NYSDEC Periodic Review Report: May 16, 2017 – May 16, 2018
Queens West (Hunters Point) Parcel 8
Parcel West of Center Boulevard between 47th Road and 48th Avenue
NYSDEC Site ID: C241087
Queens, NY 11101

NYCDDC PROJECT NO. LQD122-QW

WORK ORDER NO. 14131-LIRO-3-R-12667

CONTRACT REGISTRATION NO. 20181405131

Prepared for:

NYC DDC Department of Design and Construction

Office of Environmental and Geotechnical Services
30-30 Thomson Avenue, Third Floor
Long Island City, New York 11101

Prepared by:

LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, New York 11211

PROJECT NO. 17-155-0265

June 15, 2018

TABLE OF CONTENTS

Figures

Attachments

Appendix

1.0 INTRODUCTION

1.1 Background Information

On behalf of the New York City Department of Design and Construction (NYCDDC) Office of Environmental and Geotechnical Services (OEGS), LiRo Engineers, Inc. (LiRo) conducted an annual inspection on April 5, 2018 and prepared this New York State Department of Environmental Conservation (NYSDEC) Periodic Review Report (PRR) for the period May 16, 2017 through May 16, 2018. The PRR was prepared to document the implementation and compliance with the specific site management requirements at the construction site for the new Queens West Hunters Point Community Library located at Parcel 8, west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York (Figure 1). The parcel is approximately 0.73 acres and currently is an active construction site. The locations of the groundwater monitoring wells are shown on Figure 2.

The Queens West (Hunters Point) Parcel 8 site is in the NYSDEC Brownfield Cleanup Program (NYSDEC Site No. C241087). Avalon Riverview II LLC and Avalon Riverview North1 LLC and Queens West Development Corp., or QWDC (collectively, the Volunteer) entered into a Brownfield Cleanup Agreement with the NYSDEC to remediate the site. The approved site remedial action was implemented under the oversight of the Volunteer's environmental consultant, Fleming-Lee Shue, Inc. (FLS) of New York, NY. The City of New York agreed to assume responsibility for the site remediation in May 2015. Redevelopment of the site is being conducted under the conditions of the NYSDEC-approved Site Management Plan (SMP) dated December 2011 and revised November 2014. The annual inspection and the preparation of this PRR were performed in accordance with the SMP. The PRR Certification Form is provided in Attachment 1.

The following documentation is provided in support of the PRR Certification Form. The documentation is referenced to the PRR Certification Form Box Number and Question Number.

Box 1/Question 4. New York City Building permits have been issued for construction of the new library and park facilities. During this reporting period, the site has obtained permits for plumbing and mechanical systems installation; a permit to install a boiler in the library; and permits for the installation of construction fencing. The New York City Building permits are provided in Attachment 2.

2.0 ANNUAL SITE-WIDE INSPECTION

2.1 General Site Conditions

Construction activities at the site commenced in May 2015. A perimeter construction fence has been erected. An interim cover was placed over a demarcation barrier after remedial excavation work was completed. There are three (3) groundwater monitoring wells on the site parcel (Figure 2) which are currently being protected during construction activities. Any excavations which disturb soil below the demarcation barrier will be performed and monitored in accordance with the procedures identified in the approved SMP. The library building, Park Department building, and restroom facility shells have been constructed. Vapor barriers and sub-slab depressurization system (SSDS) piping have been installed beneath the footprint of each building, however the SSDS is not yet operational as construction is still in progress.

2.2 Compliance with Institutional Controls

Institutional Controls (ICs) have been established to maintain and monitor the Engineering Control Systems (ECs), prevent future exposure to the remaining contamination by controlling disturbances of the subsurface contamination, and to limit the use and development of the site to commercial uses only. A copy of the Environmental Easement is provided in Appendix 1. The site ICs are listed in Box 3 of the PRR Certification Form (Attachment 1). All ICs for this phase of the project are currently in compliance.

2.3 Condition and Effectiveness of Engineering Controls

An interim cover system consisting of clean soil cover has been placed and maintained prior to site redevelopment. The final composite cover system will be placed over the site during the construction of the new facilities to prevent exposure to the remaining contamination in the soil/fill at the site. There are currently no landscaped areas on-site and the surrounding pavement did not show any signs of cracking or damage. The interim cover system does not show any signs of erosion. The Excavation Work Plan (EWP), included as an appendix within the SMP, outlines procedures to be implemented during construction activities or in the event that the cover system is breached, penetrated, or temporarily removed, and any underlying remaining contamination is disturbed. The cover system, if breached, will be restored to its original condition at the completion of the soil removal in a manner that complies with the Remedial Action Work Plan (RAWP) and the EWP.

2.4 Site Management Activities

LiRo conducted quarterly groundwater monitoring on the following dates: June 21 and 22, 2017; September 27 and 28, 2017; December 6, 2017; and, March 29 and 30, and April 3, 2018. The LiRo quarterly groundwater monitoring reports are provided in Attachments 3 through 6 and provide data and summaries of the groundwater monitoring results during the reporting period.

3.0 SITE EVALUATION

Remedial activities were completed at the site in December 2011 in compliance with the NYSDEC-approved RAWP and residual contamination is managed under the requirements of the SMP.

The current site activities adhere to the SMP which includes, but is not limited to, a Monitoring Program, an Excavation Work Plan, a Health and Safety Plan, and a Community Air Monitoring Program.

LiRo observed dense non-aqueous phase liquid (DNAPL) (inferred to be coal tar based on site history) at monitoring well MW-26D during the reporting period, except for the June 2017 quarterly monitoring event. In accordance with the SMP this well was not sampled during these quarterly monitoring events. DNAPL was observed at MW-27D during each of the quarterly monitoring events conducted during the reporting period. In accordance with the SMP this well was not sampled during this review period. Measured thicknesses of the DNAPL have been consistent throughout this review period.

The groundwater monitoring results are summarized below. The results generally indicate asymptotic trends in the off-site monitoring wells.

Table 1 - Detections June 2016 – March 2018

Well ID	Analyte	Concentration (µg/L)							
		3/2018	12/2017	9/2017	6/2017	3/2017	12/2016	9/2016	6/2016
MW-24S	Benzene	6.5	NS	NS	NS	2	NS	NS	NS
	Naphthalene	180	NS	NS	NS	340	NS	NS	NS
MW-24D	Benzene	30.9	NS	NS	NS	25.1	NS	NS	NS
	Naphthalene	370	NS	NS	NS	330	NS	NS	NS
MW-25S	Benzene	12.2	NS	NS	NS	ND	NS	NS	NS
	Naphthalene	ND	NS	NS	NS	ND	NS	NS	NS
MW-25D	Benzene	ND	NS	NS	NS	ND	NS	NS	NS
	Naphthalene	ND	NS	NS	NS	ND	NS	NS	NS
MW-26S	Benzene	3,000	3,200	3,900	3,000	2,000	740	860	1,100
	Naphthalene	6,100	250	3,500	1,900	1,400	1,000	1,400	1,300
MW-26D	Benzene	NS	NS	NS	9,700	NS	NS	14,000	NS
	Naphthalene	NS	NS	NS	5,000	NS	NS	9,200	NS
MW-27S	Benzene	640	360	700	550	230	41.5	28	150
	Naphthalene	240	34.2	75.1	600	ND	ND	6.2	ND
MW-27D	Benzene	NS	NS	NS	NS	NS	NS	NS	NS
	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS
MW-30S	Benzene	ND	NS	ND	NS	ND	NS	0.22 J	NS
	Naphthalene	ND	NS	ND	NS	ND	NS	ND J	NS
MW-30D	Benzene	440	NS	89.5	NS	160	NS	2,000	NS
	Naphthalene	3,900	NS	7,800	NS	2,400	NS	10,000	NS

µg/l = micrograms per liter
ND = Non detect
NS = Not sampled

Based on the results of this evaluation, there are no recommendations regarding any necessary changes to the remedy and/or monitoring plan at this time.

Report Prepared By:

Jon Williams
Senior Geologist

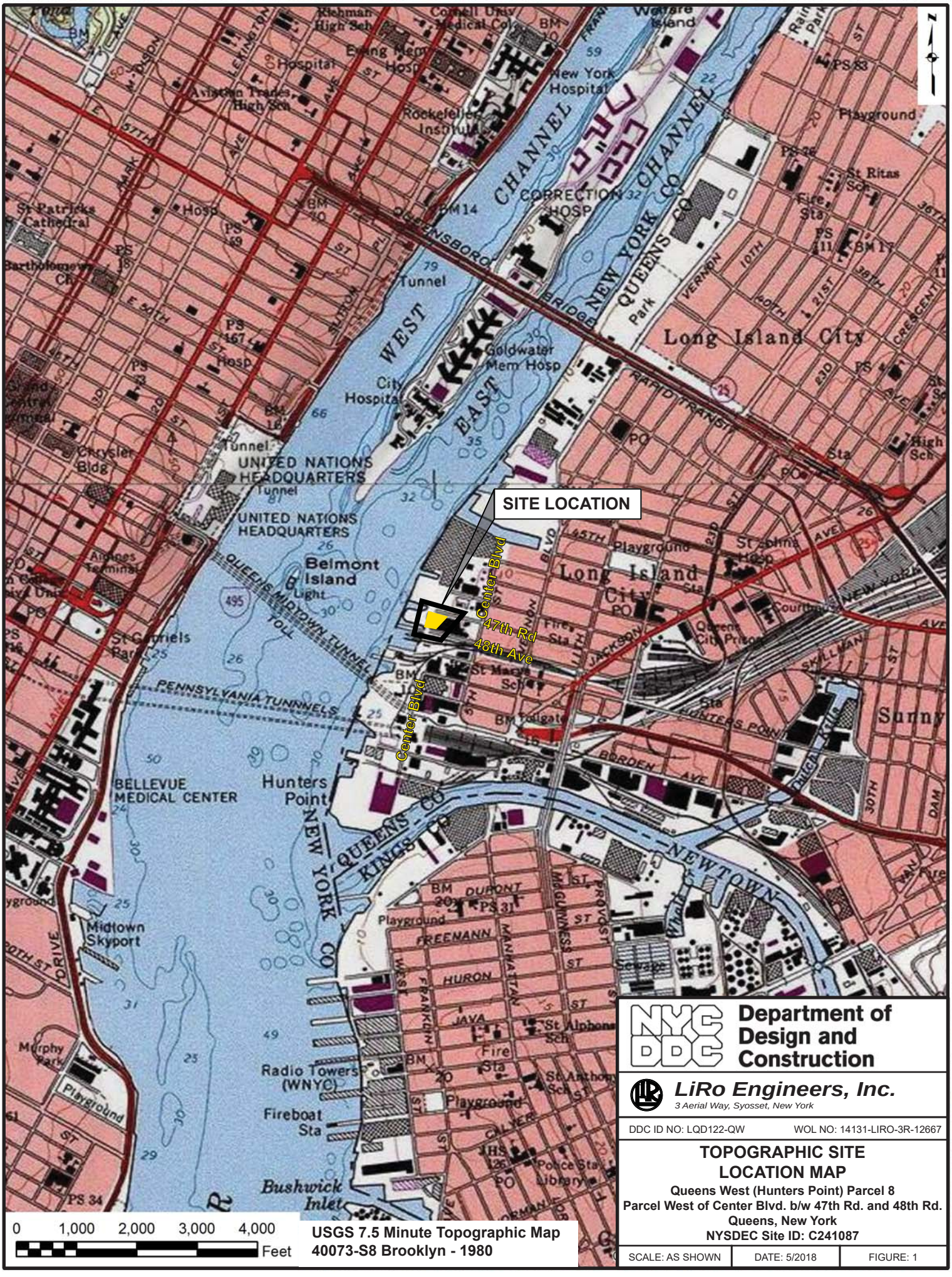
Report Reviewed By:

Stephen Frank
Senior Geologist

Report Certified By:

Martin Wesolowski, P.E.
Project Engineer

Figures



USGS 7.5 Minute Topographic Map
40073-S8 Brooklyn - 1980

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO: LQD122-QW | WOL NO: 14131-LIRO-3R-12667

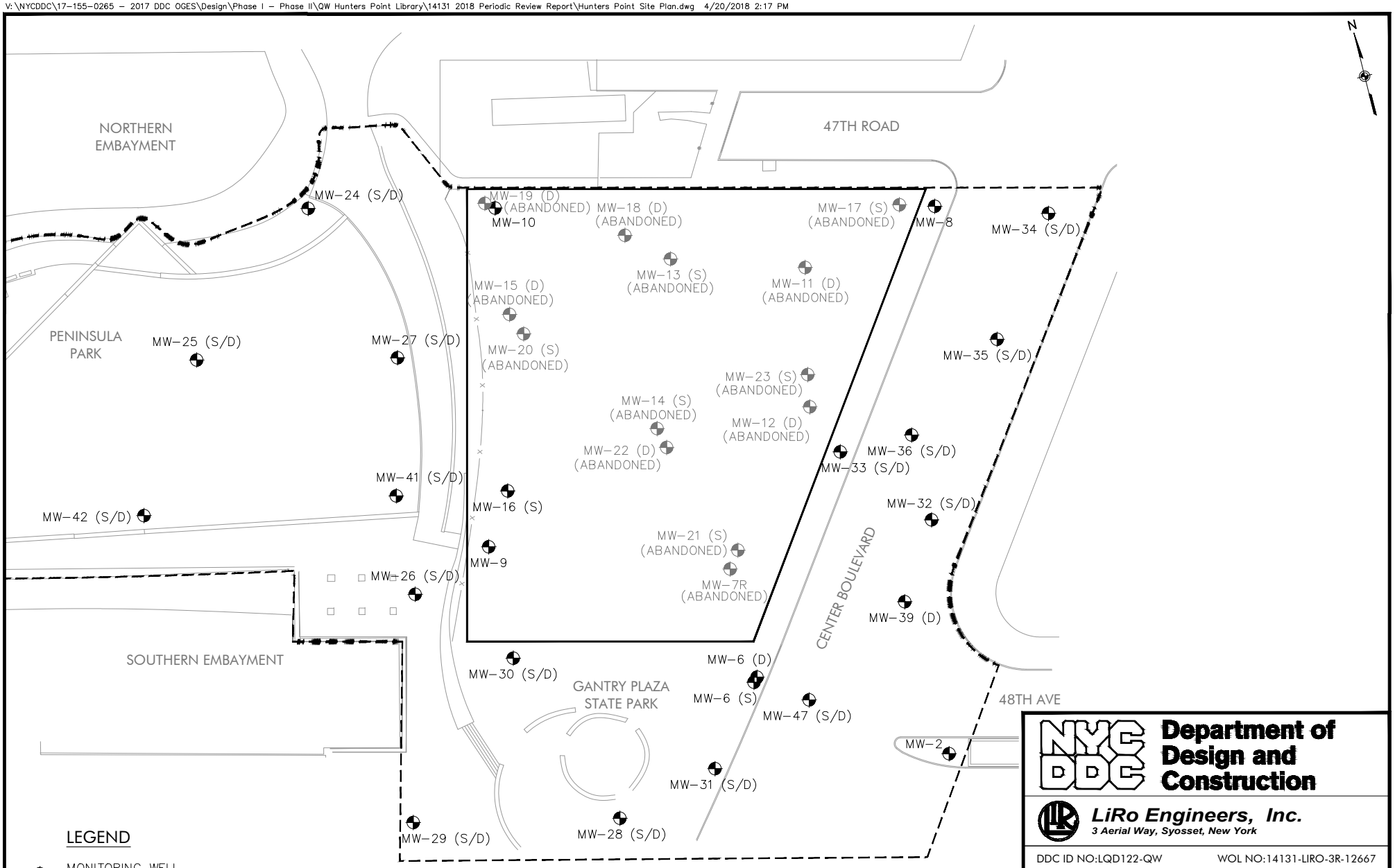
TOPOGRAPHIC SITE LOCATION MAP

Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. b/w 47th Rd. and 48th Rd.
Queens, New York
NYSDEC Site ID: C241087

SCALE: AS SHOWN	DATE: 5/2018	FIGURE: 1

V:\NYCDDC\17-155-0265 - 2017 DDC OGES\Design\Phase I - Phase II\QW Hunters Point Library\14016 1Q18 GW Sampling\Hunters Point Topo Map.ai

V:\NYCDDC\17-155-0265 - 2017 DDC OGES\Design\Phase I - Phase II\QW Hunters Point Library\14131 2018 Periodic Review Report\Hunters Point Site Plan.dwg 4/20/2018 2:17 PM



LEGEND

- MONITORING WELL LOCATION
- PARCEL 8 BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO:LQD122-QW | WOL NO:14131-LIRO-3R-12667

SITE PLAN - WELL LOCATIONS

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 5/2018	FIGURE: 2

Attachment 1
PRR Certification Form

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C241087**

Site Name Queens West (Hunter's Point) Parcel 8

Site Address: Center Blvd. and 47th Rd. and 48th Ave. Zip Code: 11101
City/Town: Long Island City
County: Queens
Site Acreage: 0.7

Reporting Period: May 16, 2017 to May 16, 2018

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☑	☐
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☑	☐

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☑

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C241087 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
19-21	Queens West Development Corporation	Landuse Restriction Monitoring Plan O&M Plan Ground Water Use Restriction Soil Management Plan Site Management Plan IC/EC Plan

(I) Tbe Controlled Property may be used for Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial
as described in 6 NYCRR Part 375-1.8(g)(2)(iv);
(2) All Engineering Controls must he operated and maintained as apecified in the Site Management Plan (SMP);
(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.
(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
(5) Data and information pertinent to Site Management oftbe Controlled Property must be reported at the frequency and in a manner defined in the SMP;
(6) All future activities on the property that will distUrb remaining contaminated material must be conducted in accordance with the SMP;
(7) Monitoring to assess the performance and effectiveness of the remedy must he perfonoed as defined in the SMP;
(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall he performed as defined in the SMP;
(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property ownCI'to
assure·compliance with the restrictions identified by this Enviromnental Easement.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
19-21	Cover System Vapor Mitigation

The Engineering Controls for this Site include a composite cover over the entire site and a vapor barrier plus sub-slab depressurization system for any occupied structures to be built on the site.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C241087

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jon Williams (print name) at 690 Delaware Avenue (print business address),

am certifying as Remedial Party (Owner or Remedial Party)

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

[signature] 6/13/18

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

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Martin Wesolowski at 690 Delaware Ave Buffalo NY 14209,
print name print business address

am certifying as a Professional Engineer for the Remedial Party
(Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

No. Stamp (Required for PE)

6/15/2018
Date

Attachment 2
New York City Permits

NYC™ Buildings

Work Permit Department of Buildings

Permit Number: *440167659-01-PL*

Issued: *09/01/2017* Expires: *09/01/2018*

Address: *QUEENS 47-40 CENTER BLVD*

Issued to: DANIELLE MAGLIO

Business: EASTERN PLBG & MECH CONTR

License No: MP-2257

Description of Work:

PLUMBING - ALTERATION TYPE 2 INSTALL PLUMBING AND MECHANICAL SYSTEMS IN NEW LIBRARY BUILDING. FILED IN CONJUNCTION WITH NB 420651459. NO CHANGE TO USE EGRESS OR OCCUPANCY UNDER THIS APPLICATION

Review is requested under Building Code: 2008

SITE FILL: NOT APPLICABLE

To see a Zoning Diagram (ZD1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at www.nyc.gov/buildings.

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment or both.

03 05/11/2018

OP-35A (5/10)

NYC™ Buildings

Work Permit Department of Buildings

Permit Number: *420606829-01-NB*

Issued: *09/07/2017* Expires: *09/01/2018*

Address: *QUEENS* *47-40 CENTER BOULEVARD*

Issued to: STEPHEN LEVAN

Business: TRITON STRUCTURAL CONCRET

Contractor No: GC-604939

Description of Work:

NEW BUILDING - CONSTRUCT NEW 6 STORIES LIBRARY BUILDING .INSTALL CONSTRUCTION FENCE

Review is requested under Building Code: 2008

SITE FILL: ON-SITE

To see a Zoning Diagram (ZD1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at www.nyc.gov/buildings.

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment or both.

04 05/11/2018

OP-35A (5/10)

NYC™ Buildings

Work Permit Department of Buildings

Permit Number: *420606829-01-EQ-FN*

Issued: *09/05/2017* Expires: *09/05/2018*

Address: *QUEENS* *47-40 CENTER BOULEVARD*

Issued to: STEPHEN LEVAN

Business: TRITON STRUCTURAL CONCRET

Contractor No: GC-604939

Description of Work:

NEW BUILDING - CONSTRUCTION EQUIPMENT - FENCE CONSTRUCT NEW 6 STORIES LIBRARY BUILDING .INSTALL CONSTRUCTION FENCE

Review is requested under Building Code: 2008

SITE FILL: ON-SITE

To see a Zoning Diagram (ZD1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at www.nyc.gov/buildings.

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment or both.

04 05/11/2018

OP-35A (5/10)

CLICK HERE TO SIGN UP FOR BUILDINGS NEWS

NYC Department of Buildings

Work Permit Data

Premises: 47-40 CENTER BOULEVARD QUEENS **Filed At: 47-40 CENTER BLVD QUEENS**

BIN: 4594151 Block: 19 Lot: 21 **Job Type: A2 - ALTERATION TYPE 2**

DOB NOW: *Inspections*

Job No:	440211156			**Fee:**	EXEMPT
Permit No:	440211156-01-EW-BL	**Issued:**	12/15/2017	**Expires:**	04/25/2018
Seq. No.:	01	**Filing Date:**	12/15/2017 INITIAL	**Status:**	ISSUED
Work:		**Proposed Job Start:**	12/15/2017	**Work Approved:**	11/05/2015

ALTERATION TYPE 2 - BOILER
INSTALL BOILER IN BOILER ROOM ON 6 FLOOR OF NEW LIBRARY BUILDING. FILED IN CONJUNCTION WITH NB 420606829AND PLUMBING AND MECHANICAL APPLICATION 440167659 ALL PLUMBING AND GAS WORK DONE UNDER 440167659. NO CHANGE TO USE, EGRESS OR OCCUPANCY UNDER THIS APPLICATION.

Use: B - BUSINESS **Landmark:** NO **Stories:** 6
Site Fill: NOT APPLICABLE
Review is requested under Building Code: 2008

Issued to: MARC BRESLAW **MASTER PLUMBER**
Business: TRISTATE PLBG SVCS CORP **License No:** MP 001544
336 WEST 37TH STREET NEW YORK NY 10018 **Phone:** 212-563-0341

If you have any questions please review these Frequently Asked Questions, the Glossary, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.

Attachment 3
LiRo Engineers, Inc. - Quarterly Monitoring Report – Second Quarter 2017, August 22, 2017

Included on Attached CD

Quarterly Monitoring Report: Second Quarter 2017

Queens West (Hunters Point) Parcel 8

Parcel West of Center Boulevard between 47th Road and 48th Avenue

Queens, New York 11101

NYSDEC Site ID: C241087

DDC PROJECT NO. LQD122-QW

WORK ORDER NO. 12964-LIRO-3-11747

CONTRACT REGISTRATION NO. 20151405569

Prepared for:

Office of Environmental and Geotechnical Services
30-30 Thomson Avenue, Third Floor
Long Island City, New York 11101

Prepared by:

LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, New York 11211

PROJECT NO. 15-008-0265

August 22, 2017

TABLE OF CONTENTS

Figures

Tables

Appendices

1.0 INTRODUCTION

1.1 Background Information

On behalf of the New York City Department of Design and Construction (DDC), Office of Environmental and Geotechnical Services (OEGS), LiRo Engineers, Inc. (LiRo) conducted the second quarter 2017 groundwater sampling event in June 2017 and prepared this Quarterly Monitoring Report (QMR) for the new Queens West Hunters Point Community Library located at Parcel 8 (Block 19, portion of Lot 21), west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York (hereinafter referred to as the Site; Figure 1). The parcel is approximately 0.73 acres and is an active construction site. The locations of the groundwater monitoring wells are shown on Figure 2. Based on the previous site investigations, groundwater flow direction is generally toward the west.

The Site is in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (NYSDEC Site No. C241087) and redevelopment of the Site is being conducted under the requirements of the Site Management Plan (SMP) dated December 2011 and Revision #1 dated November 2014. The annual groundwater sampling and this QMR were performed in accordance with the SMP. The SMP calls for quarterly groundwater sampling in order to evaluate current groundwater conditions and to evaluate the overall effectiveness of remediation.

Between October 25, 2010 and March 30, 2011, Fleming Lee Shue (FLS) of New York, New York implemented the treatment remedy for Parcel 8 which included in-situ chemical injection using sodium persulfate, sodium hydroxide, and a plant-based surfactant under the NYSDEC Brownfield Cleanup Program (BCP Site No. C241087). Sodium persulfate was the oxidant used and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of the coal tar to make it available for chemical oxidation. A total of 334,000 pounds of sodium persulfate, 136,300 pounds of sodium hydroxide, and 65,000 pounds of surfactant were injected over the five-month treatment period. The bulk of the treatment targeted the zone of 10 to 22 feet below grade (ftbg). Treatment was completed using the RemMetrik® process, which used subsurface pressure waves generated by Wavefront Technology Solutions, Inc. of Edmonton, Alberta, Canada. Primawave™ process. Previous estimates indicated that 47,000 pounds of coal tar contamination were slated for treatment.

The following on-site groundwater monitoring wells were decommissioned in June 2015 by LiRo on behalf of DDC, due to on-going construction at the Site:

- MW-7R, MW-11D, MW-12D, MW-13S, MW-14S, MW-17S, MW-18D, MW-21S, MW-22D, MW-23S, and Geothermal Well (no ID).

LiRo submitted a Monitoring Well Decommissioning memorandum dated July 1, 2015 to document the well closures.

LiRo completed the second quarter 2015 groundwater sampling in June 2015, the third quarter 2015 groundwater sampling in September 2015, and the fourth quarter 2015 groundwater sampling in December 2015.

Prior to the first quarter 2016 sampling, two (2) additional groundwater monitoring wells, MW-15 and MW-20, were decommissioned by LiRo on behalf of DDC due to their interference of on-going construction activities at the Site.

LiRo submitted a Monitoring Well Decommissioning Memorandum dated March 18, 2016 to document the well closures. LiRo completed the first quarter 2016 groundwater sampling in March 2016, the second quarter groundwater sampling in June 2016, the third quarter 2016 groundwater sampling in September 2016, and the fourth quarter groundwater sampling in December 2016.

Prior to the fourth quarter 2016 groundwater sampling, one (1) additional groundwater monitoring well, MW-19D, was decommissioned by LiRo on behalf of DDC due to its interference with on-going construction activities at the Site. LiRo submitted a Monitoring Well Decommissioning Memorandum dated December 5, 2016 to document the well closure.

The first and second quarter 2017 groundwater sampling events were completed in March and June 2017, respectively.

Construction of the new Hunters Point Library is underway at the Site. As of the time of the 2017 second quarter groundwater sampling, the building walls have been constructed and construction of the building interior is currently ongoing.

2.0 QUARTERLY GROUNDWATER SAMPLING

2.1 Overview of Groundwater Sampling

LiRo conducted the second quarter 2017 groundwater sampling at the Site on June 21 and 22, 2017, and included sampling from wells within Peninsula Park and Gantry Plaza State Park.

The well locations requiring sampling as per NYSDEC in June 2017 were MW-26S, MW-26D, MW-27S, and MW-27D, which are located in Peninsula Park and Gantry Plaza State Park. The monitoring well locations are shown on Figure 2. The groundwater samples were submitted for laboratory analysis to Chemtech of Mountainside, New Jersey, a New York State Department of Health (NYSDOH) approved laboratory (No. 11376). The analytical results were then validated by Vali-Data of WNY, LLC (Vali-Data) of West Falls, New York who prepared the Data Usability Summary Report (DUSR) dated August 2, 2017. The DUSR is provided in Appendix 1.

2.2 Groundwater Sampling and Analysis – Second Quarter 2017

Based on the SMP provided to LiRo, second quarter 2017 sampling was scheduled for monitoring wells MW-26S, MW-26D, MW-27S, and MW-27D. LiRo completed the groundwater sampling on June 21 and 22, 2017. Prior to sampling, LiRo conducted water level/free product monitoring in the wells using an oil/water interface probe. A dense non-aqueous phase liquid (DNAPL) layer (inferred to be coal tar based on Site history) with an apparent thickness of 3 inches was observed at a depth of 30.5 ftbg at MW-27D. Therefore, in accordance with the SMP, MW-27D was not sampled. The exact product thickness cannot be measured due to a mixing zone above the product.

Well purging and groundwater sampling of MW-26S, MW-26D, and MW-27S were conducted in accordance with the approved Quality Assurance Project Plan (QAPP) and the NYSDEC-approved SMP. Each well was purged using a low-flow method, which included the use of a peristaltic pump to ensure minimal generation of suspended solids, minimize the volatilization of contaminants in the groundwater, acquire a more representative localized groundwater sample from the contaminated plume, and minimize the volume of groundwater purged. The wells were purged until groundwater parameters including temperature, pH, dissolved oxygen (DO), conductivity, oxidation reduction potential (ORP), and turbidity stabilized. The aforementioned groundwater monitoring parameter measurements were collected using a Horiba U-52 water quality meter. The groundwater parameter measurements are provided in the well purge logs included in Appendix 2.

The groundwater samples were collected and submitted for laboratory analysis of the following parameters:

- Target Compound List (TCL) volatile organic compounds (VOCs), United States Environmental Protection Agency (USEPA) Method 8260C;
- TCL semi-volatile organic compounds (SVOCs), USEPA Method 8270D;
- Total Petroleum Hydrocarbon Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO), USEPA Method 8015C;
- Total Iron, USEPA Method 6010;
- Alkalinity, USEPA Method 310.1;
- Sulfide, USEPA Method 376.1; and,
- Sulfate, USEPA Method 300.

The groundwater samples were submitted to Chemtech, a New York State Environmental Laboratory Approval Program (ELAP) certified laboratory. The laboratory groundwater analytical report is included in Appendix 3.

Quality assurance/quality control (QA/QC) samples were collected during sampling and included two (2) trip blanks and one (1) equipment blank.

2.3 Summary of Analytical Results

Groundwater analytical results for the second quarter 2017 samples are summarized in Tables 2 through 4. To be consistent with previous reporting, the trends for benzene and naphthalene are discussed and summarized below.

Table 1 – Summary of Benzene and Naphthalene Detections September 2015 – June 2017

Well ID	Analyte	Concentration (µg/L)							
		6/2017	3/2017	12/2016	9/2016	6/2016	3/2016	12/2015	9/2015
MW-24S	Benzene	NS	2	NS	NS	NS	10	NS	NS
	Naphthalene	NS	340	NS	NS	NS	220	NS	NS
MW-24D	Benzene	NS	25.1	NS	NS	NS	25	NS	NS
	Naphthalene	NS	330	NS	NS	NS	260	NS	NS
MW-25S	Benzene	NS	ND	NS	NS	NS	ND	NS	NS
	Naphthalene	NS	ND	NS	NS	NS	ND	NS	NS
MW-25D	Benzene	NS	ND	NS	NS	NS	ND	NS	NS
	Naphthalene	NS	ND	NS	NS	NS	ND	NS	NS
MW-26S	Benzene	3,000	2,000	740	860	1,100	930	1,100	1,300
	Naphthalene	1,900	1,400	1,000	1,400	1,300	1,500	2,100	3,500
MW-26D	Benzene	9,700	NS	NS	14,000	NS	NS	NS	NS
	Naphthalene	5,000	NS	NS	9,200	NS	NS	NS	NS
MW-27S	Benzene	550	230	41.5	28	150	100	84	45
	Naphthalene	600	ND	ND	6.2	ND	ND	ND	ND

Table 1 – Summary of Benzene and Naphthalene Detections September 2015 – June 2017 (Continued)

Well ID	Analyte	Concentration (µg/L)							
		6/2017	3/2017	12/2016	9/2016	6/2016	3/2016	12/2015	9/2015
MW-27D	Benzene	NS	NS	NS	NS	NS	NS	NS	NS
	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS
MW-30S	Benzene	NS	ND	NS	0.22 J	NS	ND	NS	0.52
	Naphthalene	NS	ND	NS	ND J	NS	ND	NS	2.67
MW-30D	Benzene	NS	160	NS	2,000	NS	1,300	NS	1,200
	Naphthalene	NS	2,400	NS	10,000	NS	5,500	NS	7,000

µg/l = micrograms per liter
ND = Non detect
NS = Not sampled
J = Estimated value

The June 2017 benzene data reported increased concentrations (compared to the most recent previous sample for each well) at wells MW-26S and MW-27S and a decreased concentration at well MW-26D compared to the most recent previous result. The June 2017 benzene concentrations at MW-26S, MW-26D, and MW-27S are generally consistent with previous quarterly/semi-annual sampling result trends however, the MW-26S concentration is the highest level reported since September 2015.

The June 2017 naphthalene data reported increased concentrations (compared to the most recent previous sample for each well) at wells MW-26S and MW-27S and a decreased concentration at well MW-26D compared to the most recent previous result. The June 2017 naphthalene concentrations at MW-26S, MW-26D, and MW-27S are generally consistent with previous quarterly/semi-annual sampling result trends.

Total iron and TPHC DRO/GRO concentrations and water quality indicator parameters (sulfate, sulfide, and alkalinity) are reported in Table 4.

The groundwater sampling results were compared to the New York State Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standard/Guidance Values (AWQSGVs) in Tables 2 through 4. The concentrations for parameters exceeding AWQSGVs are shown on Figure 3 through 5 and are discussed below.

Analytical results identified VOC exceedances of TOGS 1.1.1 AWQSGVs at each of the three (3) monitoring wells sampled. Benzene (AWQSGV of 1 µg/L) was detected at MW-26S at 3,000 µg/L, MW-26D at 9,700 µg/L, and MW-27S at 550 µg/L. Ethylbenzene (AWQSGV of 5 µg/L) was detected at MW-26S at 530 µg/L, MW-26D at 1,000 µg/L, and MW-27S at 110 µg/L. Isopropylbenzene (AWQSGV of 5 µg/L) was detected at MW-26S at 48.8 µg/L, MW-26D at 44 µg/L and MW-27S at 11.9 µg/L. O-xylene (AWQSGV of 5 µg/L) was detected at MW-26S at 290 µg/L, MW-26D at 1,400 µg/L and MW-27S at 53.4 µg/L. M&p-xylene (AWQSGV of 5 µg/L) was detected at MW-26S at 440 µg/L, MW-26D at 1,800 µg/L and MW-27S at 81.6 µg/L.

Toluene (AWQSGV of 5 µg/L) was detected at MW-26S at 200 µg/L, MW-26D at 2,900 µg/L, and MW-27S at 53.3 µg/L.

Analytical results identified SVOC exceedances of TOGS 1.1.1 AWQSGVs at each of the three (3) monitoring wells sampled. 1,1-Biphenyl (AWQSGV of 5 µg/L) was detected at MW-26S at 34.4 µg/L and MW-26D at 37.8 µg/L. 2,4-Dimethylphenol (AWQSGV of 50 µg/L) was detected at MW-26S 250 µg/L and MW-26D at 610 µg/L. Acenaphthene (AWQSGV of 20 µg/L) was detected at MW-26S at 96.4 µg/L and MW-26D at 72.3 µg/L. Fluorene (AWQSGV of 50 µg/L) was detected at MW-26S at 52.3 µg/L. Naphthalene (AWQSGV of 10 µg/L) was detected at MW-26S at 1,900 µg/L, MW-26D at 5,000 µg/L, and MW-27S at 600 µg/L. Phenanthrene (AWQSGV of 50 µg/L) was detected at MW-26S at 69.9 µg/L and MW-26D at 56.8 µg/L.

Analytical results identified iron exceedances of TOGS 1.1.1 AWQSGV of 300 µg/L at each of the three (3) monitoring wells sampled (MW-26S at 2,280 µg/L, MW-26D at 805 µg/L, and MW-27S at 2,430 µg/L).

Analytical results identified sulfate exceedances of TOGS 1.1.1 AWQSGV of 250 mg/L at each of the three (3) monitoring wells sampled (MW-26S at 1,070 mg/L, MW-26D at 1,410 mg/L, and MW27S at 406 mg/L).

Analytical results identified sulfide exceedances of TOGS 1.1.1 AWQSGV of 0.05 mg/L in each of the three (3) monitoring wells sampled (MW-26S at 194 mg/L, MW-26D at 21.1 mg/L, and MW-27S at 20.6 mg/L).

2.4 Data Validation

Data validation was performed as required by the NYSDEC-approved Remedial Action Work Plan (RAWP), dated September 16, 2010. The DUSR, dated August 2, 2017, is provided in Appendix 1. Based on the data validation, the data are acceptable for use with the "J" qualification (which indicates an estimated value) as noted in the DUSR.

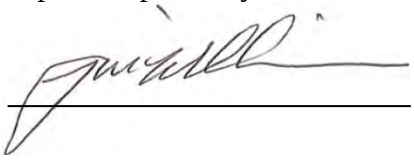
3.0 CONCLUSIONS

In June 2017, LiRo completed the second quarter 2017 groundwater sampling activities for the new Queens West Hunters Point Community Library located at Parcel 8, west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York. During this sampling event, four (4) monitoring wells, MW-26S, MW-26D, MW-27S, and MW-27D were scheduled for sampling and analysis. Prior to purging activities, DNAPL was detected in one (1) of the deep monitoring wells (MW-27D) and, as a result, that one (1) well was not sampled.

Analytical results show increased concentrations for benzene at MW-26S and MW-27S compared to the first quarter 2017 sampling event, whereas the benzene concentrations at MW-26D has decreased since the third quarter 2016 sampling event. Analytical results for naphthalene show increased concentrations at MW-26S and MW-27S compared to the first quarter 2017 sampling event and a decreased concentration at MW-26D since the third quarter 2016 sampling event.

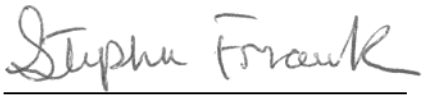
The DNAPL observed at MW-27D is potentially a result of residual coal tar in the deeper portion of the formation or migration from the Parcel 8 treatment area. DNAPL has consistently been observed at MW-27D since LiRo began quarterly sampling in June 2015.

Report Prepared By:



Jon Williams
Senior Geologist

Report Reviewed By:

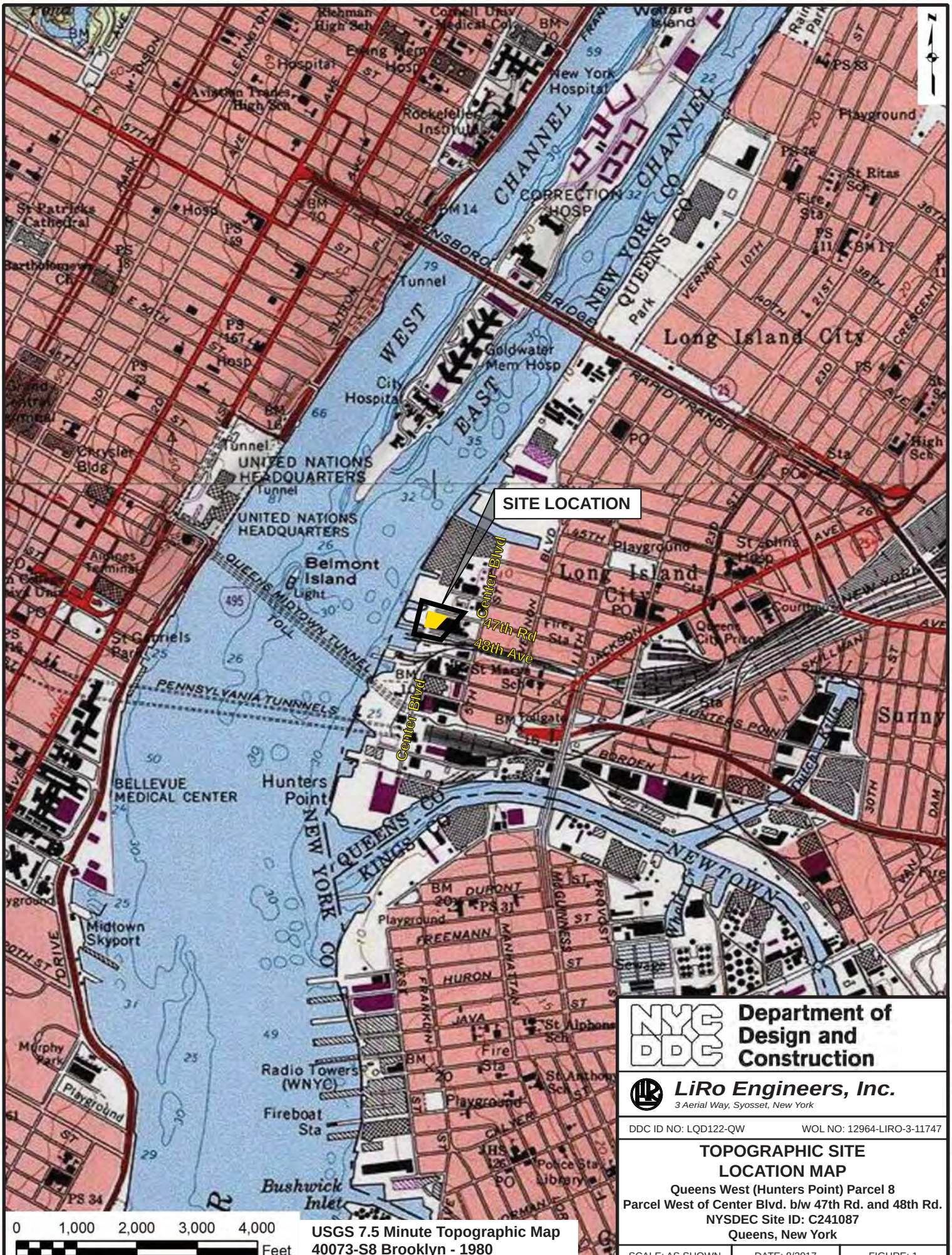


Stephen Frank
Senior Geologist

Report Reviewed By:

Robert Kreuzer
Project Manager

Figures



USGS 7.5 Minute Topographic Map
40073-S8 Brooklyn - 1980

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO: LQD122-QW | WOL NO: 12964-LIRO-3-11747

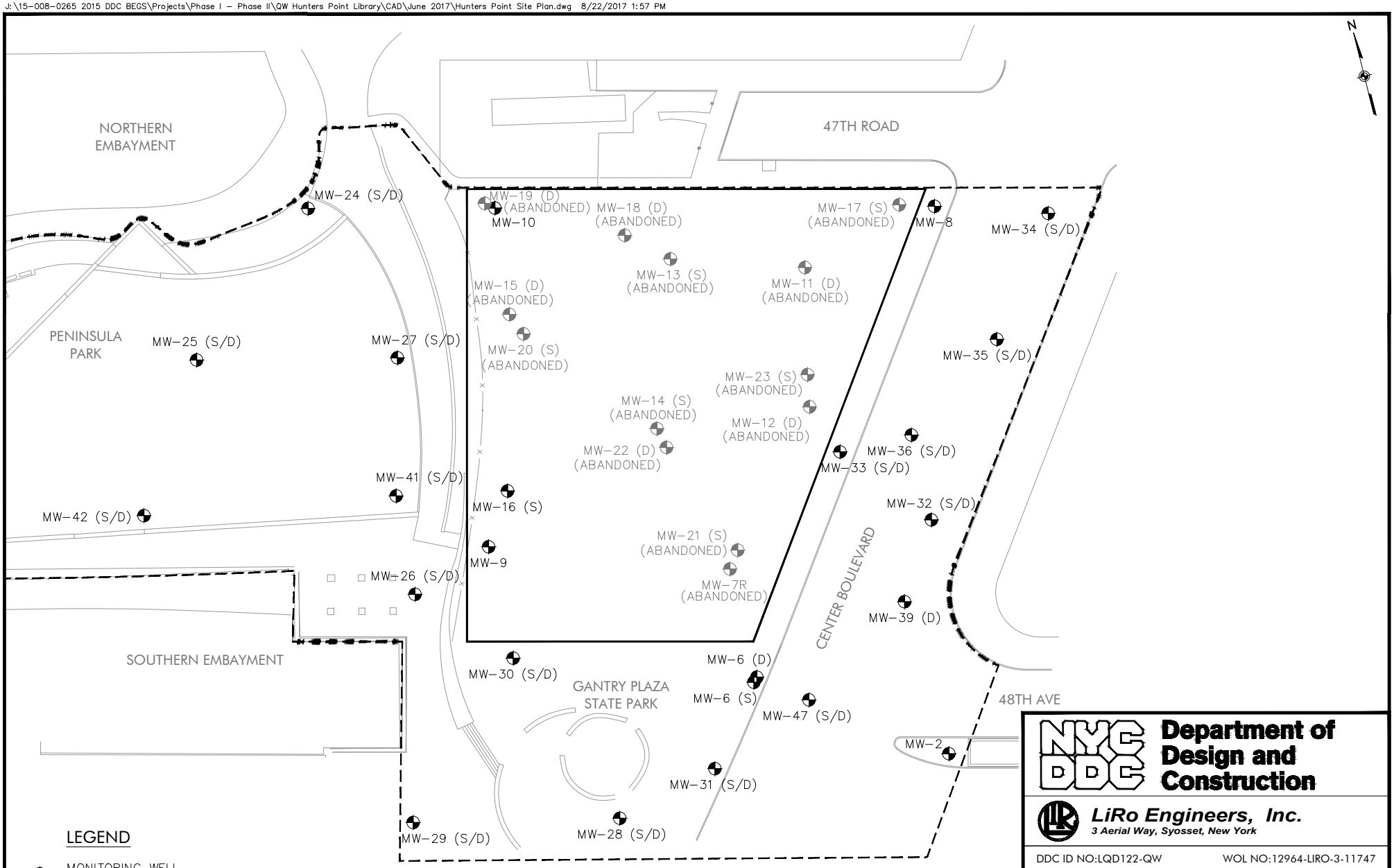
TOPOGRAPHIC SITE LOCATION MAP

Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. b/w 47th Rd. and 48th Rd.
NYSDEC Site ID: C241087
Queens, New York

SCALE: AS SHOWN	DATE: 8/2017	FIGURE: 1

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\JUNE 2017\Hunters Point Topo Map.ai

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\June 2017\Hunters Point Site Plan.dwg 8/22/2017 1:57 PM



LEGEND

- MONITORING WELL LOCATION
- PARCEL 8 BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

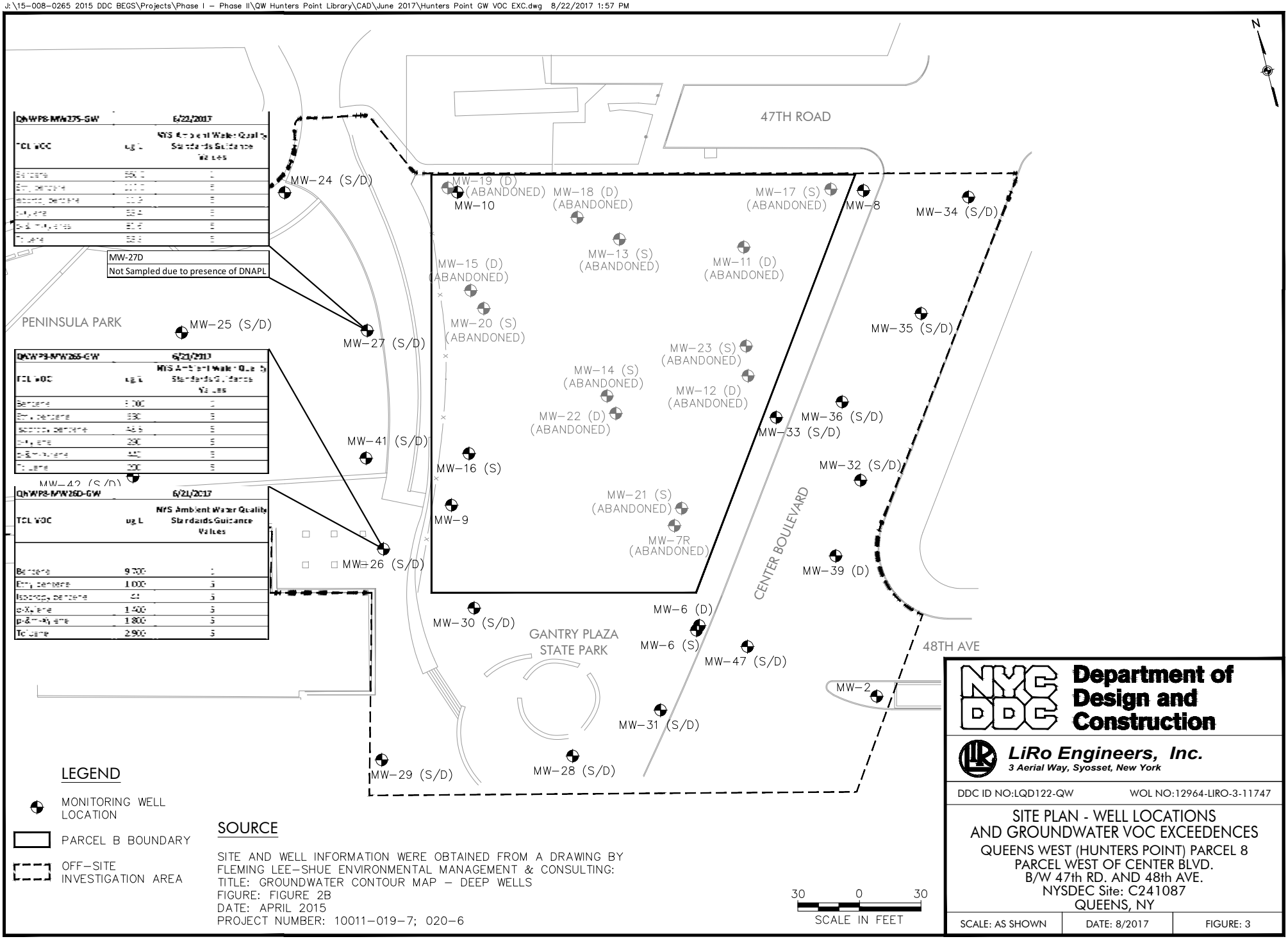
DDC ID NO:LQD122-QW WOL NO:12964-LIRO-3-11747

SITE PLAN - WELL LOCATIONS

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 8/2017	FIGURE: 2

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\June 2017\Hunters Point GW VOC EXC.dwg 8/22/2017 1:57 PM



QHWPS-MW27S-GW		6/22/2017
TCL VOC	ug/L	NYS Ambient Water Quality Standards Guidance Values
Benzene	550	1
Ethylbenzene	1000	5
Isopropylbenzene	110	5
m,o-Xylene	530	5
p-&m-Xylene	810	5
Toluene	520	5

MW-27D
Not Sampled due to presence of DNAPL

QHWPS-MW26S-GW		6/21/2017
TCL VOC	ug/L	NYS Ambient Water Quality Standards Guidance Values
Benzene	5,000	1
Ethylbenzene	330	5
Isopropylbenzene	48	5
m,o-Xylene	290	5
p-&m-Xylene	440	5
Toluene	200	5

QHWPS-MW26D-GW		6/21/2017
TCL VOC	ug/L	NYS Ambient Water Quality Standards Guidance Values
Benzene	9,700	1
Ethylbenzene	1,000	5
Isopropylbenzene	61	5
m,o-Xylene	1,400	5
p-&m-Xylene	1,800	5
Toluene	2,900	5

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

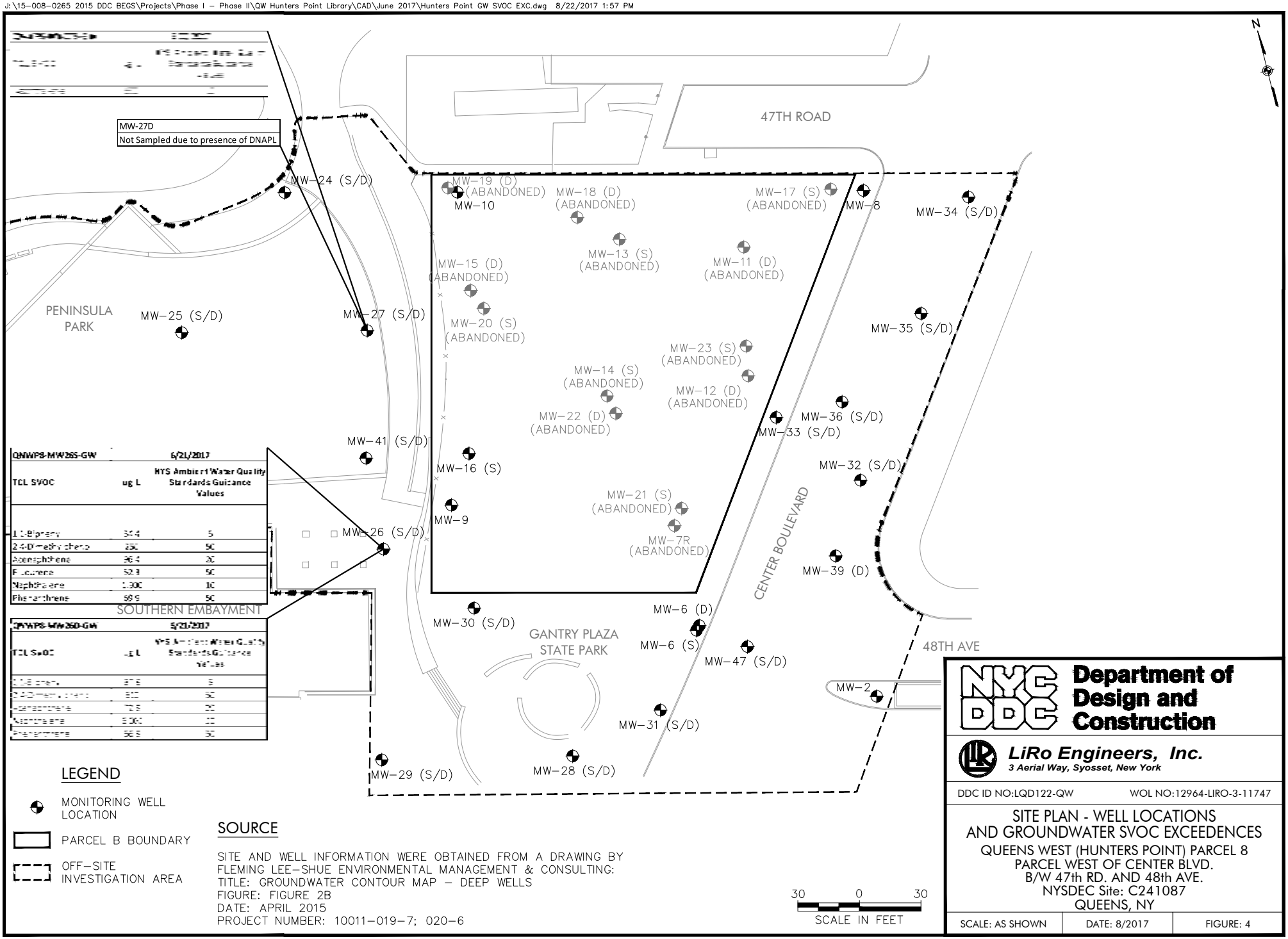
DDC ID NO:LQD122-QW WOL NO:12964-LIRO-3-11747

SITE PLAN - WELL LOCATIONS AND GROUNDWATER VOC EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 8/2017	FIGURE: 3

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\June 2017\Hunters Point GW SVOC EXC.dwg 8/22/2017 1:57 PM



QNWPS-MW26S-GW		5/21/2017
TCL SVOC	ug/L	NYS Ambient Water Quality Standards Guidance Values
1,1-Biphenyl	344	5
2,4-Dimethylphenol	250	50
Acenaphthene	364	20
Fluorene	523	50
Naphthalene	1,300	10
Phenanthrene	589	50

QNWPS-MW26D-GW		5/21/2017
TCL SVOC	ug/L	NYS Ambient Water Quality Standards Guidance Values
1,1-Biphenyl	378	5
2,4-Dimethylphenol	810	50
Acenaphthene	705	20
Naphthalene	3,060	10
Phenanthrene	568	50

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

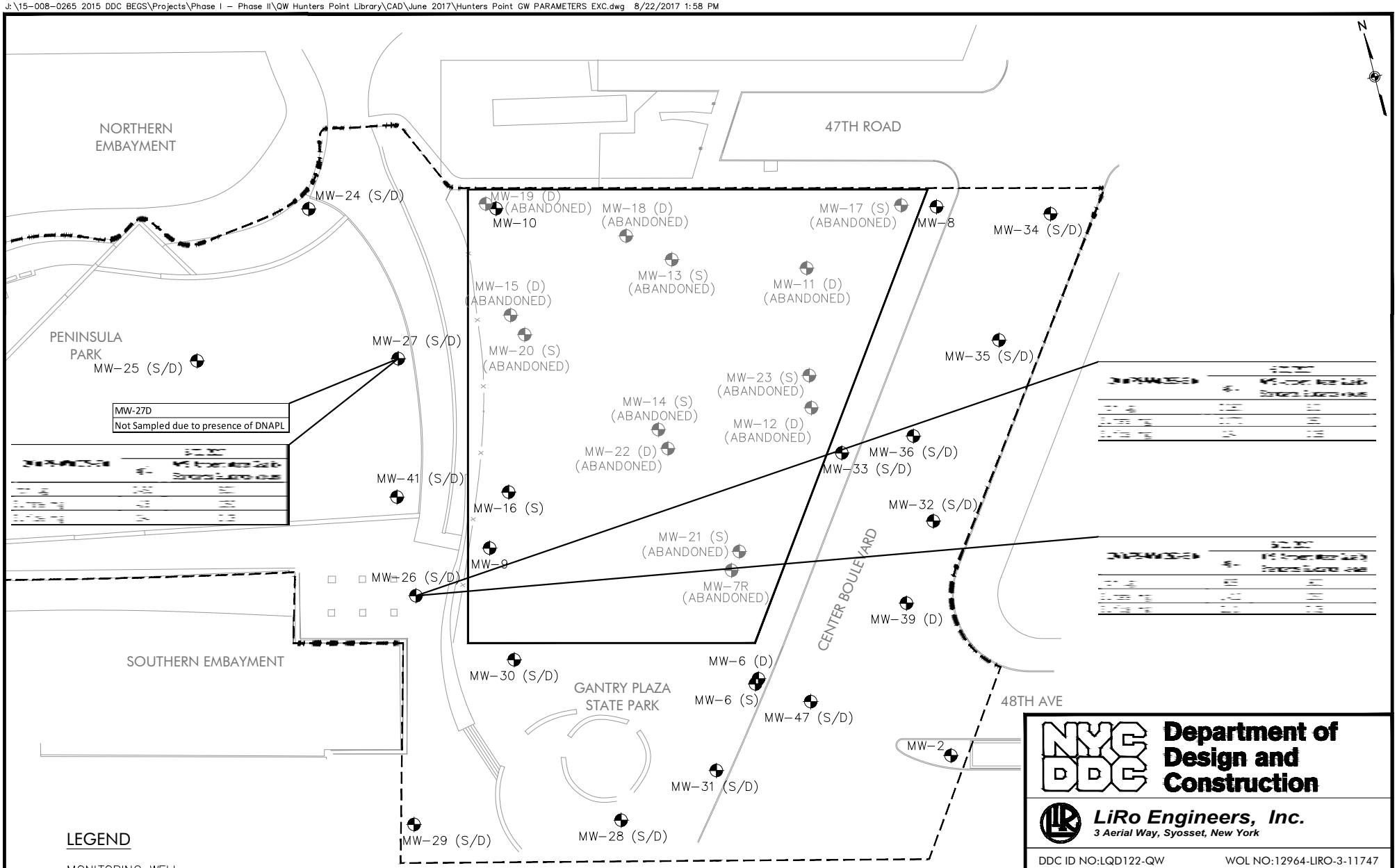
DDC ID NO:LQD122-QW WOL NO:12964-LIRO-3-11747

SITE PLAN - WELL LOCATIONS AND GROUNDWATER SVOC EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 8/2017	FIGURE: 4

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\June 2017\Hunters Point GW PARAMETERS EXC.dwg 8/22/2017 1:58 PM



LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO:LQD122-QW WOL NO:12964-LIRO-3-11747

SITE PLAN - WELL LOCATIONS AND GROUNDWATER PARAMETER EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 8/2017	FIGURE: 5

Tables

Table 2 - Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Groundwater
Quarterly Monitoring Report: Second Quarter 2017
Queen West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

TCL VOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect				
		QNWP8-MW26S-GW	QNWP8-MW26D-GW	QNWP8-MW27S-GW	QNWP8-Equip Blank	QNWP8-Trip Blank
		6/21/2017	6/21/2017	6/22/2017	6/22/2017	6/20/2017
Benzene	1	**3,000**	**9,700 D**	**550 D**	ND	ND
Ethylbenzene	5	**530**	**1,000**	**110**	ND	ND
Isopropylbenzene	5	**48.8**	**44**	**11.9**	ND	ND
Methyl-tert-butyl ether	10	ND	ND	4.3 J	ND	ND
o-Xylene	5	**290**	**1,400**	**53.4**	ND	ND
p- & m-Xylenes	5	**440**	**1,800**	**81.6**	ND	ND
Toluene	5	**200**	**2,900**	**53.3**	ND	ND
Total VOCs	NS	4,509	16,844	865	ND	ND

Notes:
All concentrations are reported in parts per billion (ppb or ug/L)
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
Naphthalene reported with SVOCs in Table 3.
J = Estimated value
D = Diluted

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 3 - Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Groundwater
Quarterly Monitoring Report: Second Quarter 2017
Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

TCL SVOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect			
		QNWP8-MW26S-GW	QNWP8-MW26D-GW	QNWP8-MW27S-GW	QNWP8-Equip Blank
		6/21/2017	6/21/2017	6/22/2017	6/22/2017
1,1-Biphenyl	5	**34.4**	**37.8**	6.8 J	ND
2,4-Dimethylphenol	50	**250 JD**	**610 JD**	28.6	ND
2-Methylnaphthalene	NS	64.8	400 JH	34.6	ND
2-Methylphenol (o-Cresol)	NS	47.7	69.7	2.5 J	ND
3+4-Methylphenols (m-Cresol & p-Cresol)	NS	110 JD	ND	4 J	ND
Acenaphthene	20	**96.4 JD**	**72.3**	19.9	ND
Acenaphthylene	NS	ND	14.2	2.2 J	ND
Acetophenone	NS	11.2	ND	ND	ND
Anthracene	NS	8 J	9.2 J	2.8 J	ND
Carbazole	NS	41.2	47.2	13.4	ND
Dibenzofuran	NS	73.9	65.6	15	ND
Dimethylphthalate	NS	3.6 J	5.7 J	5.3 J	ND
Flouranthene	NS	7.5 J	9.7 J	2.8 J	ND
Fluorene	50	**52.3**	47.4	12	ND
Napthalene	10	**1,900 D**	**5,000 JH**	**600 D**	ND
Phenanthrene	50	**69.9**	**56.8**	14.9	ND
Phenol	NS	21.1	6.2 J	ND	ND
Pyrene	NS	4.7 J	6.9 J	2.1 J	ND
Total SVOCs	NS	2,797	6,459	767	ND

Notes:
All concentrations are reported in parts per billion (ppb or ug/L)
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
H = High
D = Diluted

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 4 - Summary of Miscellaneous Parameters in Groundwater
Quarterly Monitoring Report: Second Quarter 2017
Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

Parameter	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID and Date Collected			
		QNWP8-MW26S-GW	QNWP8-MW26D-GW	QNWP8-MW27S-GW	QNWP8-Equip Blank
		6/21/2017	6/21/2017	6/22/2017	
PARAMETERS (units)					
Iron (ug/L)	300	**2,280**	**805**	**2,430**	17.1 J
Sulfate (mg/L)	250	**1,070 D**	**1,410 D**	**406 D**	NA
Sulfide (mg/L)	0.05	**194**	**21.1**	**20.6**	NA
Alkalinity (mg/L)	NS	2,290	1,710	1,360	NA
TPHC Diesel Range Organics (mg/L)	NS	9.960	18.240	2.538	0.037 J
TPHC Gasoiline Range Organics (mg/L)	NS	9.450	16.150	0.904	ND

Notes:
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
NA = Not analyzed
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
ug/L = microgram per liter
mg/L = milligram per liter
J = Estimated value
D = Diluted

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Appendix 1
Data Usability Summary Report (DUSR)

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Queens W. Hunter's Point
Chemtech SDG#I3870
August 2, 2017
Sampling date: 6/21/2017

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for LiRo Engineers, Inc., project located at Queens W. Hunter's Point, Chemtech, SDG#I3870 submitted to Vali-Data of WNY, LLC on July 26, 2017. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocols and USEPA National Functional Guidelines. The laboratory performed the analysis using USEPA method Volatile Organics (8260C) and Semi-Volatile Organics (8270D).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below in Surrogate Spike Recoveries and Laboratory Control Samples.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of 4-Bromofluorobenzene was outside ASP QC limits, low in QNWP8-EQUIP-BLANK. Associated target analytes in this sample should be qualified as estimated.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except the %Rec of Bromomethane was outside QC limits, low in VU0629WBSD01. The RPD of Bromomethane was outside QC limits, between VU0629WBS01 and VU0629WBSD01. This target analyte should be qualified as estimated in VU0629WBS01, VU0629WBSD01 and the associated samples.

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

SEMI-VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Internal Standard, Surrogate Spike Recoveries and Continuing Calibration.

Samples, QNWP8-MW26S-GW, QNWP8-MW26D-GW and QNWP8-MW27D-GW were diluted due to high target analyte concentration.
Some target analytes were over diluted in sample, QNWP8-MW26S-GWDL, due to high Naphthalene concentration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met except revised raw data for the initial calibration off Instrument F at level 2.5 is attached. The original did not include data for all target analytes.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met except the area of Naphthalene-d_8 in QNWP8-MW26D-GW and Perylene-d_{12} in QNWP8-MW26D-GWDL was outside QC limits, low. Associated target analytes detected in these samples should be qualified as estimated high. Associated target analytes not detected in these samples should be qualified as estimated.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of 2-Fluorophenol, Phenol-d_6 and 2,4,6-Tribromophenol was outside QC limits, low in QNWP8-MW26D-GW. Associated target analytes in this sample should be qualified as estimated.
The %Rec of Nitrobenzene-d_5 was outside QC limits, high in QNWP8-MW26D-GW. Associated target analytes detected in this sample should be qualified as estimated high.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met except the %D of 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol was outside APS outer QC limits in BG027701.D. These target analytes should be qualified as estimated in the associated samples, blanks and spikes.

GC/MS PERFORMANCE CHECK
All criteria were met.

#sys_sample_code	lab_sample_id	chemical_name	result_valu	lab_qualifie	validator_q	validated
QNWP8-MW26S-GW-20170621	I3870-01	Sulfate (As SO4)	1330	OR		N
QNWP8-MW26S-GW-20170621	I3870-01DL	Sulfate (As SO4)	1070	D		N
QNWP8-MW26D-GW-20170621	I3870-02	Sulfate (As SO4)	1860	OR		N
QNWP8-MW26D-GW-20170621	I3870-02DL	Sulfate (As SO4)	1410	D		N
QNWP8-MW27S-GW-20170622	I3870-03	Sulfate (As SO4)	566	OR		N
QNWP8-MW27S-GW-20170622	I3870-03DL	Sulfate (As SO4)	406	D		N
QNWP8-MW26S-GW-20170621	I3870-01	Alkalinity, Total (As CaCO3)	2290			N
QNWP8-MW26D-GW-20170621	I3870-02	Alkalinity, Total (As CaCO3)	1710			N
QNWP8-MW27S-GW-20170622	I3870-03	Alkalinity, Total (As CaCO3)	1360			N
LB88428BLW	lb88428BLW	Alkalinity, Total (As CaCO3)		U		N
LB88428BSW	LB88428BSW	Alkalinity, Total (As CaCO3)	48.9			N
QNWP8-MW26S-GW-20170621	I3870-01	Iron	2280			N
QNWP8-MW26D-GW-20170621	I3870-02	Iron	805			N
QNWP8-MW27S-GW-20170622	I3870-03	Iron	2430			N
QNWP8-EQUIP-BLANK-20170622	I3870-04	Iron	17.1	J		N
PB100076BL	PB100076BL	Iron		U		N
PB100076BS	PB100076BS	Iron	1550			N
BSF0630W1	BSF0630W1	1,1,1-Trifluorotoluene	20.24			N
BSF0630W1	BSF0630W1	PHC As Gasoline	167			N
QNWP8-MW26S-GW-20170621	I3870-01	1,1,1-Trifluorotoluene	20.79			N
QNWP8-MW26S-GW-20170621	I3870-01	PHC As Diesel Fuel	7630	E		N
QNWP8-MW26S-GW-20170621	I3870-01	PHC As Diesel Fuel	9960			N
QNWP8-MW26S-GW-20170621	I3870-01	PHC As Gasoline	9450			N
QNWP8-MW26S-GW-20170621	I3870-01	Tetracosane-D50	1.83			N
QNWP8-MW26S-GW-20170621	I3870-01	Tetracosane-D50	17.71			N
QNWP8-MW26D-GW-20170621	I3870-02	1,1,1-Trifluorotoluene	19.97			N
QNWP8-MW26D-GW-20170621	I3870-02	PHC As Diesel Fuel	16100	E		N
QNWP8-MW26D-GW-20170621	I3870-02	PHC As Diesel Fuel	18240			N
QNWP8-MW26D-GW-20170621	I3870-02	PHC As Gasoline	16150			N
QNWP8-MW26D-GW-20170621	I3870-02	Tetracosane-D50	0.94			N
QNWP8-MW26D-GW-20170621	I3870-02	Tetracosane-D50	18.78			N
QNWP8-MW27S-GW-20170622	I3870-03	1,1,1-Trifluorotoluene	20.49			N
QNWP8-MW27S-GW-20170622	I3870-03	PHC As Diesel Fuel	2290	E		N
QNWP8-MW27S-GW-20170622	I3870-03	PHC As Diesel Fuel	2538			N
QNWP8-MW27S-GW-20170622	I3870-03	PHC As Gasoline	904			N
QNWP8-MW27S-GW-20170622	I3870-03	Tetracosane-D50	17.71			N
QNWP8-MW27S-GW-20170622	I3870-03	Tetracosane-D50	3.50			N
QNWP8-MW27S-GWMS	I3870-03MS	1,1,1-Trifluorotoluene	19.98			N
QNWP8-MW27S-GWMS	I3870-03MS	PHC As Gasoline	1065			N
QNWP8-MW27S-GWMSD	I3870-03MSD	1,1,1-Trifluorotoluene	19.40			N
QNWP8-MW27S-GWMSD	I3870-03MSD	PHC As Gasoline	1012			N
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,1,1-Trifluorotoluene	18.24			N
QNWP8-EQUIP-BLANK-20170622	I3870-04	PHC As Diesel Fuel	37	J		N
QNWP8-EQUIP-BLANK-20170622	I3870-04	PHC As Gasoline		U		N
QNWP8-EQUIP-BLANK-20170622	I3870-04	Tetracosane-D50	15.89			N
PB100107BL	PB100107BL	PHC As Diesel Fuel		U		N
PB100107BL	PB100107BL	Tetracosane-D50	16.68			N
PB100107BS	PB100107BS	PHC As Diesel Fuel	165			N
PB100107BS	PB100107BS	Tetracosane-D50	17.63			N
PB100107BSD	PB100107BSD	PHC As Diesel Fuel	264			N
PB100107BSD	PB100107BSD	Tetracosane-D50	15.94			N
VBF0630W1	VBF0630W1	1,1,1-Trifluorotoluene	15.89			N
VBF0630W1	VBF0630W1	PHC As Gasoline		U		N
QNWP8-MW26S-GW-20170621	I3870-01	1,1,1-Trichloroethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,1,2,2-Tetrachloroethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,1,2-Trichloroethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,1-Dichloroethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,1-Dichloroethene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,2,3-Trichlorobenzene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,2,4-Trichlorobenzene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,2-Dibromo-3-Chloropropane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,2-Dichlorobenzene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,2-Dichloroethane		U		Y

QNWP8-MW26S-GW-20170621	I3870-01	1,2-Dichloroethane-D4	42.3			Y
QNWP8-MW26S-GW-20170621	I3870-01	1,2-Dichloropropane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,3-Dichlorobenzene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	1,4-Dichlorobenzene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Hexanone		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Acetone		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Benzene	3000			Y
QNWP8-MW26S-GW-20170621	I3870-01	Bromochloromethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Bromodichloromethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Bromoform		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Bromomethane		UQ	UJ	Y
QNWP8-MW26S-GW-20170621	I3870-01	Carbon Disulfide		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Carbon Tetrachloride		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Chlorobenzene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Chloroethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Chloroform		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Chloromethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Cis-1,2-Dichloroethylene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Cis-1,3-Dichloropropene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Cyclohexane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Dibromochloromethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Dibromofluoromethane	45.9			Y
QNWP8-MW26S-GW-20170621	I3870-01	Dichlorodifluoromethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Ethylbenzene	530			Y
QNWP8-MW26S-GW-20170621	I3870-01	Isopropylbenzene (Cumene)	48.8			Y
QNWP8-MW26S-GW-20170621	I3870-01	m,p-Xylene	440			Y
QNWP8-MW26S-GW-20170621	I3870-01	Methyl Acetate		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Methyl Ethyl Ketone (2-Butanone)		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Methylcyclohexane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Methylene Chloride		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	O-Xylene (1,2-Dimethylbenzene)	290			Y
QNWP8-MW26S-GW-20170621	I3870-01	p-Bromofluorobenzene	45.9			Y
QNWP8-MW26S-GW-20170621	I3870-01	Styrene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Tert-Butyl Alcohol		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Tert-Butyl Methyl Ether		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Tetrachloroethylene (PCE)		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Toluene	200			Y
QNWP8-MW26S-GW-20170621	I3870-01	Toluene-D8	48.3			Y
QNWP8-MW26S-GW-20170621	I3870-01	Trans-1,2-Dichloroethene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Trans-1,3-Dichloropropene		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Trichloroethylene (TCE)		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Trichlorofluoromethane		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Vinyl Chloride		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,1,1-Trichloroethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,1,2,2-Tetrachloroethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,1,2-Trichloroethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,1-Dichloroethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,1-Dichloroethene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2,3-Trichlorobenzene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2,4-Trichlorobenzene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2-Dibromo-3-Chloropropane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2-Dichlorobenzene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2-Dichloroethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2-Dichloroethane-D4	43			Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2-Dichloropropane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,3-Dichlorobenzene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	1,4-Dichlorobenzene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Hexanone		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Acetone		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Benzene	9000	E		Y
QNWP8-MW26D-GW-20170621	I3870-02	Bromochloromethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Bromodichloromethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Bromoform		U		Y

QNWP8-MW26D-GW-20170621	I3870-02	Bromomethane		UQ	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	Carbon Disulfide		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Carbon Tetrachloride		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Chlorobenzene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Chloroethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Chloroform		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Chloromethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Cis-1,2-Dichloroethylene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Cis-1,3-Dichloropropene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Cyclohexane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Dibromochloromethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Dibromofluoromethane	44.9			Y
QNWP8-MW26D-GW-20170621	I3870-02	Dichlorodifluoromethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Ethylbenzene	1000			Y
QNWP8-MW26D-GW-20170621	I3870-02	Isopropylbenzene (Cumene)	44			Y
QNWP8-MW26D-GW-20170621	I3870-02	m,p-Xylene	1800			Y
QNWP8-MW26D-GW-20170621	I3870-02	Methyl Acetate		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Methyl Ethyl Ketone (2-Butanone)		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Methylcyclohexane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Methylene Chloride		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	O-Xylene (1,2-Dimethylbenzene)	1400			Y
QNWP8-MW26D-GW-20170621	I3870-02	p-Bromofluorobenzene	47.9			Y
QNWP8-MW26D-GW-20170621	I3870-02	Styrene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Tert-Butyl Alcohol		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Tert-Butyl Methyl Ether		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Tetrachloroethylene (PCE)		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Toluene	2900			Y
QNWP8-MW26D-GW-20170621	I3870-02	Toluene-D8	47.6			Y
QNWP8-MW26D-GW-20170621	I3870-02	Trans-1,2-Dichloroethene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Trans-1,3-Dichloropropene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Trichloroethylene (TCE)		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Trichlorofluoromethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Vinyl Chloride		U		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,1,1-Trichloroethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,1,2,2-Tetrachloroethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,1,2-Trichloro-1,2,2-Trifluoroethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,1,2-Trichloroethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,1-Dichloroethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,1-Dichloroethene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2,3-Trichlorobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2,4-Trichlorobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2-Dibromo-3-Chloropropane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2-Dibromoethane (Ethylene Dibromide)		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2-Dichlorobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2-Dichloroethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2-Dichloroethane-D4	42.8			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2-Dichloropropane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,3-Dichlorobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,4-Dichlorobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Hexanone		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Acetone		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Benzene	9700	D		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Bromochloromethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Bromodichloromethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Bromoform		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Bromomethane		UDQ	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Carbon Disulfide		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Carbon Tetrachloride		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Chlorobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Chloroethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Chloroform		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Chloromethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Cis-1,2-Dichloroethylene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Cis-1,3-Dichloropropene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Cyclohexane		UD		Y

QNWP8-MW26D-GW-20170621	I3870-02DL	Dibromochloromethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Dibromofluoromethane	46.9			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Dichlorodifluoromethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Ethylbenzene	1000	D		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Isopropylbenzene (Cumene)		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	m,p-Xylene	1600	D		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Methyl Acetate		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Methyl Ethyl Ketone (2-Butanone)		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Methylcyclohexane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Methylene Chloride		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	O-Xylene (1,2-Dimethylbenzene)	1300	D		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	p-Bromofluorobenzene	43.8			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Styrene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Tert-Butyl Alcohol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Tert-Butyl Methyl Ether		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Tetrachloroethylene (PCE)		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Toluene	3000	D		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Toluene-D8	47.9			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Trans-1,2-Dichloroethene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Trans-1,3-Dichloropropene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Trichloroethylene (TCE)		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Trichlorofluoromethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Vinyl Chloride		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,1,1-Trichloroethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,1,2,2-Tetrachloroethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,1,2-Trichloroethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,1-Dichloroethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,1-Dichloroethene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2,3-Trichlorobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2,4-Trichlorobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2-Dibromo-3-Chloropropane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2-Dichlorobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2-Dichloroethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2-Dichloroethane-D4	44.9			Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2-Dichloropropane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,3-Dichlorobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	1,4-Dichlorobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Hexanone		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Acetone		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Benzene	540	E		Y
QNWP8-MW27S-GW-20170622	I3870-03	Bromochloromethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Bromodichloromethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Bromoform		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Bromomethane		UQ	UJ	Y
QNWP8-MW27S-GW-20170622	I3870-03	Carbon Disulfide		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Carbon Tetrachloride		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Chlorobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Chloroethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Chloroform		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Chloromethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Cis-1,2-Dichloroethylene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Cis-1,3-Dichloropropene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Cyclohexane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Dibromochloromethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Dibromofluoromethane	46.1			Y
QNWP8-MW27S-GW-20170622	I3870-03	Dichlorodifluoromethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Ethylbenzene	110			Y
QNWP8-MW27S-GW-20170622	I3870-03	Isopropylbenzene (Cumene)	11.9			Y
QNWP8-MW27S-GW-20170622	I3870-03	m,p-Xylene	81.6			Y
QNWP8-MW27S-GW-20170622	I3870-03	Methyl Acetate		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Methyl Ethyl Ketone (2-Butanone)		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Methylcyclohexane		U		Y

QNWP8-MW27S-GW-20170622	I3870-03	Methylene Chloride		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	O-Xylene (1,2-Dimethylbenzene)	53.4			Y
QNWP8-MW27S-GW-20170622	I3870-03	p-Bromofluorobenzene	46.4			Y
QNWP8-MW27S-GW-20170622	I3870-03	Styrene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Tert-Butyl Alcohol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Tert-Butyl Methyl Ether	4.3	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	Tetrachloroethylene (PCE)		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Toluene	53.3			Y
QNWP8-MW27S-GW-20170622	I3870-03	Toluene-D8	47.9			Y
QNWP8-MW27S-GW-20170622	I3870-03	Trans-1,2-Dichloroethene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Trans-1,3-Dichloropropene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Trichloroethylene (TCE)		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Trichlorofluoromethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Vinyl Chloride		U		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,1,1-Trichloroethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,1,2,2-Tetrachloroethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,1,2-Trichloro-1,2,2-Trifluoroethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,1,2-Trichloroethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,1-Dichloroethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,1-Dichloroethene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2,3-Trichlorobenzene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2,4-Trichlorobenzene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2-Dibromo-3-Chloropropane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2-Dibromoethane (Ethylene Dibromide)		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2-Dichlorobenzene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2-Dichloroethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2-Dichloroethane-D4	41.2			Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2-Dichloropropane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,3-Dichlorobenzene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,4-Dichlorobenzene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Hexanone		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Acetone		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Benzene	550	D		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Bromochloromethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Bromodichloromethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Bromoform		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Bromomethane		UDQ	UJ	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Carbon Disulfide		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Carbon Tetrachloride		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Chlorobenzene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Chloroethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Chloroform		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Chloromethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Cis-1,2-Dichloroethylene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Cis-1,3-Dichloropropene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Cyclohexane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Dibromochloromethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Dibromofluoromethane	46.4			Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Dichlorodifluoromethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Ethylbenzene	100	D		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Isopropylbenzene (Cumene)	11.3	D		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	m,p-Xylene	77.5	D		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Methyl Acetate		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Methyl Ethyl Ketone (2-Butanone)		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Methylcyclohexane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Methylene Chloride		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	O-Xylene (1,2-Dimethylbenzene)	49.1	D		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	p-Bromofluorobenzene	47.1			Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Styrene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Tert-Butyl Alcohol		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Tert-Butyl Methyl Ether		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Tetrachloroethylene (PCE)		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Toluene	55.9	D		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Toluene-D8	48.9			Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Trans-1,2-Dichloroethene		UD		Y

QNWP8-MW27S-GW-20170622	I3870-03DL	Trans-1,3-Dichloropropene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Trichloroethylene (TCE)		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Trichlorofluoromethane		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Vinyl Chloride		UD		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,1,1-Trichloroethane		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,1,2,2-Tetrachloroethane		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,1,2-Trichloroethane		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,1-Dichloroethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,1-Dichloroethene		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2,3-Trichlorobenzene		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2,4-Trichlorobenzene		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2-Dibromo-3-Chloropropane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2-Dibromoethane (Ethylene Dibromide)		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2-Dichlorobenzene		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2-Dichloroethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2-Dichloroethane-D4	47.8			Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2-Dichloropropane		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,3-Dichlorobenzene		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,4-Dichlorobenzene		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Hexanone		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Acetone		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Benzene		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Bromochloromethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Bromodichloromethane		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Bromoform		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Bromomethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Carbon Disulfide		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Carbon Tetrachloride		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Chlorobenzene		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Chloroethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Chloroform		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Chloromethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Cis-1,2-Dichloroethylene		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Cis-1,3-Dichloropropene		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Cyclohexane		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Dibromochloromethane		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Dibromofluoromethane	48.4			Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Dichlorodifluoromethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Ethylbenzene		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Isopropylbenzene (Cumene)		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	m,p-Xylene		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Methyl Acetate		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Methyl Ethyl Ketone (2-Butanone)		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Methylcyclohexane		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Methylene Chloride		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	O-Xylene (1,2-Dimethylbenzene)		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	p-Bromofluorobenzene	40.7			Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Styrene		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Tert-Butyl Alcohol		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Tert-Butyl Methyl Ether		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Tetrachloroethylene (PCE)		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Toluene		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Toluene-D8	48.2			Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Trans-1,2-Dichloroethene		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Trans-1,3-Dichloropropene		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Trichloroethylene (TCE)		U	UJ	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Trichlorofluoromethane		U		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Vinyl Chloride		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,1,1-Trichloroethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,1,2,2-Tetrachloroethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,1,2-Trichloroethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,1-Dichloroethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,1-Dichloroethene		U		Y

QNWP8-TRIP-BLANK-20170620	I3870-05	1,2,3-Trichlorobenzene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,2,4-Trichlorobenzene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,2-Dibromo-3-Chloropropane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,2-Dichlorobenzene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,2-Dichloroethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,2-Dichloroethane-D4	41.7			Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,2-Dichloropropane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,3-Dichlorobenzene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	1,4-Dichlorobenzene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	2-Hexanone		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Acetone		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Benzene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Bromochloromethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Bromodichloromethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Bromoform		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Bromomethane		UQ	UJ	Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Carbon Disulfide		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Carbon Tetrachloride		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Chlorobenzene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Chloroethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Chloroform		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Chloromethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Cis-1,2-Dichloroethylene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Cis-1,3-Dichloropropene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Cyclohexane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Dibromochloromethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Dibromofluoromethane	46.9			Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Dichlorodifluoromethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Ethylbenzene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Isopropylbenzene (Cumene)		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	m,p-Xylene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Methyl Acetate		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Methyl Ethyl Ketone (2-Butanone)		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Methylcyclohexane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Methylene Chloride		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	O-Xylene (1,2-Dimethylbenzene)		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	p-Bromofluorobenzene	43.5			Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Styrene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Tert-Butyl Alcohol		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Tert-Butyl Methyl Ether		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Tetrachloroethylene (PCE)		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Toluene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Toluene-D8	48.9			Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Trans-1,2-Dichloroethene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Trans-1,3-Dichloropropene		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Trichloroethylene (TCE)		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Trichlorofluoromethane		U		Y
QNWP8-TRIP-BLANK-20170620	I3870-05	Vinyl Chloride		U		Y
VN0629WBL01	VN0629WBL01	1,1,1-Trichloroethane		U		Y
VN0629WBL01	VN0629WBL01	1,1,2,2-Tetrachloroethane		U		Y
VN0629WBL01	VN0629WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y
VN0629WBL01	VN0629WBL01	1,1,2-Trichloroethane		U		Y
VN0629WBL01	VN0629WBL01	1,1-Dichloroethane		U		Y
VN0629WBL01	VN0629WBL01	1,1-Dichloroethene		U		Y
VN0629WBL01	VN0629WBL01	1,2,3-Trichlorobenzene		U		Y
VN0629WBL01	VN0629WBL01	1,2,4-Trichlorobenzene		U		Y
VN0629WBL01	VN0629WBL01	1,2-Dibromo-3-Chloropropane		U		Y
VN0629WBL01	VN0629WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
VN0629WBL01	VN0629WBL01	1,2-Dichlorobenzene		U		Y
VN0629WBL01	VN0629WBL01	1,2-Dichloroethane		U		Y
VN0629WBL01	VN0629WBL01	1,2-Dichloroethane-D4	44.8			Y
VN0629WBL01	VN0629WBL01	1,2-Dichloropropane		U		Y
VN0629WBL01	VN0629WBL01	1,3-Dichlorobenzene		U		Y
VN0629WBL01	VN0629WBL01	1,4-Dichlorobenzene		U		Y

VN0629WBL01	VN0629WBL01	2-Hexanone		U		Y
VN0629WBL01	VN0629WBL01	Acetone		U		Y
VN0629WBL01	VN0629WBL01	Benzene		U		Y
VN0629WBL01	VN0629WBL01	Bromochloromethane		U		Y
VN0629WBL01	VN0629WBL01	Bromodichloromethane		U		Y
VN0629WBL01	VN0629WBL01	Bromoform		U		Y
VN0629WBL01	VN0629WBL01	Bromomethane		U		Y
VN0629WBL01	VN0629WBL01	Carbon Disulfide		U		Y
VN0629WBL01	VN0629WBL01	Carbon Tetrachloride		U		Y
VN0629WBL01	VN0629WBL01	Chlorobenzene		U		Y
VN0629WBL01	VN0629WBL01	Chloroethane		U		Y
VN0629WBL01	VN0629WBL01	Chloroform		U		Y
VN0629WBL01	VN0629WBL01	Chloromethane		U		Y
VN0629WBL01	VN0629WBL01	Cis-1,2-Dichloroethylene		U		Y
VN0629WBL01	VN0629WBL01	Cis-1,3-Dichloropropene		U		Y
VN0629WBL01	VN0629WBL01	Cyclohexane		U		Y
VN0629WBL01	VN0629WBL01	Dibromochloromethane		U		Y
VN0629WBL01	VN0629WBL01	Dibromofluoromethane	47.7			Y
VN0629WBL01	VN0629WBL01	Dichlorodifluoromethane		U		Y
VN0629WBL01	VN0629WBL01	Ethylbenzene		U		Y
VN0629WBL01	VN0629WBL01	Isopropylbenzene (Cumene)		U		Y
VN0629WBL01	VN0629WBL01	m,p-Xylene		U		Y
VN0629WBL01	VN0629WBL01	Methyl Acetate		U		Y
VN0629WBL01	VN0629WBL01	Methyl Ethyl Ketone (2-Butanone)		U		Y
VN0629WBL01	VN0629WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
VN0629WBL01	VN0629WBL01	Methylcyclohexane		U		Y
VN0629WBL01	VN0629WBL01	Methylene Chloride		U		Y
VN0629WBL01	VN0629WBL01	O-Xylene (1,2-Dimethylbenzene)		U		Y
VN0629WBL01	VN0629WBL01	p-Bromofluorobenzene	49.3			Y
VN0629WBL01	VN0629WBL01	Styrene		U		Y
VN0629WBL01	VN0629WBL01	Tert-Butyl Alcohol		U		Y
VN0629WBL01	VN0629WBL01	Tert-Butyl Methyl Ether		U		Y
VN0629WBL01	VN0629WBL01	Tetrachloroethylene (PCE)		U		Y
VN0629WBL01	VN0629WBL01	Toluene		U		Y
VN0629WBL01	VN0629WBL01	Toluene-D8	50			Y
VN0629WBL01	VN0629WBL01	Trans-1,2-Dichloroethene		U		Y
VN0629WBL01	VN0629WBL01	Trans-1,3-Dichloropropene		U		Y
VN0629WBL01	VN0629WBL01	Trichloroethylene (TCE)		U		Y
VN0629WBL01	VN0629WBL01	Trichlorofluoromethane		U		Y
VN0629WBL01	VN0629WBL01	Vinyl Chloride		U		Y
VN0629WBS01	VN0629WBS01	1,1,1-Trichloroethane	19.9			Y
VN0629WBS01	VN0629WBS01	1,1,2,2-Tetrachloroethane	20.3			Y
VN0629WBS01	VN0629WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	19.4			Y
VN0629WBS01	VN0629WBS01	1,1,2-Trichloroethane	20.6			Y
VN0629WBS01	VN0629WBS01	1,1-Dichloroethane	19.7			Y
VN0629WBS01	VN0629WBS01	1,1-Dichloroethene	19.2			Y
VN0629WBS01	VN0629WBS01	1,2,3-Trichlorobenzene	20			Y
VN0629WBS01	VN0629WBS01	1,2,4-Trichlorobenzene	17.8			Y
VN0629WBS01	VN0629WBS01	1,2-Dibromo-3-Chloropropane	20.6			Y
VN0629WBS01	VN0629WBS01	1,2-Dibromoethane (Ethylene Dibromide)	20.3			Y
VN0629WBS01	VN0629WBS01	1,2-Dichlorobenzene	20.3			Y
VN0629WBS01	VN0629WBS01	1,2-Dichloroethane	19.7			Y
VN0629WBS01	VN0629WBS01	1,2-Dichloroethane-D4	47.4			Y
VN0629WBS01	VN0629WBS01	1,2-Dichloropropane	20.3			Y
VN0629WBS01	VN0629WBS01	1,3-Dichlorobenzene	20			Y
VN0629WBS01	VN0629WBS01	1,4-Dichlorobenzene	19.3			Y
VN0629WBS01	VN0629WBS01	2-Hexanone	100			Y
VN0629WBS01	VN0629WBS01	Acetone	88.4			Y
VN0629WBS01	VN0629WBS01	Benzene	20.6			Y
VN0629WBS01	VN0629WBS01	Bromochloromethane	19.9			Y
VN0629WBS01	VN0629WBS01	Bromodichloromethane	20.7			Y
VN0629WBS01	VN0629WBS01	Bromoform	20.4			Y
VN0629WBS01	VN0629WBS01	Bromomethane	21		J	Y
VN0629WBS01	VN0629WBS01	Carbon Disulfide	18.4			Y
VN0629WBS01	VN0629WBS01	Carbon Tetrachloride	19.4			Y
VN0629WBS01	VN0629WBS01	Chlorobenzene	20.2			Y

VN0629WBS01	VN0629WBS01	Chloroethane	18.6			Y
VN0629WBS01	VN0629WBS01	Chloroform	20			Y
VN0629WBS01	VN0629WBS01	Chloromethane	20.2			Y
VN0629WBS01	VN0629WBS01	Cis-1,2-Dichloroethylene	20			Y
VN0629WBS01	VN0629WBS01	Cis-1,3-Dichloropropene	20.5			Y
VN0629WBS01	VN0629WBS01	Cyclohexane	18.7			Y
VN0629WBS01	VN0629WBS01	Dibromochloromethane	20.4			Y
VN0629WBS01	VN0629WBS01	Dibromofluoromethane	50.9			Y
VN0629WBS01	VN0629WBS01	Dichlorodifluoromethane	19.4			Y
VN0629WBS01	VN0629WBS01	Ethylbenzene	20.7			Y
VN0629WBS01	VN0629WBS01	Isopropylbenzene (Cumene)	21.2			Y
VN0629WBS01	VN0629WBS01	m,p-Xylene	42.6			Y
VN0629WBS01	VN0629WBS01	Methyl Acetate	18.3			Y
VN0629WBS01	VN0629WBS01	Methyl Ethyl Ketone (2-Butanone)	95.1			Y
VN0629WBS01	VN0629WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone	100			Y
VN0629WBS01	VN0629WBS01	Methylcyclohexane	19.7			Y
VN0629WBS01	VN0629WBS01	Methylene Chloride	19.4			Y
VN0629WBS01	VN0629WBS01	O-Xylene (1,2-Dimethylbenzene)	21.5			Y
VN0629WBS01	VN0629WBS01	p-Bromofluorobenzene	51.4			Y
VN0629WBS01	VN0629WBS01	Styrene	21.6			Y
VN0629WBS01	VN0629WBS01	Tert-Butyl Alcohol	93.3			Y
VN0629WBS01	VN0629WBS01	Tert-Butyl Methyl Ether	20.2			Y
VN0629WBS01	VN0629WBS01	Tetrachloroethylene (PCE)	19			Y
VN0629WBS01	VN0629WBS01	Toluene	21.1			Y
VN0629WBS01	VN0629WBS01	Toluene-D8	52.7			Y
VN0629WBS01	VN0629WBS01	Trans-1,2-Dichloroethene	19.4			Y
VN0629WBS01	VN0629WBS01	Trans-1,3-Dichloropropene	20.3			Y
VN0629WBS01	VN0629WBS01	Trichloroethylene (TCE)	20			Y
VN0629WBS01	VN0629WBS01	Trichlorofluoromethane	19.3			Y
VN0629WBS01	VN0629WBS01	Vinyl Chloride	18.4			Y
VN0629WBSD01	VN0629WBSD01	1,1,1-Trichloroethane	19.7			Y
VN0629WBSD01	VN0629WBSD01	1,1,2,2-Tetrachloroethane	19.6			Y
VN0629WBSD01	VN0629WBSD01	1,1,2-Trichloro-1,2,2-Trifluoroethane	19.4			Y
VN0629WBSD01	VN0629WBSD01	1,1,2-Trichloroethane	20.3			Y
VN0629WBSD01	VN0629WBSD01	1,1-Dichloroethane	19.6			Y
VN0629WBSD01	VN0629WBSD01	1,1-Dichloroethene	19.4			Y
VN0629WBSD01	VN0629WBSD01	1,2,3-Trichlorobenzene	20.3			Y
VN0629WBSD01	VN0629WBSD01	1,2,4-Trichlorobenzene	18.4			Y
VN0629WBSD01	VN0629WBSD01	1,2-Dibromo-3-Chloropropane	20.2			Y
VN0629WBSD01	VN0629WBSD01	1,2-Dibromoethane (Ethylene Dibromide)	20			Y
VN0629WBSD01	VN0629WBSD01	1,2-Dichlorobenzene	20.1			Y
VN0629WBSD01	VN0629WBSD01	1,2-Dichloroethane	19.4			Y
VN0629WBSD01	VN0629WBSD01	1,2-Dichloroethane-D4	46.1			Y
VN0629WBSD01	VN0629WBSD01	1,2-Dichloropropane	19.8			Y
VN0629WBSD01	VN0629WBSD01	1,3-Dichlorobenzene	19.9			Y
VN0629WBSD01	VN0629WBSD01	1,4-Dichlorobenzene	19.3			Y
VN0629WBSD01	VN0629WBSD01	2-Hexanone	97.9			Y
VN0629WBSD01	VN0629WBSD01	Acetone	77			Y
VN0629WBSD01	VN0629WBSD01	Benzene	20.1			Y
VN0629WBSD01	VN0629WBSD01	Bromochloromethane	20.2			Y
VN0629WBSD01	VN0629WBSD01	Bromodichloromethane	20.2			Y
VN0629WBSD01	VN0629WBSD01	Bromoform	19.1			Y
VN0629WBSD01	VN0629WBSD01	Bromomethane	6	*	J	Y
VN0629WBSD01	VN0629WBSD01	Carbon Disulfide	18.3			Y
VN0629WBSD01	VN0629WBSD01	Carbon Tetrachloride	19			Y
VN0629WBSD01	VN0629WBSD01	Chlorobenzene	20			Y
VN0629WBSD01	VN0629WBSD01	Chloroethane	18.4			Y
VN0629WBSD01	VN0629WBSD01	Chloroform	19.8			Y
VN0629WBSD01	VN0629WBSD01	Chloromethane	17.1			Y
VN0629WBSD01	VN0629WBSD01	Cis-1,2-Dichloroethylene	19.9			Y
VN0629WBSD01	VN0629WBSD01	Cis-1,3-Dichloropropene	19.8			Y
VN0629WBSD01	VN0629WBSD01	Cyclohexane	18.8			Y
VN0629WBSD01	VN0629WBSD01	Dibromochloromethane	19.9			Y
VN0629WBSD01	VN0629WBSD01	Dibromofluoromethane	48.5			Y
VN0629WBSD01	VN0629WBSD01	Dichlorodifluoromethane	19.2			Y
VN0629WBSD01	VN0629WBSD01	Ethylbenzene	20.8			Y

