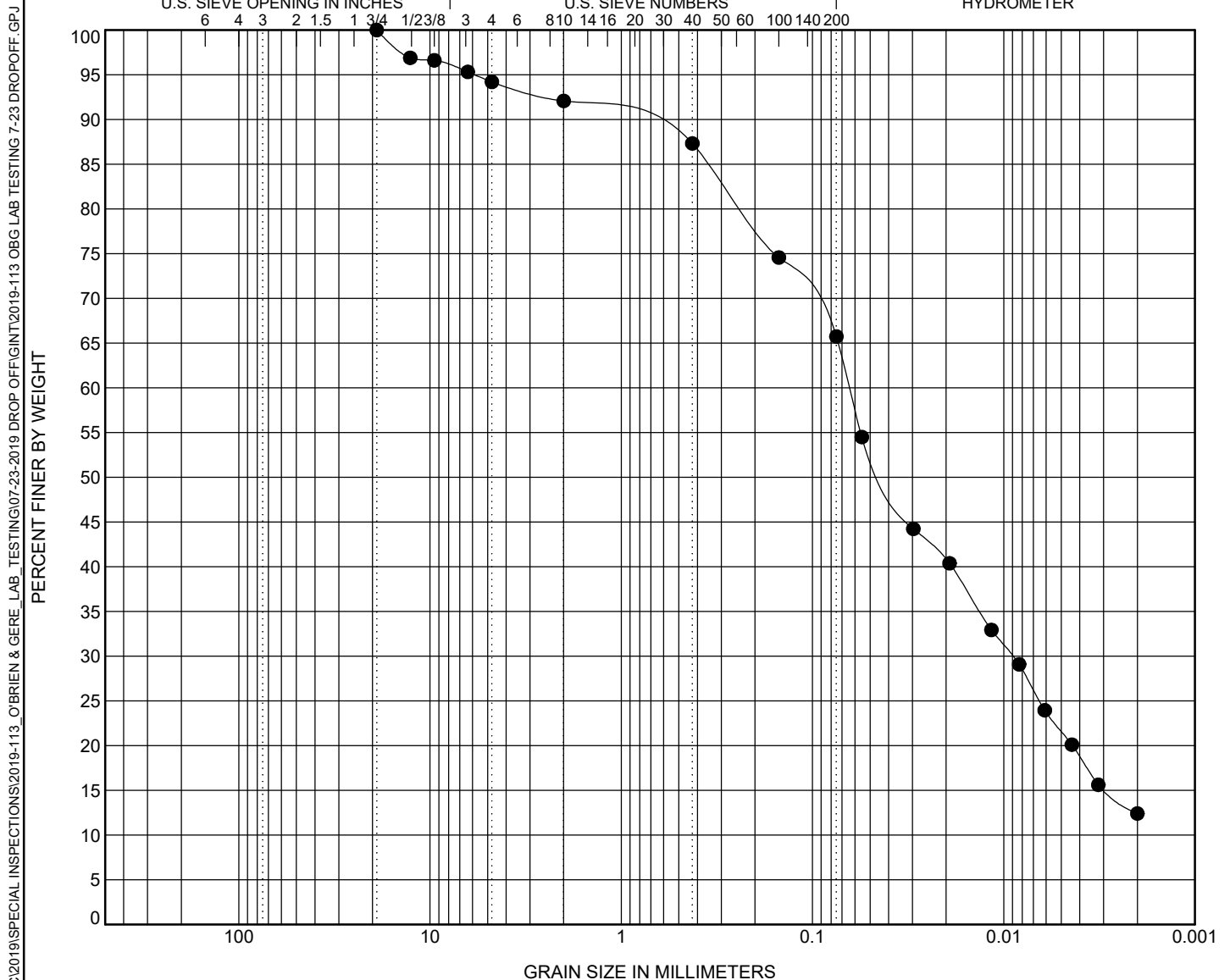
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu
●	PMC072319A-09 1.0	SANDY SILT(ML)					NP	NP	NP		
☒											
▲											
★											
◎											
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
●	PMC072319A-09 1.0	19	0.064	0.009		5.8	28.5	44.1	21.6		
☒											
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Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2019-113

Project Name: Portfolio Material Characterization
Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-10				100.0	100.0	95.5	91.8	85.6	74.5	60.8	51.1

PERFORMED BY: R. Stachowiak
CHECKED BY: C. Kenney, P.E.