VN0629WBSD01	VN0629WBSD01	Isopropylbenzene (Cumene)	21.1		Y
VN0629WBSD01	VN0629WBSD01	m,p-Xylene	42.1		Y
VN0629WBSD01	VN0629WBSD01	Methyl Acetate	18.9		Y
VN0629WBSD01	VN0629WBSD01	Methyl Ethyl Ketone (2-Butanone)	93.3		Y
VN0629WBSD01	VN0629WBSD01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone	100		Y
VN0629WBSD01	VN0629WBSD01	Methylcyclohexane	19.6		Y
VN0629WBSD01	VN0629WBSD01	Methylene Chloride	20.5		Y
VN0629WBSD01	VN0629WBSD01	O-Xylene (1,2-Dimethylbenzene)	21.3		Y
VN0629WBSD01	VN0629WBSD01	p-Bromofluorobenzene	49		Y
VN0629WBSD01	VN0629WBSD01	Styrene	21.8		Y
VN0629WBSD01	VN0629WBSD01	Tert-Butyl Alcohol	99		Y
VN0629WBSD01	VN0629WBSD01	Tert-Butyl Methyl Ether	20.8		Y
VN0629WBSD01	VN0629WBSD01	Tetrachloroethylene (PCE)	19.5		Y
VN0629WBSD01	VN0629WBSD01	Toluene	20.5		Y
VN0629WBSD01	VN0629WBSD01	Toluene-D8	49.8		Y
VN0629WBSD01	VN0629WBSD01	Trans-1,2-Dichloroethene	19.6		Y
VN0629WBSD01	VN0629WBSD01	Trans-1,3-Dichloropropene	19		Y
VN0629WBSD01	VN0629WBSD01	Trichloroethylene (TCE)	19.5		Y
VN0629WBSD01	VN0629WBSD01	Trichlorofluoromethane	19.3		Y
VN0629WBSD01	VN0629WBSD01	Vinyl Chloride	17.9		Y
VN0630WBL01	VN0630WBL01	1,1,1-Trichloroethane		U	Y
VN0630WBL01	VN0630WBL01	1,1,2,2-Tetrachloroethane		U	Y
VN0630WBL01	VN0630WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U	Y
VN0630WBL01	VN0630WBL01	1,1,2-Trichloroethane		U	Y
VN0630WBL01	VN0630WBL01	1,1-Dichloroethane		U	Y
VN0630WBL01	VN0630WBL01	1,1-Dichloroethene		U	Y
VN0630WBL01	VN0630WBL01	1,2,3-Trichlorobenzene		U	Y
VN0630WBL01	VN0630WBL01	1,2,4-Trichlorobenzene		U	Y
VN0630WBL01	VN0630WBL01	1,2-Dibromo-3-Chloropropane		U	Y
VN0630WBL01	VN0630WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U	Y
VN0630WBL01	VN0630WBL01	1,2-Dichlorobenzene		U	Y
VN0630WBL01	VN0630WBL01	1,2-Dichloroethane		U	Y
VN0630WBL01	VN0630WBL01	1,2-Dichloroethane-D4	49.2		Y
VN0630WBL01	VN0630WBL01	1,2-Dichloropropane		U	Y
VN0630WBL01	VN0630WBL01	1,3-Dichlorobenzene		U	Y
VN0630WBL01	VN0630WBL01	1,4-Dichlorobenzene		U	Y
VN0630WBL01	VN0630WBL01	2-Hexanone		U	Y
VN0630WBL01	VN0630WBL01	Acetone		U	Y
VN0630WBL01	VN0630WBL01	Benzene		U	Y
VN0630WBL01	VN0630WBL01	Bromochloromethane		U	Y
VN0630WBL01	VN0630WBL01	Bromodichloromethane		U	Y
VN0630WBL01	VN0630WBL01	Bromoform		U	Y
VN0630WBL01	VN0630WBL01	Bromomethane		U	Y
VN0630WBL01	VN0630WBL01	Carbon Disulfide		U	Y
VN0630WBL01	VN0630WBL01	Carbon Tetrachloride		U	Y
VN0630WBL01	VN0630WBL01	Chlorobenzene		U	Y
VN0630WBL01	VN0630WBL01	Chloroethane		U	Y
VN0630WBL01	VN0630WBL01	Chloroform		U	Y
VN0630WBL01	VN0630WBL01	Chloromethane		U	Y
VN0630WBL01	VN0630WBL01	Cis-1,2-Dichloroethylene		U	Y
VN0630WBL01	VN0630WBL01	Cis-1,3-Dichloropropene		U	Y
VN0630WBL01	VN0630WBL01	Cyclohexane		U	Y
VN0630WBL01	VN0630WBL01	Dibromochloromethane		U	Y
VN0630WBL01	VN0630WBL01	Dibromofluoromethane	47.7		Y
VN0630WBL01	VN0630WBL01	Dichlorodifluoromethane		U	Y
VN0630WBL01	VN0630WBL01	Ethylbenzene		U	Y
VN0630WBL01	VN0630WBL01	Isopropylbenzene (Cumene)		U	Y
VN0630WBL01	VN0630WBL01	m,p-Xylene		U	Y
VN0630WBL01	VN0630WBL01	Methyl Acetate		U	Y
VN0630WBL01	VN0630WBL01	Methyl Ethyl Ketone (2-Butanone)		U	Y
VN0630WBL01	VN0630WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U	Y
VN0630WBL01	VN0630WBL01	Methylcyclohexane		U	Y
VN0630WBL01	VN0630WBL01	Methylene Chloride		U	Y
VN0630WBL01	VN0630WBL01	O-Xylene (1,2-Dimethylbenzene)		U	Y
VN0630WBL01	VN0630WBL01	p-Bromofluorobenzene	46.1		Y
VN0630WBL01	VN0630WBL01	Styrene		U	Y

VN0630WBL01	VN0630WBL01	Tert-Butyl Alcohol		U	Y
VN0630WBL01	VN0630WBL01	Tert-Butyl Methyl Ether		U	Y
VN0630WBL01	VN0630WBL01	Tetrachloroethylene (PCE)		U	Y
VN0630WBL01	VN0630WBL01	Toluene		U	Y
VN0630WBL01	VN0630WBL01	Toluene-D8	47.5		Y
VN0630WBL01	VN0630WBL01	Trans-1,2-Dichloroethene		U	Y
VN0630WBL01	VN0630WBL01	Trans-1,3-Dichloropropene		U	Y
VN0630WBL01	VN0630WBL01	Trichloroethylene (TCE)		U	Y
VN0630WBL01	VN0630WBL01	Trichlorofluoromethane		U	Y
VN0630WBL01	VN0630WBL01	Vinyl Chloride		U	Y
VN0630WBS01	VN0630WBS01	1,1,1-Trichloroethane	20.3		Y
VN0630WBS01	VN0630WBS01	1,1,2,2-Tetrachloroethane	20.1		Y
VN0630WBS01	VN0630WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	20		Y
VN0630WBS01	VN0630WBS01	1,1,2-Trichloroethane	20.6		Y
VN0630WBS01	VN0630WBS01	1,1-Dichloroethane	20.6		Y
VN0630WBS01	VN0630WBS01	1,1-Dichloroethene	19.5		Y
VN0630WBS01	VN0630WBS01	1,2,3-Trichlorobenzene	19.5		Y
VN0630WBS01	VN0630WBS01	1,2,4-Trichlorobenzene	18.8		Y
VN0630WBS01	VN0630WBS01	1,2-Dibromo-3-Chloropropane	22.4		Y
VN0630WBS01	VN0630WBS01	1,2-Dibromoethane (Ethylene Dibromide)	20.4		Y
VN0630WBS01	VN0630WBS01	1,2-Dichlorobenzene	20.1		Y
VN0630WBS01	VN0630WBS01	1,2-Dichloroethane	20.5		Y
VN0630WBS01	VN0630WBS01	1,2-Dichloroethane-D4	53.3		Y
VN0630WBS01	VN0630WBS01	1,2-Dichloropropane	20		Y
VN0630WBS01	VN0630WBS01	1,3-Dichlorobenzene	19.7		Y
VN0630WBS01	VN0630WBS01	1,4-Dichlorobenzene	19.7		Y
VN0630WBS01	VN0630WBS01	2-Hexanone	110		Y
VN0630WBS01	VN0630WBS01	Acetone	98.3		Y
VN0630WBS01	VN0630WBS01	Benzene	20		Y
VN0630WBS01	VN0630WBS01	Bromochloromethane	21.3		Y
VN0630WBS01	VN0630WBS01	Bromodichloromethane	20.1		Y
VN0630WBS01	VN0630WBS01	Bromoform	20		Y
VN0630WBS01	VN0630WBS01	Bromomethane	26.8		Y
VN0630WBS01	VN0630WBS01	Carbon Disulfide	17.9		Y
VN0630WBS01	VN0630WBS01	Carbon Tetrachloride	19.2		Y
VN0630WBS01	VN0630WBS01	Chlorobenzene	19.5		Y
VN0630WBS01	VN0630WBS01	Chloroethane	20		Y
VN0630WBS01	VN0630WBS01	Chloroform	20.8		Y
VN0630WBS01	VN0630WBS01	Chloromethane	21.9		Y
VN0630WBS01	VN0630WBS01	Cis-1,2-Dichloroethylene	20.7		Y
VN0630WBS01	VN0630WBS01	Cis-1,3-Dichloropropene	20.4		Y
VN0630WBS01	VN0630WBS01	Cyclohexane	21		Y
VN0630WBS01	VN0630WBS01	Dibromochloromethane	20.4		Y
VN0630WBS01	VN0630WBS01	Dibromofluoromethane	50		Y
VN0630WBS01	VN0630WBS01	Dichlorodifluoromethane	20.5		Y
VN0630WBS01	VN0630WBS01	Ethylbenzene	20		Y
VN0630WBS01	VN0630WBS01	Isopropylbenzene (Cumene)	20.1		Y
VN0630WBS01	VN0630WBS01	m,p-Xylene	40.9		Y
VN0630WBS01	VN0630WBS01	Methyl Acetate	21.6		Y
VN0630WBS01	VN0630WBS01	Methyl Ethyl Ketone (2-Butanone)	110		Y
VN0630WBS01	VN0630WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone	110		Y
VN0630WBS01	VN0630WBS01	Methylcyclohexane	20		Y
VN0630WBS01	VN0630WBS01	Methylene Chloride	20.6		Y
VN0630WBS01	VN0630WBS01	O-Xylene (1,2-Dimethylbenzene)	20.1		Y
VN0630WBS01	VN0630WBS01	p-Bromofluorobenzene	50.3		Y
VN0630WBS01	VN0630WBS01	Styrene	20.7		Y
VN0630WBS01	VN0630WBS01	Tert-Butyl Alcohol	110		Y
VN0630WBS01	VN0630WBS01	Tert-Butyl Methyl Ether	21.1		Y
VN0630WBS01	VN0630WBS01	Tetrachloroethylene (PCE)	18.7		Y
VN0630WBS01	VN0630WBS01	Toluene	20.2		Y
VN0630WBS01	VN0630WBS01	Toluene-D8	50.4		Y
VN0630WBS01	VN0630WBS01	Trans-1,2-Dichloroethene	20.2		Y
VN0630WBS01	VN0630WBS01	Trans-1,3-Dichloropropene	20.3		Y
VN0630WBS01	VN0630WBS01	Trichloroethylene (TCE)	19.6		Y
VN0630WBS01	VN0630WBS01	Trichlorofluoromethane	19.4		Y
VN0630WBS01	VN0630WBS01	Vinyl Chloride	19.9		Y

QNWP8-MW26S-GW-20170621	I3870-01	1,2,4,5-Tetrachlorobenzene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2,3,4,6-Tetrachlorophenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2,4,5-Trichlorophenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2,4,6-Tribromophenol	90		Y
QNWP8-MW26S-GW-20170621	I3870-01	2,4,6-Trichlorophenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2,4-Dichlorophenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2,4-Dimethylphenol	220	E	Y
QNWP8-MW26S-GW-20170621	I3870-01	2,4-Dinitrophenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2,4-Dinitrotoluene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2,6-Dinitrotoluene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Chloronaphthalene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Chlorophenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Fluorobiphenyl	78.6		Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Fluorophenol	44.2		Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Methylnaphthalene	64.8		Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Methylphenol (O-Cresol)	47.7		Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Nitroaniline		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	2-Nitrophenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	3,3'-Dichlorobenzidine		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	3-Nitroaniline		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	4,6-Dinitro-2-Methylphenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	4-Bromophenyl Phenyl Ether		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	4-Chloro-3-Methylphenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	4-Chloroaniline		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	4-Chlorophenyl Phenyl Ether		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	4-Nitroaniline		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	4-Nitrophenol		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Acenaphthene	87.8	E	Y
QNWP8-MW26S-GW-20170621	I3870-01	Acenaphthylene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Acetophenone	11.2		Y
QNWP8-MW26S-GW-20170621	I3870-01	Anthracene	8	J	Y
QNWP8-MW26S-GW-20170621	I3870-01	Atrazine		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Benzaldehyde		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Benzo(A)Anthracene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Benzo(A)Pyrene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Benzo(B)Fluoranthene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Benzo(G,H,I)Perylene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Benzo(K)Fluoranthene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Benzyl Butyl Phthalate		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Biphenyl (Diphenyl)	34.4		Y
QNWP8-MW26S-GW-20170621	I3870-01	Bis(2-Chloroethoxy) Methane		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Bis(2-Chloroisopropyl) Ether		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Bis(2-Ethylhexyl) Phthalate		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Caprolactam		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Carbazole	41.2		Y
QNWP8-MW26S-GW-20170621	I3870-01	Chrysene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Dibenz(A,H)Anthracene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Dibenzofuran	73.9		Y
QNWP8-MW26S-GW-20170621	I3870-01	Diethyl Phthalate		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Dimethyl Phthalate	3.6	J	Y
QNWP8-MW26S-GW-20170621	I3870-01	Di-N-Butyl Phthalate		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Di-N-Octylphthalate		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Fluoranthene	7.5	J	Y
QNWP8-MW26S-GW-20170621	I3870-01	Fluorene	52.3		Y
QNWP8-MW26S-GW-20170621	I3870-01	Hexachlorobenzene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Hexachlorobutadiene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Hexachlorocyclopentadiene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Hexachloroethane		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Indeno(1,2,3-C,D)Pyrene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Isophorone		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	M+P MethylPhenol	120	E	Y
QNWP8-MW26S-GW-20170621	I3870-01	Naphthalene	1200	E	Y
QNWP8-MW26S-GW-20170621	I3870-01	Nitrobenzene		U	Y
QNWP8-MW26S-GW-20170621	I3870-01	Nitrobenzene-D5	71.2		Y
QNWP8-MW26S-GW-20170621	I3870-01	N-Nitrosodi-N-Propylamine		U	Y

QNWP8-MW26S-GW-20170621	I3870-01	N-Nitrosodiphenylamine		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Pentachlorophenol		U		Y
QNWP8-MW26S-GW-20170621	I3870-01	Phenanthrene	69.9			Y
QNWP8-MW26S-GW-20170621	I3870-01	Phenol	21.1			Y
QNWP8-MW26S-GW-20170621	I3870-01	Phenol-D6	35.4			Y
QNWP8-MW26S-GW-20170621	I3870-01	Pyrene	4.7	J		Y
QNWP8-MW26S-GW-20170621	I3870-01	Terphenyl-D14	72			Y
QNWP8-MW26S-GW-20170621	I3870-01	Terphenyl-D14	72			Y
QNWP8-MW26S-GW-20170621	I3870-01DL	1,2,4,5-Tetrachlorobenzene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,3,4,6-Tetrachlorophenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,4,5-Trichlorophenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,4,6-Tribromophenol	83.3			Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,4,6-Trichlorophenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,4-Dichlorophenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,4-Dimethylphenol	250	JD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,4-Dinitrophenol		UD	UJ	Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,4-Dinitrotoluene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2,6-Dinitrotoluene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2-Chloronaphthalene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2-Chlorophenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2-Fluorobiphenyl	83.5			Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2-Fluorophenol	33.3			Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2-Methylnaphthalene	75.5	JD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2-Methylphenol (O-Cresol)		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2-Nitroaniline		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	2-Nitrophenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	3,3'-Dichlorobenzidine		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	3-Nitroaniline		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	4,6-Dinitro-2-Methylphenol		UD	UJ	Y
QNWP8-MW26S-GW-20170621	I3870-01DL	4-Bromophenyl Phenyl Ether		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	4-Chloro-3-Methylphenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	4-Chloroaniline		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	4-Chlorophenyl Phenyl Ether		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	4-Nitroaniline		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	4-Nitrophenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Acenaphthene	96.4	JD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Acenaphthylene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Acetophenone		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Anthracene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Atrazine		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Benzaldehyde		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Benzo(A)Anthracene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Benzo(A)Pyrene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Benzo(B)Fluoranthene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Benzo(G,H,I)Perylene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Benzo(K)Fluoranthene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Benzyl Butyl Phthalate		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Biphenyl (Diphenyl)		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Bis(2-Chloroethoxy) Methane		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Bis(2-Chloroisopropyl) Ether		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Bis(2-Ethylhexyl) Phthalate		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Caprolactam		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Carbazole		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Chrysene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Dibenz(A,H)Anthracene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Dibenzofuran	86.9	JD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Diethyl Phthalate		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Dimethyl Phthalate		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Di-N-Butyl Phthalate		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Di-N-Octylphthalate		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Fluoranthene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Fluorene	59	JD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Hexachlorobenzene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Hexachlorobutadiene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Hexachlorocyclopentadiene		UD		Y

QNWP8-MW26S-GW-20170621	I3870-01DL	Hexachloroethane		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Indeno(1,2,3-C,D)Pyrene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Isophorone		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	M+P MethylPhenol	110	JD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Naphthalene	1900	D		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Nitrobenzene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Nitrobenzene-D5	73			Y
QNWP8-MW26S-GW-20170621	I3870-01DL	N-Nitrosodi-N-Propylamine		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	N-Nitrosodiphenylamine		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Pentachlorophenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Phenanthrene	72.9	JD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Phenol		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Phenol-D6	32.3			Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Pyrene		UD		Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Terphenyl-D14	72			Y
QNWP8-MW26S-GW-20170621	I3870-01DL	Terphenyl-D14	72			Y
QNWP8-MW26D-GW-20170621	I3870-02	1,2,4,5-Tetrachlorobenzene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	2,3,4,6-Tetrachlorophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	2,4,5-Trichlorophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	2,4,6-Tribromophenol	12.2	*		Y
QNWP8-MW26D-GW-20170621	I3870-02	2,4,6-Trichlorophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	2,4-Dichlorophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	2,4-Dimethylphenol	1000	E	JH	Y
QNWP8-MW26D-GW-20170621	I3870-02	2,4-Dinitrophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	2,4-Dinitrotoluene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	2,6-Dinitrotoluene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Chloronaphthalene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Chlorophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Fluorobiphenyl	68.6			Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Fluorophenol	13.5	*		Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Methylnaphthalene	780	E	JH	Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Methylphenol (O-Cresol)	69.7			Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Nitroaniline		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	2-Nitrophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	3,3'-Dichlorobenzidine		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	3-Nitroaniline		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	4,6-Dinitro-2-Methylphenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	4-Bromophenyl Phenyl Ether		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	4-Chloro-3-Methylphenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	4-Chloroaniline		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	4-Chlorophenyl Phenyl Ether		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	4-Nitroaniline		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	4-Nitrophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	Acenaphthene	72.3			Y
QNWP8-MW26D-GW-20170621	I3870-02	Acenaphthylene	14.2			Y
QNWP8-MW26D-GW-20170621	I3870-02	Acetophenone		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Anthracene	9.2	J		Y
QNWP8-MW26D-GW-20170621	I3870-02	Atrazine		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Benzaldehyde		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Benzo(A)Anthracene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Benzo(A)Pyrene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Benzo(B)Fluoranthene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Benzo(G,H,I)Perylene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Benzo(K)Fluoranthene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Benzyl Butyl Phthalate		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Biphenyl (Diphenyl)	37.8			Y
QNWP8-MW26D-GW-20170621	I3870-02	Bis(2-Chloroethoxy) Methane		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Bis(2-Chloroisopropyl) Ether		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Bis(2-Ethylhexyl) Phthalate		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Caprolactam		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	Carbazole	47.2			Y
QNWP8-MW26D-GW-20170621	I3870-02	Chrysene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Dibenz(A,H)Anthracene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Dibenzofuran	65.6			Y
QNWP8-MW26D-GW-20170621	I3870-02	Diethyl Phthalate		U		Y

QNWP8-MW26D-GW-20170621	I3870-02	Dimethyl Phthalate	5.7	J		Y
QNWP8-MW26D-GW-20170621	I3870-02	Di-N-Butyl Phthalate		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Di-N-Octylphthalate		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Fluoranthene	9.7	J		Y
QNWP8-MW26D-GW-20170621	I3870-02	Fluorene	47.4			Y
QNWP8-MW26D-GW-20170621	I3870-02	Hexachlorobenzene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Hexachlorobutadiene		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	Hexachlorocyclopentadiene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Hexachloroethane		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Indeno(1,2,3-C,D)Pyrene		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Isophorone		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	M+P MethylPhenol	100	E		Y
QNWP8-MW26D-GW-20170621	I3870-02	Naphthalene	5500	E	JH	Y
QNWP8-MW26D-GW-20170621	I3870-02	Nitrobenzene		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	Nitrobenzene-D5	230	*		Y
QNWP8-MW26D-GW-20170621	I3870-02	N-Nitrosodi-N-Propylamine		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	N-Nitrosodiphenylamine		U		Y
QNWP8-MW26D-GW-20170621	I3870-02	Pentachlorophenol		U	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02	Phenanthrene	56.8			Y
QNWP8-MW26D-GW-20170621	I3870-02	Phenol	6.2	J	J	Y
QNWP8-MW26D-GW-20170621	I3870-02	Phenol-D6	10.1	*		Y
QNWP8-MW26D-GW-20170621	I3870-02	Pyrene	6.9	J		Y
QNWP8-MW26D-GW-20170621	I3870-02	Terphenyl-D14	72.6			Y
QNWP8-MW26D-GW-20170621	I3870-02	Terphenyl-D14	72.6			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	1,2,4,5-Tetrachlorobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,3,4,6-Tetrachlorophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,4,5-Trichlorophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,4,6-Tribromophenol	18	*		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,4,6-Trichlorophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,4-Dichlorophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,4-Dimethylphenol	610	JD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,4-Dinitrophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,4-Dinitrotoluene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2,6-Dinitrotoluene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Chloronaphthalene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Chlorophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Fluorobiphenyl	130			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Fluorophenol	10	*		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Methylnaphthalene	400	JD	JH	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Methylphenol (O-Cresol)		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Nitroaniline		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	2-Nitrophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	3,3'-Dichlorobenzidine		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	3-Nitroaniline		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	4,6-Dinitro-2-Methylphenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	4-Bromophenyl Phenyl Ether		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	4-Chloro-3-Methylphenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	4-Chloroaniline		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	4-Chlorophenyl Phenyl Ether		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	4-Nitroaniline		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	4-Nitrophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Acenaphthene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Acenaphthylene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Acetophenone		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Anthracene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Atrazine		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Benzaldehyde		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Benzo(A)Anthracene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Benzo(A)Pyrene		UD	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Benzo(B)Fluoranthene		UD	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Benzo(G,H,I)Perylene		UD	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Benzo(K)Fluoranthene		UD	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Benzyl Butyl Phthalate		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Biphenyl (Diphenyl)		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Bis(2-Chloroethoxy) Methane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD		Y

QNWP8-MW26D-GW-20170621	I3870-02DL	Bis(2-Chloroisopropyl) Ether		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Bis(2-Ethylhexyl) Phthalate		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Caprolactam		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Carbazole		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Chrysene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Dibenz(A,H)Anthracene		UD	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Dibenzofuran		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Diethyl Phthalate		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Dimethyl Phthalate		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Di-N-Butyl Phthalate		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Di-N-Octylphthalate		UD	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Fluoranthene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Fluorene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Hexachlorobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Hexachlorobutadiene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Hexachlorocyclopentadiene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Hexachloroethane		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Indeno(1,2,3-C,D)Pyrene		UD	UJ	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Isophorone		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	M+P MethylPhenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Naphthalene	5000	D	JH	Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Nitrobenzene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Nitrobenzene-D5	87			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	N-Nitrosodi-N-Propylamine		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	N-Nitrosodiphenylamine		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Pentachlorophenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Phenanthrene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Phenol		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Phenol-D6	17			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Pyrene		UD		Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Terphenyl-D14	90			Y
QNWP8-MW26D-GW-20170621	I3870-02DL	Terphenyl-D14	90			Y
QNWP8-MW27S-GW-20170622	I3870-03	1,2,4,5-Tetrachlorobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2,3,4,6-Tetrachlorophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2,4,5-Trichlorophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2,4,6-Tribromophenol	130			Y
QNWP8-MW27S-GW-20170622	I3870-03	2,4,6-Trichlorophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2,4-Dichlorophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2,4-Dimethylphenol	28.6			Y
QNWP8-MW27S-GW-20170622	I3870-03	2,4-Dinitrophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2,4-Dinitrotoluene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2,6-Dinitrotoluene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Chloronaphthalene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Chlorophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Fluorobiphenyl	84.5			Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Fluorophenol	64.3			Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Methylnaphthalene	34.6			Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Methylphenol (O-Cresol)	2.5	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Nitroaniline		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	2-Nitrophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	3,3'-Dichlorobenzidine		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	3-Nitroaniline		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	4,6-Dinitro-2-Methylphenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	4-Bromophenyl Phenyl Ether		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	4-Chloro-3-Methylphenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	4-Chloroaniline		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	4-Chlorophenyl Phenyl Ether		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	4-Nitroaniline		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	4-Nitrophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Acenaphthene	19.9			Y
QNWP8-MW27S-GW-20170622	I3870-03	Acenaphthylene	2.2	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	Acetophenone		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Anthracene	2.8	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	Atrazine		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Benzaldehyde		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Benzo(A)Anthracene		U		Y

QNWP8-MW27S-GW-20170622	I3870-03	Benzo(A)Pyrene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Benzo(B)Fluoranthene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Benzo(G,H,I)Perylene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Benzo(K)Fluoranthene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Benzyl Butyl Phthalate		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Biphenyl (Diphenyl)	6.8	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	Bis(2-Chloroethoxy) Methane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Bis(2-Chloroisopropyl) Ether		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Bis(2-Ethylhexyl) Phthalate		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Caprolactam		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Carbazole	13.4			Y
QNWP8-MW27S-GW-20170622	I3870-03	Chrysene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Dibenz(A,H)Anthracene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Dibenzofuran	15			Y
QNWP8-MW27S-GW-20170622	I3870-03	Diethyl Phthalate		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Dimethyl Phthalate	5.3	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	Di-N-Butyl Phthalate		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Di-N-Octylphthalate		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Fluoranthene	2.8	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	Fluorene	12			Y
QNWP8-MW27S-GW-20170622	I3870-03	Hexachlorobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Hexachlorobutadiene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Hexachlorocyclopentadiene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Hexachloroethane		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Indeno(1,2,3-C,D)Pyrene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Isophorone		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	M+P MethylPhenol	4	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	Naphthalene	450	E		Y
QNWP8-MW27S-GW-20170622	I3870-03	Nitrobenzene		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Nitrobenzene-D5	77.4			Y
QNWP8-MW27S-GW-20170622	I3870-03	N-Nitrosodi-N-Propylamine		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	N-Nitrosodiphenylamine		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Pentachlorophenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Phenanthrene	14.9			Y
QNWP8-MW27S-GW-20170622	I3870-03	Phenol		U		Y
QNWP8-MW27S-GW-20170622	I3870-03	Phenol-D6	41.7			Y
QNWP8-MW27S-GW-20170622	I3870-03	Pyrene	2.1	J		Y
QNWP8-MW27S-GW-20170622	I3870-03	Terphenyl-D14	81.9			Y
QNWP8-MW27S-GW-20170622	I3870-03	Terphenyl-D14	81.9			Y
QNWP8-MW27S-GW-20170622	I3870-03DL	1,2,4,5-Tetrachlorobenzene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,3,4,6-Tetrachlorophenol		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,4,5-Trichlorophenol		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,4,6-Tribromophenol	160			Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,4,6-Trichlorophenol		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,4-Dichlorophenol		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,4-Dimethylphenol	33.1	JD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,4-Dinitrophenol		UD	UJ	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,4-Dinitrotoluene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2,6-Dinitrotoluene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Chloronaphthalene		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Chlorophenol		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Fluorobiphenyl	98.8			Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Fluorophenol	65.3			Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Methylnaphthalene	46	JD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Methylphenol (O-Cresol)		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Nitroaniline		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	2-Nitrophenol		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	3,3'-Dichlorobenzidine		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	3-Nitroaniline		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	4,6-Dinitro-2-Methylphenol		UD	UJ	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	4-Bromophenyl Phenyl Ether		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	4-Chloro-3-Methylphenol		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	4-Chloroaniline		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	4-Chlorophenyl Phenyl Ether		UD		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	4-Nitroaniline		UD		Y

QNWP8-MW27S-GW-20170622	I3870-03DL	4-Nitrophenol		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Acenaphthene	25.5	JD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Acenaphthylene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Acetophenone		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Anthracene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Atrazine		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Benzaldehyde		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Benzo(A)Anthracene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Benzo(A)Pyrene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Benzo(B)Fluoranthene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Benzo(G,H,I)Perylene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Benzo(K)Fluoranthene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Benzyl Butyl Phthalate		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Biphenyl (Diphenyl)		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Bis(2-Chloroethoxy) Methane		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Bis(2-Chloroisopropyl) Ether		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Bis(2-Ethylhexyl) Phthalate		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Caprolactam		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Carbazole		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Chrysene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Dibenz(A,H)Anthracene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Dibenzofuran	21.4	JD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Diethyl Phthalate		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Dimethyl Phthalate		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Di-N-Butyl Phthalate		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Di-N-Octylphthalate		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Fluoranthene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Fluorene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Hexachlorobenzene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Hexachlorobutadiene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Hexachlorocyclopentadiene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Hexachloroethane		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Indeno(1,2,3-C,D)Pyrene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Isophorone		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	M+P MethylPhenol		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Naphthalene	600	D	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Nitrobenzene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Nitrobenzene-D5	90.3		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	N-Nitrosodi-N-Propylamine		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	N-Nitrosodiphenylamine		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Pentachlorophenol		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Phenanthrene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Phenol		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Phenol-D6	39.5		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Pyrene		UD	Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Terphenyl-D14	98.4		Y
QNWP8-MW27S-GW-20170622	I3870-03DL	Terphenyl-D14	98.4		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	1,2,4,5-Tetrachlorobenzene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,3,4,6-Tetrachlorophenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,4,5-Trichlorophenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,4,6-Tribromophenol	170		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,4,6-Trichlorophenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,4-Dichlorophenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,4-Dimethylphenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,4-Dinitrophenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,4-Dinitrotoluene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2,6-Dinitrotoluene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Chloronaphthalene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Chlorophenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Fluorobiphenyl	91.7		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Fluorophenol	59.2		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Methylnaphthalene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Methylphenol (O-Cresol)		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Nitroaniline		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	2-Nitrophenol		U	Y

QNWP8-EQUIP-BLANK-20170622	I3870-04	3,3'-Dichlorobenzidine		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	3-Nitroaniline		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	4,6-Dinitro-2-Methylphenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	4-Bromophenyl Phenyl Ether		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	4-Chloro-3-Methylphenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	4-Chloroaniline		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	4-Chlorophenyl Phenyl Ether		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	4-Nitroaniline		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	4-Nitrophenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Acenaphthene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Acenaphthylene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Acetophenone		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Anthracene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Atrazine		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Benzaldehyde		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Benzo(A)Anthracene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Benzo(A)Pyrene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Benzo(B)Fluoranthene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Benzo(G,H,I)Perylene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Benzo(K)Fluoranthene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Benzyl Butyl Phthalate		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Biphenyl (Diphenyl)		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Bis(2-Chloroethoxy) Methane		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Bis(2-Chloroisopropyl) Ether		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Bis(2-Ethylhexyl) Phthalate		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Caprolactam		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Carbazole		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Chrysene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Dibenz(A,H)Anthracene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Dibenzofuran		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Diethyl Phthalate		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Dimethyl Phthalate		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Di-N-Butyl Phthalate		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Di-N-Octylphthalate		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Fluoranthene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Fluorene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Hexachlorobenzene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Hexachlorobutadiene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Hexachlorocyclopentadiene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Hexachloroethane		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Indeno(1,2,3-C,D)Pyrene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Isophorone		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	M+P MethylPhenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Naphthalene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Nitrobenzene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Nitrobenzene-D5	87.1		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	N-Nitrosodi-N-Propylamine		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	N-Nitrosodiphenylamine		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Pentachlorophenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Phenanthrene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Phenol		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Phenol-D6	33.1		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Pyrene		U	Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Terphenyl-D14	100		Y
QNWP8-EQUIP-BLANK-20170622	I3870-04	Terphenyl-D14	100		Y
PB100074BL	PB100074BL	1,2,4,5-Tetrachlorobenzene		U	Y
PB100074BL	PB100074BL	2,3,4,6-Tetrachlorophenol		U	Y
PB100074BL	PB100074BL	2,4,5-Trichlorophenol		U	Y
PB100074BL	PB100074BL	2,4,6-Tribromophenol	170		Y
PB100074BL	PB100074BL	2,4,6-Trichlorophenol		U	Y
PB100074BL	PB100074BL	2,4-Dichlorophenol		U	Y
PB100074BL	PB100074BL	2,4-Dimethylphenol		U	Y
PB100074BL	PB100074BL	2,4-Dinitrophenol		U	Y
PB100074BL	PB100074BL	2,4-Dinitrotoluene		U	Y
PB100074BL	PB100074BL	2,6-Dinitrotoluene		U	Y

PB100074BL	PB100074BL	2-Chloronaphthalene		U	Y
PB100074BL	PB100074BL	2-Chlorophenol		U	Y
PB100074BL	PB100074BL	2-Fluorobiphenyl	90.4		Y
PB100074BL	PB100074BL	2-Fluorophenol	130		Y
PB100074BL	PB100074BL	2-Methylnaphthalene		U	Y
PB100074BL	PB100074BL	2-Methylphenol (O-Cresol)		U	Y
PB100074BL	PB100074BL	2-Nitroaniline		U	Y
PB100074BL	PB100074BL	2-Nitrophenol		U	Y
PB100074BL	PB100074BL	3,3'-Dichlorobenzidine		U	Y
PB100074BL	PB100074BL	3-Nitroaniline		U	Y
PB100074BL	PB100074BL	4,6-Dinitro-2-Methylphenol		U	Y
PB100074BL	PB100074BL	4-Bromophenyl Phenyl Ether		U	Y
PB100074BL	PB100074BL	4-Chloro-3-Methylphenol		U	Y
PB100074BL	PB100074BL	4-Chloroaniline		U	Y
PB100074BL	PB100074BL	4-Chlorophenyl Phenyl Ether		U	Y
PB100074BL	PB100074BL	4-Nitroaniline		U	Y
PB100074BL	PB100074BL	4-Nitrophenol		U	Y
PB100074BL	PB100074BL	Acenaphthene		U	Y
PB100074BL	PB100074BL	Acenaphthylene		U	Y
PB100074BL	PB100074BL	Acetophenone		U	Y
PB100074BL	PB100074BL	Anthracene		U	Y
PB100074BL	PB100074BL	Atrazine		U	Y
PB100074BL	PB100074BL	Benzaldehyde		U	Y
PB100074BL	PB100074BL	Benzo(A)Anthracene		U	Y
PB100074BL	PB100074BL	Benzo(A)Pyrene		U	Y
PB100074BL	PB100074BL	Benzo(B)Fluoranthene		U	Y
PB100074BL	PB100074BL	Benzo(G,H,I)Perylene		U	Y
PB100074BL	PB100074BL	Benzo(K)Fluoranthene		U	Y
PB100074BL	PB100074BL	Benzyl Butyl Phthalate		U	Y
PB100074BL	PB100074BL	Biphenyl (Diphenyl)		U	Y
PB100074BL	PB100074BL	Bis(2-Chloroethoxy) Methane		U	Y
PB100074BL	PB100074BL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U	Y
PB100074BL	PB100074BL	Bis(2-Chloroisopropyl) Ether		U	Y
PB100074BL	PB100074BL	Bis(2-Ethylhexyl) Phthalate		U	Y
PB100074BL	PB100074BL	Caprolactam		U	Y
PB100074BL	PB100074BL	Carbazole		U	Y
PB100074BL	PB100074BL	Chrysene		U	Y
PB100074BL	PB100074BL	Dibenz(A,H)Anthracene		U	Y
PB100074BL	PB100074BL	Dibenzofuran		U	Y
PB100074BL	PB100074BL	Diethyl Phthalate		U	Y
PB100074BL	PB100074BL	Dimethyl Phthalate		U	Y
PB100074BL	PB100074BL	Di-N-Butyl Phthalate		U	Y
PB100074BL	PB100074BL	Di-N-Octylphthalate		U	Y
PB100074BL	PB100074BL	Fluoranthene		U	Y
PB100074BL	PB100074BL	Fluorene		U	Y
PB100074BL	PB100074BL	Hexachlorobenzene		U	Y
PB100074BL	PB100074BL	Hexachlorobutadiene		U	Y
PB100074BL	PB100074BL	Hexachlorocyclopentadiene		U	Y
PB100074BL	PB100074BL	Hexachloroethane		U	Y
PB100074BL	PB100074BL	Indeno(1,2,3-C,D)Pyrene		U	Y
PB100074BL	PB100074BL	Isophorone		U	Y
PB100074BL	PB100074BL	M+P MethylPhenol		U	Y
PB100074BL	PB100074BL	Naphthalene		U	Y
PB100074BL	PB100074BL	Nitrobenzene		U	Y
PB100074BL	PB100074BL	Nitrobenzene-D5	83.4		Y
PB100074BL	PB100074BL	N-Nitrosodi-N-Propylamine		U	Y
PB100074BL	PB100074BL	N-Nitrosodiphenylamine		U	Y
PB100074BL	PB100074BL	Pentachlorophenol		U	Y
PB100074BL	PB100074BL	Phenanthrene		U	Y
PB100074BL	PB100074BL	Phenol		U	Y
PB100074BL	PB100074BL	Phenol-D6	120		Y
PB100074BL	PB100074BL	Pyrene		U	Y
PB100074BL	PB100074BL	Terphenyl-D14	98.7		Y
PB100074BL	PB100074BL	Terphenyl-D14	98.7		Y
PB100074BS	PB100074BS	1,2,4,5-Tetrachlorobenzene	43.2		Y
PB100074BS	PB100074BS	2,3,4,6-Tetrachlorophenol	53.3		Y

PB100074BS	PB100074BS	2,4,5-Trichlorophenol	45.2		Y
PB100074BS	PB100074BS	2,4,6-Tribromophenol	150		Y
PB100074BS	PB100074BS	2,4,6-Trichlorophenol	47.3		Y
PB100074BS	PB100074BS	2,4-Dichlorophenol	50.1		Y
PB100074BS	PB100074BS	2,4-Dimethylphenol	45.8		Y
PB100074BS	PB100074BS	2,4-Dinitrophenol	99.4	E	Y
PB100074BS	PB100074BS	2,4-Dinitrotoluene	46.8		Y
PB100074BS	PB100074BS	2,6-Dinitrotoluene	45.1		Y
PB100074BS	PB100074BS	2-Chloronaphthalene	40.9		Y
PB100074BS	PB100074BS	2-Chlorophenol	44.2		Y
PB100074BS	PB100074BS	2-Fluorobiphenyl	83.6		Y
PB100074BS	PB100074BS	2-Fluorophenol	130		Y
PB100074BS	PB100074BS	2-Methylnaphthalene	42.9		Y
PB100074BS	PB100074BS	2-Methylphenol (O-Cresol)	40.2		Y
PB100074BS	PB100074BS	2-Nitroaniline	40.5		Y
PB100074BS	PB100074BS	2-Nitrophenol	43		Y
PB100074BS	PB100074BS	3,3'-Dichlorobenzidine	24.2		Y
PB100074BS	PB100074BS	3-Nitroaniline	23.3		Y
PB100074BS	PB100074BS	4,6-Dinitro-2-Methylphenol	43.2		Y
PB100074BS	PB100074BS	4-Bromophenyl Phenyl Ether	44.5		Y
PB100074BS	PB100074BS	4-Chloro-3-Methylphenol	46.6		Y
PB100074BS	PB100074BS	4-Chloroaniline	11.7		Y
PB100074BS	PB100074BS	4-Chlorophenyl Phenyl Ether	42.9		Y
PB100074BS	PB100074BS	4-Nitroaniline	44.1		Y
PB100074BS	PB100074BS	4-Nitrophenol	87.9	E	Y
PB100074BS	PB100074BS	Acenaphthene	38.2		Y
PB100074BS	PB100074BS	Acenaphthylene	39.2		Y
PB100074BS	PB100074BS	Acetophenone	40.6		Y
PB100074BS	PB100074BS	Anthracene	42.2		Y
PB100074BS	PB100074BS	Atrazine	44.9		Y
PB100074BS	PB100074BS	Benzaldehyde	27.8		Y
PB100074BS	PB100074BS	Benzo(A)Anthracene	42		Y
PB100074BS	PB100074BS	Benzo(A)Pyrene	43.3		Y
PB100074BS	PB100074BS	Benzo(B)Fluoranthene	42.7		Y
PB100074BS	PB100074BS	Benzo(G,H,I)Perylene	42.6		Y
PB100074BS	PB100074BS	Benzo(K)Fluoranthene	42.5		Y
PB100074BS	PB100074BS	Benzyl Butyl Phthalate	42.2		Y
PB100074BS	PB100074BS	Biphenyl (Diphenyl)	41		Y
PB100074BS	PB100074BS	Bis(2-Chloroethoxy) Methane	38.3		Y
PB100074BS	PB100074BS	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	35.9		Y
PB100074BS	PB100074BS	Bis(2-Chloroisopropyl) Ether	30.7		Y
PB100074BS	PB100074BS	Bis(2-Ethylhexyl) Phthalate	41.5		Y
PB100074BS	PB100074BS	Caprolactam	44.4		Y
PB100074BS	PB100074BS	Carbazole	37.9		Y
PB100074BS	PB100074BS	Chrysene	41.1		Y
PB100074BS	PB100074BS	Dibenz(A,H)Anthracene	43		Y
PB100074BS	PB100074BS	Dibenzofuran	43.6		Y
PB100074BS	PB100074BS	Diethyl Phthalate	44.4		Y
PB100074BS	PB100074BS	Dimethyl Phthalate	43.5		Y
PB100074BS	PB100074BS	Di-N-Butyl Phthalate	42.8		Y
PB100074BS	PB100074BS	Di-N-Octylphthalate	42.5		Y
PB100074BS	PB100074BS	Fluoranthene	42.9		Y
PB100074BS	PB100074BS	Fluorene	41		Y
PB100074BS	PB100074BS	Hexachlorobenzene	45		Y
PB100074BS	PB100074BS	Hexachlorobutadiene	45.8		Y
PB100074BS	PB100074BS	Hexachlorocyclopentadiene	110	E	Y
PB100074BS	PB100074BS	Hexachloroethane	40.5		Y
PB100074BS	PB100074BS	Indeno(1,2,3-C,D)Pyrene	44.9		Y
PB100074BS	PB100074BS	Isophorone	38.1		Y
PB100074BS	PB100074BS	M+P MethylPhenol	39.6		Y
PB100074BS	PB100074BS	Naphthalene	40.5		Y
PB100074BS	PB100074BS	Nitrobenzene	39.4		Y
PB100074BS	PB100074BS	Nitrobenzene-D5	81.2		Y
PB100074BS	PB100074BS	N-Nitrosodi-N-Propylamine	34.5		Y
PB100074BS	PB100074BS	N-Nitrosodiphenylamine	41		Y
PB100074BS	PB100074BS	Pentachlorophenol	95	E	Y

PB100074BS	PB100074BS	Phenanthrene	42		Y
PB100074BS	PB100074BS	Phenol	42.1		Y
PB100074BS	PB100074BS	Phenol-D6	120		Y
PB100074BS	PB100074BS	Pyrene	41.4		Y
PB100074BS	PB100074BS	Terphenyl-D14	86.9		Y
PB100074BS	PB100074BS	Terphenyl-D14	86.9		Y
QNWP8-MW26S-GW-20170621	I3870-01	Sulfide	194		N
QNWP8-MW26D-GW-20170621	I3870-02	Sulfide	21.1		N
QNWP8-MW26D-GWMS	I3870-02MS	Sulfide	22.7	*	N
QNWP8-MW26D-GWMSD	I3870-02MSD	Sulfide	22.9	*	N
QNWP8-MW27S-GW-20170622	I3870-03	Sulfide	20.6		N
PB100104BL	PB100104BL	Sulfide		U	N
PB100104BS	PB100104BS	Sulfide	20.0		N

Appendix 2
Well Purge Logs

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- QNWP8-MW26S	SAMPLE ID: MW- MW26S	DATE: 6/21/2017

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 8 feet 18.5	STATIC DEPTH TO WATER (feet): 5.70	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (16.20 feet – 5.70 feet) X 0.16 gallons/foot = 5.04 (19L) gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 0822	PURGING ENDED AT: 0945	TOTAL VOLUME PURGED (gallons): 9

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0825	2	4.1	425	5.71	7.94	8.19	65.1	18.60	15.40	4.6	5.20	-320	yellow	yellow pt odor
0830	4.1	8.2	425	5.72	7.88	10.0	78.2	17.97	15.12	5.7	6.31	-322	yellow	"
0835	1.75	9.95	350	5.72	7.82	8.47	85.5	16.92	14.89	4.9	5.63	-339	yellow	pt odor
0840	1.75	11.7	350	5.73	7.75	11.2	74.1	15.78	14.99	6.4	7.00	-341	"	"
8:45	1.7	13.4	340	5.74	7.71	11.6	62.0	15.34	14.81	6.6	7.20	-345	"	"
8:50	1.7	15.1	340	5.74	7.68	11.6	60.0	14.78	14.78	6.6	7.19	-349	"	"
8:55	1.7	16.8	340	5.74	7.89	11.7	54.2	15.05	14.86	6.6	7.25	-351	"	"
9:00	1.75	18.55	350	5.75	7.68	11.7	80.5	13.64	14.82	6.6	7.26	-352	"	"
9:05	1.5	20.05	300	5.75	7.66	11.7	76.5	13.02	14.88	6.6	7.26	-353	"	"
9:10	1.5	22	300	5.76	7.65	11.8	72.5	12.31	14.94	6.7	7.29	-355		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0950	SAMPLING ENDED AT: 1015
PUMP OR TUBING DEPTH IN WELL (feet): 11	SAMPLE PUMP FLOW RATE (mL per minute): 350	TUBING MATERIAL CODE: Teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW26S	3	CG	40	HCl	–	7.65	TCL VOC	PP
	2	AG	1000	–	–		TCL SVOC	
	3	CG	40	HCl	–		TPH DRO	
	2	AG	1000	–	–		TPH GRO	
	1	PE	500	HNO_3	–		Total Iron	
	1			$NaOH_2N$	–		Sulfide	
	1			–	–		Sulfate	
	1			–	–		Alkalinity	

REMARKS: PID = 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

2 of 2

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- QNWP8- MW26S continued	SAMPLE ID: MW- MW26S	DATE: 6/21/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 8 feet 18.5	STATIC DEPTH TO WATER (feet): 5.70	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (16.20 feet – 5.70 feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): L	FINAL PUMP OR TUBING DEPTH IN WELL (feet): L	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (mL/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
9:15	1.5	23.5	300	5.76	7.63	12.0	69.4	8.26	15.11	6.8	7.41	-355	yellow	PT odor
9:20	1.0	24.5	200	5.76	7.63	13.0	48.1	4.33	15.24	7.4	8.05	-355	"	"
9:25	1.25	25.75	250	5.77	7.67	13.9	32.0	4.51	15.45	7.9	8.47	-355	"	"
9:30	1.45	27.2	290	5.77	7.63	12.0	25.4	4.29	14.93	6.8	7.46	-359	"	"
9:35	1.5	28.7	300	5.77	7.62	12.4	15.0	4.31	15.02	6.9	7.52	-358	"	"
9:40	1.5	30.2	300	5.78	7.65	12.5	7.3	4.35	15.12	6.9	7.54	-359	"	"
9:45	1.5	31.7	300	5.78	7.67	12.7	5.2	4.38	15.15	6.9	7.56	-359	"	"
10:20	1.625	33.3	325	5.78	7.65	12.9	4.6	4.39	15.17	6.9	7.57	-357	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 26D	SAMPLE ID: MW- QNWP8-MW26D	DATE: 6/21/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to 21 feet 30.2	STATIC DEPTH TO WATER (feet): 5.80'	PURGE PUMP TYPE OR BAILER: PP (44L)

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (30.20 feet – 5.80' feet) X 0.16 gallons/foot = 11.7 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 24	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 23	PURGING INITIATED AT: 1116	PURGING ENDED AT: 1220	TOTAL VOLUME PURGED (gallons): ≈8

TIME	VOLUME PURGED (gallons) L	CUMUL. VOLUME PURGED (gallons) L	PURGE RATE (gpm) mL/min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1120	2.0	2.1	425	5.80	9.62	0.521	91.3	7.87	17.07	0.3	0.34	-287	yellow	pt odor
1125	2.1	6.2	425	5.80	8.59	2.73	74.5	0.99	15.95	1.4	1.82	-299	"	"
1130	2.25	8.45	450	5.81	8.01	8.32	60.0	0.00	15.69	4.5	5.17	-342	"	"
1135	2.1	10.55	425	5.81	7.82	10.4	60.1	0.00	15.75	5.8	6.46	-368	"	"
1140	2.1	12.65	425	5.81	7.73	14.4	44.4	0.00	16.74	8.3	8.95	-378	"	"
1145	2.1	14.75	425	5.83	7.74	14.5	39.1	0.00	16.24	8.4	8.99	-379	"	"
1150	2.0	16.75	400	5.83	8.06	14.0	31.6	0.00	15.89	8.1	8.70	-380	"	"
1155	2.0	18.75	400	5.84	7.77	13.5	28.0	0.00	16.13	7.8	8.39	-381	"	"
1200	2.0	20.75	400	5.84	7.79	13.2	17.0	0.00	16.14	7.7	8.35	-379	"	"
1205	2.1	22.85	425	5.85	7.80	13.4	11.4	0.00	16.20	7.8	8.37	-380	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1225	SAMPLING ENDED AT: 1300
PUMP OR TUBING DEPTH IN WELL (feet): 24	SAMPLE PUMP FLOW RATE (mL per minute): 400	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW26D	3	CG	40	HCL	—	7.80	TCL VOCs	PP
	2	AG	1000	—	—		TCL SVOCs	
	3	CG	40	HCL	—		TPH DRO	
	2	AG	1000	—	—		TPH GRO	
	1	PE	500	HNO_3	—		total Iron	
	1			$NaOH_2N$	—		Sulfide	
	1			—	—		Sulfate	
	1			—	—		Alkalinity	

REMARKS: PID = 0.0 ppm small product globules observed on purged tubing

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

2 of 2

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 26D continued	SAMPLE ID: MW- QWWP8-26D-GW	DATE: 6/21/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to 21 feet 30.2	STATIC DEPTH TO WATER (feet): 5.80	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (30.20 feet – 5.80 feet) X 0.16 gallons/foot = 11.7 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons) L	CUMUL. VOLUME PURGED (gallons) L	PURGE RATE (gpm) mL/min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1210	2.0	24.85	400	5.85	7.81	13.6	8.1	0.00	16.19	7.8	8.38	-379	yellow	PT odor
1215	2.0	26.85	400	5.86	7.83	13.7	5.0	0.00	16.11	7.7	8.40	-380	"	"
1220	1.75	28.6	350	5.86	7.82	13.9	4.1	0.00	16.14	7.6	8.41	-381	"	"
1305	1.75	30.35	350	5.92	7.80	13.1	5.0	0.00	16.10	7.4	8.40	-383	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
EVA JAKUBOWSKA	Eva		
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y ✓ N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW27D	SAMPLE ID: MW- MW27D	DATE: 6/22/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.80'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
			Product	found	in	well								
			≈ 3"											
			D.T.W –	7.80'										
		Floating	globules	@	bottom	of	well,			≈	30.50'			
		Product	observed	on	probe.									

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS: PID = 158 ppm / pt odor

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

1 of 2

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- QNWP8-MW27S	SAMPLE ID: MW- MW27S	DATE: 6/22/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 8.5 feet 18.5	STATIC DEPTH TO WATER (feet): 7.98	PURGE PUMP TYPE OR BAILER: PP (13.64)

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (15.60 feet – 7.98 feet) X 0.16 gallons/foot = 3.6 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 0800	PURGING ENDED AT: 0900	TOTAL VOLUME PURGED (gallons): 5.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm) ML/Min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0805	1	1	450	7.98	8.40	6.11	347	0.00	14.98	3.3	3.98	-368	sewage like	cloudy
0810	2.25	3.25	400	7.99	8.38	6.08	211.0	2.43	14.99	3.3	3.83	-372	"	"
0815	2.0	5.25	400	7.99	8.34	5.98	137	1.64	15.04	3.2	3.77	-375	"	"
0820	1.95	7.2	390	8.00	8.31	5.91	112	0.00	15.09	3.2	3.73	-375	"	"
0825	1.75	8.95	350	8.00	8.31	5.85	96.1	0.00	15.21	3.2	3.69	-377	"	"
0830	1.75	10.7	350	8.01	8.31	5.83	72.4	0.00	15.26	3.1	3.67	-378	clear	clear
0835	1.75	12.45	350	8.02	8.30	5.80	63.1	0.00	15.27	3.1	3.65	-378	"	"
0840	1.62	14.07	325	8.02	8.32	5.76	52.0	0.00	15.25	3.1	3.62	-378	"	"
0845	1.62	15.69	325	8.03	8.30	5.69	37.4	0.00	15.25	3.1	3.58	-378	"	"
0850	1.62	17.31	325	8.05	8.28	5.67	24.0	0.00	15.27	3.1	3.57	-378	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0905	SAMPLING ENDED AT: 1040
PUMP OR TUBING DEPTH IN WELL (feet): 11	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: teflon lined Poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW27S	3	GG	40	HCL	—	8.25	TCL VOCs	PP
	2	AG	1000	—	—		TCL SVOCs	
	3	CG	40	HCL	—		TPH DRO	
	2	AG	1000	—	—		TPH GRO	
	1	PE	500	HNO_3	—		Total Iron	
	1			NaOH, N	—		Sulfide	
	1			—	—		Sulfate	
	1			—	—		Alkalinity	

REMARKS: PID = 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

2 of 2

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW27S continues	SAMPLE ID: MW- MW27S	DATE: 6/22/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 8.5 feet 18.5	STATIC DEPTH TO WATER (feet): 7.98	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (15.60 feet – 7.98 feet) X 0.16 gallons/foot = 3.6 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons): 5.5

TIME	VOLUME PURGED (gallons) L	CUMUL. VOLUME PURGED (gallons) L	PURGE RATE (gpm) mL/min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0855	1.62	18.98	325	8.05	8.27	5.59	18.2	0.00	15.26	3.1	3.52	-377	clear	sewage
0900	1.5	20.43	300	8.06	8.25	5.58	9.0	0.00	15.27	3.1	3.52	-377	↓	↓
1045	1.5	21.93	300	8.06	8.25	5.57	4.2	0.00	15.26	3.1	3.53	-376		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: ENA JAKUBOWSICH	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Appendix 3

Laboratory Groundwater Analytical Report

Included on Attached CD

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA FOR

VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS

GC SEMI-VOLATILES

METALS

GENERAL CHEMISTRY

PROJECT NAME : HUNTERS POINT - QUEENS WEST LIBRARY

LIRO ENGINEERS, INC.

690 Delaware Ave.

Buffalo, NY - 14209

Phone No: 716-882-5476

ORDER ID : I3870

ATTENTION : Steve Frank

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 06/30/2017

Dear Steve Frank,

5 water samples for the **Hunters Point - Queens West Library** project were received on **06/22/2017.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

Regards,

Loreana Davi

Loreana@chemtech.net

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. I3970
QUOTE NO.
COC Number 040824

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: LiRO Engineers, Inc.
ADDRESS: 703 Lorimer Street
CITY: Brooklyn STATE: NY ZIP: 11211
ATTENTION: Steve Frank
PHONE: 716 882 5476 FAX: —

CLIENT PROJECT INFORMATION

PROJECT NAME: Queens West Parcel B Hunters Point Library - NYSDEC
PROJECT NO.: 15-008-0265 LOCATION: LIC, NY 4Z4057
PROJECT MANAGER: Steve Frank
e-mail: franks@liro.com
PHONE: 716 882 5476 FAX:

CLIENT BILLING INFORMATION

BILL TO: LiRO PO#:
ADDRESS: 690 Delaware Ave
CITY: Buffalo STATE: NY ZIP:
ATTENTION: S. Frank PHONE: —

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: email ; 5 day TAT DAYS *
PREAPPROVED TAT: ☒ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ LEVEL 1: Results only
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format: _____
☑ Others Full Category B

ANALYSIS

1	2	3	4	5	6	7	8	9
TCL VOC 8260B	TCL SVOC 8270C	TPH DRO 8015	TPH GRO 8015	Total Iron 6010	Sulfide 376.1	Sulfate 300/SW846	Alkalinity 310.1	

PRESERVATIVES

1	2	3	4	5	6	7	8	9
A	E	E	A	B	D	E	E	

COMMENTS

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9
1.	QNWP8-MW26S-GW	GW		X	6/21/17	0950	10	X	X	X	X	X	X	X	X	
2.	QNWP8-MW26D-GW	GW		X	"	1225	10	X	X	X	X	X	X	X	X	
3.	QNWP8-MW27S-GW	GW		X	6/22/17	0905	10	X	X	X	X	X	X	X	X	
4.	QNWP8-Equip. Blank	DI water		X	"	1100	7	X	X	X	X	X				
5.	QNWP8-Trip Blank	↓		X	6/20/17	—	2	X								
6.																
7.																
8.																
9.																
10.																

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

	RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	[signature]	6/22/17	[signature] 12:35 PM
2.			
3.	[signature]	6.22.17 1850	[signature]

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments: Data Format: NY Regulatory, Full Category B, NYSDEC EQUIS EDD

Cooler Temp. 5.0 C
Ice in Cooler?: Yes

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☑ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17 09:50
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	2290		1	0.4	1	2	mg/L		06/29/17 13:07	SM2320 B
Sulfate	1330	OR	1	0.13	0.375	0.75	mg/L		06/23/17 11:32	300.0
Sulfide	194		1	0.03	0.5	1	mg/L	06/23/17 08:00	06/23/17 17:18	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17 09:50
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	1070	D	100	13.2	37.5	75	mg/L		06/23/17 13:57	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	990 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD015591.D	10	06/23/17 08:00	06/26/17 20:45	PB100107

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	9960		253	253	505	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	1.83		29 - 130		92%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB009777.D	50	06/30/17 17:55	FB062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	9450		600	1125	2250	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.8		50 - 150		104%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	2280		1	12.5	12.5	50	ug/L	06/23/17 09:30	06/26/17 14:55	SW6010

Color Before:	Brown	Clarity Before:	Cloudy	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027654.D	1	06/23/17 08:32	06/24/17 11:32	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.3	U	0.79	1	10.3	ug/L
108-95-2	Phenol	21.1		0.22	1	10.3	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.3	U	0.57	1	10.3	ug/L
95-57-8	2-Chlorophenol	10.3	U	0.56	1	10.3	ug/L
95-48-7	2-Methylphenol	47.7		0.25	1	10.3	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.3	U	0.18	1	10.3	ug/L
98-86-2	Acetophenone	11.2		0.14	1	10.3	ug/L
65794-96-9	3+4-Methylphenols	120	E	0.39	1	10.3	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.3	U	0.21	1	10.3	ug/L
67-72-1	Hexachloroethane	10.3	U	0.26	1	10.3	ug/L
98-95-3	Nitrobenzene	10.3	U	0.7	1	10.3	ug/L
78-59-1	Isophorone	10.3	U	0.31	1	10.3	ug/L
88-75-5	2-Nitrophenol	10.3	U	0.54	1	10.3	ug/L
105-67-9	2,4-Dimethylphenol	220	E	0.73	1	10.3	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.3	U	0.57	1	10.3	ug/L
120-83-2	2,4-Dichlorophenol	10.3	U	0.68	1	10.3	ug/L
91-20-3	Naphthalene	1200	E	0.12	1	10.3	ug/L
106-47-8	4-Chloroaniline	10.3	U	1	1	10.3	ug/L
87-68-3	Hexachlorobutadiene	10.3	U	0.26	1	10.3	ug/L
105-60-2	Caprolactam	10.3	U	1	1	10.3	ug/L
59-50-7	4-Chloro-3-methylphenol	10.3	U	0.41	1	10.3	ug/L
91-57-6	2-Methylnaphthalene	64.8		0.33	1	10.3	ug/L
77-47-4	Hexachlorocyclopentadiene	10.3	U	0.25	1	10.3	ug/L
88-06-2	2,4,6-Trichlorophenol	10.3	U	0.58	1	10.3	ug/L
95-95-4	2,4,5-Trichlorophenol	10.3	U	0.41	1	10.3	ug/L
92-52-4	1,1-Biphenyl	34.4		0.15	1	10.3	ug/L
91-58-7	2-Chloronaphthalene	10.3	U	0.16	1	10.3	ug/L
88-74-4	2-Nitroaniline	10.3	U	0.51	1	10.3	ug/L
131-11-3	Dimethylphthalate	3.6	J	0.23	1	10.3	ug/L
208-96-8	Acenaphthylene	10.3	U	0.72	1	10.3	ug/L
606-20-2	2,6-Dinitrotoluene	10.3	U	0.33	1	10.3	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027654.D	1	06/23/17 08:32	06/24/17 11:32	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.3	U	1	1	10.3	ug/L
83-32-9	Acenaphthene	87.8	E	0.22	1	10.3	ug/L
51-28-5	2,4-Dinitrophenol	10.3	U	2.2	8.2	10.3	ug/L
100-02-7	4-Nitrophenol	10.3	U	2.1	5.2	10.3	ug/L
132-64-9	Dibenzofuran	73.9		0.25	1	10.3	ug/L
121-14-2	2,4-Dinitrotoluene	10.3	U	1	1	10.3	ug/L
84-66-2	Diethylphthalate	10.3	U	0.39	1	10.3	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.3	U	0.22	1	10.3	ug/L
86-73-7	Fluorene	52.3		0.32	1	10.3	ug/L
100-01-6	4-Nitroaniline	10.3	U	1.4	2.1	10.3	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.3	U	0.76	2.1	10.3	ug/L
86-30-6	n-Nitrosodiphenylamine	10.3	U	0.62	1	10.3	ug/L
101-55-3	4-Bromophenyl-phenylether	10.3	U	0.24	1	10.3	ug/L
118-74-1	Hexachlorobenzene	10.3	U	0.19	1	10.3	ug/L
1912-24-9	Atrazine	10.3	U	0.41	1	10.3	ug/L
87-86-5	Pentachlorophenol	10.3	U	1	1	10.3	ug/L
85-01-8	Phenanthrene	69.9		0.27	1	10.3	ug/L
120-12-7	Anthracene	8	J	0.16	1	10.3	ug/L
86-74-8	Carbazole	41.2		0.23	1	10.3	ug/L
84-74-2	Di-n-butylphthalate	10.3	U	1	1	10.3	ug/L
206-44-0	Fluoranthene	7.5	J	0.41	1	10.3	ug/L
129-00-0	Pyrene	4.7	J	0.21	1	10.3	ug/L
85-68-7	Butylbenzylphthalate	10.3	U	0.2	1	10.3	ug/L
91-94-1	3,3-Dichlorobenzidine	10.3	U	1	1	10.3	ug/L
56-55-3	Benzo(a)anthracene	10.3	U	0.16	1	10.3	ug/L
218-01-9	Chrysene	10.3	U	0.19	1	10.3	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.3	U	0.16	1	10.3	ug/L
117-84-0	Di-n-octyl phthalate	10.3	U	0.53	1	10.3	ug/L
205-99-2	Benzo(b)fluoranthene	10.3	U	0.3	1	10.3	ug/L
207-08-9	Benzo(k)fluoranthene	10.3	U	0.19	1	10.3	ug/L
50-32-8	Benzo(a)pyrene	10.3	U	0.14	1	10.3	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.3	U	0.15	1	10.3	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.3	U	0.43	1	10.3	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027654.D	1	06/23/17 08:32	06/24/17 11:32	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.3	U	0.3	1	10.3	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.3	U	0.21	1	10.3	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.3	U	0.21	1	10.3	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	44.2		10 - 130		29%	SPK: 150
13127-88-3	Phenol-d6	35.4		10 - 130		24%	SPK: 150
4165-60-0	Nitrobenzene-d5	71.2		36 - 131		71%	SPK: 100
321-60-8	2-Fluorobiphenyl	78.6		39 - 131		79%	SPK: 100
118-79-6	2,4,6-Tribromophenol	90		25 - 155		60%	SPK: 150
1718-51-0	Terphenyl-d14	72		23 - 130		72%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	18417	8.51				
1146-65-2	Naphthalene-d8	103807	11.33				
15067-26-2	Acenaphthene-d10	66076	15.09				
1517-22-2	Phenanthrene-d10	155735	17.84				
1719-03-5	Chrysene-d12	179639	22.21				
1520-96-3	Perylene-d12	166780	25.85				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027702.D	25	06/23/17 08:32	06/27/17 19:16	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	260	UD	19.8	25.8	260	ug/L
108-95-2	Phenol	260	UD	5.4	25.8	260	ug/L
111-44-4	bis(2-Chloroethyl)ether	260	UD	14.2	25.8	260	ug/L
95-57-8	2-Chlorophenol	260	UD	13.9	25.8	260	ug/L
95-48-7	2-Methylphenol	260	UD	6.2	25.8	260	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	260	UD	4.4	25.8	260	ug/L
98-86-2	Acetophenone	260	UD	3.6	25.8	260	ug/L
65794-96-9	3+4-Methylphenols	110	JD	9.8	25.8	260	ug/L
621-64-7	n-Nitroso-di-n-propylamine	260	UD	5.2	25.8	260	ug/L
67-72-1	Hexachloroethane	260	UD	6.4	25.8	260	ug/L
98-95-3	Nitrobenzene	260	UD	17.5	25.8	260	ug/L
78-59-1	Isophorone	260	UD	7.7	25.8	260	ug/L
88-75-5	2-Nitrophenol	260	UD	13.4	25.8	260	ug/L
105-67-9	2,4-Dimethylphenol	250	JD	18.3	25.8	260	ug/L
111-91-1	bis(2-Chloroethoxy)methane	260	UD	14.2	25.8	260	ug/L
120-83-2	2,4-Dichlorophenol	260	UD	17	25.8	260	ug/L
91-20-3	Naphthalene	1900	D	3.1	25.8	260	ug/L
106-47-8	4-Chloroaniline	260	UD	25.8	25.8	260	ug/L
87-68-3	Hexachlorobutadiene	260	UD	6.4	25.8	260	ug/L
105-60-2	Caprolactam	260	UD	25.8	25.8	260	ug/L
59-50-7	4-Chloro-3-methylphenol	260	UD	10.3	25.8	260	ug/L
91-57-6	2-Methylnaphthalene	75.5	JD	8.2	25.8	260	ug/L
77-47-4	Hexachlorocyclopentadiene	260	UD	6.2	25.8	260	ug/L
88-06-2	2,4,6-Trichlorophenol	260	UD	14.4	25.8	260	ug/L
95-95-4	2,4,5-Trichlorophenol	260	UD	10.3	25.8	260	ug/L
92-52-4	1,1-Biphenyl	260	UD	3.9	25.8	260	ug/L
91-58-7	2-Chloronaphthalene	260	UD	4.1	25.8	260	ug/L
88-74-4	2-Nitroaniline	260	UD	12.6	25.8	260	ug/L
131-11-3	Dimethylphthalate	260	UD	5.7	25.8	260	ug/L
208-96-8	Acenaphthylene	260	UD	18	25.8	260	ug/L
606-20-2	2,6-Dinitrotoluene	260	UD	8.2	25.8	260	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027702.D	25	06/23/17 08:32	06/27/17 19:16	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	260	UD	25.8	25.8	260	ug/L
83-32-9	Acenaphthene	96.4	JD	5.4	25.8	260	ug/L
51-28-5	2,4-Dinitrophenol	260	UD	54.1	210	260	ug/L
100-02-7	4-Nitrophenol	260	UD	51.5	130	260	ug/L
132-64-9	Dibenzofuran	86.9	JD	6.2	25.8	260	ug/L
121-14-2	2,4-Dinitrotoluene	260	UD	25.8	25.8	260	ug/L
84-66-2	Diethylphthalate	260	UD	9.8	25.8	260	ug/L
7005-72-3	4-Chlorophenyl-phenylether	260	UD	5.4	25.8	260	ug/L
86-73-7	Fluorene	59	JD	8	25.8	260	ug/L
100-01-6	4-Nitroaniline	260	UD	35.1	51.5	260	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	260	UD	19.1	51.5	260	ug/L
86-30-6	n-Nitrosodiphenylamine	260	UD	15.5	25.8	260	ug/L
101-55-3	4-Bromophenyl-phenylether	260	UD	5.9	25.8	260	ug/L
118-74-1	Hexachlorobenzene	260	UD	4.6	25.8	260	ug/L
1912-24-9	Atrazine	260	UD	10.3	25.8	260	ug/L
87-86-5	Pentachlorophenol	260	UD	25.8	25.8	260	ug/L
85-01-8	Phenanthrene	72.9	JD	6.7	25.8	260	ug/L
120-12-7	Anthracene	260	UD	4.1	25.8	260	ug/L
86-74-8	Carbazole	260	UD	5.7	25.8	260	ug/L
84-74-2	Di-n-butylphthalate	260	UD	25.8	25.8	260	ug/L
206-44-0	Fluoranthene	260	UD	10.3	25.8	260	ug/L
129-00-0	Pyrene	260	UD	5.2	25.8	260	ug/L
85-68-7	Butylbenzylphthalate	260	UD	4.9	25.8	260	ug/L
91-94-1	3,3-Dichlorobenzidine	260	UD	25.8	25.8	260	ug/L
56-55-3	Benzo(a)anthracene	260	UD	4.1	25.8	260	ug/L
218-01-9	Chrysene	260	UD	4.6	25.8	260	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	260	UD	4.1	25.8	260	ug/L
117-84-0	Di-n-octyl phthalate	260	UD	13.1	25.8	260	ug/L
205-99-2	Benzo(b)fluoranthene	260	UD	7.5	25.8	260	ug/L
207-08-9	Benzo(k)fluoranthene	260	UD	4.6	25.8	260	ug/L
50-32-8	Benzo(a)pyrene	260	UD	3.6	25.8	260	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	260	UD	3.9	25.8	260	ug/L
53-70-3	Dibenzo(a,h)anthracene	260	UD	10.8	25.8	260	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027702.D	25	06/23/17 08:32	06/27/17 19:16	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	260	UD	7.5	25.8	260	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	260	UD	5.2	25.8	260	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	260	UD	5.2	25.8	260	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	33.3		10 - 130		22%	SPK: 150
13127-88-3	Phenol-d6	32.3		10 - 130		22%	SPK: 150
4165-60-0	Nitrobenzene-d5	73		36 - 131		73%	SPK: 100
321-60-8	2-Fluorobiphenyl	83.5		39 - 131		83%	SPK: 100
118-79-6	2,4,6-Tribromophenol	83.3		25 - 155		56%	SPK: 150
1718-51-0	Terphenyl-d14	72		23 - 130		72%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	11081	8.49				
1146-65-2	Naphthalene-d8	53836	11.31				
15067-26-2	Acenaphthene-d10	39478	15.08				
1517-22-2	Phenanthrene-d10	118885	17.83				
1719-03-5	Chrysene-d12	136446	22.19				
1520-96-3	Perylene-d12	122813	25.81				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041936.D	40		06/29/17 13:35	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	40	U	8	8	40	ug/L
74-87-3	Chloromethane	40	U	8	8	40	ug/L
75-01-4	Vinyl Chloride	40	U	8	8	40	ug/L
74-83-9	Bromomethane	40	U	8	8	40	ug/L
75-00-3	Chloroethane	40	U	8	20	40	ug/L
75-69-4	Trichlorofluoromethane	40	U	8	8	40	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	40	U	8	8	40	ug/L
75-65-0	Tert butyl alcohol	1000	U	20	150	1000	ug/L
75-35-4	1,1-Dichloroethene	40	U	8	8	40	ug/L
67-64-1	Acetone	200	U	20	40	200	ug/L
75-15-0	Carbon Disulfide	40	U	8	8	40	ug/L
1634-04-4	Methyl tert-butyl Ether	40	U	14	20	40	ug/L
79-20-9	Methyl Acetate	40	U	8	20	40	ug/L
75-09-2	Methylene Chloride	40	U	8	8	40	ug/L
156-60-5	trans-1,2-Dichloroethene	40	U	8	8	40	ug/L
75-34-3	1,1-Dichloroethane	40	U	8	8	40	ug/L
110-82-7	Cyclohexane	40	U	8	8	40	ug/L
78-93-3	2-Butanone	200	U	52.8	100	200	ug/L
56-23-5	Carbon Tetrachloride	40	U	8	8	40	ug/L
156-59-2	cis-1,2-Dichloroethene	40	U	8	8	40	ug/L
74-97-5	Bromochloromethane	40	U	8	20	40	ug/L
67-66-3	Chloroform	40	U	8	8	40	ug/L
71-55-6	1,1,1-Trichloroethane	40	U	8	8	40	ug/L
108-87-2	Methylcyclohexane	40	U	8	8	40	ug/L
71-43-2	Benzene	3000		8	8	40	ug/L
107-06-2	1,2-Dichloroethane	40	U	8	8	40	ug/L
79-01-6	Trichloroethene	40	U	8	8	40	ug/L
78-87-5	1,2-Dichloropropane	40	U	8	8	40	ug/L
75-27-4	Bromodichloromethane	40	U	8	8	40	ug/L
108-10-1	4-Methyl-2-Pentanone	200	U	40	40	200	ug/L
108-88-3	Toluene	200		8	8	40	ug/L
10061-02-6	t-1,3-Dichloropropene	40	U	8	8	40	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041936.D	40		06/29/17 13:35	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	40	U	8	8	40	ug/L
79-00-5	1,1,2-Trichloroethane	40	U	8	8	40	ug/L
591-78-6	2-Hexanone	200	U	77.6	100	200	ug/L
124-48-1	Dibromochloromethane	40	U	8	8	40	ug/L
106-93-4	1,2-Dibromoethane	40	U	8	8	40	ug/L
127-18-4	Tetrachloroethene	40	U	8	8	40	ug/L
108-90-7	Chlorobenzene	40	U	8	8	40	ug/L
100-41-4	Ethyl Benzene	530		8	8	40	ug/L
179601-23-1	m/p-Xylenes	440		16	16	80	ug/L
95-47-6	o-Xylene	290		8	8	40	ug/L
100-42-5	Styrene	40	U	8	8	40	ug/L
75-25-2	Bromoform	40	U	8	8	40	ug/L
98-82-8	Isopropylbenzene	48.8		8	8	40	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	40	U	8	8	40	ug/L
541-73-1	1,3-Dichlorobenzene	40	U	8	8	40	ug/L
106-46-7	1,4-Dichlorobenzene	40	U	8	8	40	ug/L
95-50-1	1,2-Dichlorobenzene	40	U	8	8	40	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	40	U	8	8	40	ug/L
120-82-1	1,2,4-Trichlorobenzene	40	U	8	8	40	ug/L
87-61-6	1,2,3-Trichlorobenzene	40	U	8	8	40	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	42.3		61 - 141		85%	SPK: 50
1868-53-7	Dibromofluoromethane	45.9		69 - 133		92%	SPK: 50
2037-26-5	Toluene-d8	48.3		65 - 126		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.9		58 - 135		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	514607	7.99				
540-36-3	1,4-Difluorobenzene	838175	8.88				
3114-55-4	Chlorobenzene-d5	713637	11.67				
3855-82-1	1,4-Dichlorobenzene-d4	298398	13.61				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041936.D	40		06/29/17 13:35	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17 12:25
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	1710		1	0.4	1	2	mg/L		06/29/17 13:22	SM2320 B
Sulfate	1860	OR	1	0.13	0.375	0.75	mg/L		06/23/17 12:01	300.0
Sulfide	21.1		1	0.03	0.5	1	mg/L	06/23/17 08:00	06/23/17 17:22	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17 12:25
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-02DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	1410	D	100	13.2	37.5	75	mg/L		06/23/17 14:26	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD015592.D	20	06/23/17 08:00	06/26/17 21:21	PB100107

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	18240		500	500	1000	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	0.94		29 - 130		94%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB009778.D	50	06/30/17 18:26	FB062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	16150		600	1125	2250	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20		50 - 150		100%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	805		1	12.5	12.5	50	ug/L	06/23/17 09:30	06/26/17 15:00	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF096181.D	1	06/23/17 08:32	06/24/17 10:12	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.2	U	0.78	1	10.2	ug/L
108-95-2	Phenol	6.2	J	0.21	1	10.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.2	U	0.56	1	10.2	ug/L
95-57-8	2-Chlorophenol	10.2	U	0.55	1	10.2	ug/L
95-48-7	2-Methylphenol	69.7		0.24	1	10.2	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.2	U	0.17	1	10.2	ug/L
98-86-2	Acetophenone	10.2	U	0.14	1	10.2	ug/L
65794-96-9	3+4-Methylphenols	100	E	0.39	1	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.2	U	0.2	1	10.2	ug/L
67-72-1	Hexachloroethane	10.2	U	0.25	1	10.2	ug/L
98-95-3	Nitrobenzene	10.2	U	0.69	1	10.2	ug/L
78-59-1	Isophorone	10.2	U	0.3	1	10.2	ug/L
88-75-5	2-Nitrophenol	10.2	U	0.53	1	10.2	ug/L
105-67-9	2,4-Dimethylphenol	1000	E	0.72	1	10.2	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.2	U	0.56	1	10.2	ug/L
120-83-2	2,4-Dichlorophenol	10.2	U	0.67	1	10.2	ug/L
91-20-3	Naphthalene	5500	E	0.12	1	10.2	ug/L
106-47-8	4-Chloroaniline	10.2	U	1	1	10.2	ug/L
87-68-3	Hexachlorobutadiene	10.2	U	0.25	1	10.2	ug/L
105-60-2	Caprolactam	10.2	U	1	1	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	10.2	U	0.41	1	10.2	ug/L
91-57-6	2-Methylnaphthalene	780	E	0.32	1	10.2	ug/L
77-47-4	Hexachlorocyclopentadiene	10.2	U	0.24	1	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	10.2	U	0.57	1	10.2	ug/L
95-95-4	2,4,5-Trichlorophenol	10.2	U	0.41	1	10.2	ug/L
92-52-4	1,1-Biphenyl	37.8		0.15	1	10.2	ug/L
91-58-7	2-Chloronaphthalene	10.2	U	0.16	1	10.2	ug/L
88-74-4	2-Nitroaniline	10.2	U	0.5	1	10.2	ug/L
131-11-3	Dimethylphthalate	5.7	J	0.22	1	10.2	ug/L
208-96-8	Acenaphthylene	14.2		0.71	1	10.2	ug/L
606-20-2	2,6-Dinitrotoluene	10.2	U	0.32	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF096181.D	1	06/23/17 08:32	06/24/17 10:12	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.2	U	1	1	10.2	ug/L
83-32-9	Acenaphthene	72.3		0.21	1	10.2	ug/L
51-28-5	2,4-Dinitrophenol	10.2	U	2.1	8.1	10.2	ug/L
100-02-7	4-Nitrophenol	10.2	U	2	5.1	10.2	ug/L
132-64-9	Dibenzofuran	65.6		0.24	1	10.2	ug/L
121-14-2	2,4-Dinitrotoluene	10.2	U	1	1	10.2	ug/L
84-66-2	Diethylphthalate	10.2	U	0.39	1	10.2	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.2	U	0.21	1	10.2	ug/L
86-73-7	Fluorene	47.4		0.31	1	10.2	ug/L
100-01-6	4-Nitroaniline	10.2	U	1.4	2	10.2	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.2	U	0.75	2	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	10.2	U	0.61	1	10.2	ug/L
101-55-3	4-Bromophenyl-phenylether	10.2	U	0.23	1	10.2	ug/L
118-74-1	Hexachlorobenzene	10.2	U	0.18	1	10.2	ug/L
1912-24-9	Atrazine	10.2	U	0.41	1	10.2	ug/L
87-86-5	Pentachlorophenol	10.2	U	1	1	10.2	ug/L
85-01-8	Phenanthrene	56.8		0.26	1	10.2	ug/L
120-12-7	Anthracene	9.2	J	0.16	1	10.2	ug/L
86-74-8	Carbazole	47.2		0.22	1	10.2	ug/L
84-74-2	Di-n-butylphthalate	10.2	U	1	1	10.2	ug/L
206-44-0	Fluoranthene	9.7	J	0.41	1	10.2	ug/L
129-00-0	Pyrene	6.9	J	0.2	1	10.2	ug/L
85-68-7	Butylbenzylphthalate	10.2	U	0.19	1	10.2	ug/L
91-94-1	3,3-Dichlorobenzidine	10.2	U	1	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.2	U	0.16	1	10.2	ug/L
117-84-0	Di-n-octyl phthalate	10.2	U	0.52	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.29	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF096181.D	1	06/23/17 08:32	06/24/17 10:12	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.29	1	10.2	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.2	U	0.2	1	10.2	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.2	U	0.2	1	10.2	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	13.5	*	10 - 130		9%	SPK: 150
13127-88-3	Phenol-d6	10.1	*	10 - 130		7%	SPK: 150
4165-60-0	Nitrobenzene-d5	230	*	36 - 131		228%	SPK: 100
321-60-8	2-Fluorobiphenyl	68.6		39 - 131		69%	SPK: 100
118-79-6	2,4,6-Tribromophenol	12.2	*	25 - 155		8%	SPK: 150
1718-51-0	Terphenyl-d14	72.6		23 - 130		73%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	66918	7.27				
1146-65-2	Naphthalene-d8	85402	9.38				
15067-26-2	Acenaphthene-d10	126644	12.12				
1517-22-2	Phenanthrene-d10	207437	14.52				
1719-03-5	Chrysene-d12	157841	18.25				
1520-96-3	Perylene-d12	118774	19.93				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-02DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF096240.D	100	06/23/17 08:32	06/28/17 02:20	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	1000	UD	78.2	100	1000	ug/L
108-95-2	Phenol	1000	UD	21.3	100	1000	ug/L
111-44-4	bis(2-Chloroethyl)ether	1000	UD	55.8	100	1000	ug/L
95-57-8	2-Chlorophenol	1000	UD	54.8	100	1000	ug/L
95-48-7	2-Methylphenol	1000	UD	24.4	100	1000	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1000	UD	17.3	100	1000	ug/L
98-86-2	Acetophenone	1000	UD	14.2	100	1000	ug/L
65794-96-9	3+4-Methylphenols	1000	UD	38.6	100	1000	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1000	UD	20.3	100	1000	ug/L
67-72-1	Hexachloroethane	1000	UD	25.4	100	1000	ug/L
98-95-3	Nitrobenzene	1000	UD	69	100	1000	ug/L
78-59-1	Isophorone	1000	UD	30.5	100	1000	ug/L
88-75-5	2-Nitrophenol	1000	UD	52.8	100	1000	ug/L
105-67-9	2,4-Dimethylphenol	610	JD	72.1	100	1000	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1000	UD	55.8	100	1000	ug/L
120-83-2	2,4-Dichlorophenol	1000	UD	67	100	1000	ug/L
91-20-3	Naphthalene	5000	D	12.2	100	1000	ug/L
106-47-8	4-Chloroaniline	1000	UD	100	100	1000	ug/L
87-68-3	Hexachlorobutadiene	1000	UD	25.4	100	1000	ug/L
105-60-2	Caprolactam	1000	UD	100	100	1000	ug/L
59-50-7	4-Chloro-3-methylphenol	1000	UD	40.6	100	1000	ug/L
91-57-6	2-Methylnaphthalene	400	JD	32.5	100	1000	ug/L
77-47-4	Hexachlorocyclopentadiene	1000	UD	24.4	100	1000	ug/L
88-06-2	2,4,6-Trichlorophenol	1000	UD	56.9	100	1000	ug/L
95-95-4	2,4,5-Trichlorophenol	1000	UD	40.6	100	1000	ug/L
92-52-4	1,1-Biphenyl	1000	UD	15.2	100	1000	ug/L
91-58-7	2-Chloronaphthalene	1000	UD	16.2	100	1000	ug/L
88-74-4	2-Nitroaniline	1000	UD	49.7	100	1000	ug/L
131-11-3	Dimethylphthalate	1000	UD	22.3	100	1000	ug/L
208-96-8	Acenaphthylene	1000	UD	71.1	100	1000	ug/L
606-20-2	2,6-Dinitrotoluene	1000	UD	32.5	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-02DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF096240.D	100	06/23/17 08:32	06/28/17 02:20	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1000	UD	100	100	1000	ug/L
83-32-9	Acenaphthene	1000	UD	21.3	100	1000	ug/L
51-28-5	2,4-Dinitrophenol	1000	UD	210	810	1000	ug/L
100-02-7	4-Nitrophenol	1000	UD	200	510	1000	ug/L
132-64-9	Dibenzofuran	1000	UD	24.4	100	1000	ug/L
121-14-2	2,4-Dinitrotoluene	1000	UD	100	100	1000	ug/L
84-66-2	Diethylphthalate	1000	UD	38.6	100	1000	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1000	UD	21.3	100	1000	ug/L
86-73-7	Fluorene	1000	UD	31.5	100	1000	ug/L
100-01-6	4-Nitroaniline	1000	UD	140	200	1000	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	1000	UD	75.1	200	1000	ug/L
86-30-6	n-Nitrosodiphenylamine	1000	UD	60.9	100	1000	ug/L
101-55-3	4-Bromophenyl-phenylether	1000	UD	23.4	100	1000	ug/L
118-74-1	Hexachlorobenzene	1000	UD	18.3	100	1000	ug/L
1912-24-9	Atrazine	1000	UD	40.6	100	1000	ug/L
87-86-5	Pentachlorophenol	1000	UD	100	100	1000	ug/L
85-01-8	Phenanthrene	1000	UD	26.4	100	1000	ug/L
120-12-7	Anthracene	1000	UD	16.2	100	1000	ug/L
86-74-8	Carbazole	1000	UD	22.3	100	1000	ug/L
84-74-2	Di-n-butylphthalate	1000	UD	100	100	1000	ug/L
206-44-0	Fluoranthene	1000	UD	40.6	100	1000	ug/L
129-00-0	Pyrene	1000	UD	20.3	100	1000	ug/L
85-68-7	Butylbenzylphthalate	1000	UD	19.3	100	1000	ug/L
91-94-1	3,3-Dichlorobenzidine	1000	UD	100	100	1000	ug/L
56-55-3	Benzo(a)anthracene	1000	UD	16.2	100	1000	ug/L
218-01-9	Chrysene	1000	UD	18.3	100	1000	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1000	UD	16.2	100	1000	ug/L
117-84-0	Di-n-octyl phthalate	1000	UD	51.8	100	1000	ug/L
205-99-2	Benzo(b)fluoranthene	1000	UD	29.4	100	1000	ug/L
207-08-9	Benzo(k)fluoranthene	1000	UD	18.3	100	1000	ug/L
50-32-8	Benzo(a)pyrene	1000	UD	14.2	100	1000	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1000	UD	15.2	100	1000	ug/L
53-70-3	Dibenzo(a,h)anthracene	1000	UD	42.6	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-02DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF096240.D	100	06/23/17 08:32	06/28/17 02:20	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1000	UD	29.4	100	1000	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1000	UD	20.3	100	1000	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	1000	UD	20.3	100	1000	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	10	*	10 - 130		7%	SPK: 150
13127-88-3	Phenol-d6	17		10 - 130		11%	SPK: 150
4165-60-0	Nitrobenzene-d5	87		36 - 131		87%	SPK: 100
321-60-8	2-Fluorobiphenyl	130		39 - 131		127%	SPK: 100
118-79-6	2,4,6-Tribromophenol	18	*	25 - 155		12%	SPK: 150
1718-51-0	Terphenyl-d14	90		23 - 130		90%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	154836	6.78				
1146-65-2	Naphthalene-d8	579545	8.06				
15067-26-2	Acenaphthene-d10	207139	9.82				
1517-22-2	Phenanthrene-d10	334232	11.29				
1719-03-5	Chrysene-d12	285716	13.92				
1520-96-3	Perylene-d12	197194	15.34				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041938.D	40		06/29/17 14:25	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	40	U	8	8	40	ug/L
74-87-3	Chloromethane	40	U	8	8	40	ug/L
75-01-4	Vinyl Chloride	40	U	8	8	40	ug/L
74-83-9	Bromomethane	40	U	8	8	40	ug/L
75-00-3	Chloroethane	40	U	8	20	40	ug/L
75-69-4	Trichlorofluoromethane	40	U	8	8	40	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	40	U	8	8	40	ug/L
75-65-0	Tert butyl alcohol	1000	U	20	150	1000	ug/L
75-35-4	1,1-Dichloroethene	40	U	8	8	40	ug/L
67-64-1	Acetone	200	U	20	40	200	ug/L
75-15-0	Carbon Disulfide	40	U	8	8	40	ug/L
1634-04-4	Methyl tert-butyl Ether	40	U	14	20	40	ug/L
79-20-9	Methyl Acetate	40	U	8	20	40	ug/L
75-09-2	Methylene Chloride	40	U	8	8	40	ug/L
156-60-5	trans-1,2-Dichloroethene	40	U	8	8	40	ug/L
75-34-3	1,1-Dichloroethane	40	U	8	8	40	ug/L
110-82-7	Cyclohexane	40	U	8	8	40	ug/L
78-93-3	2-Butanone	200	U	52.8	100	200	ug/L
56-23-5	Carbon Tetrachloride	40	U	8	8	40	ug/L
156-59-2	cis-1,2-Dichloroethene	40	U	8	8	40	ug/L
74-97-5	Bromochloromethane	40	U	8	20	40	ug/L
67-66-3	Chloroform	40	U	8	8	40	ug/L
71-55-6	1,1,1-Trichloroethane	40	U	8	8	40	ug/L
108-87-2	Methylcyclohexane	40	U	8	8	40	ug/L
71-43-2	Benzene	9000	E	8	8	40	ug/L
107-06-2	1,2-Dichloroethane	40	U	8	8	40	ug/L
79-01-6	Trichloroethene	40	U	8	8	40	ug/L
78-87-5	1,2-Dichloropropane	40	U	8	8	40	ug/L
75-27-4	Bromodichloromethane	40	U	8	8	40	ug/L
108-10-1	4-Methyl-2-Pentanone	200	U	40	40	200	ug/L
108-88-3	Toluene	2900		8	8	40	ug/L
10061-02-6	t-1,3-Dichloropropene	40	U	8	8	40	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041938.D	40		06/29/17 14:25	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	40	U	8	8	40	ug/L
79-00-5	1,1,2-Trichloroethane	40	U	8	8	40	ug/L
591-78-6	2-Hexanone	200	U	77.6	100	200	ug/L
124-48-1	Dibromochloromethane	40	U	8	8	40	ug/L
106-93-4	1,2-Dibromoethane	40	U	8	8	40	ug/L
127-18-4	Tetrachloroethene	40	U	8	8	40	ug/L
108-90-7	Chlorobenzene	40	U	8	8	40	ug/L
100-41-4	Ethyl Benzene	1000		8	8	40	ug/L
179601-23-1	m/p-Xylenes	1800		16	16	80	ug/L
95-47-6	o-Xylene	1400		8	8	40	ug/L
100-42-5	Styrene	40	U	8	8	40	ug/L
75-25-2	Bromoform	40	U	8	8	40	ug/L
98-82-8	Isopropylbenzene	44		8	8	40	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	40	U	8	8	40	ug/L
541-73-1	1,3-Dichlorobenzene	40	U	8	8	40	ug/L
106-46-7	1,4-Dichlorobenzene	40	U	8	8	40	ug/L
95-50-1	1,2-Dichlorobenzene	40	U	8	8	40	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	40	U	8	8	40	ug/L
120-82-1	1,2,4-Trichlorobenzene	40	U	8	8	40	ug/L
87-61-6	1,2,3-Trichlorobenzene	40	U	8	8	40	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43		61 - 141		86%	SPK: 50
1868-53-7	Dibromofluoromethane	44.9		69 - 133		90%	SPK: 50
2037-26-5	Toluene-d8	47.6		65 - 126		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.9		58 - 135		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	507916	7.99				
540-36-3	1,4-Difluorobenzene	847004	8.88				
3114-55-4	Chlorobenzene-d5	723741	11.67				
3855-82-1	1,4-Dichlorobenzene-d4	321032	13.61				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GW	SDG No.:	I3870
Lab Sample ID:	I3870-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041938.D	40		06/29/17 14:25	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-02DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041949.D	200		06/29/17 18:56	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	200	UD	40	40	200	ug/L
74-87-3	Chloromethane	200	UD	40	40	200	ug/L
75-01-4	Vinyl Chloride	200	UD	40	40	200	ug/L
74-83-9	Bromomethane	200	UD	40	40	200	ug/L
75-00-3	Chloroethane	200	UD	40	100	200	ug/L
75-69-4	Trichlorofluoromethane	200	UD	40	40	200	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	200	UD	40	40	200	ug/L
75-65-0	Tert butyl alcohol	5000	UD	100	750	5000	ug/L
75-35-4	1,1-Dichloroethene	200	UD	40	40	200	ug/L
67-64-1	Acetone	1000	UD	100	200	1000	ug/L
75-15-0	Carbon Disulfide	200	UD	40	40	200	ug/L
1634-04-4	Methyl tert-butyl Ether	200	UD	70	100	200	ug/L
79-20-9	Methyl Acetate	200	UD	40	100	200	ug/L
75-09-2	Methylene Chloride	200	UD	40	40	200	ug/L
156-60-5	trans-1,2-Dichloroethene	200	UD	40	40	200	ug/L
75-34-3	1,1-Dichloroethane	200	UD	40	40	200	ug/L
110-82-7	Cyclohexane	200	UD	40	40	200	ug/L
78-93-3	2-Butanone	1000	UD	260	500	1000	ug/L
56-23-5	Carbon Tetrachloride	200	UD	40	40	200	ug/L
156-59-2	cis-1,2-Dichloroethene	200	UD	40	40	200	ug/L
74-97-5	Bromochloromethane	200	UD	40	100	200	ug/L
67-66-3	Chloroform	200	UD	40	40	200	ug/L
71-55-6	1,1,1-Trichloroethane	200	UD	40	40	200	ug/L
108-87-2	Methylcyclohexane	200	UD	40	40	200	ug/L
71-43-2	Benzene	9700	D	40	40	200	ug/L
107-06-2	1,2-Dichloroethane	200	UD	40	40	200	ug/L
79-01-6	Trichloroethene	200	UD	40	40	200	ug/L
78-87-5	1,2-Dichloropropane	200	UD	40	40	200	ug/L
75-27-4	Bromodichloromethane	200	UD	40	40	200	ug/L
108-10-1	4-Methyl-2-Pentanone	1000	UD	200	200	1000	ug/L
108-88-3	Toluene	3000	D	40	40	200	ug/L
10061-02-6	t-1,3-Dichloropropene	200	UD	40	40	200	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-02DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041949.D	200		06/29/17 18:56	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	200	UD	40	40	200	ug/L
79-00-5	1,1,2-Trichloroethane	200	UD	40	40	200	ug/L
591-78-6	2-Hexanone	1000	UD	390	500	1000	ug/L
124-48-1	Dibromochloromethane	200	UD	40	40	200	ug/L
106-93-4	1,2-Dibromoethane	200	UD	40	40	200	ug/L
127-18-4	Tetrachloroethene	200	UD	40	40	200	ug/L
108-90-7	Chlorobenzene	200	UD	40	40	200	ug/L
100-41-4	Ethyl Benzene	1000	D	40	40	200	ug/L
179601-23-1	m/p-Xylenes	1600	D	80	80	400	ug/L
95-47-6	o-Xylene	1300	D	40	40	200	ug/L
100-42-5	Styrene	200	UD	40	40	200	ug/L
75-25-2	Bromoform	200	UD	40	40	200	ug/L
98-82-8	Isopropylbenzene	200	UD	40	40	200	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	200	UD	40	40	200	ug/L
541-73-1	1,3-Dichlorobenzene	200	UD	40	40	200	ug/L
106-46-7	1,4-Dichlorobenzene	200	UD	40	40	200	ug/L
95-50-1	1,2-Dichlorobenzene	200	UD	40	40	200	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	200	UD	40	40	200	ug/L
120-82-1	1,2,4-Trichlorobenzene	200	UD	40	40	200	ug/L
87-61-6	1,2,3-Trichlorobenzene	200	UD	40	40	200	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	42.8		61 - 141		86%	SPK: 50
1868-53-7	Dibromofluoromethane	46.9		69 - 133		94%	SPK: 50
2037-26-5	Toluene-d8	47.9		65 - 126		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.8		58 - 135		88%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	509642	7.99				
540-36-3	1,4-Difluorobenzene	838596	8.88				
3114-55-4	Chlorobenzene-d5	699160	11.67				
3855-82-1	1,4-Dichlorobenzene-d4	281829	13.61				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/21/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW26D-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-02DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041949.D	200		06/29/17 18:56	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17 09:05
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	1360		1	0.4	1	2	mg/L		06/29/17 13:35	SM2320 B
Sulfate	566	OR	1	0.13	0.375	0.75	mg/L		06/23/17 12:30	300.0
Sulfide	20.6		1	0.03	0.5	1	mg/L	06/23/17 08:00	06/23/17 17:35	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17 09:05
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-03DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	406	D	50	6.6	18.75	37.5	mg/L		06/23/17 14:55	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	995 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD015593.D	5	06/23/17 08:00	06/26/17 21:59	PB100107

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	2538		126	126	251	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	3.5		29 - 130		88%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB009773.D	1	06/30/17 15:37	FB062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	904		12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.5		50 - 150		102%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	2430		1	12.5	12.5	50	ug/L	06/23/17 09:30	06/26/17 15:04	SW6010

Color Before:	Brown	Clarity Before:	Cloudy	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027655.D	1	06/23/17 08:32	06/24/17 12:12	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.1	U	0.78	1	10.1	ug/L
108-95-2	Phenol	10.1	U	0.21	1	10.1	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.1	U	0.56	1	10.1	ug/L
95-57-8	2-Chlorophenol	10.1	U	0.55	1	10.1	ug/L
95-48-7	2-Methylphenol	2.5	J	0.24	1	10.1	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.1	U	0.17	1	10.1	ug/L
98-86-2	Acetophenone	10.1	U	0.14	1	10.1	ug/L
65794-96-9	3+4-Methylphenols	4	J	0.38	1	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.1	U	0.2	1	10.1	ug/L
67-72-1	Hexachloroethane	10.1	U	0.25	1	10.1	ug/L
98-95-3	Nitrobenzene	10.1	U	0.69	1	10.1	ug/L
78-59-1	Isophorone	10.1	U	0.3	1	10.1	ug/L
88-75-5	2-Nitrophenol	10.1	U	0.53	1	10.1	ug/L
105-67-9	2,4-Dimethylphenol	28.6		0.72	1	10.1	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.1	U	0.56	1	10.1	ug/L
120-83-2	2,4-Dichlorophenol	10.1	U	0.67	1	10.1	ug/L
91-20-3	Naphthalene	450	E	0.12	1	10.1	ug/L
106-47-8	4-Chloroaniline	10.1	U	1	1	10.1	ug/L
87-68-3	Hexachlorobutadiene	10.1	U	0.25	1	10.1	ug/L
105-60-2	Caprolactam	10.1	U	1	1	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	10.1	U	0.4	1	10.1	ug/L
91-57-6	2-Methylnaphthalene	34.6		0.32	1	10.1	ug/L
77-47-4	Hexachlorocyclopentadiene	10.1	U	0.24	1	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	10.1	U	0.57	1	10.1	ug/L
95-95-4	2,4,5-Trichlorophenol	10.1	U	0.4	1	10.1	ug/L
92-52-4	1,1-Biphenyl	6.8	J	0.15	1	10.1	ug/L
91-58-7	2-Chloronaphthalene	10.1	U	0.16	1	10.1	ug/L
88-74-4	2-Nitroaniline	10.1	U	0.49	1	10.1	ug/L
131-11-3	Dimethylphthalate	5.3	J	0.22	1	10.1	ug/L
208-96-8	Acenaphthylene	2.2	J	0.71	1	10.1	ug/L
606-20-2	2,6-Dinitrotoluene	10.1	U	0.32	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027655.D	1	06/23/17 08:32	06/24/17 12:12	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.1	U	1	1	10.1	ug/L
83-32-9	Acenaphthene	19.9		0.21	1	10.1	ug/L
51-28-5	2,4-Dinitrophenol	10.1	U	2.1	8.1	10.1	ug/L
100-02-7	4-Nitrophenol	10.1	U	2	5.1	10.1	ug/L
132-64-9	Dibenzofuran	15		0.24	1	10.1	ug/L
121-14-2	2,4-Dinitrotoluene	10.1	U	1	1	10.1	ug/L
84-66-2	Diethylphthalate	10.1	U	0.38	1	10.1	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	12		0.31	1	10.1	ug/L
100-01-6	4-Nitroaniline	10.1	U	1.4	2	10.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.1	U	0.75	2	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	10.1	U	0.61	1	10.1	ug/L
101-55-3	4-Bromophenyl-phenylether	10.1	U	0.23	1	10.1	ug/L
118-74-1	Hexachlorobenzene	10.1	U	0.18	1	10.1	ug/L
1912-24-9	Atrazine	10.1	U	0.4	1	10.1	ug/L
87-86-5	Pentachlorophenol	10.1	U	1	1	10.1	ug/L
85-01-8	Phenanthrene	14.9		0.26	1	10.1	ug/L
120-12-7	Anthracene	2.8	J	0.16	1	10.1	ug/L
86-74-8	Carbazole	13.4		0.22	1	10.1	ug/L
84-74-2	Di-n-butylphthalate	10.1	U	1	1	10.1	ug/L
206-44-0	Fluoranthene	2.8	J	0.4	1	10.1	ug/L
129-00-0	Pyrene	2.1	J	0.2	1	10.1	ug/L
85-68-7	Butylbenzylphthalate	10.1	U	0.19	1	10.1	ug/L
91-94-1	3,3-Dichlorobenzidine	10.1	U	1	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	10.1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	10.1	U	0.18	1	10.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.1	U	0.16	1	10.1	ug/L
117-84-0	Di-n-octyl phthalate	10.1	U	0.52	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	10.1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	10.1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	10.1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.1	U	0.42	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027655.D	1	06/23/17 08:32	06/24/17 12:12	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.1	U	0.29	1	10.1	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.1	U	0.2	1	10.1	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.1	U	0.2	1	10.1	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	64.3		10 - 130		43%	SPK: 150
13127-88-3	Phenol-d6	41.7		10 - 130		28%	SPK: 150
4165-60-0	Nitrobenzene-d5	77.4		36 - 131		77%	SPK: 100
321-60-8	2-Fluorobiphenyl	84.5		39 - 131		84%	SPK: 100
118-79-6	2,4,6-Tribromophenol	130		25 - 155		86%	SPK: 150
1718-51-0	Terphenyl-d14	81.9		23 - 130		82%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	19729	8.51				
1146-65-2	Naphthalene-d8	100210	11.33				
15067-26-2	Acenaphthene-d10	62998	15.09				
1517-22-2	Phenanthrene-d10	153558	17.84				
1719-03-5	Chrysene-d12	177496	22.21				
1520-96-3	Perylene-d12	166172	25.85				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027703.D	10	06/23/17 08:32	06/27/17 19:56	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	100	UD	7.8	10.1	100	ug/L
108-95-2	Phenol	100	UD	2.1	10.1	100	ug/L
111-44-4	bis(2-Chloroethyl)ether	100	UD	5.6	10.1	100	ug/L
95-57-8	2-Chlorophenol	100	UD	5.5	10.1	100	ug/L
95-48-7	2-Methylphenol	100	UD	2.4	10.1	100	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	100	UD	1.7	10.1	100	ug/L
98-86-2	Acetophenone	100	UD	1.4	10.1	100	ug/L
65794-96-9	3+4-Methylphenols	100	UD	3.8	10.1	100	ug/L
621-64-7	n-Nitroso-di-n-propylamine	100	UD	2	10.1	100	ug/L
67-72-1	Hexachloroethane	100	UD	2.5	10.1	100	ug/L
98-95-3	Nitrobenzene	100	UD	6.9	10.1	100	ug/L
78-59-1	Isophorone	100	UD	3	10.1	100	ug/L
88-75-5	2-Nitrophenol	100	UD	5.3	10.1	100	ug/L
105-67-9	2,4-Dimethylphenol	33.1	JD	7.2	10.1	100	ug/L
111-91-1	bis(2-Chloroethoxy)methane	100	UD	5.6	10.1	100	ug/L
120-83-2	2,4-Dichlorophenol	100	UD	6.7	10.1	100	ug/L
91-20-3	Naphthalene	600	D	1.2	10.1	100	ug/L
106-47-8	4-Chloroaniline	100	UD	10.1	10.1	100	ug/L
87-68-3	Hexachlorobutadiene	100	UD	2.5	10.1	100	ug/L
105-60-2	Caprolactam	100	UD	10.1	10.1	100	ug/L
59-50-7	4-Chloro-3-methylphenol	100	UD	4	10.1	100	ug/L
91-57-6	2-Methylnaphthalene	46	JD	3.2	10.1	100	ug/L
77-47-4	Hexachlorocyclopentadiene	100	UD	2.4	10.1	100	ug/L
88-06-2	2,4,6-Trichlorophenol	100	UD	5.7	10.1	100	ug/L
95-95-4	2,4,5-Trichlorophenol	100	UD	4	10.1	100	ug/L
92-52-4	1,1-Biphenyl	100	UD	1.5	10.1	100	ug/L
91-58-7	2-Chloronaphthalene	100	UD	1.6	10.1	100	ug/L
88-74-4	2-Nitroaniline	100	UD	4.9	10.1	100	ug/L
131-11-3	Dimethylphthalate	100	UD	2.2	10.1	100	ug/L
208-96-8	Acenaphthylene	100	UD	7.1	10.1	100	ug/L
606-20-2	2,6-Dinitrotoluene	100	UD	3.2	10.1	100	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027703.D	10	06/23/17 08:32	06/27/17 19:56	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	100	UD	10.1	10.1	100	ug/L
83-32-9	Acenaphthene	25.5	JD	2.1	10.1	100	ug/L
51-28-5	2,4-Dinitrophenol	100	UD	21.2	80.8	100	ug/L
100-02-7	4-Nitrophenol	100	UD	20.2	50.5	100	ug/L
132-64-9	Dibenzofuran	21.4	JD	2.4	10.1	100	ug/L
121-14-2	2,4-Dinitrotoluene	100	UD	10.1	10.1	100	ug/L
84-66-2	Diethylphthalate	100	UD	3.8	10.1	100	ug/L
7005-72-3	4-Chlorophenyl-phenylether	100	UD	2.1	10.1	100	ug/L
86-73-7	Fluorene	100	UD	3.1	10.1	100	ug/L
100-01-6	4-Nitroaniline	100	UD	13.7	20.2	100	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	100	UD	7.5	20.2	100	ug/L
86-30-6	n-Nitrosodiphenylamine	100	UD	6.1	10.1	100	ug/L
101-55-3	4-Bromophenyl-phenylether	100	UD	2.3	10.1	100	ug/L
118-74-1	Hexachlorobenzene	100	UD	1.8	10.1	100	ug/L
1912-24-9	Atrazine	100	UD	4	10.1	100	ug/L
87-86-5	Pentachlorophenol	100	UD	10.1	10.1	100	ug/L
85-01-8	Phenanthrene	100	UD	2.6	10.1	100	ug/L
120-12-7	Anthracene	100	UD	1.6	10.1	100	ug/L
86-74-8	Carbazole	100	UD	2.2	10.1	100	ug/L
84-74-2	Di-n-butylphthalate	100	UD	10.1	10.1	100	ug/L
206-44-0	Fluoranthene	100	UD	4	10.1	100	ug/L
129-00-0	Pyrene	100	UD	2	10.1	100	ug/L
85-68-7	Butylbenzylphthalate	100	UD	1.9	10.1	100	ug/L
91-94-1	3,3-Dichlorobenzidine	100	UD	10.1	10.1	100	ug/L
56-55-3	Benzo(a)anthracene	100	UD	1.6	10.1	100	ug/L
218-01-9	Chrysene	100	UD	1.8	10.1	100	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	100	UD	1.6	10.1	100	ug/L
117-84-0	Di-n-octyl phthalate	100	UD	5.2	10.1	100	ug/L
205-99-2	Benzo(b)fluoranthene	100	UD	2.9	10.1	100	ug/L
207-08-9	Benzo(k)fluoranthene	100	UD	1.8	10.1	100	ug/L
50-32-8	Benzo(a)pyrene	100	UD	1.4	10.1	100	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	100	UD	1.5	10.1	100	ug/L
53-70-3	Dibenzo(a,h)anthracene	100	UD	4.2	10.1	100	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027703.D	10	06/23/17 08:32	06/27/17 19:56	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	100	UD	2.9	10.1	100	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	100	UD	2	10.1	100	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	100	UD	2	10.1	100	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	65.3		10 - 130		44%	SPK: 150
13127-88-3	Phenol-d6	39.5		10 - 130		26%	SPK: 150
4165-60-0	Nitrobenzene-d5	90.3		36 - 131		90%	SPK: 100
321-60-8	2-Fluorobiphenyl	98.8		39 - 131		99%	SPK: 100
118-79-6	2,4,6-Tribromophenol	160		25 - 155		104%	SPK: 150
1718-51-0	Terphenyl-d14	98.4		23 - 130		98%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	12174	8.49				
1146-65-2	Naphthalene-d8	59074	11.3				
15067-26-2	Acenaphthene-d10	43090	15.07				
1517-22-2	Phenanthrene-d10	120459	17.82				
1719-03-5	Chrysene-d12	137796	22.19				
1520-96-3	Perylene-d12	124099	25.8				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041941.D	5		06/29/17 15:39	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5	U	1	1	5	ug/L
74-87-3	Chloromethane	5	U	1	1	5	ug/L
75-01-4	Vinyl Chloride	5	U	1	1	5	ug/L
74-83-9	Bromomethane	5	U	1	1	5	ug/L
75-00-3	Chloroethane	5	U	1	2.5	5	ug/L
75-69-4	Trichlorofluoromethane	5	U	1	1	5	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	5	U	1	1	5	ug/L
75-65-0	Tert butyl alcohol	130	U	2.5	18.8	130	ug/L
75-35-4	1,1-Dichloroethene	5	U	1	1	5	ug/L
67-64-1	Acetone	25	U	2.5	5	25	ug/L
75-15-0	Carbon Disulfide	5	U	1	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	4.3	J	1.8	2.5	5	ug/L
79-20-9	Methyl Acetate	5	U	1	2.5	5	ug/L
75-09-2	Methylene Chloride	5	U	1	1	5	ug/L
156-60-5	trans-1,2-Dichloroethene	5	U	1	1	5	ug/L
75-34-3	1,1-Dichloroethane	5	U	1	1	5	ug/L
110-82-7	Cyclohexane	5	U	1	1	5	ug/L
78-93-3	2-Butanone	25	U	6.6	12.5	25	ug/L
56-23-5	Carbon Tetrachloride	5	U	1	1	5	ug/L
156-59-2	cis-1,2-Dichloroethene	5	U	1	1	5	ug/L
74-97-5	Bromochloromethane	5	U	1	2.5	5	ug/L
67-66-3	Chloroform	5	U	1	1	5	ug/L
71-55-6	1,1,1-Trichloroethane	5	U	1	1	5	ug/L
108-87-2	Methylcyclohexane	5	U	1	1	5	ug/L
71-43-2	Benzene	540	E	1	1	5	ug/L
107-06-2	1,2-Dichloroethane	5	U	1	1	5	ug/L
79-01-6	Trichloroethene	5	U	1	1	5	ug/L
78-87-5	1,2-Dichloropropane	5	U	1	1	5	ug/L
75-27-4	Bromodichloromethane	5	U	1	1	5	ug/L
108-10-1	4-Methyl-2-Pentanone	25	U	5	5	25	ug/L
108-88-3	Toluene	53.3		1	1	5	ug/L
10061-02-6	t-1,3-Dichloropropene	5	U	1	1	5	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041941.D	5		06/29/17 15:39	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	5	U	1	1	5	ug/L
79-00-5	1,1,2-Trichloroethane	5	U	1	1	5	ug/L
591-78-6	2-Hexanone	25	U	9.7	12.5	25	ug/L
124-48-1	Dibromochloromethane	5	U	1	1	5	ug/L
106-93-4	1,2-Dibromoethane	5	U	1	1	5	ug/L
127-18-4	Tetrachloroethene	5	U	1	1	5	ug/L
108-90-7	Chlorobenzene	5	U	1	1	5	ug/L
100-41-4	Ethyl Benzene	110		1	1	5	ug/L
179601-23-1	m/p-Xylenes	81.6		2	2	10	ug/L
95-47-6	o-Xylene	53.4		1	1	5	ug/L
100-42-5	Styrene	5	U	1	1	5	ug/L
75-25-2	Bromoform	5	U	1	1	5	ug/L
98-82-8	Isopropylbenzene	11.9		1	1	5	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5	U	1	1	5	ug/L
541-73-1	1,3-Dichlorobenzene	5	U	1	1	5	ug/L
106-46-7	1,4-Dichlorobenzene	5	U	1	1	5	ug/L
95-50-1	1,2-Dichlorobenzene	5	U	1	1	5	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	5	U	1	1	5	ug/L
120-82-1	1,2,4-Trichlorobenzene	5	U	1	1	5	ug/L
87-61-6	1,2,3-Trichlorobenzene	5	U	1	1	5	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.9		61 - 141		90%	SPK: 50
1868-53-7	Dibromofluoromethane	46.1		69 - 133		92%	SPK: 50
2037-26-5	Toluene-d8	47.9		65 - 126		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.4		58 - 135		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	490714	7.99				
540-36-3	1,4-Difluorobenzene	831419	8.88				
3114-55-4	Chlorobenzene-d5	694830	11.67				
3855-82-1	1,4-Dichlorobenzene-d4	296215	13.61				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I3870
Lab Sample ID:	I3870-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041941.D	5		06/29/17 15:39	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-03DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041948.D	10		06/29/17 18:32	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	10	UD	2	2	10	ug/L
74-87-3	Chloromethane	10	UD	2	2	10	ug/L
75-01-4	Vinyl Chloride	10	UD	2	2	10	ug/L
74-83-9	Bromomethane	10	UD	2	2	10	ug/L
75-00-3	Chloroethane	10	UD	2	5	10	ug/L
75-69-4	Trichlorofluoromethane	10	UD	2	2	10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	10	UD	2	2	10	ug/L
75-65-0	Tert butyl alcohol	250	UD	5	37.5	250	ug/L
75-35-4	1,1-Dichloroethene	10	UD	2	2	10	ug/L
67-64-1	Acetone	50	UD	5	10	50	ug/L
75-15-0	Carbon Disulfide	10	UD	2	2	10	ug/L
1634-04-4	Methyl tert-butyl Ether	10	UD	3.5	5	10	ug/L
79-20-9	Methyl Acetate	10	UD	2	5	10	ug/L
75-09-2	Methylene Chloride	10	UD	2	2	10	ug/L
156-60-5	trans-1,2-Dichloroethene	10	UD	2	2	10	ug/L
75-34-3	1,1-Dichloroethane	10	UD	2	2	10	ug/L
110-82-7	Cyclohexane	10	UD	2	2	10	ug/L
78-93-3	2-Butanone	50	UD	13.2	25	50	ug/L
56-23-5	Carbon Tetrachloride	10	UD	2	2	10	ug/L
156-59-2	cis-1,2-Dichloroethene	10	UD	2	2	10	ug/L
74-97-5	Bromochloromethane	10	UD	2	5	10	ug/L
67-66-3	Chloroform	10	UD	2	2	10	ug/L
71-55-6	1,1,1-Trichloroethane	10	UD	2	2	10	ug/L
108-87-2	Methylcyclohexane	10	UD	2	2	10	ug/L
71-43-2	Benzene	550	D	2	2	10	ug/L
107-06-2	1,2-Dichloroethane	10	UD	2	2	10	ug/L
79-01-6	Trichloroethene	10	UD	2	2	10	ug/L
78-87-5	1,2-Dichloropropane	10	UD	2	2	10	ug/L
75-27-4	Bromodichloromethane	10	UD	2	2	10	ug/L
108-10-1	4-Methyl-2-Pentanone	50	UD	10	10	50	ug/L
108-88-3	Toluene	55.9	D	2	2	10	ug/L
10061-02-6	t-1,3-Dichloropropene	10	UD	2	2	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-03DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041948.D	10		06/29/17 18:32	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	10	UD	2	2	10	ug/L
79-00-5	1,1,2-Trichloroethane	10	UD	2	2	10	ug/L
591-78-6	2-Hexanone	50	UD	19.4	25	50	ug/L
124-48-1	Dibromochloromethane	10	UD	2	2	10	ug/L
106-93-4	1,2-Dibromoethane	10	UD	2	2	10	ug/L
127-18-4	Tetrachloroethene	10	UD	2	2	10	ug/L
108-90-7	Chlorobenzene	10	UD	2	2	10	ug/L
100-41-4	Ethyl Benzene	100	D	2	2	10	ug/L
179601-23-1	m/p-Xylenes	77.5	D	4	4	20	ug/L
95-47-6	o-Xylene	49.1	D	2	2	10	ug/L
100-42-5	Styrene	10	UD	2	2	10	ug/L
75-25-2	Bromoform	10	UD	2	2	10	ug/L
98-82-8	Isopropylbenzene	11.3	D	2	2	10	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	10	UD	2	2	10	ug/L
541-73-1	1,3-Dichlorobenzene	10	UD	2	2	10	ug/L
106-46-7	1,4-Dichlorobenzene	10	UD	2	2	10	ug/L
95-50-1	1,2-Dichlorobenzene	10	UD	2	2	10	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	10	UD	2	2	10	ug/L
120-82-1	1,2,4-Trichlorobenzene	10	UD	2	2	10	ug/L
87-61-6	1,2,3-Trichlorobenzene	10	UD	2	2	10	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	41.2		61 - 141		82%	SPK: 50
1868-53-7	Dibromofluoromethane	46.4		69 - 133		93%	SPK: 50
2037-26-5	Toluene-d8	48.9		65 - 126		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.1		58 - 135		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	538988	7.99				
540-36-3	1,4-Difluorobenzene	861956	8.88				
3114-55-4	Chlorobenzene-d5	758887	11.67				
3855-82-1	1,4-Dichlorobenzene-d4	315106	13.61				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I3870
Lab Sample ID:	I3870-03DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041948.D	10		06/29/17 18:32	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD015573.D	1	06/23/17 08:00	06/25/17 7:01	PB100107

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	37	J	25	25	50	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	15.9		29 - 130		79%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB009770.D	1	06/30/17 14:04	FB062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	45	U	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	18.2		50 - 150		91%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	17.1	J	1	12.5	12.5	50	ug/L	06/23/17 09:30	06/26/17 15:08	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	992 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027641.D	1	06/23/17 08:32	06/23/17 21:51	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.1	U	0.78	1	10.1	ug/L
108-95-2	Phenol	10.1	U	0.21	1	10.1	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.1	U	0.55	1	10.1	ug/L
95-57-8	2-Chlorophenol	10.1	U	0.54	1	10.1	ug/L
95-48-7	2-Methylphenol	10.1	U	0.24	1	10.1	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.1	U	0.17	1	10.1	ug/L
98-86-2	Acetophenone	10.1	U	0.14	1	10.1	ug/L
65794-96-9	3+4-Methylphenols	10.1	U	0.38	1	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.1	U	0.2	1	10.1	ug/L
67-72-1	Hexachloroethane	10.1	U	0.25	1	10.1	ug/L
98-95-3	Nitrobenzene	10.1	U	0.69	1	10.1	ug/L
78-59-1	Isophorone	10.1	U	0.3	1	10.1	ug/L
88-75-5	2-Nitrophenol	10.1	U	0.52	1	10.1	ug/L
105-67-9	2,4-Dimethylphenol	10.1	U	0.72	1	10.1	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.1	U	0.55	1	10.1	ug/L
120-83-2	2,4-Dichlorophenol	10.1	U	0.67	1	10.1	ug/L
91-20-3	Naphthalene	10.1	U	0.12	1	10.1	ug/L
106-47-8	4-Chloroaniline	10.1	U	1	1	10.1	ug/L
87-68-3	Hexachlorobutadiene	10.1	U	0.25	1	10.1	ug/L
105-60-2	Caprolactam	10.1	U	1	1	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	10.1	U	0.4	1	10.1	ug/L
91-57-6	2-Methylnaphthalene	10.1	U	0.32	1	10.1	ug/L
77-47-4	Hexachlorocyclopentadiene	10.1	U	0.24	1	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	10.1	U	0.56	1	10.1	ug/L
95-95-4	2,4,5-Trichlorophenol	10.1	U	0.4	1	10.1	ug/L
92-52-4	1,1-Biphenyl	10.1	U	0.15	1	10.1	ug/L
91-58-7	2-Chloronaphthalene	10.1	U	0.16	1	10.1	ug/L
88-74-4	2-Nitroaniline	10.1	U	0.49	1	10.1	ug/L
131-11-3	Dimethylphthalate	10.1	U	0.22	1	10.1	ug/L
208-96-8	Acenaphthylene	10.1	U	0.71	1	10.1	ug/L
606-20-2	2,6-Dinitrotoluene	10.1	U	0.32	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	992 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027641.D	1	06/23/17 08:32	06/23/17 21:51	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.1	U	1	1	10.1	ug/L
83-32-9	Acenaphthene	10.1	U	0.21	1	10.1	ug/L
51-28-5	2,4-Dinitrophenol	10.1	U	2.1	8.1	10.1	ug/L
100-02-7	4-Nitrophenol	10.1	U	2	5	10.1	ug/L
132-64-9	Dibenzofuran	10.1	U	0.24	1	10.1	ug/L
121-14-2	2,4-Dinitrotoluene	10.1	U	1	1	10.1	ug/L
84-66-2	Diethylphthalate	10.1	U	0.38	1	10.1	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	10.1	U	0.31	1	10.1	ug/L
100-01-6	4-Nitroaniline	10.1	U	1.4	2	10.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.1	U	0.75	2	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	10.1	U	0.6	1	10.1	ug/L
101-55-3	4-Bromophenyl-phenylether	10.1	U	0.23	1	10.1	ug/L
118-74-1	Hexachlorobenzene	10.1	U	0.18	1	10.1	ug/L
1912-24-9	Atrazine	10.1	U	0.4	1	10.1	ug/L
87-86-5	Pentachlorophenol	10.1	U	1	1	10.1	ug/L
85-01-8	Phenanthrene	10.1	U	0.26	1	10.1	ug/L
120-12-7	Anthracene	10.1	U	0.16	1	10.1	ug/L
86-74-8	Carbazole	10.1	U	0.22	1	10.1	ug/L
84-74-2	Di-n-butylphthalate	10.1	U	1	1	10.1	ug/L
206-44-0	Fluoranthene	10.1	U	0.4	1	10.1	ug/L
129-00-0	Pyrene	10.1	U	0.2	1	10.1	ug/L
85-68-7	Butylbenzylphthalate	10.1	U	0.19	1	10.1	ug/L
91-94-1	3,3-Dichlorobenzidine	10.1	U	1	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	10.1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	10.1	U	0.18	1	10.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.1	U	0.16	1	10.1	ug/L
117-84-0	Di-n-octyl phthalate	10.1	U	0.51	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	10.1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	10.1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	10.1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.1	U	0.42	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	992 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG027641.D	1	06/23/17 08:32	06/23/17 21:51	PB100074

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.1	U	0.29	1	10.1	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.1	U	0.2	1	10.1	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.1	U	0.2	1	10.1	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	59.2		10 - 130		39%	SPK: 150
13127-88-3	Phenol-d6	33.1		10 - 130		22%	SPK: 150
4165-60-0	Nitrobenzene-d5	87.1		36 - 131		87%	SPK: 100
321-60-8	2-Fluorobiphenyl	91.7		39 - 131		92%	SPK: 100
118-79-6	2,4,6-Tribromophenol	170		25 - 155		117%	SPK: 150
1718-51-0	Terphenyl-d14	100		23 - 130		102%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	16973	8.51				
1146-65-2	Naphthalene-d8	80538	11.32				
15067-26-2	Acenaphthene-d10	52981	15.09				
1517-22-2	Phenanthrene-d10	158009	17.84				
1719-03-5	Chrysene-d12	176084	22.21				
1520-96-3	Perylene-d12	164909	25.84				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041962.D	1		06/30/17 13:17	VN063017

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041962.D	1		06/30/17 13:17	VN063017

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.8		61 - 141		96%	SPK: 50
1868-53-7	Dibromofluoromethane	48.4		69 - 133		97%	SPK: 50
2037-26-5	Toluene-d8	48.2		65 - 126		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	40.7		58 - 135		81%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	461502	7.99				
540-36-3	1,4-Difluorobenzene	736014	8.88				
3114-55-4	Chlorobenzene-d5	633525	11.67				
3855-82-1	1,4-Dichlorobenzene-d4	209162	13.61				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/22/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041962.D	1		06/30/17 13:17	VN063017

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/20/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041952.D	1		06/29/17 20:10	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/20/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041952.D	1		06/29/17 20:10	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	41.7		61 - 141		83%	SPK: 50
1868-53-7	Dibromofluoromethane	46.9		69 - 133		94%	SPK: 50
2037-26-5	Toluene-d8	48.9		65 - 126		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.5		58 - 135		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	511366	7.99				
540-36-3	1,4-Difluorobenzene	812191	8.88				
3114-55-4	Chlorobenzene-d5	705164	11.67				
3855-82-1	1,4-Dichlorobenzene-d4	250855	13.61				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	06/20/17
Project:	Hunters Point - Queens West Library	Date Received:	06/22/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I3870
Lab Sample ID:	I3870-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN041952.D	1		06/29/17 20:10	VN062917

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

Attachment 4
LiRo Engineers, Inc. - Quarterly Monitoring Report – Third Quarter 2017, November 17, 2017

Included on Attached CD

Quarterly Monitoring Report: Third Quarter 2017

Queens West (Hunters Point) Parcel 8

Parcel West of Center Boulevard between 47th Road and 48th Avenue

Queens, New York 11101

NYSDEC Site ID: C241087

DDC PROJECT NO. LQD122-QW

WORK ORDER NO. 10396-LIRO-3-9740

CONTRACT REGISTRATION NO. 20151405569

Prepared for:

Department of Design and Construction

Office of Environmental and Geotechnical Services
30-30 Thomson Avenue, Third Floor
Long Island City, New York 11101

Prepared by:

LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, New York 11211

PROJECT NO. 15-008-0265

November 17, 2017

TABLE OF CONTENTS

Figures

Tables

Appendices

1.0 INTRODUCTION

1.1 Background Information

On behalf of the New York City Department of Design and Construction (DDC), Office of Environmental and Geotechnical Services (OEGS), LiRo Engineers, Inc. (LiRo) conducted the third quarterly groundwater sampling event in September 2017 and prepared this Quarterly Monitoring Report (QMR) for the construction site of the new Queens West Hunters Point Community Library located at Parcel 8 (Block 19, portion of Lot 21), west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York (Figure 1). The parcel is approximately 0.73 acres and is an active construction site. The locations of the groundwater monitoring wells are shown on Figure 2. Based on the previous Site investigations, groundwater flow direction is generally toward the west.

The Queens West Parcel 8 Site is in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (NYSDEC Site No. C241087) and redevelopment of the Site is being conducted under the requirements of the Site Management Plan (SMP) dated December 2011 and Revision #1 dated November 2014. The annual groundwater sampling and this QMR were performed in accordance with the SMP. The SMP calls for quarterly groundwater sampling in order to evaluate current groundwater conditions and to evaluate the overall effectiveness of remediation.

Between October 25, 2010 and March 30, 2011, Fleming Lee Shue (FLS) of New York, New York implemented the treatment remedy for Parcel 8 which included in-situ chemical injection using sodium persulfate, sodium hydroxide, and a plant-based surfactant under the NYSDEC Brownfield Cleanup Program (BCP Site No. C241087). Sodium persulfate was the oxidant used and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of the coal tar to make it available for chemical oxidation. A total of 334,000 pounds of sodium persulfate, 136,300 pounds of sodium hydroxide, and 65,000 pounds of surfactant were injected over the five-month treatment period. The bulk of the treatment targeted the zone of 10 to 22 feet below grade (ftbg). Treatment was completed using the RemMetrik® process, which used subsurface pressure waves generated by Wavefront Technology Solutions, Inc. of Edmonton, Alberta, Canada. Primawave™ process. Previous estimates indicated that 47,000 pounds of coal tar contamination were slated for treatment.

The following on-site groundwater monitoring wells were decommissioned in June 2015 by LiRo on behalf of DDC at the request of the NYSDEC, due to on-going construction at the Site.

- MW-7R, MW-11D, MW-12D, MW-13S, MW-14S, MW-17S, MW-18D, MW-21S, MW-22D, MW-23S, and Geothermal Well (no ID).

LiRo submitted a Monitoring Well Decommissioning memorandum dated July 1, 2015 to document the well closures.

LiRo completed the second quarter 2015 groundwater sampling in June 2015, the third quarter 2015 groundwater sampling in September 2015, and the fourth quarter 2015 groundwater sampling in December 2015.

Prior to the first quarter 2016 sampling, two (2) additional groundwater monitoring wells, MW-15 and MW-20, were decommissioned by LiRo on behalf of DDC due to their interference of on-going construction activities at the site.

LiRo submitted a Monitoring Well Decommissioning memorandum dated March 18, 2016 to document the well closures. LiRo completed the first quarter 2016 groundwater sampling in March 2016, the second quarter 2016 groundwater sampling in June 2016, the third quarter 2016 groundwater sampling in September 2016, and the fourth quarter 2016 groundwater sampling in December 2016.

Prior to the fourth quarter 2016 groundwater sampling, one (1) additional groundwater monitoring well, MW-19D, was decommissioned by LiRo on behalf of DDC due to its interference with on-going construction activities at the Site. LiRo submitted a Monitoring Well Decommissioning Memorandum dated December 5, 2016 to document the well closure.

LiRo completed the first quarter 2017 groundwater sampling in March 2017, the second quarter groundwater sampling in June 2017, and the third quarter groundwater sampling in September 2017.

Construction of the new Hunters Point Library is underway at the Site. As of the time of the 2017 third quarter sampling, the building walls have been constructed and construction of the building interior is currently ongoing.

2.0 QUARTERLY GROUNDWATER SAMPLING

2.1 Overview of Groundwater Sampling

LiRo conducted the third quarter of 2017 groundwater sampling at the Site on September 27 and 28, 2017 and included sampling from wells within Gantry Plaza State Park and Peninsula Park.

The well locations requiring sampling by NYSDEC in September 2017 were MW-26S, MW-26D, MW-27S, and MW-27D, which are located in Peninsula Park and MW-30S and MW-30D, which are located in Gantry Plaza State Park. The monitoring well locations are shown on Figure 2. The groundwater samples were submitted for laboratory analysis to Chemtech of Mountainside, New Jersey, a New York State Department of Health (NYSDOH) approved laboratory (No. 11376). The analytical results were then validated by Vali-Data of WNY, LLC (Vali-Data) of West Falls, New York, who prepared the Data Usability Summary Report (DUSR) dated October 30, 2017. The DUSR is provided in Appendix 1.

2.2 Groundwater Sampling and Analysis – Third Quarter 2017

Based on the SMP provided to LiRo, the third quarter 2017 sampling was scheduled for monitoring wells MW-26S, MW-26D, MW-27S, MW-27D, MW-30S, and MW-30D. LiRo completed the groundwater sampling on September 27 and 28, 2017. Prior to sampling, LiRo conducted water level/free product monitoring in the wells using an oil/water interface probe. A dense non-aqueous phase liquid (DNAPL) layer (inferred to be coal tar based on site history) with an approximate thickness of 6 inches was observed within a bailer removed from the well prior to well depth measurement at MW-26D and a measurable thickness of approximately 3 inches of DNAPL was observed with the interface probe at a depth of 30 ftbg at MW-27D. Therefore, in accordance with the SMP, MW-26D and MW-27D were not sampled. The exact product thickness cannot be measured due to a mixing zone above the product.

Well purging and groundwater sampling of MW-26S, MW-27S, MW-30S, and MW-30D were conducted in accordance with the approved Quality Assurance Project Plan (QAPP) and with the NYSDEC-approved SMP. Each well was purged using a low-flow method, which included the use of a peristaltic pump to ensure minimal generation of suspended solids, minimize the volatilization of contaminants in the groundwater, acquire a more representative localized groundwater sample from the contaminated plume and minimize the volume of groundwater purged. The wells were purged until groundwater parameters including temperature, pH, dissolved oxygen (DO), conductivity, oxidation reduction potential (ORP), and turbidity stabilized. The aforementioned groundwater monitoring parameter measurements were collected using a Horiba U-52 water quality meter. The groundwater parameter measurements are provided in the well purge logs included in Appendix 2.

The groundwater samples were collected and submitted for laboratory analysis of the following parameters:

- Target Compound List (TCL) volatile organic compounds (VOCs), United States Environmental Protection Agency (USEPA) Method 8260C;
- TCL semi-volatile organic compounds (SVOCs), USEPA Method 8270D;
- Total Petroleum Hydrocarbon (TPHC) Diesel Range Organics/Gasoline Range Organics (DRO/GRO), USEPA Method 8015C;
- Total Iron, USEPA Method 6010;
- Alkalinity, USEPA Method 310.1;
- Sulfide, USEPA Method 376.1; and,
- Sulfate, USEPA Method 300.

The groundwater samples were submitted to Chemtech, a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory. The laboratory groundwater analytical report is included in Appendix 3.

Quality assurance/quality control (QA/QC) samples were collected during sampling and included one (1) trip blanks and one (1) equipment blank.

2.3 Summary of Analytical Results

Groundwater analytical results for the third quarter 2017 samples are summarized in Tables 2 through 4. To be consistent with previous reporting, the trends for benzene and naphthalene are discussed and summarized below.

Table 1 – Summary of Benzene and Naphthalene Detections December 2015 – September 2017

Well ID	Analyte	Concentration (µg/L)							
		9/2017	6/2017	3/2017	12/2016	9/2016	6/2016	3/2016	12/2015
MW-24S	Benzene	NS	NS	2	NS	NS	NS	10	NS
	Naphthalene	NS	NS	340	NS	NS	NS	220	NS
MW-24D	Benzene	NS	NS	25.1	NS	NS	NS	25	NS
	Naphthalene	NS	NS	330	NS	NS	NS	260	NS
MW-25S	Benzene	NS	NS	ND	NS	NS	NS	ND	NS
	Naphthalene	NS	NS	ND	NS	NS	NS	ND	NS
MW-25D	Benzene	NS	NS	ND	NS	NS	NS	ND	NS
	Naphthalene	NS	NS	ND	NS	NS	NS	ND	NS
MW-26S	Benzene	3,900	3,000	2,000	740	860	1,100	930	1,100
	Naphthalene	3,500	1,900	1,400	1,000	1,400	1,300	1,500	2,100
MW-26D	Benzene	NS	9,700	NS	NS	14,000	NS	NS	NS
	Naphthalene	NS	5,000	NS	NS	9,200	NS	NS	NS
MW-27S	Benzene	700	550	230	41.5	28	150	100	84
	Naphthalene	75.1	600	ND	ND	6.2	ND	ND	ND

Table 1 – Summary of Benzene and Naphthalene Detections December 2015 – September 2017 (Continued)

Well ID	Analyte	Concentration (µg/L)							
		9/2017	6/2017	3/2017	12/2016	9/2016	6/2016	3/2016	12/2015
MW-27D	Benzene	NS	NS	NS	NS	NS	NS	NS	NS
	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS
MW-30S	Benzene	ND	NS	ND	NS	0.22 J	NS	ND	NS
	Naphthalene	ND	NS	ND	NS	ND J	NS	ND	NS
MW-30D	Benzene	89.5	NS	160	NS	2,000	NS	1,300	NS
	Naphthalene	7,800	NS	2,400	NS	10,000	NS	5,500	NS

µg/l = micrograms per liter
ND = Non detect
NS = Not sampled
J = Estimated value

The September 2017 benzene data reported a decreased concentration at well MW-30D compared to the most recent (second quarter 2017) previous results. The September 2017 benzene data reported increased concentrations at wells MW-26S and MW-27S compared to the most recent (second quarter 2017) previous results. Benzene was not detected at MW-30S. The September 2017 benzene concentrations at MW-26S and MW-27S are generally higher than previous quarterly/semi-annual sampling results. The September 2017 benzene concentration at MW-30D is generally consistent with previous quarterly/semi-annual sampling results.

The September 2017 naphthalene data reported increased concentrations at wells MW-26S and MW-30D compared to the most recent (second quarter 2017) previous results. The September 2017 naphthalene data reported a decreased concentration at MW-27S compared to the most recent (second quarter 2017) previous result. Naphthalene was not detected at well MW-30S. The September 2017 naphthalene concentrations are generally consistent with previous quarterly/semi-annual sampling results.

Total iron and TPHC DRO/GRO and water quality indicator parameter (sulfate, sulfide, and alkalinity) results are reported in Table 4.

The groundwater sample results were compared to the New York State Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standard/Guidance values (AWQSGVs) in Tables 2 through 4. The concentrations for parameters exceeding AWQSGVs are shown on Figures 3 through 5 and are discussed below.

Analytical results from MW-26S identified seven (7) VOCs in exceedance of TOGS 1.1.1 AWQSGVs including benzene at 3,900 µg/L, ethylbenzene at 650 µg/L, isopropylbenzene at 49.1 µg/L, methylene chloride at 71.5 µg/L, o-xylene at 460 µg/L, m- & p-xylenes at 660 µg/L, and toluene at 400 µg/L. Seven (7) SVOCs were identified in exceedance of TOGS 1.1.1 AWQSGVs including 1,1-biphenyl at 37.4 µg/L, 2,4-dimethylphenol at 340 µg/L, acenaphthene at 75.8 µg/L, fluorene at 58.1 µg/L, naphthalene at 3,500 µg/L, phenanthrene at 94.9 µg/L, and phenol at 26.3 µg/L. Iron was reported at 706 µg/L, sulfate was reported at 822 milligrams per liter (mg/L), and sulfide was reported at 62.1 mg/L, each in exceedance of TOGS 1.1.1 AWQSGVs at MW-26S.

Analytical results from MW-27S identified six (6) VOCs in exceedance of TOGS 1.1.1 AWQSGVs including, benzene at 700 µg/L, ethylbenzene at 81.3 µg/L, isopropylbenzene at 11 µg/L, o-xylene at 31.3 µg/L, m- & p-xylenes at 22.5 µg/L, and toluene at 8.7 µg/L. Four (4) SVOCs were identified in exceedance of TOGS 1.1.1 AWQSGVs including, 1,1-biphenyl at 5.2 µg/L, acenaphthene at 21.8 µg/L, naphthalene at 75.1 µg/L, and phenol at 3.4 µg/L . Iron was reported at 11,600 µg/L, sulfate was reported at 266 mg/L, and sulfide was reported at 13.4 mg/L, each in exceedance of TOGS 1.1.1 AWQSGVs at MW-27S.

Analytical results from MW-30S identified one (1) VOC in exceedance of TOGS 1.1.1 AWQSGVs, isopropylbenzene at 5.8 µg/L. No SVOCs were identified in exceedance of TOGS 1.1.1 AWQSGVs. Iron was reported at 12,800 µg/L and sulfide was reported at 4 mg/L, each in exceedance of its respective TOGS 1.1.1 AWQSGVs.

Analytical results from MW-30D identified seven (7) VOCs in exceedance of TOGS 1.1.1 AWQSGVs including benzene at 89.5 µg/L, ethylbenzene at 620 µg/L, isopropylbenzene at 59.5 µg/L, methylene chloride at 15.8 µg/L, o-xylene at 200 µg/L, m- & p-xylenes at 400 µg/L, and toluene at 45.2 µg/L. Five (5) SVOCs were identified in exceedance of TOGS 1.1.1 AWQSGVs including 1,1-biphenyl at 43 µg/L, acenaphthene at 170 µg/L, fluorene at 50.3 µg/L, naphthalene at 7,800 µg/L, and phenol at 4.5 µg/L. Iron was reported at 881 µg/L, sulfate was reported at 480 mg/L, and sulfide was reported at 4.6 mg/L, each in exceedance of TOGS 1.1.1 AWQSGVs.

2.4 Data Validation

Data validation was performed as required by the SMP. The DUSR, dated October 30, 2017, is provided in Appendix 1. Based on the data validation, the data are acceptable for use with the "J" qualification (which indicates an estimated value) and "JH" (which indicates an estimated high value) as noted in the DUSR.

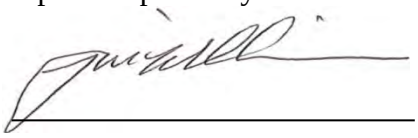
3.0 CONCLUSIONS

In September 2017, LiRo completed the third quarter 2017 groundwater sampling activities at the construction site for the new Queens West Hunters Point Community Library located at Parcel 8, west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York. During this sampling event, six (6) monitoring wells, MW-26S, MW-26D, MW-27S, MW-27D, MW-30S, and MW-30D were scheduled for sampling and analysis. Prior to purging activities, DNAPL was detected in two (2) of the deep monitoring wells (MW-26D and MW-27D) and as a result, those two (2) wells were not sampled.

Benzene data indicate increased concentrations at MW-26D and MW-27S, a decreased concentration at MW-30D, and no detection at MW-30S. Naphthalene data indicate increased concentrations at MW-26S and MW-30D, a decreased concentration at MW-27S and no detection at MW-30S.

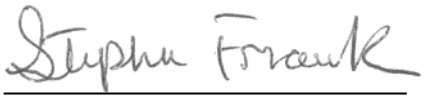
The DNAPL observed at MW-26D and MW-27D is potentially a result of residual coal tar in the deeper portion of the formation or migration from the Parcel 8 treatment area. DNAPL has consistently been observed at MW-26D and MW-27D since LiRo assumed responsibility for quarterly sampling in June 2015.

Report Prepared By:



Jon Williams
Senior Geologist

Report Reviewed By:

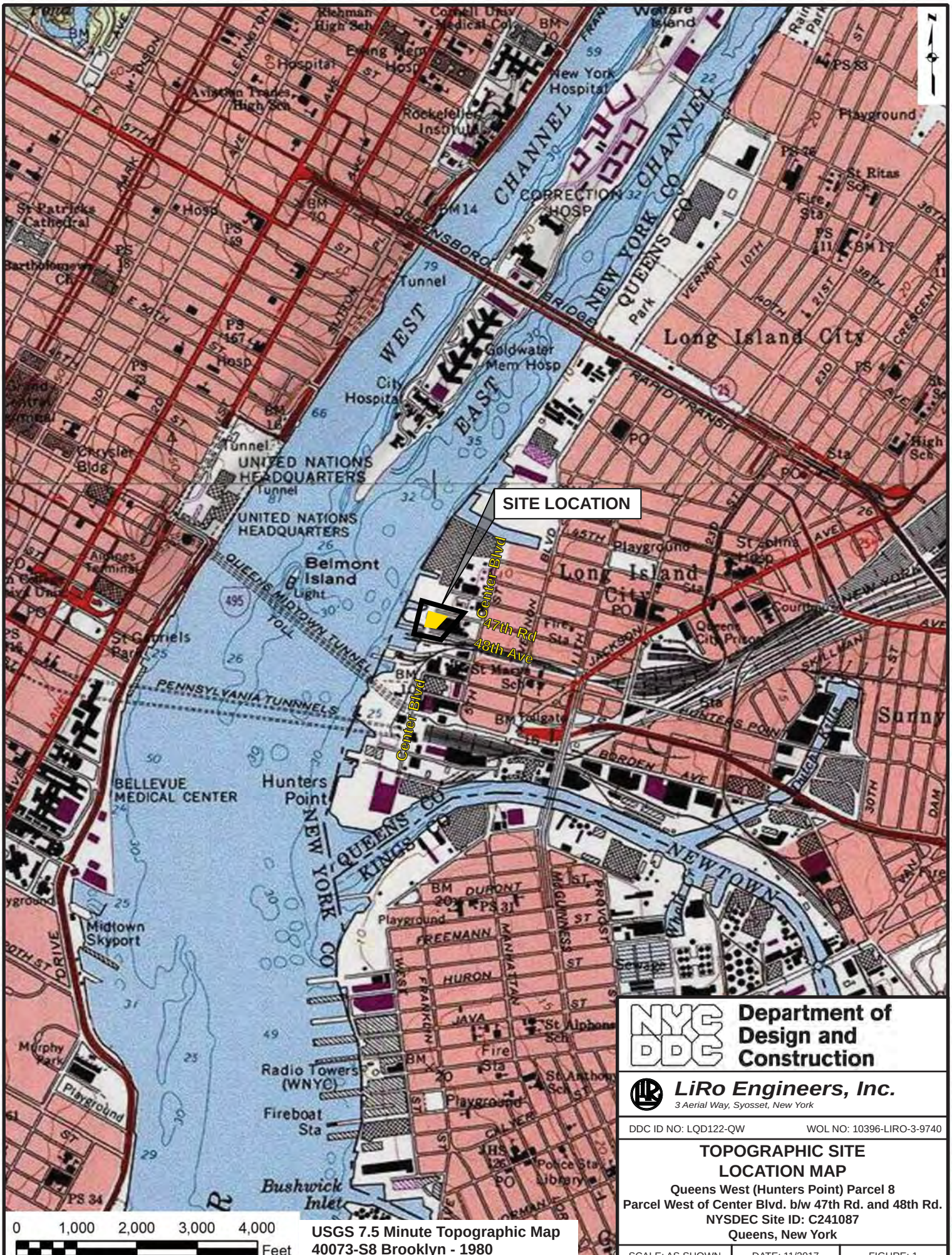


Stephen Frank
Senior Geologist

Report Reviewed By:

Robert Kreuzer
Project Manager

Figures



USGS 7.5 Minute Topographic Map
40073-S8 Brooklyn - 1980

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO: LQD122-QW | WOL NO: 10396-LIRO-3-9740

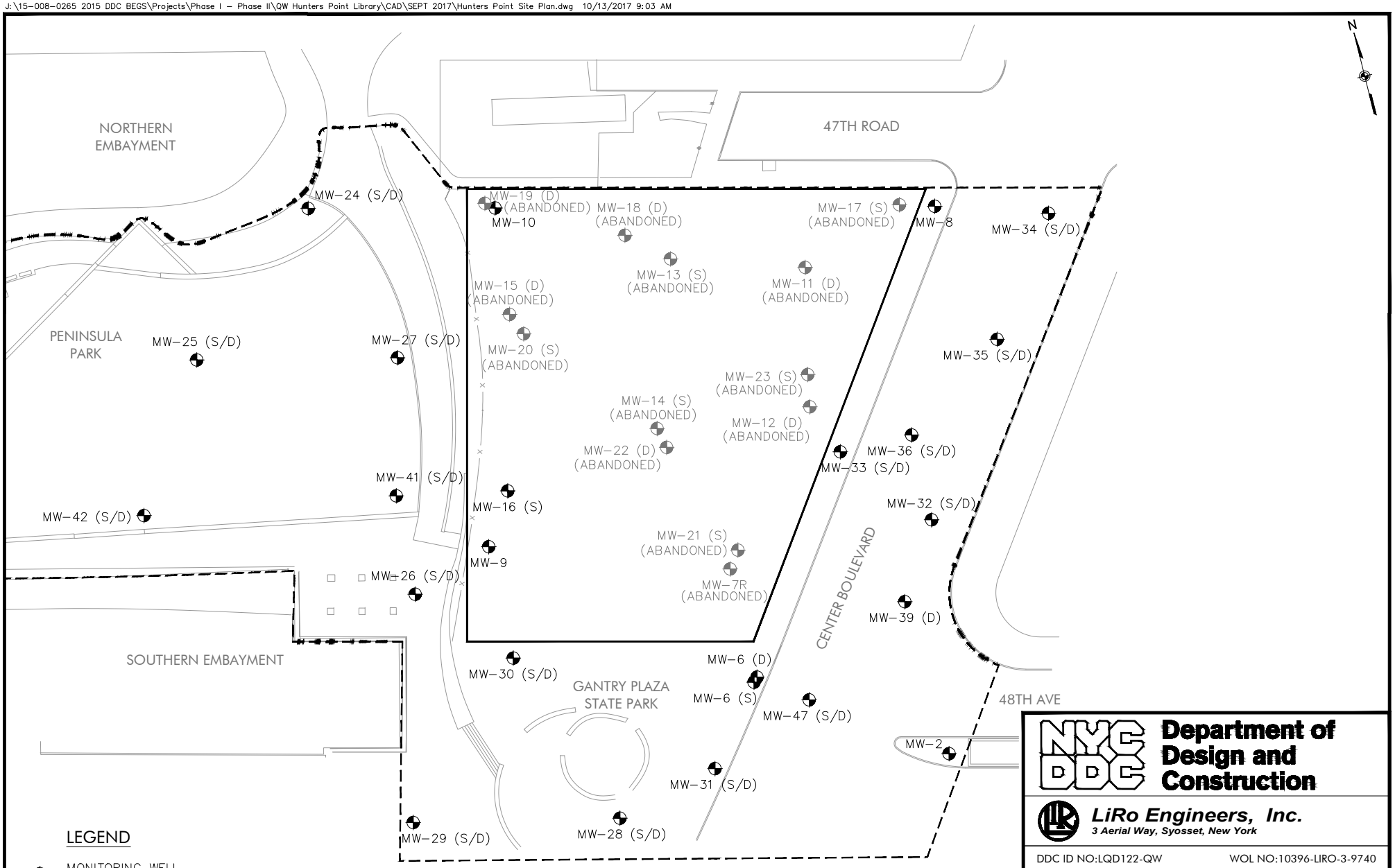
TOPOGRAPHIC SITE LOCATION MAP

Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. b/w 47th Rd. and 48th Rd.
NYSDEC Site ID: C241087
Queens, New York

SCALE: AS SHOWN	DATE: 11/2017	FIGURE: 1

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\SEPT 2017\Hunters Point Topo Map.ai

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\SEPT 2017\Hunters Point Site Plan.dwg 10/13/2017 9:03 AM



Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

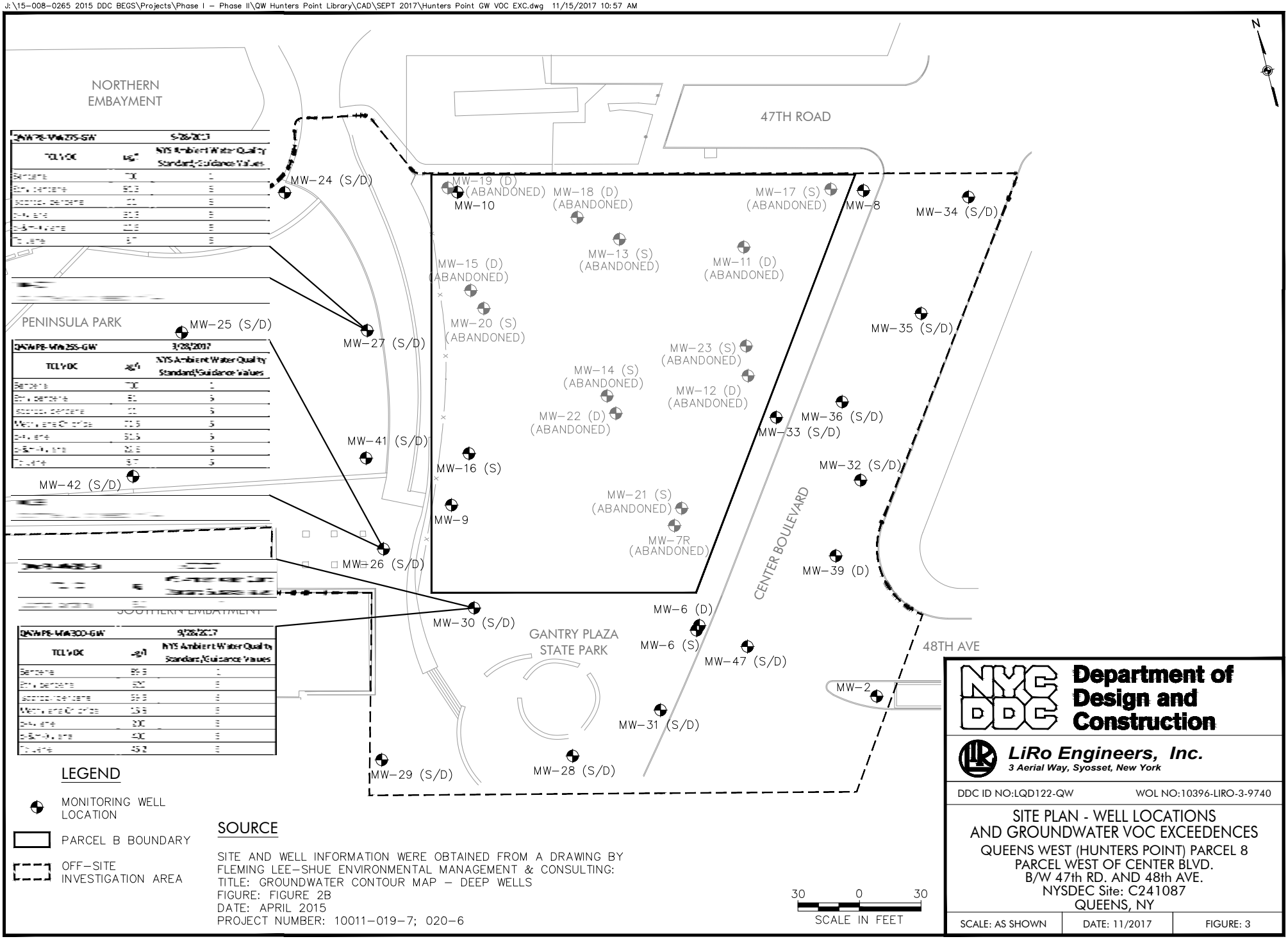
DDC ID NO:LQD122-QW | WOL NO:10396-LIRO-3-9740

SITE PLAN - WELL LOCATIONS

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 11/2017	FIGURE: 2

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\SEPT 2017\Hunters Point GW VOC EXC.dwg 11/15/2017 10:57 AM



QAWP8-WW355-GW	9/28/2017
TCL VOC	ug/l
Benzene	700
Ethylbenzene	810
Isopropylbenzene	770
n-Propylbenzene	860
Toluene	870

QAWP8-WW355-GW	3/28/2017
TCL VOC	ug/l
Benzene	700
Ethylbenzene	810
Isopropylbenzene	770
Methyl tert-butyl ether	10
n-Propylbenzene	860
Toluene	870

QAWP8-WW330-GW	9/28/2017
TCL VOC	ug/l
Benzene	700
Ethylbenzene	810
Isopropylbenzene	770
Methyl tert-butyl ether	10
n-Propylbenzene	860
Toluene	870

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

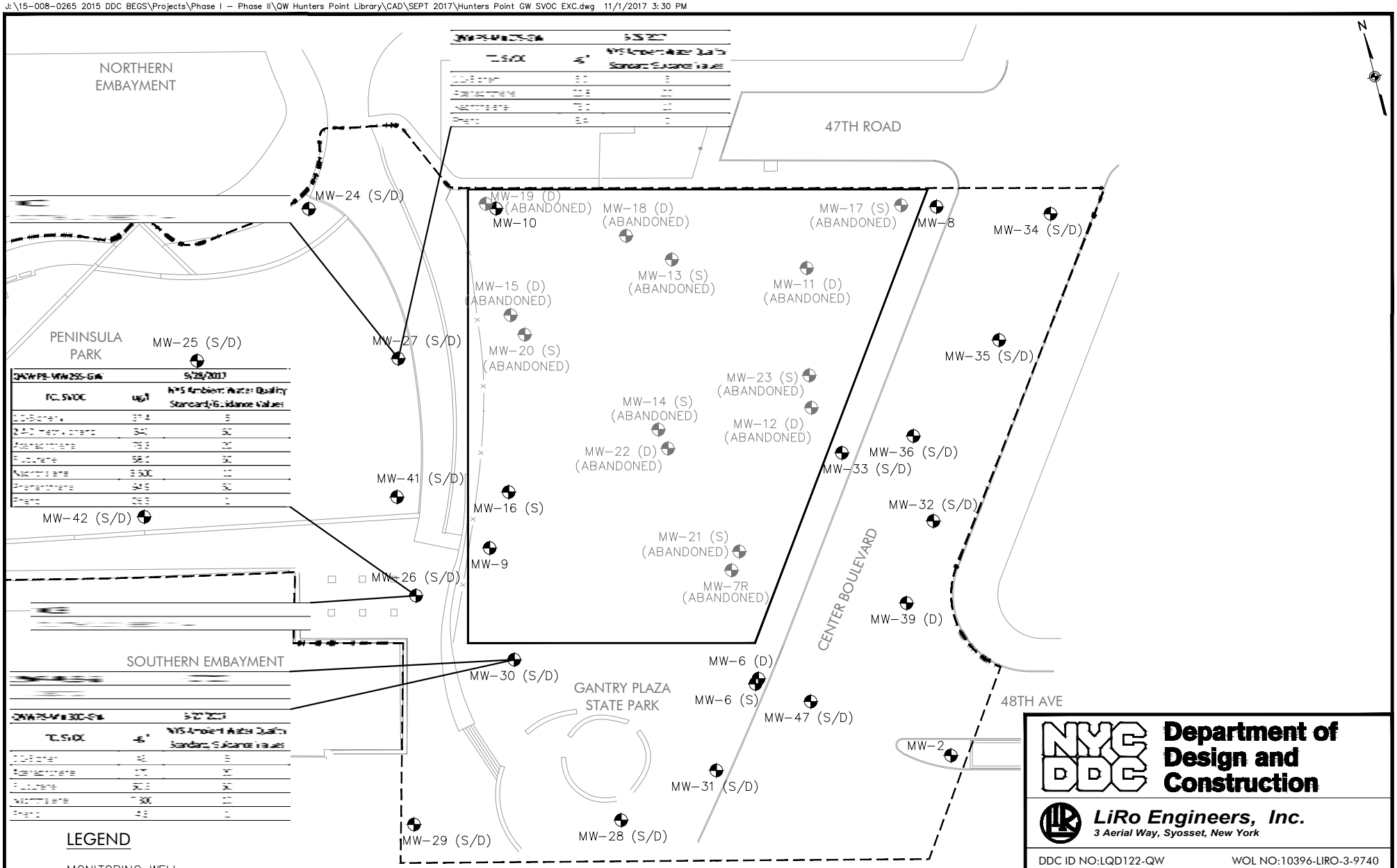
DDC ID NO:LQD122-QW WOL NO:10396-LIRO-3-9740

SITE PLAN - WELL LOCATIONS AND GROUNDWATER VOC EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 11/2017	FIGURE: 3

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\SEPT 2017\Hunters Point GW SVOC EXC.dwg 11/1/2017 3:30 PM



QWAPS-MW25S-GW		5/25/2017
TCL SVOC	ug/l	NYS Ambient Water Quality Standard/Guidance Values
2,4-Dichlorophenol	37.4	5
2,4-Dimethylphenol	34.1	50
Acenaphthene	79.8	20
Fluorene	58.1	50
Naphthalene	3,500	10
Phenanthrene	64.5	50
Phenol	29.8	1

QWAPS-MW30D-GW		5/25/2017
TCL SVOC	ug/l	NYS Ambient Water Quality Standard/Guidance Values
2,4-Dichlorophenol	42	5
Acenaphthene	17	20
Fluorene	30.8	50
Naphthalene	1,300	10
Phenol	4.8	1

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

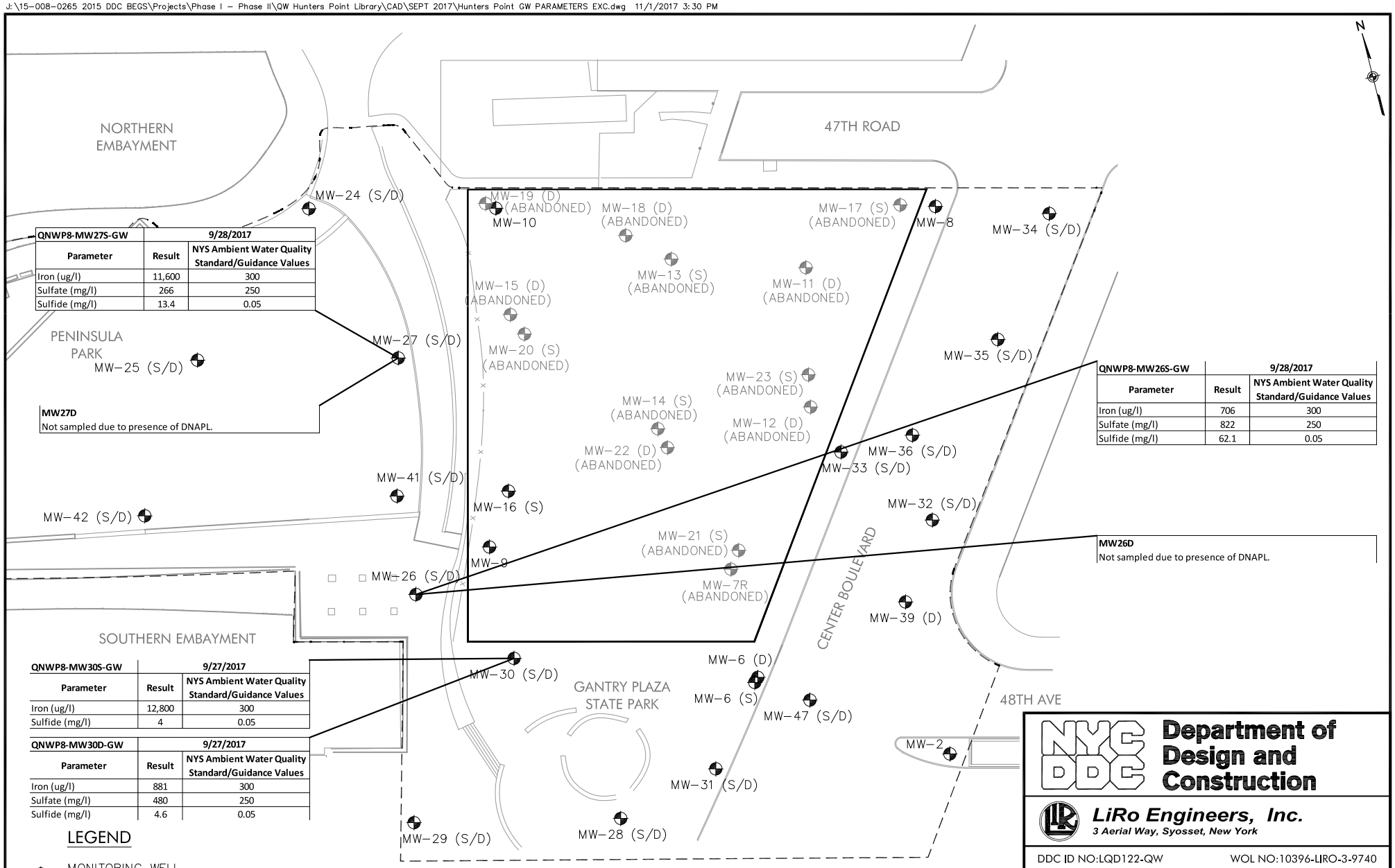
DDC ID NO:LQD122-QW WOL NO:10396-LIRO-3-9740

SITE PLAN - WELL LOCATIONS AND GROUNDWATER SVOC EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 11/2017	FIGURE: 4

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\SEPT 2017\Hunters Point GW PARAMETERS EXC.dwg 11/1/2017 3:30 PM



QNWP8-MW27S-GW	9/28/2017	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Values
Iron (ug/l)	11,600	300
Sulfate (mg/l)	266	250
Sulfide (mg/l)	13.4	0.05

MW27D
Not sampled due to presence of DNAPL.

QNWP8-MW26S-GW	9/28/2017	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Values
Iron (ug/l)	706	300
Sulfate (mg/l)	822	250
Sulfide (mg/l)	62.1	0.05

MW26D
Not sampled due to presence of DNAPL.

QNWP8-MW30S-GW	9/27/2017	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Values
Iron (ug/l)	12,800	300
Sulfide (mg/l)	4	0.05

QNWP8-MW30D-GW	9/27/2017	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Values
Iron (ug/l)	881	300
Sulfate (mg/l)	480	250
Sulfide (mg/l)	4.6	0.05

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO:LQD122-QW WOL NO:10396-LIRO-3-9740

SITE PLAN - WELL LOCATIONS & GROUNDWATER MISCELLANEOUS PARAMETER EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 11/2017	FIGURE: 5

Tables

Table 2 - Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Groundwater
Quarterly Monitoring Report: Third Quarter 2017
Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

TCL VOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect					
		QNWP8-MW26S-GW	QNWP8-MW27S-GW	QNWP8-MW30S-GW	QNWP8-MW30D-GW	QNWP8-Equip. Blank	QNWP8-Trip Blank 1
		9/28/2017	9/28/2017	9/27/2017	9/27/2017	9/28/2017	9/28/2017
Acetone	50	ND	1.8 J	7.5	ND	ND	ND
Benzene	1	**3,900**	**700 D**	ND	**89.5**	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	5.2	ND
Carbon Disulfide	NS	ND	1.1	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	**36.5**	ND
Chloromethane	NS	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50	ND	ND	ND	ND	0.24 J	ND
Ethylbenzene	5	**650**	**81.3**	ND	**620**	ND	ND
Isopropylbenzene	5	**49.1 J**	**11**	**5.8**	**59.5**	ND	ND
Methyl Acetate	NS	ND	0.95 J	ND	ND	ND	ND
Methylene chloride	5	**71.5**	ND	ND	**15.8**	ND	ND
Methyl-tert-butyl ether	NS	ND	2.9	ND	ND	ND	ND
o-Xylene	5	**460**	**31.3**	ND	**200**	ND	ND
p- & m-Xylenes	5	**660**	**22.5**	ND	**400**	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND
Toluene	5	**400**	**8.7**	ND	**45.2**	ND	ND
Xylene (Total)	5	**1,120**	**53.8**	ND	**600**	ND	ND
Total VOCs	NS	6,191	915	13	1,430	42	ND

Notes:
All concentrations are reported in parts per billion (ppb or ug/L)
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
Naphthalene reported with SVOCs in Table 3.
J = Estimated.

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 3 - Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Groundwater
Quarterly Monitoring Report: Third Quarter 2017
Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

TCL SVOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect				
		QNWP8-MW26S-GW	QNWP8-MW27S-GW	QNWP8-MW30S-GW	QNWP8-MW30D-GW	QNWP8-Equip. Blank
		9/28/2017	9/28/2017	9/27/2017	9/27/2017	9/28/2017
1,1-Biphenyl	5	**37.4**	**5.2 J**	ND	**43**	ND
2,4-Dimethylphenol	50	**340 D**	11	ND	32.7 JH	ND
2-Methylnaphthalene	NS	120 D	2.7 J	ND	210 D	ND
2-Methylphenol (o-Cresol)	NS	51.9	ND	ND	ND	ND
3+4-Methylphenols (m-Cresol & p-Cresol)	NS	180 D	ND	ND	ND	ND
Acenaphthene	20	**75.8**	**21.8**	ND	**170 D**	ND
Acenaphthylene	NS	5.5 J	ND	ND	ND	ND
Anthracene	50	12.8	2.1 J	ND	2.9 J	ND
Carbazole	NS	56	13.8	ND	37.5	ND
Dibenzofuran	NS	71.9	15.6	ND	130 D	ND
Diethylphthalate	50	ND	ND	2.7 J	ND	ND
Dimethylphthalate	50	5 J	2.1 J	4.6 J	7 J	ND
Flouranthene	50	7.9 J	ND	ND	ND	ND
Fluorene	50	**58.1**	13.4	ND	**50.3**	ND
Napthalene	10	**3,500 D**	**75.1**	ND	**7,800 J**	ND
Phenanthrene	50	**94.9 JD**	13.8	ND	44.5	ND
Phenol	1	**26.3**	**3.4 J**	ND	**4.5 J**	ND
Pyrene	50	4.7 J	ND	ND	ND	ND
Total SVOCs	NS	4,648	180	7	8,532	ND

Notes:
All concentrations are reported in parts per billion (ppb or ug/L)
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated
JH = Estimated high
D = Dilution

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 4 - Summary of Miscellaneous Parameters in Groundwater
Quarterly Monitoring Report: Third Quarter 2017
Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

Parameter	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID and Date Collected				
		QNWP8-MW26S-GW 9/28/2017	QNWP8-MW27S-GW 9/28/2017	QNWP8-MW30S-GW 9/27/2017	QNWP8-MW30D-GW 9/27/2017	QNWP8-Equip. Blank 9/28/2017
PARAMETERS (units)						
Iron (ug/L)	300	**706**	**11,600**	**12,800**	**881**	54.2
Sulfate (mg/L)	250	**822 D**	**266 D**	96.5 D	**480 D**	NA
Sulfide (mg/L)	0.05	**62.1**	**13.4**	**4.0**	**4.6**	NA
Alkalinity (mg/L)	NS	1,720 D	1400	598	2,190 D	NA
TPHC Diesel Range Organics (mg/L)	NS	11.200	3.085	0.264	12.700	ND
TPHC Gasoiline Range Organics (mg/L)	NS	ND	0.51	ND	ND	ND

Notes:
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
NA = Not analyzed
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
ug/L = microgram per liter
mg/L = milligram per liter
D = Dilution

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Appendix 1
Data Usability Summary Report (DUSR)

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Queens W. Hunter's Point
Chemtech SDG#I5526
October 30, 2017
Sampling date: 9/27, 28/2017

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for LiRo Engineers, Inc., project located at Queens W. Hunter's Point, Chemtech, SDG#I5526 submitted to Vali-Data of WNY, LLC on October 25, 2017. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocols and USEPA National Functional Guidelines. The laboratory performed the analysis using USEPA method Volatile Organics (8260C) and Semi-Volatile Organics (8270D).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Compound Quantitation.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met except Chloroform and Bromodichloromethane was detected above the reporting limit in QNWP8-EQUIP-BLANK. These target analytes should be qualified as undetected at the reporting limit if they were detected in the samples below the reporting limit. These target analytes should be qualified as undetected if they were detected in the samples below the blank results. If these target analytes were detected in the samples above the blank results, then they should be qualified as estimated high.
Dibromochloromethane was detected above the MDL, below the reporting limit and is qualified as estimated in QNWP8-EQUIP-BLANK. This target analyte should be qualified as undetected at the reporting limit if it was detected in the samples below the reporting limit. If this target analyte was detected in the samples above the reporting limit, then it should be qualified as estimated high.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

SEMI-VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Internal Standard and Surrogate Spike Recoveries.

Samples, QNWP8-MW26S-GW, QNWP8-MW27S-GW, QNWP8-MW30S-GW and QNWP8-MW30D-GW were diluted due to high target analyte concentration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met except the area of Naphthalene-d_8 in QNWP8-MW26S-GW and QNWP8-MW30D-GW was outside QC limits, low. The area of 1,4-Dichlorobenzene-d_4, Chrysene-d_{12} and Perylene-d_{12} in QNWP8-MW30D-GWDL2 was outside QC limits, low. Associated target analytes detected in these samples should be qualified as estimated high. Associated target analytes not detected in these samples should be qualified as estimated.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of Nitrobenzene-d_5 was outside QC limits, low in QNWP8-MW26S-GW, QNWP8-MW30D-GW and QNWP8-MW30D-GWDL2. The %Rec of 2-Fluorobiphenyl was outside QC limits, low in QNWP8-MW30D-GWDL2. Associated target analytes in these samples should be qualified as estimated.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW30S-GW-20170927	Sulfate (As SO4)	111	OR		N	0.75	
QNWP8-MW30S-GW-20170927	Sulfate (As SO4)	96.5	D		N	7.5	
QNWP8-MW30S-GWMS	Bromide	12.7			N	0.5	
QNWP8-MW30S-GWMS	Chloride (As Cl)	109	OR*		N	0.15	
QNWP8-MW30S-GWMS	Fluoride	3.3			N	0.1	
QNWP8-MW30S-GWMS	Nitrogen, Nitrate (As N)	2.5			N	0.13	
QNWP8-MW30S-GWMS	Nitrogen, Nitrite	2.7			N	0.15	
QNWP8-MW30S-GWMS	Phosphorus, Ortho	7			N	0.25	
QNWP8-MW30S-GWMS	Sulfate (As SO4)	117	OR*		N	0.75	
QNWP8-MW30D-GW-20170927	Sulfate (As SO4)	640	OR		N	0.75	
QNWP8-MW30D-GW-20170927	Sulfate (As SO4)	480	D		N	15	
QNWP8-MW26S-GW-20170928	Sulfate (As SO4)	1130	OR		N	0.75	
QNWP8-MW26S-GW-20170928	Sulfate (As SO4)	822	D		N	37.5	
QNWP8-MW27S-GW-20170928	Sulfate (As SO4)	342	OR		N	0.75	
QNWP8-MW27S-GW-20170928	Sulfate (As SO4)	266	D		N	7.5	
LB90422BLW	Bromide		U		N	0.5	
LB90422BLW	Chloride (As Cl)		U		N	0.15	
LB90422BLW	Fluoride		U		N	0.1	
LB90422BLW	Nitrogen, Nitrate (As N)		U		N	0.13	
LB90422BLW	Nitrogen, Nitrite		U		N	0.15	
LB90422BLW	Phosphorus, Ortho		U		N	0.25	
LB90422BLW	Sulfate (As SO4)		U		N	0.75	
LB90422BSW	Bromide	9.6			N	0.5	
LB90422BSW	Chloride (As Cl)	2.9			N	0.15	
LB90422BSW	Fluoride	2			N	0.1	
LB90422BSW	Nitrogen, Nitrate (As N)	2.4			N	0.13	
LB90422BSW	Nitrogen, Nitrite	2.9			N	0.15	
LB90422BSW	Phosphorus, Ortho	4.9			N	0.25	
LB90422BSW	Sulfate (As SO4)	14.5			N	0.75	
QNWP8-MW30S-GW-20170927	Alkalinity, Total (As CaCO3)	598			N	2	
QNWP8-MW30D-GW-20170927	Alkalinity, Total (As CaCO3)	2190	D		N	20	
QNWP8-MW26S-GW-20170928	Alkalinity, Total (As CaCO3)	1720	D		N	20	
QNWP8-MW27S-GW-20170928	Alkalinity, Total (As CaCO3)	1400			N	2	
QNWP8-MW30S-GW-20170927	Iron	12800			N	50	
QNWP8-MW30S-GWMS	Iron	13800			N	50	
QNWP8-MW30S-GWMSD	Iron	13800			N	50	
QNWP8-MW30D-GW-20170927	Iron	881			N	50	
QNWP8-MW26S-GW-20170928	Iron	706			N	50	
QNWP8-MW27S-GW-20170928	Iron	11600			N	50	
QNWP8-EQUIP-BLANK-20170928	Iron	54.2			N	50	
PB102854BL	Iron		U		N	50	
PB102854BS	Iron	1440			N	50	
BSF1004W1	1,1,1-Trifluorotoluene	20.34			N	1	
BSF1004W1	PHC As Gasoline	164			N	45	
QNWP8-MW30S-GW-20170927	1,1,1-Trifluorotoluene	19.22			N	1	
QNWP8-MW30S-GW-20170927	PHC As Diesel Fuel	264			N	50	
QNWP8-MW30S-GW-20170927	PHC As Gasoline		U		N	45	
QNWP8-MW30S-GW-20170927	Tetracosane-D50	19.64			N	1	
QNWP8-MW30S-GWMS	1,1,1-Trifluorotoluene	20.17			N	1	
QNWP8-MW30S-GWMS	PHC As Gasoline	179			N	45	
QNWP8-MW30S-GWMSD	1,1,1-Trifluorotoluene	19.65			N	1	
QNWP8-MW30S-GWMSD	PHC As Gasoline	185			N	45	
QNWP8-MW30D-GW-20170927	1,1,1-Trifluorotoluene	21.94			N	1	
QNWP8-MW30D-GW-20170927	PHC As Diesel Fuel	12700			N	1000	
QNWP8-MW30D-GW-20170927	PHC As Gasoline		U		N	450	
QNWP8-MW30D-GW-20170927	Tetracosane-D50	0.69			N	1	
QNWP8-MW26S-GW-20170928	1,1,1-Trifluorotoluene	20.37			N	1	
QNWP8-MW26S-GW-20170928	PHC As Diesel Fuel	11200			N	1000	
QNWP8-MW26S-GW-20170928	PHC As Gasoline		U		N	2250	