REMARKS:

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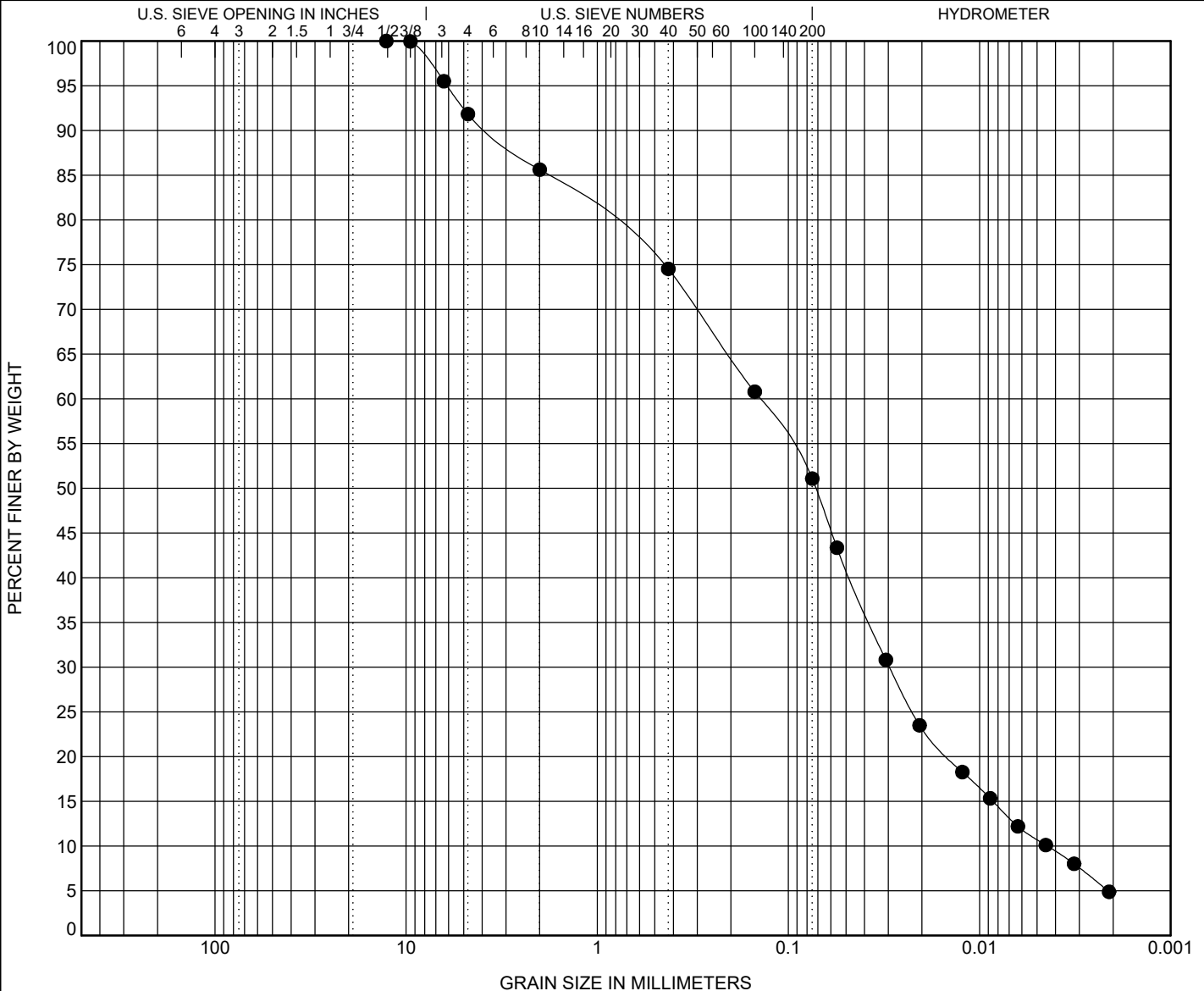
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification					LL	PL	PI	Cc	Cu
● PMC072319A-10 1.0		SANDY SILT (ML)					NP	NP	NP	1.39	32.05
☒											
▲											
★											
◎											
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt		%Clay	
● PMC072319A-10 1.0		12.7	0.142	0.03	0.004	8.2	40.8	40.3		10.8	
☒											
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★											
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GRAIN SIZE - GINT STD US LAB.GDT - 8/2/19 12:57 - \\192.168.0.250\PUBLIC\2019\SPECIAL INSPECTIONS\2019-113_O'BRIEN & GERE LAB TESTING\07-23-2019 DROP OFF\GINT\2019-113_OBG LAB TESTING 7-23 DROP OFF.GPJ



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SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering

Project Number: 2019-113

Project Name: Portfolio Material Characterization

Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-11			100.0	99.2	97.5	92.5	88.3	80.7	69.7	54.3	47.0

PERFORMED BY: R. Stachowiak

CHECKED BY: C. Kenney, P.E.