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW26S-GW-20170928	Tetracosane-D50	0.81			N	1	
QNWP8-MW27S-GW-20170928	1,1,1-Trifluorotoluene	15.48			N	1	
QNWP8-MW27S-GW-20170928	PHC As Diesel Fuel	3085			N	250	
QNWP8-MW27S-GW-20170928	PHC As Gasoline	508			N	90	
QNWP8-MW27S-GW-20170928	Tetracosane-D50	3.76			N	1	
QNWP8-EQUIP-BLANK-20170928	1,1,1-Trifluorotoluene	19.19			N	1	
QNWP8-EQUIP-BLANK-20170928	PHC As Diesel Fuel		U		N	50	
QNWP8-EQUIP-BLANK-20170928	PHC As Gasoline		U		N	45	
QNWP8-EQUIP-BLANK-20170928	Tetracosane-D50	22.05			N	1	
PB102899BL	PHC As Diesel Fuel		U		N	50	
PB102899BL	Tetracosane-D50	17.50			N	1	
PB102899BS	PHC As Diesel Fuel	171			N	50	
PB102899BS	Tetracosane-D50	16.97			N	1	
PB102899BSD	PHC As Diesel Fuel	208			N	50	
PB102899BSD	Tetracosane-D50	21.27			N	1	
VBF1004W1	1,1,1-Trifluorotoluene	19.96			N	1	
VBF1004W1	PHC As Gasoline		U		Y	45	
QNWP8-MW30S-GW-20170927	1,1,1-Trichloroethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,1,2,2-Tetrachloroethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,1,2-Trichloroethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,1-Dichloroethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,1-Dichloroethene		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,2,3-Trichlorobenzene		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,2,4-Trichlorobenzene		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,2-Dibromo-3-Chloropropane		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,2-Dichlorobenzene		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,2-Dichloroethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,2-Dichloroethane-D4	53.2			Y	1	4
QNWP8-MW30S-GW-20170927	1,2-Dichloropropane		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,3-Dichlorobenzene		U		Y	1	4
QNWP8-MW30S-GW-20170927	1,4-Dichlorobenzene		U		Y	1	4
QNWP8-MW30S-GW-20170927	2-Hexanone		U		Y	5	4
QNWP8-MW30S-GW-20170927	Acetone	7.5			Y	5	4
QNWP8-MW30S-GW-20170927	Benzene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Bromochloromethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Bromodichloromethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Bromoform		U		Y	1	4
QNWP8-MW30S-GW-20170927	Bromomethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Carbon Disulfide		U		Y	1	4
QNWP8-MW30S-GW-20170927	Carbon Tetrachloride		U		Y	1	4
QNWP8-MW30S-GW-20170927	Chlorobenzene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Chloroethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Chloroform		U		Y	1	4
QNWP8-MW30S-GW-20170927	Chloromethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Cis-1,2-Dichloroethylene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Cis-1,3-Dichloropropene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Cyclohexane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Dibromochloromethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Dibromofluoromethane	49.8			Y	1	4
QNWP8-MW30S-GW-20170927	Dichlorodifluoromethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Ethylbenzene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Isopropylbenzene (Cumene)	5.8			Y	1	4
QNWP8-MW30S-GW-20170927	m,p-Xylene		U		Y	2	4
QNWP8-MW30S-GW-20170927	Methyl Acetate		U		Y	1	4
QNWP8-MW30S-GW-20170927	Methyl Ethyl Ketone (2-Butanone)		U		Y	5	4
QNWP8-MW30S-GW-20170927	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	5	4
QNWP8-MW30S-GW-20170927	Methylcyclohexane		U		Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW30S-GW-20170927	Methylene Chloride		U		Y	1	4
QNWP8-MW30S-GW-20170927	O-Xylene (1,2-Dimethylbenzene)		U		Y	1	4
QNWP8-MW30S-GW-20170927	p-Bromofluorobenzene	47.8			Y	1	4
QNWP8-MW30S-GW-20170927	Styrene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Tert-Butyl Alcohol		U		Y	25	4
QNWP8-MW30S-GW-20170927	Tert-Butyl Methyl Ether		U		Y	1	4
QNWP8-MW30S-GW-20170927	Tetrachloroethylene (PCE)		U		Y	1	4
QNWP8-MW30S-GW-20170927	Toluene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Toluene-D8	51.9			Y	1	4
QNWP8-MW30S-GW-20170927	Trans-1,2-Dichloroethene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Trans-1,3-Dichloropropene		U		Y	1	4
QNWP8-MW30S-GW-20170927	Trichloroethylene (TCE)		U		Y	1	4
QNWP8-MW30S-GW-20170927	Trichlorofluoromethane		U		Y	1	4
QNWP8-MW30S-GW-20170927	Vinyl Chloride		U		Y	1	4
QNWP8-MW30D-GW-20170927	1,1,1-Trichloroethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,1,2,2-Tetrachloroethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,1,2-Trichloroethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,1-Dichloroethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,1-Dichloroethene		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,2,3-Trichlorobenzene		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,2,4-Trichlorobenzene		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,2-Dibromo-3-Chloropropane		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,2-Dichlorobenzene		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,2-Dichloroethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,2-Dichloroethane-D4	50.5			Y	1	4
QNWP8-MW30D-GW-20170927	1,2-Dichloropropane		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,3-Dichlorobenzene		U		Y	10	4
QNWP8-MW30D-GW-20170927	1,4-Dichlorobenzene		U		Y	10	4
QNWP8-MW30D-GW-20170927	2-Hexanone		U		Y	50	4
QNWP8-MW30D-GW-20170927	Acetone		U		Y	50	4
QNWP8-MW30D-GW-20170927	Benzene	89.5			Y	10	4
QNWP8-MW30D-GW-20170927	Bromochloromethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Bromodichloromethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Bromoform		U		Y	10	4
QNWP8-MW30D-GW-20170927	Bromomethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Carbon Disulfide		U		Y	10	4
QNWP8-MW30D-GW-20170927	Carbon Tetrachloride		U		Y	10	4
QNWP8-MW30D-GW-20170927	Chlorobenzene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Chloroethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Chloroform		U		Y	10	4
QNWP8-MW30D-GW-20170927	Chloromethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Cis-1,2-Dichloroethylene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Cis-1,3-Dichloropropene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Cyclohexane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Dibromochloromethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Dibromofluoromethane	49.5			Y	1	4
QNWP8-MW30D-GW-20170927	Dichlorodifluoromethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Ethylbenzene	620			Y	10	4
QNWP8-MW30D-GW-20170927	Isopropylbenzene (Cumene)	59.5			Y	10	4
QNWP8-MW30D-GW-20170927	m,p-Xylene	400			Y	20	4
QNWP8-MW30D-GW-20170927	Methyl Acetate		U		Y	10	4
QNWP8-MW30D-GW-20170927	Methyl Ethyl Ketone (2-Butanone)		U		Y	50	4
QNWP8-MW30D-GW-20170927	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	50	4
QNWP8-MW30D-GW-20170927	Methylcyclohexane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Methylene Chloride	15.8			Y	10	4
QNWP8-MW30D-GW-20170927	O-Xylene (1,2-Dimethylbenzene)	200			Y	10	4
QNWP8-MW30D-GW-20170927	p-Bromofluorobenzene	51.6			Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW30D-GW-20170927	Styrene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Tert-Butyl Alcohol		U		Y	250	4
QNWP8-MW30D-GW-20170927	Tert-Butyl Methyl Ether		U		Y	10	4
QNWP8-MW30D-GW-20170927	Tetrachloroethylene (PCE)		U		Y	10	4
QNWP8-MW30D-GW-20170927	Toluene	45.2			Y	10	4
QNWP8-MW30D-GW-20170927	Toluene-D8	51.9			Y	1	4
QNWP8-MW30D-GW-20170927	Trans-1,2-Dichloroethene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Trans-1,3-Dichloropropene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Trichloroethylene (TCE)		U		Y	10	4
QNWP8-MW30D-GW-20170927	Trichlorofluoromethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Vinyl Chloride		U		Y	10	4
QNWP8-MW26S-GW-20170928	1,1,1-Trichloroethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,1,2,2-Tetrachloroethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,1,2-Trichloroethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,1-Dichloroethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,1-Dichloroethene		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,2,3-Trichlorobenzene		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,2,4-Trichlorobenzene		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,2-Dibromo-3-Chloropropane		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,2-Dichlorobenzene		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,2-Dichloroethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,2-Dichloroethane-D4	50.2			Y	1	4
QNWP8-MW26S-GW-20170928	1,2-Dichloropropane		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,3-Dichlorobenzene		U		Y	50	4
QNWP8-MW26S-GW-20170928	1,4-Dichlorobenzene		U		Y	50	4
QNWP8-MW26S-GW-20170928	2-Hexanone		U		Y	250	4
QNWP8-MW26S-GW-20170928	Acetone		U		Y	250	4
QNWP8-MW26S-GW-20170928	Benzene	3900			Y	50	4
QNWP8-MW26S-GW-20170928	Bromochloromethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Bromodichloromethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Bromoform		U		Y	50	4
QNWP8-MW26S-GW-20170928	Bromomethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Carbon Disulfide		U		Y	50	4
QNWP8-MW26S-GW-20170928	Carbon Tetrachloride		U		Y	50	4
QNWP8-MW26S-GW-20170928	Chlorobenzene		U		Y	50	4
QNWP8-MW26S-GW-20170928	Chloroethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Chloroform		U		Y	50	4
QNWP8-MW26S-GW-20170928	Chloromethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Cis-1,2-Dichloroethylene		U		Y	50	4
QNWP8-MW26S-GW-20170928	Cis-1,3-Dichloropropene		U		Y	50	4
QNWP8-MW26S-GW-20170928	Cyclohexane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Dibromochloromethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Dibromofluoromethane	50			Y	1	4
QNWP8-MW26S-GW-20170928	Dichlorodifluoromethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Ethylbenzene	650			Y	50	4
QNWP8-MW26S-GW-20170928	Isopropylbenzene (Cumene)	49.1	J		Y	50	4
QNWP8-MW26S-GW-20170928	m,p-Xylene	660			Y	100	4
QNWP8-MW26S-GW-20170928	Methyl Acetate		U		Y	50	4
QNWP8-MW26S-GW-20170928	Methyl Ethyl Ketone (2-Butanone)		U		Y	250	4
QNWP8-MW26S-GW-20170928	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	250	4
QNWP8-MW26S-GW-20170928	Methylcyclohexane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Methylene Chloride	71.5			Y	50	4
QNWP8-MW26S-GW-20170928	O-Xylene (1,2-Dimethylbenzene)	460			Y	50	4
QNWP8-MW26S-GW-20170928	p-Bromofluorobenzene	49.9			Y	1	4
QNWP8-MW26S-GW-20170928	Styrene		U		Y	50	4
QNWP8-MW26S-GW-20170928	Tert-Butyl Alcohol		U		Y	1300	4
QNWP8-MW26S-GW-20170928	Tert-Butyl Methyl Ether		U		Y	50	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW26S-GW-20170928	Tetrachloroethylene (PCE)		U		Y	50	4
QNWP8-MW26S-GW-20170928	Toluene	400			Y	50	4
QNWP8-MW26S-GW-20170928	Toluene-D8	52.1			Y	1	4
QNWP8-MW26S-GW-20170928	Trans-1,2-Dichloroethene		U		Y	50	4
QNWP8-MW26S-GW-20170928	Trans-1,3-Dichloropropene		U		Y	50	4
QNWP8-MW26S-GW-20170928	Trichloroethylene (TCE)		U		Y	50	4
QNWP8-MW26S-GW-20170928	Trichlorofluoromethane		U		Y	50	4
QNWP8-MW26S-GW-20170928	Vinyl Chloride		U		Y	50	4
QNWP8-MW27S-GW-20170928	1,1,1-Trichloroethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,1,2,2-Tetrachloroethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,1,2-Trichloroethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,1-Dichloroethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,1-Dichloroethene		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,2,3-Trichlorobenzene		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,2,4-Trichlorobenzene		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,2-Dibromo-3-Chloropropane		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,2-Dichlorobenzene		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,2-Dichloroethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,2-Dichloroethane-D4	54.3			Y	1	4
QNWP8-MW27S-GW-20170928	1,2-Dichloropropane		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,3-Dichlorobenzene		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,4-Dichlorobenzene		U		Y	1	4
QNWP8-MW27S-GW-20170928	2-Hexanone		U		Y	5	4
QNWP8-MW27S-GW-20170928	Acetone	1.8	J		Y	5	4
QNWP8-MW27S-GW-20170928	Benzene	360	E		Y	1	4
QNWP8-MW27S-GW-20170928	Bromochloromethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Bromodichloromethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Bromoform		U		Y	1	4
QNWP8-MW27S-GW-20170928	Bromomethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Carbon Disulfide	1.1			Y	1	4
QNWP8-MW27S-GW-20170928	Carbon Tetrachloride		U		Y	1	4
QNWP8-MW27S-GW-20170928	Chlorobenzene		U		Y	1	4
QNWP8-MW27S-GW-20170928	Chloroethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Chloroform		U		Y	1	4
QNWP8-MW27S-GW-20170928	Chloromethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Cis-1,2-Dichloroethylene		U		Y	1	4
QNWP8-MW27S-GW-20170928	Cis-1,3-Dichloropropene		U		Y	1	4
QNWP8-MW27S-GW-20170928	Cyclohexane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Dibromochloromethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Dibromofluoromethane	49.4			Y	1	4
QNWP8-MW27S-GW-20170928	Dichlorodifluoromethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Ethylbenzene	81.3			Y	1	4
QNWP8-MW27S-GW-20170928	Isopropylbenzene (Cumene)	11			Y	1	4
QNWP8-MW27S-GW-20170928	m,p-Xylene	22.5			Y	2	4
QNWP8-MW27S-GW-20170928	Methyl Acetate	0.95	J		Y	1	4
QNWP8-MW27S-GW-20170928	Methyl Ethyl Ketone (2-Butanone)		U		Y	5	4
QNWP8-MW27S-GW-20170928	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	5	4
QNWP8-MW27S-GW-20170928	Methylcyclohexane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Methylene Chloride		U		Y	1	4
QNWP8-MW27S-GW-20170928	O-Xylene (1,2-Dimethylbenzene)	31.3			Y	1	4
QNWP8-MW27S-GW-20170928	p-Bromofluorobenzene	50.9			Y	1	4
QNWP8-MW27S-GW-20170928	Styrene		U		Y	1	4
QNWP8-MW27S-GW-20170928	Tert-Butyl Alcohol		U		Y	25	4
QNWP8-MW27S-GW-20170928	Tert-Butyl Methyl Ether	2.9			Y	1	4
QNWP8-MW27S-GW-20170928	Tetrachloroethylene (PCE)		U		Y	1	4
QNWP8-MW27S-GW-20170928	Toluene	8.7			Y	1	4
QNWP8-MW27S-GW-20170928	Toluene-D8	51.9			Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW27S-GW-20170928	Trans-1,2-Dichloroethene		U		Y	1	4
QNWP8-MW27S-GW-20170928	Trans-1,3-Dichloropropene		U		Y	1	4
QNWP8-MW27S-GW-20170928	Trichloroethylene (TCE)		U		Y	1	4
QNWP8-MW27S-GW-20170928	Trichlorofluoromethane		U		Y	1	4
QNWP8-MW27S-GW-20170928	Vinyl Chloride		U		Y	1	4
QNWP8-MW27S-GW-20170928	1,1,1-Trichloroethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,1,2,2-Tetrachloroethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,1,2-Trichloro-1,2,2-Trifluoroethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,1,2-Trichloroethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,1-Dichloroethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,1-Dichloroethene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,2,3-Trichlorobenzene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,2,4-Trichlorobenzene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,2-Dibromo-3-Chloropropane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,2-Dibromoethane (Ethylene Dibromide)		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,2-Dichlorobenzene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,2-Dichloroethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,2-Dichloroethane-D4	51			Y	1	4
QNWP8-MW27S-GW-20170928	1,2-Dichloropropane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,3-Dichlorobenzene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	1,4-Dichlorobenzene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	2-Hexanone		UD		Y	25	4
QNWP8-MW27S-GW-20170928	Acetone		UD		Y	25	4
QNWP8-MW27S-GW-20170928	Benzene	700	D		Y	5	4
QNWP8-MW27S-GW-20170928	Bromochloromethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Bromodichloromethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Bromoform		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Bromomethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Carbon Disulfide		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Carbon Tetrachloride		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Chlorobenzene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Chloroethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Chloroform		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Chloromethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Cis-1,2-Dichloroethylene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Cis-1,3-Dichloropropene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Cyclohexane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Dibromochloromethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Dibromofluoromethane	48.8			Y	1	4
QNWP8-MW27S-GW-20170928	Dichlorodifluoromethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Ethylbenzene	110	D		Y	5	4
QNWP8-MW27S-GW-20170928	Isopropylbenzene (Cumene)	16.9	D		Y	5	4
QNWP8-MW27S-GW-20170928	m,p-Xylene	23.9	D		Y	10	4
QNWP8-MW27S-GW-20170928	Methyl Acetate		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Methyl Ethyl Ketone (2-Butanone)		UD		Y	25	4
QNWP8-MW27S-GW-20170928	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		UD		Y	25	4
QNWP8-MW27S-GW-20170928	Methylcyclohexane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Methylene Chloride		UD		Y	5	4
QNWP8-MW27S-GW-20170928	O-Xylene (1,2-Dimethylbenzene)	24.9	D		Y	5	4
QNWP8-MW27S-GW-20170928	p-Bromofluorobenzene	49.9			Y	1	4
QNWP8-MW27S-GW-20170928	Styrene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Tert-Butyl Alcohol		UD		Y	130	4
QNWP8-MW27S-GW-20170928	Tert-Butyl Methyl Ether		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Tetrachloroethylene (PCE)		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Toluene	9.7	D		Y	5	4
QNWP8-MW27S-GW-20170928	Toluene-D8	51.4			Y	1	4
QNWP8-MW27S-GW-20170928	Trans-1,2-Dichloroethene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Trans-1,3-Dichloropropene		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Trichloroethylene (TCE)		UD		Y	5	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW27S-GW-20170928	Trichlorofluoromethane		UD		Y	5	4
QNWP8-MW27S-GW-20170928	Vinyl Chloride		UD		Y	5	4
QNWP8-EQUIP-BLANK-20170928	1,1,1-Trichloroethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,1,2,2-Tetrachloroethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,1,2-Trichloroethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,1-Dichloroethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,1-Dichloroethene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2,3-Trichlorobenzene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2,4-Trichlorobenzene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2-Dibromo-3-Chloropropane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2-Dichlorobenzene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2-Dichloroethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2-Dichloroethane-D4	50			Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2-Dichloropropane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,3-Dichlorobenzene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,4-Dichlorobenzene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	2-Hexanone		U		Y	5	4
QNWP8-EQUIP-BLANK-20170928	Acetone		U		Y	5	4
QNWP8-EQUIP-BLANK-20170928	Benzene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Bromochloromethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Bromodichloromethane	5.2			Y	1	4
QNWP8-EQUIP-BLANK-20170928	Bromoform		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Bromomethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Carbon Disulfide		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Carbon Tetrachloride		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Chlorobenzene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Chloroethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Chloroform	36.5			Y	1	4
QNWP8-EQUIP-BLANK-20170928	Chloromethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Cis-1,2-Dichloroethylene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Cis-1,3-Dichloropropene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Cyclohexane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Dibromochloromethane	0.24	J		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Dibromofluoromethane	50.3			Y	1	4
QNWP8-EQUIP-BLANK-20170928	Dichlorodifluoromethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Ethylbenzene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Isopropylbenzene (Cumene)		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	m,p-Xylene		U		Y	2	4
QNWP8-EQUIP-BLANK-20170928	Methyl Acetate		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Methyl Ethyl Ketone (2-Butanone)		U		Y	5	4
QNWP8-EQUIP-BLANK-20170928	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	5	4
QNWP8-EQUIP-BLANK-20170928	Methylcyclohexane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Methylene Chloride		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	O-Xylene (1,2-Dimethylbenzene)		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	p-Bromofluorobenzene	45.3			Y	1	4
QNWP8-EQUIP-BLANK-20170928	Styrene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Tert-Butyl Alcohol		U		Y	25	4
QNWP8-EQUIP-BLANK-20170928	Tert-Butyl Methyl Ether		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Tetrachloroethylene (PCE)		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Toluene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Toluene-D8	51.7			Y	1	4
QNWP8-EQUIP-BLANK-20170928	Trans-1,2-Dichloroethene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Trans-1,3-Dichloropropene		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Trichloroethylene (TCE)		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Trichlorofluoromethane		U		Y	1	4
QNWP8-EQUIP-BLANK-20170928	Vinyl Chloride		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,1,1-Trichloroethane		U		Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-TRIP-BLANK-20170928	1,1,2,2-Tetrachloroethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,1,2-Trichloroethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,1-Dichloroethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,1-Dichloroethene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,2,3-Trichlorobenzene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,2,4-Trichlorobenzene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,2-Dibromo-3-Chloropropane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,2-Dichlorobenzene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,2-Dichloroethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,2-Dichloroethane-D4	51.5			Y	1	4
QNWP8-TRIP-BLANK-20170928	1,2-Dichloropropane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,3-Dichlorobenzene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	1,4-Dichlorobenzene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	2-Hexanone		U		Y	5	4
QNWP8-TRIP-BLANK-20170928	Acetone		U		Y	5	4
QNWP8-TRIP-BLANK-20170928	Benzene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Bromochloromethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Bromodichloromethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Bromoform		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Bromomethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Carbon Disulfide		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Carbon Tetrachloride		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Chlorobenzene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Chloroethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Chloroform		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Chloromethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Cis-1,2-Dichloroethylene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Cis-1,3-Dichloropropene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Cyclohexane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Dibromochloromethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Dibromofluoromethane	48.8			Y	1	4
QNWP8-TRIP-BLANK-20170928	Dichlorodifluoromethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Ethylbenzene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Isopropylbenzene (Cumene)		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	m,p-Xylene		U		Y	2	4
QNWP8-TRIP-BLANK-20170928	Methyl Acetate		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Methyl Ethyl Ketone (2-Butanone)		U		Y	5	4
QNWP8-TRIP-BLANK-20170928	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	5	4
QNWP8-TRIP-BLANK-20170928	Methylcyclohexane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Methylene Chloride		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	O-Xylene (1,2-Dimethylbenzene)		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	p-Bromofluorobenzene	43.8			Y	1	4
QNWP8-TRIP-BLANK-20170928	Styrene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Tert-Butyl Alcohol		U		Y	25	4
QNWP8-TRIP-BLANK-20170928	Tert-Butyl Methyl Ether		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Tetrachloroethylene (PCE)		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Toluene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Toluene-D8	51.4			Y	1	4
QNWP8-TRIP-BLANK-20170928	Trans-1,2-Dichloroethene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Trans-1,3-Dichloropropene		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Trichloroethylene (TCE)		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Trichlorofluoromethane		U		Y	1	4
QNWP8-TRIP-BLANK-20170928	Vinyl Chloride		U		Y	1	4
VN1004WBL01	1,1,1-Trichloroethane		U		Y	1	4
VN1004WBL01	1,1,2,2-Tetrachloroethane		U		Y	1	4
VN1004WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	1	4
VN1004WBL01	1,1,2-Trichloroethane		U		Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
VN1004WBL01	1,1-Dichloroethane		U		Y	1	4
VN1004WBL01	1,1-Dichloroethene		U		Y	1	4
VN1004WBL01	1,2,3-Trichlorobenzene		U		Y	1	4
VN1004WBL01	1,2,4-Trichlorobenzene		U		Y	1	4
VN1004WBL01	1,2-Dibromo-3-Chloropropane		U		Y	1	4
VN1004WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	1	4
VN1004WBL01	1,2-Dichlorobenzene		U		Y	1	4
VN1004WBL01	1,2-Dichloroethane		U		Y	1	4
VN1004WBL01	1,2-Dichloroethane-D4	49.4			Y	1	4
VN1004WBL01	1,2-Dichloropropane		U		Y	1	4
VN1004WBL01	1,3-Dichlorobenzene		U		Y	1	4
VN1004WBL01	1,4-Dichlorobenzene		U		Y	1	4
VN1004WBL01	2-Hexanone		U		Y	5	4
VN1004WBL01	Acetone		U		Y	5	4
VN1004WBL01	Benzene		U		Y	1	4
VN1004WBL01	Bromochloromethane		U		Y	1	4
VN1004WBL01	Bromodichloromethane		U		Y	1	4
VN1004WBL01	Bromoform		U		Y	1	4
VN1004WBL01	Bromomethane		U		Y	1	4
VN1004WBL01	Carbon Disulfide		U		Y	1	4
VN1004WBL01	Carbon Tetrachloride		U		Y	1	4
VN1004WBL01	Chlorobenzene		U		Y	1	4
VN1004WBL01	Chloroethane		U		Y	1	4
VN1004WBL01	Chloroform		U		Y	1	4
VN1004WBL01	Chloromethane		U		Y	1	4
VN1004WBL01	Cis-1,2-Dichloroethylene		U		Y	1	4
VN1004WBL01	Cis-1,3-Dichloropropene		U		Y	1	4
VN1004WBL01	Cyclohexane		U		Y	1	4
VN1004WBL01	Dibromochloromethane		U		Y	1	4
VN1004WBL01	Dibromofluoromethane	50			Y	1	4
VN1004WBL01	Dichlorodifluoromethane		U		Y	1	4
VN1004WBL01	Ethylbenzene		U		Y	1	4
VN1004WBL01	Isopropylbenzene (Cumene)		U		Y	1	4
VN1004WBL01	m,p-Xylene		U		Y	2	4
VN1004WBL01	Methyl Acetate		U		Y	1	4
VN1004WBL01	Methyl Ethyl Ketone (2-Butanone)		U		Y	5	4
VN1004WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	5	4
VN1004WBL01	Methylcyclohexane		U		Y	1	4
VN1004WBL01	Methylene Chloride		U		Y	1	4
VN1004WBL01	O-Xylene (1,2-Dimethylbenzene)		U		Y	1	4
VN1004WBL01	p-Bromofluorobenzene	45.6			Y	1	4
VN1004WBL01	Styrene		U		Y	1	4
VN1004WBL01	Tert-Butyl Alcohol		U		Y	25	4
VN1004WBL01	Tert-Butyl Methyl Ether		U		Y	1	4
VN1004WBL01	Tetrachloroethylene (PCE)		U		Y	1	4
VN1004WBL01	Toluene		U		Y	1	4
VN1004WBL01	Toluene-D8	51.4			Y	1	4
VN1004WBL01	Trans-1,2-Dichloroethene		U		Y	1	4
VN1004WBL01	Trans-1,3-Dichloropropene		U		Y	1	4
VN1004WBL01	Trichloroethylene (TCE)		U		Y	1	4
VN1004WBL01	Trichlorofluoromethane		U		Y	1	4
VN1004WBL01	Vinyl Chloride		U		Y	1	4
VN1004WBL02	1,1,1-Trichloroethane		U		Y	1	4
VN1004WBL02	1,1,2,2-Tetrachloroethane		U		Y	1	4
VN1004WBL02	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	1	4
VN1004WBL02	1,1,2-Trichloroethane		U		Y	1	4
VN1004WBL02	1,1-Dichloroethane		U		Y	1	4
VN1004WBL02	1,1-Dichloroethene		U		Y	1	4
VN1004WBL02	1,2,3-Trichlorobenzene		U		Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
VN1004WBL02	1,2,4-Trichlorobenzene		U		Y	1	4
VN1004WBL02	1,2-Dibromo-3-Chloropropane		U		Y	1	4
VN1004WBL02	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	1	4
VN1004WBL02	1,2-Dichlorobenzene		U		Y	1	4
VN1004WBL02	1,2-Dichloroethane		U		Y	1	4
VN1004WBL02	1,2-Dichloroethane-D4	55.1			Y	1	4
VN1004WBL02	1,2-Dichloropropane		U		Y	1	4
VN1004WBL02	1,3-Dichlorobenzene		U		Y	1	4
VN1004WBL02	1,4-Dichlorobenzene		U		Y	1	4
VN1004WBL02	2-Hexanone		U		Y	5	4
VN1004WBL02	Acetone		U		Y	5	4
VN1004WBL02	Benzene		U		Y	1	4
VN1004WBL02	Bromochloromethane		U		Y	1	4
VN1004WBL02	Bromodichloromethane		U		Y	1	4
VN1004WBL02	Bromoform		U		Y	1	4
VN1004WBL02	Bromomethane		U		Y	1	4
VN1004WBL02	Carbon Disulfide		U		Y	1	4
VN1004WBL02	Carbon Tetrachloride		U		Y	1	4
VN1004WBL02	Chlorobenzene		U		Y	1	4
VN1004WBL02	Chloroethane		U		Y	1	4
VN1004WBL02	Chloroform		U		Y	1	4
VN1004WBL02	Chloromethane		U		Y	1	4
VN1004WBL02	Cis-1,2-Dichloroethylene		U		Y	1	4
VN1004WBL02	Cis-1,3-Dichloropropene		U		Y	1	4
VN1004WBL02	Cyclohexane		U		Y	1	4
VN1004WBL02	Dibromochloromethane		U		Y	1	4
VN1004WBL02	Dibromofluoromethane	50			Y	1	4
VN1004WBL02	Dichlorodifluoromethane		U		Y	1	4
VN1004WBL02	Ethylbenzene		U		Y	1	4
VN1004WBL02	Isopropylbenzene (Cumene)		U		Y	1	4
VN1004WBL02	m,p-Xylene		U		Y	2	4
VN1004WBL02	Methyl Acetate		U		Y	1	4
VN1004WBL02	Methyl Ethyl Ketone (2-Butanone)		U		Y	5	4
VN1004WBL02	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	5	4
VN1004WBL02	Methylcyclohexane		U		Y	1	4
VN1004WBL02	Methylene Chloride		U		Y	1	4
VN1004WBL02	O-Xylene (1,2-Dimethylbenzene)		U		Y	1	4
VN1004WBL02	p-Bromofluorobenzene	45.6			Y	1	4
VN1004WBL02	Styrene		U		Y	1	4
VN1004WBL02	Tert-Butyl Alcohol		U		Y	25	4
VN1004WBL02	Tert-Butyl Methyl Ether		U		Y	1	4
VN1004WBL02	Tetrachloroethylene (PCE)		U		Y	1	4
VN1004WBL02	Toluene		U		Y	1	4
VN1004WBL02	Toluene-D8	52			Y	1	4
VN1004WBL02	Trans-1,2-Dichloroethene		U		Y	1	4
VN1004WBL02	Trans-1,3-Dichloropropene		U		Y	1	4
VN1004WBL02	Trichloroethylene (TCE)		U		Y	1	4
VN1004WBL02	Trichlorofluoromethane		U		Y	1	4
VN1004WBL02	Vinyl Chloride		U		Y	1	4
VN1004WBS01	1,1,1-Trichloroethane	19.5			Y	1	4
VN1004WBS01	1,1,2,2-Tetrachloroethane	20.6			Y	1	4
VN1004WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	19.9			Y	1	4
VN1004WBS01	1,1,2-Trichloroethane	19.9			Y	1	4
VN1004WBS01	1,1-Dichloroethane	19.9			Y	1	4
VN1004WBS01	1,1-Dichloroethene	19.7			Y	1	4
VN1004WBS01	1,2,3-Trichlorobenzene	19.1			Y	1	4
VN1004WBS01	1,2,4-Trichlorobenzene	18.5			Y	1	4
VN1004WBS01	1,2-Dibromo-3-Chloropropane	20.2			Y	1	4
VN1004WBS01	1,2-Dibromoethane (Ethylene Dibromide	19.4			Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
VN1004WBS01	1,2-Dichlorobenzene	20.3			Y	1	4
VN1004WBS01	1,2-Dichloroethane	19.4			Y	1	4
VN1004WBS01	1,2-Dichloroethane-D4	50.6			Y	1	4
VN1004WBS01	1,2-Dichloropropane	19.3			Y	1	4
VN1004WBS01	1,3-Dichlorobenzene	20			Y	1	4
VN1004WBS01	1,4-Dichlorobenzene	19.6			Y	1	4
VN1004WBS01	2-Hexanone	95.3			Y	5	4
VN1004WBS01	Acetone	98.2			Y	5	4
VN1004WBS01	Benzene	19.8			Y	1	4
VN1004WBS01	Bromochloromethane	20.9			Y	1	4
VN1004WBS01	Bromodichloromethane	18.6			Y	1	4
VN1004WBS01	Bromoform	18			Y	1	4
VN1004WBS01	Bromomethane	24.6			Y	1	4
VN1004WBS01	Carbon Disulfide	17.8			Y	1	4
VN1004WBS01	Carbon Tetrachloride	18.9			Y	1	4
VN1004WBS01	Chlorobenzene	19.7			Y	1	4
VN1004WBS01	Chloroethane	19.7			Y	1	4
VN1004WBS01	Chloroform	19.7			Y	1	4
VN1004WBS01	Chloromethane	18.4			Y	1	4
VN1004WBS01	Cis-1,2-Dichloroethylene	20.1			Y	1	4
VN1004WBS01	Cis-1,3-Dichloropropene	19.2			Y	1	4
VN1004WBS01	Cyclohexane	19.5			Y	1	4
VN1004WBS01	Dibromochloromethane	18.4			Y	1	4
VN1004WBS01	Dibromofluoromethane	50.2			Y	1	4
VN1004WBS01	Dichlorodifluoromethane	19.6			Y	1	4
VN1004WBS01	Ethylbenzene	19.8			Y	1	4
VN1004WBS01	Isopropylbenzene (Cumene)	20.7			Y	1	4
VN1004WBS01	m,p-Xylene	39.9			Y	2	4
VN1004WBS01	Methyl Acetate	19.2			Y	1	4
VN1004WBS01	Methyl Ethyl Ketone (2-Butanone)	99.7			Y	5	4
VN1004WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pen	99			Y	5	4
VN1004WBS01	Methylcyclohexane	19.6			Y	1	4
VN1004WBS01	Methylene Chloride	18.5			Y	1	4
VN1004WBS01	O-Xylene (1,2-Dimethylbenzene)	20.2			Y	1	4
VN1004WBS01	p-Bromofluorobenzene	48.8			Y	1	4
VN1004WBS01	Styrene	19.9			Y	1	4
VN1004WBS01	Tert-Butyl Alcohol	110			Y	25	4
VN1004WBS01	Tert-Butyl Methyl Ether	20.1			Y	1	4
VN1004WBS01	Tetrachloroethylene (PCE)	20.2			Y	1	4
VN1004WBS01	Toluene	19.8			Y	1	4
VN1004WBS01	Toluene-D8	51.4			Y	1	4
VN1004WBS01	Trans-1,2-Dichloroethene	19.3			Y	1	4
VN1004WBS01	Trans-1,3-Dichloropropene	18.1			Y	1	4
VN1004WBS01	Trichloroethylene (TCE)	19.7			Y	1	4
VN1004WBS01	Trichlorofluoromethane	19.7			Y	1	4
VN1004WBS01	Vinyl Chloride	19.4			Y	1	4
VN1004WBS02	1,1,1-Trichloroethane	18.1			Y	1	4
VN1004WBS02	1,1,2,2-Tetrachloroethane	21.1			Y	1	4
VN1004WBS02	1,1,2-Trichloro-1,2,2-Trifluoroethane	18			Y	1	4
VN1004WBS02	1,1,2-Trichloroethane	18.4			Y	1	4
VN1004WBS02	1,1-Dichloroethane	18.8			Y	1	4
VN1004WBS02	1,1-Dichloroethene	17.7			Y	1	4
VN1004WBS02	1,2,3-Trichlorobenzene	17.5			Y	1	4
VN1004WBS02	1,2,4-Trichlorobenzene	17			Y	1	4
VN1004WBS02	1,2-Dibromo-3-Chloropropane	20			Y	1	4
VN1004WBS02	1,2-Dibromoethane (Ethylene Dibromide	18.3			Y	1	4
VN1004WBS02	1,2-Dichlorobenzene	19.6			Y	1	4
VN1004WBS02	1,2-Dichloroethane	18.9			Y	1	4
VN1004WBS02	1,2-Dichloroethane-D4	53.8			Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
VN1004WBS02	1,2-Dichloropropane	18.7			Y	1	4
VN1004WBS02	1,3-Dichlorobenzene	19.1			Y	1	4
VN1004WBS02	1,4-Dichlorobenzene	18.5			Y	1	4
VN1004WBS02	2-Hexanone	93.3			Y	5	4
VN1004WBS02	Acetone	79			Y	5	4
VN1004WBS02	Benzene	18.3			Y	1	4
VN1004WBS02	Bromochloromethane	20.1			Y	1	4
VN1004WBS02	Bromodichloromethane	17.6			Y	1	4
VN1004WBS02	Bromoform	17.1			Y	1	4
VN1004WBS02	Bromomethane	25.3			Y	1	4
VN1004WBS02	Carbon Disulfide	16.9			Y	1	4
VN1004WBS02	Carbon Tetrachloride	17.2			Y	1	4
VN1004WBS02	Chlorobenzene	18.8			Y	1	4
VN1004WBS02	Chloroethane	18.8			Y	1	4
VN1004WBS02	Chloroform	18.7			Y	1	4
VN1004WBS02	Chloromethane	18.2			Y	1	4
VN1004WBS02	Cis-1,2-Dichloroethylene	18.7			Y	1	4
VN1004WBS02	Cis-1,3-Dichloropropene	17.5			Y	1	4
VN1004WBS02	Cyclohexane	18.7			Y	1	4
VN1004WBS02	Dibromochloromethane	17			Y	1	4
VN1004WBS02	Dibromofluoromethane	51.5			Y	1	4
VN1004WBS02	Dichlorodifluoromethane	18.4			Y	1	4
VN1004WBS02	Ethylbenzene	18.9			Y	1	4
VN1004WBS02	Isopropylbenzene (Cumene)	20.1			Y	1	4
VN1004WBS02	m,p-Xylene	37.5			Y	2	4
VN1004WBS02	Methyl Acetate	20			Y	1	4
VN1004WBS02	Methyl Ethyl Ketone (2-Butanone)	94.5			Y	5	4
VN1004WBS02	Methyl Isobutyl Ketone (4-Methyl-2-Pen	100			Y	5	4
VN1004WBS02	Methylcyclohexane	17.8			Y	1	4
VN1004WBS02	Methylene Chloride	19.2			Y	1	4
VN1004WBS02	O-Xylene (1,2-Dimethylbenzene)	19.3			Y	1	4
VN1004WBS02	p-Bromofluorobenzene	47.4			Y	1	4
VN1004WBS02	Styrene	18.7			Y	1	4
VN1004WBS02	Tert-Butyl Alcohol	120			Y	25	4
VN1004WBS02	Tert-Butyl Methyl Ether	19.1			Y	1	4
VN1004WBS02	Tetrachloroethylene (PCE)	19			Y	1	4
VN1004WBS02	Toluene	18.4			Y	1	4
VN1004WBS02	Toluene-D8	51.3			Y	1	4
VN1004WBS02	Trans-1,2-Dichloroethene	17.9			Y	1	4
VN1004WBS02	Trans-1,3-Dichloropropene	16.7			Y	1	4
VN1004WBS02	Trichloroethylene (TCE)	17.7			Y	1	4
VN1004WBS02	Trichlorofluoromethane	18.2			Y	1	4
VN1004WBS02	Vinyl Chloride	18.6			Y	1	4
VN1005WBL01	1,1,1-Trichloroethane		U		Y	1	4
VN1005WBL01	1,1,2,2-Tetrachloroethane		U		Y	1	4
VN1005WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	1	4
VN1005WBL01	1,1,2-Trichloroethane		U		Y	1	4
VN1005WBL01	1,1-Dichloroethane		U		Y	1	4
VN1005WBL01	1,1-Dichloroethene		U		Y	1	4
VN1005WBL01	1,2,3-Trichlorobenzene		U		Y	1	4
VN1005WBL01	1,2,4-Trichlorobenzene		U		Y	1	4
VN1005WBL01	1,2-Dibromo-3-Chloropropane		U		Y	1	4
VN1005WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	1	4
VN1005WBL01	1,2-Dichlorobenzene		U		Y	1	4
VN1005WBL01	1,2-Dichloroethane		U		Y	1	4
VN1005WBL01	1,2-Dichloroethane-D4	48.9			Y	1	4
VN1005WBL01	1,2-Dichloropropane		U		Y	1	4
VN1005WBL01	1,3-Dichlorobenzene		U		Y	1	4
VN1005WBL01	1,4-Dichlorobenzene		U		Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
VN1005WBL01	2-Hexanone		U		Y	5	4
VN1005WBL01	Acetone		U		Y	5	4
VN1005WBL01	Benzene		U		Y	1	4
VN1005WBL01	Bromochloromethane		U		Y	1	4
VN1005WBL01	Bromodichloromethane		U		Y	1	4
VN1005WBL01	Bromoform		U		Y	1	4
VN1005WBL01	Bromomethane		U		Y	1	4
VN1005WBL01	Carbon Disulfide		U		Y	1	4
VN1005WBL01	Carbon Tetrachloride		U		Y	1	4
VN1005WBL01	Chlorobenzene		U		Y	1	4
VN1005WBL01	Chloroethane		U		Y	1	4
VN1005WBL01	Chloroform		U		Y	1	4
VN1005WBL01	Chloromethane		U		Y	1	4
VN1005WBL01	Cis-1,2-Dichloroethylene		U		Y	1	4
VN1005WBL01	Cis-1,3-Dichloropropene		U		Y	1	4
VN1005WBL01	Cyclohexane		U		Y	1	4
VN1005WBL01	Dibromochloromethane		U		Y	1	4
VN1005WBL01	Dibromofluoromethane	48.7			Y	1	4
VN1005WBL01	Dichlorodifluoromethane		U		Y	1	4
VN1005WBL01	Ethylbenzene		U		Y	1	4
VN1005WBL01	Isopropylbenzene (Cumene)		U		Y	1	4
VN1005WBL01	m,p-Xylene		U		Y	2	4
VN1005WBL01	Methyl Acetate		U		Y	1	4
VN1005WBL01	Methyl Ethyl Ketone (2-Butanone)		U		Y	5	4
VN1005WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	5	4
VN1005WBL01	Methylcyclohexane		U		Y	1	4
VN1005WBL01	Methylene Chloride		U		Y	1	4
VN1005WBL01	O-Xylene (1,2-Dimethylbenzene)		U		Y	1	4
VN1005WBL01	p-Bromofluorobenzene	46.3			Y	1	4
VN1005WBL01	Styrene		U		Y	1	4
VN1005WBL01	Tert-Butyl Alcohol		U		Y	25	4
VN1005WBL01	Tert-Butyl Methyl Ether		U		Y	1	4
VN1005WBL01	Tetrachloroethylene (PCE)		U		Y	1	4
VN1005WBL01	Toluene		U		Y	1	4
VN1005WBL01	Toluene-D8	51.4			Y	1	4
VN1005WBL01	Trans-1,2-Dichloroethene		U		Y	1	4
VN1005WBL01	Trans-1,3-Dichloropropene		U		Y	1	4
VN1005WBL01	Trichloroethylene (TCE)		U		Y	1	4
VN1005WBL01	Trichlorofluoromethane		U		Y	1	4
VN1005WBL01	Vinyl Chloride		U		Y	1	4
VN1005WBL02	1,1,1-Trichloroethane		U		Y	1	4
VN1005WBL02	1,1,2,2-Tetrachloroethane		U		Y	1	4
VN1005WBL02	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	1	4
VN1005WBL02	1,1,2-Trichloroethane		U		Y	1	4
VN1005WBL02	1,1-Dichloroethane		U		Y	1	4
VN1005WBL02	1,1-Dichloroethene		U		Y	1	4
VN1005WBL02	1,2,3-Trichlorobenzene		U		Y	1	4
VN1005WBL02	1,2,4-Trichlorobenzene		U		Y	1	4
VN1005WBL02	1,2-Dibromo-3-Chloropropane		U		Y	1	4
VN1005WBL02	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	1	4
VN1005WBL02	1,2-Dichlorobenzene		U		Y	1	4
VN1005WBL02	1,2-Dichloroethane		U		Y	1	4
VN1005WBL02	1,2-Dichloroethane-D4	50.3			Y	1	4
VN1005WBL02	1,2-Dichloropropane		U		Y	1	4
VN1005WBL02	1,3-Dichlorobenzene		U		Y	1	4
VN1005WBL02	1,4-Dichlorobenzene		U		Y	1	4
VN1005WBL02	2-Hexanone		U		Y	5	4
VN1005WBL02	Acetone		U		Y	5	4
VN1005WBL02	Benzene		U		Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
VN1005WBL02	Bromochloromethane		U		Y	1	4
VN1005WBL02	Bromodichloromethane		U		Y	1	4
VN1005WBL02	Bromoform		U		Y	1	4
VN1005WBL02	Bromomethane		U		Y	1	4
VN1005WBL02	Carbon Disulfide		U		Y	1	4
VN1005WBL02	Carbon Tetrachloride		U		Y	1	4
VN1005WBL02	Chlorobenzene		U		Y	1	4
VN1005WBL02	Chloroethane		U		Y	1	4
VN1005WBL02	Chloroform		U		Y	1	4
VN1005WBL02	Chloromethane		U		Y	1	4
VN1005WBL02	Cis-1,2-Dichloroethylene		U		Y	1	4
VN1005WBL02	Cis-1,3-Dichloropropene		U		Y	1	4
VN1005WBL02	Cyclohexane		U		Y	1	4
VN1005WBL02	Dibromochloromethane		U		Y	1	4
VN1005WBL02	Dibromofluoromethane	49.2			Y	1	4
VN1005WBL02	Dichlorodifluoromethane		U		Y	1	4
VN1005WBL02	Ethylbenzene		U		Y	1	4
VN1005WBL02	Isopropylbenzene (Cumene)		U		Y	1	4
VN1005WBL02	m,p-Xylene		U		Y	2	4
VN1005WBL02	Methyl Acetate		U		Y	1	4
VN1005WBL02	Methyl Ethyl Ketone (2-Butanone)		U		Y	5	4
VN1005WBL02	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	5	4
VN1005WBL02	Methylcyclohexane		U		Y	1	4
VN1005WBL02	Methylene Chloride		U		Y	1	4
VN1005WBL02	O-Xylene (1,2-Dimethylbenzene)		U		Y	1	4
VN1005WBL02	p-Bromofluorobenzene	48.1			Y	1	4
VN1005WBL02	Styrene		U		Y	1	4
VN1005WBL02	Tert-Butyl Alcohol		U		Y	25	4
VN1005WBL02	Tert-Butyl Methyl Ether		U		Y	1	4
VN1005WBL02	Tetrachloroethylene (PCE)		U		Y	1	4
VN1005WBL02	Toluene		U		Y	1	4
VN1005WBL02	Toluene-D8	51.4			Y	1	4
VN1005WBL02	Trans-1,2-Dichloroethene		U		Y	1	4
VN1005WBL02	Trans-1,3-Dichloropropene		U		Y	1	4
VN1005WBL02	Trichloroethylene (TCE)		U		Y	1	4
VN1005WBL02	Trichlorofluoromethane		U		Y	1	4
VN1005WBL02	Vinyl Chloride		U		Y	1	4
VN1005WBS01	1,1,1-Trichloroethane	19			Y	1	4
VN1005WBS01	1,1,2,2-Tetrachloroethane	22.3			Y	1	4
VN1005WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	19			Y	1	4
VN1005WBS01	1,1,2-Trichloroethane	20.3			Y	1	4
VN1005WBS01	1,1-Dichloroethane	19.5			Y	1	4
VN1005WBS01	1,1-Dichloroethene	18.7			Y	1	4
VN1005WBS01	1,2,3-Trichlorobenzene	19.6			Y	1	4
VN1005WBS01	1,2,4-Trichlorobenzene	18.5			Y	1	4
VN1005WBS01	1,2-Dibromo-3-Chloropropane	22			Y	1	4
VN1005WBS01	1,2-Dibromoethane (Ethylene Dibromide	20			Y	1	4
VN1005WBS01	1,2-Dichlorobenzene	19.7			Y	1	4
VN1005WBS01	1,2-Dichloroethane	19.2			Y	1	4
VN1005WBS01	1,2-Dichloroethane-D4	53.5			Y	1	4
VN1005WBS01	1,2-Dichloropropane	18.3			Y	1	4
VN1005WBS01	1,3-Dichlorobenzene	19.1			Y	1	4
VN1005WBS01	1,4-Dichlorobenzene	18.8			Y	1	4
VN1005WBS01	2-Hexanone	110			Y	5	4
VN1005WBS01	Acetone	110			Y	5	4
VN1005WBS01	Benzene	18.9			Y	1	4
VN1005WBS01	Bromochloromethane	18.5			Y	1	4
VN1005WBS01	Bromodichloromethane	18.4			Y	1	4
VN1005WBS01	Bromoform	18.5			Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
VN1005WBS01	Bromomethane	21			Y	1	4
VN1005WBS01	Carbon Disulfide	17			Y	1	4
VN1005WBS01	Carbon Tetrachloride	18			Y	1	4
VN1005WBS01	Chlorobenzene	18.9			Y	1	4
VN1005WBS01	Chloroethane	19.2			Y	1	4
VN1005WBS01	Chloroform	19.6			Y	1	4
VN1005WBS01	Chloromethane	17.9			Y	1	4
VN1005WBS01	Cis-1,2-Dichloroethylene	19.8			Y	1	4
VN1005WBS01	Cis-1,3-Dichloropropene	18.8			Y	1	4
VN1005WBS01	Cyclohexane	19.2			Y	1	4
VN1005WBS01	Dibromochloromethane	18.2			Y	1	4
VN1005WBS01	Dibromofluoromethane	51.2			Y	1	4
VN1005WBS01	Dichlorodifluoromethane	18.4			Y	1	4
VN1005WBS01	Ethylbenzene	19.1			Y	1	4
VN1005WBS01	Isopropylbenzene (Cumene)	19.9			Y	1	4
VN1005WBS01	m,p-Xylene	38.5			Y	2	4
VN1005WBS01	Methyl Acetate	21.9			Y	1	4
VN1005WBS01	Methyl Ethyl Ketone (2-Butanone)	110			Y	5	4
VN1005WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pen	110			Y	5	4
VN1005WBS01	Methylcyclohexane	18.3			Y	1	4
VN1005WBS01	Methylene Chloride	20.3			Y	1	4
VN1005WBS01	O-Xylene (1,2-Dimethylbenzene)	19.7			Y	1	4
VN1005WBS01	p-Bromofluorobenzene	49			Y	1	4
VN1005WBS01	Styrene	19.3			Y	1	4
VN1005WBS01	Tert-Butyl Alcohol	140			Y	25	4
VN1005WBS01	Tert-Butyl Methyl Ether	21.8			Y	1	4
VN1005WBS01	Tetrachloroethylene (PCE)	18.8			Y	1	4
VN1005WBS01	Toluene	18.8			Y	1	4
VN1005WBS01	Toluene-D8	50.8			Y	1	4
VN1005WBS01	Trans-1,2-Dichloroethene	18.5			Y	1	4
VN1005WBS01	Trans-1,3-Dichloropropene	18.1			Y	1	4
VN1005WBS01	Trichloroethylene (TCE)	18.5			Y	1	4
VN1005WBS01	Trichlorofluoromethane	18.9			Y	1	4
VN1005WBS01	Vinyl Chloride	18			Y	1	4
VN1005WBS02	1,1,1-Trichloroethane	20.2			Y	1	4
VN1005WBS02	1,1,2,2-Tetrachloroethane	22.2			Y	1	4
VN1005WBS02	1,1,2-Trichloro-1,2,2-Trifluoroethane	19.5			Y	1	4
VN1005WBS02	1,1,2-Trichloroethane	20.3			Y	1	4
VN1005WBS02	1,1-Dichloroethane	20.7			Y	1	4
VN1005WBS02	1,1-Dichloroethene	19.9			Y	1	4
VN1005WBS02	1,2,3-Trichlorobenzene	21.6			Y	1	4
VN1005WBS02	1,2,4-Trichlorobenzene	21.1			Y	1	4
VN1005WBS02	1,2-Dibromo-3-Chloropropane	23.4			Y	1	4
VN1005WBS02	1,2-Dibromoethane (Ethylene Dibromide	20.4			Y	1	4
VN1005WBS02	1,2-Dichlorobenzene	19.8			Y	1	4
VN1005WBS02	1,2-Dichloroethane	19.9			Y	1	4
VN1005WBS02	1,2-Dichloroethane-D4	53.7			Y	1	4
VN1005WBS02	1,2-Dichloropropane	19.3			Y	1	4
VN1005WBS02	1,3-Dichlorobenzene	19.2			Y	1	4
VN1005WBS02	1,4-Dichlorobenzene	18.9			Y	1	4
VN1005WBS02	2-Hexanone	120			Y	5	4
VN1005WBS02	Acetone	95.4			Y	5	4
VN1005WBS02	Benzene	19.4			Y	1	4
VN1005WBS02	Bromochloromethane	21.4			Y	1	4
VN1005WBS02	Bromodichloromethane	19			Y	1	4
VN1005WBS02	Bromoform	19.7			Y	1	4
VN1005WBS02	Bromomethane	20.9			Y	1	4
VN1005WBS02	Carbon Disulfide	18.8			Y	1	4
VN1005WBS02	Carbon Tetrachloride	18.8			Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
VN1005WBS02	Chlorobenzene	19.3			Y	1	4
VN1005WBS02	Chloroethane	20.1			Y	1	4
VN1005WBS02	Chloroform	20.4			Y	1	4
VN1005WBS02	Chloromethane	19			Y	1	4
VN1005WBS02	Cis-1,2-Dichloroethylene	21			Y	1	4
VN1005WBS02	Cis-1,3-Dichloropropene	18.8			Y	1	4
VN1005WBS02	Cyclohexane	20.2			Y	1	4
VN1005WBS02	Dibromochloromethane	18.8			Y	1	4
VN1005WBS02	Dibromofluoromethane	49.3			Y	1	4
VN1005WBS02	Dichlorodifluoromethane	19.4			Y	1	4
VN1005WBS02	Ethylbenzene	19.5			Y	1	4
VN1005WBS02	Isopropylbenzene (Cumene)	19.1			Y	1	4
VN1005WBS02	m,p-Xylene	39.1			Y	2	4
VN1005WBS02	Methyl Acetate	24.6			Y	1	4
VN1005WBS02	Methyl Ethyl Ketone (2-Butanone)	120			Y	5	4
VN1005WBS02	Methyl Isobutyl Ketone (4-Methyl-2-Pen	120			Y	5	4
VN1005WBS02	Methylcyclohexane	18.4			Y	1	4
VN1005WBS02	Methylene Chloride	21			Y	1	4
VN1005WBS02	O-Xylene (1,2-Dimethylbenzene)	19.7			Y	1	4
VN1005WBS02	p-Bromofluorobenzene	47.4			Y	1	4
VN1005WBS02	Styrene	19.6			Y	1	4
VN1005WBS02	Tert-Butyl Alcohol	150			Y	25	4
VN1005WBS02	Tert-Butyl Methyl Ether	22.7			Y	1	4
VN1005WBS02	Tetrachloroethylene (PCE)	19.5			Y	1	4
VN1005WBS02	Toluene	19.3			Y	1	4
VN1005WBS02	Toluene-D8	49.5			Y	1	4
VN1005WBS02	Trans-1,2-Dichloroethene	20			Y	1	4
VN1005WBS02	Trans-1,3-Dichloropropene	18.1			Y	1	4
VN1005WBS02	Trichloroethylene (TCE)	18.9			Y	1	4
VN1005WBS02	Trichlorofluoromethane	20.1			Y	1	4
VN1005WBS02	Vinyl Chloride	19.5			Y	1	4
QNWP8-MW30S-GW-20170927	1,2,4,5-Tetrachlorobenzene		U		Y	10	4
QNWP8-MW30S-GW-20170927	2,3,4,6-Tetrachlorophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	2,4,5-Trichlorophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	2,4,6-Tribromophenol	130			Y	1	4
QNWP8-MW30S-GW-20170927	2,4,6-Trichlorophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	2,4-Dichlorophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	2,4-Dimethylphenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	2,4-Dinitrophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	2,4-Dinitrotoluene		U		Y	10	4
QNWP8-MW30S-GW-20170927	2,6-Dinitrotoluene		U		Y	10	4
QNWP8-MW30S-GW-20170927	2-Chloronaphthalene		U		Y	10	4
QNWP8-MW30S-GW-20170927	2-Chlorophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	2-Fluorobiphenyl	88.6			Y	1	4
QNWP8-MW30S-GW-20170927	2-Fluorophenol	61.6			Y	1	4
QNWP8-MW30S-GW-20170927	2-Methylnaphthalene		U		Y	10	4
QNWP8-MW30S-GW-20170927	2-Methylphenol (O-Cresol)		U		Y	10	4
QNWP8-MW30S-GW-20170927	2-Nitroaniline		U		Y	10	4
QNWP8-MW30S-GW-20170927	2-Nitrophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	3,3'-Dichlorobenzidine		U		Y	10	4
QNWP8-MW30S-GW-20170927	3-Nitroaniline		U		Y	10	4
QNWP8-MW30S-GW-20170927	4,6-Dinitro-2-Methylphenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	4-Bromophenyl Phenyl Ether		U		Y	10	4
QNWP8-MW30S-GW-20170927	4-Chloro-3-Methylphenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	4-Chloroaniline		U		Y	10	4
QNWP8-MW30S-GW-20170927	4-Chlorophenyl Phenyl Ether		U		Y	10	4
QNWP8-MW30S-GW-20170927	4-Nitroaniline		U		Y	10	4
QNWP8-MW30S-GW-20170927	4-Nitrophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	Acenaphthene		U		Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW30S-GW-20170927	Acenaphthylene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Acetophenone		U		Y	10	4
QNWP8-MW30S-GW-20170927	Anthracene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Atrazine		U		Y	10	4
QNWP8-MW30S-GW-20170927	Benzaldehyde		U		Y	10	4
QNWP8-MW30S-GW-20170927	Benzo(A)Anthracene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Benzo(A)Pyrene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Benzo(B)Fluoranthene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Benzo(G,H,I)Perylene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Benzo(K)Fluoranthene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Benzyl Butyl Phthalate		U		Y	10	4
QNWP8-MW30S-GW-20170927	Biphenyl (Diphenyl)		U		Y	10	4
QNWP8-MW30S-GW-20170927	Bis(2-Chloroethoxy) Methane		U		Y	10	4
QNWP8-MW30S-GW-20170927	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	10	4
QNWP8-MW30S-GW-20170927	Bis(2-Chloroisopropyl) Ether		U		Y	10	4
QNWP8-MW30S-GW-20170927	Bis(2-Ethylhexyl) Phthalate		U		Y	10	4
QNWP8-MW30S-GW-20170927	Caprolactam		U		Y	10	4
QNWP8-MW30S-GW-20170927	Carbazole		U		Y	10	4
QNWP8-MW30S-GW-20170927	Chrysene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Dibenz(A,H)Anthracene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Dibenzofuran		U		Y	10	4
QNWP8-MW30S-GW-20170927	Diethyl Phthalate	2.7	J		Y	10	4
QNWP8-MW30S-GW-20170927	Dimethyl Phthalate	4.6	J		Y	10	4
QNWP8-MW30S-GW-20170927	Di-N-Butyl Phthalate		U		Y	10	4
QNWP8-MW30S-GW-20170927	Di-N-Octylphthalate		U		Y	10	4
QNWP8-MW30S-GW-20170927	Fluoranthene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Fluorene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Hexachlorobenzene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Hexachlorobutadiene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Hexachlorocyclopentadiene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Hexachloroethane		U		Y	10	4
QNWP8-MW30S-GW-20170927	Indeno(1,2,3-C,D)Pyrene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Isophorone		U		Y	10	4
QNWP8-MW30S-GW-20170927	M+P MethylPhenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	Naphthalene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Nitrobenzene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Nitrobenzene-D5	89.2			Y	1	4
QNWP8-MW30S-GW-20170927	N-Nitrosodi-N-Propylamine		U		Y	10	4
QNWP8-MW30S-GW-20170927	N-Nitrosodiphenylamine		U		Y	10	4
QNWP8-MW30S-GW-20170927	Pentachlorophenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	Phenanthrene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Phenol		U		Y	10	4
QNWP8-MW30S-GW-20170927	Phenol-D6	37.8			Y	1	4
QNWP8-MW30S-GW-20170927	Pyrene		U		Y	10	4
QNWP8-MW30S-GW-20170927	Terphenyl-D14	90.1			Y	1	4
QNWP8-MW30S-GW-20170927	Terphenyl-D14	90.1			Y	1	4
QNWP8-MW30D-GW-20170927	1,2,4,5-Tetrachlorobenzene		U		Y	10	4
QNWP8-MW30D-GW-20170927	2,3,4,6-Tetrachlorophenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	2,4,5-Trichlorophenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	2,4,6-Tribromophenol	95.8			Y	1	4
QNWP8-MW30D-GW-20170927	2,4,6-Trichlorophenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	2,4-Dichlorophenol		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	2,4-Dimethylphenol	32.7		JH	Y	10	4
QNWP8-MW30D-GW-20170927	2,4-Dinitrophenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	2,4-Dinitrotoluene		U		Y	10	4
QNWP8-MW30D-GW-20170927	2,6-Dinitrotoluene		U		Y	10	4
QNWP8-MW30D-GW-20170927	2-Chloronaphthalene		U		Y	10	4
QNWP8-MW30D-GW-20170927	2-Chlorophenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	2-Fluorobiphenyl	76.3			Y	1	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW30D-GW-20170927	2-Fluorophenol	38.3			Y	1	4
QNWP8-MW30D-GW-20170927	2-Methylnaphthalene	370	E	JH	Y	10	4
QNWP8-MW30D-GW-20170927	2-Methylphenol (O-Cresol)		U		Y	10	4
QNWP8-MW30D-GW-20170927	2-Nitroaniline		U		Y	10	4
QNWP8-MW30D-GW-20170927	2-Nitrophenol		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	3,3'-Dichlorobenzidine		U		Y	10	4
QNWP8-MW30D-GW-20170927	3-Nitroaniline		U		Y	10	4
QNWP8-MW30D-GW-20170927	4,6-Dinitro-2-Methylphenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	4-Bromophenyl Phenyl Ether		U		Y	10	4
QNWP8-MW30D-GW-20170927	4-Chloro-3-Methylphenol		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	4-Chloroaniline		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	4-Chlorophenyl Phenyl Ether		U		Y	10	4
QNWP8-MW30D-GW-20170927	4-Nitroaniline		U		Y	10	4
QNWP8-MW30D-GW-20170927	4-Nitrophenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	Acenaphthene	100	E		Y	10	4
QNWP8-MW30D-GW-20170927	Acenaphthylene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Acetophenone		U		Y	10	4
QNWP8-MW30D-GW-20170927	Anthracene	2.9	J		Y	10	4
QNWP8-MW30D-GW-20170927	Atrazine		U		Y	10	4
QNWP8-MW30D-GW-20170927	Benzaldehyde		U		Y	10	4
QNWP8-MW30D-GW-20170927	Benzo(A)Anthracene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Benzo(A)Pyrene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Benzo(B)Fluoranthene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Benzo(G,H,I)Perylene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Benzo(K)Fluoranthene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Benzyl Butyl Phthalate		U		Y	10	4
QNWP8-MW30D-GW-20170927	Biphenyl (Diphenyl)	43			Y	10	4
QNWP8-MW30D-GW-20170927	Bis(2-Chloroethoxy) Methane		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	10	4
QNWP8-MW30D-GW-20170927	Bis(2-Chloroisopropyl) Ether		U		Y	10	4
QNWP8-MW30D-GW-20170927	Bis(2-Ethylhexyl) Phthalate		U		Y	10	4
QNWP8-MW30D-GW-20170927	Caprolactam		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	Carbazole	37.5			Y	10	4
QNWP8-MW30D-GW-20170927	Chrysene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Dibenz(A,H)Anthracene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Dibenzofuran	84.2	E		Y	10	4
QNWP8-MW30D-GW-20170927	Diethyl Phthalate		U		Y	10	4
QNWP8-MW30D-GW-20170927	Dimethyl Phthalate	7	J		Y	10	4
QNWP8-MW30D-GW-20170927	Di-N-Butyl Phthalate		U		Y	10	4
QNWP8-MW30D-GW-20170927	Di-N-Octylphthalate		U		Y	10	4
QNWP8-MW30D-GW-20170927	Fluoranthene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Fluorene	50.3			Y	10	4
QNWP8-MW30D-GW-20170927	Hexachlorobenzene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Hexachlorobutadiene		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	Hexachlorocyclopentadiene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Hexachloroethane		U		Y	10	4
QNWP8-MW30D-GW-20170927	Indeno(1,2,3-C,D)Pyrene		U		Y	10	4
QNWP8-MW30D-GW-20170927	Isophorone		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	M+P MethylPhenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	Naphthalene	2100	E	JH	Y	10	4
QNWP8-MW30D-GW-20170927	Nitrobenzene		U	UJ	Y	10	4
QNWP8-MW30D-GW-20170927	Nitrobenzene-D5	240			Y	1	4
QNWP8-MW30D-GW-20170927	N-Nitrosodi-N-Propylamine		U		Y	10	4
QNWP8-MW30D-GW-20170927	N-Nitrosodiphenylamine		U		Y	10	4
QNWP8-MW30D-GW-20170927	Pentachlorophenol		U		Y	10	4
QNWP8-MW30D-GW-20170927	Phenanthrene	44.5			Y	10	4
QNWP8-MW30D-GW-20170927	Phenol	4.5	J		Y	10	4
QNWP8-MW30D-GW-20170927	Phenol-D6	28.1			Y	1	4
QNWP8-MW30D-GW-20170927	Pyrene		U		Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW30D-GW-20170927	Terphenyl-D14	80.6			Y	1	4
QNWP8-MW30D-GW-20170927	Terphenyl-D14	80.6			Y	1	4
QNWP8-MW30D-GW-20170927	1,2,4,5-Tetrachlorobenzene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2,3,4,6-Tetrachlorophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2,4,5-Trichlorophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2,4,6-Tribromophenol	110			Y	10	4
QNWP8-MW30D-GW-20170927	2,4,6-Trichlorophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2,4-Dichlorophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2,4-Dimethylphenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2,4-Dinitrophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2,4-Dinitrotoluene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2,6-Dinitrotoluene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2-Chloronaphthalene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2-Chlorophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2-Fluorobiphenyl	100			Y	10	4
QNWP8-MW30D-GW-20170927	2-Fluorophenol	48.1			Y	10	4
QNWP8-MW30D-GW-20170927	2-Methylnaphthalene	210	D		Y	100	4
QNWP8-MW30D-GW-20170927	2-Methylphenol (O-Cresol)		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2-Nitroaniline		UD		Y	100	4
QNWP8-MW30D-GW-20170927	2-Nitrophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	3,3'-Dichlorobenzidine		UD		Y	100	4
QNWP8-MW30D-GW-20170927	3-Nitroaniline		UD		Y	100	4
QNWP8-MW30D-GW-20170927	4,6-Dinitro-2-Methylphenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	4-Bromophenyl Phenyl Ether		UD		Y	100	4
QNWP8-MW30D-GW-20170927	4-Chloro-3-Methylphenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	4-Chloroaniline		UD		Y	100	4
QNWP8-MW30D-GW-20170927	4-Chlorophenyl Phenyl Ether		UD		Y	100	4
QNWP8-MW30D-GW-20170927	4-Nitroaniline		UD		Y	100	4
QNWP8-MW30D-GW-20170927	4-Nitrophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Acenaphthene	170	D		Y	100	4
QNWP8-MW30D-GW-20170927	Acenaphthylene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Acetophenone		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Anthracene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Atrazine		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Benzaldehyde		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Benzo(A)Anthracene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Benzo(A)Pyrene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Benzo(B)Fluoranthene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Benzo(G,H,I)Perylene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Benzo(K)Fluoranthene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Benzyl Butyl Phthalate		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Biphenyl (Diphenyl)	54.5	JD		Y	100	4
QNWP8-MW30D-GW-20170927	Bis(2-Chloroethoxy) Methane		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Bis(2-Chloroisopropyl) Ether		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Bis(2-Ethylhexyl) Phthalate		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Caprolactam		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Carbazole	47.1	JD		Y	100	4
QNWP8-MW30D-GW-20170927	Chrysene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Dibenz(A,H)Anthracene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Dibenzofuran	130	D		Y	100	4
QNWP8-MW30D-GW-20170927	Diethyl Phthalate		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Dimethyl Phthalate		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Di-N-Butyl Phthalate		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Di-N-Octylphthalate		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Fluoranthene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Fluorene	67.3	JD		Y	100	4
QNWP8-MW30D-GW-20170927	Hexachlorobenzene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Hexachlorobutadiene		UD		Y	100	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW30D-GW-20170927	Hexachlorocyclopentadiene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Hexachloroethane		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Indeno(1,2,3-C,D)Pyrene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Isophorone		UD		Y	100	4
QNWP8-MW30D-GW-20170927	M+P MethylPhenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Naphthalene	2700	ED		Y	100	4
QNWP8-MW30D-GW-20170927	Nitrobenzene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Nitrobenzene-D5	97.4			Y	10	4
QNWP8-MW30D-GW-20170927	N-Nitrosodi-N-Propylamine		UD		Y	100	4
QNWP8-MW30D-GW-20170927	N-Nitrosodiphenylamine		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Pentachlorophenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Phenanthrene	56.6	JD		Y	100	4
QNWP8-MW30D-GW-20170927	Phenol		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Phenol-D6	30.5			Y	10	4
QNWP8-MW30D-GW-20170927	Pyrene		UD		Y	100	4
QNWP8-MW30D-GW-20170927	Terphenyl-D14	94.1			Y	10	4
QNWP8-MW30D-GW-20170927	Terphenyl-D14	94.1			Y	10	4
QNWP8-MW30D-GW-20170927	1,2,4,5-Tetrachlorobenzene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	2,3,4,6-Tetrachlorophenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	2,4,5-Trichlorophenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	2,4,6-Tribromophenol	93.2			Y	100	4
QNWP8-MW30D-GW-20170927	2,4,6-Trichlorophenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	2,4-Dichlorophenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	2,4-Dimethylphenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	2,4-Dinitrophenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	2,4-Dinitrotoluene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	2,6-Dinitrotoluene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	2-Chloronaphthalene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	2-Chlorophenol		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	2-Fluorobiphenyl	170			Y	100	4
QNWP8-MW30D-GW-20170927	2-Fluorophenol	68.7			Y	100	4
QNWP8-MW30D-GW-20170927	2-Methylnaphthalene	310	JD	J	Y	1000	4
QNWP8-MW30D-GW-20170927	2-Methylphenol (O-Cresol)		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	2-Nitroaniline		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	2-Nitrophenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	3,3'-Dichlorobenzidine		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	3-Nitroaniline		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	4,6-Dinitro-2-Methylphenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	4-Bromophenyl Phenyl Ether		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	4-Chloro-3-Methylphenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	4-Chloroaniline		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	4-Chlorophenyl Phenyl Ether		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	4-Nitroaniline		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	4-Nitrophenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Acenaphthene	290	JD	J	Y	1000	4
QNWP8-MW30D-GW-20170927	Acenaphthylene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Acetophenone		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Anthracene		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Atrazine		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Benzaldehyde		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Benzo(A)Anthracene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Benzo(A)Pyrene		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Benzo(B)Fluoranthene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Benzo(G,H,I)Perylene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Benzo(K)Fluoranthene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Benzyl Butyl Phthalate		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Biphenyl (Diphenyl)		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Bis(2-Chloroethoxy) Methane		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD	UJ	Y	1000	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW30D-GW-20170927	Bis(2-Chloroisopropyl) Ether		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Bis(2-Ethylhexyl) Phthalate		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Caprolactam		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Carbazole		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Chrysene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Dibenz(A,H)Anthracene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Dibenzofuran	220	JD	J	Y	1000	4
QNWP8-MW30D-GW-20170927	Diethyl Phthalate		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Dimethyl Phthalate		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Di-N-Butyl Phthalate		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Di-N-Octylphthalate		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Fluoranthene		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Fluorene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Hexachlorobenzene		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Hexachlorobutadiene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Hexachlorocyclopentadiene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Hexachloroethane		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Indeno(1,2,3-C,D)Pyrene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Isophorone		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	M+P MethylPhenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Naphthalene	7800	D	J	Y	1000	4
QNWP8-MW30D-GW-20170927	Nitrobenzene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Nitrobenzene-D5	140			Y	100	4
QNWP8-MW30D-GW-20170927	N-Nitrosodi-N-Propylamine		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	N-Nitrosodiphenylamine		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Pentachlorophenol		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Phenanthrene		UD		Y	1000	4
QNWP8-MW30D-GW-20170927	Phenol		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Phenol-D6	47.4			Y	100	4
QNWP8-MW30D-GW-20170927	Pyrene		UD	UJ	Y	1000	4
QNWP8-MW30D-GW-20170927	Terphenyl-D14	140			Y	100	4
QNWP8-MW30D-GW-20170927	Terphenyl-D14	140			Y	100	4
QNWP8-MW26S-GW-20170928	1,2,4,5-Tetrachlorobenzene		U		Y	10	4
QNWP8-MW26S-GW-20170928	2,3,4,6-Tetrachlorophenol		U		Y	10	4
QNWP8-MW26S-GW-20170928	2,4,5-Trichlorophenol		U		Y	10	4
QNWP8-MW26S-GW-20170928	2,4,6-Tribromophenol	100			Y	1	4
QNWP8-MW26S-GW-20170928	2,4,6-Trichlorophenol		U		Y	10	4
QNWP8-MW26S-GW-20170928	2,4-Dichlorophenol		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	2,4-Dimethylphenol	510	E	JH	Y	10	4
QNWP8-MW26S-GW-20170928	2,4-Dinitrophenol		U		Y	10	4
QNWP8-MW26S-GW-20170928	2,4-Dinitrotoluene		U		Y	10	4
QNWP8-MW26S-GW-20170928	2,6-Dinitrotoluene		U		Y	10	4
QNWP8-MW26S-GW-20170928	2-Chloronaphthalene		U		Y	10	4
QNWP8-MW26S-GW-20170928	2-Chlorophenol		U		Y	10	4
QNWP8-MW26S-GW-20170928	2-Fluorobiphenyl	76.9			Y	1	4
QNWP8-MW26S-GW-20170928	2-Fluorophenol	46.4			Y	1	4
QNWP8-MW26S-GW-20170928	2-Methylnaphthalene	160	E	JH	Y	10	4
QNWP8-MW26S-GW-20170928	2-Methylphenol (O-Cresol)	51.9			Y	10	4
QNWP8-MW26S-GW-20170928	2-Nitroaniline		U		Y	10	4
QNWP8-MW26S-GW-20170928	2-Nitrophenol		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	3,3'-Dichlorobenzidine		U		Y	10	4
QNWP8-MW26S-GW-20170928	3-Nitroaniline		U		Y	10	4
QNWP8-MW26S-GW-20170928	4,6-Dinitro-2-Methylphenol		U		Y	10	4
QNWP8-MW26S-GW-20170928	4-Bromophenyl Phenyl Ether		U		Y	10	4
QNWP8-MW26S-GW-20170928	4-Chloro-3-Methylphenol		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	4-Chloroaniline		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	4-Chlorophenyl Phenyl Ether		U		Y	10	4
QNWP8-MW26S-GW-20170928	4-Nitroaniline		U		Y	10	4
QNWP8-MW26S-GW-20170928	4-Nitrophenol		U		Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW26S-GW-20170928	Acenaphthene	75.8			Y	10	4
QNWP8-MW26S-GW-20170928	Acenaphthylene	5.5	J		Y	10	4
QNWP8-MW26S-GW-20170928	Acetophenone		U		Y	10	4
QNWP8-MW26S-GW-20170928	Anthracene	12.8			Y	10	4
QNWP8-MW26S-GW-20170928	Atrazine		U		Y	10	4
QNWP8-MW26S-GW-20170928	Benzaldehyde		U		Y	10	4
QNWP8-MW26S-GW-20170928	Benzo(A)Anthracene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Benzo(A)Pyrene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Benzo(B)Fluoranthene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Benzo(G,H,I)Perylene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Benzo(K)Fluoranthene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Benzyl Butyl Phthalate		U		Y	10	4
QNWP8-MW26S-GW-20170928	Biphenyl (Diphenyl)	37.4			Y	10	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroethoxy) Methane		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	10	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroisopropyl) Ether		U		Y	10	4
QNWP8-MW26S-GW-20170928	Bis(2-Ethylhexyl) Phthalate		U		Y	10	4
QNWP8-MW26S-GW-20170928	Caprolactam		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	Carbazole	56			Y	10	4
QNWP8-MW26S-GW-20170928	Chrysene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Dibenz(A,H)Anthracene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Dibenzofuran	71.9			Y	10	4
QNWP8-MW26S-GW-20170928	Diethyl Phthalate		U		Y	10	4
QNWP8-MW26S-GW-20170928	Dimethyl Phthalate	5	J		Y	10	4
QNWP8-MW26S-GW-20170928	Di-N-Butyl Phthalate		U		Y	10	4
QNWP8-MW26S-GW-20170928	Di-N-Octylphthalate		U		Y	10	4
QNWP8-MW26S-GW-20170928	Fluoranthene	7.9	J		Y	10	4
QNWP8-MW26S-GW-20170928	Fluorene	58.1			Y	10	4
QNWP8-MW26S-GW-20170928	Hexachlorobenzene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Hexachlorobutadiene		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	Hexachlorocyclopentadiene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Hexachloroethane		U		Y	10	4
QNWP8-MW26S-GW-20170928	Indeno(1,2,3-C,D)Pyrene		U		Y	10	4
QNWP8-MW26S-GW-20170928	Isophorone		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	M+P MethylPhenol	130	E		Y	10	4
QNWP8-MW26S-GW-20170928	Naphthalene	1100	E	JH	Y	10	4
QNWP8-MW26S-GW-20170928	Nitrobenzene		U	UJ	Y	10	4
QNWP8-MW26S-GW-20170928	Nitrobenzene-D5	160			Y	1	4
QNWP8-MW26S-GW-20170928	N-Nitrosodi-N-Propylamine		U		Y	10	4
QNWP8-MW26S-GW-20170928	N-Nitrosodiphenylamine		U		Y	10	4
QNWP8-MW26S-GW-20170928	Pentachlorophenol		U		Y	10	4
QNWP8-MW26S-GW-20170928	Phenanthrene	81.2	E		Y	10	4
QNWP8-MW26S-GW-20170928	Phenol	26.3			Y	10	4
QNWP8-MW26S-GW-20170928	Phenol-D6	34.1			Y	1	4
QNWP8-MW26S-GW-20170928	Pyrene	4.7	J		Y	10	4
QNWP8-MW26S-GW-20170928	Terphenyl-D14	66.2			Y	1	4
QNWP8-MW26S-GW-20170928	Terphenyl-D14	66.2			Y	1	4
QNWP8-MW26S-GW-20170928	1,2,4,5-Tetrachlorobenzene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2,3,4,6-Tetrachlorophenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2,4,5-Trichlorophenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2,4,6-Tribromophenol	120			Y	10	4
QNWP8-MW26S-GW-20170928	2,4,6-Trichlorophenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2,4-Dichlorophenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2,4-Dimethylphenol	340	D		Y	100	4
QNWP8-MW26S-GW-20170928	2,4-Dinitrophenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2,4-Dinitrotoluene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2,6-Dinitrotoluene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2-Chloronaphthalene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2-Chlorophenol		UD		Y	100	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW26S-GW-20170928	2-Fluorobiphenyl	100			Y	10	4
QNWP8-MW26S-GW-20170928	2-Fluorophenol	64.7			Y	10	4
QNWP8-MW26S-GW-20170928	2-Methylnaphthalene	120	D		Y	100	4
QNWP8-MW26S-GW-20170928	2-Methylphenol (O-Cresol)	75	JD		Y	100	4
QNWP8-MW26S-GW-20170928	2-Nitroaniline		UD		Y	100	4
QNWP8-MW26S-GW-20170928	2-Nitrophenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	3,3'-Dichlorobenzidine		UD		Y	100	4
QNWP8-MW26S-GW-20170928	3-Nitroaniline		UD		Y	100	4
QNWP8-MW26S-GW-20170928	4,6-Dinitro-2-Methylphenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	4-Bromophenyl Phenyl Ether		UD		Y	100	4
QNWP8-MW26S-GW-20170928	4-Chloro-3-Methylphenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	4-Chloroaniline		UD		Y	100	4
QNWP8-MW26S-GW-20170928	4-Chlorophenyl Phenyl Ether		UD		Y	100	4
QNWP8-MW26S-GW-20170928	4-Nitroaniline		UD		Y	100	4
QNWP8-MW26S-GW-20170928	4-Nitrophenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Acenaphthene	120	D		Y	100	4
QNWP8-MW26S-GW-20170928	Acenaphthylene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Acetophenone		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Anthracene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Atrazine		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Benzaldehyde		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Benzo(A)Anthracene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Benzo(A)Pyrene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Benzo(B)Fluoranthene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Benzo(G,H,I)Perylene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Benzo(K)Fluoranthene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Benzyl Butyl Phthalate		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Biphenyl (Diphenyl)	49.6	JD		Y	100	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroethoxy) Methane		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroisopropyl) Ether		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Bis(2-Ethylhexyl) Phthalate		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Caprolactam		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Carbazole	65.5	JD		Y	100	4
QNWP8-MW26S-GW-20170928	Chrysene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Dibenz(A,H)Anthracene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Dibenzofuran	110	D		Y	100	4
QNWP8-MW26S-GW-20170928	Diethyl Phthalate		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Dimethyl Phthalate		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Di-N-Butyl Phthalate		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Di-N-Octylphthalate		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Fluoranthene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Fluorene	83.4	JD		Y	100	4
QNWP8-MW26S-GW-20170928	Hexachlorobenzene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Hexachlorobutadiene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Hexachlorocyclopentadiene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Hexachloroethane		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Indeno(1,2,3-C,D)Pyrene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Isophorone		UD		Y	100	4
QNWP8-MW26S-GW-20170928	M+P MethylPhenol	180	D		Y	100	4
QNWP8-MW26S-GW-20170928	Naphthalene	1900	ED		Y	100	4
QNWP8-MW26S-GW-20170928	Nitrobenzene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Nitrobenzene-D5	95.1			Y	10	4
QNWP8-MW26S-GW-20170928	N-Nitrosodi-N-Propylamine		UD		Y	100	4
QNWP8-MW26S-GW-20170928	N-Nitrosodiphenylamine		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Pentachlorophenol		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Phenanthrene	94.9	JD		Y	100	4
QNWP8-MW26S-GW-20170928	Phenol	33.1	JD		Y	100	4
QNWP8-MW26S-GW-20170928	Phenol-D6	40.1			Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW26S-GW-20170928	Pyrene		UD		Y	100	4
QNWP8-MW26S-GW-20170928	Terphenyl-D14	83.8			Y	10	4
QNWP8-MW26S-GW-20170928	Terphenyl-D14	83.8			Y	10	4
QNWP8-MW26S-GW-20170928	1,2,4,5-Tetrachlorobenzene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2,3,4,6-Tetrachlorophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2,4,5-Trichlorophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2,4,6-Tribromophenol	85.1			Y	100	4
QNWP8-MW26S-GW-20170928	2,4,6-Trichlorophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2,4-Dichlorophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2,4-Dimethylphenol	370	JD		Y	1000	4
QNWP8-MW26S-GW-20170928	2,4-Dinitrophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2,4-Dinitrotoluene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2,6-Dinitrotoluene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2-Chloronaphthalene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2-Chlorophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2-Fluorobiphenyl	120			Y	100	4
QNWP8-MW26S-GW-20170928	2-Fluorophenol	64.4			Y	100	4
QNWP8-MW26S-GW-20170928	2-Methylnaphthalene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2-Methylphenol (O-Cresol)		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2-Nitroaniline		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	2-Nitrophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	3,3'-Dichlorobenzidine		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	3-Nitroaniline		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	4,6-Dinitro-2-Methylphenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	4-Bromophenyl Phenyl Ether		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	4-Chloro-3-Methylphenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	4-Chloroaniline		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	4-Chlorophenyl Phenyl Ether		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	4-Nitroaniline		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	4-Nitrophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Acenaphthene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Acenaphthylene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Acetophenone		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Anthracene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Atrazine		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Benzaldehyde		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Benzo(A)Anthracene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Benzo(A)Pyrene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Benzo(B)Fluoranthene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Benzo(G,H,I)Perylene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Benzo(K)Fluoranthene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Benzyl Butyl Phthalate		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Biphenyl (Diphenyl)		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroethoxy) Methane		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Bis(2-Chloroisopropyl) Ether		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Bis(2-Ethylhexyl) Phthalate		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Caprolactam		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Carbazole		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Chrysene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Dibenz(A,H)Anthracene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Dibenzofuran		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Diethyl Phthalate		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Dimethyl Phthalate		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Di-N-Butyl Phthalate		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Di-N-Octylphthalate		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Fluoranthene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Fluorene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Hexachlorobenzene		UD		Y	1000	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW26S-GW-20170928	Hexachlorobutadiene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Hexachlorocyclopentadiene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Hexachloroethane		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Indeno(1,2,3-C,D)Pyrene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Isophorone		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	M+P MethylPhenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Naphthalene	3500	D		Y	1000	4
QNWP8-MW26S-GW-20170928	Nitrobenzene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Nitrobenzene-D5	97.8			Y	100	4
QNWP8-MW26S-GW-20170928	N-Nitrosodi-N-Propylamine		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	N-Nitrosodiphenylamine		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Pentachlorophenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Phenanthrene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Phenol		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Phenol-D6	42.6			Y	100	4
QNWP8-MW26S-GW-20170928	Pyrene		UD		Y	1000	4
QNWP8-MW26S-GW-20170928	Terphenyl-D14	89.8			Y	100	4
QNWP8-MW26S-GW-20170928	Terphenyl-D14	89.8			Y	100	4
QNWP8-MW27S-GW-20170928	1,2,4,5-Tetrachlorobenzene		U		Y	10	4
QNWP8-MW27S-GW-20170928	2,3,4,6-Tetrachlorophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	2,4,5-Trichlorophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	2,4,6-Tribromophenol	120			Y	1	4
QNWP8-MW27S-GW-20170928	2,4,6-Trichlorophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	2,4-Dichlorophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	2,4-Dimethylphenol	11			Y	10	4
QNWP8-MW27S-GW-20170928	2,4-Dinitrophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	2,4-Dinitrotoluene		U		Y	10	4
QNWP8-MW27S-GW-20170928	2,6-Dinitrotoluene		U		Y	10	4
QNWP8-MW27S-GW-20170928	2-Chloronaphthalene		U		Y	10	4
QNWP8-MW27S-GW-20170928	2-Chlorophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	2-Fluorobiphenyl	90.8			Y	1	4
QNWP8-MW27S-GW-20170928	2-Fluorophenol	67.6			Y	1	4
QNWP8-MW27S-GW-20170928	2-Methylnaphthalene	2.7	J		Y	10	4
QNWP8-MW27S-GW-20170928	2-Methylphenol (O-Cresol)		U		Y	10	4
QNWP8-MW27S-GW-20170928	2-Nitroaniline		U		Y	10	4
QNWP8-MW27S-GW-20170928	2-Nitrophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	3,3'-Dichlorobenzidine		U		Y	10	4
QNWP8-MW27S-GW-20170928	3-Nitroaniline		U		Y	10	4
QNWP8-MW27S-GW-20170928	4,6-Dinitro-2-Methylphenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	4-Bromophenyl Phenyl Ether		U		Y	10	4
QNWP8-MW27S-GW-20170928	4-Chloro-3-Methylphenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	4-Chloroaniline		U		Y	10	4
QNWP8-MW27S-GW-20170928	4-Chlorophenyl Phenyl Ether		U		Y	10	4
QNWP8-MW27S-GW-20170928	4-Nitroaniline		U		Y	10	4
QNWP8-MW27S-GW-20170928	4-Nitrophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	Acenaphthene	21.8			Y	10	4
QNWP8-MW27S-GW-20170928	Acenaphthylene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Acetophenone		U		Y	10	4
QNWP8-MW27S-GW-20170928	Anthracene	2.1	J		Y	10	4
QNWP8-MW27S-GW-20170928	Atrazine		U		Y	10	4
QNWP8-MW27S-GW-20170928	Benzaldehyde		U		Y	10	4
QNWP8-MW27S-GW-20170928	Benzo(A)Anthracene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Benzo(A)Pyrene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Benzo(B)Fluoranthene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Benzo(G,H,I)Perylene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Benzo(K)Fluoranthene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Benzyl Butyl Phthalate		U		Y	10	4
QNWP8-MW27S-GW-20170928	Biphenyl (Diphenyl)	5.2	J		Y	10	4
QNWP8-MW27S-GW-20170928	Bis(2-Chloroethoxy) Methane		U		Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-MW27S-GW-20170928	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	10	4
QNWP8-MW27S-GW-20170928	Bis(2-Chloroisopropyl) Ether		U		Y	10	4
QNWP8-MW27S-GW-20170928	Bis(2-Ethylhexyl) Phthalate		U		Y	10	4
QNWP8-MW27S-GW-20170928	Caprolactam		U		Y	10	4
QNWP8-MW27S-GW-20170928	Carbazole	13.8			Y	10	4
QNWP8-MW27S-GW-20170928	Chrysene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Dibenz(A,H)Anthracene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Dibenzofuran	15.6			Y	10	4
QNWP8-MW27S-GW-20170928	Diethyl Phthalate		U		Y	10	4
QNWP8-MW27S-GW-20170928	Dimethyl Phthalate	2.1	J		Y	10	4
QNWP8-MW27S-GW-20170928	Di-N-Butyl Phthalate		U		Y	10	4
QNWP8-MW27S-GW-20170928	Di-N-Octylphthalate		U		Y	10	4
QNWP8-MW27S-GW-20170928	Fluoranthene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Fluorene	13.4			Y	10	4
QNWP8-MW27S-GW-20170928	Hexachlorobenzene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Hexachlorobutadiene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Hexachlorocyclopentadiene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Hexachloroethane		U		Y	10	4
QNWP8-MW27S-GW-20170928	Indeno(1,2,3-C,D)Pyrene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Isophorone		U		Y	10	4
QNWP8-MW27S-GW-20170928	M+P MethylPhenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	Naphthalene	75.1			Y	10	4
QNWP8-MW27S-GW-20170928	Nitrobenzene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Nitrobenzene-D5	90.2			Y	1	4
QNWP8-MW27S-GW-20170928	N-Nitrosodi-N-Propylamine		U		Y	10	4
QNWP8-MW27S-GW-20170928	N-Nitrosodiphenylamine		U		Y	10	4
QNWP8-MW27S-GW-20170928	Pentachlorophenol		U		Y	10	4
QNWP8-MW27S-GW-20170928	Phenanthrene	13.8			Y	10	4
QNWP8-MW27S-GW-20170928	Phenol	3.4	J		Y	10	4
QNWP8-MW27S-GW-20170928	Phenol-D6	43.6			Y	1	4
QNWP8-MW27S-GW-20170928	Pyrene		U		Y	10	4
QNWP8-MW27S-GW-20170928	Terphenyl-D14	93.3			Y	1	4
QNWP8-MW27S-GW-20170928	Terphenyl-D14	93.3			Y	1	4
QNWP8-EQUIP-BLANK-20170928	1,2,4,5-Tetrachlorobenzene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2,3,4,6-Tetrachlorophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2,4,5-Trichlorophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2,4,6-Tribromophenol	140			Y	1	4
QNWP8-EQUIP-BLANK-20170928	2,4,6-Trichlorophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2,4-Dichlorophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2,4-Dimethylphenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2,4-Dinitrophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2,4-Dinitrotoluene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2,6-Dinitrotoluene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2-Chloronaphthalene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2-Chlorophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2-Fluorobiphenyl	95.6			Y	1	4
QNWP8-EQUIP-BLANK-20170928	2-Fluorophenol	67.9			Y	1	4
QNWP8-EQUIP-BLANK-20170928	2-Methylnaphthalene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2-Methylphenol (O-Cresol)		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2-Nitroaniline		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	2-Nitrophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	3,3'-Dichlorobenzidine		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	3-Nitroaniline		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	4,6-Dinitro-2-Methylphenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	4-Bromophenyl Phenyl Ether		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	4-Chloro-3-Methylphenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	4-Chloroaniline		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	4-Chlorophenyl Phenyl Ether		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	4-Nitroaniline		U		Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
QNWP8-EQUIP-BLANK-20170928	4-Nitrophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Acenaphthene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Acenaphthylene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Acetophenone		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Anthracene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Atrazine		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Benzaldehyde		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Benzo(A)Anthracene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Benzo(A)Pyrene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Benzo(B)Fluoranthene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Benzo(G,H,I)Perylene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Benzo(K)Fluoranthene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Benzyl Butyl Phthalate		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Biphenyl (Diphenyl)		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Bis(2-Chloroethoxy) Methane		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Bis(2-Chloroisopropyl) Ether		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Bis(2-Ethylhexyl) Phthalate		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Caprolactam		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Carbazole		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Chrysene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Dibenz(A,H)Anthracene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Dibenzofuran		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Diethyl Phthalate		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Dimethyl Phthalate		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Di-N-Butyl Phthalate		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Di-N-Octylphthalate		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Fluoranthene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Fluorene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Hexachlorobenzene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Hexachlorobutadiene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Hexachlorocyclopentadiene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Hexachloroethane		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Indeno(1,2,3-C,D)Pyrene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Isophorone		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	M+P MethylPhenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Naphthalene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Nitrobenzene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Nitrobenzene-D5	98.2			Y	1	4
QNWP8-EQUIP-BLANK-20170928	N-Nitrosodi-N-Propylamine		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	N-Nitrosodiphenylamine		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Pentachlorophenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Phenanthrene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Phenol		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Phenol-D6	41.8			Y	1	4
QNWP8-EQUIP-BLANK-20170928	Pyrene		U		Y	10	4
QNWP8-EQUIP-BLANK-20170928	Terphenyl-D14	94.3			Y	1	4
QNWP8-EQUIP-BLANK-20170928	Terphenyl-D14	94.3			Y	1	4
PB102898BL	1,2,4,5-Tetrachlorobenzene		U		Y	10	4
PB102898BL	2,3,4,6-Tetrachlorophenol		U		Y	10	4
PB102898BL	2,4,5-Trichlorophenol		U		Y	10	4
PB102898BL	2,4,6-Tribromophenol	120			Y	1	4
PB102898BL	2,4,6-Trichlorophenol		U		Y	10	4
PB102898BL	2,4-Dichlorophenol		U		Y	10	4
PB102898BL	2,4-Dimethylphenol		U		Y	10	4
PB102898BL	2,4-Dinitrophenol		U		Y	10	4
PB102898BL	2,4-Dinitrotoluene		U		Y	10	4
PB102898BL	2,6-Dinitrotoluene		U		Y	10	4
PB102898BL	2-Chloronaphthalene		U		Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
PB102898BL	2-Chlorophenol		U		Y	10	4
PB102898BL	2-Fluorobiphenyl	85.5			Y	1	4
PB102898BL	2-Fluorophenol	120			Y	1	4
PB102898BL	2-Methylnaphthalene		U		Y	10	4
PB102898BL	2-Methylphenol (O-Cresol)		U		Y	10	4
PB102898BL	2-Nitroaniline		U		Y	10	4
PB102898BL	2-Nitrophenol		U		Y	10	4
PB102898BL	3,3'-Dichlorobenzidine		U		Y	10	4
PB102898BL	3-Nitroaniline		U		Y	10	4
PB102898BL	4,6-Dinitro-2-Methylphenol		U		Y	10	4
PB102898BL	4-Bromophenyl Phenyl Ether		U		Y	10	4
PB102898BL	4-Chloro-3-Methylphenol		U		Y	10	4
PB102898BL	4-Chloroaniline		U		Y	10	4
PB102898BL	4-Chlorophenyl Phenyl Ether		U		Y	10	4
PB102898BL	4-Nitroaniline		U		Y	10	4
PB102898BL	4-Nitrophenol		U		Y	10	4
PB102898BL	Acenaphthene		U		Y	10	4
PB102898BL	Acenaphthylene		U		Y	10	4
PB102898BL	Acetophenone		U		Y	10	4
PB102898BL	Anthracene		U		Y	10	4
PB102898BL	Atrazine		U		Y	10	4
PB102898BL	Benzaldehyde		U		Y	10	4
PB102898BL	Benzo(A)Anthracene		U		Y	10	4
PB102898BL	Benzo(A)Pyrene		U		Y	10	4
PB102898BL	Benzo(B)Fluoranthene		U		Y	10	4
PB102898BL	Benzo(G,H,I)Perylene		U		Y	10	4
PB102898BL	Benzo(K)Fluoranthene		U		Y	10	4
PB102898BL	Benzyl Butyl Phthalate		U		Y	10	4
PB102898BL	Biphenyl (Diphenyl)		U		Y	10	4
PB102898BL	Bis(2-Chloroethoxy) Methane		U		Y	10	4
PB102898BL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	10	4
PB102898BL	Bis(2-Chloroisopropyl) Ether		U		Y	10	4
PB102898BL	Bis(2-Ethylhexyl) Phthalate		U		Y	10	4
PB102898BL	Caprolactam		U		Y	10	4
PB102898BL	Carbazole		U		Y	10	4
PB102898BL	Chrysene		U		Y	10	4
PB102898BL	Dibenz(A,H)Anthracene		U		Y	10	4
PB102898BL	Dibenzofuran		U		Y	10	4
PB102898BL	Diethyl Phthalate		U		Y	10	4
PB102898BL	Dimethyl Phthalate		U		Y	10	4
PB102898BL	Di-N-Butyl Phthalate		U		Y	10	4
PB102898BL	Di-N-Octylphthalate		U		Y	10	4
PB102898BL	Fluoranthene		U		Y	10	4
PB102898BL	Fluorene		U		Y	10	4
PB102898BL	Hexachlorobenzene		U		Y	10	4
PB102898BL	Hexachlorobutadiene		U		Y	10	4
PB102898BL	Hexachlorocyclopentadiene		U		Y	10	4
PB102898BL	Hexachloroethane		U		Y	10	4
PB102898BL	Indeno(1,2,3-C,D)Pyrene		U		Y	10	4
PB102898BL	Isophorone		U		Y	10	4
PB102898BL	M+P MethylPhenol		U		Y	10	4
PB102898BL	Naphthalene		U		Y	10	4
PB102898BL	Nitrobenzene		U		Y	10	4
PB102898BL	Nitrobenzene-D5	83.1			Y	1	4
PB102898BL	N-Nitrosodi-N-Propylamine		U		Y	10	4
PB102898BL	N-Nitrosodiphenylamine		U		Y	10	4
PB102898BL	Pentachlorophenol		U		Y	10	4
PB102898BL	Phenanthrene		U		Y	10	4
PB102898BL	Phenol		U		Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
PB102898BL	Phenol-D6	110			Y	1	4
PB102898BL	Pyrene		U		Y	10	4
PB102898BL	Terphenyl-D14	74			Y	1	4
PB102898BL	Terphenyl-D14	74			Y	1	4
PB102898BS	1,2,4,5-Tetrachlorobenzene	33.7			Y	10	4
PB102898BS	2,3,4,6-Tetrachlorophenol	39.6			Y	10	4
PB102898BS	2,4,5-Trichlorophenol	37.3			Y	10	4
PB102898BS	2,4,6-Tribromophenol	110			Y	1	4
PB102898BS	2,4,6-Trichlorophenol	34.9			Y	10	4
PB102898BS	2,4-Dichlorophenol	38.4			Y	10	4
PB102898BS	2,4-Dimethylphenol	37.1			Y	10	4
PB102898BS	2,4-Dinitrophenol	68.7			Y	10	4
PB102898BS	2,4-Dinitrotoluene	39.8			Y	10	4
PB102898BS	2,6-Dinitrotoluene	38.5			Y	10	4
PB102898BS	2-Chloronaphthalene	36.5			Y	10	4
PB102898BS	2-Chlorophenol	36.6			Y	10	4
PB102898BS	2-Fluorobiphenyl	78.6			Y	1	4
PB102898BS	2-Fluorophenol	110			Y	1	4
PB102898BS	2-Methylnaphthalene	40			Y	10	4
PB102898BS	2-Methylphenol (O-Cresol)	38.3			Y	10	4
PB102898BS	2-Nitroaniline	37.2			Y	10	4
PB102898BS	2-Nitrophenol	41			Y	10	4
PB102898BS	3,3'-Dichlorobenzidine	25.5			Y	10	4
PB102898BS	3-Nitroaniline	28.3			Y	10	4
PB102898BS	4,6-Dinitro-2-Methylphenol	37.4			Y	10	4
PB102898BS	4-Bromophenyl Phenyl Ether	39.3			Y	10	4
PB102898BS	4-Chloro-3-Methylphenol	36.5			Y	10	4
PB102898BS	4-Chloroaniline	23.9			Y	10	4
PB102898BS	4-Chlorophenyl Phenyl Ether	37			Y	10	4
PB102898BS	4-Nitroaniline	41.1			Y	10	4
PB102898BS	4-Nitrophenol	66.4			Y	10	4
PB102898BS	Acenaphthene	34.2			Y	10	4
PB102898BS	Acenaphthylene	37.1			Y	10	4
PB102898BS	Acetophenone	34			Y	10	4
PB102898BS	Anthracene	39.4			Y	10	4
PB102898BS	Atrazine	39.9			Y	10	4
PB102898BS	Benzaldehyde	27.1			Y	10	4
PB102898BS	Benzo(A)Anthracene	39.4			Y	10	4
PB102898BS	Benzo(A)Pyrene	39.6			Y	10	4
PB102898BS	Benzo(B)Fluoranthene	41			Y	10	4
PB102898BS	Benzo(G,H,I)Perylene	38.2			Y	10	4
PB102898BS	Benzo(K)Fluoranthene	35.4			Y	10	4
PB102898BS	Benzyl Butyl Phthalate	39			Y	10	4
PB102898BS	Biphenyl (Diphenyl)	35.1			Y	10	4
PB102898BS	Bis(2-Chloroethoxy) Methane	37.6			Y	10	4
PB102898BS	Bis(2-Chloroethyl) Ether (2-Chloroethyl	36.7			Y	10	4
PB102898BS	Bis(2-Chloroisopropyl) Ether	35.4			Y	10	4
PB102898BS	Bis(2-Ethylhexyl) Phthalate	38.8			Y	10	4
PB102898BS	Caprolactam	39.8			Y	10	4
PB102898BS	Carbazole	37.8			Y	10	4
PB102898BS	Chrysene	38.5			Y	10	4
PB102898BS	Dibenz(A,H)Anthracene	37.4			Y	10	4
PB102898BS	Dibenzofuran	38.7			Y	10	4
PB102898BS	Diethyl Phthalate	36.5			Y	10	4
PB102898BS	Dimethyl Phthalate	37.2			Y	10	4
PB102898BS	Di-N-Butyl Phthalate	37.9			Y	10	4
PB102898BS	Di-N-Octylphthalate	39.7			Y	10	4
PB102898BS	Fluoranthene	39.4			Y	10	4
PB102898BS	Fluorene	37.3			Y	10	4

#sys_sample_code	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	reporting detection limit	validation level
PB102898BS	Hexachlorobenzene	36.5			Y	10	4
PB102898BS	Hexachlorobutadiene	35.6			Y	10	4
PB102898BS	Hexachlorocyclopentadiene	64.1			Y	10	4
PB102898BS	Hexachloroethane	36			Y	10	4
PB102898BS	Indeno(1,2,3-C,D)Pyrene	39.3			Y	10	4
PB102898BS	Isophorone	37.2			Y	10	4
PB102898BS	M+P MethylPhenol	36.2			Y	10	4
PB102898BS	Naphthalene	37.1			Y	10	4
PB102898BS	Nitrobenzene	35.5			Y	10	4
PB102898BS	Nitrobenzene-D5	77.6			Y	1	4
PB102898BS	N-Nitrosodi-N-Propylamine	34.6			Y	10	4
PB102898BS	N-Nitrosodiphenylamine	37.7			Y	10	4
PB102898BS	Pentachlorophenol	59			Y	10	4
PB102898BS	Phenanthrene	38.4			Y	10	4
PB102898BS	Phenol	37.8			Y	10	4
PB102898BS	Phenol-D6	110			Y	1	4
PB102898BS	Pyrene	37.7			Y	10	4
PB102898BS	Terphenyl-D14	72.8			Y	1	4
PB102898BS	Terphenyl-D14	72.8			Y	1	4
QNWP8-MW30S-GW-20170927	Sulfide	4.0			N	1	
QNWP8-MW30S-GWMS	Sulfide	18.6			N	1	
QNWP8-MW30S-GWMSD	Sulfide	18.7			N	1	
QNWP8-MW30D-GW-20170927	Sulfide	4.64			N	1	
QNWP8-MW26S-GW-20170928	Sulfide	62.1			N	1	
QNWP8-MW27S-GW-20170928	Sulfide	13.4			N	1	

Appendix 2
Well Purge Logs

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW 26S	SAMPLE ID: MW- MW26S	DATE: 9/28/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006"	WELL SCREEN INTERVAL DEPTH: feet to 3 feet 18.5	STATIC DEPTH TO WATER (feet): 6.23	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (16.20 feet – 6.23 feet) X 0.16 gallons/foot = 4.7 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 0750	PURGING ENDED AT: 0830	TOTAL VOLUME PURGED (gallons): ~6.5

TIME	VOLUME PURGED (gallons) L	CUMUL. VOLUME PURGED (gallons) L	PURGE RATE (gpm) mL/min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0750	0.5	2.25	450	6.23	7.08	6.54	4.1	3.62	21.07	3.5	4.07	-332	clear	organic odor
0755	2.25	4.50	450	6.24	7.19	5.95	0.9	2.62	19.16	3.2	3.76	-367	clear	"
0800	2.5	7.00	500	6.25	7.17	6.32	0.6	2.11	18.23	3.4	4.00	-371	clear	"
0805	2.25	9.25	450	6.25	7.15	7.03	2.0	1.66	17.87	3.9	4.46	-372	clear	"
0810	2.50	11.75	500	6.26	7.06	6.54	2.1	1.44	18.09	3.7	4.30	-373	clear	"
0815	2.25	14	450	6.26	7.05	6.72	1.6	1.40	17.63	3.7	4.31	-373	clear	"
0820	2.25	16.25	450	6.27	7.09	6.77	1.0	1.45	17.50	4.0	4.41	-373	clear	"
0825	2.50	18.75	500	6.28	7.03	6.80	1.1	1.42	17.46	4.1	4.46	-373	"	"
0830	2.50	21.25	500	6.28	7.00	6.81	0.0	1.43	17.51	4.1	4.48	-372	clear	↓
0915	2.50	23.75	500	6.32	6.99	6.84	0.0	1.39	17.41	4.1	4.53	-373	"	↓

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES: Eva Jku	SAMPLING INITIATED AT: 0840	SAMPLING ENDED AT: 0910
PUMP OR TUBING DEPTH IN WELL (feet): 11	SAMPLE PUMP FLOW RATE (mL per minute): 450	TUBING MATERIAL CODE: teflon lined Poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QAWP8-MW26S	3	CG	40	HCL	—	6.99	TCL VOCs	PP
	2	AG	1000	—			TCL SVOCs	
	3	CG	40	HCL			TPH DRO	
	2	AG	1000	—			TPH GRO	
	1	PE	500	HNO_3			total Iron	
				$NaOH_2N$			Sulfide	
				—			Sulfate	
				—			Alkalinity	

REMARKS: PID = 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 27S	SAMPLE ID: MW- 27S	DATE: 9/28/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006"	WELL SCREEN INTERVAL DEPTH: feet to 8.5 feet 18.5	STATIC DEPTH TO WATER (feet): 8.32'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (15.60 feet – 8.32 feet) X 0.16 gallons/foot = 3.4 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 0930	PURGING ENDED AT: 1045	TOTAL VOLUME PURGED (gallons): 7.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0940	0.5	2.5	450	8.32	7.89	4.26	71.1	2.45	19.07	2.3	2.72	-357	slight cloudy	Organic odor
0945	2.25	5.75	450	8.32	7.63	4.19	25.1	1.57	19.39	2.2	2.69	-368	"	"
0950	2.25	7.0	450	8.33	7.57	4.23	20.2	1.49	18.88	2.2	2.71	-360	clear	"
0955	2.1	9.1	425	8.33	7.50	4.20	15.0	1.45	18.66	2.2	2.68	-358	"	"
1000	2.25	11.35	450	8.34	7.42	4.17	15.0	1.28	18.57	2.2	2.67	-356	clear	"
1005	2.1	1345	425	8.35	7.33	4.16	8.0	1.11	18.51	2.2	2.66	-356	"	
1010	2.3	15.75	475	8.35	7.29	4.14	7.1	1.05	18.51	2.2	2.65	-354	"	"
1015	2.25	18	450	8.36	7.25	4.12	5.0	0.98	18.50	2.2	2.64	-354	clear	"
1020	2.5	20.5	500	8.37	7.21	4.09	4.2	0.91	18.49	2.2	2.61	-354	↓	"
1025	2.5	23	500	8.37	7.20	4.06	3.0	0.88	18.45	2.2	2.60	-354	↓	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1055	SAMPLING ENDED AT: 1130
PUMP OR TUBING DEPTH IN WELL (feet): 11	SAMPLE PUMP FLOW RATE (mL per minute): 450	TUBING MATERIAL CODE: teflon lined Poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWJPB-MW27S	3	GG	40	HCL	—	7.10	TCL VOCs	PP
	2	AG	1000	—	—		TCL SVOCs	
	3	CG	40	HCL			TPH DRO	
	2	AG	1000	—			TPH GRO	
	1	PE	500	HNO_3			total Iron	
	1			$NaOH_2N$			Sulfide	
	1			—			Sulfate	
	1			—			Alkalinity	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8		SITE LOCATION: Long Island City, Queens, New York
Well No: MW- 27S continued	SAMPLE ID: MW- MW - 27S	DATE: 9/28/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 8.32'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons): 7.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1030	2.25	25.25	450	8.39	7.15	4.00	0.0	0.81	18.42	2.1	2.56	-354	clear	organic odor
1035	2.25	27.5	450	8.39	7.20	3.96	0.0	0.82	18.37	2.1	2.54	-355		"
1040	2.25	29.75	450	8.40	7.12	3.93	0.0	0.77	18.31	2.1	2.52	-356		"
1045	2.25	27	450	8.41	7.11	3.92	0.0	0.75	18.30	2.1	2.51	-358		"
1140	2.25	29.25	450	8.49	7.10	3.91	0.0	0.69	18.30	2.1	2.50	-360	↓	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: ELA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1055	SAMPLING ENDED AT: 1130
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 30S	SAMPLE ID: MW- 30S	DATE: 9/27/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 5,5 feet 15	STATIC DEPTH TO WATER (feet): 7.90'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (14.85 feet – 7.90' feet) X 0.16 gallons/foot = 3.3 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 0810	PURGING ENDED AT: 0855	TOTAL VOLUME PURGED (gallons): ≈5

TIME	VOLUME PURGED (gallons) L	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm) mL/min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0815	0.5	2.0	400	7.90	6.44	1.48	347	4.10	18.78	0.7	0.944	-178	cloudy	Sulfur + diesel
0820	2.5	2.1	425	7.91	6.51	1.35	35.8	3.36	18.95	0.7	0.871	-169	clear	"
0825	4.6	2.1	425	7.91	6.44	1.24	5.5	2.27	19.18	0.6	0.796	-144	clear	"
0830	6.7	2.0	400	7.92	6.48	1.26	0.7	1.84	19.18	0.6	0.805	-156	clear	"
0835	8.7	2.0	400	7.92	6.51	1.28	0.0	1.89	19.23	0.6	0.815	-141	clear	"
0840	10.7	2.0	400	7.93	6.71	1.30	0.0	2.00	18.98	0.7	0.865	-148	clear	"
0845	12.7	2.1	425	7.93	6.74	1.39	0.0	2.05	18.82	0.7	0.840	-174	clear	↓
0850	14.8	2.1	425	7.94	6.78	1.41	0.0	1.98	18.63	0.7	0.902	-177	"	
0855	16.9	2.0	400	7.94	6.79	1.42	0.0	1.93	18.61	0.7	0.907	-177	"	
0935	18.9	2.0	400	7.96	6.81	1.46	0.0	1.86	18.50	0.7	0.933	-177	'	↓

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSICA	SAMPLER(S) SIGNATURES: Eva Jku	SAMPLING INITIATED AT: 0900	SAMPLING ENDED AT: 0930
PUMP OR TUBING DEPTH IN WELL (feet): 11	SAMPLE PUMP FLOW RATE (mL per minute): 400	TUBING MATERIAL CODE: teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW30S	3	GG	40	HCL	—	6.81	TCL VOC	PP
	2	AG	1000	—			TCL SVOC	
	3	CG	40	HCL			TPH DRO	
	2	AG	1000	—			TPH GRO	
	1	PE	500	HNO_3			total Iron	
	1			$NaOH_2N$			Sulfide	
	1			—			Sulfate	
	1			—			Alkalinity	

REMARKS: PID = 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 30D	SAMPLE ID: MW- 30D	DATE: 9/27/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 19 feet 29	STATIC DEPTH TO WATER (feet): 8.25	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable
= (28.30 feet – 8.25' feet) X 0.16 gallons/foot = 9.6 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 20	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21	PURGING INITIATED AT: 1010	PURGING ENDED AT: 1135	TOTAL VOLUME PURGED (gallons): ≈11

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (ml/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1015	0.5	2.25	450	8.25	6.90	5.45	264	3.61	20.08	2.9	3.45	-186	cloudy	sewage odor
1020	2.25	4.50	450	8.25	6.91	5.55	183	2.81	19.64	3.0	3.49	-196	"	"
1025	2.25	6.75	450	8.26	6.93	5.62	24.0	2.01	19.39	3.0	3.54	-207	clear	"
1030	2.5	9.25	500	8.27	6.97	5.61	2.6	1.58	19.35	3.0	3.52	-211	clear	"
1035	2.5	11.75	500	8.28	6.98	5.57	1.3	1.62	19.36	3.0	3.48	-231	clear	
1040	2.25	14.0	450	8.29	7.04	5.45	8.9	1.64	20.43	2.9	3.43	-187	clear	
1045	2.25	16.25	450	8.29	7.01	5.51	7.4	1.60	19.87	3.0	3.47	-186	"	
1050	2.25	18.50	450	8.31	7.04	5.56	5.1	3.68	19.71	3.0	3.49	-166	"	
1055	2.25	20.75	450	8.31	7.01	5.51	1.0	3.05	19.83	3.0	3.46	-178	"	
1100	2.1	22.85	425	8.31	7.02	5.49	0.0	2.65	19.85	3.0	3.45	-186	"	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1145	SAMPLING ENDED AT: 1215
ENA JAKUBONSKA	Ena JKU		
PUMP OR TUBING DEPTH IN WELL (feet): 21	SAMPLE PUMP FLOW RATE (mL per minute): 450	TUBING MATERIAL CODE: teflon lined Poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
GNUPE-MW30D	3	CG	40	HCL	—	7.03	TCL VOC	PP
	2	AG	1000	—	—		TCL SVOC	
	3	CG	40	HCL			TPH DRO	
	2	AG	1000	—			TPH GRO	
	1	PE	500	HNO_3			total Iron	
	1			$NaOH_2N$			sulfide	
	1			—			sulfate	
							Alkalinity	

REMARKS: PID = 0.0 ppm

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW30D cont	SAMPLE ID: MW- 30D	DATE: 9/27/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006"	WELL SCREEN INTERVAL DEPTH: feet to 19 feet 29	STATIC DEPTH TO WATER (feet): 8.25	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 20	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21	PURGING INITIATED AT: 1010	PURGING ENDED AT: 1135	TOTAL VOLUME PURGED (gallons): 211

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/min)	DEPTH TO WATER (feet)	pH (standard units)	COND (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1105	2.25	25.1	450	8.32	7.00	5.48	0.0	2.37	19.90	3.0	3.45	-191	clear	organic odor
1110	2.25	27.35	450	8.32	6.99	5.47	0.0	2.20	19.86	3.0	3.44	-195	clear	"
1115	2.1	29.45	425	8.32	6.98	5.48	0.0	2.12	19.62	3.0	3.46	-197	clear	"
1120	2.1	31.55	425	8.33	6.97	5.45	0.0	2.10	19.57	3.0	3.47	-193	clear	
1125	2.25	33.8	450	8.34	6.98	5.42	0.0	2.08	19.57	3.0	3.45	-189		
1130	2.25	36.05	450	8.34	7.00	5.45	0.0	2.03	19.58	3.0	3.49	-187		
1135	2.5	38.55	500	8.36	7.01	5.50	0.0	1.98	19.57	3.0	3.51	-183		
1220	2.5	41.05	500	8.38	7.03	5.53	0.0	1.96	19.62	3.0	3.55	-187		

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1145	SAMPLING ENDED AT: 1215
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 26D	SAMPLE ID: MW- 26D	DATE: 9/27/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to 21 feet 30.2	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (30.20 feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
				product not detected with probe however product noted @ tip of bailer and product globules observed within bailer.										

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
				D.T.W -		6.32'		
				T.D -		30.25		
				D.T.P. - Bottom		± 0.5'		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 27D	SAMPLE ID: MW- 27D	DATE: 9/28/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
							product	closest						
							on	probe						
								≈ 3" of			product			

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type: _____	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
			P.T.W. =		8.25'	≈ 3" of Product		
			P.T.B. =		310.3'	@ Bottom.		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Appendix 3

Laboratory Groundwater Analytical Report

Included on Attached CD

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA FOR

VOLATILE ORGANICS

GC SEMI-VOLATILES

METALS

GENERAL CHEMISTRY

PROJECT NAME : HUNTERS POINT - QUEENS WEST LIBRARY

LIRO ENGINEERS, INC.

690 Delaware Ave.

Buffalo, NY - 14209

Phone No: 716-882-5476

ORDER ID : I5526

ATTENTION : Steve Frank

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 10/05/2017

Dear Steve Frank,

6 water samples for the **Hunters Point - Queens West Library** project were received on **09/28/2017.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

The invoice for this workorder is also attached to the e-mail.

Regards,

Loreana Davi

908 728 3147

Loreana@chemtech.net

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
QUOTE NO. 15826
COC Number 040967

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: LiRo Engineers, Inc.
ADDRESS: 703 Lorimer Street
CITY: Brooklyn STATE: NY ZIP: 11211
ATTENTION: Steve Frank
PHONE: 716 882 5476 FAX: —

CLIENT PROJECT INFORMATION

PROJECT NAME: Queens West Parcel B, Hunters Point Library, NYSDEC C241052
PROJECT NO.: 15-008-0265 LOCATION: LIC, NY
PROJECT MANAGER: Steve Frank
e-mail: franks@liro.com
PHONE: 716 882 5476 FAX: —

CLIENT BILLING INFORMATION

BILL TO: LiRO PO#:
ADDRESS: 690 Delaware Ave
CITY: Buffalo STATE: NY ZIP:
ATTENTION: S. Frank PHONE: —

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: Email: 5 day TAT DAYS *
PREAPPROVED TAT: ☒ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ LEVEL 1: Results only
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format: _____
☒ Others Full Category B

ANALYSIS

1 TCL VOCs 8260B
2 TCL SVOCs 8270C
3 TPH DRO 8015
4 TPH GRO 8015
5 Total Iron 6010C
6 Sulfide 376.1
7 Sulfate 300.0/9056
8 Alkalinity 310.2
9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9
1.	QNWP8-MW30S-GW	GW		X	9/27/17	0930	10	A	E	E	A	B	D	E	E	
2.	QNWP8-MW30D-GW	GW		X	"	1215	10									
3.	QNWP8-MW26S-GW	GW		X	9/28/17	0910	10									
4.	QNWP8-MW27S-GW	GW		X		1130	10									
5.	QNWP8-Equip. Blank	DI H2O		X		1300	7									
6.	QNWP8-Trip Blank	DI water		X	9/28/17	—	2									
7.																
8.																
9.																
10.																

COMMENTS

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME	RECEIVED BY
1. RELINQUISHED BY SAMPLER:	9/28/17 1335	1.
2. RELINQUISHED BY:	DATE/TIME:	2. RECEIVED BY:
3. RELINQUISHED BY:	DATE/TIME: 9-28-17 1805	3. RECEIVED FOR LAB BY:

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant
Cooler Temp. 5.1i
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments: Data Format; NY Regulatory, Full Category B, NYSDEC EQUIS EDD
Ice in Cooler?: yes

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☒ PICKED UP ☐ OVERNIGHT
Shipment Complete: ☐ YES ☐ NO

Revision 8/2007

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17 09:30
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	598		1	0.4	1	2	mg/L		10/02/17 16:46	SM2320 B
Sulfate	111	OR	1	0.13	0.375	0.75	mg/L		09/28/17 18:37	300.0
Sulfide	4		1	0.03	0.5	1	mg/L	09/30/17 10:51	09/30/17 14:08	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17 09:30
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	96.5	D	10	1.3	3.75	7.5	mg/L		09/28/17 22:37	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE023275.D	1	10/04/17 08:00	10/04/17 16:13	PB102899

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	264		25	25	50	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	19.6		29 - 130		98%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB011197.D	1	10/04/17 14:16	FB100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	45	U	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	19.2		50 - 150		96%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	12800		1	12.5	12.5	50	ug/L	10/03/17 09:02	10/03/17 17:52	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099073.D	1	10/04/17 09:08	10/04/17 18:11	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10	U	0.77	1	10	ug/L
108-95-2	Phenol	10	U	0.21	1	10	ug/L
111-44-4	bis(2-Chloroethyl)ether	10	U	0.55	1	10	ug/L
95-57-8	2-Chlorophenol	10	U	0.54	1	10	ug/L
95-48-7	2-Methylphenol	10	U	0.24	1	10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10	U	0.17	1	10	ug/L
98-86-2	Acetophenone	10	U	0.14	1	10	ug/L
65794-96-9	3+4-Methylphenols	10	U	0.38	1	10	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10	U	0.2	1	10	ug/L
67-72-1	Hexachloroethane	10	U	0.25	1	10	ug/L
98-95-3	Nitrobenzene	10	U	0.68	1	10	ug/L
78-59-1	Isophorone	10	U	0.3	1	10	ug/L
88-75-5	2-Nitrophenol	10	U	0.52	1	10	ug/L
105-67-9	2,4-Dimethylphenol	10	U	0.71	1	10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10	U	0.55	1	10	ug/L
120-83-2	2,4-Dichlorophenol	10	U	0.66	1	10	ug/L
91-20-3	Naphthalene	10	U	0.12	1	10	ug/L
106-47-8	4-Chloroaniline	10	U	1	1	10	ug/L
87-68-3	Hexachlorobutadiene	10	U	0.25	1	10	ug/L
105-60-2	Caprolactam	10	U	1	1	10	ug/L
59-50-7	4-Chloro-3-methylphenol	10	U	0.4	1	10	ug/L
91-57-6	2-Methylnaphthalene	10	U	0.32	1	10	ug/L
77-47-4	Hexachlorocyclopentadiene	10	U	0.24	1	10	ug/L
88-06-2	2,4,6-Trichlorophenol	10	U	0.56	1	10	ug/L
95-95-4	2,4,5-Trichlorophenol	10	U	0.4	1	10	ug/L
92-52-4	1,1-Biphenyl	10	U	0.15	1	10	ug/L
91-58-7	2-Chloronaphthalene	10	U	0.16	1	10	ug/L
88-74-4	2-Nitroaniline	10	U	0.49	1	10	ug/L
131-11-3	Dimethylphthalate	4.6	J	0.22	1	10	ug/L
208-96-8	Acenaphthylene	10	U	0.7	1	10	ug/L
606-20-2	2,6-Dinitrotoluene	10	U	0.32	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099073.D	1	10/04/17 09:08	10/04/17 18:11	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10	U	1	1	10	ug/L
83-32-9	Acenaphthene	10	U	0.21	1	10	ug/L
51-28-5	2,4-Dinitrophenol	10	U	2.1	8	10	ug/L
100-02-7	4-Nitrophenol	10	U	2	5	10	ug/L
132-64-9	Dibenzofuran	10	U	0.24	1	10	ug/L
121-14-2	2,4-Dinitrotoluene	10	U	1	1	10	ug/L
84-66-2	Diethylphthalate	2.7	J	0.38	1	10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10	U	0.21	1	10	ug/L
86-73-7	Fluorene	10	U	0.31	1	10	ug/L
100-01-6	4-Nitroaniline	10	U	1.4	2	10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10	U	0.74	2	10	ug/L
86-30-6	n-Nitrosodiphenylamine	10	U	0.6	1	10	ug/L
101-55-3	4-Bromophenyl-phenylether	10	U	0.23	1	10	ug/L
118-74-1	Hexachlorobenzene	10	U	0.18	1	10	ug/L
1912-24-9	Atrazine	10	U	0.4	1	10	ug/L
87-86-5	Pentachlorophenol	10	U	1	1	10	ug/L
85-01-8	Phenanthrene	10	U	0.26	1	10	ug/L
120-12-7	Anthracene	10	U	0.16	1	10	ug/L
86-74-8	Carbazole	10	U	0.22	1	10	ug/L
84-74-2	Di-n-butylphthalate	10	U	1	1	10	ug/L
206-44-0	Fluoranthene	10	U	0.4	1	10	ug/L
129-00-0	Pyrene	10	U	0.2	1	10	ug/L
85-68-7	Butylbenzylphthalate	10	U	0.19	1	10	ug/L
91-94-1	3,3-Dichlorobenzidine	10	U	1	1	10	ug/L
56-55-3	Benzo(a)anthracene	10	U	0.16	1	10	ug/L
218-01-9	Chrysene	10	U	0.18	1	10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	0.16	1	10	ug/L
117-84-0	Di-n-octyl phthalate	10	U	0.51	1	10	ug/L
205-99-2	Benzo(b)fluoranthene	10	U	0.29	1	10	ug/L
207-08-9	Benzo(k)fluoranthene	10	U	0.18	1	10	ug/L
50-32-8	Benzo(a)pyrene	10	U	0.14	1	10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	0.15	1	10	ug/L
53-70-3	Dibenzo(a,h)anthracene	10	U	0.42	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099073.D	1	10/04/17 09:08	10/04/17 18:11	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10	U	0.29	1	10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U	0.2	1	10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10	U	0.2	1	10	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	61.6		10 - 130		41%	SPK: 150
13127-88-3	Phenol-d6	37.8		10 - 130		25%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.2		36 - 131		89%	SPK: 100
321-60-8	2-Fluorobiphenyl	88.6		39 - 131		89%	SPK: 100
118-79-6	2,4,6-Tribromophenol	130		25 - 155		85%	SPK: 150
1718-51-0	Terphenyl-d14	90.1		23 - 130		90%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	135272	6.86				
1146-65-2	Naphthalene-d8	574276	8.15				
15067-26-2	Acenaphthene-d10	264833	9.9				
1517-22-2	Phenanthrene-d10	467741	11.39				
1719-03-5	Chrysene-d12	314735	14.03				
1520-96-3	Perylene-d12	239578	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043897.D	1		10/05/17 13:35	VN100517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	7.5		0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043897.D	1		10/05/17 13:35	VN100517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	5.8		0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.2		61 - 141		106%	SPK: 50
1868-53-7	Dibromofluoromethane	49.8		69 - 133		100%	SPK: 50
2037-26-5	Toluene-d8	51.9		65 - 126		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.8		58 - 135		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1162120	7.67				
540-36-3	1,4-Difluorobenzene	1879550	8.59				
3114-55-4	Chlorobenzene-d5	1591230	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	597462	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043897.D	1		10/05/17 13:35	VN100517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17 12:15
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	2190	D	10	4	10	20	mg/L		10/02/17 17:45	SM2320 B
Sulfate	640	OR	1	0.13	0.375	0.75	mg/L		09/28/17 20:07	300.0
Sulfide	4.64		1	0.03	0.5	1	mg/L	09/30/17 10:51	09/30/17 14:22	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17 12:15
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-02DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	480	D	20	2.6	7.5	15	mg/L		09/29/17 10:11	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time
J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE023280.D	20	10/04/17 08:00	10/04/17 19:10	PB102899

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	12700		500	500	1000	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	0.69		29 - 130		69%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB011201.D	10	10/04/17 16:20	FB100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	450	U	120	225	450	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	21.9		50 - 150		110%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	881		1	12.5	12.5	50	ug/L	10/03/17 09:02	10/03/17 18:25	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099074.D	1	10/04/17 09:08	10/04/17 18:38	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10	U	0.77	1	10	ug/L
108-95-2	Phenol	4.5	J	0.21	1	10	ug/L
111-44-4	bis(2-Chloroethyl)ether	10	U	0.55	1	10	ug/L
95-57-8	2-Chlorophenol	10	U	0.54	1	10	ug/L
95-48-7	2-Methylphenol	10	U	0.24	1	10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10	U	0.17	1	10	ug/L
98-86-2	Acetophenone	10	U	0.14	1	10	ug/L
65794-96-9	3+4-Methylphenols	10	U	0.38	1	10	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10	U	0.2	1	10	ug/L
67-72-1	Hexachloroethane	10	U	0.25	1	10	ug/L
98-95-3	Nitrobenzene	10	U	0.68	1	10	ug/L
78-59-1	Isophorone	10	U	0.3	1	10	ug/L
88-75-5	2-Nitrophenol	10	U	0.52	1	10	ug/L
105-67-9	2,4-Dimethylphenol	32.7		0.71	1	10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10	U	0.55	1	10	ug/L
120-83-2	2,4-Dichlorophenol	10	U	0.66	1	10	ug/L
91-20-3	Naphthalene	2100	E	0.12	1	10	ug/L
106-47-8	4-Chloroaniline	10	U	1	1	10	ug/L
87-68-3	Hexachlorobutadiene	10	U	0.25	1	10	ug/L
105-60-2	Caprolactam	10	U	1	1	10	ug/L
59-50-7	4-Chloro-3-methylphenol	10	U	0.4	1	10	ug/L
91-57-6	2-Methylnaphthalene	370	E	0.32	1	10	ug/L
77-47-4	Hexachlorocyclopentadiene	10	U	0.24	1	10	ug/L
88-06-2	2,4,6-Trichlorophenol	10	U	0.56	1	10	ug/L
95-95-4	2,4,5-Trichlorophenol	10	U	0.4	1	10	ug/L
92-52-4	1,1-Biphenyl	43		0.15	1	10	ug/L
91-58-7	2-Chloronaphthalene	10	U	0.16	1	10	ug/L
88-74-4	2-Nitroaniline	10	U	0.49	1	10	ug/L
131-11-3	Dimethylphthalate	7	J	0.22	1	10	ug/L
208-96-8	Acenaphthylene	10	U	0.7	1	10	ug/L
606-20-2	2,6-Dinitrotoluene	10	U	0.32	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099074.D	1	10/04/17 09:08	10/04/17 18:38	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10	U	1	1	10	ug/L
83-32-9	Acenaphthene	100	E	0.21	1	10	ug/L
51-28-5	2,4-Dinitrophenol	10	U	2.1	8	10	ug/L
100-02-7	4-Nitrophenol	10	U	2	5	10	ug/L
132-64-9	Dibenzofuran	84.2	E	0.24	1	10	ug/L
121-14-2	2,4-Dinitrotoluene	10	U	1	1	10	ug/L
84-66-2	Diethylphthalate	10	U	0.38	1	10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10	U	0.21	1	10	ug/L
86-73-7	Fluorene	50.3		0.31	1	10	ug/L
100-01-6	4-Nitroaniline	10	U	1.4	2	10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10	U	0.74	2	10	ug/L
86-30-6	n-Nitrosodiphenylamine	10	U	0.6	1	10	ug/L
101-55-3	4-Bromophenyl-phenylether	10	U	0.23	1	10	ug/L
118-74-1	Hexachlorobenzene	10	U	0.18	1	10	ug/L
1912-24-9	Atrazine	10	U	0.4	1	10	ug/L
87-86-5	Pentachlorophenol	10	U	1	1	10	ug/L
85-01-8	Phenanthrene	44.5		0.26	1	10	ug/L
120-12-7	Anthracene	2.9	J	0.16	1	10	ug/L
86-74-8	Carbazole	37.5		0.22	1	10	ug/L
84-74-2	Di-n-butylphthalate	10	U	1	1	10	ug/L
206-44-0	Fluoranthene	10	U	0.4	1	10	ug/L
129-00-0	Pyrene	10	U	0.2	1	10	ug/L
85-68-7	Butylbenzylphthalate	10	U	0.19	1	10	ug/L
91-94-1	3,3-Dichlorobenzidine	10	U	1	1	10	ug/L
56-55-3	Benzo(a)anthracene	10	U	0.16	1	10	ug/L
218-01-9	Chrysene	10	U	0.18	1	10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	0.16	1	10	ug/L
117-84-0	Di-n-octyl phthalate	10	U	0.51	1	10	ug/L
205-99-2	Benzo(b)fluoranthene	10	U	0.29	1	10	ug/L
207-08-9	Benzo(k)fluoranthene	10	U	0.18	1	10	ug/L
50-32-8	Benzo(a)pyrene	10	U	0.14	1	10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	0.15	1	10	ug/L
53-70-3	Dibenzo(a,h)anthracene	10	U	0.42	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099074.D	1	10/04/17 09:08	10/04/17 18:38	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10	U	0.29	1	10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U	0.2	1	10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10	U	0.2	1	10	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	38.3		10 - 130		26%	SPK: 150
13127-88-3	Phenol-d6	28.1		10 - 130		19%	SPK: 150
4165-60-0	Nitrobenzene-d5	240	*	36 - 131		237%	SPK: 100
321-60-8	2-Fluorobiphenyl	76.3		39 - 131		76%	SPK: 100
118-79-6	2,4,6-Tribromophenol	95.8		25 - 155		64%	SPK: 150
1718-51-0	Terphenyl-d14	80.6		23 - 130		81%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	139828	6.87				
1146-65-2	Naphthalene-d8	176249	8.16				
15067-26-2	Acenaphthene-d10	258508	9.9				
1517-22-2	Phenanthrene-d10	400289	11.39				
1719-03-5	Chrysene-d12	258565	14.03				
1520-96-3	Perylene-d12	224799	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-02DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099108.D	10	10/04/17 09:08	10/05/17 17:30	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	100	UD	7.7	10	100	ug/L
108-95-2	Phenol	100	UD	2.1	10	100	ug/L
111-44-4	bis(2-Chloroethyl)ether	100	UD	5.5	10	100	ug/L
95-57-8	2-Chlorophenol	100	UD	5.4	10	100	ug/L
95-48-7	2-Methylphenol	100	UD	2.4	10	100	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	100	UD	1.7	10	100	ug/L
98-86-2	Acetophenone	100	UD	1.4	10	100	ug/L
65794-96-9	3+4-Methylphenols	100	UD	3.8	10	100	ug/L
621-64-7	n-Nitroso-di-n-propylamine	100	UD	2	10	100	ug/L
67-72-1	Hexachloroethane	100	UD	2.5	10	100	ug/L
98-95-3	Nitrobenzene	100	UD	6.8	10	100	ug/L
78-59-1	Isophorone	100	UD	3	10	100	ug/L
88-75-5	2-Nitrophenol	100	UD	5.2	10	100	ug/L
105-67-9	2,4-Dimethylphenol	100	UD	7.1	10	100	ug/L
111-91-1	bis(2-Chloroethoxy)methane	100	UD	5.5	10	100	ug/L
120-83-2	2,4-Dichlorophenol	100	UD	6.6	10	100	ug/L
91-20-3	Naphthalene	2700	ED	1.2	10	100	ug/L
106-47-8	4-Chloroaniline	100	UD	10	10	100	ug/L
87-68-3	Hexachlorobutadiene	100	UD	2.5	10	100	ug/L
105-60-2	Caprolactam	100	UD	10	10	100	ug/L
59-50-7	4-Chloro-3-methylphenol	100	UD	4	10	100	ug/L
91-57-6	2-Methylnaphthalene	210	D	3.2	10	100	ug/L
77-47-4	Hexachlorocyclopentadiene	100	UD	2.4	10	100	ug/L
88-06-2	2,4,6-Trichlorophenol	100	UD	5.6	10	100	ug/L
95-95-4	2,4,5-Trichlorophenol	100	UD	4	10	100	ug/L
92-52-4	1,1-Biphenyl	54.5	JD	1.5	10	100	ug/L
91-58-7	2-Chloronaphthalene	100	UD	1.6	10	100	ug/L
88-74-4	2-Nitroaniline	100	UD	4.9	10	100	ug/L
131-11-3	Dimethylphthalate	100	UD	2.2	10	100	ug/L
208-96-8	Acenaphthylene	100	UD	7	10	100	ug/L
606-20-2	2,6-Dinitrotoluene	100	UD	3.2	10	100	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-02DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099108.D	10	10/04/17 09:08	10/05/17 17:30	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	100	UD	10	10	100	ug/L
83-32-9	Acenaphthene	170	D	2.1	10	100	ug/L
51-28-5	2,4-Dinitrophenol	100	UD	21	80	100	ug/L
100-02-7	4-Nitrophenol	100	UD	20	50	100	ug/L
132-64-9	Dibenzofuran	130	D	2.4	10	100	ug/L
121-14-2	2,4-Dinitrotoluene	100	UD	10	10	100	ug/L
84-66-2	Diethylphthalate	100	UD	3.8	10	100	ug/L
7005-72-3	4-Chlorophenyl-phenylether	100	UD	2.1	10	100	ug/L
86-73-7	Fluorene	67.3	JD	3.1	10	100	ug/L
100-01-6	4-Nitroaniline	100	UD	13.6	20	100	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	100	UD	7.4	20	100	ug/L
86-30-6	n-Nitrosodiphenylamine	100	UD	6	10	100	ug/L
101-55-3	4-Bromophenyl-phenylether	100	UD	2.3	10	100	ug/L
118-74-1	Hexachlorobenzene	100	UD	1.8	10	100	ug/L
1912-24-9	Atrazine	100	UD	4	10	100	ug/L
87-86-5	Pentachlorophenol	100	UD	10	10	100	ug/L
85-01-8	Phenanthrene	56.6	JD	2.6	10	100	ug/L
120-12-7	Anthracene	100	UD	1.6	10	100	ug/L
86-74-8	Carbazole	47.1	JD	2.2	10	100	ug/L
84-74-2	Di-n-butylphthalate	100	UD	10	10	100	ug/L
206-44-0	Fluoranthene	100	UD	4	10	100	ug/L
129-00-0	Pyrene	100	UD	2	10	100	ug/L
85-68-7	Butylbenzylphthalate	100	UD	1.9	10	100	ug/L
91-94-1	3,3-Dichlorobenzidine	100	UD	10	10	100	ug/L
56-55-3	Benzo(a)anthracene	100	UD	1.6	10	100	ug/L
218-01-9	Chrysene	100	UD	1.8	10	100	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	100	UD	1.6	10	100	ug/L
117-84-0	Di-n-octyl phthalate	100	UD	5.1	10	100	ug/L
205-99-2	Benzo(b)fluoranthene	100	UD	2.9	10	100	ug/L
207-08-9	Benzo(k)fluoranthene	100	UD	1.8	10	100	ug/L
50-32-8	Benzo(a)pyrene	100	UD	1.4	10	100	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	100	UD	1.5	10	100	ug/L
53-70-3	Dibenzo(a,h)anthracene	100	UD	4.2	10	100	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-02DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099108.D	10	10/04/17 09:08	10/05/17 17:30	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	100	UD	2.9	10	100	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	100	UD	2	10	100	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	100	UD	2	10	100	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	48.1		10 - 130		32%	SPK: 150
13127-88-3	Phenol-d6	30.5		10 - 130		20%	SPK: 150
4165-60-0	Nitrobenzene-d5	97.4		36 - 131		97%	SPK: 100
321-60-8	2-Fluorobiphenyl	100		39 - 131		105%	SPK: 100
118-79-6	2,4,6-Tribromophenol	110		25 - 155		72%	SPK: 150
1718-51-0	Terphenyl-d14	94.1		23 - 130		94%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	127207	6.86				
1146-65-2	Naphthalene-d8	469866	8.15				
15067-26-2	Acenaphthene-d10	242953	9.9				
1517-22-2	Phenanthrene-d10	422602	11.39				
1719-03-5	Chrysene-d12	300994	14.03				
1520-96-3	Perylene-d12	214947	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GWDL2	SDG No.:	I5526
Lab Sample ID:	I5526-02DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099112.D	100	10/04/17 09:08	10/05/17 19:21	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	1000	UD	77	100	1000	ug/L
108-95-2	Phenol	1000	UD	21	100	1000	ug/L
111-44-4	bis(2-Chloroethyl)ether	1000	UD	55	100	1000	ug/L
95-57-8	2-Chlorophenol	1000	UD	54	100	1000	ug/L
95-48-7	2-Methylphenol	1000	UD	24	100	1000	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1000	UD	17	100	1000	ug/L
98-86-2	Acetophenone	1000	UD	14	100	1000	ug/L
65794-96-9	3+4-Methylphenols	1000	UD	38	100	1000	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1000	UD	20	100	1000	ug/L
67-72-1	Hexachloroethane	1000	UD	25	100	1000	ug/L
98-95-3	Nitrobenzene	1000	UD	68	100	1000	ug/L
78-59-1	Isophorone	1000	UD	30	100	1000	ug/L
88-75-5	2-Nitrophenol	1000	UD	52	100	1000	ug/L
105-67-9	2,4-Dimethylphenol	1000	UD	71	100	1000	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1000	UD	55	100	1000	ug/L
120-83-2	2,4-Dichlorophenol	1000	UD	66	100	1000	ug/L
91-20-3	Naphthalene	7800	D	12	100	1000	ug/L
106-47-8	4-Chloroaniline	1000	UD	100	100	1000	ug/L
87-68-3	Hexachlorobutadiene	1000	UD	25	100	1000	ug/L
105-60-2	Caprolactam	1000	UD	100	100	1000	ug/L
59-50-7	4-Chloro-3-methylphenol	1000	UD	40	100	1000	ug/L
91-57-6	2-Methylnaphthalene	310	JD	32	100	1000	ug/L
77-47-4	Hexachlorocyclopentadiene	1000	UD	24	100	1000	ug/L
88-06-2	2,4,6-Trichlorophenol	1000	UD	56	100	1000	ug/L
95-95-4	2,4,5-Trichlorophenol	1000	UD	40	100	1000	ug/L
92-52-4	1,1-Biphenyl	1000	UD	15	100	1000	ug/L
91-58-7	2-Chloronaphthalene	1000	UD	16	100	1000	ug/L
88-74-4	2-Nitroaniline	1000	UD	49	100	1000	ug/L
131-11-3	Dimethylphthalate	1000	UD	22	100	1000	ug/L
208-96-8	Acenaphthylene	1000	UD	70	100	1000	ug/L
606-20-2	2,6-Dinitrotoluene	1000	UD	32	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GWDL2	SDG No.:	I5526
Lab Sample ID:	I5526-02DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099112.D	100	10/04/17 09:08	10/05/17 19:21	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1000	UD	100	100	1000	ug/L
83-32-9	Acenaphthene	290	JD	21	100	1000	ug/L
51-28-5	2,4-Dinitrophenol	1000	UD	210	800	1000	ug/L
100-02-7	4-Nitrophenol	1000	UD	200	500	1000	ug/L
132-64-9	Dibenzofuran	220	JD	24	100	1000	ug/L
121-14-2	2,4-Dinitrotoluene	1000	UD	100	100	1000	ug/L
84-66-2	Diethylphthalate	1000	UD	38	100	1000	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1000	UD	21	100	1000	ug/L
86-73-7	Fluorene	1000	UD	31	100	1000	ug/L
100-01-6	4-Nitroaniline	1000	UD	140	200	1000	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	1000	UD	74	200	1000	ug/L
86-30-6	n-Nitrosodiphenylamine	1000	UD	60	100	1000	ug/L
101-55-3	4-Bromophenyl-phenylether	1000	UD	23	100	1000	ug/L
118-74-1	Hexachlorobenzene	1000	UD	18	100	1000	ug/L
1912-24-9	Atrazine	1000	UD	40	100	1000	ug/L
87-86-5	Pentachlorophenol	1000	UD	100	100	1000	ug/L
85-01-8	Phenanthrene	1000	UD	26	100	1000	ug/L
120-12-7	Anthracene	1000	UD	16	100	1000	ug/L
86-74-8	Carbazole	1000	UD	22	100	1000	ug/L
84-74-2	Di-n-butylphthalate	1000	UD	100	100	1000	ug/L
206-44-0	Fluoranthene	1000	UD	40	100	1000	ug/L
129-00-0	Pyrene	1000	UD	20	100	1000	ug/L
85-68-7	Butylbenzylphthalate	1000	UD	19	100	1000	ug/L
91-94-1	3,3-Dichlorobenzidine	1000	UD	100	100	1000	ug/L
56-55-3	Benzo(a)anthracene	1000	UD	16	100	1000	ug/L
218-01-9	Chrysene	1000	UD	18	100	1000	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1000	UD	16	100	1000	ug/L
117-84-0	Di-n-octyl phthalate	1000	UD	51	100	1000	ug/L
205-99-2	Benzo(b)fluoranthene	1000	UD	29	100	1000	ug/L
207-08-9	Benzo(k)fluoranthene	1000	UD	18	100	1000	ug/L
50-32-8	Benzo(a)pyrene	1000	UD	14	100	1000	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1000	UD	15	100	1000	ug/L
53-70-3	Dibenzo(a,h)anthracene	1000	UD	42	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GWDL2	SDG No.:	I5526
Lab Sample ID:	I5526-02DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099112.D	100	10/04/17 09:08	10/05/17 19:21	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1000	UD	29	100	1000	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1000	UD	20	100	1000	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	1000	UD	20	100	1000	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	68.7		10 - 130		46%	SPK: 150
13127-88-3	Phenol-d6	47.4		10 - 130		32%	SPK: 150
4165-60-0	Nitrobenzene-d5	140	*	36 - 131		138%	SPK: 100
321-60-8	2-Fluorobiphenyl	170	*	39 - 131		169%	SPK: 100
118-79-6	2,4,6-Tribromophenol	93.2		25 - 155		62%	SPK: 150
1718-51-0	Terphenyl-d14	140	*	23 - 130		140%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	66344	6.86				
1146-65-2	Naphthalene-d8	288242	8.15				
15067-26-2	Acenaphthene-d10	133215	9.9				
1517-22-2	Phenanthrene-d10	246092	11.39				
1719-03-5	Chrysene-d12	178778	14.02				
1520-96-3	Perylene-d12	122069	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043885.D	10		10/05/17 05:22	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	10	U	2	2	10	ug/L
74-87-3	Chloromethane	10	U	2	2	10	ug/L
75-01-4	Vinyl Chloride	10	U	2	2	10	ug/L
74-83-9	Bromomethane	10	U	2	2	10	ug/L
75-00-3	Chloroethane	10	U	2	5	10	ug/L
75-69-4	Trichlorofluoromethane	10	U	2	2	10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	10	U	2	2	10	ug/L
75-65-0	Tert butyl alcohol	250	U	5	37.5	250	ug/L
75-35-4	1,1-Dichloroethene	10	U	2	2	10	ug/L
67-64-1	Acetone	50	U	5	10	50	ug/L
75-15-0	Carbon Disulfide	10	U	2	2	10	ug/L
1634-04-4	Methyl tert-butyl Ether	10	U	3.5	5	10	ug/L
79-20-9	Methyl Acetate	10	U	2	5	10	ug/L
75-09-2	Methylene Chloride	15.8		2	2	10	ug/L
156-60-5	trans-1,2-Dichloroethene	10	U	2	2	10	ug/L
75-34-3	1,1-Dichloroethane	10	U	2	2	10	ug/L
110-82-7	Cyclohexane	10	U	2	2	10	ug/L
78-93-3	2-Butanone	50	U	13.2	25	50	ug/L
56-23-5	Carbon Tetrachloride	10	U	2	2	10	ug/L
156-59-2	cis-1,2-Dichloroethene	10	U	2	2	10	ug/L
74-97-5	Bromochloromethane	10	U	2	5	10	ug/L
67-66-3	Chloroform	10	U	2	2	10	ug/L
71-55-6	1,1,1-Trichloroethane	10	U	2	2	10	ug/L
108-87-2	Methylcyclohexane	10	U	2	2	10	ug/L
71-43-2	Benzene	89.5		2	2	10	ug/L
107-06-2	1,2-Dichloroethane	10	U	2	2	10	ug/L
79-01-6	Trichloroethene	10	U	2	2	10	ug/L
78-87-5	1,2-Dichloropropane	10	U	2	2	10	ug/L
75-27-4	Bromodichloromethane	10	U	2	2	10	ug/L
108-10-1	4-Methyl-2-Pentanone	50	U	10	10	50	ug/L
108-88-3	Toluene	45.2		2	2	10	ug/L
10061-02-6	t-1,3-Dichloropropene	10	U	2	2	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043885.D	10		10/05/17 05:22	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	10	U	2	2	10	ug/L
79-00-5	1,1,2-Trichloroethane	10	U	2	2	10	ug/L
591-78-6	2-Hexanone	50	U	19.4	25	50	ug/L
124-48-1	Dibromochloromethane	10	U	2	2	10	ug/L
106-93-4	1,2-Dibromoethane	10	U	2	2	10	ug/L
127-18-4	Tetrachloroethene	10	U	2	2	10	ug/L
108-90-7	Chlorobenzene	10	U	2	2	10	ug/L
100-41-4	Ethyl Benzene	620		2	2	10	ug/L
179601-23-1	m/p-Xylenes	400		4	4	20	ug/L
95-47-6	o-Xylene	200		2	2	10	ug/L
100-42-5	Styrene	10	U	2	2	10	ug/L
75-25-2	Bromoform	10	U	2	2	10	ug/L
98-82-8	Isopropylbenzene	59.5		2	2	10	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	10	U	2	2	10	ug/L
541-73-1	1,3-Dichlorobenzene	10	U	2	2	10	ug/L
106-46-7	1,4-Dichlorobenzene	10	U	2	2	10	ug/L
95-50-1	1,2-Dichlorobenzene	10	U	2	2	10	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	2	2	10	ug/L
120-82-1	1,2,4-Trichlorobenzene	10	U	2	2	10	ug/L
87-61-6	1,2,3-Trichlorobenzene	10	U	2	2	10	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.5		61 - 141		101%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		69 - 133		99%	SPK: 50
2037-26-5	Toluene-d8	51.9		65 - 126		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.6		58 - 135		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1192330	7.67				
540-36-3	1,4-Difluorobenzene	1909680	8.59				
3114-55-4	Chlorobenzene-d5	1676540	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	769596	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/27/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	I5526
Lab Sample ID:	I5526-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043885.D	10		10/05/17 05:22	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17 09:10
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	1720	D	10	4	10	20	mg/L		10/02/17 18:01	SM2320 B
Sulfate	1130	OR	1	0.13	0.375	0.75	mg/L		09/28/17 20:37	300.0
Sulfide	62.1		1	0.03	0.5	1	mg/L	09/30/17 10:51	09/30/17 14:25	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17 09:10
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-03DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	822	D	50	6.6	18.75	37.5	mg/L		09/29/17 10:41	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE023293.D	20	10/04/17 08:00	10/05/17 9:11	PB102899

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	11200		500	500	1000	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	0.81		29 - 130		81%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB011205.D	50	10/04/17 18:25	FB100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	2250	U	600	1125	2250	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.4		50 - 150		102%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	706		1	12.5	12.5	50	ug/L	10/03/17 09:02	10/03/17 18:29	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099075.D	1	10/04/17 09:08	10/04/17 19:06	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10	U	0.77	1	10	ug/L
108-95-2	Phenol	26.3		0.21	1	10	ug/L
111-44-4	bis(2-Chloroethyl)ether	10	U	0.55	1	10	ug/L
95-57-8	2-Chlorophenol	10	U	0.54	1	10	ug/L
95-48-7	2-Methylphenol	51.9		0.24	1	10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10	U	0.17	1	10	ug/L
98-86-2	Acetophenone	10	U	0.14	1	10	ug/L
65794-96-9	3+4-Methylphenols	130	E	0.38	1	10	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10	U	0.2	1	10	ug/L
67-72-1	Hexachloroethane	10	U	0.25	1	10	ug/L
98-95-3	Nitrobenzene	10	U	0.68	1	10	ug/L
78-59-1	Isophorone	10	U	0.3	1	10	ug/L
88-75-5	2-Nitrophenol	10	U	0.52	1	10	ug/L
105-67-9	2,4-Dimethylphenol	510	E	0.71	1	10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10	U	0.55	1	10	ug/L
120-83-2	2,4-Dichlorophenol	10	U	0.66	1	10	ug/L
91-20-3	Naphthalene	1100	E	0.12	1	10	ug/L
106-47-8	4-Chloroaniline	10	U	1	1	10	ug/L
87-68-3	Hexachlorobutadiene	10	U	0.25	1	10	ug/L
105-60-2	Caprolactam	10	U	1	1	10	ug/L
59-50-7	4-Chloro-3-methylphenol	10	U	0.4	1	10	ug/L
91-57-6	2-Methylnaphthalene	160	E	0.32	1	10	ug/L
77-47-4	Hexachlorocyclopentadiene	10	U	0.24	1	10	ug/L
88-06-2	2,4,6-Trichlorophenol	10	U	0.56	1	10	ug/L
95-95-4	2,4,5-Trichlorophenol	10	U	0.4	1	10	ug/L
92-52-4	1,1-Biphenyl	37.4		0.15	1	10	ug/L
91-58-7	2-Chloronaphthalene	10	U	0.16	1	10	ug/L
88-74-4	2-Nitroaniline	10	U	0.49	1	10	ug/L
131-11-3	Dimethylphthalate	5	J	0.22	1	10	ug/L
208-96-8	Acenaphthylene	5.5	J	0.7	1	10	ug/L
606-20-2	2,6-Dinitrotoluene	10	U	0.32	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099075.D	1	10/04/17 09:08	10/04/17 19:06	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10	U	1	1	10	ug/L
83-32-9	Acenaphthene	75.8		0.21	1	10	ug/L
51-28-5	2,4-Dinitrophenol	10	U	2.1	8	10	ug/L
100-02-7	4-Nitrophenol	10	U	2	5	10	ug/L
132-64-9	Dibenzofuran	71.9		0.24	1	10	ug/L
121-14-2	2,4-Dinitrotoluene	10	U	1	1	10	ug/L
84-66-2	Diethylphthalate	10	U	0.38	1	10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10	U	0.21	1	10	ug/L
86-73-7	Fluorene	58.1		0.31	1	10	ug/L
100-01-6	4-Nitroaniline	10	U	1.4	2	10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10	U	0.74	2	10	ug/L
86-30-6	n-Nitrosodiphenylamine	10	U	0.6	1	10	ug/L
101-55-3	4-Bromophenyl-phenylether	10	U	0.23	1	10	ug/L
118-74-1	Hexachlorobenzene	10	U	0.18	1	10	ug/L
1912-24-9	Atrazine	10	U	0.4	1	10	ug/L
87-86-5	Pentachlorophenol	10	U	1	1	10	ug/L
85-01-8	Phenanthrene	81.2	E	0.26	1	10	ug/L
120-12-7	Anthracene	12.8		0.16	1	10	ug/L
86-74-8	Carbazole	56		0.22	1	10	ug/L
84-74-2	Di-n-butylphthalate	10	U	1	1	10	ug/L
206-44-0	Fluoranthene	7.9	J	0.4	1	10	ug/L
129-00-0	Pyrene	4.7	J	0.2	1	10	ug/L
85-68-7	Butylbenzylphthalate	10	U	0.19	1	10	ug/L
91-94-1	3,3-Dichlorobenzidine	10	U	1	1	10	ug/L
56-55-3	Benzo(a)anthracene	10	U	0.16	1	10	ug/L
218-01-9	Chrysene	10	U	0.18	1	10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	0.16	1	10	ug/L
117-84-0	Di-n-octyl phthalate	10	U	0.51	1	10	ug/L
205-99-2	Benzo(b)fluoranthene	10	U	0.29	1	10	ug/L
207-08-9	Benzo(k)fluoranthene	10	U	0.18	1	10	ug/L
50-32-8	Benzo(a)pyrene	10	U	0.14	1	10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	0.15	1	10	ug/L
53-70-3	Dibenzo(a,h)anthracene	10	U	0.42	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099075.D	1	10/04/17 09:08	10/04/17 19:06	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10	U	0.29	1	10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U	0.2	1	10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10	U	0.2	1	10	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	46.4		10 - 130		31%	SPK: 150
13127-88-3	Phenol-d6	34.1		10 - 130		23%	SPK: 150
4165-60-0	Nitrobenzene-d5	160	*	36 - 131		162%	SPK: 100
321-60-8	2-Fluorobiphenyl	76.9		39 - 131		77%	SPK: 100
118-79-6	2,4,6-Tribromophenol	100		25 - 155		68%	SPK: 150
1718-51-0	Terphenyl-d14	66.2		23 - 130		66%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	135025	6.87				
1146-65-2	Naphthalene-d8	250148	8.16				
15067-26-2	Acenaphthene-d10	237993	9.91				
1517-22-2	Phenanthrene-d10	298117	11.4				
1719-03-5	Chrysene-d12	233922	14.03				
1520-96-3	Perylene-d12	225681	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099109.D	10	10/04/17 09:08	10/05/17 17:57	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	100	UD	7.7	10	100	ug/L
108-95-2	Phenol	33.1	JD	2.1	10	100	ug/L
111-44-4	bis(2-Chloroethyl)ether	100	UD	5.5	10	100	ug/L
95-57-8	2-Chlorophenol	100	UD	5.4	10	100	ug/L
95-48-7	2-Methylphenol	75	JD	2.4	10	100	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	100	UD	1.7	10	100	ug/L
98-86-2	Acetophenone	100	UD	1.4	10	100	ug/L
65794-96-9	3+4-Methylphenols	180	D	3.8	10	100	ug/L
621-64-7	n-Nitroso-di-n-propylamine	100	UD	2	10	100	ug/L
67-72-1	Hexachloroethane	100	UD	2.5	10	100	ug/L
98-95-3	Nitrobenzene	100	UD	6.8	10	100	ug/L
78-59-1	Isophorone	100	UD	3	10	100	ug/L
88-75-5	2-Nitrophenol	100	UD	5.2	10	100	ug/L
105-67-9	2,4-Dimethylphenol	340	D	7.1	10	100	ug/L
111-91-1	bis(2-Chloroethoxy)methane	100	UD	5.5	10	100	ug/L
120-83-2	2,4-Dichlorophenol	100	UD	6.6	10	100	ug/L
91-20-3	Naphthalene	1900	ED	1.2	10	100	ug/L
106-47-8	4-Chloroaniline	100	UD	10	10	100	ug/L
87-68-3	Hexachlorobutadiene	100	UD	2.5	10	100	ug/L
105-60-2	Caprolactam	100	UD	10	10	100	ug/L
59-50-7	4-Chloro-3-methylphenol	100	UD	4	10	100	ug/L
91-57-6	2-Methylnaphthalene	120	D	3.2	10	100	ug/L
77-47-4	Hexachlorocyclopentadiene	100	UD	2.4	10	100	ug/L
88-06-2	2,4,6-Trichlorophenol	100	UD	5.6	10	100	ug/L
95-95-4	2,4,5-Trichlorophenol	100	UD	4	10	100	ug/L
92-52-4	1,1-Biphenyl	49.6	JD	1.5	10	100	ug/L
91-58-7	2-Chloronaphthalene	100	UD	1.6	10	100	ug/L
88-74-4	2-Nitroaniline	100	UD	4.9	10	100	ug/L
131-11-3	Dimethylphthalate	100	UD	2.2	10	100	ug/L
208-96-8	Acenaphthylene	100	UD	7	10	100	ug/L
606-20-2	2,6-Dinitrotoluene	100	UD	3.2	10	100	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099109.D	10	10/04/17 09:08	10/05/17 17:57	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	100	UD	10	10	100	ug/L
83-32-9	Acenaphthene	120	D	2.1	10	100	ug/L
51-28-5	2,4-Dinitrophenol	100	UD	21	80	100	ug/L
100-02-7	4-Nitrophenol	100	UD	20	50	100	ug/L
132-64-9	Dibenzofuran	110	D	2.4	10	100	ug/L
121-14-2	2,4-Dinitrotoluene	100	UD	10	10	100	ug/L
84-66-2	Diethylphthalate	100	UD	3.8	10	100	ug/L
7005-72-3	4-Chlorophenyl-phenylether	100	UD	2.1	10	100	ug/L
86-73-7	Fluorene	83.4	JD	3.1	10	100	ug/L
100-01-6	4-Nitroaniline	100	UD	13.6	20	100	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	100	UD	7.4	20	100	ug/L
86-30-6	n-Nitrosodiphenylamine	100	UD	6	10	100	ug/L
101-55-3	4-Bromophenyl-phenylether	100	UD	2.3	10	100	ug/L
118-74-1	Hexachlorobenzene	100	UD	1.8	10	100	ug/L
1912-24-9	Atrazine	100	UD	4	10	100	ug/L
87-86-5	Pentachlorophenol	100	UD	10	10	100	ug/L
85-01-8	Phenanthrene	94.9	JD	2.6	10	100	ug/L
120-12-7	Anthracene	100	UD	1.6	10	100	ug/L
86-74-8	Carbazole	65.5	JD	2.2	10	100	ug/L
84-74-2	Di-n-butylphthalate	100	UD	10	10	100	ug/L
206-44-0	Fluoranthene	100	UD	4	10	100	ug/L
129-00-0	Pyrene	100	UD	2	10	100	ug/L
85-68-7	Butylbenzylphthalate	100	UD	1.9	10	100	ug/L
91-94-1	3,3-Dichlorobenzidine	100	UD	10	10	100	ug/L
56-55-3	Benzo(a)anthracene	100	UD	1.6	10	100	ug/L
218-01-9	Chrysene	100	UD	1.8	10	100	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	100	UD	1.6	10	100	ug/L
117-84-0	Di-n-octyl phthalate	100	UD	5.1	10	100	ug/L
205-99-2	Benzo(b)fluoranthene	100	UD	2.9	10	100	ug/L
207-08-9	Benzo(k)fluoranthene	100	UD	1.8	10	100	ug/L
50-32-8	Benzo(a)pyrene	100	UD	1.4	10	100	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	100	UD	1.5	10	100	ug/L
53-70-3	Dibenzo(a,h)anthracene	100	UD	4.2	10	100	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099109.D	10	10/04/17 09:08	10/05/17 17:57	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	100	UD	2.9	10	100	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	100	UD	2	10	100	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	100	UD	2	10	100	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	64.7		10 - 130		43%	SPK: 150
13127-88-3	Phenol-d6	40.1		10 - 130		27%	SPK: 150
4165-60-0	Nitrobenzene-d5	95.1		36 - 131		95%	SPK: 100
321-60-8	2-Fluorobiphenyl	100		39 - 131		104%	SPK: 100
118-79-6	2,4,6-Tribromophenol	120		25 - 155		81%	SPK: 150
1718-51-0	Terphenyl-d14	83.8		23 - 130		84%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	126540	6.86				
1146-65-2	Naphthalene-d8	506600	8.15				
15067-26-2	Acenaphthene-d10	244702	9.9				
1517-22-2	Phenanthrene-d10	420536	11.39				
1719-03-5	Chrysene-d12	300554	14.03				
1520-96-3	Perylene-d12	217032	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GWDL2	SDG No.:	I5526
Lab Sample ID:	I5526-03DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099113.D	100	10/04/17 09:08	10/05/17 19:49	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	1000	UD	77	100	1000	ug/L
108-95-2	Phenol	1000	UD	21	100	1000	ug/L
111-44-4	bis(2-Chloroethyl)ether	1000	UD	55	100	1000	ug/L
95-57-8	2-Chlorophenol	1000	UD	54	100	1000	ug/L
95-48-7	2-Methylphenol	1000	UD	24	100	1000	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1000	UD	17	100	1000	ug/L
98-86-2	Acetophenone	1000	UD	14	100	1000	ug/L
65794-96-9	3+4-Methylphenols	1000	UD	38	100	1000	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1000	UD	20	100	1000	ug/L
67-72-1	Hexachloroethane	1000	UD	25	100	1000	ug/L
98-95-3	Nitrobenzene	1000	UD	68	100	1000	ug/L
78-59-1	Isophorone	1000	UD	30	100	1000	ug/L
88-75-5	2-Nitrophenol	1000	UD	52	100	1000	ug/L
105-67-9	2,4-Dimethylphenol	370	JD	71	100	1000	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1000	UD	55	100	1000	ug/L
120-83-2	2,4-Dichlorophenol	1000	UD	66	100	1000	ug/L
91-20-3	Naphthalene	3500	D	12	100	1000	ug/L
106-47-8	4-Chloroaniline	1000	UD	100	100	1000	ug/L
87-68-3	Hexachlorobutadiene	1000	UD	25	100	1000	ug/L
105-60-2	Caprolactam	1000	UD	100	100	1000	ug/L
59-50-7	4-Chloro-3-methylphenol	1000	UD	40	100	1000	ug/L
91-57-6	2-Methylnaphthalene	1000	UD	32	100	1000	ug/L
77-47-4	Hexachlorocyclopentadiene	1000	UD	24	100	1000	ug/L
88-06-2	2,4,6-Trichlorophenol	1000	UD	56	100	1000	ug/L
95-95-4	2,4,5-Trichlorophenol	1000	UD	40	100	1000	ug/L
92-52-4	1,1-Biphenyl	1000	UD	15	100	1000	ug/L
91-58-7	2-Chloronaphthalene	1000	UD	16	100	1000	ug/L
88-74-4	2-Nitroaniline	1000	UD	49	100	1000	ug/L
131-11-3	Dimethylphthalate	1000	UD	22	100	1000	ug/L
208-96-8	Acenaphthylene	1000	UD	70	100	1000	ug/L
606-20-2	2,6-Dinitrotoluene	1000	UD	32	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GWDL2	SDG No.:	I5526
Lab Sample ID:	I5526-03DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099113.D	100	10/04/17 09:08	10/05/17 19:49	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1000	UD	100	100	1000	ug/L
83-32-9	Acenaphthene	1000	UD	21	100	1000	ug/L
51-28-5	2,4-Dinitrophenol	1000	UD	210	800	1000	ug/L
100-02-7	4-Nitrophenol	1000	UD	200	500	1000	ug/L
132-64-9	Dibenzofuran	1000	UD	24	100	1000	ug/L
121-14-2	2,4-Dinitrotoluene	1000	UD	100	100	1000	ug/L
84-66-2	Diethylphthalate	1000	UD	38	100	1000	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1000	UD	21	100	1000	ug/L
86-73-7	Fluorene	1000	UD	31	100	1000	ug/L
100-01-6	4-Nitroaniline	1000	UD	140	200	1000	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	1000	UD	74	200	1000	ug/L
86-30-6	n-Nitrosodiphenylamine	1000	UD	60	100	1000	ug/L
101-55-3	4-Bromophenyl-phenylether	1000	UD	23	100	1000	ug/L
118-74-1	Hexachlorobenzene	1000	UD	18	100	1000	ug/L
1912-24-9	Atrazine	1000	UD	40	100	1000	ug/L
87-86-5	Pentachlorophenol	1000	UD	100	100	1000	ug/L
85-01-8	Phenanthrene	1000	UD	26	100	1000	ug/L
120-12-7	Anthracene	1000	UD	16	100	1000	ug/L
86-74-8	Carbazole	1000	UD	22	100	1000	ug/L
84-74-2	Di-n-butylphthalate	1000	UD	100	100	1000	ug/L
206-44-0	Fluoranthene	1000	UD	40	100	1000	ug/L
129-00-0	Pyrene	1000	UD	20	100	1000	ug/L
85-68-7	Butylbenzylphthalate	1000	UD	19	100	1000	ug/L
91-94-1	3,3-Dichlorobenzidine	1000	UD	100	100	1000	ug/L
56-55-3	Benzo(a)anthracene	1000	UD	16	100	1000	ug/L
218-01-9	Chrysene	1000	UD	18	100	1000	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1000	UD	16	100	1000	ug/L
117-84-0	Di-n-octyl phthalate	1000	UD	51	100	1000	ug/L
205-99-2	Benzo(b)fluoranthene	1000	UD	29	100	1000	ug/L
207-08-9	Benzo(k)fluoranthene	1000	UD	18	100	1000	ug/L
50-32-8	Benzo(a)pyrene	1000	UD	14	100	1000	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1000	UD	15	100	1000	ug/L
53-70-3	Dibenzo(a,h)anthracene	1000	UD	42	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GWDL2	SDG No.:	I5526
Lab Sample ID:	I5526-03DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099113.D	100	10/04/17 09:08	10/05/17 19:49	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1000	UD	29	100	1000	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1000	UD	20	100	1000	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	1000	UD	20	100	1000	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	64.4		10 - 130		43%	SPK: 150
13127-88-3	Phenol-d6	42.6		10 - 130		28%	SPK: 150
4165-60-0	Nitrobenzene-d5	97.8		36 - 131		98%	SPK: 100
321-60-8	2-Fluorobiphenyl	120		39 - 131		116%	SPK: 100
118-79-6	2,4,6-Tribromophenol	85.1		25 - 155		57%	SPK: 150
1718-51-0	Terphenyl-d14	89.8		23 - 130		90%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	115665	6.86				
1146-65-2	Naphthalene-d8	491318	8.15				
15067-26-2	Acenaphthene-d10	231837	9.9				
1517-22-2	Phenanthrene-d10	415463	11.39				
1719-03-5	Chrysene-d12	298757	14.02				
1520-96-3	Perylene-d12	204282	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043887.D	50		10/05/17 06:13	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	50	U	10	10	50	ug/L
74-87-3	Chloromethane	50	U	10	10	50	ug/L
75-01-4	Vinyl Chloride	50	U	10	10	50	ug/L
74-83-9	Bromomethane	50	U	10	10	50	ug/L
75-00-3	Chloroethane	50	U	10	25	50	ug/L
75-69-4	Trichlorofluoromethane	50	U	10	10	50	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	50	U	10	10	50	ug/L
75-65-0	Tert butyl alcohol	1300	U	25	190	1300	ug/L
75-35-4	1,1-Dichloroethene	50	U	10	10	50	ug/L
67-64-1	Acetone	250	U	25	50	250	ug/L
75-15-0	Carbon Disulfide	50	U	10	10	50	ug/L
1634-04-4	Methyl tert-butyl Ether	50	U	17.5	25	50	ug/L
79-20-9	Methyl Acetate	50	U	10	25	50	ug/L
75-09-2	Methylene Chloride	71.5		10	10	50	ug/L
156-60-5	trans-1,2-Dichloroethene	50	U	10	10	50	ug/L
75-34-3	1,1-Dichloroethane	50	U	10	10	50	ug/L
110-82-7	Cyclohexane	50	U	10	10	50	ug/L
78-93-3	2-Butanone	250	U	66	130	250	ug/L
56-23-5	Carbon Tetrachloride	50	U	10	10	50	ug/L
156-59-2	cis-1,2-Dichloroethene	50	U	10	10	50	ug/L
74-97-5	Bromochloromethane	50	U	10	25	50	ug/L
67-66-3	Chloroform	50	U	10	10	50	ug/L
71-55-6	1,1,1-Trichloroethane	50	U	10	10	50	ug/L
108-87-2	Methylcyclohexane	50	U	10	10	50	ug/L
71-43-2	Benzene	3900		10	10	50	ug/L
107-06-2	1,2-Dichloroethane	50	U	10	10	50	ug/L
79-01-6	Trichloroethene	50	U	10	10	50	ug/L
78-87-5	1,2-Dichloropropane	50	U	10	10	50	ug/L
75-27-4	Bromodichloromethane	50	U	10	10	50	ug/L
108-10-1	4-Methyl-2-Pentanone	250	U	50	50	250	ug/L
108-88-3	Toluene	400		10	10	50	ug/L
10061-02-6	t-1,3-Dichloropropene	50	U	10	10	50	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043887.D	50		10/05/17 06:13	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	50	U	10	10	50	ug/L
79-00-5	1,1,2-Trichloroethane	50	U	10	10	50	ug/L
591-78-6	2-Hexanone	250	U	97	130	250	ug/L
124-48-1	Dibromochloromethane	50	U	10	10	50	ug/L
106-93-4	1,2-Dibromoethane	50	U	10	10	50	ug/L
127-18-4	Tetrachloroethene	50	U	10	10	50	ug/L
108-90-7	Chlorobenzene	50	U	10	10	50	ug/L
100-41-4	Ethyl Benzene	650		10	10	50	ug/L
179601-23-1	m/p-Xylenes	660		20	20	100	ug/L
95-47-6	o-Xylene	460		10	10	50	ug/L
100-42-5	Styrene	50	U	10	10	50	ug/L
75-25-2	Bromoform	50	U	10	10	50	ug/L
98-82-8	Isopropylbenzene	49.1	J	10	10	50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	50	U	10	10	50	ug/L
541-73-1	1,3-Dichlorobenzene	50	U	10	10	50	ug/L
106-46-7	1,4-Dichlorobenzene	50	U	10	10	50	ug/L
95-50-1	1,2-Dichlorobenzene	50	U	10	10	50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	50	U	10	10	50	ug/L
120-82-1	1,2,4-Trichlorobenzene	50	U	10	10	50	ug/L
87-61-6	1,2,3-Trichlorobenzene	50	U	10	10	50	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.2		61 - 141		100%	SPK: 50
1868-53-7	Dibromofluoromethane	50		69 - 133		100%	SPK: 50
2037-26-5	Toluene-d8	52.1		65 - 126		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.9		58 - 135		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1193100	7.67				
540-36-3	1,4-Difluorobenzene	1889080	8.59				
3114-55-4	Chlorobenzene-d5	1647110	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	685596	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043887.D	50		10/05/17 06:13	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17 11:30
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	1400		1	0.4	1	2	mg/L		10/02/17 17:49	SM2320 B
Sulfate	342	OR	1	0.13	0.375	0.75	mg/L		09/28/17 21:07	300.0
Sulfide	13.4		1	0.03	0.5	1	mg/L	09/30/17 10:51	09/30/17 14:28	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17 11:30
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-04DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	266	D	10	1.3	3.75	7.5	mg/L		09/29/17 00:06	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE023292.D	5	10/04/17 08:00	10/05/17 8:37	PB102899

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	3085		125	125	250	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	3.76		29 - 130		94%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB011206.D	2	10/04/17 19:12	FB100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	508		24	45	90	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.5		50 - 150		77%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	11600		1	12.5	12.5	50	ug/L	10/03/17 09:02	10/03/17 18:33	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099076.D	1	10/04/17 09:08	10/04/17 19:36	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10	U	0.77	1	10	ug/L
108-95-2	Phenol	3.4	J	0.21	1	10	ug/L
111-44-4	bis(2-Chloroethyl)ether	10	U	0.55	1	10	ug/L
95-57-8	2-Chlorophenol	10	U	0.54	1	10	ug/L
95-48-7	2-Methylphenol	10	U	0.24	1	10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10	U	0.17	1	10	ug/L
98-86-2	Acetophenone	10	U	0.14	1	10	ug/L
65794-96-9	3+4-Methylphenols	10	U	0.38	1	10	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10	U	0.2	1	10	ug/L
67-72-1	Hexachloroethane	10	U	0.25	1	10	ug/L
98-95-3	Nitrobenzene	10	U	0.68	1	10	ug/L
78-59-1	Isophorone	10	U	0.3	1	10	ug/L
88-75-5	2-Nitrophenol	10	U	0.52	1	10	ug/L
105-67-9	2,4-Dimethylphenol	11		0.71	1	10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10	U	0.55	1	10	ug/L
120-83-2	2,4-Dichlorophenol	10	U	0.66	1	10	ug/L
91-20-3	Naphthalene	75.1		0.12	1	10	ug/L
106-47-8	4-Chloroaniline	10	U	1	1	10	ug/L
87-68-3	Hexachlorobutadiene	10	U	0.25	1	10	ug/L
105-60-2	Caprolactam	10	U	1	1	10	ug/L
59-50-7	4-Chloro-3-methylphenol	10	U	0.4	1	10	ug/L
91-57-6	2-Methylnaphthalene	2.7	J	0.32	1	10	ug/L
77-47-4	Hexachlorocyclopentadiene	10	U	0.24	1	10	ug/L
88-06-2	2,4,6-Trichlorophenol	10	U	0.56	1	10	ug/L
95-95-4	2,4,5-Trichlorophenol	10	U	0.4	1	10	ug/L
92-52-4	1,1-Biphenyl	5.2	J	0.15	1	10	ug/L
91-58-7	2-Chloronaphthalene	10	U	0.16	1	10	ug/L
88-74-4	2-Nitroaniline	10	U	0.49	1	10	ug/L
131-11-3	Dimethylphthalate	2.1	J	0.22	1	10	ug/L
208-96-8	Acenaphthylene	10	U	0.7	1	10	ug/L
606-20-2	2,6-Dinitrotoluene	10	U	0.32	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099076.D	1	10/04/17 09:08	10/04/17 19:36	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10	U	1	1	10	ug/L
83-32-9	Acenaphthene	21.8		0.21	1	10	ug/L
51-28-5	2,4-Dinitrophenol	10	U	2.1	8	10	ug/L
100-02-7	4-Nitrophenol	10	U	2	5	10	ug/L
132-64-9	Dibenzofuran	15.6		0.24	1	10	ug/L
121-14-2	2,4-Dinitrotoluene	10	U	1	1	10	ug/L
84-66-2	Diethylphthalate	10	U	0.38	1	10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10	U	0.21	1	10	ug/L
86-73-7	Fluorene	13.4		0.31	1	10	ug/L
100-01-6	4-Nitroaniline	10	U	1.4	2	10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10	U	0.74	2	10	ug/L
86-30-6	n-Nitrosodiphenylamine	10	U	0.6	1	10	ug/L
101-55-3	4-Bromophenyl-phenylether	10	U	0.23	1	10	ug/L
118-74-1	Hexachlorobenzene	10	U	0.18	1	10	ug/L
1912-24-9	Atrazine	10	U	0.4	1	10	ug/L
87-86-5	Pentachlorophenol	10	U	1	1	10	ug/L
85-01-8	Phenanthrene	13.8		0.26	1	10	ug/L
120-12-7	Anthracene	2.1	J	0.16	1	10	ug/L
86-74-8	Carbazole	13.8		0.22	1	10	ug/L
84-74-2	Di-n-butylphthalate	10	U	1	1	10	ug/L
206-44-0	Fluoranthene	10	U	0.4	1	10	ug/L
129-00-0	Pyrene	10	U	0.2	1	10	ug/L
85-68-7	Butylbenzylphthalate	10	U	0.19	1	10	ug/L
91-94-1	3,3-Dichlorobenzidine	10	U	1	1	10	ug/L
56-55-3	Benzo(a)anthracene	10	U	0.16	1	10	ug/L
218-01-9	Chrysene	10	U	0.18	1	10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	0.16	1	10	ug/L
117-84-0	Di-n-octyl phthalate	10	U	0.51	1	10	ug/L
205-99-2	Benzo(b)fluoranthene	10	U	0.29	1	10	ug/L
207-08-9	Benzo(k)fluoranthene	10	U	0.18	1	10	ug/L
50-32-8	Benzo(a)pyrene	10	U	0.14	1	10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	0.15	1	10	ug/L
53-70-3	Dibenzo(a,h)anthracene	10	U	0.42	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099076.D	1	10/04/17 09:08	10/04/17 19:36	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10	U	0.29	1	10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U	0.2	1	10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10	U	0.2	1	10	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	67.6		10 - 130		45%	SPK: 150
13127-88-3	Phenol-d6	43.6		10 - 130		29%	SPK: 150
4165-60-0	Nitrobenzene-d5	90.2		36 - 131		90%	SPK: 100
321-60-8	2-Fluorobiphenyl	90.8		39 - 131		91%	SPK: 100
118-79-6	2,4,6-Tribromophenol	120		25 - 155		77%	SPK: 150
1718-51-0	Terphenyl-d14	93.3		23 - 130		93%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	132692	6.86				
1146-65-2	Naphthalene-d8	554134	8.15				
15067-26-2	Acenaphthene-d10	248962	9.9				
1517-22-2	Phenanthrene-d10	424293	11.39				
1719-03-5	Chrysene-d12	255343	14.03				
1520-96-3	Perylene-d12	227270	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043886.D	1		10/05/17 05:47	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1.8	J	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1.1		0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	2.9		0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.95	J	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	360	E	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	8.7		0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043886.D	1		10/05/17 05:47	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	81.3		0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	22.5		0.4	0.4	2	ug/L
95-47-6	o-Xylene	31.3		0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	11		0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	54.3		61 - 141		109%	SPK: 50
1868-53-7	Dibromofluoromethane	49.4		69 - 133		99%	SPK: 50
2037-26-5	Toluene-d8	51.9		65 - 126		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.9		58 - 135		102%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1033060	7.67				
540-36-3	1,4-Difluorobenzene	1699570	8.59				
3114-55-4	Chlorobenzene-d5	1459460	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	652189	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I5526
Lab Sample ID:	I5526-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043886.D	1		10/05/17 05:47	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-04DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043896.D	5		10/05/17 13:10	VN100517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5	UD	1	1	5	ug/L
74-87-3	Chloromethane	5	UD	1	1	5	ug/L
75-01-4	Vinyl Chloride	5	UD	1	1	5	ug/L
74-83-9	Bromomethane	5	UD	1	1	5	ug/L
75-00-3	Chloroethane	5	UD	1	2.5	5	ug/L
75-69-4	Trichlorofluoromethane	5	UD	1	1	5	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	5	UD	1	1	5	ug/L
75-65-0	Tert butyl alcohol	130	UD	2.5	18.8	130	ug/L
75-35-4	1,1-Dichloroethene	5	UD	1	1	5	ug/L
67-64-1	Acetone	25	UD	2.5	5	25	ug/L
75-15-0	Carbon Disulfide	5	UD	1	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	5	UD	1.8	2.5	5	ug/L
79-20-9	Methyl Acetate	5	UD	1	2.5	5	ug/L
75-09-2	Methylene Chloride	5	UD	1	1	5	ug/L
156-60-5	trans-1,2-Dichloroethene	5	UD	1	1	5	ug/L
75-34-3	1,1-Dichloroethane	5	UD	1	1	5	ug/L
110-82-7	Cyclohexane	5	UD	1	1	5	ug/L
78-93-3	2-Butanone	25	UD	6.6	12.5	25	ug/L
56-23-5	Carbon Tetrachloride	5	UD	1	1	5	ug/L
156-59-2	cis-1,2-Dichloroethene	5	UD	1	1	5	ug/L
74-97-5	Bromochloromethane	5	UD	1	2.5	5	ug/L
67-66-3	Chloroform	5	UD	1	1	5	ug/L
71-55-6	1,1,1-Trichloroethane	5	UD	1	1	5	ug/L
108-87-2	Methylcyclohexane	5	UD	1	1	5	ug/L
71-43-2	Benzene	700	D	1	1	5	ug/L
107-06-2	1,2-Dichloroethane	5	UD	1	1	5	ug/L
79-01-6	Trichloroethene	5	UD	1	1	5	ug/L
78-87-5	1,2-Dichloropropane	5	UD	1	1	5	ug/L
75-27-4	Bromodichloromethane	5	UD	1	1	5	ug/L
108-10-1	4-Methyl-2-Pentanone	25	UD	5	5	25	ug/L
108-88-3	Toluene	9.7	D	1	1	5	ug/L
10061-02-6	t-1,3-Dichloropropene	5	UD	1	1	5	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-04DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043896.D	5		10/05/17 13:10	VN100517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	5	UD	1	1	5	ug/L
79-00-5	1,1,2-Trichloroethane	5	UD	1	1	5	ug/L
591-78-6	2-Hexanone	25	UD	9.7	12.5	25	ug/L
124-48-1	Dibromochloromethane	5	UD	1	1	5	ug/L
106-93-4	1,2-Dibromoethane	5	UD	1	1	5	ug/L
127-18-4	Tetrachloroethene	5	UD	1	1	5	ug/L
108-90-7	Chlorobenzene	5	UD	1	1	5	ug/L
100-41-4	Ethyl Benzene	110	D	1	1	5	ug/L
179601-23-1	m/p-Xylenes	23.9	D	2	2	10	ug/L
95-47-6	o-Xylene	24.9	D	1	1	5	ug/L
100-42-5	Styrene	5	UD	1	1	5	ug/L
75-25-2	Bromoform	5	UD	1	1	5	ug/L
98-82-8	Isopropylbenzene	16.9	D	1	1	5	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5	UD	1	1	5	ug/L
541-73-1	1,3-Dichlorobenzene	5	UD	1	1	5	ug/L
106-46-7	1,4-Dichlorobenzene	5	UD	1	1	5	ug/L
95-50-1	1,2-Dichlorobenzene	5	UD	1	1	5	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	5	UD	1	1	5	ug/L
120-82-1	1,2,4-Trichlorobenzene	5	UD	1	1	5	ug/L
87-61-6	1,2,3-Trichlorobenzene	5	UD	1	1	5	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51		61 - 141		102%	SPK: 50
1868-53-7	Dibromofluoromethane	48.8		69 - 133		98%	SPK: 50
2037-26-5	Toluene-d8	51.4		65 - 126		103%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.9		58 - 135		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1293640	7.67				
540-36-3	1,4-Difluorobenzene	2081660	8.59				
3114-55-4	Chlorobenzene-d5	1798430	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	733163	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I5526
Lab Sample ID:	I5526-04DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043896.D	5		10/05/17 13:10	VN100517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE023279.D	1	10/04/17 08:00	10/04/17 18:35	PB102899

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	50	U	25	25	50	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	22		29 - 130		110%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB011200.D	1	10/04/17 15:49	FB100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	45	U	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	19.2		50 - 150		96%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	54.2		1	12.5	12.5	50	ug/L	10/03/17 09:02	10/03/17 18:37	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099077.D	1	10/04/17 09:08	10/04/17 20:04	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10	U	0.77	1	10	ug/L
108-95-2	Phenol	10	U	0.21	1	10	ug/L
111-44-4	bis(2-Chloroethyl)ether	10	U	0.55	1	10	ug/L
95-57-8	2-Chlorophenol	10	U	0.54	1	10	ug/L
95-48-7	2-Methylphenol	10	U	0.24	1	10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10	U	0.17	1	10	ug/L
98-86-2	Acetophenone	10	U	0.14	1	10	ug/L
65794-96-9	3+4-Methylphenols	10	U	0.38	1	10	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10	U	0.2	1	10	ug/L
67-72-1	Hexachloroethane	10	U	0.25	1	10	ug/L
98-95-3	Nitrobenzene	10	U	0.68	1	10	ug/L
78-59-1	Isophorone	10	U	0.3	1	10	ug/L
88-75-5	2-Nitrophenol	10	U	0.52	1	10	ug/L
105-67-9	2,4-Dimethylphenol	10	U	0.71	1	10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10	U	0.55	1	10	ug/L
120-83-2	2,4-Dichlorophenol	10	U	0.66	1	10	ug/L
91-20-3	Naphthalene	10	U	0.12	1	10	ug/L
106-47-8	4-Chloroaniline	10	U	1	1	10	ug/L
87-68-3	Hexachlorobutadiene	10	U	0.25	1	10	ug/L
105-60-2	Caprolactam	10	U	1	1	10	ug/L
59-50-7	4-Chloro-3-methylphenol	10	U	0.4	1	10	ug/L
91-57-6	2-Methylnaphthalene	10	U	0.32	1	10	ug/L
77-47-4	Hexachlorocyclopentadiene	10	U	0.24	1	10	ug/L
88-06-2	2,4,6-Trichlorophenol	10	U	0.56	1	10	ug/L
95-95-4	2,4,5-Trichlorophenol	10	U	0.4	1	10	ug/L
92-52-4	1,1-Biphenyl	10	U	0.15	1	10	ug/L
91-58-7	2-Chloronaphthalene	10	U	0.16	1	10	ug/L
88-74-4	2-Nitroaniline	10	U	0.49	1	10	ug/L
131-11-3	Dimethylphthalate	10	U	0.22	1	10	ug/L
208-96-8	Acenaphthylene	10	U	0.7	1	10	ug/L
606-20-2	2,6-Dinitrotoluene	10	U	0.32	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099077.D	1	10/04/17 09:08	10/04/17 20:04	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10	U	1	1	10	ug/L
83-32-9	Acenaphthene	10	U	0.21	1	10	ug/L
51-28-5	2,4-Dinitrophenol	10	U	2.1	8	10	ug/L
100-02-7	4-Nitrophenol	10	U	2	5	10	ug/L
132-64-9	Dibenzofuran	10	U	0.24	1	10	ug/L
121-14-2	2,4-Dinitrotoluene	10	U	1	1	10	ug/L
84-66-2	Diethylphthalate	10	U	0.38	1	10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10	U	0.21	1	10	ug/L
86-73-7	Fluorene	10	U	0.31	1	10	ug/L
100-01-6	4-Nitroaniline	10	U	1.4	2	10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10	U	0.74	2	10	ug/L
86-30-6	n-Nitrosodiphenylamine	10	U	0.6	1	10	ug/L
101-55-3	4-Bromophenyl-phenylether	10	U	0.23	1	10	ug/L
118-74-1	Hexachlorobenzene	10	U	0.18	1	10	ug/L
1912-24-9	Atrazine	10	U	0.4	1	10	ug/L
87-86-5	Pentachlorophenol	10	U	1	1	10	ug/L
85-01-8	Phenanthrene	10	U	0.26	1	10	ug/L
120-12-7	Anthracene	10	U	0.16	1	10	ug/L
86-74-8	Carbazole	10	U	0.22	1	10	ug/L
84-74-2	Di-n-butylphthalate	10	U	1	1	10	ug/L
206-44-0	Fluoranthene	10	U	0.4	1	10	ug/L
129-00-0	Pyrene	10	U	0.2	1	10	ug/L
85-68-7	Butylbenzylphthalate	10	U	0.19	1	10	ug/L
91-94-1	3,3-Dichlorobenzidine	10	U	1	1	10	ug/L
56-55-3	Benzo(a)anthracene	10	U	0.16	1	10	ug/L
218-01-9	Chrysene	10	U	0.18	1	10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	0.16	1	10	ug/L
117-84-0	Di-n-octyl phthalate	10	U	0.51	1	10	ug/L
205-99-2	Benzo(b)fluoranthene	10	U	0.29	1	10	ug/L
207-08-9	Benzo(k)fluoranthene	10	U	0.18	1	10	ug/L
50-32-8	Benzo(a)pyrene	10	U	0.14	1	10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	0.15	1	10	ug/L
53-70-3	Dibenzo(a,h)anthracene	10	U	0.42	1	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF099077.D	1	10/04/17 09:08	10/04/17 20:04	PB102898

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10	U	0.29	1	10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U	0.2	1	10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10	U	0.2	1	10	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	67.9		10 - 130		45%	SPK: 150
13127-88-3	Phenol-d6	41.8		10 - 130		28%	SPK: 150
4165-60-0	Nitrobenzene-d5	98.2		36 - 131		98%	SPK: 100
321-60-8	2-Fluorobiphenyl	95.6		39 - 131		96%	SPK: 100
118-79-6	2,4,6-Tribromophenol	140		25 - 155		93%	SPK: 150
1718-51-0	Terphenyl-d14	94.3		23 - 130		94%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	145856	6.86				
1146-65-2	Naphthalene-d8	601038	8.15				
15067-26-2	Acenaphthene-d10	272997	9.9				
1517-22-2	Phenanthrene-d10	483117	11.39				
1719-03-5	Chrysene-d12	328421	14.03				
1520-96-3	Perylene-d12	245476	15.5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043859.D	1		10/04/17 17:33	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	36.5		0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	5.2		0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043859.D	1		10/04/17 17:33	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.24	J	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50		61 - 141		100%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		69 - 133		101%	SPK: 50
2037-26-5	Toluene-d8	51.7		65 - 126		103%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.3		58 - 135		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1223310	7.67				
540-36-3	1,4-Difluorobenzene	1897930	8.59				
3114-55-4	Chlorobenzene-d5	1609220	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	569291	13.36				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043859.D	1		10/04/17 17:33	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043860.D	1		10/04/17 17:59	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043860.D	1		10/04/17 17:59	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51.5		61 - 141		103%	SPK: 50
1868-53-7	Dibromofluoromethane	48.8		69 - 133		98%	SPK: 50
2037-26-5	Toluene-d8	51.4		65 - 126		103%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.8		58 - 135		88%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1140000	7.67				
540-36-3	1,4-Difluorobenzene	1829960	8.59				
3114-55-4	Chlorobenzene-d5	1516470	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	508373	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	09/28/17
Project:	Hunters Point - Queens West Library	Date Received:	09/28/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I5526
Lab Sample ID:	I5526-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN043860.D	1		10/04/17 17:59	VN100417

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

Attachment 5
LiRo Engineers, Inc. - Quarterly Monitoring Report – Fourth Quarter 2017, March 7, 2018

Included on Attached CD

Quarterly Monitoring Report: Fourth Quarter 2017

Queens West (Hunters Point) Parcel 8

Parcel West of Center Boulevard between 47th Road and 48th Avenue

Queens, New York 11101

NYSDEC Site ID: C241087

DDC PROJECT NO. LQD122-QW

WORK ORDER NO. 13821-LIRO-3-12503

CONTRACT REGISTRATION NO. 20151405569

Prepared for:

NYC DDC Department of Design and Construction

Office of Environmental and Geotechnical Services
30-30 Thomson Avenue, Third Floor
Long Island City, New York 11101

Prepared by:

LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, New York 11211

PROJECT NO. 15-008-0265

March 7, 2018

TABLE OF CONTENTS

Figures

Tables

Appendices

1.0 INTRODUCTION

1.1 Background Information

On behalf of the New York City Department of Design and Construction (DDC), Office of Environmental and Geotechnical Services (OEGS), LiRo Engineers, Inc. (LiRo) conducted the 2017 fourth quarter groundwater sampling event in December 2017 and prepared this Quarterly Monitoring Report (QMR) for the new Queens West Hunters Point Community Library located at Parcel 8 (Block 19, portion of Lot 21), the Site, west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York (Figure 1). The parcel is approximately 0.73 acres and is an active construction site. The locations of the groundwater monitoring wells are shown on Figure 2. Based on the previous Site investigations, groundwater flow direction is generally toward the west.

The Site is in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) (NYSDEC Site No. C241087) and redevelopment of the Site is being conducted under the requirements of the Site Management Plan (SMP) dated December 2011 and Revision #1 dated November 2014. The groundwater sampling and this QMR were performed in accordance with the SMP. The SMP calls for quarterly groundwater sampling in order to evaluate current groundwater conditions and to evaluate the overall effectiveness of remediation.

Between October 25, 2010 and March 30, 2011, Fleming Lee Shue (FLS) of New York, New York implemented the treatment remedy for Parcel 8, which included in-situ chemical injection using sodium persulfate, sodium hydroxide, and a plant-based surfactant under the NYSDEC BCP Site No. C241087. Sodium persulfate was the oxidant used and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of the coal tar to make it available for chemical oxidation. A total of 334,000 pounds of sodium persulfate, 136,300 pounds of sodium hydroxide, and 65,000 pounds of surfactant were injected over the five-month treatment period. The bulk of the treatment targeted the zone of 10 to 22 feet below grade (ftbg). Treatment was completed using the RemMetrik® process, which, in this instance, used subsurface pressure waves generated by Wavefront Technology Solutions, Inc.'s Primawave™ process. Previous estimates indicated that 47,000 pounds of coal tar contamination were slated for treatment.

The following on-site groundwater monitoring wells were decommissioned in June 2015 by LiRo on behalf of the DDC, due to on-going construction at the Site.

- MW-7R, MW-11D, MW-12D, MW-13S, MW-14S, MW-17S, MW-18D, MW-21S, MW-22D, MW-23S, and Geothermal Well (no ID).

LiRo submitted a Monitoring Well Decommissioning memorandum dated July 1, 2015 to document the well closures.

LiRo completed the second quarter 2015 groundwater sampling in June 2015, the third quarter 2015 groundwater sampling in September 2015, and the fourth quarter 2015 groundwater sampling in December 2015.

Prior to the first quarter 2016 sampling, two (2) additional groundwater monitoring wells, MW-15 and MW-20, were decommissioned by LiRo on behalf of DDC due to their interference of on-going construction activities at the Site.

LiRo submitted a Monitoring Well Decommissioning Memorandum dated March 18, 2016 to document the well closures. LiRo completed the first quarter 2016 groundwater sampling in March 2016, the second quarter 2016 groundwater sampling in June 2016, the third quarter 2016 groundwater sampling in September 2016, and the fourth quarter 2016 groundwater sampling in December 2016.

Prior to the fourth quarter 2016 sampling, one (1) additional groundwater monitoring well, MW-19D, was decommissioned by LiRo on behalf of DDC due to its interference with on-going construction activities at the Site. LiRo submitted a Monitoring Well Decommissioning Memorandum dated December 5, 2016 to document the well closure.

LiRo completed the first quarter 2017 groundwater sampling in March 2017, the second quarter groundwater sampling in June 2017, the third quarter groundwater sampling in September 2017, and the fourth quarter groundwater sampling in December 2017.
Construction of the new Hunters Point Library is underway at the Site. At the time of the 2017 fourth quarter sampling, the building walls have been constructed and construction of the building interior is currently ongoing.

2.0 QUARTERLY GROUNDWATER SAMPLING

2.1 Overview of Groundwater Sampling

LiRo conducted the fourth quarter 2017 groundwater sampling at the Site on December 6, 2017, which included sampling from wells within Peninsula Park.

The well locations requiring sampling as per NYSDEC in December 2017 were MW-26S, MW-26D, MW-27S, and MW-27D, which are located in Peninsula Park. The monitoring well locations are shown on Figure 2. The groundwater samples were submitted for laboratory analysis to Chemtech of Mountainside, New Jersey, a New York State Department of Health (NYSDOH) approved laboratory (No. 11376). The analytical results were then validated by Vali-Data of WNY, LLC (Vali-Data) of West Falls, New York, who prepared the Data Usability Summary Report (DUSR) dated March 2, 2018. The DUSR is provided in Appendix 1.

2.2 Groundwater Sampling and Analysis – Fourth Quarter 2017

Based on the SMP provided to LiRo, the fourth quarter 2017 sampling was scheduled for monitoring wells MW-26S, MW-26D, MW-27S, and MW-27D. LiRo completed the groundwater sampling on December 6, 2017. Prior to sampling, LiRo conducted water level/free product monitoring in the wells using an oil/water interface probe. A dense non-aqueous phase liquid (DNAPL) layer (inferred to be coal tar based on Site history) was identified at MW-26D and MW-27D, with measurable thicknesses of 1 inch at a depth of 30.1 ftbg and approximately 3 inches at a depth of 30.1 ftbg, respectively. Therefore, in accordance with the SMP, MW-26D and MW-27D were not sampled. The exact product thickness cannot be measured due to a mixing zone above the product.

Well purging and groundwater sampling of MW-26S and MW-27S was conducted in accordance with the approved Quality Assurance Project Plan (QAPP) and the NYSDEC-approved SMP. Each well was purged using a low-flow method, which included the use of a peristaltic pump to ensure minimal generation of suspended solids, minimize the volatilization of contaminants in the groundwater, acquire a more representative localized groundwater sample from the contaminated plume and minimize the volume of groundwater purged. The wells were purged until groundwater parameters including temperature, pH, dissolved oxygen (DO), conductivity, oxidation reduction potential (ORP), and turbidity stabilized. The aforementioned groundwater monitoring parameter measurements were collected using a Horiba U-52 water quality meter. The groundwater parameter measurements are provided in the well purge logs included in Appendix 2.

The groundwater samples were collected and submitted for laboratory analysis of the following parameters:

- Target Compound List (TCL) volatile organic compounds (VOCs), United States Environmental Protection Agency (USEPA) Method 8260C;
- TCL semi-volatile organic compounds (SVOCs), USEPA Method 8270D;
- Total Petroleum Hydrocarbon (TPHC) Diesel Range Organics/Gasoline Range Organics (DRO/GRO), USEPA Method 8015C;
- Total Iron, USEPA Method 6010;
- Alkalinity, USEPA Method 310.1;
- Sulfide, USEPA Method 376.1; and,
- Sulfate, USEPA Method 300.

The groundwater samples were submitted to Chemtech, a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory. The laboratory groundwater analytical report is included in Appendix 3.

Quality assurance/quality control (QA/QC) samples were collected during sampling and included one (1) trip blank and one (1) equipment blank.

2.3 Summary of Analytical Results

Groundwater analytical results for the fourth quarter 2017 samples are summarized in Tables 2 through 4. To be consistent with previous reporting, the trends for benzene and naphthalene are discussed and summarized below.

Table 1 – Summary of Benzene and Naphthalene Detections March 2016 – December 2017

Well ID	Analyte	Concentration (µg/L)							
		12/2017	9/2017	6/2017	3/2017	12/2016	9/2016	6/2016	3/2016
MW-24S	Benzene	NS	NS	NS	2	NS	NS	NS	10
	Naphthalene	NS	NS	NS	340	NS	NS	NS	220
MW-24D	Benzene	NS	NS	NS	25.1	NS	NS	NS	25
	Naphthalene	NS	NS	NS	330	NS	NS	NS	260
MW-25S	Benzene	NS	NS	NS	ND	NS	NS	NS	ND
	Naphthalene	NS	NS	NS	ND	NS	NS	NS	ND
MW-25D	Benzene	NS	NS	NS	ND	NS	NS	NS	ND
	Naphthalene	NS	NS	NS	ND	NS	NS	NS	ND
MW-26S	Benzene	3,200	3,900	3,000	2,000	740	860	1,100	930
	Naphthalene	250	3,500	1,900	1,400	1,000	1,400	1,300	1,500
MW-26D	Benzene	NS	NS	9,700	NS	NS	14,000	NS	NS
	Naphthalene	NS	NS	5,000	NS	NS	9,200	NS	NS
MW-27S	Benzene	360	700	550	230	41.5	28	150	100
	Naphthalene	34.2	75.1	600	ND	ND	6.2	ND	ND

Table 1 – Summary of Benzene and Naphthalene Detections March 2016 – December 2017 (Continued)

Well ID	Analyte	Concentration (µg/L)							
		12/2017	9/2017	6/2017	3/2017	12/2016	9/2016	6/2016	3/2016
MW-27D	Benzene	NS	NS	NS	NS	NS	NS	NS	NS
	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS
MW-30S	Benzene	NS	ND	NS	ND	NS	0.22 J	NS	ND
	Naphthalene	NS	ND	NS	ND	NS	ND J	NS	ND
MW-30D	Benzene	NS	89.5	NS	160	NS	2,000	NS	1,300
	Naphthalene	NS	7,800	NS	2,400	NS	10,000	NS	5,500

µg/l = micrograms per liter
ND = Non detect
NS = Not sampled

The December 2017 benzene data reported decreased concentrations at wells MW-26S and MW-27S compared to the third quarter 2017 results. The concentrations are generally consistent with previous quarterly/semi-annual sampling result trends.

The December 2017 naphthalene data reported decreased concentrations at wells MW-26S and MW-27S, compared to the third quarter 2017 results. December 2017 naphthalene concentrations are generally consistent with previous quarterly/semi-annual sampling result trends.

Total iron and TPHC DRO/GRO and water quality indicator parameter (sulfate, sulfide, and alkalinity) results are reported in Table 4.

The groundwater sampling results were compared to the New York State Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standard/Guidance values (AWQSGVs) in Tables 2 through 4. The concentrations for parameters exceeding AWQSGVs are shown on Figures 3 through 5 and are discussed below.

Analytical results from MW-26S identified six (6) VOC analytes in exceedance of TOGS 1.1.1 AWQSGVs, including benzene at 3,200 micrograms per liter (µg/L), ethylbenzene at 620 µg/L, isopropylbenzene at 41.5 µg/L, o-xylene at 440 µg/L, m- & p-xylenes at 610 µg/L, and toluene at 330 µg/L. Three (3) SVOC analytes were identified in exceedance of TOGS 1.1.1 AWQSGVs, including 2,4-dimethylphenol at 97.4 µg/L, naphthalene at 250 µg/L, and phenol at 13.5 µg/L. Iron was reported at 438 µg/L, sulfate was reported at 482 milligrams per liter (mg/L), and sulfide was reported at 23.5 mg/L, each in exceedance of TOGS 1.1.1 AWQSGVs at MW-26S.

Analytical results from MW-27S identified five (5) VOC analytes in exceedance of TOGS 1.1.1 AWQSGVs including benzene at 360 µg/L, ethylbenzene at 43.6 µg/L, isopropylbenzene at 6.3 µg/L, o-xylene at 9.6 µg/L, and m- & p-xylenes at 7.6 µg/L. Two (2) SVOC analytes were identified in exceedance of TOGS 1.1.1 AWQSGVs including naphthalene at 34.2 µg/L and phenol at 6 µg/L. Iron was reported at 2,530 µg/L and sulfide was reported at 7.7 mg/L, each in exceedance of TOGS 1.1.1 AWQSGVs at MW-27S.

2.4 Data Validation

Data validation was performed as required by the SMP. The DUSR, dated March 2, 2018, for the fourth quarter 2017 groundwater analytical results is provided in Appendix 1. Based on the data validation, the data are acceptable for use with the "J" qualification (which indicates an estimated value) as noted in the DUSR.

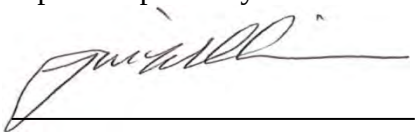
3.0 CONCLUSIONS

In December 2017, LiRo completed the fourth quarter 2017 groundwater sampling activities at the construction Site for the new Queens West Hunters Point Community Library located at Parcel 8, west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York. During this sampling event, four (4) monitoring wells, MW-26S, MW-26D, MW-27S, and MW-27D, were scheduled for sampling and analysis. Prior to purging activities, DNAPL was detected in two (2) of the deep monitoring wells (MW-26D and MW-27D) and as a result, these two (2) wells were not sampled.

Comparing to the third quarter 2017 groundwater sampling results, benzene data indicates decreased concentrations at MW-26S and MW-27S. Naphthalene data also indicates decreased concentrations at MW-26S and MW-27S.

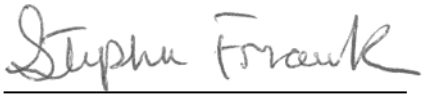
The DNAPL observed at MW-26D and MW-27D is potentially a result of residual coal tar in the deeper portion of the formation or migration from the Parcel 8 treatment area. DNAPL has consistently been observed at MW-26D and MW-27D since LiRo began quarterly sampling in June 2015.

Report Prepared By:



Jon Williams
Senior Geologist

Report Reviewed By:

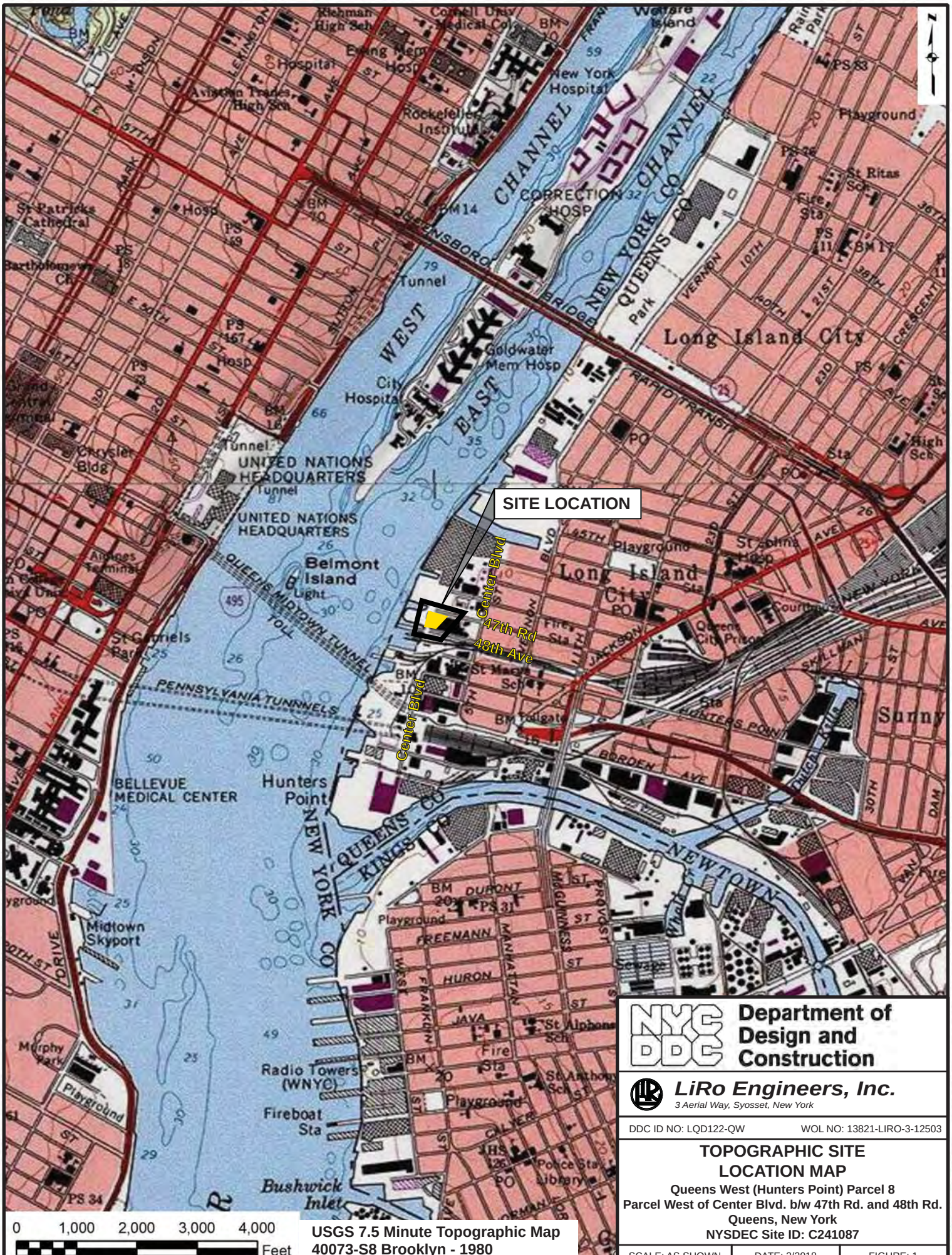


Stephen Frank
Senior Geologist

Report Reviewed By:

Robert Kreuzer
Project Manager

Figures



USGS 7.5 Minute Topographic Map
40073-S8 Brooklyn - 1980

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO: LQD122-QW | WOL NO: 13821-LIRO-3-12503

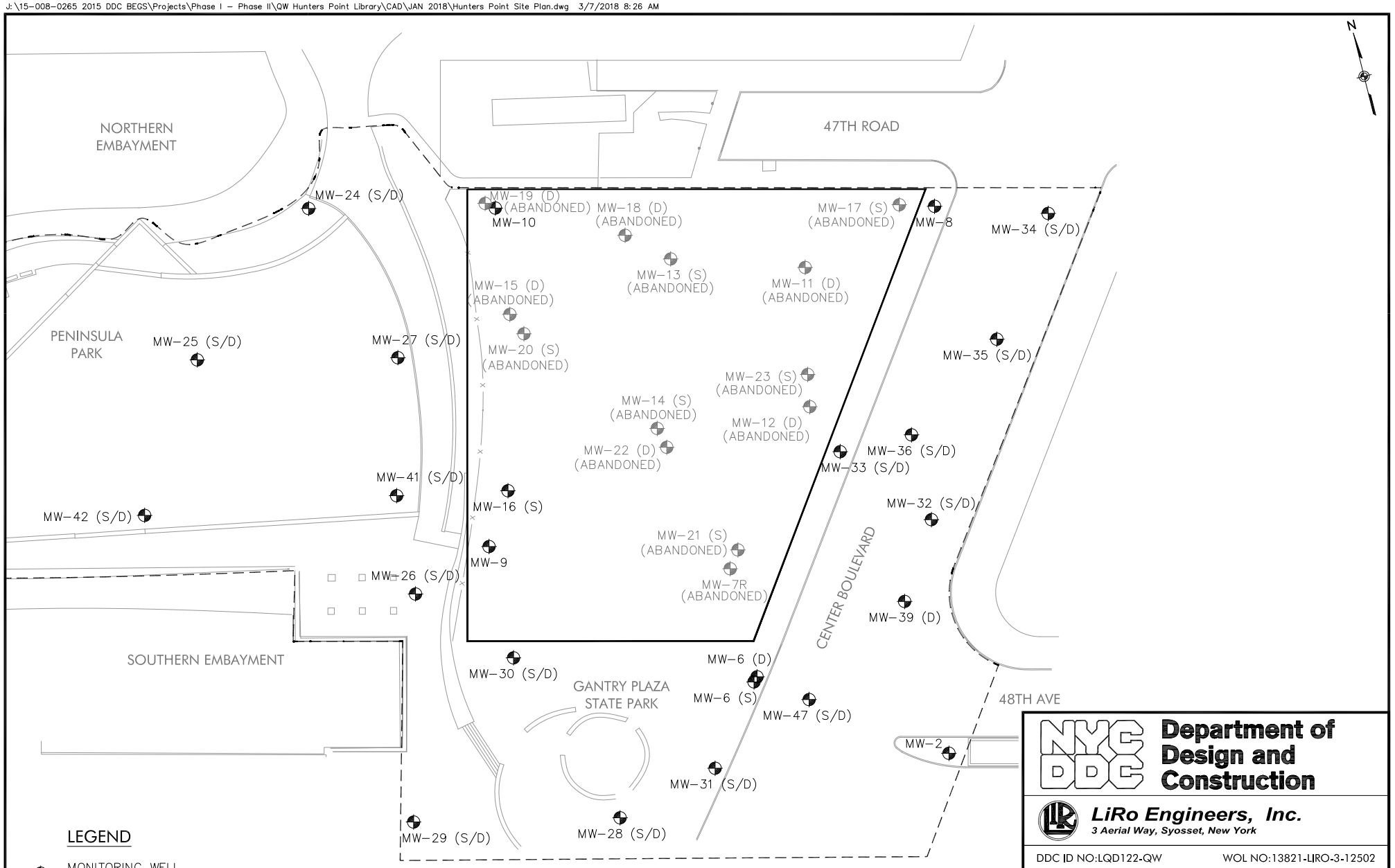
TOPOGRAPHIC SITE LOCATION MAP

Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. b/w 47th Rd. and 48th Rd.
Queens, New York
NYSDEC Site ID: C241087

SCALE: AS SHOWN	DATE: 2/2018	FIGURE: 1

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\JAN 2018\Hunters Point Topo Map.ai

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\JAN 2018\Hunters Point Site Plan.dwg 3/7/2018 8:26 AM



LEGEND

- MONITORING WELL LOCATION
- PARCEL 8 BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

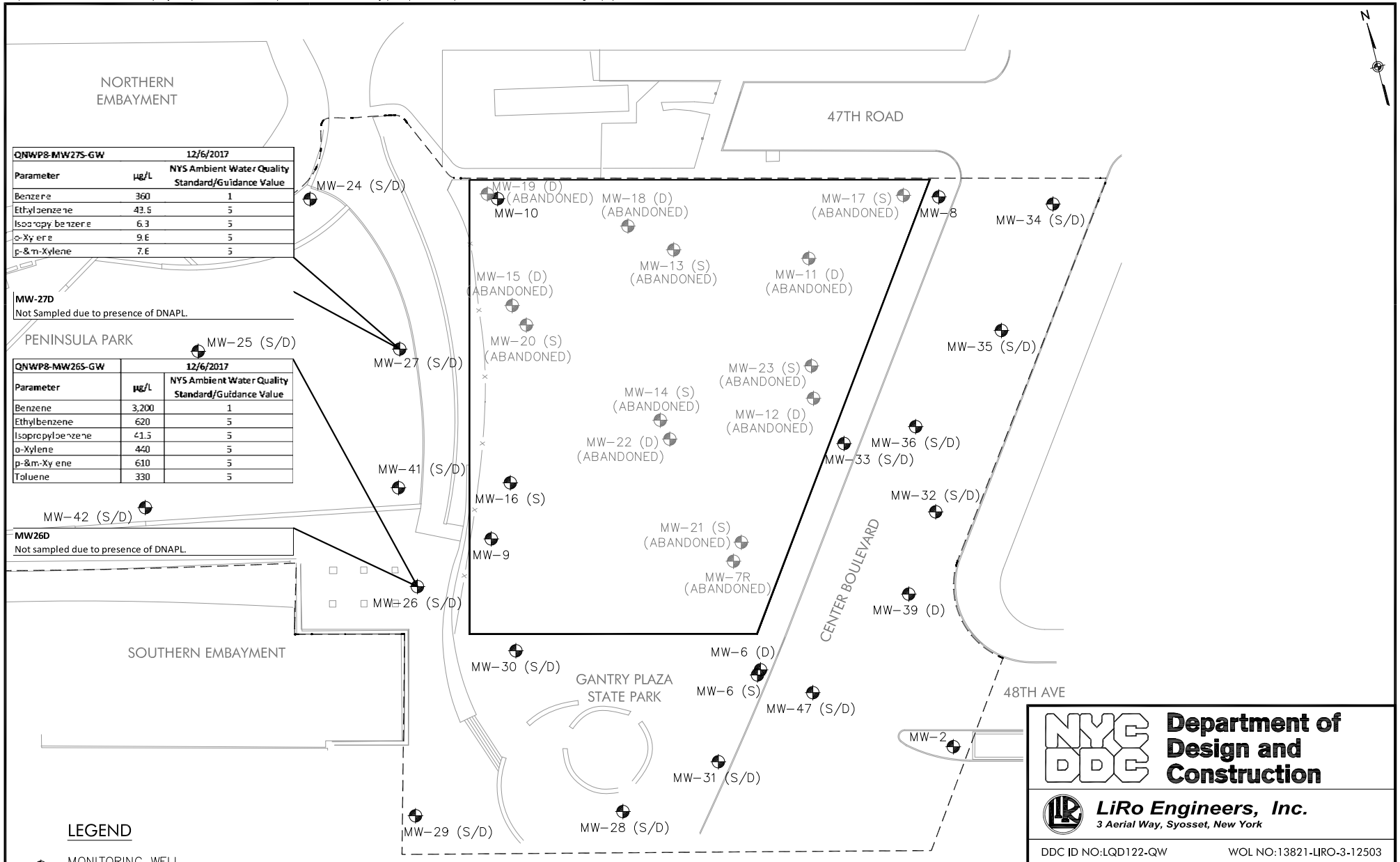
DDC ID NO:LQD122-QW WOL NO:13821-LIRO-3-12502

SITE PLAN - WELL LOCATIONS

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 3/2018	FIGURE: 2

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\JAN 2018\Hunters Point GW VOC EXC.dwg 3/7/2018 8:26 AM



QNWP8-MW27S-GW	12/6/2017	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Benzene	360	1
Ethylbenzene	43.5	5
Isopropylbenzene	6.3	5
o-Xylene	9.6	5
p-&m-Xylene	7.6	5

MW-27D
Not Sampled due to presence of DNAPL.