REMARKS:

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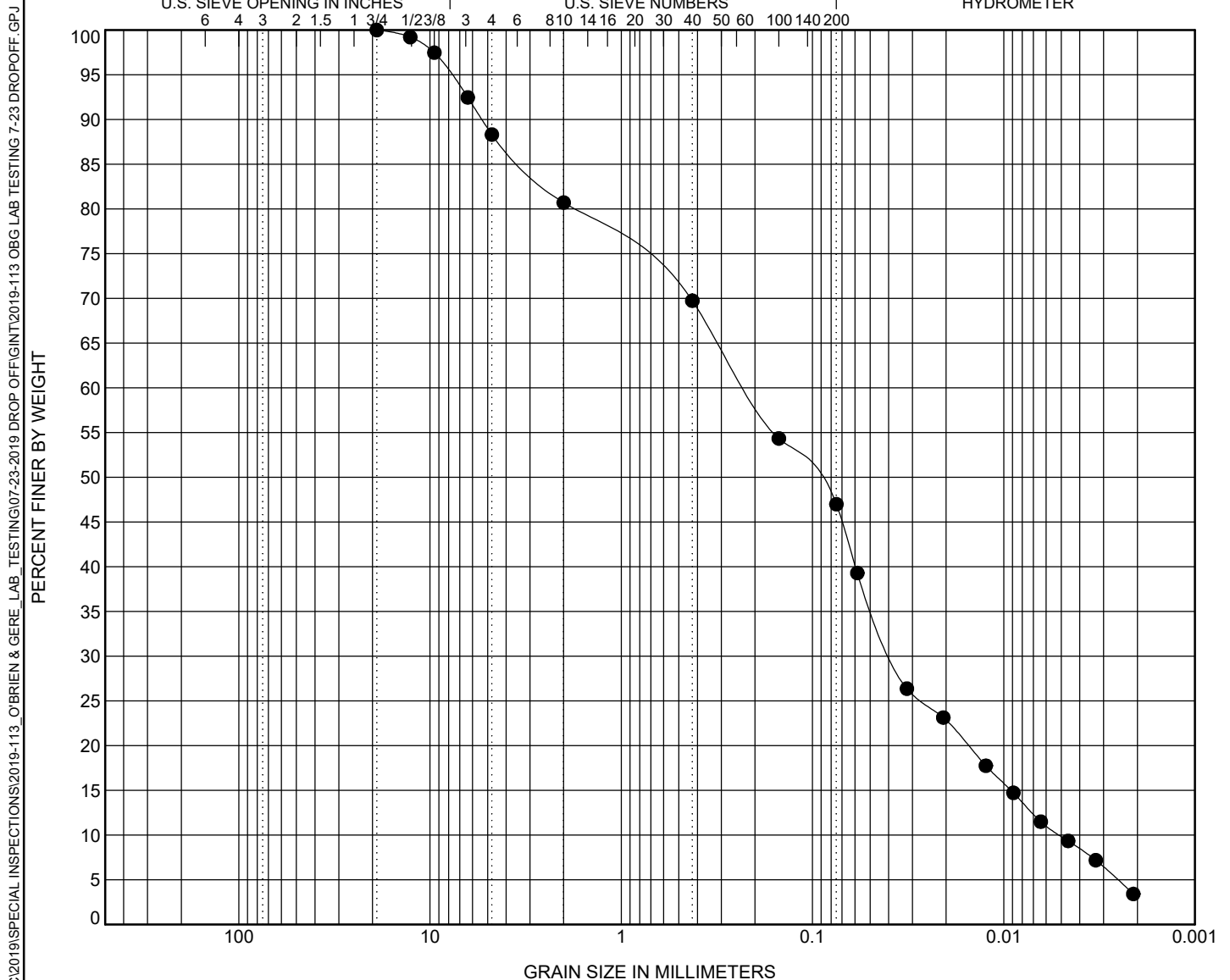
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