QNWP8-MW26S-GW	12/6/2017	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Benzene	3,200	1
Ethylbenzene	620	5
Isopropylbenzene	41.5	5
o-Xylene	440	5
p-&m-Xylene	610	5
Toluene	330	5

MW26D
Not sampled due to presence of DNAPL.

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

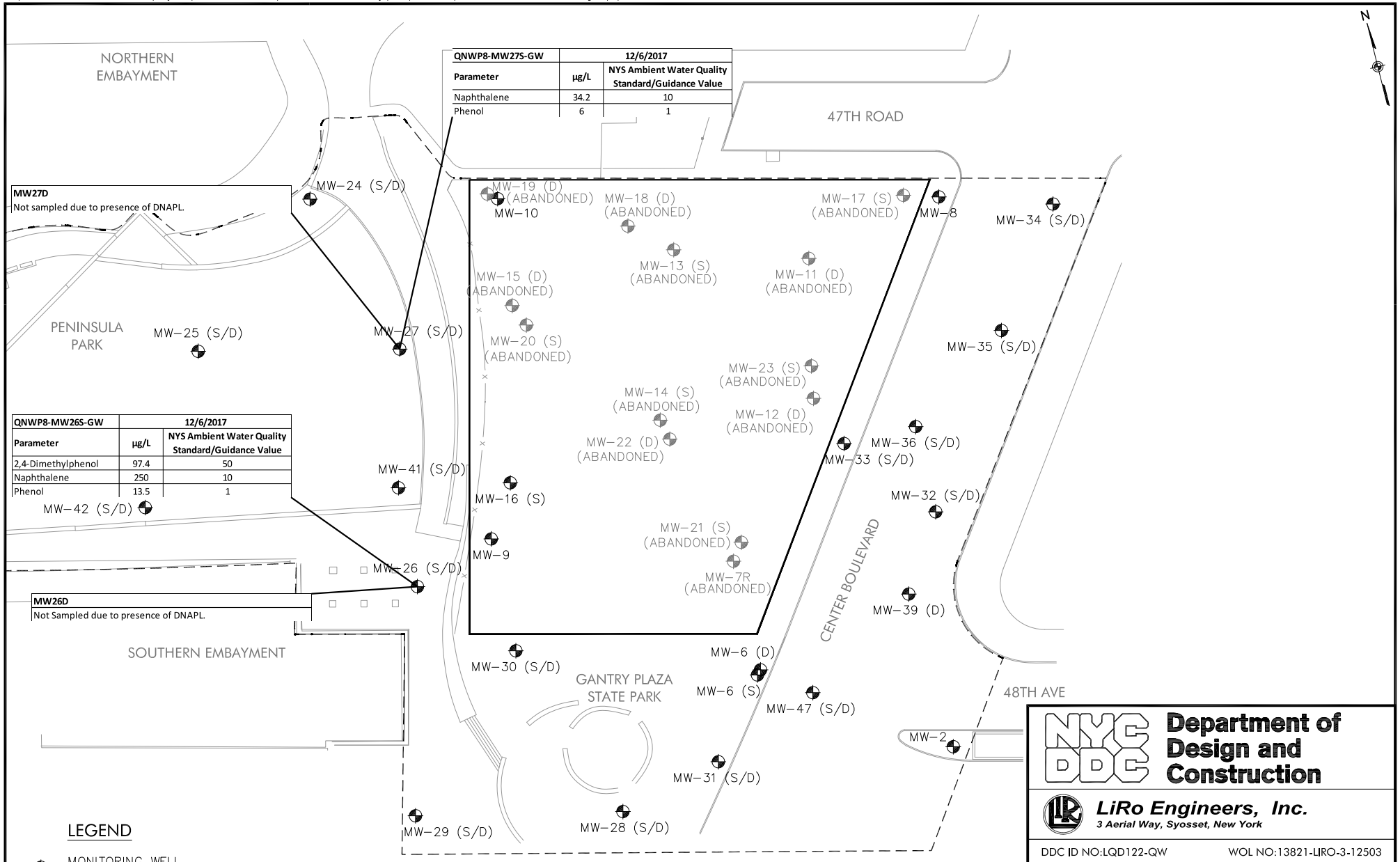
DDC ID NO:LQD122-QW WOL NO:13821-LIRO-3-12503

SITE PLAN - WELL LOCATIONS AND GROUNDWATER VOC EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 3/2018	FIGURE: 3

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\JAN 2018\Hunters Point GW SVOC EXC.dwg 3/7/2018 8:26 AM



QNWP8-MW27S-GW	12/6/2017	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Naphthalene	34.2	10
Phenol	6	1

MW27D
Not sampled due to presence of DNAPL.

QNWP8-MW26S-GW	12/6/2017	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
2,4-Dimethylphenol	97.4	50
Naphthalene	250	10
Phenol	13.5	1

MW26D
Not Sampled due to presence of DNAPL.

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

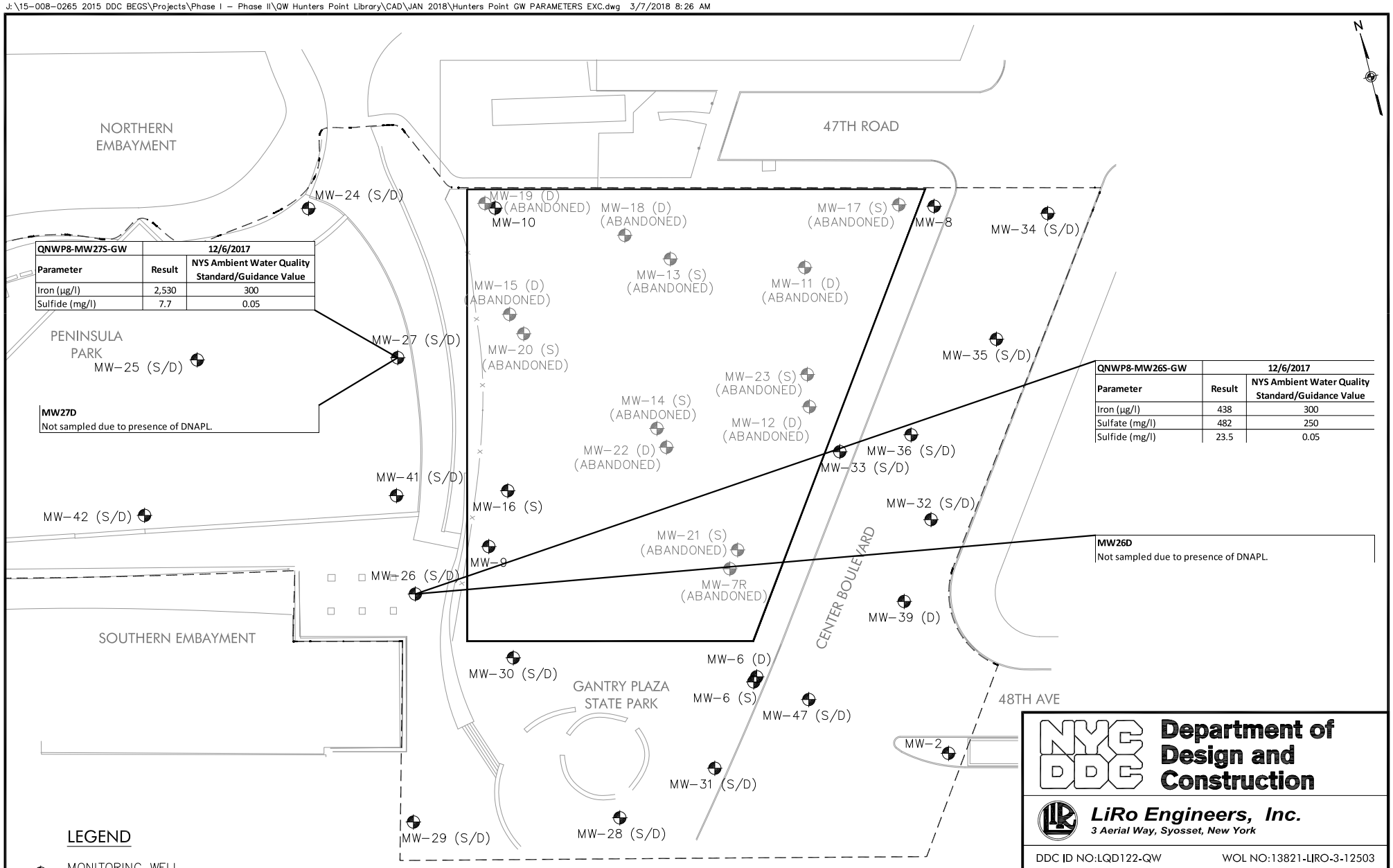
DDC ID NO:LQD122-QW WOL NO:13821-LIRO-3-12503

SITE PLAN - WELL LOCATIONS AND GROUNDWATER SVOC EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 3/2018	FIGURE: 4

J:\15-008-0265 2015 DDC BEGS\Projects\Phase I - Phase II\QW Hunters Point Library\CAD\JAN 2018\Hunters Point GW PARAMETERS EXC.dwg 3/7/2018 8:26 AM



QNWP8-MW27S-GW	12/6/2017	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Iron (µg/l)	2,530	300
Sulfide (mg/l)	7.7	0.05

MW27D
Not sampled due to presence of DNAPL.

QNWP8-MW26S-GW	12/6/2017	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Iron (µg/l)	438	300
Sulfate (mg/l)	482	250
Sulfide (mg/l)	23.5	0.05

MW26D
Not sampled due to presence of DNAPL.

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO:LQD122-QW WOL NO:13821-LIRO-3-12503

SITE PLAN - WELL LOCATIONS & GROUNDWATER MISCELLANEOUS PARAMETER EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 3/2018	FIGURE: 5

Tables

Table 2 - Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Groundwater
Quarterly Monitoring Report: Fourth Quarter 2017
Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

TCL VOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect			
		QNWP8-MW26S-GW	QNWP8-MW27S-GW	QNWP8-Equip. Blank	QNWP8-Trip Blank 1
		12/6/2017	12/6/2017	12/6/2017	12/4/2017
Benzene	1	**3,200**	**360 D**	ND	ND
Ethylbenzene	5	**620**	**43.6**	ND	ND
Isopropylbenzene	5	**41.5 J**	**6.3**	ND	ND
Methyl-tert-butyl ether	NS	ND	2.6	ND	ND
o-Xylene	5	**440**	**9.6**	ND	ND
p- & m-Xylenes	5	**610**	**7.6**	ND	ND
Toluene	5	**330**	4.1	ND	ND
Xylene (Total)	5	**1,050**	**17.2**	ND	ND
Total VOCs	NS	5,242	434	ND	ND

Notes:
All concentrations are reported in parts per billion (ppb or ug/L)
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
Naphthalene reported with SVOCs in Table 3.
J = Estimated.
D = Dilution.

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 3 - Summary of Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) Detected in Groundwater
Quarterly Monitoring Report: Fourth Quarter 2017
Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

TCL SVOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect		
		QNWP8-MW26S-GW	QNWP8-MW27S-GW	QNWP8-Equip. Blank
		12/6/2017	12/6/2017	12/6/2017
2,4-Dimethylphenol	50	**97.4 D**	25.4	ND
2-Methylnaphthalene	NS	2.9 J	ND	ND
2-Methylphenol (o-Cresol)	NS	20.3	ND	ND
3+4-Methylphenols (m-Cresol & p-Cresol)	NS	35.5	ND	ND
Acenaphthene	20	4.9 J	ND	ND
Acetophenone	NS	4.2 J	ND	ND
Carbazole	NS	22.8	11.3	ND
Diethylphthalate	50	ND	20.2	ND
Napthalene	10	**250 D**	**34.2**	ND
Phenol	1	**13.5**	**6 J**	ND
Total SVOCs	NS	202	97	ND

Notes:
All concentrations are reported in parts per billion (ppb or ug/L)
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated
D = Dilution

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 4 - Summary of Miscellaneous Parameters in Groundwater
Quarterly Monitoring Report: Fourth Quarter 2017
Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. between 47th Rd. & 48th Ave., Queens, NY

Parameter	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID and Date Collected		
		QNWP8-MW26S-GW 12/6/2017	QNWP8-MW27S-GW 12/6/2017	QNWP8-Equip. Blank 12/6/2017
PARAMETERS (units)				
Iron (ug/L)	300	**438**	**2,530**	ND
Sulfate (mg/L)	250	**482 D**	218 D	ND
Sulfide (mg/L)	0.05	**23.5**	**7.7**	NA
Alkalinity (mg/L)	NS	1,690	1,570	NA
TPHC Diesel Range Organics (mg/L)	NS	19.700	6.520	ND
TPHC Gasoiline Range Organics (mg/L)	NS	4.275	0.464	ND

Notes:
NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
NA = Not analyzed
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
ug/L = microgram per liter
mg/L = milligram per liter
D = Dilution

Bold = Concentration exceeds NYS Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards/Guidance Values - Class GA Waters

Appendix 1
Data Usability Summary Report (DUSR)

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Queens W. Hunter's Point
Chemtech SDG#I6786
March 2, 2018
Reissued: March 5, 2018
Sampling date: 12/4, 6/2017

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package(reissued; March 5, 2018) for LiRo Engineers, Inc., project located at Queens W. Hunter's Point, Chemtech, SDG#I6786 submitted to Vali-Data of WNY, LLC on January 18, 2018. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocols and USEPA National Functional Guidelines. The laboratory performed the analysis using USEPA method Volatile Organics (8260C) and Semi-Volatile Organics (8270D).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below in Surrogate Spike Recoveries and Laboratory Control Samples.

Sample, QNWP8-MW26S-GW, was diluted due to a bad matrix.
Sample, QNWP8-MW27S-GW, was diluted due to high target analyte concentrations.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met except the pH of QNWP8-MW27S-GW was outside QC limits. The sample was analyzed within 7 days of collection, so no further action is required.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of 1,2-Dichloroethane-d_4 was outside ASP QC limits, high in VN1212WBS01 and VN1212WBSD01. Associated target analytes detected in these laboratory control samples should be qualified as estimated.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except the RPD of Bromomethane, Acetone, 2-Hexanone, 1,2-Dibromo-3-Chloropropane, 1,2,4-Trichlorobenzene and 1,2,3-Trichlorobenzene were outside QC limits, between VN1212WBS01 and VN1212WBSD01. These target analytes should be qualified as estimated in VN1212WBS01, VN1212WBSD01 and the associated samples.

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met except the %D of Bromomethane was outside QC limits in VN045691.D.

ASP allows for up to two target analytes to be outside QC limits without further action.

GC/MS PERFORMANCE CHECK
All criteria were met.

SEMI-VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Laboratory Control Samples.

Sample, QNWP8-MW26S-GW was diluted due to high target analyte concentration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except the %Rec of N-Nitroso-di-n-propylamine, 4-Chloroaniline, 1,1'-Biphenyl, 3-Nitroaniline, Acenaphthene, n-Nitrosodiphenylamine and 4-Bromophenyl-phenylether was outside QC limits, low in PB104989BS. These target analytes should be qualified as estimated in PB104989BS and the associated samples.
4-Nitrophenol was qualified with an 'E' due to exceeding the calibration range in PB104989BS. This target analyte should be qualified as estimated in PB104989BS and in the associated samples, if detected.

MS/MSD
No MS/MSD was acquired for these samples.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated yn	validation level
QNWP8-MW26S-GW-20171206	I6786-01	Sulfate (As SO4)	273	OR		N	
QNWP8-MW26S-GW-20171206	I6786-01DL	Sulfate (As SO4)	482	D		N	
QNWP8-MW27S-GW-20171206	I6786-02	Sulfate (As SO4)	189	OR		N	
QNWP8-MW27S-GW-20171206	I6786-02DL	Sulfate (As SO4)	218	D		N	
QNWP8-MW27S-GWMS	I6786-02MS	Bromide	10.3			N	
QNWP8-MW27S-GWMS	I6786-02MS	Chloride (As Cl)	220	OR*		N	
QNWP8-MW27S-GWMS	I6786-02MS	Fluoride	2.6			N	
QNWP8-MW27S-GWMS	I6786-02MS	Nitrogen, Nitrate (As N)	2.5			N	
QNWP8-MW27S-GWMS	I6786-02MS	Nitrogen, Nitrite	3			N	
QNWP8-MW27S-GWMS	I6786-02MS	Phosphorus, Ortho	8			N	
QNWP8-MW27S-GWMS	I6786-02MS	Sulfate (As SO4)	189	OR*		N	
LB92045BLW	LB92045BLW	Bromide		U		N	
LB92045BLW	LB92045BLW	Chloride (As Cl)		U		N	
LB92045BLW	LB92045BLW	Fluoride		U		N	
LB92045BLW	LB92045BLW	Nitrogen, Nitrate (As N)		U		N	
LB92045BLW	LB92045BLW	Nitrogen, Nitrite		U		N	
LB92045BLW	LB92045BLW	Phosphorus, Ortho		U		N	
LB92045BLW	LB92045BLW	Sulfate (As SO4)		U		N	
LB92045BSW	LB92045BSW	Bromide	9.4			N	
LB92045BSW	LB92045BSW	Chloride (As Cl)	2.8			N	
LB92045BSW	LB92045BSW	Fluoride	1.9			N	
LB92045BSW	LB92045BSW	Nitrogen, Nitrate (As N)	2.4			N	
LB92045BSW	LB92045BSW	Nitrogen, Nitrite	2.8			N	
LB92045BSW	LB92045BSW	Phosphorus, Ortho	5.1			N	
LB92045BSW	LB92045BSW	Sulfate (As SO4)	14			N	
QNWP8-MW26S-GW-20171206	I6786-01	Alkalinity, Total (As CaCO3)	1690			N	
QNWP8-MW27S-GW-20171206	I6786-02	Alkalinity, Total (As CaCO3)	1570			N	
LB92078BLW	LB92078BLW	Alkalinity, Total (As CaCO3)		U		N	
LB92078BSW	LB92078BSW	Alkalinity, Total (As CaCO3)	46			N	
QNWP8-MW26S-GW-20171206	I6786-01	Iron	438			N	
QNWP8-MW27S-GW-20171206	I6786-02	Iron	2530			N	
QNWP8-EQUIP-BLANK-20171206	I6786-03	Iron		U		N	
PB104898BL	PB104898BL	Iron		U		N	
PB104898BS	PB104898BS	Iron	1550			N	
BSF1213W1	BSF1213W1	1,1,1-Trifluorotoluene	21.17			N	
BSF1213W1	BSF1213W1	PHC As Gasoline	222			N	
QNWP8-MW26S-GW-20171206	I6786-01	1,1,1-Trifluorotoluene	18.70			N	
QNWP8-MW26S-GW-20171206	I6786-01	PHC As Diesel Fuel	12600	E		N	
QNWP8-MW26S-GW-20171206	I6786-01	PHC As Diesel Fuel	19700			N	
QNWP8-MW26S-GW-20171206	I6786-01	PHC As Gasoline	4275			N	
QNWP8-MW26S-GW-20171206	I6786-01	Tetracosane-D50	0.00			N	
QNWP8-MW27S-GW-20171206	I6786-02	1,1,1-Trifluorotoluene	20.48			N	
QNWP8-MW27S-GW-20171206	I6786-02	PHC As Diesel Fuel	4130	E		N	
QNWP8-MW27S-GW-20171206	I6786-02	PHC As Diesel Fuel	6520			N	
QNWP8-MW27S-GW-20171206	I6786-02	PHC As Gasoline	464			N	
QNWP8-MW27S-GW-20171206	I6786-02	Tetracosane-D50	1.96			N	
QNWP8-MW27S-GWMS	I6786-02MS	1,1,1-Trifluorotoluene	19.31			N	
QNWP8-MW27S-GWMS	I6786-02MS	PHC As Gasoline	574			N	
QNWP8-MW27S-GWMSD	I6786-02MSD	1,1,1-Trifluorotoluene	19.24			N	
QNWP8-MW27S-GWMSD	I6786-02MSD	PHC As Gasoline	605			N	
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,1,1-Trifluorotoluene	18.46			N	
QNWP8-EQUIP-BLANK-20171206	I6786-03	PHC As Diesel Fuel		U		N	
QNWP8-EQUIP-BLANK-20171206	I6786-03	PHC As Gasoline		U		N	
QNWP8-EQUIP-BLANK-20171206	I6786-03	Tetracosane-D50	19.68			N	
PB104884BL	PB104884BL	PHC As Diesel Fuel		U		N	
PB104884BL	PB104884BL	Tetracosane-D50	16.46			N	
PB104884BS	PB104884BS	PHC As Diesel Fuel	189			N	
PB104884BS	PB104884BS	Tetracosane-D50	21.06			N	
PB104884BSD	PB104884BSD	PHC As Diesel Fuel	181			N	
PB104884BSD	PB104884BSD	Tetracosane-D50	19.07			N	
VBF1213S1	VBF1213S1	1,1,1-Trifluorotoluene	15.81			N	
VBF1213S1	VBF1213S1	PHC As Gasoline		U		N	
VBF1213W1	VBF1213W1	1,1,1-Trifluorotoluene	16.66			N	
VBF1213W1	VBF1213W1	PHC As Gasoline		U		N	
QNWP8-MW26S-GW-20171206	I6786-01	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,1,2-Trichloroethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,1-Dichloroethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,1-Dichloroethene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,2,3-Trichlorobenzene		U	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,2,4-Trichlorobenzene		U	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,2-Dibromo-3-Chloropropane		U	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,2-Dichloroethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,2-Dichloroethane-D4	46.6			Y	4

QNWP8-MW26S-GW-20171206	I6786-01	1,2-Dichloropropane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Hexanone		U	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Acetone		U	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Benzene	3200			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Bromochloromethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Bromodichloromethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Bromoform		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Bromomethane		U	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Carbon Disulfide		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Carbon Tetrachloride		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Chlorobenzene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Chloroethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Chloroform		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Chloromethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Cyclohexane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Dibromochloromethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Dibromofluoromethane	47.9			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Dichlorodifluoromethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Ethylbenzene	620			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Isopropylbenzene (Cumene)	41.5	J		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	m,p-Xylene	610			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Methyl Acetate		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Methylcyclohexane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Methylene Chloride		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	O-Xylene (1,2-Dimethylbenzene)	440			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	p-Bromofluorobenzene	50.6			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Styrene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Tert-Butyl Alcohol		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Tert-Butyl Methyl Ether		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Toluene	330			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Toluene-D8	48.5			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Trichloroethylene (TCE)		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Trichlorofluoromethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Vinyl Chloride		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,1,2-Trichloroethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,1-Dichloroethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,1-Dichloroethene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2,3-Trichlorobenzene		U	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2,4-Trichlorobenzene		U	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2-Dibromo-3-Chloropropane		U	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2-Dichloroethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2-Dichloroethane-D4	49			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2-Dichloropropane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2-Hexanone		U	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Acetone		U	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Benzene	300	E		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Bromochloromethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Bromodichloromethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Bromoform		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Bromomethane		U	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Carbon Disulfide		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Carbon Tetrachloride		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Chlorobenzene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Chloroethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Chloroform		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Chloromethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Cyclohexane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Dibromochloromethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Dibromofluoromethane	46.7			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Dichlorodifluoromethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Ethylbenzene	43.6			Y	4

QNWP8-MW27S-GW-20171206	I6786-02	Isopropylbenzene (Cumene)	6.3		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	m,p-Xylene	7.6		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Methyl Acetate		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Methyl Ethyl Ketone (2-Butanone)		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Methylcyclohexane		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Methylene Chloride		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	O-Xylene (1,2-Dimethylbenzene)	9.6		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	p-Bromofluorobenzene	50.2		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Styrene		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Tert-Butyl Alcohol		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Tert-Butyl Methyl Ether	2.6		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Tetrachloroethylene (PCE)		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Toluene	4.1		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Toluene-D8	47.5		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Trans-1,2-Dichloroethene		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Trans-1,3-Dichloropropene		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Trichloroethylene (TCE)		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Trichlorofluoromethane		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Vinyl Chloride		U	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,1,1-Trichloroethane (TCA)		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,1,2,2-Tetrachloroethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,1,2-Trichloro-1,2,2-Trifluoroethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,1,2-Trichloroethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,1-Dichloroethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,1-Dichloroethene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,2,3-Trichlorobenzene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,2,4-Trichlorobenzene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,2-Dibromo-3-Chloropropane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,2-Dibromoethane (Ethylene Dibromide)		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,2-Dichlorobenzene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,2-Dichloroethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,2-Dichloroethane-D4	45.4		Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,2-Dichloropropane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,3-Dichlorobenzene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	1,4-Dichlorobenzene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	2-Hexanone		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Acetone		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Benzene	360	D	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Bromochloromethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Bromodichloromethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Bromoform		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Bromomethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Carbon Disulfide		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Carbon Tetrachloride		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Chlorobenzene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Chloroethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Chloroform		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Chloromethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Cis-1,2-Dichloroethylene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Cis-1,3-Dichloropropene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Cyclohexane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Dibromochloromethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Dibromofluoromethane	48.2		Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Dichlorodifluoromethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Ethylbenzene	49.7	D	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Isopropylbenzene (Cumene)	8.1	D	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	m,p-Xylene	10.3	D	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Methyl Acetate		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Methyl Ethyl Ketone (2-Butanone)		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Methylcyclohexane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Methylene Chloride		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	O-Xylene (1,2-Dimethylbenzene)	12.8	D	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	p-Bromofluorobenzene	47.1		Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Styrene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Tert-Butyl Alcohol		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Tert-Butyl Methyl Ether		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Tetrachloroethylene (PCE)		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Toluene	6	D	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Toluene-D8	48.2		Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Trans-1,2-Dichloroethene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Trans-1,3-Dichloropropene		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Trichloroethylene (TCE)		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Trichlorofluoromethane		UD	Y	4
QNWP8-MW27S-GW-20171206	I6786-02DL	Vinyl Chloride		UD	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,1,1-Trichloroethane (TCA)		U	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,1,2,2-Tetrachloroethane		U	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,1,2-Trichloro-1,2,2-Trifluoroethane		U	Y	4

QNWP8-EQUIP-BLANK-20171206	I6786-03	1,1,2-Trichloroethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,1-Dichloroethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,1-Dichloroethene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2,3-Trichlorobenzene		U	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2,4-Trichlorobenzene		U	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2-Dibromo-3-Chloropropane		U	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2-Dichlorobenzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2-Dichloroethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2-Dichloroethane-D4	45.2			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2-Dichloropropane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,3-Dichlorobenzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,4-Dichlorobenzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Hexanone		U	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Acetone		U	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Benzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Bromochloromethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Bromodichloromethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Bromoform		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Bromomethane		U	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Carbon Disulfide		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Carbon Tetrachloride		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Chlorobenzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Chloroethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Chloroform		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Chloromethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Cyclohexane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Dibromochloromethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Dibromofluoromethane	49			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Dichlorodifluoromethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Ethylbenzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Isopropylbenzene (Cumene)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	m,p-Xylene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Methyl Acetate		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Methylcyclohexane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Methylene Chloride		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	p-Bromofluorobenzene	48.3			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Styrene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Tert-Butyl Alcohol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Tert-Butyl Methyl Ether		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Toluene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Toluene-D8	48.9			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Trichloroethylene (TCE)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Trichlorofluoromethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Vinyl Chloride		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,1,2-Trichloroethane		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,1-Dichloroethane		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,1-Dichloroethene		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,2,3-Trichlorobenzene		U	UJ	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,2,4-Trichlorobenzene		U	UJ	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,2-Dibromo-3-Chloropropane		U	UJ	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,2-Dichlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,2-Dichloroethane		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,2-Dichloroethane-D4	47.1			Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,2-Dichloropropane		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,3-Dichlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	1,4-Dichlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	2-Hexanone		U	UJ	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Acetone		U	UJ	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Benzene		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Bromochloromethane		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Bromodichloromethane		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Bromoform		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Bromomethane		U	UJ	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Carbon Disulfide		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Carbon Tetrachloride		U		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Chlorobenzene		U		Y	4

QNWP8-TRIP-BLANK-20171204	I6786-04	Chloroethane		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Chloroform		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Chloromethane		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Cis-1,2-Dichloroethylene		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Cis-1,3-Dichloropropene		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Cyclohexane		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Dibromochloromethane		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Dibromofluoromethane	48.9		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Dichlorodifluoromethane		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Ethylbenzene		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Isopropylbenzene (Cumene)		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	m,p-Xylene		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Methyl Acetate		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Methyl Ethyl Ketone (2-Butanone)		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Methylcyclohexane		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Methylene Chloride		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	O-Xylene (1,2-Dimethylbenzene)		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	p-Bromofluorobenzene	46.8		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Styrene		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Tert-Butyl Alcohol		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Tert-Butyl Methyl Ether		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Tetrachloroethylene (PCE)		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Toluene		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Toluene-D8	48.6		Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Trans-1,2-Dichloroethene		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Trans-1,3-Dichloropropene		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Trichloroethylene (TCE)		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Trichlorofluoromethane		U	Y	4
QNWP8-TRIP-BLANK-20171204	I6786-04	Vinyl Chloride		U	Y	4
VN1212WBL01	VN1212WBL01	1,1,1-Trichloroethane (TCA)		U	Y	4
VN1212WBL01	VN1212WBL01	1,1,2,2-Tetrachloroethane		U	Y	4
VN1212WBL01	VN1212WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U	Y	4
VN1212WBL01	VN1212WBL01	1,1,2-Trichloroethane		U	Y	4
VN1212WBL01	VN1212WBL01	1,1-Dichloroethane		U	Y	4
VN1212WBL01	VN1212WBL01	1,1-Dichloroethene		U	Y	4
VN1212WBL01	VN1212WBL01	1,2,3-Trichlorobenzene		U	Y	4
VN1212WBL01	VN1212WBL01	1,2,4-Trichlorobenzene		U	Y	4
VN1212WBL01	VN1212WBL01	1,2-Dibromo-3-Chloropropane		U	Y	4
VN1212WBL01	VN1212WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U	Y	4
VN1212WBL01	VN1212WBL01	1,2-Dichlorobenzene		U	Y	4
VN1212WBL01	VN1212WBL01	1,2-Dichloroethane		U	Y	4
VN1212WBL01	VN1212WBL01	1,2-Dichloroethane-D4	43.6		Y	4
VN1212WBL01	VN1212WBL01	1,2-Dichloropropane		U	Y	4
VN1212WBL01	VN1212WBL01	1,3-Dichlorobenzene		U	Y	4
VN1212WBL01	VN1212WBL01	1,4-Dichlorobenzene		U	Y	4
VN1212WBL01	VN1212WBL01	2-Hexanone		U	Y	4
VN1212WBL01	VN1212WBL01	Acetone		U	Y	4
VN1212WBL01	VN1212WBL01	Benzene		U	Y	4
VN1212WBL01	VN1212WBL01	Bromochloromethane		U	Y	4
VN1212WBL01	VN1212WBL01	Bromodichloromethane		U	Y	4
VN1212WBL01	VN1212WBL01	Bromoform		U	Y	4
VN1212WBL01	VN1212WBL01	Bromomethane		U	Y	4
VN1212WBL01	VN1212WBL01	Carbon Disulfide		U	Y	4
VN1212WBL01	VN1212WBL01	Carbon Tetrachloride		U	Y	4
VN1212WBL01	VN1212WBL01	Chlorobenzene		U	Y	4
VN1212WBL01	VN1212WBL01	Chloroethane		U	Y	4
VN1212WBL01	VN1212WBL01	Chloroform		U	Y	4
VN1212WBL01	VN1212WBL01	Chloromethane		U	Y	4
VN1212WBL01	VN1212WBL01	Cis-1,2-Dichloroethylene		U	Y	4
VN1212WBL01	VN1212WBL01	Cis-1,3-Dichloropropene		U	Y	4
VN1212WBL01	VN1212WBL01	Cyclohexane		U	Y	4
VN1212WBL01	VN1212WBL01	Dibromochloromethane		U	Y	4
VN1212WBL01	VN1212WBL01	Dibromofluoromethane	48.1		Y	4
VN1212WBL01	VN1212WBL01	Dichlorodifluoromethane		U	Y	4
VN1212WBL01	VN1212WBL01	Ethylbenzene		U	Y	4
VN1212WBL01	VN1212WBL01	Isopropylbenzene (Cumene)		U	Y	4
VN1212WBL01	VN1212WBL01	m,p-Xylene		U	Y	4
VN1212WBL01	VN1212WBL01	Methyl Acetate		U	Y	4
VN1212WBL01	VN1212WBL01	Methyl Ethyl Ketone (2-Butanone)		U	Y	4
VN1212WBL01	VN1212WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U	Y	4
VN1212WBL01	VN1212WBL01	Methylcyclohexane		U	Y	4
VN1212WBL01	VN1212WBL01	Methylene Chloride		U	Y	4
VN1212WBL01	VN1212WBL01	O-Xylene (1,2-Dimethylbenzene)		U	Y	4
VN1212WBL01	VN1212WBL01	p-Bromofluorobenzene	45.9		Y	4
VN1212WBL01	VN1212WBL01	Styrene		U	Y	4
VN1212WBL01	VN1212WBL01	Tert-Butyl Alcohol		U	Y	4
VN1212WBL01	VN1212WBL01	Tert-Butyl Methyl Ether		U	Y	4
VN1212WBL01	VN1212WBL01	Tetrachloroethylene (PCE)		U	Y	4

VN1212WBL01	VN1212WBL01	Toluene		U	Y	4
VN1212WBL01	VN1212WBL01	Toluene-D8	47.6		Y	4
VN1212WBL01	VN1212WBL01	Trans-1,2-Dichloroethene		U	Y	4
VN1212WBL01	VN1212WBL01	Trans-1,3-Dichloropropene		U	Y	4
VN1212WBL01	VN1212WBL01	Trichloroethylene (TCE)		U	Y	4
VN1212WBL01	VN1212WBL01	Trichlorofluoromethane		U	Y	4
VN1212WBL01	VN1212WBL01	Vinyl Chloride		U	Y	4
VN1212WBS01	VN1212WBS01	1,1,1-Trichloroethane (TCA)	21.7		Y	4
VN1212WBS01	VN1212WBS01	1,1,2,2-Tetrachloroethane	21.4		Y	4
VN1212WBS01	VN1212WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	20	J	Y	4
VN1212WBS01	VN1212WBS01	1,1,2-Trichloroethane	20.5		Y	4
VN1212WBS01	VN1212WBS01	1,1-Dichloroethane	21.5	J	Y	4
VN1212WBS01	VN1212WBS01	1,1-Dichloroethene	20.5	J	Y	4
VN1212WBS01	VN1212WBS01	1,2,3-Trichlorobenzene	18.8	J	Y	4
VN1212WBS01	VN1212WBS01	1,2,4-Trichlorobenzene	18.2	J	Y	4
VN1212WBS01	VN1212WBS01	1,2-Dibromo-3-Chloropropane	22.4	J	Y	4
VN1212WBS01	VN1212WBS01	1,2-Dibromoethane (Ethylene Dibromide)	20.3		Y	4
VN1212WBS01	VN1212WBS01	1,2-Dichlorobenzene	20.3		Y	4
VN1212WBS01	VN1212WBS01	1,2-Dichloroethane	20.5	J	Y	4
VN1212WBS01	VN1212WBS01	1,2-Dichloroethane-D4	59.7		Y	4
VN1212WBS01	VN1212WBS01	1,2-Dichloropropane	20.6		Y	4
VN1212WBS01	VN1212WBS01	1,3-Dichlorobenzene	20.1		Y	4
VN1212WBS01	VN1212WBS01	1,4-Dichlorobenzene	20.2		Y	4
VN1212WBS01	VN1212WBS01	2-Hexanone	110	J	Y	4
VN1212WBS01	VN1212WBS01	Acetone	110	J	Y	4
VN1212WBS01	VN1212WBS01	Benzene	20.5		Y	4
VN1212WBS01	VN1212WBS01	Bromochloromethane	21	J	Y	4
VN1212WBS01	VN1212WBS01	Bromodichloromethane	20.1		Y	4
VN1212WBS01	VN1212WBS01	Bromoform	20.1		Y	4
VN1212WBS01	VN1212WBS01	Bromomethane	20	J	Y	4
VN1212WBS01	VN1212WBS01	Carbon Disulfide	18.7	J	Y	4
VN1212WBS01	VN1212WBS01	Carbon Tetrachloride	19.5		Y	4
VN1212WBS01	VN1212WBS01	Chlorobenzene	20.3		Y	4
VN1212WBS01	VN1212WBS01	Chloroethane	20.6	J	Y	4
VN1212WBS01	VN1212WBS01	Chloroform	21.3	J	Y	4
VN1212WBS01	VN1212WBS01	Chloromethane	22.1	J	Y	4
VN1212WBS01	VN1212WBS01	Cis-1,2-Dichloroethylene	21.6	J	Y	4
VN1212WBS01	VN1212WBS01	Cis-1,3-Dichloropropene	20.3		Y	4
VN1212WBS01	VN1212WBS01	Cyclohexane	20.3		Y	4
VN1212WBS01	VN1212WBS01	Dibromochloromethane	20.4		Y	4
VN1212WBS01	VN1212WBS01	Dibromofluoromethane	54.5		Y	4
VN1212WBS01	VN1212WBS01	Dichlorodifluoromethane	19.2	J	Y	4
VN1212WBS01	VN1212WBS01	Ethylbenzene	20.4		Y	4
VN1212WBS01	VN1212WBS01	Isopropylbenzene (Cumene)	21.2		Y	4
VN1212WBS01	VN1212WBS01	m,p-Xylene	41.3		Y	4
VN1212WBS01	VN1212WBS01	Methyl Acetate	24.9	J	Y	4
VN1212WBS01	VN1212WBS01	Methyl Ethyl Ketone (2-Butanone)	120	J	Y	4
VN1212WBS01	VN1212WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	110		Y	4
VN1212WBS01	VN1212WBS01	Methylcyclohexane	17.7		Y	4
VN1212WBS01	VN1212WBS01	Methylene Chloride	21.6	J	Y	4
VN1212WBS01	VN1212WBS01	O-Xylene (1,2-Dimethylbenzene)	20.8		Y	4
VN1212WBS01	VN1212WBS01	p-Bromofluorobenzene	53		Y	4
VN1212WBS01	VN1212WBS01	Styrene	20.8		Y	4
VN1212WBS01	VN1212WBS01	Tert-Butyl Alcohol	120		Y	4
VN1212WBS01	VN1212WBS01	Tert-Butyl Methyl Ether	21.9	J	Y	4
VN1212WBS01	VN1212WBS01	Tetrachloroethylene (PCE)	19.8		Y	4
VN1212WBS01	VN1212WBS01	Toluene	21.1		Y	4
VN1212WBS01	VN1212WBS01	Toluene-D8	52.6		Y	4
VN1212WBS01	VN1212WBS01	Trans-1,2-Dichloroethene	21.1	J	Y	4
VN1212WBS01	VN1212WBS01	Trans-1,3-Dichloropropene	20.7		Y	4
VN1212WBS01	VN1212WBS01	Trichloroethylene (TCE)	19.1		Y	4
VN1212WBS01	VN1212WBS01	Trichlorofluoromethane	19.5	J	Y	4
VN1212WBS01	VN1212WBS01	Vinyl Chloride	20.7	J	Y	4
VN1212WBSD01	VN1212WBSD0	1,1,1-Trichloroethane (TCA)	21.4		Y	4
VN1212WBSD01	VN1212WBSD0	1,1,2,2-Tetrachloroethane	19.5		Y	4
VN1212WBSD01	VN1212WBSD0	1,1,2-Trichloro-1,2,2-Trifluoroethane	20.4	J	Y	4
VN1212WBSD01	VN1212WBSD0	1,1,2-Trichloroethane	19.7		Y	4
VN1212WBSD01	VN1212WBSD0	1,1-Dichloroethane	21.7	J	Y	4
VN1212WBSD01	VN1212WBSD0	1,1-Dichloroethene	19.9	J	Y	4
VN1212WBSD01	VN1212WBSD0	1,2,3-Trichlorobenzene	17.2	J	Y	4
VN1212WBSD01	VN1212WBSD0	1,2,4-Trichlorobenzene	16.9	J	Y	4
VN1212WBSD01	VN1212WBSD0	1,2-Dibromo-3-Chloropropane	18.6	J	Y	4
VN1212WBSD01	VN1212WBSD0	1,2-Dibromoethane (Ethylene Dibromide)	19.6		Y	4
VN1212WBSD01	VN1212WBSD0	1,2-Dichlorobenzene	19.8		Y	4
VN1212WBSD01	VN1212WBSD0	1,2-Dichloroethane	20.5	J	Y	4
VN1212WBSD01	VN1212WBSD0	1,2-Dichloroethane-D4	57.9		Y	4
VN1212WBSD01	VN1212WBSD0	1,2-Dichloropropane	20.1		Y	4
VN1212WBSD01	VN1212WBSD0	1,3-Dichlorobenzene	19.6		Y	4
VN1212WBSD01	VN1212WBSD0	1,4-Dichlorobenzene	19.6		Y	4

VN1212WBSD01	VN1212WBSD0	2-Hexanone	91.8	J	Y	4
VN1212WBSD01	VN1212WBSD0	Acetone	90.7	J	Y	4
VN1212WBSD01	VN1212WBSD0	Benzene	19.9		Y	4
VN1212WBSD01	VN1212WBSD0	Bromochloromethane	22.2	J	Y	4
VN1212WBSD01	VN1212WBSD0	Bromodichloromethane	19.7		Y	4
VN1212WBSD01	VN1212WBSD0	Bromoform	18.2		Y	4
VN1212WBSD01	VN1212WBSD0	Bromomethane	11.7	J	Y	4
VN1212WBSD01	VN1212WBSD0	Carbon Disulfide	19.7	J	Y	4
VN1212WBSD01	VN1212WBSD0	Carbon Tetrachloride	20.4		Y	4
VN1212WBSD01	VN1212WBSD0	Chlorobenzene	20		Y	4
VN1212WBSD01	VN1212WBSD0	Chloroethane	18.4	J	Y	4
VN1212WBSD01	VN1212WBSD0	Chloroform	21.6	J	Y	4
VN1212WBSD01	VN1212WBSD0	Chloromethane	21	J	Y	4
VN1212WBSD01	VN1212WBSD0	Cis-1,2-Dichloroethylene	21.2	J	Y	4
VN1212WBSD01	VN1212WBSD0	Cis-1,3-Dichloropropene	19.7		Y	4
VN1212WBSD01	VN1212WBSD0	Cyclohexane	20.4		Y	4
VN1212WBSD01	VN1212WBSD0	Dibromochloromethane	19.5		Y	4
VN1212WBSD01	VN1212WBSD0	Dibromofluoromethane	53.6		Y	4
VN1212WBSD01	VN1212WBSD0	Dichlorodifluoromethane	19.1	J	Y	4
VN1212WBSD01	VN1212WBSD0	Ethylbenzene	20.1		Y	4
VN1212WBSD01	VN1212WBSD0	Isopropylbenzene (Cumene)	20.9		Y	4
VN1212WBSD01	VN1212WBSD0	m,p-Xylene	40.4		Y	4
VN1212WBSD01	VN1212WBSD0	Methyl Acetate	22.4	J	Y	4
VN1212WBSD01	VN1212WBSD0	Methyl Ethyl Ketone (2-Butanone)	97.7	J	Y	4
VN1212WBSD01	VN1212WBSD0	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	96.9		Y	4
VN1212WBSD01	VN1212WBSD0	Methylcyclohexane	18		Y	4
VN1212WBSD01	VN1212WBSD0	Methylene Chloride	21.5	J	Y	4
VN1212WBSD01	VN1212WBSD0	O-Xylene (1,2-Dimethylbenzene)	20.6		Y	4
VN1212WBSD01	VN1212WBSD0	p-Bromofluorobenzene	51.6		Y	4
VN1212WBSD01	VN1212WBSD0	Styrene	20.4		Y	4
VN1212WBSD01	VN1212WBSD0	Tert-Butyl Alcohol	100		Y	4
VN1212WBSD01	VN1212WBSD0	Tert-Butyl Methyl Ether	20.8	J	Y	4
VN1212WBSD01	VN1212WBSD0	Tetrachloroethylene (PCE)	21.2		Y	4
VN1212WBSD01	VN1212WBSD0	Toluene	21		Y	4
VN1212WBSD01	VN1212WBSD0	Toluene-D8	51.9		Y	4
VN1212WBSD01	VN1212WBSD0	Trans-1,2-Dichloroethene	20.8	J	Y	4
VN1212WBSD01	VN1212WBSD0	Trans-1,3-Dichloropropene	19.1		Y	4
VN1212WBSD01	VN1212WBSD0	Trichloroethylene (TCE)	19.1		Y	4
VN1212WBSD01	VN1212WBSD0	Trichlorofluoromethane	20.3	J	Y	4
VN1212WBSD01	VN1212WBSD0	Vinyl Chloride	20.2	J	Y	4
VN1213WBL01	VN1213WBL01	1,1,1-Trichloroethane (TCA)		U	Y	4
VN1213WBL01	VN1213WBL01	1,1,2,2-Tetrachloroethane		U	Y	4
VN1213WBL01	VN1213WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U	Y	4
VN1213WBL01	VN1213WBL01	1,1,2-Trichloroethane		U	Y	4
VN1213WBL01	VN1213WBL01	1,1-Dichloroethane		U	Y	4
VN1213WBL01	VN1213WBL01	1,1-Dichloroethene		U	Y	4
VN1213WBL01	VN1213WBL01	1,2,3-Trichlorobenzene		U	Y	4
VN1213WBL01	VN1213WBL01	1,2,4-Trichlorobenzene		U	Y	4
VN1213WBL01	VN1213WBL01	1,2-Dibromo-3-Chloropropane		U	Y	4
VN1213WBL01	VN1213WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U	Y	4
VN1213WBL01	VN1213WBL01	1,2-Dichlorobenzene		U	Y	4
VN1213WBL01	VN1213WBL01	1,2-Dichloroethane		U	Y	4
VN1213WBL01	VN1213WBL01	1,2-Dichloroethane-D4	47.1		Y	4
VN1213WBL01	VN1213WBL01	1,2-Dichloropropane		U	Y	4
VN1213WBL01	VN1213WBL01	1,3-Dichlorobenzene		U	Y	4
VN1213WBL01	VN1213WBL01	1,4-Dichlorobenzene		U	Y	4
VN1213WBL01	VN1213WBL01	2-Hexanone		U	Y	4
VN1213WBL01	VN1213WBL01	Acetone		U	Y	4
VN1213WBL01	VN1213WBL01	Benzene		U	Y	4
VN1213WBL01	VN1213WBL01	Bromochloromethane		U	Y	4
VN1213WBL01	VN1213WBL01	Bromodichloromethane		U	Y	4
VN1213WBL01	VN1213WBL01	Bromoform		U	Y	4
VN1213WBL01	VN1213WBL01	Bromomethane		U	Y	4
VN1213WBL01	VN1213WBL01	Carbon Disulfide		U	Y	4
VN1213WBL01	VN1213WBL01	Carbon Tetrachloride		U	Y	4
VN1213WBL01	VN1213WBL01	Chlorobenzene		U	Y	4
VN1213WBL01	VN1213WBL01	Chloroethane		U	Y	4
VN1213WBL01	VN1213WBL01	Chloroform		U	Y	4
VN1213WBL01	VN1213WBL01	Chloromethane		U	Y	4
VN1213WBL01	VN1213WBL01	Cis-1,2-Dichloroethylene		U	Y	4
VN1213WBL01	VN1213WBL01	Cis-1,3-Dichloropropene		U	Y	4
VN1213WBL01	VN1213WBL01	Cyclohexane		U	Y	4
VN1213WBL01	VN1213WBL01	Dibromochloromethane		U	Y	4
VN1213WBL01	VN1213WBL01	Dibromofluoromethane	48.6		Y	4
VN1213WBL01	VN1213WBL01	Dichlorodifluoromethane		U	Y	4
VN1213WBL01	VN1213WBL01	Ethylbenzene		U	Y	4
VN1213WBL01	VN1213WBL01	Isopropylbenzene (Cumene)		U	Y	4
VN1213WBL01	VN1213WBL01	m,p-Xylene		U	Y	4
VN1213WBL01	VN1213WBL01	Methyl Acetate		U	Y	4

VN1213WBL01	VN1213WBL01	Methyl Ethyl Ketone (2-Butanone)		U	Y	4
VN1213WBL01	VN1213WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U	Y	4
VN1213WBL01	VN1213WBL01	Methylcyclohexane		U	Y	4
VN1213WBL01	VN1213WBL01	Methylene Chloride		U	Y	4
VN1213WBL01	VN1213WBL01	O-Xylene (1,2-Dimethylbenzene)		U	Y	4
VN1213WBL01	VN1213WBL01	p-Bromofluorobenzene	46.2		Y	4
VN1213WBL01	VN1213WBL01	Styrene		U	Y	4
VN1213WBL01	VN1213WBL01	Tert-Butyl Alcohol		U	Y	4
VN1213WBL01	VN1213WBL01	Tert-Butyl Methyl Ether		U	Y	4
VN1213WBL01	VN1213WBL01	Tetrachloroethylene (PCE)		U	Y	4
VN1213WBL01	VN1213WBL01	Toluene		U	Y	4
VN1213WBL01	VN1213WBL01	Toluene-D8	48.9		Y	4
VN1213WBL01	VN1213WBL01	Trans-1,2-Dichloroethene		U	Y	4
VN1213WBL01	VN1213WBL01	Trans-1,3-Dichloropropene		U	Y	4
VN1213WBL01	VN1213WBL01	Trichloroethylene (TCE)		U	Y	4
VN1213WBL01	VN1213WBL01	Trichlorofluoromethane		U	Y	4
VN1213WBL01	VN1213WBL01	Vinyl Chloride		U	Y	4
VN1213WBS01	VN1213WBS01	1,1,1-Trichloroethane (TCA)	20.2		Y	4
VN1213WBS01	VN1213WBS01	1,1,2,2-Tetrachloroethane	17.7		Y	4
VN1213WBS01	VN1213WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	22.4		Y	4
VN1213WBS01	VN1213WBS01	1,1,2-Trichloroethane	18.3		Y	4
VN1213WBS01	VN1213WBS01	1,1-Dichloroethane	20.2		Y	4
VN1213WBS01	VN1213WBS01	1,1-Dichloroethene	19.4		Y	4
VN1213WBS01	VN1213WBS01	1,2,3-Trichlorobenzene	17.3		Y	4
VN1213WBS01	VN1213WBS01	1,2,4-Trichlorobenzene	17.5		Y	4
VN1213WBS01	VN1213WBS01	1,2-Dibromo-3-Chloropropane	17.1		Y	4
VN1213WBS01	VN1213WBS01	1,2-Dibromoethane (Ethylene Dibromide)	18		Y	4
VN1213WBS01	VN1213WBS01	1,2-Dichlorobenzene	19.3		Y	4
VN1213WBS01	VN1213WBS01	1,2-Dichloroethane	18.8		Y	4
VN1213WBS01	VN1213WBS01	1,2-Dichloroethane-D4	50.3		Y	4
VN1213WBS01	VN1213WBS01	1,2-Dichloropropane	19.5		Y	4
VN1213WBS01	VN1213WBS01	1,3-Dichlorobenzene	19.6		Y	4
VN1213WBS01	VN1213WBS01	1,4-Dichlorobenzene	19.3		Y	4
VN1213WBS01	VN1213WBS01	2-Hexanone	82.5		Y	4
VN1213WBS01	VN1213WBS01	Acetone	89.2		Y	4
VN1213WBS01	VN1213WBS01	Benzene	19		Y	4
VN1213WBS01	VN1213WBS01	Bromochloromethane	18.9		Y	4
VN1213WBS01	VN1213WBS01	Bromodichloromethane	19.4		Y	4
VN1213WBS01	VN1213WBS01	Bromoform	17.5		Y	4
VN1213WBS01	VN1213WBS01	Bromomethane	14.5		Y	4
VN1213WBS01	VN1213WBS01	Carbon Disulfide	18.4		Y	4
VN1213WBS01	VN1213WBS01	Carbon Tetrachloride	20.6		Y	4
VN1213WBS01	VN1213WBS01	Chlorobenzene	19.7		Y	4
VN1213WBS01	VN1213WBS01	Chloroethane	19.7		Y	4
VN1213WBS01	VN1213WBS01	Chloroform	19.8		Y	4
VN1213WBS01	VN1213WBS01	Chloromethane	20.4		Y	4
VN1213WBS01	VN1213WBS01	Cis-1,2-Dichloroethylene	19.4		Y	4
VN1213WBS01	VN1213WBS01	Cis-1,3-Dichloropropene	19.2		Y	4
VN1213WBS01	VN1213WBS01	Cyclohexane	22		Y	4
VN1213WBS01	VN1213WBS01	Dibromochloromethane	18.5		Y	4
VN1213WBS01	VN1213WBS01	Dibromofluoromethane	49		Y	4
VN1213WBS01	VN1213WBS01	Dichlorodifluoromethane	21		Y	4
VN1213WBS01	VN1213WBS01	Ethylbenzene	20.1		Y	4
VN1213WBS01	VN1213WBS01	Isopropylbenzene (Cumene)	21.1		Y	4
VN1213WBS01	VN1213WBS01	m,p-Xylene	41		Y	4
VN1213WBS01	VN1213WBS01	Methyl Acetate	18.7		Y	4
VN1213WBS01	VN1213WBS01	Methyl Ethyl Ketone (2-Butanone)	84.8		Y	4
VN1213WBS01	VN1213WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	84.2		Y	4
VN1213WBS01	VN1213WBS01	Methylcyclohexane	20.9		Y	4
VN1213WBS01	VN1213WBS01	Methylene Chloride	19.4		Y	4
VN1213WBS01	VN1213WBS01	O-Xylene (1,2-Dimethylbenzene)	20.4		Y	4
VN1213WBS01	VN1213WBS01	p-Bromofluorobenzene	48.1		Y	4
VN1213WBS01	VN1213WBS01	Styrene	20.4		Y	4
VN1213WBS01	VN1213WBS01	Tert-Butyl Alcohol	78.9		Y	4
VN1213WBS01	VN1213WBS01	Tert-Butyl Methyl Ether	18.6		Y	4
VN1213WBS01	VN1213WBS01	Tetrachloroethylene (PCE)	19		Y	4
VN1213WBS01	VN1213WBS01	Toluene	20.1		Y	4
VN1213WBS01	VN1213WBS01	Toluene-D8	48.5		Y	4
VN1213WBS01	VN1213WBS01	Trans-1,2-Dichloroethene	19.4		Y	4
VN1213WBS01	VN1213WBS01	Trans-1,3-Dichloropropene	19		Y	4
VN1213WBS01	VN1213WBS01	Trichloroethylene (TCE)	18.5		Y	4
VN1213WBS01	VN1213WBS01	Trichlorofluoromethane	20.2		Y	4
VN1213WBS01	VN1213WBS01	Vinyl Chloride	19.3		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	1,2,4,5-Tetrachlorobenzene		U	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2,3,4,6-Tetrachlorophenol		U	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2,4,5-Trichlorophenol		U	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2,4,6-Tribromophenol	77.3		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2,4,6-Trichlorophenol		U	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2,4-Dichlorophenol		U	Y	4

QNWP8-MW26S-GW-20171206	I6786-01	2,4-Dimethylphenol	99.1	E		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2,4-Dinitrophenol		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2,4-Dinitrotoluene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2,6-Dinitrotoluene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Chloronaphthalene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Chlorophenol		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Fluorobiphenyl	72			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Fluorophenol	46.2			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Methylnaphthalene	2.9	J		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Methylphenol (O-Cresol)	20.3			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Nitroaniline		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	2-Nitrophenol		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	3-Nitroaniline		UQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	4,6-Dinitro-2-Methylphenol		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	4-Bromophenyl Phenyl Ether		UQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	4-Chloro-3-Methylphenol		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	4-Chloroaniline		UQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	4-Chlorophenyl Phenyl Ether		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	4-Nitroaniline		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	4-Nitrophenol		U	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Acenaphthene	4.9	JQ	J	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Acenaphthylene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Acetophenone	4.2	J		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Anthracene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Atrazine		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Benzaldehyde		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Benzo(A)Anthracene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Benzo(A)Pyrene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Biphenyl (Diphenyl)		UQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Bis(2-Chloroethoxy) Methane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Bis(2-Chloroisopropyl) Ether		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Caprolactam		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Carbazole	22.8			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Chrysene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Dibenz(A,H)Anthracene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Dibenzofuran		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Diethyl Phthalate		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Dimethyl Phthalate		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Di-N-Octylphthalate		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Fluoranthene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Fluorene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Hexachlorobenzene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Hexachlorobutadiene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Hexachlorocyclopentadiene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Hexachloroethane		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Indeno(1,2,3-C,D)Pyrene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Isophorone		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	M+P MethylPhenol	35.5			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Naphthalene	200	E		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Nitrobenzene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Nitrobenzene-D5	70.2			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	N-Nitrosodi-N-Propylamine		UQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	N-Nitrosodiphenylamine		UQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Pentachlorophenol		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Phenanthrene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Phenol	13.5			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Phenol-D6	32.6			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Pyrene		U		Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Terphenyl-D14	69.3			Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Terphenyl-D14	69.3			Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	1,2,4,5-Tetrachlorobenzene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,3,4,6-Tetrachlorophenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,4,5-Trichlorophenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,4,6-Tribromophenol	80.6			Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,4,6-Trichlorophenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,4-Dichlorophenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,4-Dimethylphenol	97.4	D		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,4-Dinitrophenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,4-Dinitrotoluene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2,6-Dinitrotoluene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2-Chloronaphthalene		UD		Y	4

QNWP8-MW26S-GW-20171206	I6786-01DL	2-Chlorophenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2-Fluorobiphenyl	77.2			Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2-Fluorophenol	42.8			Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2-Methylnaphthalene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2-Methylphenol (O-Cresol)	19.1	JD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2-Nitroaniline		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	2-Nitrophenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	3,3'-Dichlorobenzidine		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	3-Nitroaniline		UDQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	4,6-Dinitro-2-Methylphenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	4-Bromophenyl Phenyl Ether		UDQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	4-Chloro-3-Methylphenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	4-Chloroaniline		UDQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	4-Chlorophenyl Phenyl Ether		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	4-Nitroaniline		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	4-Nitrophenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Acenaphthene		UDQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Acenaphthylene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Acetophenone		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Anthracene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Atrazine		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Benzaldehyde		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Benzo(A)Anthracene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Benzo(A)Pyrene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Benzo(B)Fluoranthene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Benzo(G,H,I)Perylene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Benzo(K)Fluoranthene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Benzyl Butyl Phthalate		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Biphenyl (Diphenyl)		UDQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Bis(2-Chloroethoxy) Methane		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Bis(2-Chloroisopropyl) Ether		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Bis(2-Ethylhexyl) Phthalate		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Caprolactam		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Carbazole	25.4	JD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Chrysene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Dibenz(A,H)Anthracene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Dibenzofuran		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Diethyl Phthalate		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Dimethyl Phthalate		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Di-N-Butyl Phthalate		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Di-N-Octylphthalate		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Fluoranthene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Fluorene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Hexachlorobenzene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Hexachlorobutadiene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Hexachlorocyclopentadiene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Hexachloroethane		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Indeno(1,2,3-C,D)Pyrene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Isophorone		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	M+P MethylPhenol	31.4	JD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Naphthalene	250	D		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Nitrobenzene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Nitrobenzene-D5	69.2			Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	N-Nitrosodi-N-Propylamine		UDQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	N-Nitrosodiphenylamine		UDQ	UJ	Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Pentachlorophenol		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Phenanthrene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Phenol	11.4	JD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Phenol-D6	28.5			Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Pyrene		UD		Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Terphenyl-D14	79.7			Y	4
QNWP8-MW26S-GW-20171206	I6786-01DL	Terphenyl-D14	79.7			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	1,2,4,5-Tetrachlorobenzene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,3,4,6-Tetrachlorophenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,4,5-Trichlorophenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,4,6-Tribromophenol	120			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,4,6-Trichlorophenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,4-Dichlorophenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,4-Dimethylphenol	25.4			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,4-Dinitrophenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,4-Dinitrotoluene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2,6-Dinitrotoluene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2-Chloronaphthalene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2-Chlorophenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2-Fluorobiphenyl	84.7			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2-Fluorophenol	65.2			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2-Methylnaphthalene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2-Methylphenol (O-Cresol)		U		Y	4

QNWP8-MW27S-GW-20171206	I6786-02	2-Nitroaniline		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	2-Nitrophenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	3-Nitroaniline		UQ	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	4,6-Dinitro-2-Methylphenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	4-Bromophenyl Phenyl Ether		UQ	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	4-Chloro-3-Methylphenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	4-Chloroaniline		UQ	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	4-Chlorophenyl Phenyl Ether		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	4-Nitroaniline		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	4-Nitrophenol		U	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Acenaphthene		UQ	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Acenaphthylene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Acetophenone		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Anthracene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Atrazine		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Benzaldehyde		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Benzo(A)Anthracene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Benzo(A)Pyrene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Biphenyl (Diphenyl)		UQ	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Bis(2-Chloroethoxy) Methane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Bis(2-Chloroisopropyl) Ether		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Caprolactam		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Carbazole	11.3			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Chrysene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Dibenz(A,H)Anthracene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Dibenzofuran		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Diethyl Phthalate	20.2			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Dimethyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Di-N-Octylphthalate		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Fluorene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Hexachlorobenzene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Hexachlorobutadiene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Hexachlorocyclopentadiene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Hexachloroethane		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Indeno(1,2,3-C,D)Pyrene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Isophorone		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	M+P MethylPhenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Naphthalene	34.2			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Nitrobenzene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Nitrobenzene-D5	84.1			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	N-Nitrosodi-N-Propylamine		UQ	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	N-Nitrosodiphenylamine		UQ	UJ	Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Pentachlorophenol		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Phenanthrene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Phenol	6	J		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Phenol-D6	45.5			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Pyrene		U		Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Terphenyl-D14	78.2			Y	4
QNWP8-MW27S-GW-20171206	I6786-02	Terphenyl-D14	78.2			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	1,2,4,5-Tetrachlorobenzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,3,4,6-Tetrachlorophenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,4,5-Trichlorophenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,4,6-Tribromophenol	170			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,4,6-Trichlorophenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,4-Dichlorophenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,4-Dimethylphenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,4-Dinitrophenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,4-Dinitrotoluene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2,6-Dinitrotoluene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Chloronaphthalene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Chlorophenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Fluorobiphenyl	92.8			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Fluorophenol	68.2			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Methylnaphthalene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Methylphenol (O-Cresol)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Nitroaniline		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	2-Nitrophenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	3-Nitroaniline		UQ	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	4,6-Dinitro-2-Methylphenol		U		Y	4

QNWP8-EQUIP-BLANK-20171206	I6786-03	4-Bromophenyl Phenyl Ether		UQ	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	4-Chloro-3-Methylphenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	4-Chloroaniline		UQ	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	4-Chlorophenyl Phenyl Ether		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	4-Nitroaniline		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	4-Nitrophenol		U	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Acenaphthene		UQ	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Acenaphthylene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Acetophenone		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Anthracene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Atrazine		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Benzaldehyde		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Benzo(A)Anthracene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Benzo(A)Pyrene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Benzo(B)Fluoranthene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Benzo(K)Fluoranthene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Benzyl Butyl Phthalate		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Biphenyl (Diphenyl)		UQ	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Bis(2-Chloroethoxy) Methane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Bis(2-Chloroisopropyl) Ether		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Caprolactam		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Carbazole		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Chrysene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Dibenz(A,H)Anthracene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Dibenzofuran		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Diethyl Phthalate		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Dimethyl Phthalate		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Di-N-Butyl Phthalate		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Di-N-Octylphthalate		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Fluoranthene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Fluorene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Hexachlorobenzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Hexachlorobutadiene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Hexachlorocyclopentadiene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Hexachloroethane		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Indeno(1,2,3-C,D)Pyrene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Isophorone		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	M+P MethylPhenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Naphthalene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Nitrobenzene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Nitrobenzene-D5	88.3			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	N-Nitrosodi-N-Propylamine		UQ	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	N-Nitrosodiphenylamine		UQ	UJ	Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Pentachlorophenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Phenanthrene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Phenol		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Phenol-D6	38.6			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Pyrene		U		Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Terphenyl-D14	89.7			Y	4
QNWP8-EQUIP-BLANK-20171206	I6786-03	Terphenyl-D14	89.7			Y	4
PB104989BL	PB104989BL	1,2,4,5-Tetrachlorobenzene		U		Y	4
PB104989BL	PB104989BL	2,3,4,6-Tetrachlorophenol		U		Y	4
PB104989BL	PB104989BL	2,4,5-Trichlorophenol		U		Y	4
PB104989BL	PB104989BL	2,4,6-Tribromophenol	140			Y	4
PB104989BL	PB104989BL	2,4,6-Trichlorophenol		U		Y	4
PB104989BL	PB104989BL	2,4-Dichlorophenol		U		Y	4
PB104989BL	PB104989BL	2,4-Dimethylphenol		U		Y	4
PB104989BL	PB104989BL	2,4-Dinitrophenol		U		Y	4
PB104989BL	PB104989BL	2,4-Dinitrotoluene		U		Y	4
PB104989BL	PB104989BL	2,6-Dinitrotoluene		U		Y	4
PB104989BL	PB104989BL	2-Chloronaphthalene		U		Y	4
PB104989BL	PB104989BL	2-Chlorophenol		U		Y	4
PB104989BL	PB104989BL	2-Fluorobiphenyl	81.5			Y	4
PB104989BL	PB104989BL	2-Fluorophenol	130			Y	4
PB104989BL	PB104989BL	2-Methylnaphthalene		U		Y	4
PB104989BL	PB104989BL	2-Methylphenol (O-Cresol)		U		Y	4
PB104989BL	PB104989BL	2-Nitroaniline		U		Y	4
PB104989BL	PB104989BL	2-Nitrophenol		U		Y	4
PB104989BL	PB104989BL	3,3'-Dichlorobenzidine		U		Y	4
PB104989BL	PB104989BL	3-Nitroaniline		U		Y	4
PB104989BL	PB104989BL	4,6-Dinitro-2-Methylphenol		U		Y	4
PB104989BL	PB104989BL	4-Bromophenyl Phenyl Ether		U		Y	4
PB104989BL	PB104989BL	4-Chloro-3-Methylphenol		U		Y	4
PB104989BL	PB104989BL	4-Chloroaniline		U		Y	4
PB104989BL	PB104989BL	4-Chlorophenyl Phenyl Ether		U		Y	4
PB104989BL	PB104989BL	4-Nitroaniline		U		Y	4

PB104989BL	PB104989BL	4-Nitrophenol		U		Y	4
PB104989BL	PB104989BL	Acenaphthene		U		Y	4
PB104989BL	PB104989BL	Acenaphthylene		U		Y	4
PB104989BL	PB104989BL	Acetophenone		U		Y	4
PB104989BL	PB104989BL	Anthracene		U		Y	4
PB104989BL	PB104989BL	Atrazine		U		Y	4
PB104989BL	PB104989BL	Benzaldehyde		U		Y	4
PB104989BL	PB104989BL	Benzo(A)Anthracene		U		Y	4
PB104989BL	PB104989BL	Benzo(A)Pyrene		U		Y	4
PB104989BL	PB104989BL	Benzo(B)Fluoranthene		U		Y	4
PB104989BL	PB104989BL	Benzo(G,H,I)Perylene		U		Y	4
PB104989BL	PB104989BL	Benzo(K)Fluoranthene		U		Y	4
PB104989BL	PB104989BL	Benzyl Butyl Phthalate		U		Y	4
PB104989BL	PB104989BL	Biphenyl (Diphenyl)		U		Y	4
PB104989BL	PB104989BL	Bis(2-Chloroethoxy) Methane		U		Y	4
PB104989BL	PB104989BL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
PB104989BL	PB104989BL	Bis(2-Chloroisopropyl) Ether		U		Y	4
PB104989BL	PB104989BL	Bis(2-Ethylhexyl) Phthalate		U		Y	4
PB104989BL	PB104989BL	Caprolactam		U		Y	4
PB104989BL	PB104989BL	Carbazole		U		Y	4
PB104989BL	PB104989BL	Chrysene		U		Y	4
PB104989BL	PB104989BL	Dibenz(A,H)Anthracene		U		Y	4
PB104989BL	PB104989BL	Dibenzofuran		U		Y	4
PB104989BL	PB104989BL	Diethyl Phthalate		U		Y	4
PB104989BL	PB104989BL	Dimethyl Phthalate		U		Y	4
PB104989BL	PB104989BL	Di-N-Butyl Phthalate		U		Y	4
PB104989BL	PB104989BL	Di-N-Octylphthalate		U		Y	4
PB104989BL	PB104989BL	Fluoranthene		U		Y	4
PB104989BL	PB104989BL	Fluorene		U		Y	4
PB104989BL	PB104989BL	Hexachlorobenzene		U		Y	4
PB104989BL	PB104989BL	Hexachlorobutadiene		U		Y	4
PB104989BL	PB104989BL	Hexachlorocyclopentadiene		U		Y	4
PB104989BL	PB104989BL	Hexachloroethane		U		Y	4
PB104989BL	PB104989BL	Indeno(1,2,3-C,D)Pyrene		U		Y	4
PB104989BL	PB104989BL	Isophorone		U		Y	4
PB104989BL	PB104989BL	M+P MethylPhenol		U		Y	4
PB104989BL	PB104989BL	Naphthalene		U		Y	4
PB104989BL	PB104989BL	Nitrobenzene		U		Y	4
PB104989BL	PB104989BL	Nitrobenzene-D5	79.9			Y	4
PB104989BL	PB104989BL	N-Nitrosodi-N-Propylamine		U		Y	4
PB104989BL	PB104989BL	N-Nitrosodiphenylamine		U		Y	4
PB104989BL	PB104989BL	Pentachlorophenol		U		Y	4
PB104989BL	PB104989BL	Phenanthrene		U		Y	4
PB104989BL	PB104989BL	Phenol		U		Y	4
PB104989BL	PB104989BL	Phenol-D6	120			Y	4
PB104989BL	PB104989BL	Pyrene		U		Y	4
PB104989BL	PB104989BL	Terphenyl-D14	81			Y	4
PB104989BL	PB104989BL	Terphenyl-D14	81			Y	4
PB104989BS	PB104989BS	1,2,4,5-Tetrachlorobenzene	30.5			Y	4
PB104989BS	PB104989BS	2,3,4,6-Tetrachlorophenol	42.9			Y	4
PB104989BS	PB104989BS	2,4,5-Trichlorophenol	39.2			Y	4
PB104989BS	PB104989BS	2,4,6-Tribromophenol	140			Y	4
PB104989BS	PB104989BS	2,4,6-Trichlorophenol	38.4			Y	4
PB104989BS	PB104989BS	2,4-Dichlorophenol	39.8			Y	4
PB104989BS	PB104989BS	2,4-Dimethylphenol	43.2			Y	4
PB104989BS	PB104989BS	2,4-Dinitrophenol	68.7			Y	4
PB104989BS	PB104989BS	2,4-Dinitrotoluene	40.2			Y	4
PB104989BS	PB104989BS	2,6-Dinitrotoluene	37.5			Y	4
PB104989BS	PB104989BS	2-Chloronaphthalene	33.7			Y	4
PB104989BS	PB104989BS	2-Chlorophenol	36.4			Y	4
PB104989BS	PB104989BS	2-Fluorobiphenyl	76.1			Y	4
PB104989BS	PB104989BS	2-Fluorophenol	130			Y	4
PB104989BS	PB104989BS	2-Methylnaphthalene	34.1			Y	4
PB104989BS	PB104989BS	2-Methylphenol (O-Cresol)	37			Y	4
PB104989BS	PB104989BS	2-Nitroaniline	35.6			Y	4
PB104989BS	PB104989BS	2-Nitrophenol	35.6			Y	4
PB104989BS	PB104989BS	3,3'-Dichlorobenzidine	18.7			Y	4
PB104989BS	PB104989BS	3-Nitroaniline	6.3	J	J	Y	4
PB104989BS	PB104989BS	4,6-Dinitro-2-Methylphenol	31.9			Y	4
PB104989BS	PB104989BS	4-Bromophenyl Phenyl Ether	32.1		J	Y	4
PB104989BS	PB104989BS	4-Chloro-3-Methylphenol	38.4			Y	4
PB104989BS	PB104989BS	4-Chloroaniline	4.6	J	J	Y	4
PB104989BS	PB104989BS	4-Chlorophenyl Phenyl Ether	33.7			Y	4
PB104989BS	PB104989BS	4-Nitroaniline	36.8			Y	4
PB104989BS	PB104989BS	4-Nitrophenol	84.5	E	J	Y	4
PB104989BS	PB104989BS	Acenaphthene	32.3		J	Y	4
PB104989BS	PB104989BS	Acenaphthylene	33.1			Y	4
PB104989BS	PB104989BS	Acetophenone	33.2			Y	4
PB104989BS	PB104989BS	Anthracene	35.4			Y	4

PB104989BS	PB104989BS	Atrazine	38.9			Y	4
PB104989BS	PB104989BS	Benzaldehyde	34.8			Y	4
PB104989BS	PB104989BS	Benzo(A)Anthracene	34.6			Y	4
PB104989BS	PB104989BS	Benzo(A)Pyrene	35.6			Y	4
PB104989BS	PB104989BS	Benzo(B)Fluoranthene	34.1			Y	4
PB104989BS	PB104989BS	Benzo(G,H,I)Perylene	35.7			Y	4
PB104989BS	PB104989BS	Benzo(K)Fluoranthene	33.7			Y	4
PB104989BS	PB104989BS	Benzyl Butyl Phthalate	37.4			Y	4
PB104989BS	PB104989BS	Biphenyl (Diphenyl)	31.5		J	Y	4
PB104989BS	PB104989BS	Bis(2-Chloroethoxy) Methane	34.6			Y	4
PB104989BS	PB104989BS	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	31.3			Y	4
PB104989BS	PB104989BS	Bis(2-Chloroisopropyl) Ether	43.1			Y	4
PB104989BS	PB104989BS	Bis(2-Ethylhexyl) Phthalate	36.4			Y	4
PB104989BS	PB104989BS	Caprolactam	40.1			Y	4
PB104989BS	PB104989BS	Carbazole	37.3			Y	4
PB104989BS	PB104989BS	Chrysene	34.3			Y	4
PB104989BS	PB104989BS	Dibenz(A,H)Anthracene	35.4			Y	4
PB104989BS	PB104989BS	Dibenzofuran	35.2			Y	4
PB104989BS	PB104989BS	Diethyl Phthalate	37.2			Y	4
PB104989BS	PB104989BS	Dimethyl Phthalate	35.5			Y	4
PB104989BS	PB104989BS	Di-N-Butyl Phthalate	38.3			Y	4
PB104989BS	PB104989BS	Di-N-Octylphthalate	37.4			Y	4
PB104989BS	PB104989BS	Fluoranthene	37.5			Y	4
PB104989BS	PB104989BS	Fluorene	35.6			Y	4
PB104989BS	PB104989BS	Hexachlorobenzene	31.9			Y	4
PB104989BS	PB104989BS	Hexachlorobutadiene	32.4			Y	4
PB104989BS	PB104989BS	Hexachlorocyclopentadiene	50.1			Y	4
PB104989BS	PB104989BS	Hexachloroethane	33.4			Y	4
PB104989BS	PB104989BS	Indeno(1,2,3-C,D)Pyrene	36.8			Y	4
PB104989BS	PB104989BS	Isophorone	35.5			Y	4
PB104989BS	PB104989BS	M+P MethylPhenol	33.6			Y	4
PB104989BS	PB104989BS	Naphthalene	32.7			Y	4
PB104989BS	PB104989BS	Nitrobenzene	34.4			Y	4
PB104989BS	PB104989BS	Nitrobenzene-D5	75.8			Y	4
PB104989BS	PB104989BS	N-Nitrosodi-N-Propylamine	27.5		J	Y	4
PB104989BS	PB104989BS	N-Nitrosodiphenylamine	31.2		J	Y	4
PB104989BS	PB104989BS	Pentachlorophenol	57.7			Y	4
PB104989BS	PB104989BS	Phenanthrene	33.8			Y	4
PB104989BS	PB104989BS	Phenol	37.4			Y	4
PB104989BS	PB104989BS	Phenol-D6	120			Y	4
PB104989BS	PB104989BS	Pyrene	34.8			Y	4
PB104989BS	PB104989BS	Terphenyl-D14	77.3			Y	4
PB104989BS	PB104989BS	Terphenyl-D14	77.3			Y	4
PB104989TB-20171213	PB104989TB	1,2,4,5-Tetrachlorobenzene		U		Y	4
PB104989TB-20171213	PB104989TB	2,3,4,6-Tetrachlorophenol		U		Y	4
PB104989TB-20171213	PB104989TB	2,4-Dichlorophenol		U		Y	4
PB104989TB-20171213	PB104989TB	2,4-Dimethylphenol		U		Y	4
PB104989TB-20171213	PB104989TB	2,4-Dinitrophenol		U		Y	4
PB104989TB-20171213	PB104989TB	2,6-Dinitrotoluene		U		Y	4
PB104989TB-20171213	PB104989TB	2-Chloronaphthalene		U		Y	4
PB104989TB-20171213	PB104989TB	2-Chlorophenol		U		Y	4
PB104989TB-20171213	PB104989TB	2-Methylnaphthalene		U		Y	4
PB104989TB-20171213	PB104989TB	2-Nitroaniline		U		Y	4
PB104989TB-20171213	PB104989TB	2-Nitrophenol		U		Y	4
PB104989TB-20171213	PB104989TB	3,3'-Dichlorobenzidine		U		Y	4
PB104989TB-20171213	PB104989TB	3-Nitroaniline		U		Y	4
PB104989TB-20171213	PB104989TB	4,6-Dinitro-2-Methylphenol		U		Y	4
PB104989TB-20171213	PB104989TB	4-Bromophenyl Phenyl Ether		U		Y	4
PB104989TB-20171213	PB104989TB	4-Chloro-3-Methylphenol		U		Y	4
PB104989TB-20171213	PB104989TB	4-Chloroaniline		U		Y	4
PB104989TB-20171213	PB104989TB	4-Chlorophenyl Phenyl Ether		U		Y	4
PB104989TB-20171213	PB104989TB	4-Nitroaniline		U		Y	4
PB104989TB-20171213	PB104989TB	4-Nitrophenol		U		Y	4
PB104989TB-20171213	PB104989TB	Acenaphthene		U		Y	4
PB104989TB-20171213	PB104989TB	Acenaphthylene		U		Y	4
PB104989TB-20171213	PB104989TB	Acetophenone		U		Y	4
PB104989TB-20171213	PB104989TB	Anthracene		U		Y	4
PB104989TB-20171213	PB104989TB	Atrazine		U		Y	4
PB104989TB-20171213	PB104989TB	Benzaldehyde		U		Y	4
PB104989TB-20171213	PB104989TB	Benzo(A)Anthracene		U		Y	4
PB104989TB-20171213	PB104989TB	Benzo(A)Pyrene		U		Y	4
PB104989TB-20171213	PB104989TB	Benzo(B)Fluoranthene		U		Y	4
PB104989TB-20171213	PB104989TB	Benzo(G,H,I)Perylene		U		Y	4
PB104989TB-20171213	PB104989TB	Benzo(K)Fluoranthene		U		Y	4
PB104989TB-20171213	PB104989TB	Benzyl Butyl Phthalate		U		Y	4
PB104989TB-20171213	PB104989TB	Biphenyl (Diphenyl)		U		Y	4
PB104989TB-20171213	PB104989TB	Bis(2-Chloroethoxy) Methane		U		Y	4
PB104989TB-20171213	PB104989TB	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
PB104989TB-20171213	PB104989TB	Bis(2-Chloroisopropyl) Ether		U		Y	4

PB104989TB-20171213	PB104989TB	Bis(2-Ethylhexyl) Phthalate		U	Y	4
PB104989TB-20171213	PB104989TB	Caprolactam		U	Y	4
PB104989TB-20171213	PB104989TB	Carbazole		U	Y	4
PB104989TB-20171213	PB104989TB	Chrysene		U	Y	4
PB104989TB-20171213	PB104989TB	Dibenz(A,H)Anthracene		U	Y	4
PB104989TB-20171213	PB104989TB	Dibenzofuran		U	Y	4
PB104989TB-20171213	PB104989TB	Diethyl Phthalate		U	Y	4
PB104989TB-20171213	PB104989TB	Dimethyl Phthalate		U	Y	4
PB104989TB-20171213	PB104989TB	Di-N-Butyl Phthalate		U	Y	4
PB104989TB-20171213	PB104989TB	Di-N-Octylphthalate		U	Y	4
PB104989TB-20171213	PB104989TB	Fluoranthene		U	Y	4
PB104989TB-20171213	PB104989TB	Fluorene		U	Y	4
PB104989TB-20171213	PB104989TB	Hexachlorocyclopentadiene		U	Y	4
PB104989TB-20171213	PB104989TB	Indeno(1,2,3-C,D)Pyrene		U	Y	4
PB104989TB-20171213	PB104989TB	Isophorone		U	Y	4
PB104989TB-20171213	PB104989TB	Naphthalene		U	Y	4
PB104989TB-20171213	PB104989TB	N-Nitrosodi-N-Propylamine		U	Y	4
PB104989TB-20171213	PB104989TB	N-Nitrosodiphenylamine		U	Y	4
PB104989TB-20171213	PB104989TB	Phenanthrene		U	Y	4
PB104989TB-20171213	PB104989TB	Phenol		U	Y	4
PB104989TB-20171213	PB104989TB	Pyrene		U	Y	4
QNWP8-MW26S-GW-20171206	I6786-01	Sulfide	23.5		N	
QNWP8-MW26S-GWMS	I6786-01MS	Sulfide	27.2		N	
QNWP8-MW26S-GWMSD	I6786-01MSD	Sulfide	27.0		N	
QNWP8-MW27S-GW-20171206	I6786-02	Sulfide	7.68		N	
PB104913BL	PB104913BL	Sulfide		U	N	
PB104913BS	PB104913BS	Sulfide	20.0		N	

Appendix 2
Well Purge Logs

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW26S	SAMPLE ID: MW- QNPW8-MW26S	DATE: 12/06/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006"	WELL SCREEN INTERVAL DEPTH: feet to 8 feet 18.5	STATIC DEPTH TO WATER (feet): 6.30'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (16.20 feet – 6.30 feet) X 0.16 gallons/foot = 4.7 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 0835	PURGING ENDED AT: 0915	TOTAL VOLUME PURGED (gallons): 5.7

TIME	VOLUME PURGED (gallons) L	CUMUL VOLUME PURGED (gallons) L	PURGE RATE (ml/min ppm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0835	0.5	2	400	6.30	7.56	3.06	73.6	1.36	14.00	1.6	2.05	-283	slight cloudy	sewage like
0840	2.5	4.5	400	6.30	7.43	5.80	28.5	0.06	14.45	3.1	3.66	-336	↓	↓
0845	2.25	6.75	450	6.31	7.45	6.60	12.9	0.00	14.55	3.6	4.15	-345		
0850	2.25	9.0	450	6.31	7.49	7.35	2.4	0.00	14.48	4.0	4.65	-346	↓	
0855	2.0	11.0	400	6.32	7.50	8.69	2.7	0.00	14.49	4.8	5.52	349		
0900	2.0	13.0	400	6.33	7.55	8.72	2.5	0.00	14.52	5.0	5.54	-350	yellow	
0905	2.0	15.0	400	6.34	7.57	8.82	2.8	0.00	14.54	5.1	5.57	-351	↓	
0910	2.12	17.1	425	6.35	7.55	8.91	2.1	0.00	14.53	5.1	5.61	-350		
0915	2.25	19.3	450	6.36	7.56	8.93	2.0	0.00	14.56	5.2	5.63	-355		
0945	2.25	21.6	450	6.40	7.49	8.95	2.0	0.00	14.60	5.2	5.70	-356	↓	↓

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0920	SAMPLING ENDED AT: 0940
PUMP OR TUBING DEPTH IN WELL (feet): 11	SAMPLE PUMP FLOW RATE (mL per minute): 425	TUBING MATERIAL CODE:	Teflon lined poly
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNPW8-MW26S	3	CG	40	HCL	—	7.49	TCL VOC	PP
	2	AG	1000	—	—		TCL SVOC	
	3	CG	40	HCL	—		TPH DRO	
	2	AG	1,000	—	—		TPH GRO	
	1	PE	500	HNO_3	—		total Iron	
	1			$NaOH_2N$	—		Sulfide	
	1			—	—		Sulfate	
	1	↓	↓	—	—	↓	Alkalinity	↓

REMARKS: PID = 0.0 ppm

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 26D	SAMPLE ID: MW- 26D	DATE: 12/6/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
					D.T.W		6.43'		≈ 1" of product @ bottom of well					
					Bottom		30.20'							
Product not detected with probe however product observed in bailer (see pic)														

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal /Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS: PID = 0.6 ppm

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York
Well No: MW- 27S	SAMPLE ID: QNPB - MW27S - GW DATE: 12-06-2017

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006"	WELL SCREEN INTERVAL DEPTH: feet to 8.5 feet 18.5	STATIC DEPTH TO WATER (feet): 8.35'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (15.60 feet – 8.35 feet) X 0.16 gallons/foot = 3.48 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12	PURGING INITIATED AT: 1055	PURGING ENDED AT: 1200	TOTAL VOLUME PURGED (gallons): ≈9

TIME	VOLUME PURGED (gallons) L	CUMUL. VOLUME PURGED (gallons) L	PURGE RATE (mL/min) mL/min	DEPTH TO WATER (feet)	pH (standard units)	COND (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1055	0.5	2.5	500	8.37	7.70	7.08	18.7	7.5	10.35	3.8	4.45	-328	cloudy	sewage like
1100	2.25	4.75	450	8.37	7.64	6.96	15.3	0.7	11.08	3.8	4.38	-339		
1105	2.25	7.0	450	8.37	7.67	6.84	15.9	0.00	12.32	3.7	4.31	-356		
1110	2.5	9.5	500	8.39	7.69	6.86	15.6	0.00	12.32	3.7	4.34	-358		
1115	2.25	11.75	450	8.39	7.68	6.81	12.0	0.00	12.52	3.7	4.29	-357		
1120	2.25	14.0	450	8.40	7.67	6.78	74.0	0.00	12.64	3.7	4.27	-356		
1125	2.12	16.1	425	8.41	7.70	6.71	60.0	0.00	12.96	3.6	4.23	-351		
1130	2.25	18.3	450	8.41	7.67	6.69	42.1	0.00	12.93	3.6	4.21	-352		
1135	2.25	20.6	450	8.42	7.64	6.63	28.2	0.00	12.91	3.6	4.18	-350		
1140	2.0	22.6	400	8.43	7.63	6.62	17.1	0.00	12.88	3.6	4.17	-350		

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1205	SAMPLING ENDED AT: 1230
PUMP OR TUBING DEPTH IN WELL (feet): 12	SAMPLE PUMP FLOW RATE (mL per minute): 450	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW27S	3	CG	HCL	40	—	7.61	TCL VOCs	PP
	2	AG	—	1000	—		TCL SVOCs	
	3	CG	HCL	40	—		TPH DRO	
	2	AG	—	1000	—		TPH GRO	
	1	PE	HNO_3	500	—		total Iron	
	1		$NaOH_2N$		—		sulfide	
	1		—		—		sulfate	
	1		—		—		Alkalinity	

REMARKS: PID = 0.0 ppm

MATERIAL CODES **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

2 of 2

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 27S continued	SAMPLE ID: MW-	DATE: 12/06/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 8.35	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (15.6 feet – 8.35 feet) X 0.16 gallons/foot = 3.48 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1145	2.12	24.72	425	8.43	7.62	6.57	10.0	0.00	12.94	3.6	4.16	-350	clear	sewage like
1150	2.0	26.72	400	8.44	7.62	6.58	7.1	0.00	13.08	3.6	4.14	-350	↓	↓
1155	2.0	28.72	400	8.45	7.62	6.56	3.0	0.00	13.09	3.6	4.14	-350		
1200	2.0	30.72	400	8.45	7.61	6.54	0.0	0.00	13.10	3.6	4.12	-350		
1235	2.12	32.84	425	8.50	7.61	6.53	0.0	0.00	13.09	3.6	4.12	-347	↓	↓

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1205	SAMPLING ENDED AT: 1230
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- 27D	SAMPLE ID: MW- 27D	DATE: 12/6/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)

D.T.W - 8.49'
D.T.P - 26.30
Total Depth - 30.40'
@ 3" of product @ bottom of well

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS: PID = 185 ppm

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Appendix 3

Laboratory Groundwater Analytical Report

Included on Attached CD

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA FOR

VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS

GC SEMI-VOLATILES

METALS

GENERAL CHEMISTRY

PROJECT NAME : HUNTERS POINT - QUEENS WEST LIBRARY

LIRO ENGINEERS, INC.

690 Delaware Ave.

Buffalo, NY - 14209

Phone No: 716-882-5476

ORDER ID : I6786

ATTENTION : Steve Frank

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 12/13/2017

Dear Steve Frank,

4 water samples for the **Hunters Point - Queens West Library** project were received on **12/07/2017.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

The invoice for this workorder is also attached to the e-mail.

Regards,

Nancy Padilla

9087283142

Nancy@chemtech.net

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. I6786
QUOTE NO.
COC Number 022984

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: LiRO Engineers, Inc.
ADDRESS: 703 Korimer Street
CITY: Brooklyn STATE: NY ZIP: 11211
ATTENTION: Steve Frank
PHONE: 716 882 5476 FAX: —

CLIENT PROJECT INFORMATION

PROJECT NAME: Queens West, Parcel 8 Hunters Point Library NYSDEC
PROJECT NO.: 15-008-0265 LOCATION: C241087 LIC, NY
PROJECT MANAGER: Steve Frank
e-mail: franks@liro.com
PHONE: 716 882 5476 FAX: —

CLIENT BILLING INFORMATION

BILL TO: LiRO PO#:
ADDRESS: 690 Delaware Ave
CITY: Buffalo STATE: NY ZIP:
ATTENTION: S. Frank PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: 5 day TAT DAYS *
PREAPPROVED TAT: ☒ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ LEVEL 1: Results only
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format: _____
☑ Others Full category B

ANALYSIS

1	2	3	4	5	6	7	8	9
TCL VOCs 8260B	TCL SVOCs 8270C	TPH DRO 8015	TPH GRO 8015	Total Iron 6010	Sulfide 376.1	Sulfate 300/SW	Alkalinity 310.1	

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9
1.	QNWP8-MW26S-GW	GW		X	12/6/17	0920	8	X	X	X	X	X	X	X	X	
2.	QNWP8-MW27S-GW	GW		X	"	1205	8	X	X	X	X	X	X	X	X	
3.	QNWP8-Equip. Blank	DI Water		X	↓	1230	8	X	X	X	X	X				
4.	QNWP8-Trip Blank	DI Water		X	12/4/17	—	2	X								
5.																
6.																
7.																
8.																
9.																
10.																

PRESERVATIVES: A | E | E | A | B | D | E | E

COMMENTS: ← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME:	RECEIVED BY:
1. RELINQUISHED BY SAMPLER:	12/6/17	1.
2. RELINQUISHED BY:	DATE/TIME:	2. RECEIVED BY:
3. RELINQUISHED BY:	DATE/TIME: 12/7 7:45	3. RECEIVED FOR LAB BY:

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant Cooler Temp. 4.2°
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments: Data Format: NY Regulatory Full category B, NYSDEC EQUIS EED
Ice in Cooler?: _____

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT
Shipment Complete: ☐ YES ☐ NO

Revision 8/2007

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17 09:20
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I6786
Lab Sample ID:	I6786-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	482	D	20	2.6	7.5	15	mg/L		12/08/17 21:18	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17 09:20
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	1690		1	0.4	1	2	mg/L		12/11/17 14:48	SM2320 B
Sulfate	273	OR	1	0.13	0.375	0.75	mg/L		12/08/17 15:27	300.0
Sulfide	23.5		1	0.03	0.5	1	mg/L	12/11/17 12:10	12/11/17 14:36	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE024824.D	25	12/09/17 09:02	12/12/17 0:09	PB104884

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	19700		625	625	1250	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	0	*	29 - 130		0%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB012479.D	25	12/13/17 15:59	FB121317

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	4275		300	565	1130	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	18.7		50 - 150		94%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	438		1	12.5	12.5	50	ug/L	12/11/17 09:40	12/11/17 18:05	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031532.D	1	12/13/17 09:26	12/13/17 17:51	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	1	U	0.77	1	10.1	ug/L
108-95-2	Phenol	13.5		0.21	1	10.1	ug/L
111-44-4	bis(2-Chloroethyl)ether	1	U	0.55	1	10.1	ug/L
95-57-8	2-Chlorophenol	1	U	0.54	1	10.1	ug/L
95-48-7	2-Methylphenol	20.3		0.24	1	10.1	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1	U	0.17	1	10.1	ug/L
98-86-2	Acetophenone	4.2	J	0.14	1	10.1	ug/L
65794-96-9	3+4-Methylphenols	35.5		0.38	1	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1	U	0.2	1	10.1	ug/L
67-72-1	Hexachloroethane	1	U	0.25	1	10.1	ug/L
98-95-3	Nitrobenzene	1	U	0.68	1	10.1	ug/L
78-59-1	Isophorone	1	U	0.3	1	10.1	ug/L
88-75-5	2-Nitrophenol	1	U	0.52	1	10.1	ug/L
105-67-9	2,4-Dimethylphenol	99.1	E	0.71	1	10.1	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1	U	0.55	1	10.1	ug/L
120-83-2	2,4-Dichlorophenol	1	U	0.66	1	10.1	ug/L
91-20-3	Naphthalene	200	E	0.12	1	10.1	ug/L
106-47-8	4-Chloroaniline	1	U	1	1	10.1	ug/L
87-68-3	Hexachlorobutadiene	1	U	0.25	1	10.1	ug/L
105-60-2	Caprolactam	1	U	1	1	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	1	U	0.4	1	10.1	ug/L
91-57-6	2-Methylnaphthalene	2.9	J	0.32	1	10.1	ug/L
77-47-4	Hexachlorocyclopentadiene	1	U	0.24	1	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	1	U	0.56	1	10.1	ug/L
95-95-4	2,4,5-Trichlorophenol	1	U	0.4	1	10.1	ug/L
92-52-4	1,1-Biphenyl	1	U	0.15	1	10.1	ug/L
91-58-7	2-Chloronaphthalene	1	U	0.16	1	10.1	ug/L
88-74-4	2-Nitroaniline	1	U	0.49	1	10.1	ug/L
131-11-3	Dimethylphthalate	1	U	0.22	1	10.1	ug/L
208-96-8	Acenaphthylene	1	U	0.7	1	10.1	ug/L
606-20-2	2,6-Dinitrotoluene	1	U	0.32	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031532.D	1	12/13/17 09:26	12/13/17 17:51	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1	U	1	1	10.1	ug/L
83-32-9	Acenaphthene	4.9	J	0.21	1	10.1	ug/L
51-28-5	2,4-Dinitrophenol	8	U	2.1	8	10.1	ug/L
100-02-7	4-Nitrophenol	5	U	2	5	10.1	ug/L
132-64-9	Dibenzofuran	1	U	0.24	1	10.1	ug/L
121-14-2	2,4-Dinitrotoluene	1	U	1	1	10.1	ug/L
84-66-2	Diethylphthalate	1	U	0.38	1	10.1	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	1	U	0.31	1	10.1	ug/L
100-01-6	4-Nitroaniline	2	U	1.4	2	10.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	2	U	0.74	2	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	1	U	0.6	1	10.1	ug/L
101-55-3	4-Bromophenyl-phenylether	1	U	0.23	1	10.1	ug/L
118-74-1	Hexachlorobenzene	1	U	0.18	1	10.1	ug/L
1912-24-9	Atrazine	1	U	0.4	1	10.1	ug/L
87-86-5	Pentachlorophenol	1	U	1	1	10.1	ug/L
85-01-8	Phenanthrene	1	U	0.26	1	10.1	ug/L
120-12-7	Anthracene	1	U	0.16	1	10.1	ug/L
86-74-8	Carbazole	22.8		0.22	1	10.1	ug/L
84-74-2	Di-n-butylphthalate	1	U	1	1	10.1	ug/L
206-44-0	Fluoranthene	1	U	0.4	1	10.1	ug/L
129-00-0	Pyrene	1	U	0.2	1	10.1	ug/L
85-68-7	Butylbenzylphthalate	1	U	0.19	1	10.1	ug/L
91-94-1	3,3-Dichlorobenzidine	1	U	1	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	1	U	0.18	1	10.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1	U	0.16	1	10.1	ug/L
117-84-0	Di-n-octyl phthalate	1	U	0.51	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	1	U	0.42	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031532.D	1	12/13/17 09:26	12/13/17 17:51	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1	U	0.29	1	10.1	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1	U	0.2	1	10.1	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	1	U	0.2	1	10.1	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	46.2		10 - 130		31%	SPK: 150
13127-88-3	Phenol-d6	32.6		10 - 130		22%	SPK: 150
4165-60-0	Nitrobenzene-d5	70.2		36 - 131		70%	SPK: 100
321-60-8	2-Fluorobiphenyl	72		39 - 131		72%	SPK: 100
118-79-6	2,4,6-Tribromophenol	77.3		25 - 155		52%	SPK: 150
1718-51-0	Terphenyl-d14	69.3		23 - 130		69%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	50422	8.11				
1146-65-2	Naphthalene-d8	262523	10.92				
15067-26-2	Acenaphthene-d10	188979	14.73				
1517-22-2	Phenanthrene-d10	453839	17.47				
1719-03-5	Chrysene-d12	483930	21.74				
1520-96-3	Perylene-d12	479581	25.03				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I6786
Lab Sample ID:	I6786-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031534.D	5	12/13/17 09:26	12/13/17 19:07	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	5	UD	3.9	5	50.3	ug/L
108-95-2	Phenol	11.4	JD	1.1	5	50.3	ug/L
111-44-4	bis(2-Chloroethyl)ether	5	UD	2.8	5	50.3	ug/L
95-57-8	2-Chlorophenol	5	UD	2.7	5	50.3	ug/L
95-48-7	2-Methylphenol	19.1	JD	1.2	5	50.3	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	5	UD	0.85	5	50.3	ug/L
98-86-2	Acetophenone	5	UD	0.7	5	50.3	ug/L
65794-96-9	3+4-Methylphenols	31.4	JD	1.9	5	50.3	ug/L
621-64-7	n-Nitroso-di-n-propylamine	5	UD	1	5	50.3	ug/L
67-72-1	Hexachloroethane	5	UD	1.3	5	50.3	ug/L
98-95-3	Nitrobenzene	5	UD	3.4	5	50.3	ug/L
78-59-1	Isophorone	5	UD	1.5	5	50.3	ug/L
88-75-5	2-Nitrophenol	5	UD	2.6	5	50.3	ug/L
105-67-9	2,4-Dimethylphenol	97.4	D	3.6	5	50.3	ug/L
111-91-1	bis(2-Chloroethoxy)methane	5	UD	2.8	5	50.3	ug/L
120-83-2	2,4-Dichlorophenol	5	UD	3.3	5	50.3	ug/L
91-20-3	Naphthalene	250	D	0.6	5	50.3	ug/L
106-47-8	4-Chloroaniline	5	UD	5	5	50.3	ug/L
87-68-3	Hexachlorobutadiene	5	UD	1.3	5	50.3	ug/L
105-60-2	Caprolactam	5	UD	5	5	50.3	ug/L
59-50-7	4-Chloro-3-methylphenol	5	UD	2	5	50.3	ug/L
91-57-6	2-Methylnaphthalene	5	UD	1.6	5	50.3	ug/L
77-47-4	Hexachlorocyclopentadiene	5	UD	1.2	5	50.3	ug/L
88-06-2	2,4,6-Trichlorophenol	5	UD	2.8	5	50.3	ug/L
95-95-4	2,4,5-Trichlorophenol	5	UD	2	5	50.3	ug/L
92-52-4	1,1-Biphenyl	5	UD	0.75	5	50.3	ug/L
91-58-7	2-Chloronaphthalene	5	UD	0.8	5	50.3	ug/L
88-74-4	2-Nitroaniline	5	UD	2.5	5	50.3	ug/L
131-11-3	Dimethylphthalate	5	UD	1.1	5	50.3	ug/L
208-96-8	Acenaphthylene	5	UD	3.5	5	50.3	ug/L
606-20-2	2,6-Dinitrotoluene	5	UD	1.6	5	50.3	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I6786
Lab Sample ID:	I6786-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031534.D	5	12/13/17 09:26	12/13/17 19:07	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	5	UD	5	5	50.3	ug/L
83-32-9	Acenaphthene	5	UD	1.1	5	50.3	ug/L
51-28-5	2,4-Dinitrophenol	40.2	UD	10.6	40.2	50.3	ug/L
100-02-7	4-Nitrophenol	25.1	UD	10.1	25.1	50.3	ug/L
132-64-9	Dibenzofuran	5	UD	1.2	5	50.3	ug/L
121-14-2	2,4-Dinitrotoluene	5	UD	5	5	50.3	ug/L
84-66-2	Diethylphthalate	5	UD	1.9	5	50.3	ug/L
7005-72-3	4-Chlorophenyl-phenylether	5	UD	1.1	5	50.3	ug/L
86-73-7	Fluorene	5	UD	1.6	5	50.3	ug/L
100-01-6	4-Nitroaniline	10.1	UD	6.8	10.1	50.3	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.1	UD	3.7	10.1	50.3	ug/L
86-30-6	n-Nitrosodiphenylamine	5	UD	3	5	50.3	ug/L
101-55-3	4-Bromophenyl-phenylether	5	UD	1.2	5	50.3	ug/L
118-74-1	Hexachlorobenzene	5	UD	0.9	5	50.3	ug/L
1912-24-9	Atrazine	5	UD	2	5	50.3	ug/L
87-86-5	Pentachlorophenol	5	UD	5	5	50.3	ug/L
85-01-8	Phenanthrene	5	UD	1.3	5	50.3	ug/L
120-12-7	Anthracene	5	UD	0.8	5	50.3	ug/L
86-74-8	Carbazole	25.4	JD	1.1	5	50.3	ug/L
84-74-2	Di-n-butylphthalate	5	UD	5	5	50.3	ug/L
206-44-0	Fluoranthene	5	UD	2	5	50.3	ug/L
129-00-0	Pyrene	5	UD	1	5	50.3	ug/L
85-68-7	Butylbenzylphthalate	5	UD	0.95	5	50.3	ug/L
91-94-1	3,3-Dichlorobenzidine	5	UD	5	5	50.3	ug/L
56-55-3	Benzo(a)anthracene	5	UD	0.8	5	50.3	ug/L
218-01-9	Chrysene	5	UD	0.9	5	50.3	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	5	UD	0.8	5	50.3	ug/L
117-84-0	Di-n-octyl phthalate	5	UD	2.6	5	50.3	ug/L
205-99-2	Benzo(b)fluoranthene	5	UD	1.5	5	50.3	ug/L
207-08-9	Benzo(k)fluoranthene	5	UD	0.9	5	50.3	ug/L
50-32-8	Benzo(a)pyrene	5	UD	0.7	5	50.3	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	5	UD	0.75	5	50.3	ug/L
53-70-3	Dibenzo(a,h)anthracene	5	UD	2.1	5	50.3	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	I6786
Lab Sample ID:	I6786-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031534.D	5	12/13/17 09:26	12/13/17 19:07	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	5	UD	1.5	5	50.3	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	5	UD	1	5	50.3	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	5	UD	1	5	50.3	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	42.8		10 - 130		28%	SPK: 150
13127-88-3	Phenol-d6	28.5		10 - 130		19%	SPK: 150
4165-60-0	Nitrobenzene-d5	69.2		36 - 131		69%	SPK: 100
321-60-8	2-Fluorobiphenyl	77.2		39 - 131		77%	SPK: 100
118-79-6	2,4,6-Tribromophenol	80.6		25 - 155		54%	SPK: 150
1718-51-0	Terphenyl-d14	79.7		23 - 130		80%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	42008	8.11				
1146-65-2	Naphthalene-d8	205452	10.92				
15067-26-2	Acenaphthene-d10	155173	14.73				
1517-22-2	Phenanthrene-d10	412824	17.47				
1719-03-5	Chrysene-d12	477112	21.74				
1520-96-3	Perylene-d12	468325	25.03				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045682.D	50		12/13/17 01:13	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	50	U	10	10	50	ug/L
74-87-3	Chloromethane	50	U	10	10	50	ug/L
75-01-4	Vinyl Chloride	50	U	10	10	50	ug/L
74-83-9	Bromomethane	50	U	10	10	50	ug/L
75-00-3	Chloroethane	50	U	10	25	50	ug/L
75-69-4	Trichlorofluoromethane	50	U	10	10	50	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	50	U	10	10	50	ug/L
75-65-0	Tert butyl alcohol	1300	U	25	190	1300	ug/L
75-35-4	1,1-Dichloroethene	50	U	10	10	50	ug/L
67-64-1	Acetone	250	U	25	50	250	ug/L
75-15-0	Carbon Disulfide	50	U	10	10	50	ug/L
1634-04-4	Methyl tert-butyl Ether	50	U	17.5	25	50	ug/L
79-20-9	Methyl Acetate	50	U	10	25	50	ug/L
75-09-2	Methylene Chloride	50	U	10	10	50	ug/L
156-60-5	trans-1,2-Dichloroethene	50	U	10	10	50	ug/L
75-34-3	1,1-Dichloroethane	50	U	10	10	50	ug/L
110-82-7	Cyclohexane	50	U	10	10	50	ug/L
78-93-3	2-Butanone	250	U	66	130	250	ug/L
56-23-5	Carbon Tetrachloride	50	U	10	10	50	ug/L
156-59-2	cis-1,2-Dichloroethene	50	U	10	10	50	ug/L
74-97-5	Bromochloromethane	50	U	10	25	50	ug/L
67-66-3	Chloroform	50	U	10	10	50	ug/L
71-55-6	1,1,1-Trichloroethane	50	U	10	10	50	ug/L
108-87-2	Methylcyclohexane	50	U	10	10	50	ug/L
71-43-2	Benzene	3200		10	10	50	ug/L
107-06-2	1,2-Dichloroethane	50	U	10	10	50	ug/L
79-01-6	Trichloroethene	50	U	10	10	50	ug/L
78-87-5	1,2-Dichloropropane	50	U	10	10	50	ug/L
75-27-4	Bromodichloromethane	50	U	10	10	50	ug/L
108-10-1	4-Methyl-2-Pentanone	250	U	50	50	250	ug/L
108-88-3	Toluene	330		10	10	50	ug/L
10061-02-6	t-1,3-Dichloropropene	50	U	10	10	50	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045682.D	50		12/13/17 01:13	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	50	U	10	10	50	ug/L
79-00-5	1,1,2-Trichloroethane	50	U	10	10	50	ug/L
591-78-6	2-Hexanone	250	U	97	130	250	ug/L
124-48-1	Dibromochloromethane	50	U	10	10	50	ug/L
106-93-4	1,2-Dibromoethane	50	U	10	10	50	ug/L
127-18-4	Tetrachloroethene	50	U	10	10	50	ug/L
108-90-7	Chlorobenzene	50	U	10	10	50	ug/L
100-41-4	Ethyl Benzene	620		10	10	50	ug/L
179601-23-1	m/p-Xylenes	610		20	20	100	ug/L
95-47-6	o-Xylene	440		10	10	50	ug/L
100-42-5	Styrene	50	U	10	10	50	ug/L
75-25-2	Bromoform	50	U	10	10	50	ug/L
98-82-8	Isopropylbenzene	41.5	J	10	10	50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	50	U	10	10	50	ug/L
541-73-1	1,3-Dichlorobenzene	50	U	10	10	50	ug/L
106-46-7	1,4-Dichlorobenzene	50	U	10	10	50	ug/L
95-50-1	1,2-Dichlorobenzene	50	U	10	10	50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	50	U	10	10	50	ug/L
120-82-1	1,2,4-Trichlorobenzene	50	U	10	10	50	ug/L
87-61-6	1,2,3-Trichlorobenzene	50	U	10	10	50	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.6		61 - 141		93%	SPK: 50
1868-53-7	Dibromofluoromethane	47.9		69 - 133		96%	SPK: 50
2037-26-5	Toluene-d8	48.5		65 - 126		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.6		58 - 135		101%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	816108	7.67				
540-36-3	1,4-Difluorobenzene	1437090	8.59				
3114-55-4	Chlorobenzene-d5	1325860	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	599227	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045682.D	50		12/13/17 01:13	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17 12:05
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I6786
Lab Sample ID:	I6786-02DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	218	D	20	2.6	7.5	15	mg/L		12/08/17 21:50	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17 12:05
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	1570		1	0.4	1	2	mg/L		12/11/17 15:13	SM2320 B
Sulfate	189	OR	1	0.13	0.375	0.75	mg/L		12/08/17 15:59	300.0
Sulfide	7.68		1	0.03	0.5	1	mg/L	12/11/17 12:10	12/11/17 15:03	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE024825.D	10	12/09/17 09:02	12/12/17 0:44	PB104884

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	6520		250	250	500	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	1.96		29 - 130		98%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB012475.D	1	12/13/17 13:58	FB121317

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	464		12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.5		50 - 150		102%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	2530		1	12.5	12.5	50	ug/L	12/11/17 09:40	12/11/17 18:09	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031531.D	1	12/13/17 09:26	12/13/17 17:14	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	1	U	0.78	1	10.1	ug/L
108-95-2	Phenol	6	J	0.21	1	10.1	ug/L
111-44-4	bis(2-Chloroethyl)ether	1	U	0.56	1	10.1	ug/L
95-57-8	2-Chlorophenol	1	U	0.55	1	10.1	ug/L
95-48-7	2-Methylphenol	1	U	0.24	1	10.1	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1	U	0.17	1	10.1	ug/L
98-86-2	Acetophenone	1	U	0.14	1	10.1	ug/L
65794-96-9	3+4-Methylphenols	1	U	0.38	1	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1	U	0.2	1	10.1	ug/L
67-72-1	Hexachloroethane	1	U	0.25	1	10.1	ug/L
98-95-3	Nitrobenzene	1	U	0.69	1	10.1	ug/L
78-59-1	Isophorone	1	U	0.3	1	10.1	ug/L
88-75-5	2-Nitrophenol	1	U	0.53	1	10.1	ug/L
105-67-9	2,4-Dimethylphenol	25.4		0.72	1	10.1	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1	U	0.56	1	10.1	ug/L
120-83-2	2,4-Dichlorophenol	1	U	0.67	1	10.1	ug/L
91-20-3	Naphthalene	34.2		0.12	1	10.1	ug/L
106-47-8	4-Chloroaniline	1	U	1	1	10.1	ug/L
87-68-3	Hexachlorobutadiene	1	U	0.25	1	10.1	ug/L
105-60-2	Caprolactam	1	U	1	1	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	1	U	0.4	1	10.1	ug/L
91-57-6	2-Methylnaphthalene	1	U	0.32	1	10.1	ug/L
77-47-4	Hexachlorocyclopentadiene	1	U	0.24	1	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	1	U	0.57	1	10.1	ug/L
95-95-4	2,4,5-Trichlorophenol	1	U	0.4	1	10.1	ug/L
92-52-4	1,1-Biphenyl	1	U	0.15	1	10.1	ug/L
91-58-7	2-Chloronaphthalene	1	U	0.16	1	10.1	ug/L
88-74-4	2-Nitroaniline	1	U	0.49	1	10.1	ug/L
131-11-3	Dimethylphthalate	1	U	0.22	1	10.1	ug/L
208-96-8	Acenaphthylene	1	U	0.71	1	10.1	ug/L
606-20-2	2,6-Dinitrotoluene	1	U	0.32	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031531.D	1	12/13/17 09:26	12/13/17 17:14	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1	U	1	1	10.1	ug/L
83-32-9	Acenaphthene	1	U	0.21	1	10.1	ug/L
51-28-5	2,4-Dinitrophenol	8.1	U	2.1	8.1	10.1	ug/L
100-02-7	4-Nitrophenol	5.1	U	2	5.1	10.1	ug/L
132-64-9	Dibenzofuran	1	U	0.24	1	10.1	ug/L
121-14-2	2,4-Dinitrotoluene	1	U	1	1	10.1	ug/L
84-66-2	Diethylphthalate	20.2		0.38	1	10.1	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	1	U	0.31	1	10.1	ug/L
100-01-6	4-Nitroaniline	2	U	1.4	2	10.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	2	U	0.75	2	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	1	U	0.61	1	10.1	ug/L
101-55-3	4-Bromophenyl-phenylether	1	U	0.23	1	10.1	ug/L
118-74-1	Hexachlorobenzene	1	U	0.18	1	10.1	ug/L
1912-24-9	Atrazine	1	U	0.4	1	10.1	ug/L
87-86-5	Pentachlorophenol	1	U	1	1	10.1	ug/L
85-01-8	Phenanthrene	1	U	0.26	1	10.1	ug/L
120-12-7	Anthracene	1	U	0.16	1	10.1	ug/L
86-74-8	Carbazole	11.3		0.22	1	10.1	ug/L
84-74-2	Di-n-butylphthalate	1	U	1	1	10.1	ug/L
206-44-0	Fluoranthene	1	U	0.4	1	10.1	ug/L
129-00-0	Pyrene	1	U	0.2	1	10.1	ug/L
85-68-7	Butylbenzylphthalate	1	U	0.19	1	10.1	ug/L
91-94-1	3,3-Dichlorobenzidine	1	U	1	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	1	U	0.18	1	10.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1	U	0.16	1	10.1	ug/L
117-84-0	Di-n-octyl phthalate	1	U	0.52	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	1	U	0.42	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031531.D	1	12/13/17 09:26	12/13/17 17:14	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1	U	0.29	1	10.1	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1	U	0.2	1	10.1	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	1	U	0.2	1	10.1	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	65.2		10 - 130		43%	SPK: 150
13127-88-3	Phenol-d6	45.5		10 - 130		30%	SPK: 150
4165-60-0	Nitrobenzene-d5	84.1		36 - 131		84%	SPK: 100
321-60-8	2-Fluorobiphenyl	84.7		39 - 131		85%	SPK: 100
118-79-6	2,4,6-Tribromophenol	120		25 - 155		80%	SPK: 150
1718-51-0	Terphenyl-d14	78.2		23 - 130		78%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	51035	8.11				
1146-65-2	Naphthalene-d8	237081	10.92				
15067-26-2	Acenaphthene-d10	177039	14.73				
1517-22-2	Phenanthrene-d10	450528	17.47				
1719-03-5	Chrysene-d12	513312	21.74				
1520-96-3	Perylene-d12	513381	25.03				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I6786
Lab Sample ID:	I6786-02DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045695.D	5		12/13/17 12:37	VN121317

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5	UD	1	1	5	ug/L
74-87-3	Chloromethane	5	UD	1	1	5	ug/L
75-01-4	Vinyl Chloride	5	UD	1	1	5	ug/L
74-83-9	Bromomethane	5	UD	1	1	5	ug/L
75-00-3	Chloroethane	5	UD	1	2.5	5	ug/L
75-69-4	Trichlorofluoromethane	5	UD	1	1	5	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	5	UD	1	1	5	ug/L
75-65-0	Tert butyl alcohol	130	UD	2.5	18.8	130	ug/L
75-35-4	1,1-Dichloroethene	5	UD	1	1	5	ug/L
67-64-1	Acetone	25	UD	2.5	5	25	ug/L
75-15-0	Carbon Disulfide	5	UD	1	1	5	ug/L
1634-04-4	Methyl tert-butyl Ether	5	UD	1.8	2.5	5	ug/L
79-20-9	Methyl Acetate	5	UD	1	2.5	5	ug/L
75-09-2	Methylene Chloride	5	UD	1	1	5	ug/L
156-60-5	trans-1,2-Dichloroethene	5	UD	1	1	5	ug/L
75-34-3	1,1-Dichloroethane	5	UD	1	1	5	ug/L
110-82-7	Cyclohexane	5	UD	1	1	5	ug/L
78-93-3	2-Butanone	25	UD	6.6	12.5	25	ug/L
56-23-5	Carbon Tetrachloride	5	UD	1	1	5	ug/L
156-59-2	cis-1,2-Dichloroethene	5	UD	1	1	5	ug/L
74-97-5	Bromochloromethane	5	UD	1	2.5	5	ug/L
67-66-3	Chloroform	5	UD	1	1	5	ug/L
71-55-6	1,1,1-Trichloroethane	5	UD	1	1	5	ug/L
108-87-2	Methylcyclohexane	5	UD	1	1	5	ug/L
71-43-2	Benzene	360	D	1	1	5	ug/L
107-06-2	1,2-Dichloroethane	5	UD	1	1	5	ug/L
79-01-6	Trichloroethene	5	UD	1	1	5	ug/L
78-87-5	1,2-Dichloropropane	5	UD	1	1	5	ug/L
75-27-4	Bromodichloromethane	5	UD	1	1	5	ug/L
108-10-1	4-Methyl-2-Pentanone	25	UD	5	5	25	ug/L
108-88-3	Toluene	6	D	1	1	5	ug/L
10061-02-6	t-1,3-Dichloropropene	5	UD	1	1	5	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I6786
Lab Sample ID:	I6786-02DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045695.D	5		12/13/17 12:37	VN121317

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	5	UD	1	1	5	ug/L
79-00-5	1,1,2-Trichloroethane	5	UD	1	1	5	ug/L
591-78-6	2-Hexanone	25	UD	9.7	12.5	25	ug/L
124-48-1	Dibromochloromethane	5	UD	1	1	5	ug/L
106-93-4	1,2-Dibromoethane	5	UD	1	1	5	ug/L
127-18-4	Tetrachloroethene	5	UD	1	1	5	ug/L
108-90-7	Chlorobenzene	5	UD	1	1	5	ug/L
100-41-4	Ethyl Benzene	49.7	D	1	1	5	ug/L
179601-23-1	m/p-Xylenes	10.3	D	2	2	10	ug/L
95-47-6	o-Xylene	12.8	D	1	1	5	ug/L
100-42-5	Styrene	5	UD	1	1	5	ug/L
75-25-2	Bromoform	5	UD	1	1	5	ug/L
98-82-8	Isopropylbenzene	8.1	D	1	1	5	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5	UD	1	1	5	ug/L
541-73-1	1,3-Dichlorobenzene	5	UD	1	1	5	ug/L
106-46-7	1,4-Dichlorobenzene	5	UD	1	1	5	ug/L
95-50-1	1,2-Dichlorobenzene	5	UD	1	1	5	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	5	UD	1	1	5	ug/L
120-82-1	1,2,4-Trichlorobenzene	5	UD	1	1	5	ug/L
87-61-6	1,2,3-Trichlorobenzene	5	UD	1	1	5	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.4		61 - 141		91%	SPK: 50
1868-53-7	Dibromofluoromethane	48.2		69 - 133		96%	SPK: 50
2037-26-5	Toluene-d8	48.2		65 - 126		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.1		58 - 135		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	874874	7.66				
540-36-3	1,4-Difluorobenzene	1518080	8.58				
3114-55-4	Chlorobenzene-d5	1365160	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	550567	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	I6786
Lab Sample ID:	I6786-02DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045695.D	5		12/13/17 12:37	VN121317

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045680.D	1		12/13/17 00:22	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	2.6		0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	300	E	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	4.1		0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045680.D	1		12/13/17 00:22	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	43.6		0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	7.6		0.4	0.4	2	ug/L
95-47-6	o-Xylene	9.6		0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	6.3		0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49		61 - 141		98%	SPK: 50
1868-53-7	Dibromofluoromethane	46.7		69 - 133		93%	SPK: 50
2037-26-5	Toluene-d8	47.5		65 - 126		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.2		58 - 135		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	811021	7.67				
540-36-3	1,4-Difluorobenzene	1471290	8.59				
3114-55-4	Chlorobenzene-d5	1313930	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	583630	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	I6786
Lab Sample ID:	I6786-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045680.D	1		12/13/17 00:22	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17 12:30
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	0.75	U	1	0.13	0.375	0.75	mg/L		12/08/17 20:46	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE024806.D	1	12/09/17 09:02	12/11/17 13:43	PB104884

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	50	U	25	25	50	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	19.7		29 - 130		98%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB012474.D	1	12/13/17 13:28	FB121317

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	45	U	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	18.5		50 - 150		92%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	50	U	1	12.5	12.5	50	ug/L	12/11/17 09:40	12/11/17 18:13	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031530.D	1	12/13/17 09:26	12/13/17 16:36	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	1	U	0.77	1	10.1	ug/L
108-95-2	Phenol	1	U	0.21	1	10.1	ug/L
111-44-4	bis(2-Chloroethyl)ether	1	U	0.55	1	10.1	ug/L
95-57-8	2-Chlorophenol	1	U	0.54	1	10.1	ug/L
95-48-7	2-Methylphenol	1	U	0.24	1	10.1	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1	U	0.17	1	10.1	ug/L
98-86-2	Acetophenone	1	U	0.14	1	10.1	ug/L
65794-96-9	3+4-Methylphenols	1	U	0.38	1	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1	U	0.2	1	10.1	ug/L
67-72-1	Hexachloroethane	1	U	0.25	1	10.1	ug/L
98-95-3	Nitrobenzene	1	U	0.68	1	10.1	ug/L
78-59-1	Isophorone	1	U	0.3	1	10.1	ug/L
88-75-5	2-Nitrophenol	1	U	0.52	1	10.1	ug/L
105-67-9	2,4-Dimethylphenol	1	U	0.71	1	10.1	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1	U	0.55	1	10.1	ug/L
120-83-2	2,4-Dichlorophenol	1	U	0.66	1	10.1	ug/L
91-20-3	Naphthalene	1	U	0.12	1	10.1	ug/L
106-47-8	4-Chloroaniline	1	U	1	1	10.1	ug/L
87-68-3	Hexachlorobutadiene	1	U	0.25	1	10.1	ug/L
105-60-2	Caprolactam	1	U	1	1	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	1	U	0.4	1	10.1	ug/L
91-57-6	2-Methylnaphthalene	1	U	0.32	1	10.1	ug/L
77-47-4	Hexachlorocyclopentadiene	1	U	0.24	1	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	1	U	0.56	1	10.1	ug/L
95-95-4	2,4,5-Trichlorophenol	1	U	0.4	1	10.1	ug/L
92-52-4	1,1-Biphenyl	1	U	0.15	1	10.1	ug/L
91-58-7	2-Chloronaphthalene	1	U	0.16	1	10.1	ug/L
88-74-4	2-Nitroaniline	1	U	0.49	1	10.1	ug/L
131-11-3	Dimethylphthalate	1	U	0.22	1	10.1	ug/L
208-96-8	Acenaphthylene	1	U	0.7	1	10.1	ug/L
606-20-2	2,6-Dinitrotoluene	1	U	0.32	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031530.D	1	12/13/17 09:26	12/13/17 16:36	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1	U	1	1	10.1	ug/L
83-32-9	Acenaphthene	1	U	0.21	1	10.1	ug/L
51-28-5	2,4-Dinitrophenol	8	U	2.1	8	10.1	ug/L
100-02-7	4-Nitrophenol	5	U	2	5	10.1	ug/L
132-64-9	Dibenzofuran	1	U	0.24	1	10.1	ug/L
121-14-2	2,4-Dinitrotoluene	1	U	1	1	10.1	ug/L
84-66-2	Diethylphthalate	1	U	0.38	1	10.1	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	1	U	0.31	1	10.1	ug/L
100-01-6	4-Nitroaniline	2	U	1.4	2	10.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	2	U	0.74	2	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	1	U	0.6	1	10.1	ug/L
101-55-3	4-Bromophenyl-phenylether	1	U	0.23	1	10.1	ug/L
118-74-1	Hexachlorobenzene	1	U	0.18	1	10.1	ug/L
1912-24-9	Atrazine	1	U	0.4	1	10.1	ug/L
87-86-5	Pentachlorophenol	1	U	1	1	10.1	ug/L
85-01-8	Phenanthrene	1	U	0.26	1	10.1	ug/L
120-12-7	Anthracene	1	U	0.16	1	10.1	ug/L
86-74-8	Carbazole	1	U	0.22	1	10.1	ug/L
84-74-2	Di-n-butylphthalate	1	U	1	1	10.1	ug/L
206-44-0	Fluoranthene	1	U	0.4	1	10.1	ug/L
129-00-0	Pyrene	1	U	0.2	1	10.1	ug/L
85-68-7	Butylbenzylphthalate	1	U	0.19	1	10.1	ug/L
91-94-1	3,3-Dichlorobenzidine	1	U	1	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	1	U	0.18	1	10.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1	U	0.16	1	10.1	ug/L
117-84-0	Di-n-octyl phthalate	1	U	0.51	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	1	U	0.42	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	995 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG031530.D	1	12/13/17 09:26	12/13/17 16:36	PB104989

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1	U	0.29	1	10.1	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1	U	0.2	1	10.1	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	1	U	0.2	1	10.1	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	68.2		10 - 130		45%	SPK: 150
13127-88-3	Phenol-d6	38.6		10 - 130		26%	SPK: 150
4165-60-0	Nitrobenzene-d5	88.3		36 - 131		88%	SPK: 100
321-60-8	2-Fluorobiphenyl	92.8		39 - 131		93%	SPK: 100
118-79-6	2,4,6-Tribromophenol	170		25 - 155		115%	SPK: 150
1718-51-0	Terphenyl-d14	89.7		23 - 130		90%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	46304	8.11				
1146-65-2	Naphthalene-d8	201768	10.92				
15067-26-2	Acenaphthene-d10	149314	14.73				
1517-22-2	Phenanthrene-d10	455465	17.47				
1719-03-5	Chrysene-d12	532242	21.75				
1520-96-3	Perylene-d12	519861	25.03				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045681.D	1		12/13/17 00:48	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045681.D	1		12/13/17 00:48	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.2		61 - 141		90%	SPK: 50
1868-53-7	Dibromofluoromethane	49		69 - 133		98%	SPK: 50
2037-26-5	Toluene-d8	48.9		65 - 126		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.3		58 - 135		97%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	912734	7.67				
540-36-3	1,4-Difluorobenzene	1533440	8.59				
3114-55-4	Chlorobenzene-d5	1427230	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	581760	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/06/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045681.D	1		12/13/17 00:48	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/04/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045679.D	1		12/12/17 23:57	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/04/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045679.D	1		12/12/17 23:57	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.1		61 - 141		94%	SPK: 50
1868-53-7	Dibromofluoromethane	48.9		69 - 133		98%	SPK: 50
2037-26-5	Toluene-d8	48.6		65 - 126		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.8		58 - 135		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	813592	7.67				
540-36-3	1,4-Difluorobenzene	1406890	8.59				
3114-55-4	Chlorobenzene-d5	1302690	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	496832	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	12/04/17
Project:	Hunters Point - Queens West Library	Date Received:	12/07/17
Client Sample ID:	QNWP8-TRIP-BLANK	SDG No.:	I6786
Lab Sample ID:	I6786-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN045679.D	1		12/12/17 23:57	VN121217

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

Attachment 6
LiRo Engineers, Inc. - Quarterly Monitoring Report – First Quarter 2018, May 15, 2018

Included on Attached CD

Quarterly Monitoring Report: First Quarter 2018

Queens West (Hunters Point) Parcel 8

Parcel West of Center Boulevard between 47th Road and 48th Avenue

Queens, New York 11101

NYSDEC Site ID: C241087

DDC PROJECT NO. LQD122-QW

WORK ORDER NO. 14016-LIRO-3-R-12608

CONTRACT REGISTRATION NO. 20181405131

Prepared for:

Department of Design and Construction

Office of Environmental and Geotechnical Services
30-30 Thomson Avenue, Third Floor
Long Island City, New York 11101

Prepared by:

LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, New York 11211

PROJECT NO. 17-155-0265

May 15, 2018

TABLE OF CONTENTS

Figures

Tables

Appendices

1.0 INTRODUCTION

1.1 Background Information

On behalf of the New York City Department of Design and Construction (DDC), Office of Environmental and Geotechnical Services (OEGS), LiRo Engineers, Inc. (LiRo) conducted the annual/first quarter 2018 groundwater sampling event in March 2018 and prepared this Quarterly Monitoring Report (QMR) for the new Queens West Hunters Point Community Library located at Parcel 8 (Block 19, portion of Lot 21), west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York (hereinafter referred to as the Site; Figure 1). The parcel is approximately 0.73 acres and is an active construction site. The locations of the groundwater monitoring wells are shown on Figure 2. Based on the previous site investigations, groundwater flow direction is generally toward the west.

The Site is in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) (NYSDEC Site No. C241087) and redevelopment of the Site is being conducted under the requirements of the Site Management Plan (SMP) dated December 2011 and Revision #1 dated November 2014. The annual/first quarter groundwater sampling and this QMR were performed in accordance with the SMP. The SMP calls for quarterly groundwater sampling in order to evaluate current groundwater conditions and to evaluate the overall effectiveness of remediation.

Between October 25, 2010 and March 30, 2011, Fleming Lee Shue (FLS) of New York, New York implemented the treatment remedy for Parcel 8 which included in-situ chemical injection using sodium persulfate, sodium hydroxide, and a plant-based surfactant under the NYSDEC BCP Site No. C241087. Sodium persulfate was the oxidant used and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of the coal tar to make it available for chemical oxidation. A total of 334,000 pounds of sodium persulfate, 136,300 pounds of sodium hydroxide, and 65,000 pounds of surfactant were injected over the five-month treatment period. The bulk of the treatment targeted the zone of 10 to 22 feet below grade (ftbg). Treatment was completed using the RemMetrik® process, which, in this instance used subsurface pressure waves generated by Wavefront Technology Solutions, Inc. of Edmonton, Alberta, Canada, Primawave™ process. Previous estimates indicated that 47,000 pounds of coal tar contamination were slated for treatment.

The following on-site groundwater monitoring wells were decommissioned in June 2015 by LiRo on behalf of the DDC, due to on-going construction at the Site:

- MW-7R, MW-11D, MW-12D, MW-13S, MW-14S, MW-17S, MW-18D, MW-21S, MW-22D, MW-23S, and Geothermal Well (no ID).

LiRo submitted a Monitoring Well Decommissioning memorandum dated July 1, 2015 to document the well closures.

LiRo completed the second quarter 2015 groundwater sampling in June 2015, the third quarter 2015 groundwater sampling in September 2015, and the fourth quarter 2015 groundwater sampling in December 2015.

Prior to the first quarter 2016 sampling, two (2) additional groundwater monitoring wells, MW-15 and MW-20, were decommissioned by LiRo on behalf of DDC due to their interference of on-going construction activities at the Site.

LiRo submitted a Monitoring Well Decommissioning Memorandum dated March 18, 2016 to document the well closures. LiRo completed the first quarter 2016 groundwater sampling in March 2016, the second quarter groundwater sampling in June 2016, the third quarter 2016 groundwater sampling in September 2016, and the fourth quarter groundwater sampling in December 2016.

Prior to the fourth quarter 2016 groundwater sampling, one (1) additional groundwater monitoring well, MW-19D, was decommissioned by LiRo on behalf of DDC due to its interference with on-going construction activities at the Site. LiRo submitted a Monitoring Well Decommissioning Memorandum dated December 5, 2016 to document the well closure.

LiRo completed the first quarter 2017 groundwater sampling in March 2017, the second quarter groundwater sampling in June 2017, the third quarter groundwater sampling in September 2017, and the fourth quarter groundwater sampling in December 2017. The first quarter 2018 groundwater sampling was completed in March and April 2018.

Construction of the new Hunters Point Library is underway at the Site. As of the time of the 2018 first quarter groundwater sampling, the building shell has been completed and construction of the building interior is currently ongoing.

2.0 QUARTERLY GROUNDWATER SAMPLING

2.1 Overview of Groundwater Sampling

LiRo conducted the annual/first quarter 2018 groundwater sampling at the Site from March 29 through April 3, 2018, which included sampling from wells within Peninsula Park and Gantry Plaza State Park.

The well locations requiring sampling as per NYSDEC in March 2018 were MW-24S, MW-24D, MW-25S, MW-25D, MW-26S, MW-26D, MW-27S, MW-27D, MW-30S, and MW-30D which are located in Peninsula Park and Gantry Plaza State Park. The monitoring well locations are shown on Figure 2. The groundwater samples were submitted for laboratory analysis to Chemtech of Mountainside, New Jersey, a New York State Department of Health (NYSDOH) approved laboratory (No. 11376). The analytical results were then validated by Vali-Data of WNY, LLC (Vali-Data) of West Falls, New York who prepared the Data Usability Summary Reports (DUSRs) dated April 29 and April 30, 2018. The DUSRs are provided in Appendix 1.

2.2 Groundwater Sampling and Analysis – First Quarter 2018

Based on the SMP provided to LiRo, first quarter 2018 sampling was scheduled for monitoring wells MW-24S, MW-24D, MW-25S, MW-25D, MW-26S, MW-26D, MW-27S, MW-27D, MW-30S, and MW-30D. LiRo completed the groundwater sampling between March 29 and April 3, 2018. Prior to sampling, LiRo conducted water level/free product monitoring in the wells using an oil/water interface probe. A dense non-aqueous phase liquid (DNAPL) layer (inferred to be coal tar based on Site history) with an apparent thickness of 1 inch was observed at a depth of 30.1 ftbg at MW-26D and approximately 4 inches of DNAPL was identified at a depth of 30.1 ftbg at MW-27D. Therefore, in accordance with the SMP, MW-26D and MW-27D were not sampled. The exact product thickness cannot be measured due to a mixing zone above the product.

Well purging and groundwater sampling of MW-24S, MW-24D, MW-25S, MW-25D, MW-26S, MW-27S, MW-30S, and MW-30D were conducted in accordance with the approved Quality Assurance Project Plan (QAPP) and the NYSDEC-approved SMP. Each well was purged using a low-flow method, which included the use of a peristaltic pump to ensure minimal generation of suspended solids, minimize the volatilization of contaminants in the groundwater, acquire a more representative localized groundwater sample from the contaminated plume, and minimize the volume of groundwater purged. The wells were purged until groundwater parameters including temperature, pH, dissolved oxygen (DO), conductivity, oxidation-reduction potential (ORP), and turbidity stabilized. The aforementioned groundwater monitoring parameter measurements were collected using a Horiba U-52 water quality meter. The groundwater parameter measurements are provided in the well purge logs included in Appendix 2.

The groundwater samples were collected and submitted for laboratory analysis of the following parameters:

- Target Compound List (TCL) volatile organic compounds (VOCs), United States Environmental Protection Agency (USEPA) Method 8260C;
- TCL semi-volatile organic compounds (SVOCs), USEPA Method 8270D;
- Total Petroleum Hydrocarbon (TPHC) Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO), USEPA Method 8015C;
- Total Iron, USEPA Method 6010;
- Alkalinity, USEPA Method 310.1;
- Sulfide, USEPA Method 376.1; and,
- Sulfate, USEPA Method 300.

The groundwater samples were submitted to Chemtech, a New York State Environmental Laboratory Approval Program (ELAP) certified laboratory. The laboratory groundwater analytical report is included in Appendix 3.

Quality assurance/quality control (QA/QC) samples were collected during sampling and included two (2) trip blanks and one (1) equipment blank.

2.3 Summary of Analytical Results

Groundwater analytical results for the first quarter 2018 samples are summarized in Tables 2 through 4. To be consistent with previous reporting, the trends for benzene and naphthalene are discussed and summarized below.

Table 1 – Summary of Benzene and Naphthalene Detections June 2016 – March 2018

Well ID	Analyte	Concentration (µg/L)							
		3/2018	12/2017	9/2017	6/2017	3/2017	12/2016	9/2016	6/2016
MW-24S	Benzene	6.5	NS	NS	NS	2	NS	NS	NS
	Naphthalene	180	NS	NS	NS	340	NS	NS	NS
MW-24D	Benzene	30.9	NS	NS	NS	25.1	NS	NS	NS
	Naphthalene	370	NS	NS	NS	330	NS	NS	NS
MW-25S	Benzene	12.2	NS	NS	NS	ND	NS	NS	NS
	Naphthalene	ND	NS	NS	NS	ND	NS	NS	NS
MW-25D	Benzene	ND	NS	NS	NS	ND	NS	NS	NS
	Naphthalene	ND	NS	NS	NS	ND	NS	NS	NS
MW-26S	Benzene	3,000	3,200	3,900	3,000	2,000	740	860	1,100
	Naphthalene	6,100	250	3,500	1,900	1,400	1,000	1,400	1,300
MW-26D	Benzene	NS	NS	NS	9,700	NS	NS	14,000	NS
	Naphthalene	NS	NS	NS	5,000	NS	NS	9,200	NS
MW-27S	Benzene	640	360	700	550	230	41.5	28	150
	Naphthalene	240	34.2	75.1	600	ND	ND	6.2	ND

Table 1 – Summary of Benzene and Naphthalene Detections June 2016 – March 2018 (Continued)

Well ID	Analyte	Concentration (µg/L)							
		3/2018	12/2017	9/2017	6/2017	3/2017	12/2016	9/2016	6/2016
MW-27D	Benzene	NS	NS	NS	NS	NS	NS	NS	NS
	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS
MW-30S	Benzene	ND	NS	ND	NS	ND	NS	0.22 J	NS
	Naphthalene	ND	NS	ND	NS	ND	NS	ND J	NS
MW-30D	Benzene	440	NS	89.5	NS	160	NS	2,000	NS
	Naphthalene	3,900	NS	7,800	NS	2,400	NS	10,000	NS

µg/l = micrograms per liter
ND = Non detect
NS = Not sampled

The March 2018 benzene data reported no detections at wells MW-25D and MW-30S, a decreased concentration (compared to the most recent previous sample for each well) at well MW-26S, and increased concentrations at wells MW-24S, MW-24D, MW-25S, MW-27S, and MW-30D compared to the most recent previous results. The March 2018 benzene concentrations are generally consistent with previous quarterly/semi-annual sampling result trends.

The March 2018 naphthalene data reported no detections at wells MW-25S, MW-25D, and MW-30S, decreased concentrations at wells MW-24S and MW-30D compared to the most recent previous results, and increased concentrations at wells MW-24D, MW-26S and MW-27S. The March 2018 naphthalene concentrations are generally consistent with previous quarterly/semi-annual sampling result trends.

Total iron and TPHC DRO/GRO concentrations and water quality indicator parameters (sulfate, sulfide, and alkalinity) are reported in Table 4.

The groundwater sampling results were compared to the New York State Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standard/Guidance Values (AWQSGVs) in Tables 2 through 4. The concentrations for parameters exceeding AWQSGVs are shown on Figure 3 through 5 and are discussed below.

Analytical results identified VOC exceedances of TOGS 1.1.1 AWQSGVs at six (6) of the eight (8) monitoring wells sampled. Acetone (AWQSGV of 50 µg/L) was detected at MW-30D at 120 µg/L. Benzene (AWQSGV of 1 µg/L) was detected at MW-24S at 6.5 µg/L, MW-24D at 30.9 µg/L, MW-25S at 12.2 µg/L, MW-26S at 3,000 µg/L, MW-27S at 640 µg/L, and MW-30D at 440 µg/L. Ethylbenzene (AWQSGV of 5 µg/L) was detected at MW-24D at 14.9 µg/L, MW-26S at 610 µg/L, MW-27S at 130 µg/L, and MW-30D at 390 µg/L. Isopropylbenzene (AWQSGV of 5 µg/L) was detected at MW-26S at 34 µg/L, MW-27S at 24.4 µg/L, and MW-30D at 30.4 µg/L. O-xylene (AWQSGV of 5 µg/L) was detected at MW-26S at 550 µg/L, MW-27S at 21 µg/L, and MW-30D at 290 µg/L. M&p-xylene (AWQSGV of 5 µg/L) was detected at MW-26S at 810 µg/L, MW-27S at 17.2 µg/L, and MW-30D at 410 µg/L. Toluene (AWQSGV of 5 µg/L) was detected at MW-26S at 410 µg/L, MW-27S at 9.4 µg/L, and MW-30D at 140 µg/L. No VOCs were detected above TOGS 1.1.1 AWQSGVs at MW-25D, or MW-30S.

Analytical results identified SVOC exceedances of TOGS 1.1.1 AWQSGVs at five (5) of the eight (8) monitoring wells sampled. 1,1-Biphenyl (AWQSGV of 5 µg/L) was detected at MW-24D at 5.7 µg/L, MW-26S at 46.1 µg/L, MW-27S at 5.5 µg/L, and MW-30D at 38.7 µg/L. 2,4-Dimethylphenol (AWQSGV of 50 µg/L) was detected at MW-26S at 340 µg/L and MW-30D at 200 µg/L. Acenaphthene (AWQSGV of 20 µg/L) was detected at MW-26S at 140 µg/L, MW-27S at 21.9 µg/L, and MW-30D at 150 µg/L. Naphthalene (AWQSGV of 10 µg/L) was detected at MW-24S at 180 µg/L, MW-24D at 370 µg/L, MW-26S at 6,100 µg/L, MW-27S at 240 µg/L, and MW-30D at 3,900 µg/L. Fluorene and phenanthrene (AWQSGVs of 50 µg/L) were also detected at MW-26S at 60.2 µg/L and 78.2 µg/L, respectively. No SVOCs were detected above TOGS 1.1.1 AWQSGVs at MW-25S, MW-25D, or MW-30S.

Analytical results identified iron exceedances of TOGS 1.1.1 AWQSGV of 300 µg/L at six (6) of the eight (8) monitoring wells sampled (MW-24S at 3,400 µg/L, MW-25S at 593 µg/L, MW-26S at 1,640 µg/L, MW-27S at 2,040 µg/L, MW-30S at 4,040 µg/L, and MW-30D at 704 µg/L). Iron was not detected above its TOGS 1.1.1 AWQSGV at MW-24D or MW-25D.

Analytical results identified sulfate exceedances of TOGS 1.1.1 AWQSGV of 250 mg/L at four (4) of the eight (8) monitoring wells sampled (MW-25S at 287 mg/L, MW-25D at 638 mg/L, MW26S at 696 mg/L, and MW-30D at 434 mg/L). Sulfate was not detected above its TOGS 1.1.1 AWQSGV at MW-24S, MW-24D, MW-27S, or MW-30S.

Analytical results identified sulfide exceedances of TOGS 1.1.1 AWQSGV of 0.05 mg/L in all eight (8) monitoring wells sampled (MW-24S at 7.68 mg/L, MW-24D at 8.48 mg/L, MW-25S at 3.36 mg/L, MW-25D at 4.64 mg/L, MW-26S at 36.2 mg/L, MW-27S at 17.8 mg/L, MW-30S at 6.56 mg/L and MW-30D at 8.96 mg/L).

2.4 Data Validation

Data validation was performed as required by the NYSDEC-approved Remedial Action Work Plan (RAWP), dated September 16, 2010. The DUSRs, dated April 29 and April 30, 2018, are provided in Appendix 1. Based on the data validation, the data are acceptable for use with the "J" (which indicates an estimated value) and "JH" qualifications (which indicates an estimated high value) as noted in the DUSRs.

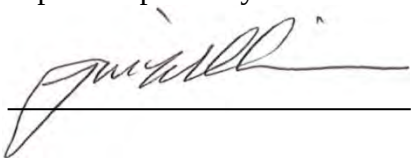
3.0 CONCLUSIONS

In March 2018, LiRo completed the annual/first quarter 2018 groundwater sampling activities for the new Queens West Hunters Point Community Library located at Parcel 8, west of Center Boulevard between 47th Road and 48th Avenue, Queens, New York. During this sampling event, 10 monitoring wells, MW-24S, MW-24D, MW-25S, MW-25D, MW-26S, MW-26D, MW-27S, MW-27D, MW-30S, and MW-30D were scheduled for sampling and analysis. Prior to purging activities, DNAPL was detected in two (2) of the deep monitoring wells (MW-26D and MW-27D) and as a result, those two (2) wells were not sampled.

Benzene analytical results indicate increased concentrations at MW-24S, MW-24D, MW-25S, MW-27S, and MW-30D, a decreased concentration at MW-26S, and no detections at MW-25D and MW-30S. Naphthalene analytical results indicate increased concentrations at MW-24D, MW-26S, and MW-27S, decreased concentrations at MW-24S and MW-30D, and no detections at MW-25S, MW-25D, and MW-30S.

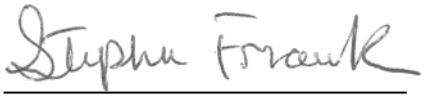
The DNAPL observed at MW-26D and MW-27D is potentially a result of residual coal tar in the deeper portion of the formation or migration from the Parcel 8 treatment area. DNAPL has consistently been observed at MW-26D and MW-27D since LiRo began quarterly sampling in June 2015.

Report Prepared By:



Jon Williams
Senior Geologist

Report Reviewed By:

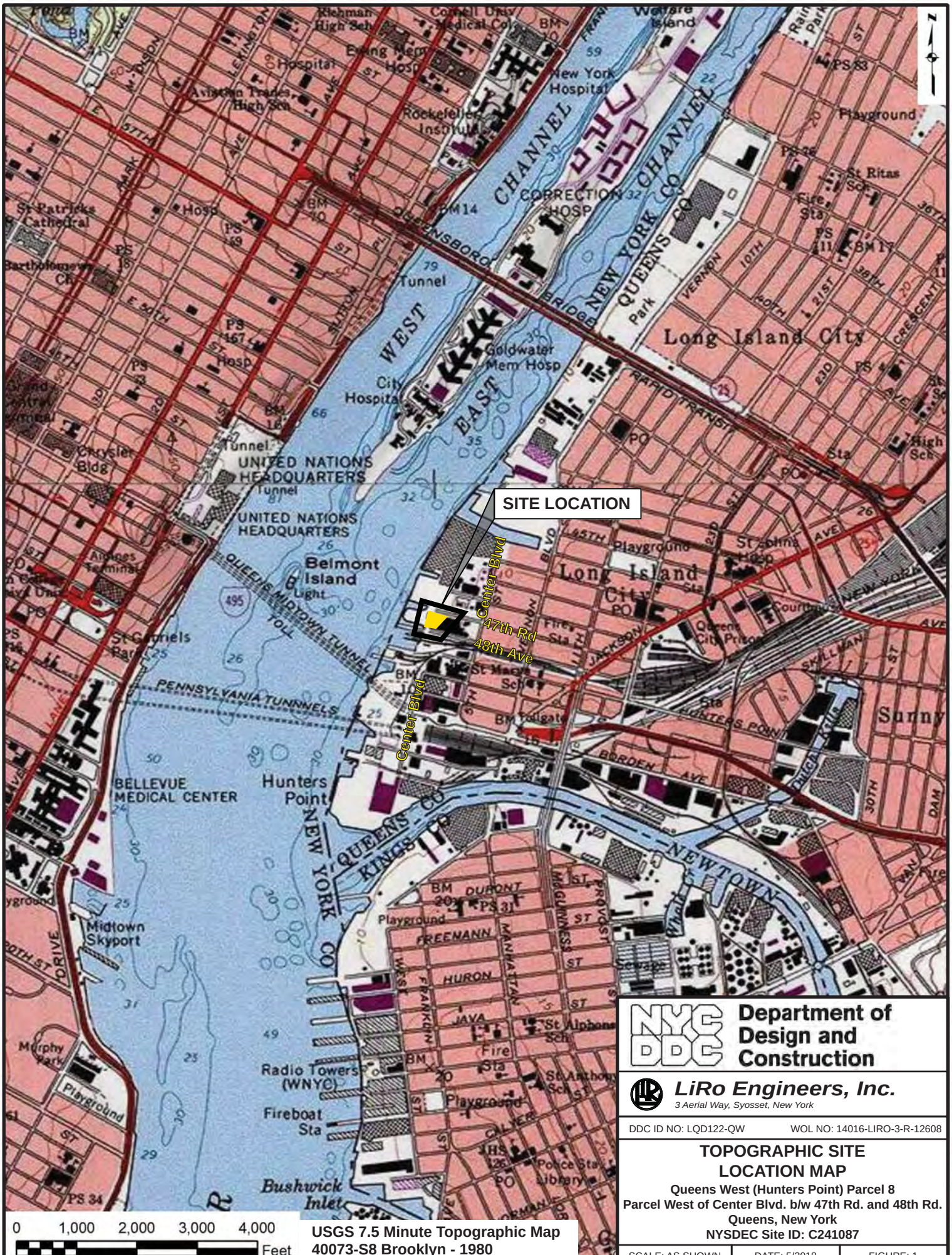


Stephen Frank
Senior Geologist

Report Reviewed By:

Robert Kreuzer
Project Manager

Figures



USGS 7.5 Minute Topographic Map
40073-S8 Brooklyn - 1980

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO: LQD122-QW WOL NO: 14016-LIRO-3-R-12608

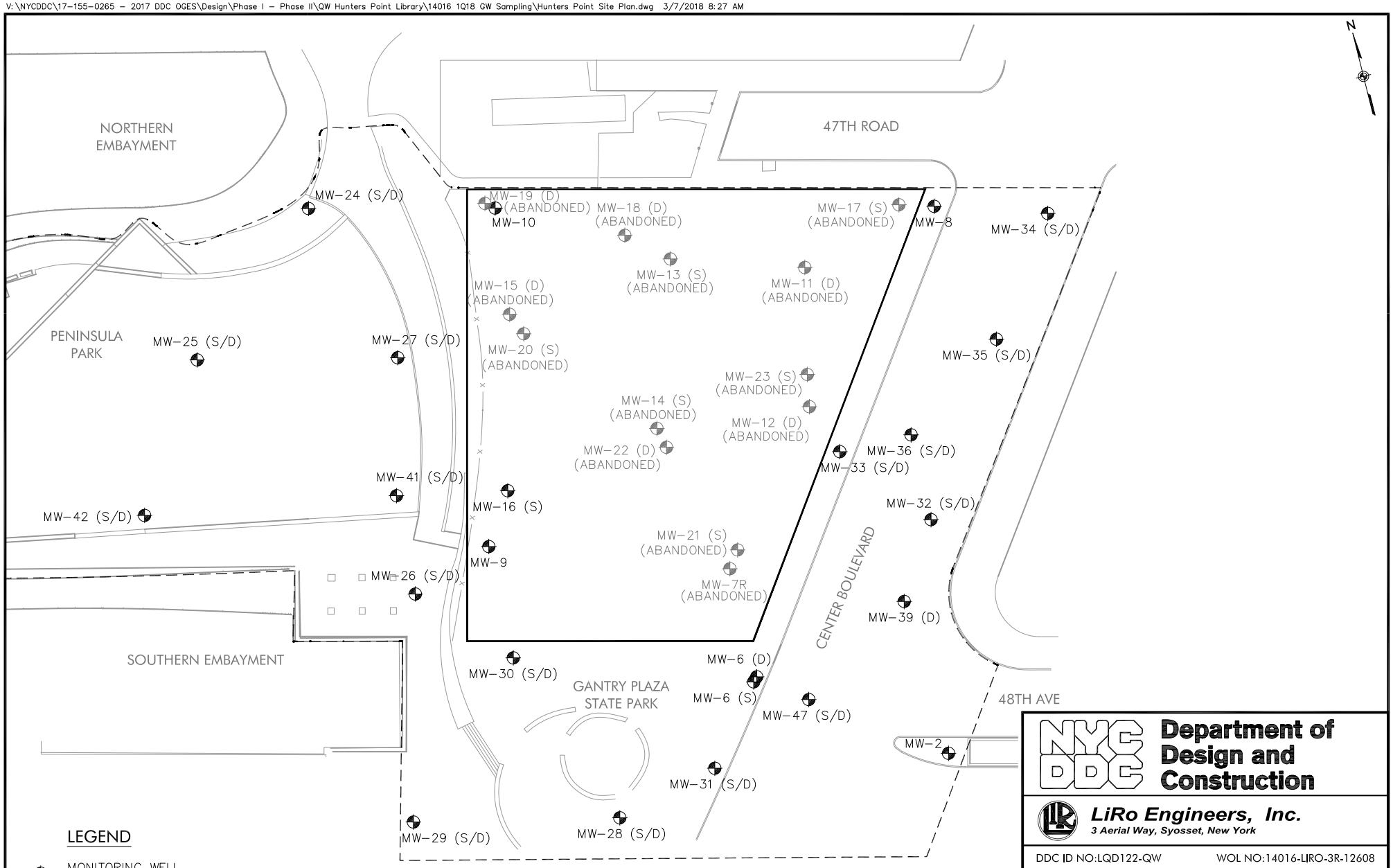
TOPOGRAPHIC SITE LOCATION MAP

Queens West (Hunters Point) Parcel 8
Parcel West of Center Blvd. b/w 47th Rd. and 48th Rd.
Queens, New York
NYSDEC Site ID: C241087

SCALE: AS SHOWN	DATE: 5/2018	FIGURE: 1

V:\NYCDDC\17-155-0265 - 2017 DDC OGES\Design\Phase I - Phase II\QW Hunters Point Library\14016 1Q18 GW Sampling\Hunters Point Topo Map.ai

V:\NYCDDC\17-155-0265 - 2017 DDC OGES\Design\Phase I - Phase II\QW Hunters Point Library\14016 1Q18 GW Sampling\Hunters Point Site Plan.dwg 3/7/2018 8:27 AM



LEGEND

- MONITORING WELL LOCATION
- PARCEL 8 BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

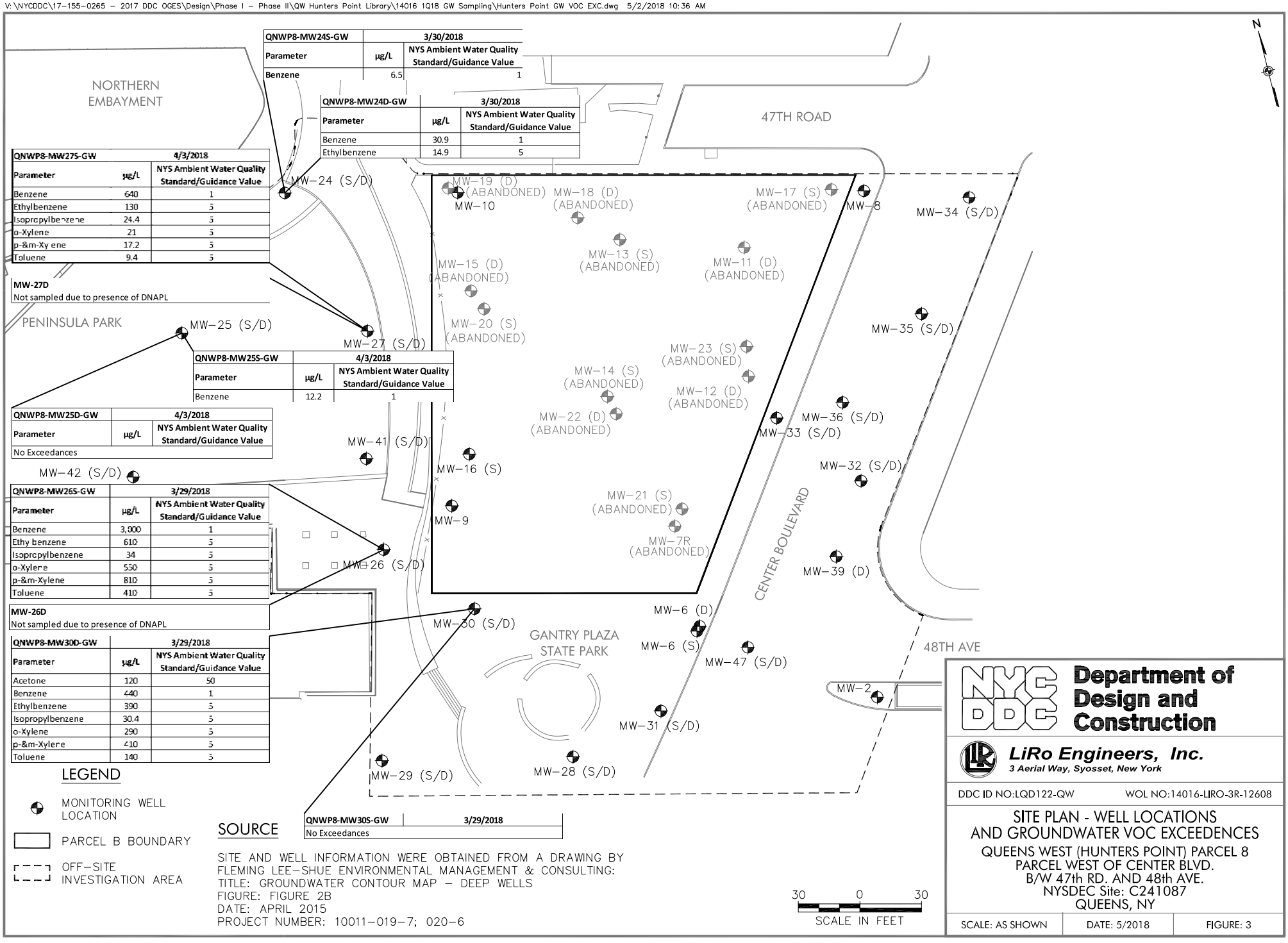
DDC ID NO:LQD122-QW WOL NO:14016-LIRO-3R-12608

SITE PLAN - WELL LOCATIONS

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 5/2018	FIGURE: 2

V:\NYCDDC\17-155-0265 - 2017 DDC OGES\Design\Phase I - Phase II\QW Hunters Point Library\14016 1Q18 GW Sampling\Hunters Point GW VOC EXC.dwg 5/2/2018 10:36 AM



QNWP8-MW24S-GW	3/30/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Benzene	6.5	1

QNWP8-MW24D-GW	3/30/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Benzene	30.9	1
Ethylbenzene	14.9	5

QNWP8-MW27S-GW	4/3/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Benzene	640	1
Ethylbenzene	130	5
Isopropylbenzene	24.4	5
o-Xylene	21	5
p-&m-Xylene	17.2	5
Toluene	9.4	5

MW-27D
Not sampled due to presence of DNAPL

QNWP8-MW25S-GW	4/3/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Benzene	12.2	1

QNWP8-MW25D-GW	4/3/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
No Exceedances		

QNWP8-MW26S-GW	3/29/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Benzene	3,000	1
Ethylbenzene	610	5
Isopropylbenzene	34	5
o-Xylene	550	5
p-&m-Xylene	810	5
Toluene	410	5

MW-26D
Not sampled due to presence of DNAPL

QNWP8-MW30D-GW	3/29/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Acetone	120	50
Benzene	440	1
Ethylbenzene	390	5
Isopropylbenzene	30.4	5
o-Xylene	290	5
p-&m-Xylene	410	5
Toluene	140	5

QNWP8-MW30S-GW	3/29/2018
No Exceedances	

LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

NYC DDC **Department of Design and Construction**

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO:LQD122-QW WOL NO:14016-LIRO-3R-12608

SITE PLAN - WELL LOCATIONS AND GROUNDWATER VOC EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 5/2018	FIGURE: 3

V:\NYCDDC\17-155-0265 - 2017 DDC OGES\Design\Phase I - Phase II\QW Hunters Point Library\14016 1Q18 GW Sampling\Hunters Point GW SVOC EXC.dwg 4/20/2018 2:23 PM

QNWP8-MW24S-GW	3/30/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
Naphthalene	180	10

QNWP8-MW24D-GW	3/30/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
1,1-Biphenyl	5.7	5
Naphthalene	370	10

QNWP8-MW27S-GW	4/3/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
1,1-Biphenyl	5.5	5
Acenaphthene	21.9	20
Naphthalene	240	10

MW-27D
Not sampled due to presence of DNAPL

QNWP8-25S-GW	4/3/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
No Exceedances		

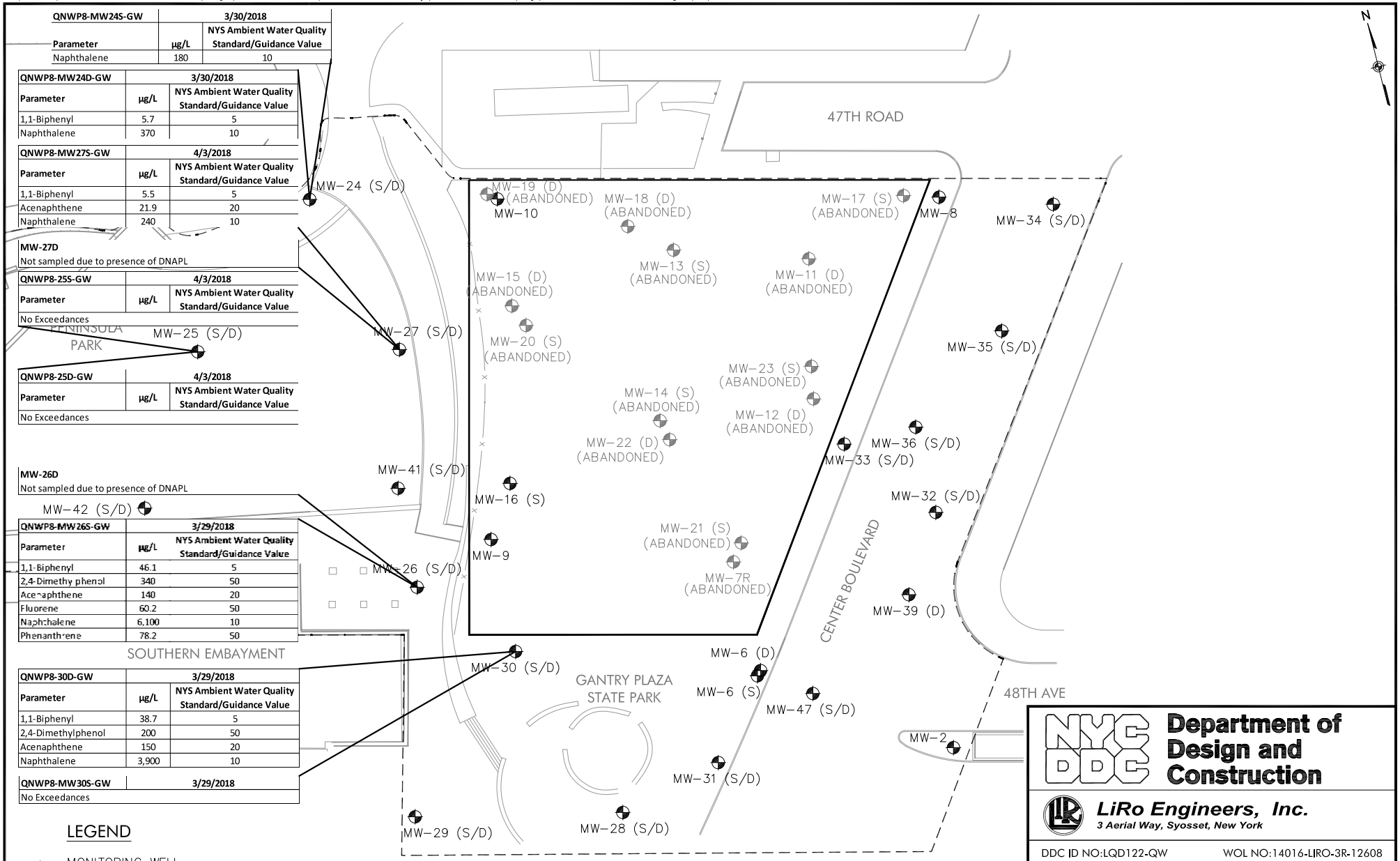
QNWP8-25D-GW	4/3/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
No Exceedances		

MW-26D
Not sampled due to presence of DNAPL

QNWP8-MW26S-GW	3/29/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
1,1-Biphenyl	46.1	5
2,4-Dimethy phenol	340	50
Acenaphthene	140	20
Fluorene	60.2	50
Naphthalene	6,100	10
Phenanthrene	78.2	50

QNWP8-30D-GW	3/29/2018	
Parameter	µg/L	NYS Ambient Water Quality Standard/Guidance Value
1,1-Biphenyl	38.7	5
2,4-Dimethylphenol	200	50
Acenaphthene	150	20
Naphthalene	3,900	10

QNWP8-MW30S-GW	3/29/2018
No Exceedances	



LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO:LQD122-QW WOL NO:14016-LIRO-3R-12608

SITE PLAN - WELL LOCATIONS AND GROUNDWATER SVOC EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 5/2018	FIGURE: 4

V:\NYCDDC\17-155-0265 - 2017 DDC OGES\Design\Phase I - Phase II\QW Hunters Point Library\14016 1Q18 GW Sampling\Hunters Point GW PARAMETERS EXC.dwg 4/20/2018 2:23 PM

QNWP8-MW24D-GW	3/30/2018	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Sulfide (mg/l)	8.48	0.05

QNWP8-MW24S-GW	3/30/2018	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Iron (µg/l)	3,400	300
Sulfide (mg/l)	7.68	0.05

QNWP8-MW27S-GW	4/3/2018	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Iron (µg/l)	2,040	300
Sulfide (mg/l)	17.8	0.05

MW-27D
Not sampled due to presence of DNAPL

QNWP8-MW25D-GW	4/3/2018	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Sulfate (mg/L)	638	250
Sulfide (mg/L)	4.64	0.05

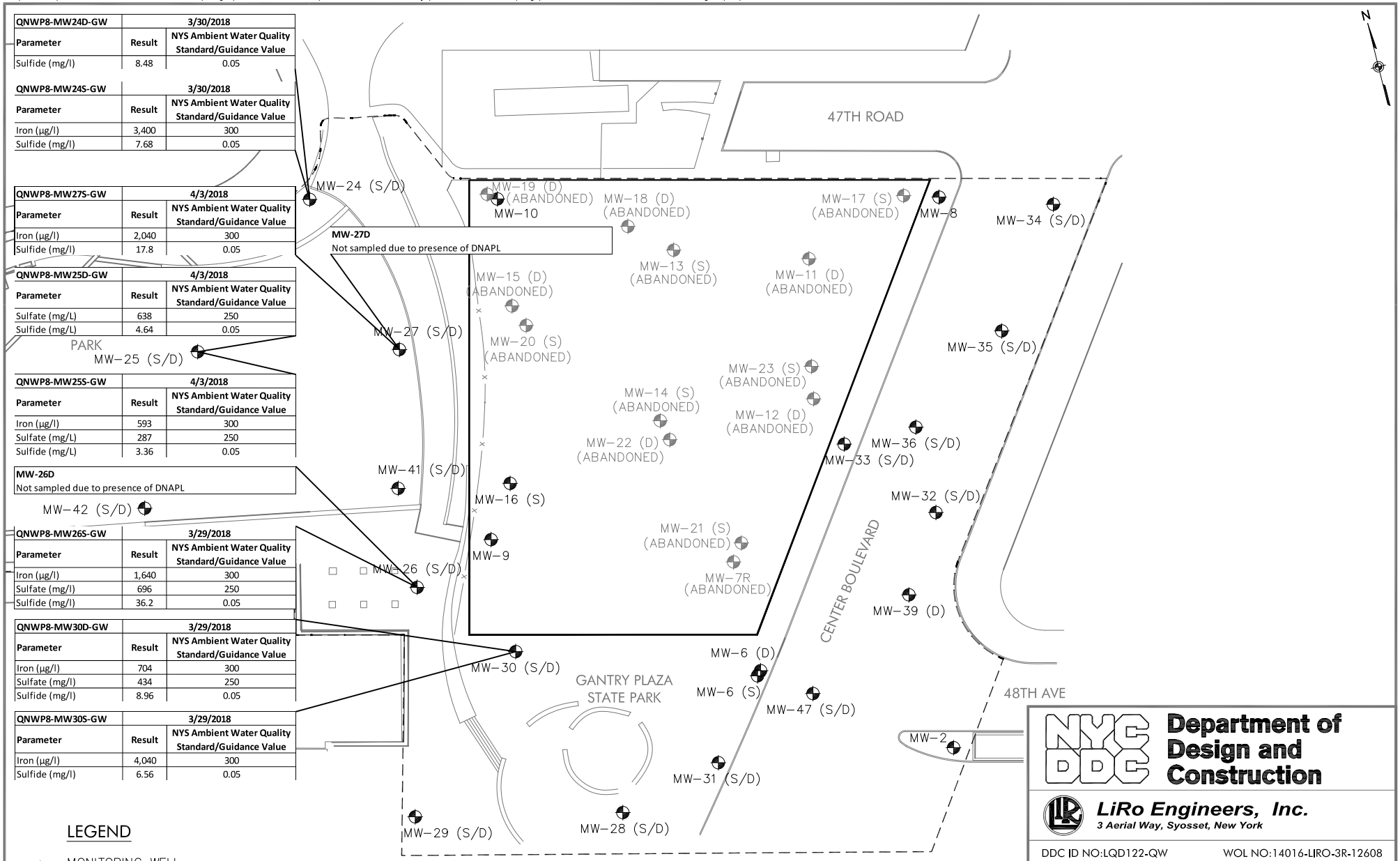
QNWP8-MW25S-GW	4/3/2018	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Iron (µg/l)	593	300
Sulfate (mg/L)	287	250
Sulfide (mg/L)	3.36	0.05

MW-26D
Not sampled due to presence of DNAPL

QNWP8-MW26S-GW	3/29/2018	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Iron (µg/l)	1,640	300
Sulfate (mg/l)	696	250
Sulfide (mg/l)	36.2	0.05

QNWP8-MW30D-GW	3/29/2018	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Iron (µg/l)	704	300
Sulfate (mg/l)	434	250
Sulfide (mg/l)	8.96	0.05

QNWP8-MW30S-GW	3/29/2018	
Parameter	Result	NYS Ambient Water Quality Standard/Guidance Value
Iron (µg/l)	4,040	300
Sulfide (mg/l)	6.56	0.05



LEGEND

- MONITORING WELL LOCATION
- PARCEL B BOUNDARY
- OFF-SITE INVESTIGATION AREA

SOURCE

SITE AND WELL INFORMATION WERE OBTAINED FROM A DRAWING BY FLEMING LEE-SHUE ENVIRONMENTAL MANAGEMENT & CONSULTING:
TITLE: GROUNDWATER CONTOUR MAP - DEEP WELLS
FIGURE: FIGURE 2B
DATE: APRIL 2015
PROJECT NUMBER: 10011-019-7; 020-6

30 0 30
SCALE IN FEET

Department of Design and Construction

LiRo Engineers, Inc.
3 Aerial Way, Syosset, New York

DDC ID NO:LQD122-QW WOL NO:14016-LIRO-3R-12608

SITE PLAN - WELL LOCATIONS & GROUNDWATER MISCELLANEOUS PARAMETER EXCEEDENCES

QUEENS WEST (HUNTERS POINT) PARCEL 8
PARCEL WEST OF CENTER BLVD.
B/W 47th RD. AND 48th AVE.
NYSDEC Site: C241087
QUEENS, NY

SCALE: AS SHOWN	DATE: 5/2018	FIGURE: 5

Tables

Table 2 - Summary of TCL VOCs Detected in Groundwater

TCL VOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect			
		QNWP8-MW24S-GW 3/30/2018	QNWP8-MW24D-GW 3/30/2018	QNWP8-MW25S-GW 4/3/2018	QNWP8-MW25D-GW 4/3/2018
Acetone	50	ND	ND	ND	ND
Benzene	1	**6.5**	**30.9**	**12.2**	ND
Carbon Disulfide	NS	ND	ND	ND	ND
Cyclohexane	NS	ND	ND	ND	ND
Ethylbenzene	5	3.7	**14.9**	0.45 J	ND
Isopropylbenzene	5	0.95 J	2	ND	ND
Methylcyclohexane	NS	ND	0.47 J	ND	ND
Methyl-tert-butyl ether	10	ND	ND	1.6	4.5
o-Xylene	5	0.78 J	4.5	ND	ND
p- & m-Xylenes	5	1.2 J	4.4	ND	ND
Toluene	5	ND	2.2	ND	ND
Total VOCs	NS	13	59	14	5

Notes:
All concentrations are reported in parts per billion (ppb or µg/L)
TCL VOCs = Target Compound List Volatile Organic Compounds
Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
D = Dilution

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 2 - Summary of TCL VOCs Detected in Groundwater

TCL VOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect			
		QNWP8-MW26S-GW 3/29/2018	QNWP8-MW27S 4/3/2018	QNWP8-MW30S-GW 3/29/2018	QNWP8-MW30D-GW 3/29/2018
Acetone	50	ND	ND	ND	**120 J**
Benzene	1	**3,000**	**640 D**	ND	**440**
Carbon Disulfide	NS	51 J	1.7	ND	ND
Cyclohexane	NS	ND	ND	ND	ND
Ethylbenzene	5	**610**	**130 J**	ND	**390**
Isopropylbenzene	5	**34 J**	**24.4 J**	ND	**30.4 J**
Methylcyclohexane	NS	15 J	ND	ND	7.8 J
Methyl-tert-butyl ether	10	ND	5.8	ND	ND
o-Xylene	5	**550**	**21 J**	ND	**290**
p- & m-Xylenes	5	**810**	**17.2 J**	ND	**410**
Toluene	5	**410**	**9.4 J**	ND	**140**
Total VOCs	NS	5,480	850	ND	1,828

Notes:
All concentrations are reported in parts per billion (ppb or µg/L)
TCL VOCs = Target Compound List Volatile Organic Compounds
Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
D = Dilution

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 2 - Summary of TCL VOCs Detected in Groundwater

TCL VOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect		
		QNWP8-Equip Blank 4/3/2018	Trip Blank #1 3/28/2018	Trip Blank #2 3/28/2018
Acetone	50	ND	ND	ND
Benzene	1	ND	ND	ND
Carbon Disulfide	NS	ND	ND	ND
Cyclohexane	NS	ND	ND	ND
Ethylbenzene	5	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND
Methylcyclohexane	NS	ND	ND	ND
Methyl-tert-butyl ether	10	ND	ND	ND
o-Xylene	5	ND	ND	ND
p- & m-Xylenes	5	ND	ND	ND
Toluene	5	ND	ND	ND
Total VOCs	NS	ND	ND	ND

Notes:
All concentrations are reported in parts per billion (ppb or µg/L)
TCL VOCs = Target Compound List Volatile Organic Compounds
Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
D = Dilution

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 3 - Summary of TCL SVOCs Detected in Groundwater

TCL SVOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect		
		QNWP8-MW24S-GW	QNWP8-MW24D-GW	QNWP8-MW25S-GW
		3/30/2018	3/30/2018	4/3/2018
1,1-Biphenyl	5	2.7 J	**5.7 J**	ND
2,4-Dimethylphenol	50	ND	ND	ND
2-Methylnaphthalene	NS	ND	2.5 J	ND
2-Methylphenol (o-Cresol)	NS	ND	ND	ND
3+4-Methylphenols (m-Cresol & p-Cresol)	NS	ND	ND	ND
4-Nitroaniline	NS	ND	ND	ND
Acenaphthene	20	12.2 J	17 J	ND
Acenaphthylene	NS	ND	ND	ND
Acetophenone	NS	ND	ND	ND
Anthracene	NS	4 J	4.3 J	ND
Carbazole	NS	2.2 J	6.1 J	ND
Dibenzofuran	NS	9.7 J	12.2 J	ND
Diethylphthalate	NS	ND	ND	ND
Dimethylphthalate	NS	2.4 J	2.1 J	5.3 J
Flouranthene	NS	2.4 J	2.8 J	ND
Fluorene	50	9.8 J	12 J	ND
Napthalene	10	**180 J**	**370 J**	ND
Phenanthrene	50	16	17.1	ND
Phenol	NS	ND	ND	4.7 J
Pyrene	NS	2 J	2.7 J	ND
Total SVOCs	NS	243	455	10

Notes:
All concentrations are reported in parts per billion (ppb or µg/L)
TCL SVOCs = Target Compound List Semi-Volatile Organic Compounds
Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
JH = Estimated high value
D = Dilution
E = Value Exceeds Calibration Range

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 3 - Summary of TCL SVOCs Detected in Groundwater

TCL SVOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect		
		QNWP8-MW25D-GW 4/3/2018	QNWP8-MW26S-GW 3/29/2018	QNWP8-MW27S 4/3/2018
1,1-Biphenyl	5	ND	**46.1 J**	**5.5 J**
2,4-Dimethylphenol	50	ND	**340 J**	17.7 J
2-Methylnaphthalene	NS	ND	260 J	ND
2-Methylphenol (o-Cresol)	NS	ND	33.6 JH	ND
3+4-Methylphenols (m-Cresol & p-Cresol)	NS	ND	140 D	ND
4-Nitroaniline	NS	ND	ND	ND
Acenaphthene	20	ND	**140 J**	**21.9**
Acenaphthylene	NS	ND	8.1 J	2.7 J
Acetophenone	NS	ND	ND	ND
Anthracene	NS	ND	14	2.4 J
Carbazole	NS	ND	56.5	21.3
Dibenzofuran	NS	ND	110 J	14.6
Diethylphthalate	NS	ND	ND	ND
Dimethylphthalate	NS	ND	5.8 J	2.3 J
Flouranthene	NS	ND	7.7 J	ND
Fluorene	50	ND	**60.2 J**	11.7
Napthalene	10	ND	**6,100 J**	**240 D**
Phenanthrene	50	ND	**78.2**	12.4
Phenol	NS	ND	ND	3.3 J
Pyrene	NS	ND	4.5 J	ND
Total SVOCs	NS	ND	7,408	356

Notes:
All concentrations are reported in parts per billion (ppb or µg/L)
TCL SVOCs = Target Compound List Semi-Volatile Organic Compounds
Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
JH = Estimated high value
D = Dilution
E = Value Exceeds Calibration Range

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 3 - Summary of TCL SVOCs Detected in Groundwater

TCL SVOC	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID & Date Collect		
		QNWP8-MW30S-GW 3/29/2018	QNWP8-MW30D-GW 3/29/2018	QNWP8-Equip Blank 4/3/2018
1,1-Biphenyl	5	ND	**38.7 J**	ND
2,4-Dimethylphenol	50	ND	**200 E**	ND
2-Methylnaphthalene	NS	ND	210 J	ND
2-Methylphenol (o-Cresol)	NS	ND	19.9 J	ND
3+4-Methylphenols (m-Cresol & p-Cresol)	NS	ND	29.3	ND
4-Nitroaniline	NS	ND	2.4 J	ND
Acenaphthene	20	5.5 J	**150 J**	ND
Acenaphthylene	NS	ND	3.7 J	ND
Acetophenone	NS	ND	ND	ND
Anthracene	NS	ND	3.1 J	ND
Carbazole	NS	ND	36.6	ND
Dibenzofuran	NS	ND	110 J	ND
Diethylphthalate	NS	ND	ND	ND
Dimethylphthalate	NS	ND	3.5 J	ND
Flouranthene	NS	ND	ND	ND
Fluorene	50	ND	39.1 J	ND
Napthalene	10	ND	**3,900 J**	ND
Phenanthrene	50	ND	36.9	ND
Phenol	NS	ND	9.7 J	ND
Pyrene	NS	ND	ND	ND
Total SVOCs	NS	6	4,761	ND

Notes:
All concentrations are reported in parts per billion (ppb or µg/L)
TCL SVOCs = Target Compound List Semi-Volatile Organic Compounds
Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
JH = Estimated high value
D = Dilution
E = Value Exceeds Calibration Range

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 4 - Summary of Miscel. Parameters in Groundwater

Parameter	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID and Date Collected		
		QNWP8-MW24S-GW	QNWP8-MW24D-GW	QNWP8-MW25S-GW
		3/30/2018	3/30/2018	4/3/2018
PARAMETERS (units)				
Iron (ug/L)	300	**3,400**	ND	**593**
Sulfate (mg/L)	250	9.6	8.1	**287 D**
Sulfide (mg/L)	0.05	**7.68**	**8.48**	**3.36**
Alkalinity (mg/L)	NS	525	510	236
TPHC Diesel Range Organics (mg/L)	NS	0.420	0.565	0.132
TPHC Gasoline Range Organics (mg/L)	NS	0.037 J	0.103	0.014 J

Notes:

Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
D = Dilution
µg/L = microgram per liter
mg/L = milligram per liter

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 4 - Summary of Miscel. Parameters in Groundwater

Parameter	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID and Date Collected		
		QNWP8-MW25D-GW	QNWP8-MW26S-GW	QNWP8-MW27S
		4/3/2018	3/29/2018	4/3/2018
PARAMETERS (units)				
Iron (ug/L)	300	137	**1,640**	**2,040**
Sulfate (mg/L)	250	**638 D**	**696 D**	239 D
Sulfide (mg/L)	0.05	**4.64**	**36.2**	**17.8**
Alkalinity (mg/L)	NS	228	2,100	173
TPHC Diesel Range Organics (mg/L)	NS	0.133	14.204	3.010
TPHC Gasoline Range Organics (mg/L)	NS	ND	8.710	0.884

Notes:

Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
D = Dilution
µg/L = microgram per liter
mg/L = milligram per liter

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Table 4 - Summary of Miscel. Parameters in Groundwater

Parameter	NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values	Sample ID and Date Collected		
		QNWP8-MW30S-GW 3/29/2018	QNWP8-MW30D-GW 3/29/2018	QNWP8-Equip Blank 4/3/2018
PARAMETERS (units)				
Iron (ug/L)	300	**4,040**	**704**	ND
Sulfate (mg/L)	250	119 D	**434 D**	NA
Sulfide (mg/L)	0.05	**6.56**	**8.96**	NA
Alkalinity (mg/L)	NS	487	2,350	NA
TPHC Diesel Range Organics (mg/L)	NS	0.272	10.909	0.071
TPHC Gasoline Range Organics (mg/L)	NS	ND	3.320	ND

Notes:

Technical and Operational Guidance Series (TOGS) NYS Ambient Water Quality Standards/Guidance Values for Class GA Waterbody
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
J = Estimated value
D = Dilution
µg/L = microgram per liter
mg/L = milligram per liter

Bold Shaded = Concentration exceeds NYS TOGS 1.1.1 Ambient Water Quality Standards/Guidance Values - Class GA Waters

Appendix 1
Data Usability Summary Reports (DUSRs)

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Queens W. Hunter's Point
Chemtech SDG#J2173
April 29, 2018
Sampling date: 3/29, 30/2018

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for LiRo Engineers, Inc., project located at Queens W. Hunter's Point, Chemtech, SDG#J2173 submitted to Vali-Data of WNY, LLC on April 18, 2018. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocols and USEPA National Functional Guidelines. The laboratory performed the analysis using USEPA method Volatile Organics (8260C) and Semi-Volatile Organics (8270D).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Surrogate Spike Recoveries.

Samples, QNWP8-MW26S-GW and QNWP8-MS30D-GW, were diluted due to a bad matrix.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of 1,2-Dichloroethane-d_4, Toluene-d_8 and 4-Bromofluorobenzene were outside ASP QC limits, high in VN0410WBL01. Associated target analytes detected in VN0410WBL01 should be qualified as estimated.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
No MS/MSD was acquired for these samples.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

SEMI-VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Internal Standard, Surrogate Spike Recoveries, Laboratory Control Samples and Continuing Calibration.

Samples; QNWP8-MW26S-GW, QNWP8-MW30D-GW, QNWP8-MW30D-GWDL, QNWP8-MW24S-GW and QNWP8-MW24D-GW was diluted due to high target analyte concentration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met except the area of Naphthalene-d_8 was outside QC limits, low in QNWP8-MW26S-GW and QNWP8-MW30D-GW. Associated target analytes in these samples should be qualified as estimated high, if detected.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of 2-Fluorophenol was outside ASP QC limits, low in QNWP8-MW26S-GW. Associated target analytes in this sample should be qualified as estimated.
The %Rec of 2-Fluorophenol was outside ASP QC limits, high in PB107874BL and PB107874BS.
The %Rec of Nitrobenzene-d_5 was outside QC limits, high in QNWP8-MW26S-GW and QNWP8-MW30D-GW. Associated target analytes in these samples should be qualified as estimated high, if detected.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except the %Rec of 2-Chlorophenol, 2-Methylphenol, 3+4-Methylphenols and 2,4-Dimethylphenol was outside QC limits, high in PB107874BS. These target analytes should be qualified as estimated in PB107874BS.
The RPD between PB107874BS and PB107874BSD was outside QC limits for many target analytes. The noncompliant target analytes should be qualified as estimated in PB107874BS/BSD and the associated samples.
Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4-Nitrophenol and Pentachlorophenol were qualified with an 'E' due to exceeding the calibration range in PB107874BS. These target analytes should be qualified as estimated in PB107874BS and in the associated samples, if detected.

MS/MSD
No MS/MSD was acquired for these samples.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION

All criteria were met except the %D of Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4-Nitrophenol and 4,6-Dinitro-3-Methylphenol was outside ASP outer QC limits in BF104152.D and BF104211.D. These target analytes should be qualified as estimated in the associated blanks, spikes and samples.

GC/MS PERFORMANCE CHECK

All criteria were met.