PROJECT LOCATION





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Fax: 315-638-1544

SIEVE ANALYSIS OF SOIL/AGGREGATE

TEST METHOD: ASTM D422, D1140

Client: O'Brien & Gere Engineering
Project Number: 2019-113

Project Name: Portfolio Material Characterization
Project Location: Syracuse, New York

Sample ID	SIEVE SIZE - PERCENT PASSING SIEVE										
	2"	1"	3/4"	1/2"	3/8"	1/4"	#4	#10	#40	#100	#200
PMC072319A-12				100.0	98.6	92.1	87.5	78.6	65.8	53.1	46.8

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

REMARKS: _____

PREWASH _____
ENTIRE SAMPLE X
MASS RETAINED ON #200 ONLY _____
NOT PREWASHED _____



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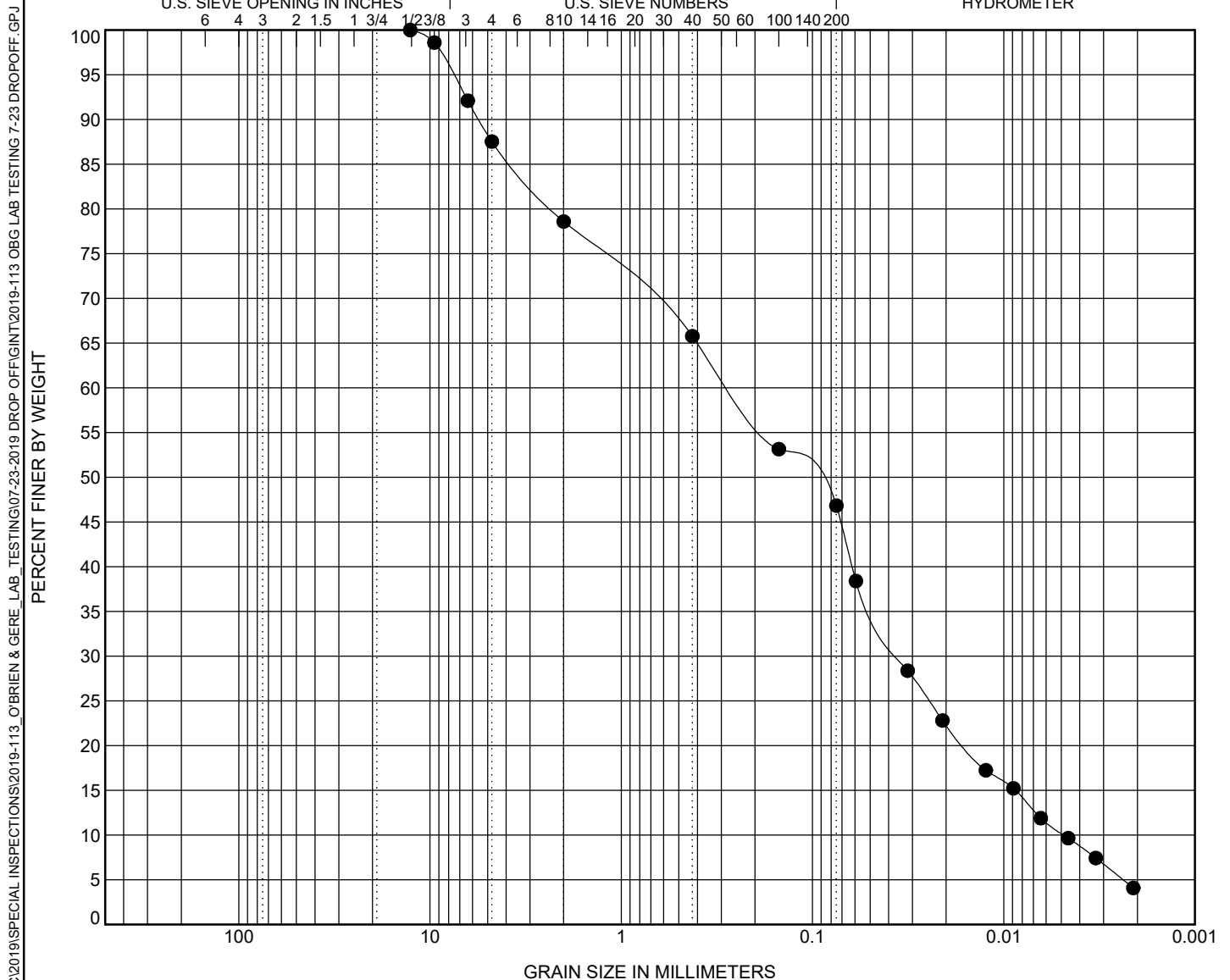
GRAIN SIZE DISTRIBUTION

CLIENT O'Brien & Gere

PROJECT NAME Laboratory Testing

PROJECT NUMBER 2019-113

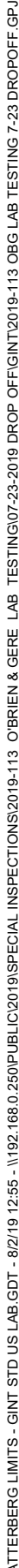
PROJECT LOCATION



ATTERBERG LIMITS' RESULTS

PROJECT NAME Laboratory Testing

PROJECT LOCATION

[illegible]

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Moisture Content Testing

Client: O'Brien & Gere Engineering **Project Name:** Portfolio Material Characterization
Project Number: 2019-113 **Project Location:** Syracuse, New York

TEST METHOD: ASTM D2974 (via D5268)

PERFORMED BY: R. Stachowiak

CHECKED BY: C. Kenney, P.E.

Sample ID	Moisture Content (%)
PMC-072319A-01	26.5
PMC-072319A-02	23.6
PMC-072319A-03	31.5
PMC-072319A-04	20.7
PMC-072319A-05	25.3
PMC-072319A-06	32.3
PMC-072319A-07	26.0
PMC-072319A-08	25.7
PMC-072319A-09	24.0
PMC-072319A-10	20.5
PMC-072319A-11	23.5
PMC-072319A-12	26.2

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Phone: (315) 638-2706



pH Testing

Client: O'Brien & Gere Engineering **Project Name:** Portfolio Material Characterization
Project Number: 2019-113 **Project Location:** Syracuse, New York

TEST METHOD: ASTM D4972; METHOD A & B

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

Sample ID	pH of Soil (in water)
PMC-072319A-01	7.9
PMC-072319A-02	7.3
PMC-072319A-03	7.4
PMC-072319A-04	7.6
PMC-072319A-05	7.6
PMC-072319A-06	7.7
PMC-072319A-07	7.7
PMC-072319A-08	7.6
PMC-072319A-09	7.6
PMC-072319A-10	7.6
PMC-072319A-11	7.5
PMC-072319A-12	7.5

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Phone: (315) 638-2706 Fax: (315) 638-1544



Organic Content Testing

Client: O'Brien & Gere Engineering **Project Name:** Portfolio Material Characterization
Project Number: 2019-113 **Project Location:** Syracuse, New York

TEST METHOD: ASTM D5268

PERFORMED BY: R. Stachowiak CHECKED BY: C. Kenney, P.E.

Sample ID	Organic Content (% by mass)
PMC-072319A-01	8.4
PMC-072319A-02	7.6
PMC-072319A-03	10.1
PMC-072319A-04	9.0
PMC-072319A-05	8.1
PMC-072319A-06	8.8
PMC-072319A-07	10.7
PMC-072319A-08	9.3
PMC-072319A-09	10.0
PMC-072319A-10	9.5
PMC-072319A-11	15.5
PMC-072319A-12	12.8

APPENDIX 5

PHOTOGRAPH LOGS

APPENDIX 5A

CONSTRUCTION WORK PHOTOGRAPH LOG

Week of September 29, 2019: Clearing by Open Water Area



Week of September 29, 2019: Clearing and Staged Topsoil Material Deliveries



Week of October 13, 2019: Clearing, Regrading, and Installation of Demarcation Layer



Week of October 13, 2019: Installed Safety Fence Along CSX ROW



Week of October 13, 2019: Placement of Topsoil



Week of October 20, 2019: Jumper Bridge and Clearing by OW-4



Week of October 20, 2019: Site Clearing and Grading



Week of October 27, 2019: Site Overview and Topsoil Placement



Week of October 27, 2019: Grading Slope at OW-04



Week of October 27, 2019: Installation of Geocell



Week of November 3, 2019: Final Cover at OW-4 Slope



APPENDIX 5B
UAV PHOTOGRAPH LOG – OCTOBER 29, 2019