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW24D-GWMS	J2173-05MS	Bromide	13.3			N	
LB94328BLW	LB94328BLW	Bromide		U		N	
LB94328BSW	LB94328BSW	Bromide	9.5			N	
QNWP8-MW24D-GWMS	J2173-05MS	Chloride (As Cl)	1350	OR		N	
LB94328BLW	LB94328BLW	Chloride (As Cl)		U		N	
LB94328BSW	LB94328BSW	Chloride (As Cl)	2.9			N	
QNWP8-MW24D-GWMS	J2173-05MS	Fluoride	1.7			N	
LB94328BLW	LB94328BLW	Fluoride		U		N	
LB94328BSW	LB94328BSW	Fluoride	2			N	
QNWP8-MW24D-GWMS	J2173-05MS	Nitrogen, Nitrate (As N)	2.5			N	
LB94328BLW	LB94328BLW	Nitrogen, Nitrate (As N)		U		N	
LB94328BSW	LB94328BSW	Nitrogen, Nitrate (As N)	2.4			N	
QNWP8-MW24D-GWMS	J2173-05MS	Nitrogen, Nitrite	0.7			N	
LB94328BLW	LB94328BLW	Nitrogen, Nitrite		U		N	
LB94328BSW	LB94328BSW	Nitrogen, Nitrite	2.9			N	
QNWP8-MW24D-GWMS	J2173-05MS	Phosphorus, Total Orthophosphate (As PO4)	8.1			N	
LB94328BLW	LB94328BLW	Phosphorus, Total Orthophosphate (As PO4)		U		N	
LB94328BSW	LB94328BSW	Phosphorus, Total Orthophosphate (As PO4)	5.2			N	
QNWP8-MW26S-GW-20180329	J2173-01	Sulfate (As SO4)	924	OR		N	
QNWP8-MW26S-GW-20180329	J2173-01DL	Sulfate (As SO4)	696	D		N	
QNWP8-MW30S-GW-20180329	J2173-02	Sulfate (As SO4)	142	OR		N	
QNWP8-MW30S-GW-20180329	J2173-02DL	Sulfate (As SO4)	119	D		N	
QNWP8-MW30D-GW-20180329	J2173-03	Sulfate (As SO4)	588	OR		N	
QNWP8-MW30D-GW-20180329	J2173-03DL	Sulfate (As SO4)	434	D		N	
QNWP8-MW24S-GW-20180330	J2173-04	Sulfate (As SO4)	9.6			N	
QNWP8-MW24D-GW-20180330	J2173-05	Sulfate (As SO4)	8.1			N	
QNWP8-MW24D-GWMS	J2173-05MS	Sulfate (As SO4)	23.9			N	
LB94328BLW	LB94328BLW	Sulfate (As SO4)		U		N	
LB94328BSW	LB94328BSW	Sulfate (As SO4)	15.3			N	
QNWP8-MW26S-GW-20180329	J2173-01	Alkalinity, Total (As CaCO3)	2100			N	
QNWP8-MW30S-GW-20180329	J2173-02	Alkalinity, Total (As CaCO3)	487			N	
QNWP8-MW30D-GW-20180329	J2173-03	Alkalinity, Total (As CaCO3)	2350			N	
QNWP8-MW24S-GW-20180330	J2173-04	Alkalinity, Total (As CaCO3)	525			N	
QNWP8-MW24D-GW-20180330	J2173-05	Alkalinity, Total (As CaCO3)	510			N	
LB94362BLW	LB94362BLW	Alkalinity, Total (As CaCO3)		U		N	
LB94362BSW	LB94362BSW	Alkalinity, Total (As CaCO3)	43.2			N	
QNWP8-MW26S-GW-20180329	J2173-01	Iron	1640			N	
QNWP8-MW26S-GWMS	J2173-01MS	Iron	3040			N	
QNWP8-MW26S-GWMSD	J2173-01MSD	Iron	3040			N	
QNWP8-MW30S-GW-20180329	J2173-02	Iron	4040			N	
QNWP8-MW30D-GW-20180329	J2173-03	Iron	704			N	
QNWP8-MW24S-GW-20180330	J2173-04	Iron	3400			N	
QNWP8-MW24D-GW-20180330	J2173-05	Iron		U		N	
PB107942BL	PB107942BL	Iron		U		N	
PB107942BS	PB107942BS	Iron	1550			N	
BSF0403W1	BSF0403W1	1,1,1-Trifluorotoluene	20.03			N	
QNWP8-MW26S-GW-20180329	J2173-01	1,1,1-Trifluorotoluene	23.62			N	
QNWP8-MW30S-GW-20180329	J2173-02	1,1,1-Trifluorotoluene	19.76			N	
QNWP8-MW30S-GWMS	J2173-02MS	1,1,1-Trifluorotoluene	18.74			N	
QNWP8-MW30S-GWMSD	J2173-02MSD	1,1,1-Trifluorotoluene	18.27			N	
QNWP8-MW30D-GW-20180329	J2173-03	1,1,1-Trifluorotoluene	20.06			N	
QNWP8-MW30D-GWMS	J2173-03MS	1,1,1-Trifluorotoluene	18.74			N	
QNWP8-MW30D-GWMSD	J2173-03MSD	1,1,1-Trifluorotoluene	18.27			N	
QNWP8-MW24S-GW-20180330	J2173-04	1,1,1-Trifluorotoluene	22.01			N	
QNWP8-MW24D-GW-20180330	J2173-05	1,1,1-Trifluorotoluene	22.80			N	
VBF0403W1	VBF0403W1	1,1,1-Trifluorotoluene	19.26			N	
QNWP8-MW26S-GW-20180329	J2173-01	PHC As Diesel Fuel	13900	E		N	
QNWP8-MW26S-GW-20180329	J2173-01	PHC As Diesel Fuel	14204			N	
QNWP8-MW30S-GW-20180329	J2173-02	PHC As Diesel Fuel	272			N	
QNWP8-MW30D-GW-20180329	J2173-03	PHC As Diesel Fuel	10909			N	
QNWP8-MW30D-GW-20180329	J2173-03	PHC As Diesel Fuel	11000	E		N	
QNWP8-MW24S-GW-20180330	J2173-04	PHC As Diesel Fuel	420			N	
QNWP8-MW24D-GW-20180330	J2173-05	PHC As Diesel Fuel	565			N	
PB107890BL	PB107890BL	PHC As Diesel Fuel		U		N	
PB107890BS	PB107890BS	PHC As Diesel Fuel	173			N	
PB107890BSD	PB107890BSD	PHC As Diesel Fuel	180			N	
BSF0403W1	BSF0403W1	PHC As Gasoline	173			N	
QNWP8-MW26S-GW-20180329	J2173-01	PHC As Gasoline	8710			N	
QNWP8-MW30S-GW-20180329	J2173-02	PHC As Gasoline		U		N	

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW30S-GWMS	J2173-02MS	PHC As Gasoline	139			N	
QNWP8-MW30S-GWMSD	J2173-02MSD	PHC As Gasoline	142			N	
QNWP8-MW30D-GW-20180329	J2173-03	PHC As Gasoline	3320			N	
QNWP8-MW30D-GWMS	J2173-03MS	PHC As Gasoline	139			N	
QNWP8-MW30D-GWMSD	J2173-03MSD	PHC As Gasoline	142			N	
QNWP8-MW24S-GW-20180330	J2173-04	PHC As Gasoline	37	J		N	
QNWP8-MW24D-GW-20180330	J2173-05	PHC As Gasoline	103			N	
VBF0403W1	VBF0403W1	PHC As Gasoline		U		N	
QNWP8-MW26S-GW-20180329	J2173-01	Tetracosane-D50	0.75			N	
QNWP8-MW30S-GW-20180329	J2173-02	Tetracosane-D50	13.83			N	
QNWP8-MW30D-GW-20180329	J2173-03	Tetracosane-D50	0.61			N	
QNWP8-MW24S-GW-20180330	J2173-04	Tetracosane-D50	13.91			N	
QNWP8-MW24D-GW-20180330	J2173-05	Tetracosane-D50	14.93			N	
PB107890BL	PB107890BL	Tetracosane-D50	12.07			N	
PB107890BS	PB107890BS	Tetracosane-D50	16.03			N	
PB107890BSD	PB107890BSD	Tetracosane-D50	16.95			N	
QNWP8-MW26S-GW-20180329	J2173-01	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,1,1-Trichloroethane (TCA)		U		Y	4
VN0405WBL01	VN0405WBL01	1,1,1-Trichloroethane (TCA)		U		Y	4
VN0405WBS01	VN0405WBS01	1,1,1-Trichloroethane (TCA)	20.4			Y	4
VN0410WBL01	VN0410WBL01	1,1,1-Trichloroethane (TCA)		U		Y	4
VN0410WBS01	VN0410WBS01	1,1,1-Trichloroethane (TCA)	19			Y	4
VN0410WBSD01	VN0410WBSD01	1,1,1-Trichloroethane (TCA)	20.1			Y	4
VX0408WBL01	VX0408WBL01	1,1,1-Trichloroethane (TCA)		U		Y	4
VX0408WBS01	VX0408WBS01	1,1,1-Trichloroethane (TCA)	18.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,1,2,2-Tetrachloroethane		U		Y	4
VN0405WBL01	VN0405WBL01	1,1,2,2-Tetrachloroethane		U		Y	4
VN0405WBS01	VN0405WBS01	1,1,2,2-Tetrachloroethane	22.6			Y	4
VN0410WBL01	VN0410WBL01	1,1,2,2-Tetrachloroethane		U		Y	4
VN0410WBS01	VN0410WBS01	1,1,2,2-Tetrachloroethane	20			Y	4
VN0410WBSD01	VN0410WBSD01	1,1,2,2-Tetrachloroethane	21.4			Y	4
VX0408WBL01	VX0408WBL01	1,1,2,2-Tetrachloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,1,2,2-Tetrachloroethane	18.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
VN0405WBL01	VN0405WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
VN0405WBS01	VN0405WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	20.9			Y	4
VN0410WBL01	VN0410WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
VN0410WBS01	VN0410WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	19.1			Y	4
VN0410WBSD01	VN0410WBSD01	1,1,2-Trichloro-1,2,2-Trifluoroethane	20.1			Y	4
VX0408WBL01	VX0408WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	19.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,1,2-Trichloroethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,1,2-Trichloroethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,1,2-Trichloroethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,1,2-Trichloroethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,1,2-Trichloroethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,1,2-Trichloroethane		U		Y	4
VN0405WBL01	VN0405WBL01	1,1,2-Trichloroethane		U		Y	4
VN0405WBS01	VN0405WBS01	1,1,2-Trichloroethane	20			Y	4
VN0410WBL01	VN0410WBL01	1,1,2-Trichloroethane		U		Y	4
VN0410WBS01	VN0410WBS01	1,1,2-Trichloroethane	18.5			Y	4
VN0410WBSD01	VN0410WBSD01	1,1,2-Trichloroethane	19.7			Y	4
VX0408WBL01	VX0408WBL01	1,1,2-Trichloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,1,2-Trichloroethane	19.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,1-Dichloroethane		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW30S-GW-20180329	J2173-02	1,1-Dichloroethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,1-Dichloroethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,1-Dichloroethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,1-Dichloroethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,1-Dichloroethane		U		Y	4
VN0405WBL01	VN0405WBL01	1,1-Dichloroethane		U		Y	4
VN0405WBS01	VN0405WBS01	1,1-Dichloroethane	20.5			Y	4
VN0410WBL01	VN0410WBL01	1,1-Dichloroethane		U		Y	4
VN0410WBS01	VN0410WBS01	1,1-Dichloroethane	18.9			Y	4
VN0410WBSD01	VN0410WBSD01	1,1-Dichloroethane	20.2			Y	4
VX0408WBL01	VX0408WBL01	1,1-Dichloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,1-Dichloroethane	18.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,1-Dichloroethene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,1-Dichloroethene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,1-Dichloroethene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,1-Dichloroethene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,1-Dichloroethene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,1-Dichloroethene		U		Y	4
VN0405WBL01	VN0405WBL01	1,1-Dichloroethene		U		Y	4
VN0405WBS01	VN0405WBS01	1,1-Dichloroethene	20.4			Y	4
VN0410WBL01	VN0410WBL01	1,1-Dichloroethene		U		Y	4
VN0410WBS01	VN0410WBS01	1,1-Dichloroethene	18.8			Y	4
VN0410WBSD01	VN0410WBSD01	1,1-Dichloroethene	19.6			Y	4
VX0408WBL01	VX0408WBL01	1,1-Dichloroethene		U		Y	4
VX0408WBS01	VX0408WBS01	1,1-Dichloroethene	18.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,2,3-Trichlorobenzene		U		Y	4
VN0405WBL01	VN0405WBL01	1,2,3-Trichlorobenzene		U		Y	4
VN0405WBS01	VN0405WBS01	1,2,3-Trichlorobenzene	19.5			Y	4
VN0410WBL01	VN0410WBL01	1,2,3-Trichlorobenzene		U		Y	4
VN0410WBS01	VN0410WBS01	1,2,3-Trichlorobenzene	20.3			Y	4
VN0410WBSD01	VN0410WBSD01	1,2,3-Trichlorobenzene	21.2			Y	4
VX0408WBL01	VX0408WBL01	1,2,3-Trichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,2,3-Trichlorobenzene	19.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,2,4-Trichlorobenzene		U		Y	4
VN0405WBL01	VN0405WBL01	1,2,4-Trichlorobenzene		U		Y	4
VN0405WBS01	VN0405WBS01	1,2,4-Trichlorobenzene	18.8			Y	4
VN0410WBL01	VN0410WBL01	1,2,4-Trichlorobenzene		U		Y	4
VN0410WBS01	VN0410WBS01	1,2,4-Trichlorobenzene	19.9			Y	4
VN0410WBSD01	VN0410WBSD01	1,2,4-Trichlorobenzene	20.6			Y	4
VX0408WBL01	VX0408WBL01	1,2,4-Trichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,2,4-Trichlorobenzene	19.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,2-Dibromo-3-Chloropropane		U		Y	4
VN0405WBL01	VN0405WBL01	1,2-Dibromo-3-Chloropropane		U		Y	4
VN0405WBS01	VN0405WBS01	1,2-Dibromo-3-Chloropropane	20.5			Y	4
VN0410WBL01	VN0410WBL01	1,2-Dibromo-3-Chloropropane		U		Y	4
VN0410WBS01	VN0410WBS01	1,2-Dibromo-3-Chloropropane	20.5			Y	4
VN0410WBSD01	VN0410WBSD01	1,2-Dibromo-3-Chloropropane	21.3			Y	4
VX0408WBL01	VX0408WBL01	1,2-Dibromo-3-Chloropropane		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dibromo-3-Chloropropane	17.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
VN0405WBL01	VN0405WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
VN0405WBS01	VN0405WBS01	1,2-Dibromoethane (Ethylene Dibromide)	19.7			Y	4
VN0410WBL01	VN0410WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
VN0410WBS01	VN0410WBS01	1,2-Dibromoethane (Ethylene Dibromide)	19.1			Y	4
VN0410WBSD01	VN0410WBSD01	1,2-Dibromoethane (Ethylene Dibromide)	20.5			Y	4
VX0408WBL01	VX0408WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dibromoethane (Ethylene Dibromide)	18.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2-Dichlorobenzene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,2-Dichlorobenzene		U		Y	4
VN0405WBL01	VN0405WBL01	1,2-Dichlorobenzene		U		Y	4
VN0405WBS01	VN0405WBS01	1,2-Dichlorobenzene	20			Y	4
VN0410WBL01	VN0410WBL01	1,2-Dichlorobenzene		U		Y	4
VN0410WBS01	VN0410WBS01	1,2-Dichlorobenzene	19.9			Y	4
VN0410WBSD01	VN0410WBSD01	1,2-Dichlorobenzene	20.6			Y	4
VX0408WBL01	VX0408WBL01	1,2-Dichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dichlorobenzene	19.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2-Dichloroethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2-Dichloroethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2-Dichloroethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2-Dichloroethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2-Dichloroethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,2-Dichloroethane		U		Y	4
VN0405WBL01	VN0405WBL01	1,2-Dichloroethane		U		Y	4
VN0405WBS01	VN0405WBS01	1,2-Dichloroethane	20.3			Y	4
VN0410WBL01	VN0410WBL01	1,2-Dichloroethane		U		Y	4
VN0410WBS01	VN0410WBS01	1,2-Dichloroethane	18.3			Y	4
VN0410WBSD01	VN0410WBSD01	1,2-Dichloroethane	19.7			Y	4
VX0408WBL01	VX0408WBL01	1,2-Dichloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dichloroethane	18.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2-Dichloroethane-D4	53.3			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2-Dichloroethane-D4	53			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2-Dichloroethane-D4	49.7			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2-Dichloroethane-D4	52.9			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2-Dichloroethane-D4	52.2			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,2-Dichloroethane-D4	52.7			Y	4
VN0405WBL01	VN0405WBL01	1,2-Dichloroethane-D4	52.7			Y	4
VN0405WBS01	VN0405WBS01	1,2-Dichloroethane-D4	51.8			Y	4
VN0410WBL01	VN0410WBL01	1,2-Dichloroethane-D4	32.9			Y	4
VN0410WBS01	VN0410WBS01	1,2-Dichloroethane-D4	48.5			Y	4
VN0410WBSD01	VN0410WBSD01	1,2-Dichloroethane-D4	49.2			Y	4
VX0408WBL01	VX0408WBL01	1,2-Dichloroethane-D4	43.8			Y	4
VX0408WBS01	VX0408WBS01	1,2-Dichloroethane-D4	45.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2-Dichloropropane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2-Dichloropropane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2-Dichloropropane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2-Dichloropropane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2-Dichloropropane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,2-Dichloropropane		U		Y	4
VN0405WBL01	VN0405WBL01	1,2-Dichloropropane		U		Y	4
VN0405WBS01	VN0405WBS01	1,2-Dichloropropane	20			Y	4
VN0410WBL01	VN0410WBL01	1,2-Dichloropropane		U		Y	4
VN0410WBS01	VN0410WBS01	1,2-Dichloropropane	18.6			Y	4
VN0410WBSD01	VN0410WBSD01	1,2-Dichloropropane	20.3			Y	4
VX0408WBL01	VX0408WBL01	1,2-Dichloropropane		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dichloropropane	19.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,3-Dichlorobenzene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,3-Dichlorobenzene		U		Y	4
VN0405WBL01	VN0405WBL01	1,3-Dichlorobenzene		U		Y	4
VN0405WBS01	VN0405WBS01	1,3-Dichlorobenzene	19.7			Y	4
VN0410WBL01	VN0410WBL01	1,3-Dichlorobenzene		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
VN0410WBS01	VN0410WBS01	1,3-Dichlorobenzene	19.3			Y	4
VN0410WBSD01	VN0410WBSD01	1,3-Dichlorobenzene	20.3			Y	4
VX0408WBL01	VX0408WBL01	1,3-Dichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,3-Dichlorobenzene	19.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,4-Dichlorobenzene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	1,4-Dichlorobenzene		U		Y	4
VN0405WBL01	VN0405WBL01	1,4-Dichlorobenzene		U		Y	4
VN0405WBS01	VN0405WBS01	1,4-Dichlorobenzene	20.9			Y	4
VN0410WBL01	VN0410WBL01	1,4-Dichlorobenzene		U		Y	4
VN0410WBS01	VN0410WBS01	1,4-Dichlorobenzene	19.1			Y	4
VN0410WBSD01	VN0410WBSD01	1,4-Dichlorobenzene	20.1			Y	4
VX0408WBL01	VX0408WBL01	1,4-Dichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,4-Dichlorobenzene	19.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Hexanone		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Hexanone		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Hexanone		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Hexanone		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Hexanone		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	2-Hexanone		U		Y	4
VN0405WBL01	VN0405WBL01	2-Hexanone		U		Y	4
VN0405WBS01	VN0405WBS01	2-Hexanone	95.3			Y	4
VN0410WBL01	VN0410WBL01	2-Hexanone		U		Y	4
VN0410WBS01	VN0410WBS01	2-Hexanone	92.4			Y	4
VN0410WBSD01	VN0410WBSD01	2-Hexanone	100			Y	4
VX0408WBL01	VX0408WBL01	2-Hexanone		U		Y	4
VX0408WBS01	VX0408WBS01	2-Hexanone	91.3			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Acetone		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Acetone		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Acetone	36.7	J		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Acetone		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Acetone		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Acetone		U		Y	4
VN0405WBL01	VN0405WBL01	Acetone		U		Y	4
VN0405WBS01	VN0405WBS01	Acetone	110			Y	4
VN0410WBL01	VN0410WBL01	Acetone		U		Y	4
VN0410WBS01	VN0410WBS01	Acetone	89.6			Y	4
VN0410WBSD01	VN0410WBSD01	Acetone	95.6			Y	4
VX0408WBL01	VX0408WBL01	Acetone		U		Y	4
VX0408WBS01	VX0408WBS01	Acetone	91.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Benzene	3000			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Benzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Benzene	330			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Benzene	6.5			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Benzene	30.9			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Benzene		U		Y	4
VN0405WBL01	VN0405WBL01	Benzene		U		Y	4
VN0405WBS01	VN0405WBS01	Benzene	20			Y	4
VN0410WBL01	VN0410WBL01	Benzene		U		Y	4
VN0410WBS01	VN0410WBS01	Benzene	18.4			Y	4
VN0410WBSD01	VN0410WBSD01	Benzene	20			Y	4
VX0408WBL01	VX0408WBL01	Benzene		U		Y	4
VX0408WBS01	VX0408WBS01	Benzene	19.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Bromochloromethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Bromochloromethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Bromochloromethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Bromochloromethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Bromochloromethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Bromochloromethane		U		Y	4
VN0405WBL01	VN0405WBL01	Bromochloromethane		U		Y	4
VN0405WBS01	VN0405WBS01	Bromochloromethane	22			Y	4
VN0410WBL01	VN0410WBL01	Bromochloromethane		U		Y	4
VN0410WBS01	VN0410WBS01	Bromochloromethane	20.3			Y	4
VN0410WBSD01	VN0410WBSD01	Bromochloromethane	20.2			Y	4
VX0408WBL01	VX0408WBL01	Bromochloromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Bromochloromethane	17.4			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW26S-GW-20180329	J2173-01	Bromodichloromethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Bromodichloromethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Bromodichloromethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Bromodichloromethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Bromodichloromethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Bromodichloromethane		U		Y	4
VN0405WBL01	VN0405WBL01	Bromodichloromethane		U		Y	4
VN0405WBS01	VN0405WBS01	Bromodichloromethane	20.3			Y	4
VN0410WBL01	VN0410WBL01	Bromodichloromethane		U		Y	4
VN0410WBS01	VN0410WBS01	Bromodichloromethane	18.4			Y	4
VN0410WBSD01	VN0410WBSD01	Bromodichloromethane	20			Y	4
VX0408WBL01	VX0408WBL01	Bromodichloromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Bromodichloromethane	19.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Bromoform		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Bromoform		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Bromoform		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Bromoform		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Bromoform		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Bromoform		U		Y	4
VN0405WBL01	VN0405WBL01	Bromoform		U		Y	4
VN0405WBS01	VN0405WBS01	Bromoform	19.1			Y	4
VN0410WBL01	VN0410WBL01	Bromoform		U		Y	4
VN0410WBS01	VN0410WBS01	Bromoform	18.4			Y	4
VN0410WBSD01	VN0410WBSD01	Bromoform	19.9			Y	4
VX0408WBL01	VX0408WBL01	Bromoform		U		Y	4
VX0408WBS01	VX0408WBS01	Bromoform	18.9			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Bromomethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Bromomethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Bromomethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Bromomethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Bromomethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Bromomethane		U		Y	4
VN0405WBL01	VN0405WBL01	Bromomethane		U		Y	4
VN0405WBS01	VN0405WBS01	Bromomethane	23.7			Y	4
VN0410WBL01	VN0410WBL01	Bromomethane		U		Y	4
VN0410WBS01	VN0410WBS01	Bromomethane	21.3			Y	4
VN0410WBSD01	VN0410WBSD01	Bromomethane	22.7			Y	4
VX0408WBL01	VX0408WBL01	Bromomethane		U		Y	4
VX0408WBS01	VX0408WBS01	Bromomethane	24.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Carbon Disulfide	51.1			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Carbon Disulfide		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Carbon Disulfide		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Carbon Disulfide		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Carbon Disulfide		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Carbon Disulfide		U		Y	4
VN0405WBL01	VN0405WBL01	Carbon Disulfide		U		Y	4
VN0405WBS01	VN0405WBS01	Carbon Disulfide	20.3			Y	4
VN0410WBL01	VN0410WBL01	Carbon Disulfide		U		Y	4
VN0410WBS01	VN0410WBS01	Carbon Disulfide	18.2			Y	4
VN0410WBSD01	VN0410WBSD01	Carbon Disulfide	19.4			Y	4
VX0408WBL01	VX0408WBL01	Carbon Disulfide		U		Y	4
VX0408WBS01	VX0408WBS01	Carbon Disulfide	19			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Carbon Tetrachloride		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Carbon Tetrachloride		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Carbon Tetrachloride		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Carbon Tetrachloride		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Carbon Tetrachloride		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Carbon Tetrachloride		U		Y	4
VN0405WBL01	VN0405WBL01	Carbon Tetrachloride		U		Y	4
VN0405WBS01	VN0405WBS01	Carbon Tetrachloride	20.2			Y	4
VN0410WBL01	VN0410WBL01	Carbon Tetrachloride		U		Y	4
VN0410WBS01	VN0410WBS01	Carbon Tetrachloride	18.2			Y	4
VN0410WBSD01	VN0410WBSD01	Carbon Tetrachloride	19.3			Y	4
VX0408WBL01	VX0408WBL01	Carbon Tetrachloride		U		Y	4
VX0408WBS01	VX0408WBS01	Carbon Tetrachloride	19.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Chlorobenzene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Chlorobenzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Chlorobenzene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Chlorobenzene		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW24D-GW-20180330	J2173-05	Chlorobenzene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Chlorobenzene		U		Y	4
VN0405WBL01	VN0405WBL01	Chlorobenzene		U		Y	4
VN0405WBS01	VN0405WBS01	Chlorobenzene	19.7			Y	4
VN0410WBL01	VN0410WBL01	Chlorobenzene		U		Y	4
VN0410WBS01	VN0410WBS01	Chlorobenzene	19.2			Y	4
VN0410WBSD01	VN0410WBSD01	Chlorobenzene	20.2			Y	4
VX0408WBL01	VX0408WBL01	Chlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	Chlorobenzene	19			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Chloroethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Chloroethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Chloroethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Chloroethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Chloroethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Chloroethane		U		Y	4
VN0405WBL01	VN0405WBL01	Chloroethane		U		Y	4
VN0405WBS01	VN0405WBS01	Chloroethane	21.8			Y	4
VN0410WBL01	VN0410WBL01	Chloroethane		U		Y	4
VN0410WBS01	VN0410WBS01	Chloroethane	19.2			Y	4
VN0410WBSD01	VN0410WBSD01	Chloroethane	20.6			Y	4
VX0408WBL01	VX0408WBL01	Chloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	Chloroethane	18.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Chloroform		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Chloroform		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Chloroform		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Chloroform		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Chloroform		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Chloroform		U		Y	4
VN0405WBL01	VN0405WBL01	Chloroform		U		Y	4
VN0405WBS01	VN0405WBS01	Chloroform	21			Y	4
VN0410WBL01	VN0410WBL01	Chloroform		U		Y	4
VN0410WBS01	VN0410WBS01	Chloroform	19.3			Y	4
VN0410WBSD01	VN0410WBSD01	Chloroform	20.3			Y	4
VX0408WBL01	VX0408WBL01	Chloroform		U		Y	4
VX0408WBS01	VX0408WBS01	Chloroform	18.7			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Chloromethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Chloromethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Chloromethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Chloromethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Chloromethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Chloromethane		U		Y	4
VN0405WBL01	VN0405WBL01	Chloromethane		U		Y	4
VN0405WBS01	VN0405WBS01	Chloromethane	19.5			Y	4
VN0410WBL01	VN0410WBL01	Chloromethane		U		Y	4
VN0410WBS01	VN0410WBS01	Chloromethane	18.7			Y	4
VN0410WBSD01	VN0410WBSD01	Chloromethane	19.6			Y	4
VX0408WBL01	VX0408WBL01	Chloromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Chloromethane	19			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Cis-1,2-Dichloroethylene		U		Y	4
VN0405WBL01	VN0405WBL01	Cis-1,2-Dichloroethylene		U		Y	4
VN0405WBS01	VN0405WBS01	Cis-1,2-Dichloroethylene	20.6			Y	4
VN0410WBL01	VN0410WBL01	Cis-1,2-Dichloroethylene		U		Y	4
VN0410WBS01	VN0410WBS01	Cis-1,2-Dichloroethylene	19			Y	4
VN0410WBSD01	VN0410WBSD01	Cis-1,2-Dichloroethylene	20.2			Y	4
VX0408WBL01	VX0408WBL01	Cis-1,2-Dichloroethylene		U		Y	4
VX0408WBS01	VX0408WBS01	Cis-1,2-Dichloroethylene	18.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Cis-1,3-Dichloropropene		U		Y	4
VN0405WBL01	VN0405WBL01	Cis-1,3-Dichloropropene		U		Y	4
VN0405WBS01	VN0405WBS01	Cis-1,3-Dichloropropene	20.1			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
VN0410WBL01	VN0410WBL01	Cis-1,3-Dichloropropene		U		Y	4
VN0410WBS01	VN0410WBS01	Cis-1,3-Dichloropropene	17.9			Y	4
VN0410WBSD01	VN0410WBSD01	Cis-1,3-Dichloropropene	19.5			Y	4
VX0408WBL01	VX0408WBL01	Cis-1,3-Dichloropropene		U		Y	4
VX0408WBS01	VX0408WBS01	Cis-1,3-Dichloropropene	19			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Cyclohexane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Cyclohexane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Cyclohexane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Cyclohexane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Cyclohexane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Cyclohexane		U		Y	4
VN0405WBL01	VN0405WBL01	Cyclohexane		U		Y	4
VN0405WBS01	VN0405WBS01	Cyclohexane	20.8			Y	4
VN0410WBL01	VN0410WBL01	Cyclohexane		U		Y	4
VN0410WBS01	VN0410WBS01	Cyclohexane	18.5			Y	4
VN0410WBSD01	VN0410WBSD01	Cyclohexane	19.7			Y	4
VX0408WBL01	VX0408WBL01	Cyclohexane		U		Y	4
VX0408WBS01	VX0408WBS01	Cyclohexane	18.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Dibromochloromethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Dibromochloromethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Dibromochloromethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Dibromochloromethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Dibromochloromethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Dibromochloromethane		U		Y	4
VN0405WBL01	VN0405WBL01	Dibromochloromethane		U		Y	4
VN0405WBS01	VN0405WBS01	Dibromochloromethane	19.2			Y	4
VN0410WBL01	VN0410WBL01	Dibromochloromethane		U		Y	4
VN0410WBS01	VN0410WBS01	Dibromochloromethane	18.1			Y	4
VN0410WBSD01	VN0410WBSD01	Dibromochloromethane	20.1			Y	4
VX0408WBL01	VX0408WBL01	Dibromochloromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Dibromochloromethane	19.3			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Dibromofluoromethane	51			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Dibromofluoromethane	52.1			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Dibromofluoromethane	48			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Dibromofluoromethane	52.4			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Dibromofluoromethane	52.3			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Dibromofluoromethane	51.6			Y	4
VN0405WBL01	VN0405WBL01	Dibromofluoromethane	51.2			Y	4
VN0405WBS01	VN0405WBS01	Dibromofluoromethane	51.6			Y	4
VN0410WBL01	VN0410WBL01	Dibromofluoromethane	37			Y	4
VN0410WBS01	VN0410WBS01	Dibromofluoromethane	48			Y	4
VN0410WBSD01	VN0410WBSD01	Dibromofluoromethane	49			Y	4
VX0408WBL01	VX0408WBL01	Dibromofluoromethane	47.6			Y	4
VX0408WBS01	VX0408WBS01	Dibromofluoromethane	49			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Dichlorodifluoromethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Dichlorodifluoromethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Dichlorodifluoromethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Dichlorodifluoromethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Dichlorodifluoromethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Dichlorodifluoromethane		U		Y	4
VN0405WBL01	VN0405WBL01	Dichlorodifluoromethane		U		Y	4
VN0405WBS01	VN0405WBS01	Dichlorodifluoromethane	20.8			Y	4
VN0410WBL01	VN0410WBL01	Dichlorodifluoromethane		U		Y	4
VN0410WBS01	VN0410WBS01	Dichlorodifluoromethane	19.2			Y	4
VN0410WBSD01	VN0410WBSD01	Dichlorodifluoromethane	20.4			Y	4
VX0408WBL01	VX0408WBL01	Dichlorodifluoromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Dichlorodifluoromethane	19.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Ethylbenzene	610			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Ethylbenzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Ethylbenzene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Ethylbenzene	3.7			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Ethylbenzene	14.9			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Ethylbenzene		U		Y	4
VN0405WBL01	VN0405WBL01	Ethylbenzene		U		Y	4
VN0405WBS01	VN0405WBS01	Ethylbenzene	19.7			Y	4
VN0410WBL01	VN0410WBL01	Ethylbenzene		U		Y	4
VN0410WBS01	VN0410WBS01	Ethylbenzene	18.8			Y	4
VN0410WBSD01	VN0410WBSD01	Ethylbenzene	19.7			Y	4
VX0408WBL01	VX0408WBL01	Ethylbenzene		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
VX0408WBS01	VX0408WBS01	Ethylbenzene	19.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Isopropylbenzene (Cumene)	33.8	J		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Isopropylbenzene (Cumene)		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Isopropylbenzene (Cumene)	17.7			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Isopropylbenzene (Cumene)	0.95	J		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Isopropylbenzene (Cumene)	2			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Isopropylbenzene (Cumene)		U		Y	4
VN0405WBL01	VN0405WBL01	Isopropylbenzene (Cumene)		U		Y	4
VN0405WBS01	VN0405WBS01	Isopropylbenzene (Cumene)	21.2			Y	4
VN0410WBL01	VN0410WBL01	Isopropylbenzene (Cumene)		U		Y	4
VN0410WBS01	VN0410WBS01	Isopropylbenzene (Cumene)	19.4			Y	4
VN0410WBSD01	VN0410WBSD01	Isopropylbenzene (Cumene)	20.4			Y	4
VX0408WBL01	VX0408WBL01	Isopropylbenzene (Cumene)		U		Y	4
VX0408WBS01	VX0408WBS01	Isopropylbenzene (Cumene)	19.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	m,p-Xylene	810			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	m,p-Xylene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	m,p-Xylene	370			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	m,p-Xylene	1.2	J		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	m,p-Xylene	4.4			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	m,p-Xylene		U		Y	4
VN0405WBL01	VN0405WBL01	m,p-Xylene		U		Y	4
VN0405WBS01	VN0405WBS01	m,p-Xylene	39.1			Y	4
VN0410WBL01	VN0410WBL01	m,p-Xylene		U		Y	4
VN0410WBS01	VN0410WBS01	m,p-Xylene	37.5			Y	4
VN0410WBSD01	VN0410WBSD01	m,p-Xylene	39.9			Y	4
VX0408WBL01	VX0408WBL01	m,p-Xylene		U		Y	4
VX0408WBS01	VX0408WBS01	m,p-Xylene	38.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Methyl Acetate		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Methyl Acetate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Methyl Acetate		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Methyl Acetate		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Methyl Acetate		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Methyl Acetate		U		Y	4
VN0405WBL01	VN0405WBL01	Methyl Acetate		U		Y	4
VN0405WBS01	VN0405WBS01	Methyl Acetate	21.6			Y	4
VN0410WBL01	VN0410WBL01	Methyl Acetate		U		Y	4
VN0410WBS01	VN0410WBS01	Methyl Acetate	19.7			Y	4
VN0410WBSD01	VN0410WBSD01	Methyl Acetate	20.7			Y	4
VX0408WBL01	VX0408WBL01	Methyl Acetate		U		Y	4
VX0408WBS01	VX0408WBS01	Methyl Acetate	18.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
VN0405WBL01	VN0405WBL01	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
VN0405WBS01	VN0405WBS01	Methyl Ethyl Ketone (2-Butanone)	100			Y	4
VN0410WBL01	VN0410WBL01	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
VN0410WBS01	VN0410WBS01	Methyl Ethyl Ketone (2-Butanone)	96.1			Y	4
VN0410WBSD01	VN0410WBSD01	Methyl Ethyl Ketone (2-Butanone)	100			Y	4
VX0408WBL01	VX0408WBL01	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
VX0408WBS01	VX0408WBS01	Methyl Ethyl Ketone (2-Butanone)	88.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
VN0405WBL01	VN0405WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
VN0405WBS01	VN0405WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	99.6			Y	4
VN0410WBL01	VN0410WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
VN0410WBS01	VN0410WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	94.8			Y	4
VN0410WBSD01	VN0410WBSD01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	100			Y	4
VX0408WBL01	VX0408WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
VX0408WBS01	VX0408WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	91.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Methylcyclohexane	14.8	J		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Methylcyclohexane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Methylcyclohexane	6.4	J		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW24S-GW-20180330	J2173-04	Methylcyclohexane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Methylcyclohexane	0.47	J		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Methylcyclohexane		U		Y	4
VN0405WBL01	VN0405WBL01	Methylcyclohexane		U		Y	4
VN0405WBS01	VN0405WBS01	Methylcyclohexane	19.6			Y	4
VN0410WBL01	VN0410WBL01	Methylcyclohexane		U		Y	4
VN0410WBS01	VN0410WBS01	Methylcyclohexane	17.7			Y	4
VN0410WBSD01	VN0410WBSD01	Methylcyclohexane	18.8			Y	4
VX0408WBL01	VX0408WBL01	Methylcyclohexane		U		Y	4
VX0408WBS01	VX0408WBS01	Methylcyclohexane	19.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Methylene Chloride		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Methylene Chloride		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Methylene Chloride		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Methylene Chloride		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Methylene Chloride		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Methylene Chloride		U		Y	4
VN0405WBL01	VN0405WBL01	Methylene Chloride		U		Y	4
VN0405WBS01	VN0405WBS01	Methylene Chloride	20.2			Y	4
VN0410WBL01	VN0410WBL01	Methylene Chloride		U		Y	4
VN0410WBS01	VN0410WBS01	Methylene Chloride	20.2			Y	4
VN0410WBSD01	VN0410WBSD01	Methylene Chloride	21.4			Y	4
VX0408WBL01	VX0408WBL01	Methylene Chloride		U		Y	4
VX0408WBS01	VX0408WBS01	Methylene Chloride	17.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	O-Xylene (1,2-Dimethylbenzene)	550			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	O-Xylene (1,2-Dimethylbenzene)	260			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	O-Xylene (1,2-Dimethylbenzene)	0.78	J		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	O-Xylene (1,2-Dimethylbenzene)	4.4			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
VN0405WBL01	VN0405WBL01	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
VN0405WBS01	VN0405WBS01	O-Xylene (1,2-Dimethylbenzene)	19.7			Y	4
VN0410WBL01	VN0410WBL01	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
VN0410WBS01	VN0410WBS01	O-Xylene (1,2-Dimethylbenzene)	19			Y	4
VN0410WBSD01	VN0410WBSD01	O-Xylene (1,2-Dimethylbenzene)	20.1			Y	4
VX0408WBL01	VX0408WBL01	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
VX0408WBS01	VX0408WBS01	O-Xylene (1,2-Dimethylbenzene)	19.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	p-Bromofluorobenzene	53			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	p-Bromofluorobenzene	49			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	p-Bromofluorobenzene	43.9			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	p-Bromofluorobenzene	50.1			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	p-Bromofluorobenzene	53.1			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	p-Bromofluorobenzene	50			Y	4
VN0405WBL01	VN0405WBL01	p-Bromofluorobenzene	51.2			Y	4
VN0405WBS01	VN0405WBS01	p-Bromofluorobenzene	47.1			Y	4
VN0410WBL01	VN0410WBL01	p-Bromofluorobenzene	33.2			Y	4
VN0410WBS01	VN0410WBS01	p-Bromofluorobenzene	44.8			Y	4
VN0410WBSD01	VN0410WBSD01	p-Bromofluorobenzene	46.2			Y	4
VX0408WBL01	VX0408WBL01	p-Bromofluorobenzene	45.3			Y	4
VX0408WBS01	VX0408WBS01	p-Bromofluorobenzene	47.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Styrene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Styrene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Styrene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Styrene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Styrene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Styrene		U		Y	4
VN0405WBL01	VN0405WBL01	Styrene		U		Y	4
VN0405WBS01	VN0405WBS01	Styrene	19.1			Y	4
VN0410WBL01	VN0410WBL01	Styrene		U		Y	4
VN0410WBS01	VN0410WBS01	Styrene	18.7			Y	4
VN0410WBSD01	VN0410WBSD01	Styrene	19.7			Y	4
VX0408WBL01	VX0408WBL01	Styrene		U		Y	4
VX0408WBS01	VX0408WBS01	Styrene	19.3			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Tert-Butyl Alcohol		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Tert-Butyl Alcohol		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Tert-Butyl Alcohol		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Tert-Butyl Alcohol		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Tert-Butyl Alcohol		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Tert-Butyl Alcohol		U		Y	4
VN0405WBL01	VN0405WBL01	Tert-Butyl Alcohol		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
VN0405WBS01	VN0405WBS01	Tert-Butyl Alcohol	110			Y	4
VN0410WBL01	VN0410WBL01	Tert-Butyl Alcohol		U		Y	4
VN0410WBS01	VN0410WBS01	Tert-Butyl Alcohol	100			Y	4
VN0410WBSD01	VN0410WBSD01	Tert-Butyl Alcohol	110			Y	4
VX0408WBL01	VX0408WBL01	Tert-Butyl Alcohol		U		Y	4
VX0408WBS01	VX0408WBS01	Tert-Butyl Alcohol	93.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Tert-Butyl Methyl Ether		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Tert-Butyl Methyl Ether		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Tert-Butyl Methyl Ether		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Tert-Butyl Methyl Ether		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Tert-Butyl Methyl Ether		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Tert-Butyl Methyl Ether		U		Y	4
VN0405WBL01	VN0405WBL01	Tert-Butyl Methyl Ether		U		Y	4
VN0405WBS01	VN0405WBS01	Tert-Butyl Methyl Ether	20.7			Y	4
VN0410WBL01	VN0410WBL01	Tert-Butyl Methyl Ether		U		Y	4
VN0410WBS01	VN0410WBS01	Tert-Butyl Methyl Ether	19.4			Y	4
VN0410WBSD01	VN0410WBSD01	Tert-Butyl Methyl Ether	20.8			Y	4
VX0408WBL01	VX0408WBL01	Tert-Butyl Methyl Ether		U		Y	4
VX0408WBS01	VX0408WBS01	Tert-Butyl Methyl Ether	18.9			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Tetrachloroethylene (PCE)		U		Y	4
VN0405WBL01	VN0405WBL01	Tetrachloroethylene (PCE)		U		Y	4
VN0405WBS01	VN0405WBS01	Tetrachloroethylene (PCE)	20.1			Y	4
VN0410WBL01	VN0410WBL01	Tetrachloroethylene (PCE)		U		Y	4
VN0410WBS01	VN0410WBS01	Tetrachloroethylene (PCE)	19			Y	4
VN0410WBSD01	VN0410WBSD01	Tetrachloroethylene (PCE)	20.2			Y	4
VX0408WBL01	VX0408WBL01	Tetrachloroethylene (PCE)		U		Y	4
VX0408WBS01	VX0408WBS01	Tetrachloroethylene (PCE)	19.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Toluene	410			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Toluene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Toluene	56			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Toluene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Toluene	2.2			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Toluene		U		Y	4
VN0405WBL01	VN0405WBL01	Toluene		U		Y	4
VN0405WBS01	VN0405WBS01	Toluene	19.6			Y	4
VN0410WBL01	VN0410WBL01	Toluene		U		Y	4
VN0410WBS01	VN0410WBS01	Toluene	18.3			Y	4
VN0410WBSD01	VN0410WBSD01	Toluene	20			Y	4
VX0408WBL01	VX0408WBL01	Toluene		U		Y	4
VX0408WBS01	VX0408WBS01	Toluene	18.9			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Toluene-D8	52.6			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Toluene-D8	52.6			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Toluene-D8	44.6			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Toluene-D8	52.3			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Toluene-D8	52.8			Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Toluene-D8	52.3			Y	4
VN0405WBL01	VN0405WBL01	Toluene-D8	52.9			Y	4
VN0405WBS01	VN0405WBS01	Toluene-D8	50.9			Y	4
VN0410WBL01	VN0410WBL01	Toluene-D8	37.9			Y	4
VN0410WBS01	VN0410WBS01	Toluene-D8	47.3			Y	4
VN0410WBSD01	VN0410WBSD01	Toluene-D8	49			Y	4
VX0408WBL01	VX0408WBL01	Toluene-D8	46.7			Y	4
VX0408WBS01	VX0408WBS01	Toluene-D8	48.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Trans-1,2-Dichloroethene		U		Y	4
VN0405WBL01	VN0405WBL01	Trans-1,2-Dichloroethene		U		Y	4
VN0405WBS01	VN0405WBS01	Trans-1,2-Dichloroethene	20			Y	4
VN0410WBL01	VN0410WBL01	Trans-1,2-Dichloroethene		U		Y	4
VN0410WBS01	VN0410WBS01	Trans-1,2-Dichloroethene	18.5			Y	4
VN0410WBSD01	VN0410WBSD01	Trans-1,2-Dichloroethene	19.9			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
VX0408WBL01	VX0408WBL01	Trans-1,2-Dichloroethene		U		Y	4
VX0408WBS01	VX0408WBS01	Trans-1,2-Dichloroethene	19.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Trans-1,3-Dichloropropene		U		Y	4
VN0405WBL01	VN0405WBL01	Trans-1,3-Dichloropropene		U		Y	4
VN0405WBS01	VN0405WBS01	Trans-1,3-Dichloropropene	19			Y	4
VN0410WBL01	VN0410WBL01	Trans-1,3-Dichloropropene		U		Y	4
VN0410WBS01	VN0410WBS01	Trans-1,3-Dichloropropene	17.8			Y	4
VN0410WBSD01	VN0410WBSD01	Trans-1,3-Dichloropropene	19.2			Y	4
VX0408WBL01	VX0408WBL01	Trans-1,3-Dichloropropene		U		Y	4
VX0408WBS01	VX0408WBS01	Trans-1,3-Dichloropropene	19			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Trichloroethylene (TCE)		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Trichloroethylene (TCE)		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Trichloroethylene (TCE)		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Trichloroethylene (TCE)		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Trichloroethylene (TCE)		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Trichloroethylene (TCE)		U		Y	4
VN0405WBL01	VN0405WBL01	Trichloroethylene (TCE)		U		Y	4
VN0405WBS01	VN0405WBS01	Trichloroethylene (TCE)	19.5			Y	4
VN0410WBL01	VN0410WBL01	Trichloroethylene (TCE)		U		Y	4
VN0410WBS01	VN0410WBS01	Trichloroethylene (TCE)	18.6			Y	4
VN0410WBSD01	VN0410WBSD01	Trichloroethylene (TCE)	20.2			Y	4
VX0408WBL01	VX0408WBL01	Trichloroethylene (TCE)		U		Y	4
VX0408WBS01	VX0408WBS01	Trichloroethylene (TCE)	19.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Trichlorofluoromethane		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Trichlorofluoromethane		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Trichlorofluoromethane		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Trichlorofluoromethane		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Trichlorofluoromethane		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Trichlorofluoromethane		U		Y	4
VN0405WBL01	VN0405WBL01	Trichlorofluoromethane		U		Y	4
VN0405WBS01	VN0405WBS01	Trichlorofluoromethane	21.8			Y	4
VN0410WBL01	VN0410WBL01	Trichlorofluoromethane		U		Y	4
VN0410WBS01	VN0410WBS01	Trichlorofluoromethane	19.5			Y	4
VN0410WBSD01	VN0410WBSD01	Trichlorofluoromethane	20.8			Y	4
VX0408WBL01	VX0408WBL01	Trichlorofluoromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Trichlorofluoromethane	18.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Vinyl Chloride		U		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Vinyl Chloride		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Vinyl Chloride		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Vinyl Chloride		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Vinyl Chloride		U		Y	4
QNWP8-TRIPBLANK-1-20180330	J2173-06	Vinyl Chloride		U		Y	4
VN0405WBL01	VN0405WBL01	Vinyl Chloride		U		Y	4
VN0405WBS01	VN0405WBS01	Vinyl Chloride	20.7			Y	4
VN0410WBL01	VN0410WBL01	Vinyl Chloride		U		Y	4
VN0410WBS01	VN0410WBS01	Vinyl Chloride	19.1			Y	4
VN0410WBSD01	VN0410WBSD01	Vinyl Chloride	20.2			Y	4
VX0408WBL01	VX0408WBL01	Vinyl Chloride		U		Y	4
VX0408WBS01	VX0408WBS01	Vinyl Chloride	18.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	1,2,4,5-Tetrachlorobenzene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	1,2,4,5-Tetrachlorobenzene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	1,2,4,5-Tetrachlorobenzene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	1,2,4,5-Tetrachlorobenzene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	1,2,4,5-Tetrachlorobenzene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	1,2,4,5-Tetrachlorobenzene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	1,2,4,5-Tetrachlorobenzene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	1,2,4,5-Tetrachlorobenzene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	1,2,4,5-Tetrachlorobenzene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	1,2,4,5-Tetrachlorobenzene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	1,2,4,5-Tetrachlorobenzene		UD	UJ	Y	4
PB107874BL	PB107874BL	1,2,4,5-Tetrachlorobenzene		U		Y	4
PB107874BS	PB107874BS	1,2,4,5-Tetrachlorobenzene	43.1		J	Y	4
PB107874BSD	PB107874BSD	1,2,4,5-Tetrachlorobenzene	34.7		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2,3,4,6-Tetrachlorophenol		U	UJ	Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW26S-GW-20180329	J2173-01DL	2,3,4,6-Tetrachlorophenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,3,4,6-Tetrachlorophenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,3,4,6-Tetrachlorophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,3,4,6-Tetrachlorophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,3,4,6-Tetrachlorophenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,3,4,6-Tetrachlorophenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,3,4,6-Tetrachlorophenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,3,4,6-Tetrachlorophenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,3,4,6-Tetrachlorophenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,3,4,6-Tetrachlorophenol		UD	UJ	Y	4
PB107874BL	PB107874BL	2,3,4,6-Tetrachlorophenol		U		Y	4
PB107874BS	PB107874BS	2,3,4,6-Tetrachlorophenol	49.1		J	Y	4
PB107874BSD	PB107874BSD	2,3,4,6-Tetrachlorophenol	38.8		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2,4,5-Trichlorophenol		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2,4,5-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,4,5-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,4,5-Trichlorophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,4,5-Trichlorophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,4,5-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,4,5-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,4,5-Trichlorophenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,4,5-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,4,5-Trichlorophenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,4,5-Trichlorophenol		UD	UJ	Y	4
PB107874BL	PB107874BL	2,4,5-Trichlorophenol		U		Y	4
PB107874BS	PB107874BS	2,4,5-Trichlorophenol	48.6		J	Y	4
PB107874BSD	PB107874BSD	2,4,5-Trichlorophenol	37		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2,4,6-Tribromophenol	95.7			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2,4,6-Tribromophenol	110			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,4,6-Tribromophenol	65.1			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,4,6-Tribromophenol	130			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,4,6-Tribromophenol	74.6			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,4,6-Tribromophenol	58.9			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,4,6-Tribromophenol	34.1			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,4,6-Tribromophenol	100			Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,4,6-Tribromophenol	92.9			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,4,6-Tribromophenol	110			Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,4,6-Tribromophenol	110			Y	4
PB107874BL	PB107874BL	2,4,6-Tribromophenol	140			Y	4
PB107874BS	PB107874BS	2,4,6-Tribromophenol	140			Y	4
PB107874BSD	PB107874BSD	2,4,6-Tribromophenol	110			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2,4,6-Trichlorophenol		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2,4,6-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,4,6-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,4,6-Trichlorophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,4,6-Trichlorophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,4,6-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,4,6-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,4,6-Trichlorophenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,4,6-Trichlorophenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,4,6-Trichlorophenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,4,6-Trichlorophenol		UD	UJ	Y	4
PB107874BL	PB107874BL	2,4,6-Trichlorophenol		U		Y	4
PB107874BS	PB107874BS	2,4,6-Trichlorophenol	49.4		J	Y	4
PB107874BSD	PB107874BSD	2,4,6-Trichlorophenol	39.3		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2,4-Dichlorophenol		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2,4-Dichlorophenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,4-Dichlorophenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,4-Dichlorophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,4-Dichlorophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,4-Dichlorophenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,4-Dichlorophenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,4-Dichlorophenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,4-Dichlorophenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,4-Dichlorophenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,4-Dichlorophenol		UD	UJ	Y	4
PB107874BL	PB107874BL	2,4-Dichlorophenol		U		Y	4
PB107874BS	PB107874BS	2,4-Dichlorophenol	54		J	Y	4
PB107874BSD	PB107874BSD	2,4-Dichlorophenol	41.1		J	Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW26S-GW-20180329	J2173-01	2,4-Dimethylphenol	680	EQ	JH	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2,4-Dimethylphenol	480	EDQ	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,4-Dimethylphenol	340	JDQ	J	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,4-Dimethylphenol		UQ	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,4-Dimethylphenol	200	EQ	JH	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,4-Dimethylphenol		UDQ	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,4-Dimethylphenol		UDQ	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,4-Dimethylphenol		UQ	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,4-Dimethylphenol		UDQ	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,4-Dimethylphenol		UQ	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,4-Dimethylphenol		UDQ	UJ	Y	4
PB107874BL	PB107874BL	2,4-Dimethylphenol		U		Y	4
PB107874BS	PB107874BS	2,4-Dimethylphenol	56.8		J	Y	4
PB107874BSD	PB107874BSD	2,4-Dimethylphenol	46.1		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2,4-Dinitrophenol		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2,4-Dinitrophenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,4-Dinitrophenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,4-Dinitrophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,4-Dinitrophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,4-Dinitrophenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,4-Dinitrophenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,4-Dinitrophenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,4-Dinitrophenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,4-Dinitrophenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,4-Dinitrophenol		UD	UJ	Y	4
PB107874BL	PB107874BL	2,4-Dinitrophenol		U		Y	4
PB107874BS	PB107874BS	2,4-Dinitrophenol	83.8	E	J	Y	4
PB107874BSD	PB107874BSD	2,4-Dinitrophenol	67.6		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2,4-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2,4-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,4-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,4-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,4-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,4-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,4-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,4-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,4-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,4-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,4-Dinitrotoluene		UD	UJ	Y	4
PB107874BL	PB107874BL	2,4-Dinitrotoluene		U		Y	4
PB107874BS	PB107874BS	2,4-Dinitrotoluene	46.7		J	Y	4
PB107874BSD	PB107874BSD	2,4-Dinitrotoluene	36.7		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2,6-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2,6-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2,6-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2,6-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2,6-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2,6-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2,6-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2,6-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2,6-Dinitrotoluene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2,6-Dinitrotoluene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2,6-Dinitrotoluene		UD	UJ	Y	4
PB107874BL	PB107874BL	2,6-Dinitrotoluene		U		Y	4
PB107874BS	PB107874BS	2,6-Dinitrotoluene	47.5		J	Y	4
PB107874BSD	PB107874BSD	2,6-Dinitrotoluene	36.9		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Chloronaphthalene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2-Chloronaphthalene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2-Chloronaphthalene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Chloronaphthalene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Chloronaphthalene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2-Chloronaphthalene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2-Chloronaphthalene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Chloronaphthalene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2-Chloronaphthalene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Chloronaphthalene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2-Chloronaphthalene		UD	UJ	Y	4
PB107874BL	PB107874BL	2-Chloronaphthalene		U		Y	4
PB107874BS	PB107874BS	2-Chloronaphthalene	44.1		J	Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
PB107874BSD	PB107874BSD	2-Chloronaphthalene	35.5		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Chlorophenol		UQ		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2-Chlorophenol		UDQ	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2-Chlorophenol		UDQ		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Chlorophenol		UQ		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Chlorophenol		UQ		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2-Chlorophenol		UDQ		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2-Chlorophenol		UDQ		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Chlorophenol		UQ		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2-Chlorophenol		UDQ		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Chlorophenol		UQ		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2-Chlorophenol		UDQ		Y	4
PB107874BL	PB107874BL	2-Chlorophenol		U		Y	4
PB107874BS	PB107874BS	2-Chlorophenol	54.7		J	Y	4
PB107874BSD	PB107874BSD	2-Chlorophenol	44.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Fluorobiphenyl	83.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2-Fluorobiphenyl	110			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2-Fluorobiphenyl	110			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Fluorobiphenyl	87.7			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Fluorobiphenyl	67.1			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2-Fluorobiphenyl	75.2			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2-Fluorobiphenyl	68.4			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Fluorobiphenyl	86.3			Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2-Fluorobiphenyl	110			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Fluorobiphenyl	87.7			Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2-Fluorobiphenyl	120			Y	4
PB107874BL	PB107874BL	2-Fluorobiphenyl	93.3			Y	4
PB107874BS	PB107874BS	2-Fluorobiphenyl	93.7			Y	4
PB107874BSD	PB107874BSD	2-Fluorobiphenyl	73.9			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Fluorophenol	21.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2-Fluorophenol	15.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2-Fluorophenol	2.3			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Fluorophenol	61.7			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Fluorophenol	31.8			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2-Fluorophenol	0.95			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2-Fluorophenol	3.3			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Fluorophenol	47.5			Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2-Fluorophenol	23.7			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Fluorophenol	42.6			Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2-Fluorophenol	50.3			Y	4
PB107874BL	PB107874BL	2-Fluorophenol	180			Y	4
PB107874BS	PB107874BS	2-Fluorophenol	170			Y	4
PB107874BSD	PB107874BSD	2-Fluorophenol	130			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Methylnaphthalene	300	E	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2-Methylnaphthalene	260	D	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2-Methylnaphthalene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Methylnaphthalene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Methylnaphthalene	300	E	JH	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2-Methylnaphthalene	210	JD	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2-Methylnaphthalene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Methylnaphthalene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2-Methylnaphthalene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Methylnaphthalene	2.5	J	J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2-Methylnaphthalene		UD	UJ	Y	4
PB107874BL	PB107874BL	2-Methylnaphthalene		U		Y	4
PB107874BS	PB107874BS	2-Methylnaphthalene	44.8		J	Y	4
PB107874BSD	PB107874BSD	2-Methylnaphthalene	36.3		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Methylphenol (O-Cresol)	33.6	Q	JH	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2-Methylphenol (O-Cresol)	53.1	DQ	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2-Methylphenol (O-Cresol)		UDQ	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Methylphenol (O-Cresol)		UQ	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Methylphenol (O-Cresol)	19.9	Q	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2-Methylphenol (O-Cresol)		UDQ	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2-Methylphenol (O-Cresol)		UDQ	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Methylphenol (O-Cresol)		UQ	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2-Methylphenol (O-Cresol)		UDQ	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Methylphenol (O-Cresol)		UQ	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2-Methylphenol (O-Cresol)		UDQ	UJ	Y	4
PB107874BL	PB107874BL	2-Methylphenol (O-Cresol)		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
PB107874BS	PB107874BS	2-Methylphenol (O-Cresol)	49.2		J	Y	4
PB107874BSD	PB107874BSD	2-Methylphenol (O-Cresol)	36.8		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Nitroaniline		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2-Nitroaniline		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2-Nitroaniline		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Nitroaniline		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Nitroaniline		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2-Nitroaniline		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2-Nitroaniline		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Nitroaniline		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2-Nitroaniline		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Nitroaniline		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2-Nitroaniline		UD		Y	4
PB107874BL	PB107874BL	2-Nitroaniline		U		Y	4
PB107874BS	PB107874BS	2-Nitroaniline	47.1			Y	4
PB107874BSD	PB107874BSD	2-Nitroaniline	38.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	2-Nitrophenol		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	2-Nitrophenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	2-Nitrophenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	2-Nitrophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	2-Nitrophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	2-Nitrophenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	2-Nitrophenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	2-Nitrophenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	2-Nitrophenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	2-Nitrophenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	2-Nitrophenol		UD	UJ	Y	4
PB107874BL	PB107874BL	2-Nitrophenol		U		Y	4
PB107874BS	PB107874BS	2-Nitrophenol	49.7		J	Y	4
PB107874BSD	PB107874BSD	2-Nitrophenol	37.7		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	3,3'-Dichlorobenzidine		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	3,3'-Dichlorobenzidine		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	3,3'-Dichlorobenzidine		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	3,3'-Dichlorobenzidine		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	3,3'-Dichlorobenzidine		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	3,3'-Dichlorobenzidine		UD		Y	4
PB107874BL	PB107874BL	3,3'-Dichlorobenzidine		U		Y	4
PB107874BS	PB107874BS	3,3'-Dichlorobenzidine	13.2			Y	4
PB107874BSD	PB107874BSD	3,3'-Dichlorobenzidine	11.3			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	3-Nitroaniline		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	3-Nitroaniline		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	3-Nitroaniline		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	3-Nitroaniline		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	3-Nitroaniline		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	3-Nitroaniline		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	3-Nitroaniline		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	3-Nitroaniline		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	3-Nitroaniline		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	3-Nitroaniline		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	3-Nitroaniline		UD		Y	4
PB107874BL	PB107874BL	3-Nitroaniline		U		Y	4
PB107874BS	PB107874BS	3-Nitroaniline	11.2			Y	4
PB107874BSD	PB107874BSD	3-Nitroaniline	10.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	4,6-Dinitro-2-Methylphenol		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	4,6-Dinitro-2-Methylphenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	4,6-Dinitro-2-Methylphenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	4,6-Dinitro-2-Methylphenol		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	4,6-Dinitro-2-Methylphenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	4,6-Dinitro-2-Methylphenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	4,6-Dinitro-2-Methylphenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	4,6-Dinitro-2-Methylphenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	4,6-Dinitro-2-Methylphenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	4,6-Dinitro-2-Methylphenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	4,6-Dinitro-2-Methylphenol		UD	UJ	Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
PB107874BL	PB107874BL	4,6-Dinitro-2-Methylphenol		U		Y	4
PB107874BS	PB107874BS	4,6-Dinitro-2-Methylphenol	41.8			Y	4
PB107874BSD	PB107874BSD	4,6-Dinitro-2-Methylphenol	34.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	4-Bromophenyl Phenyl Ether		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	4-Bromophenyl Phenyl Ether		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	4-Bromophenyl Phenyl Ether		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	4-Bromophenyl Phenyl Ether		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	4-Bromophenyl Phenyl Ether		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	4-Bromophenyl Phenyl Ether		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	4-Bromophenyl Phenyl Ether		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	4-Bromophenyl Phenyl Ether		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	4-Bromophenyl Phenyl Ether		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	4-Bromophenyl Phenyl Ether		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	4-Bromophenyl Phenyl Ether		UD		Y	4
PB107874BL	PB107874BL	4-Bromophenyl Phenyl Ether		U		Y	4
PB107874BS	PB107874BS	4-Bromophenyl Phenyl Ether	43.3			Y	4
PB107874BSD	PB107874BSD	4-Bromophenyl Phenyl Ether	36.3			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	4-Chloro-3-Methylphenol		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	4-Chloro-3-Methylphenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	4-Chloro-3-Methylphenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	4-Chloro-3-Methylphenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	4-Chloro-3-Methylphenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	4-Chloro-3-Methylphenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	4-Chloro-3-Methylphenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	4-Chloro-3-Methylphenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	4-Chloro-3-Methylphenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	4-Chloro-3-Methylphenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	4-Chloro-3-Methylphenol		UD	UJ	Y	4
PB107874BL	PB107874BL	4-Chloro-3-Methylphenol		U		Y	4
PB107874BS	PB107874BS	4-Chloro-3-Methylphenol	51.2		J	Y	4
PB107874BSD	PB107874BSD	4-Chloro-3-Methylphenol	40.5		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	4-Chloroaniline		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	4-Chloroaniline		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	4-Chloroaniline		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	4-Chloroaniline		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	4-Chloroaniline		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	4-Chloroaniline		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	4-Chloroaniline		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	4-Chloroaniline		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	4-Chloroaniline		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	4-Chloroaniline		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	4-Chloroaniline		UD	UJ	Y	4
PB107874BL	PB107874BL	4-Chloroaniline		U		Y	4
PB107874BS	PB107874BS	4-Chloroaniline	8	J	J	Y	4
PB107874BSD	PB107874BSD	4-Chloroaniline	5.8	J	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	4-Chlorophenyl Phenyl Ether		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	4-Chlorophenyl Phenyl Ether		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	4-Chlorophenyl Phenyl Ether		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	4-Chlorophenyl Phenyl Ether		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	4-Chlorophenyl Phenyl Ether		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	4-Chlorophenyl Phenyl Ether		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	4-Chlorophenyl Phenyl Ether		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	4-Chlorophenyl Phenyl Ether		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	4-Chlorophenyl Phenyl Ether		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	4-Chlorophenyl Phenyl Ether		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	4-Chlorophenyl Phenyl Ether		UD	UJ	Y	4
PB107874BL	PB107874BL	4-Chlorophenyl Phenyl Ether		U		Y	4
PB107874BS	PB107874BS	4-Chlorophenyl Phenyl Ether	44.1		J	Y	4
PB107874BSD	PB107874BSD	4-Chlorophenyl Phenyl Ether	35.4		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	4-Nitroaniline		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	4-Nitroaniline		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	4-Nitroaniline		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	4-Nitroaniline		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	4-Nitroaniline	2.4	J	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	4-Nitroaniline		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	4-Nitroaniline		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	4-Nitroaniline		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	4-Nitroaniline		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	4-Nitroaniline		U	UJ	Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW24D-GW-20180330	J2173-05DL	4-Nitroaniline		UD	UJ	Y	4
PB107874BL	PB107874BL	4-Nitroaniline		U		Y	4
PB107874BS	PB107874BS	4-Nitroaniline	36.3		J	Y	4
PB107874BSD	PB107874BSD	4-Nitroaniline	29.4		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	4-Nitrophenol		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	4-Nitrophenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	4-Nitrophenol		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	4-Nitrophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	4-Nitrophenol		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	4-Nitrophenol		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	4-Nitrophenol		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	4-Nitrophenol		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	4-Nitrophenol		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	4-Nitrophenol		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	4-Nitrophenol		UD	UJ	Y	4
PB107874BL	PB107874BL	4-Nitrophenol		U		Y	4
PB107874BS	PB107874BS	4-Nitrophenol	100	E	J	Y	4
PB107874BSD	PB107874BSD	4-Nitrophenol	79.6		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Acenaphthene	98	E	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Acenaphthene	140	D	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Acenaphthene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Acenaphthene	5.5	J	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Acenaphthene	96	E	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Acenaphthene	150	JD	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Acenaphthene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Acenaphthene	12.2		J	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Acenaphthene	12.6	JD	J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Acenaphthene	17		J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Acenaphthene	18.5	JD	J	Y	4
PB107874BL	PB107874BL	Acenaphthene		U		Y	4
PB107874BS	PB107874BS	Acenaphthene	49.5		J	Y	4
PB107874BSD	PB107874BSD	Acenaphthene	39.1		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Acenaphthylene	8.1	J	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Acenaphthylene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Acenaphthylene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Acenaphthylene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Acenaphthylene	3.7	J	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Acenaphthylene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Acenaphthylene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Acenaphthylene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Acenaphthylene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Acenaphthylene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Acenaphthylene		UD	UJ	Y	4
PB107874BL	PB107874BL	Acenaphthylene		U		Y	4
PB107874BS	PB107874BS	Acenaphthylene	43.7		J	Y	4
PB107874BSD	PB107874BSD	Acenaphthylene	35.4		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Acetophenone		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Acetophenone		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Acetophenone		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Acetophenone		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Acetophenone		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Acetophenone		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Acetophenone		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Acetophenone		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Acetophenone		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Acetophenone		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Acetophenone		UD	UJ	Y	4
PB107874BL	PB107874BL	Acetophenone		U		Y	4
PB107874BS	PB107874BS	Acetophenone	43.2		J	Y	4
PB107874BSD	PB107874BSD	Acetophenone	33.6		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Anthracene	14			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Anthracene	15.4	JD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Anthracene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Anthracene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Anthracene	3.1	J		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Anthracene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Anthracene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Anthracene	4	J		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Anthracene		UD		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW24D-GW-20180330	J2173-05	Anthracene	4.3	J		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Anthracene		UD		Y	4
PB107874BL	PB107874BL	Anthracene		U		Y	4
PB107874BS	PB107874BS	Anthracene	45.6			Y	4
PB107874BSD	PB107874BSD	Anthracene	37.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Atrazine		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Atrazine		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Atrazine		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Atrazine		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Atrazine		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Atrazine		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Atrazine		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Atrazine		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Atrazine		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Atrazine		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Atrazine		UD		Y	4
PB107874BL	PB107874BL	Atrazine		U		Y	4
PB107874BS	PB107874BS	Atrazine	46.4			Y	4
PB107874BSD	PB107874BSD	Atrazine	39			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Benzaldehyde		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Benzaldehyde		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Benzaldehyde		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Benzaldehyde		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Benzaldehyde		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Benzaldehyde		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Benzaldehyde		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Benzaldehyde		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Benzaldehyde		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Benzaldehyde		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Benzaldehyde		UD	UJ	Y	4
PB107874BL	PB107874BL	Benzaldehyde		U		Y	4
PB107874BS	PB107874BS	Benzaldehyde	22		J	Y	4
PB107874BSD	PB107874BSD	Benzaldehyde	16.7		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Benzo(A)Anthracene		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Benzo(A)Anthracene		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Benzo(A)Anthracene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Benzo(A)Anthracene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Benzo(A)Anthracene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Benzo(A)Anthracene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Benzo(A)Anthracene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Benzo(A)Anthracene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Benzo(A)Anthracene		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Benzo(A)Anthracene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Benzo(A)Anthracene		UD		Y	4
PB107874BL	PB107874BL	Benzo(A)Anthracene		U		Y	4
PB107874BS	PB107874BS	Benzo(A)Anthracene	44.2			Y	4
PB107874BSD	PB107874BSD	Benzo(A)Anthracene	36.3			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Benzo(A)Pyrene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Benzo(A)Pyrene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Benzo(A)Pyrene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Benzo(A)Pyrene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Benzo(A)Pyrene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Benzo(A)Pyrene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Benzo(A)Pyrene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Benzo(A)Pyrene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Benzo(A)Pyrene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Benzo(A)Pyrene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Benzo(A)Pyrene		UD	UJ	Y	4
PB107874BL	PB107874BL	Benzo(A)Pyrene		U		Y	4
PB107874BS	PB107874BS	Benzo(A)Pyrene	46.6		J	Y	4
PB107874BSD	PB107874BSD	Benzo(A)Pyrene	37.9		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Benzo(B)Fluoranthene		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Benzo(B)Fluoranthene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Benzo(B)Fluoranthene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Benzo(B)Fluoranthene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Benzo(B)Fluoranthene		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW24S-GW-20180330	J2173-04DL	Benzo(B)Fluoranthene		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Benzo(B)Fluoranthene		UD		Y	4
PB107874BL	PB107874BL	Benzo(B)Fluoranthene		U		Y	4
PB107874BS	PB107874BS	Benzo(B)Fluoranthene	44.1			Y	4
PB107874BSD	PB107874BSD	Benzo(B)Fluoranthene	36.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Benzo(G,H,I)Perylene		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Benzo(G,H,I)Perylene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Benzo(G,H,I)Perylene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Benzo(G,H,I)Perylene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Benzo(G,H,I)Perylene		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Benzo(G,H,I)Perylene		UD		Y	4
PB107874BL	PB107874BL	Benzo(G,H,I)Perylene		U		Y	4
PB107874BS	PB107874BS	Benzo(G,H,I)Perylene	47.3			Y	4
PB107874BSD	PB107874BSD	Benzo(G,H,I)Perylene	38.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Benzo(K)Fluoranthene		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Benzo(K)Fluoranthene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Benzo(K)Fluoranthene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Benzo(K)Fluoranthene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Benzo(K)Fluoranthene		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Benzo(K)Fluoranthene		UD		Y	4
PB107874BL	PB107874BL	Benzo(K)Fluoranthene		U		Y	4
PB107874BS	PB107874BS	Benzo(K)Fluoranthene	45			Y	4
PB107874BSD	PB107874BSD	Benzo(K)Fluoranthene	37.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Benzyl Butyl Phthalate		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Benzyl Butyl Phthalate		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Benzyl Butyl Phthalate		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Benzyl Butyl Phthalate		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Benzyl Butyl Phthalate		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Benzyl Butyl Phthalate		UD		Y	4
PB107874BL	PB107874BL	Benzyl Butyl Phthalate		U		Y	4
PB107874BS	PB107874BS	Benzyl Butyl Phthalate	44.7			Y	4
PB107874BSD	PB107874BSD	Benzyl Butyl Phthalate	37.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Biphenyl (Diphenyl)	46.1		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Biphenyl (Diphenyl)	59	D	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Biphenyl (Diphenyl)		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Biphenyl (Diphenyl)		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Biphenyl (Diphenyl)	38.7		J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Biphenyl (Diphenyl)		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Biphenyl (Diphenyl)		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Biphenyl (Diphenyl)	2.7	J	J	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Biphenyl (Diphenyl)		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Biphenyl (Diphenyl)	5.7	J	J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Biphenyl (Diphenyl)		UD	UJ	Y	4
PB107874BL	PB107874BL	Biphenyl (Diphenyl)		U		Y	4
PB107874BS	PB107874BS	Biphenyl (Diphenyl)	45		J	Y	4
PB107874BSD	PB107874BSD	Biphenyl (Diphenyl)	35.6		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Bis(2-Chloroethoxy) Methane		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Bis(2-Chloroethoxy) Methane		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Bis(2-Chloroethoxy) Methane		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Bis(2-Chloroethoxy) Methane		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Bis(2-Chloroethoxy) Methane		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Bis(2-Chloroethoxy) Methane		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Bis(2-Chloroethoxy) Methane		UD	UJ	Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW24S-GW-20180330	J2173-04	Bis(2-Chloroethoxy) Methane		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Bis(2-Chloroethoxy) Methane		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Bis(2-Chloroethoxy) Methane		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Bis(2-Chloroethoxy) Methane		UD	UJ	Y	4
PB107874BL	PB107874BL	Bis(2-Chloroethoxy) Methane		U		Y	4
PB107874BS	PB107874BS	Bis(2-Chloroethoxy) Methane	48.3		J	Y	4
PB107874BSD	PB107874BSD	Bis(2-Chloroethoxy) Methane	37.6		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD	UJ	Y	4
PB107874BL	PB107874BL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
PB107874BS	PB107874BS	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	40.2		J	Y	4
PB107874BSD	PB107874BSD	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	31.8		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Bis(2-Chloroisopropyl) Ether		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Bis(2-Chloroisopropyl) Ether		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Bis(2-Chloroisopropyl) Ether		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Bis(2-Chloroisopropyl) Ether		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Bis(2-Chloroisopropyl) Ether		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Bis(2-Chloroisopropyl) Ether		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Bis(2-Chloroisopropyl) Ether		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Bis(2-Chloroisopropyl) Ether		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Bis(2-Chloroisopropyl) Ether		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Bis(2-Chloroisopropyl) Ether		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Bis(2-Chloroisopropyl) Ether		UD	UJ	Y	4
PB107874BL	PB107874BL	Bis(2-Chloroisopropyl) Ether		U		Y	4
PB107874BS	PB107874BS	Bis(2-Chloroisopropyl) Ether	45.8			Y	4
PB107874BSD	PB107874BSD	Bis(2-Chloroisopropyl) Ether	36.9		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Bis(2-Ethylhexyl) Phthalate		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Bis(2-Ethylhexyl) Phthalate		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Bis(2-Ethylhexyl) Phthalate		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Bis(2-Ethylhexyl) Phthalate		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Bis(2-Ethylhexyl) Phthalate		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Bis(2-Ethylhexyl) Phthalate		UD		Y	4
PB107874BL	PB107874BL	Bis(2-Ethylhexyl) Phthalate		U		Y	4
PB107874BS	PB107874BS	Bis(2-Ethylhexyl) Phthalate	45.6			Y	4
PB107874BSD	PB107874BSD	Bis(2-Ethylhexyl) Phthalate	37.3			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Caprolactam		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Caprolactam		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Caprolactam		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Caprolactam		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Caprolactam		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Caprolactam		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Caprolactam		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Caprolactam		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Caprolactam		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Caprolactam		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Caprolactam		UD	UJ	Y	4
PB107874BL	PB107874BL	Caprolactam		U		Y	4
PB107874BS	PB107874BS	Caprolactam	52.4		J	Y	4
PB107874BSD	PB107874BSD	Caprolactam	39.2		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Carbazole	56.5			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Carbazole	63.5	D		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Carbazole		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Carbazole		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Carbazole	36.6			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Carbazole		UD		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW30D-GW-20180329	J2173-03DL2	Carbazole		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Carbazole	2.2	J		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Carbazole		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Carbazole	6.1	J		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Carbazole		UD		Y	4
PB107874BL	PB107874BL	Carbazole		U		Y	4
PB107874BS	PB107874BS	Carbazole	45.1			Y	4
PB107874BSD	PB107874BSD	Carbazole	37.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Chrysene		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Chrysene		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Chrysene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Chrysene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Chrysene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Chrysene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Chrysene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Chrysene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Chrysene		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Chrysene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Chrysene		UD		Y	4
PB107874BL	PB107874BL	Chrysene		U		Y	4
PB107874BS	PB107874BS	Chrysene	43.9			Y	4
PB107874BSD	PB107874BSD	Chrysene	35.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Dibenz(A,H)Anthracene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Dibenz(A,H)Anthracene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Dibenz(A,H)Anthracene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Dibenz(A,H)Anthracene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Dibenz(A,H)Anthracene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Dibenz(A,H)Anthracene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Dibenz(A,H)Anthracene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Dibenz(A,H)Anthracene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Dibenz(A,H)Anthracene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Dibenz(A,H)Anthracene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Dibenz(A,H)Anthracene		UD	UJ	Y	4
PB107874BL	PB107874BL	Dibenz(A,H)Anthracene		U		Y	4
PB107874BS	PB107874BS	Dibenz(A,H)Anthracene	47.6		J	Y	4
PB107874BSD	PB107874BSD	Dibenz(A,H)Anthracene	37.7		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Dibenzofuran	85.1	E	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Dibenzofuran	110	D	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Dibenzofuran		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Dibenzofuran		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Dibenzofuran	78		UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Dibenzofuran	110	JD	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Dibenzofuran		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Dibenzofuran	9.7	J	J	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Dibenzofuran		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Dibenzofuran	12.2		J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Dibenzofuran	12.9	JD	J	Y	4
PB107874BL	PB107874BL	Dibenzofuran		U		Y	4
PB107874BS	PB107874BS	Dibenzofuran	45.7		J	Y	4
PB107874BSD	PB107874BSD	Dibenzofuran	36.7		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Diethyl Phthalate		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Diethyl Phthalate		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Diethyl Phthalate		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Diethyl Phthalate		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Diethyl Phthalate		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Diethyl Phthalate		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Diethyl Phthalate		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Diethyl Phthalate		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Diethyl Phthalate		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Diethyl Phthalate		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Diethyl Phthalate		UD	UJ	Y	4
PB107874BL	PB107874BL	Diethyl Phthalate		U		Y	4
PB107874BS	PB107874BS	Diethyl Phthalate	45.4		J	Y	4
PB107874BSD	PB107874BSD	Diethyl Phthalate	36.2		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Dimethyl Phthalate	5.8	J	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Dimethyl Phthalate		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Dimethyl Phthalate		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Dimethyl Phthalate		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Dimethyl Phthalate	3.5	J	UJ	Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW30D-GW-20180329	J2173-03DL	Dimethyl Phthalate		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Dimethyl Phthalate		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Dimethyl Phthalate	2.4	J	J	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Dimethyl Phthalate		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Dimethyl Phthalate	2.1	J	J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Dimethyl Phthalate		UD	UJ	Y	4
PB107874BL	PB107874BL	Dimethyl Phthalate		U		Y	4
PB107874BS	PB107874BS	Dimethyl Phthalate	43.6		J	Y	4
PB107874BSD	PB107874BSD	Dimethyl Phthalate	35.2		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Di-N-Butyl Phthalate		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Di-N-Butyl Phthalate		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Di-N-Butyl Phthalate		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Di-N-Butyl Phthalate		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Di-N-Butyl Phthalate		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Di-N-Butyl Phthalate		UD		Y	4
PB107874BL	PB107874BL	Di-N-Butyl Phthalate		U		Y	4
PB107874BS	PB107874BS	Di-N-Butyl Phthalate	45.6			Y	4
PB107874BSD	PB107874BSD	Di-N-Butyl Phthalate	38.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Di-N-Octylphthalate		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Di-N-Octylphthalate		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Di-N-Octylphthalate		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Di-N-Octylphthalate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Di-N-Octylphthalate		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Di-N-Octylphthalate		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Di-N-Octylphthalate		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Di-N-Octylphthalate		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Di-N-Octylphthalate		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Di-N-Octylphthalate		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Di-N-Octylphthalate		UD		Y	4
PB107874BL	PB107874BL	Di-N-Octylphthalate		U		Y	4
PB107874BS	PB107874BS	Di-N-Octylphthalate	51.2			Y	4
PB107874BSD	PB107874BSD	Di-N-Octylphthalate	42.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Fluoranthene	7.7	J		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Fluoranthene		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Fluoranthene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Fluoranthene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Fluoranthene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Fluoranthene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Fluoranthene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Fluoranthene	2.4	J		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Fluoranthene		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Fluoranthene	2.8	J		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Fluoranthene		UD		Y	4
PB107874BL	PB107874BL	Fluoranthene		U		Y	4
PB107874BS	PB107874BS	Fluoranthene	45.5			Y	4
PB107874BSD	PB107874BSD	Fluoranthene	37.7			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Fluorene	60.2		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Fluorene	79.6	D	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Fluorene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Fluorene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Fluorene	39.1		J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Fluorene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Fluorene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Fluorene	9.8	J	J	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Fluorene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Fluorene	12		J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Fluorene	13.2	JD	J	Y	4
PB107874BL	PB107874BL	Fluorene		U		Y	4
PB107874BS	PB107874BS	Fluorene	45.1		J	Y	4
PB107874BSD	PB107874BSD	Fluorene	36.2		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Hexachlorobenzene		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Hexachlorobenzene		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Hexachlorobenzene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Hexachlorobenzene		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW30D-GW-20180329	J2173-03	Hexachlorobenzene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Hexachlorobenzene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Hexachlorobenzene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Hexachlorobenzene		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Hexachlorobenzene		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Hexachlorobenzene		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Hexachlorobenzene		UD		Y	4
PB107874BL	PB107874BL	Hexachlorobenzene		U		Y	4
PB107874BS	PB107874BS	Hexachlorobenzene	41.3			Y	4
PB107874BSD	PB107874BSD	Hexachlorobenzene	34.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Hexachlorobutadiene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Hexachlorobutadiene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Hexachlorobutadiene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Hexachlorobutadiene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Hexachlorobutadiene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Hexachlorobutadiene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Hexachlorobutadiene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Hexachlorobutadiene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Hexachlorobutadiene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Hexachlorobutadiene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Hexachlorobutadiene		UD	UJ	Y	4
PB107874BL	PB107874BL	Hexachlorobutadiene		U		Y	4
PB107874BS	PB107874BS	Hexachlorobutadiene	40.9		J	Y	4
PB107874BSD	PB107874BSD	Hexachlorobutadiene	32.3		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Hexachlorocyclopentadiene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Hexachlorocyclopentadiene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Hexachlorocyclopentadiene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Hexachlorocyclopentadiene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Hexachlorocyclopentadiene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Hexachlorocyclopentadiene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Hexachlorocyclopentadiene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Hexachlorocyclopentadiene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Hexachlorocyclopentadiene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Hexachlorocyclopentadiene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Hexachlorocyclopentadiene		UD	UJ	Y	4
PB107874BL	PB107874BL	Hexachlorocyclopentadiene		U		Y	4
PB107874BS	PB107874BS	Hexachlorocyclopentadiene	93.9	E	J	Y	4
PB107874BSD	PB107874BSD	Hexachlorocyclopentadiene	76.3		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Hexachloroethane		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Hexachloroethane		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Hexachloroethane		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Hexachloroethane		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Hexachloroethane		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Hexachloroethane		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Hexachloroethane		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Hexachloroethane		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Hexachloroethane		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Hexachloroethane		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Hexachloroethane		UD	UJ	Y	4
PB107874BL	PB107874BL	Hexachloroethane		U		Y	4
PB107874BS	PB107874BS	Hexachloroethane	44.9		J	Y	4
PB107874BSD	PB107874BSD	Hexachloroethane	36		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Indeno(1,2,3-C,D)Pyrene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Indeno(1,2,3-C,D)Pyrene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Indeno(1,2,3-C,D)Pyrene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Indeno(1,2,3-C,D)Pyrene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Indeno(1,2,3-C,D)Pyrene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Indeno(1,2,3-C,D)Pyrene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Indeno(1,2,3-C,D)Pyrene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Indeno(1,2,3-C,D)Pyrene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Indeno(1,2,3-C,D)Pyrene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Indeno(1,2,3-C,D)Pyrene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Indeno(1,2,3-C,D)Pyrene		UD	UJ	Y	4
PB107874BL	PB107874BL	Indeno(1,2,3-C,D)Pyrene		U		Y	4
PB107874BS	PB107874BS	Indeno(1,2,3-C,D)Pyrene	47.7		J	Y	4
PB107874BSD	PB107874BSD	Indeno(1,2,3-C,D)Pyrene	38.6		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Isophorone		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Isophorone		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Isophorone		UD	UJ	Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW30S-GW-20180329	J2173-02	Isophorone		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Isophorone		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Isophorone		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Isophorone		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Isophorone		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Isophorone		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Isophorone		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Isophorone		UD	UJ	Y	4
PB107874BL	PB107874BL	Isophorone		U		Y	4
PB107874BS	PB107874BS	Isophorone	46.5		J	Y	4
PB107874BSD	PB107874BSD	Isophorone	37.2		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	M+P MethylPhenol	120	EQ		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	M+P MethylPhenol	140	DQ		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	M+P MethylPhenol		UDQ		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	M+P MethylPhenol		UQ		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	M+P MethylPhenol	29.3	Q		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	M+P MethylPhenol		UDQ		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	M+P MethylPhenol		UDQ		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	M+P MethylPhenol		UQ		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	M+P MethylPhenol		UDQ		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	M+P MethylPhenol		UQ		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	M+P MethylPhenol		UDQ		Y	4
PB107874BL	PB107874BL	M+P MethylPhenol		U		Y	4
PB107874BS	PB107874BS	M+P MethylPhenol	49.2		J	Y	4
PB107874BSD	PB107874BSD	M+P MethylPhenol	40.9			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Naphthalene	2000	E	JH	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Naphthalene	3100	ED	J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Naphthalene	6100	D	J	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Naphthalene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Naphthalene	1700	E	JH	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Naphthalene	4300	ED	J	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Naphthalene	3900	D	J	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Naphthalene	140	E	J	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Naphthalene	180	D	J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Naphthalene	240	E	J	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Naphthalene	370	D	J	Y	4
PB107874BL	PB107874BL	Naphthalene		U		Y	4
PB107874BS	PB107874BS	Naphthalene	45.5		J	Y	4
PB107874BSD	PB107874BSD	Naphthalene	36.2		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Nitrobenzene		U	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Nitrobenzene		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Nitrobenzene		UD	UJ	Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Nitrobenzene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Nitrobenzene		U	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Nitrobenzene		UD	UJ	Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Nitrobenzene		UD	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Nitrobenzene		U	UJ	Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Nitrobenzene		UD	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Nitrobenzene		U	UJ	Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Nitrobenzene		UD	UJ	Y	4
PB107874BL	PB107874BL	Nitrobenzene		U		Y	4
PB107874BS	PB107874BS	Nitrobenzene	43.8		J	Y	4
PB107874BSD	PB107874BSD	Nitrobenzene	35.4		J	Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Nitrobenzene-D5	180			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Nitrobenzene-D5	120			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Nitrobenzene-D5	20.1			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Nitrobenzene-D5	89.1			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Nitrobenzene-D5	130			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Nitrobenzene-D5	16			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Nitrobenzene-D5	8.1			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Nitrobenzene-D5	83			Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Nitrobenzene-D5	78			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Nitrobenzene-D5	92.3			Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Nitrobenzene-D5	74.7			Y	4
PB107874BL	PB107874BL	Nitrobenzene-D5	93			Y	4
PB107874BS	PB107874BS	Nitrobenzene-D5	93			Y	4
PB107874BSD	PB107874BSD	Nitrobenzene-D5	70			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	N-Nitrosodi-N-Propylamine		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	N-Nitrosodi-N-Propylamine		UD		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW26S-GW-20180329	J2173-01DL2	N-Nitrosodi-N-Propylamine		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	N-Nitrosodi-N-Propylamine		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	N-Nitrosodi-N-Propylamine		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	N-Nitrosodi-N-Propylamine		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	N-Nitrosodi-N-Propylamine		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	N-Nitrosodi-N-Propylamine		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	N-Nitrosodi-N-Propylamine		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	N-Nitrosodi-N-Propylamine		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	N-Nitrosodi-N-Propylamine		UD		Y	4
PB107874BL	PB107874BL	N-Nitrosodi-N-Propylamine		U		Y	4
PB107874BS	PB107874BS	N-Nitrosodi-N-Propylamine	44.8		J	Y	4
PB107874BSD	PB107874BSD	N-Nitrosodi-N-Propylamine	36.7			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	N-Nitrosodiphenylamine		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	N-Nitrosodiphenylamine		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	N-Nitrosodiphenylamine		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	N-Nitrosodiphenylamine		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	N-Nitrosodiphenylamine		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	N-Nitrosodiphenylamine		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	N-Nitrosodiphenylamine		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	N-Nitrosodiphenylamine		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	N-Nitrosodiphenylamine		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	N-Nitrosodiphenylamine		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	N-Nitrosodiphenylamine		UD		Y	4
PB107874BL	PB107874BL	N-Nitrosodiphenylamine		U		Y	4
PB107874BS	PB107874BS	N-Nitrosodiphenylamine	43.9			Y	4
PB107874BSD	PB107874BSD	N-Nitrosodiphenylamine	36.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Pentachlorophenol		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Pentachlorophenol		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Pentachlorophenol		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Pentachlorophenol		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Pentachlorophenol		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Pentachlorophenol		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Pentachlorophenol		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Pentachlorophenol		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Pentachlorophenol		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Pentachlorophenol		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Pentachlorophenol		UD		Y	4
PB107874BL	PB107874BL	Pentachlorophenol		U		Y	4
PB107874BS	PB107874BS	Pentachlorophenol	80.1	E	J	Y	4
PB107874BSD	PB107874BSD	Pentachlorophenol	65.6			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Phenanthrene	78.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Phenanthrene	92.8	D		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Phenanthrene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Phenanthrene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Phenanthrene	36.9			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Phenanthrene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Phenanthrene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Phenanthrene	16			Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Phenanthrene	15.8	JD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Phenanthrene	17.1			Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Phenanthrene	19.6	JD		Y	4
PB107874BL	PB107874BL	Phenanthrene		U		Y	4
PB107874BS	PB107874BS	Phenanthrene	44.2			Y	4
PB107874BSD	PB107874BSD	Phenanthrene	36.4			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Phenol		U		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Phenol		UD	UJ	Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Phenol		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Phenol		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Phenol	9.7	J		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Phenol		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Phenol		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Phenol		U		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Phenol		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Phenol		U		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Phenol		UD		Y	4
PB107874BL	PB107874BL	Phenol		U		Y	4
PB107874BS	PB107874BS	Phenol	53		J	Y	4
PB107874BSD	PB107874BSD	Phenol	43.9			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Phenol-D6	31			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW26S-GW-20180329	J2173-01DL	Phenol-D6	32.1			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Phenol-D6	0			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Phenol-D6	31.4			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Phenol-D6	23.1			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Phenol-D6	1.8			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Phenol-D6	0			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Phenol-D6	30.3			Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Phenol-D6	17.3			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Phenol-D6	28			Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Phenol-D6	31.1			Y	4
PB107874BL	PB107874BL	Phenol-D6	160			Y	4
PB107874BS	PB107874BS	Phenol-D6	160			Y	4
PB107874BSD	PB107874BSD	Phenol-D6	120			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Pyrene	4.5	J		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Pyrene		UD		Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Pyrene		UD		Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Pyrene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Pyrene		U		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Pyrene		UD		Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Pyrene		UD		Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Pyrene	2	J		Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Pyrene		UD		Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Pyrene	2.7	J		Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Pyrene		UD		Y	4
PB107874BL	PB107874BL	Pyrene		U		Y	4
PB107874BS	PB107874BS	Pyrene	43.4			Y	4
PB107874BSD	PB107874BSD	Pyrene	35.7			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Terphenyl-D14	58.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Terphenyl-D14	58.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Terphenyl-D14	64.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL	Terphenyl-D14	64.2			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Terphenyl-D14	62.8			Y	4
QNWP8-MW26S-GW-20180329	J2173-01DL2	Terphenyl-D14	62.8			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Terphenyl-D14	83.3			Y	4
QNWP8-MW30S-GW-20180329	J2173-02	Terphenyl-D14	83.3			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Terphenyl-D14	48.9			Y	4
QNWP8-MW30D-GW-20180329	J2173-03	Terphenyl-D14	48.9			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Terphenyl-D14	71.3			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL	Terphenyl-D14	71.3			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Terphenyl-D14	69.4			Y	4
QNWP8-MW30D-GW-20180329	J2173-03DL2	Terphenyl-D14	69.4			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Terphenyl-D14	76.7			Y	4
QNWP8-MW24S-GW-20180330	J2173-04	Terphenyl-D14	76.7			Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Terphenyl-D14	77.6			Y	4
QNWP8-MW24S-GW-20180330	J2173-04DL	Terphenyl-D14	77.6			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Terphenyl-D14	81.7			Y	4
QNWP8-MW24D-GW-20180330	J2173-05	Terphenyl-D14	81.7			Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Terphenyl-D14	94.2			Y	4
QNWP8-MW24D-GW-20180330	J2173-05DL	Terphenyl-D14	94.2			Y	4
PB107874BL	PB107874BL	Terphenyl-D14	90.8			Y	4
PB107874BL	PB107874BL	Terphenyl-D14	90.8			Y	4
PB107874BS	PB107874BS	Terphenyl-D14	93.7			Y	4
PB107874BS	PB107874BS	Terphenyl-D14	93.7			Y	4
PB107874BSD	PB107874BSD	Terphenyl-D14	75			Y	4
PB107874BSD	PB107874BSD	Terphenyl-D14	75			Y	4
QNWP8-MW26S-GW-20180329	J2173-01	Sulfide	36.2			N	
QNWP8-MW26S-GWMS	J2173-01MS	Sulfide	76.5			N	
QNWP8-MW26S-GWMSD	J2173-01MSD	Sulfide	76.3			N	
QNWP8-MW30S-GW-20180329	J2173-02	Sulfide	6.56			N	
QNWP8-MW30D-GW-20180329	J2173-03	Sulfide	8.96			N	
QNWP8-MW24S-GW-20180330	J2173-04	Sulfide	7.68			N	
QNWP8-MW24D-GW-20180330	J2173-05	Sulfide	8.48			N	
PB107907BL	PB107907BL	Sulfide		U		N	
PB107907BS	PB107907BS	Sulfide	20.0			N	

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Queens W. Hunter's Point
Chemtech SDG#J2216
April 30, 2018
Sampling date: 3/28/2018, 4/3/2018

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for LiRo Engineers, Inc., project located at Queens W. Hunter's Point, Chemtech, SDG#J2216 submitted to Vali-Data of WNY, LLC on April 18, 2018. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocols and USEPA National Functional Guidelines. The laboratory performed the analysis using USEPA method Volatile Organics (8260C) and Semi-Volatile Organics (8270D).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below in Surrogate Spike Recoveries and Laboratory Control Samples.

Sample, QNWP8-MW27S-GW, was diluted due to high target concentration

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met.

The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of Toluene-d_8 and 4-Bromofluorobenzene were outside ASP QC limits, low in VX0411WBL01 and QNWP8-MW27S-GW. Associated target analytes in these samples should be qualified as estimated.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except the %Rec of Bromomethane was outside QC limits, low in VX0411WBS01. This target analyte should be qualified as estimated in the associated samples.

MS/MSD
No MS/MSD was acquired for these samples.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

SEMI-VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Surrogate Spike Recoveries and Laboratory Control Samples.

Sample; QNWP8-MW27S-GW was diluted due to high target analyte concentration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
The data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met except the %Rec of 2-Fluorophenol was outside ASP QC limits, high in PB108007BL and PB108007BS. The %Rec of Phenol-d_5 was outside QC limits, high in PB108007BL. Associated target analytes in these samples should be qualified as estimated high, if detected.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except the %Rec of 2-Chlorophenol, 2-Methylphenol, 3+4-Methylphenols and 2,4-Dimethylphenol was outside QC limits, high in PB108007BS. These target analytes should be qualified as estimated in PB108007BS and the associated samples in which they were detected.
Hexachlorocyclopentadiene and 2,4-Dinitrophenol were qualified with an 'E' due to exceeding the calibration range in PB108007BS. These target analytes should be qualified as estimated in PB108007BS and in the associated samples, if detected.

MS/MSD
No MS/MSD was acquired for these samples.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes whose %RSD>15%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
LB94395BLW	LB94395BLW	Bromide		U		N	
LB94395BSW	LB94395BSW	Bromide	9.7			N	
LB94395BLW	LB94395BLW	Chloride (As Cl)		U		N	
LB94395BSW	LB94395BSW	Chloride (As Cl)	2.9			N	
LB94395BLW	LB94395BLW	Fluoride		U		N	
LB94395BSW	LB94395BSW	Fluoride	2.1			N	
LB94395BLW	LB94395BLW	Nitrogen, Nitrate (As N)		U		N	
LB94395BSW	LB94395BSW	Nitrogen, Nitrate (As N)	2.4			N	
LB94395BLW	LB94395BLW	Nitrogen, Nitrite		U		N	
LB94395BSW	LB94395BSW	Nitrogen, Nitrite	2.9			N	
LB94395BLW	LB94395BLW	Phosphorus, Total Orthophosphate (As PO4)		U		N	
LB94395BSW	LB94395BSW	Phosphorus, Total Orthophosphate (As PO4)	5			N	
QNWP8-MW25S-GW-20180403	J2216-01	Sulfate (As SO4)	387	OR		N	
QNWP8-MW25S-GW-20180403	J2216-01DL	Sulfate (As SO4)	287	D		N	
QNWP8-MW25D-GW-20180403	J2216-02	Sulfate (As SO4)	858	OR		N	
QNWP8-MW25D-GW-20180403	J2216-02DL	Sulfate (As SO4)	638	D		N	
QNWP8-MW27S-GW-20180403	J2216-03	Sulfate (As SO4)	308	OR		N	
QNWP8-MW27S-GW-20180403	J2216-03DL	Sulfate (As SO4)	239	D		N	
LB94395BLW	LB94395BLW	Sulfate (As SO4)		U		N	
LB94395BSW	LB94395BSW	Sulfate (As SO4)	14.9			N	
QNWP8-MW25S-GW-20180403	J2216-01	Alkalinity, Total (As CaCO3)	236			N	
QNWP8-MW25D-GW-20180403	J2216-02	Alkalinity, Total (As CaCO3)	228			N	
QNWP8-MW27S-GW-20180403	J2216-03	Alkalinity, Total (As CaCO3)	173			N	
LB94482BLW	LB94482BLW	Alkalinity, Total (As CaCO3)		U		N	
LB94482BSW	LB94482BSW	Alkalinity, Total (As CaCO3)	47.8			N	
QNWP8-MW25S-GW-20180403	J2216-01	Iron	593			N	
QNWP8-MW25S-GWMS	J2216-01MS	Iron	2160			N	
QNWP8-MW25S-GWMSD	J2216-01MSD	Iron	2170			N	
QNWP8-MW25D-GW-20180403	J2216-02	Iron	137			N	
QNWP8-MW27S-GW-20180403	J2216-03	Iron	2040			N	
QNWP8-EQUIP-BLANK-20180403	J2216-04	Iron		U		N	
PB108006BL	PB108006BL	Iron		U		N	
PB108006BS	PB108006BS	Iron	1610			N	
BSF0405W1	BSF0405W1	1,1,1-Trifluorotoluene	20.16			N	
QNWP8-MW25S-GW-20180403	J2216-01	1,1,1-Trifluorotoluene	19.58			N	
QNWP8-MW25D-GW-20180403	J2216-02	1,1,1-Trifluorotoluene	20.87			N	
QNWP8-MW27S-GW-20180403	J2216-03	1,1,1-Trifluorotoluene	20.29			N	
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,1,1-Trifluorotoluene	20.15			N	
QNWP8-EQUIP-BLANKMS	J2216-04MS	1,1,1-Trifluorotoluene	20.21			N	
QNWP8-EQUIP-BLANKMSD	J2216-04MSD	1,1,1-Trifluorotoluene	20.01			N	
VBF0405W1	VBF0405W1	1,1,1-Trifluorotoluene	20.37			N	
QNWP8-MW25S-GW-20180403	J2216-01	PHC As Diesel Fuel	132			N	
QNWP8-MW25D-GW-20180403	J2216-02	PHC As Diesel Fuel	133			N	
QNWP8-MW27S-GW-20180403	J2216-03	PHC As Diesel Fuel	2060	E		N	
QNWP8-MW27S-GW-20180403	J2216-03	PHC As Diesel Fuel	3010			N	
QNWP8-EQUIP-BLANK-20180403	J2216-04	PHC As Diesel Fuel	71			N	
PB108009BL	PB108009BL	PHC As Diesel Fuel		U		N	
PB108009BS	PB108009BS	PHC As Diesel Fuel	157			N	
PB108009BSD	PB108009BSD	PHC As Diesel Fuel	163			N	
BSF0405W1	BSF0405W1	PHC As Gasoline	140			N	
QNWP8-MW25S-GW-20180403	J2216-01	PHC As Gasoline	14	J		N	
QNWP8-MW25D-GW-20180403	J2216-02	PHC As Gasoline		U		N	
QNWP8-MW27S-GW-20180403	J2216-03	PHC As Gasoline	884			N	
QNWP8-EQUIP-BLANK-20180403	J2216-04	PHC As Gasoline		U		N	
QNWP8-EQUIP-BLANKMS	J2216-04MS	PHC As Gasoline	145			N	
QNWP8-EQUIP-BLANKMSD	J2216-04MSD	PHC As Gasoline	148			N	
VBF0405W1	VBF0405W1	PHC As Gasoline		U		N	
QNWP8-MW25S-GW-20180403	J2216-01	Tetracosane-D50	9.90			N	
QNWP8-MW25D-GW-20180403	J2216-02	Tetracosane-D50	13.45			N	
QNWP8-MW27S-GW-20180403	J2216-03	Tetracosane-D50	3.56			N	
QNWP8-EQUIP-BLANK-20180403	J2216-04	Tetracosane-D50	11.15			N	
PB108009BL	PB108009BL	Tetracosane-D50	10.69			N	
PB108009BS	PB108009BS	Tetracosane-D50	11.62			N	
PB108009BSD	PB108009BSD	Tetracosane-D50	11.80			N	
QNWP8-MW25S-GW-20180403	J2216-01	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,1,1-Trichloroethane (TCA)		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW27S-GW-20180403	J2216-03	1,1,1-Trichloroethane (TCA)		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,1,1-Trichloroethane (TCA)		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,1,1-Trichloroethane (TCA)		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,1,1-Trichloroethane (TCA)		U		Y	4
VX0408WBL01	VX0408WBL01	1,1,1-Trichloroethane (TCA)		U		Y	4
VX0408WBS01	VX0408WBS01	1,1,1-Trichloroethane (TCA)	18.5			Y	4
VX0411WBL01	VX0411WBL01	1,1,1-Trichloroethane (TCA)		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	1,1,1-Trichloroethane (TCA)	21.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,1,2,2-Tetrachloroethane		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,1,2,2-Tetrachloroethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,1,2,2-Tetrachloroethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,1,2,2-Tetrachloroethane		U		Y	4
VX0408WBL01	VX0408WBL01	1,1,2,2-Tetrachloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,1,2,2-Tetrachloroethane	18.6			Y	4
VX0411WBL01	VX0411WBL01	1,1,2,2-Tetrachloroethane		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	1,1,2,2-Tetrachloroethane	20.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,1,2-Trichloro-1,2,2-Trifluoroethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
VX0408WBL01	VX0408WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	19.6			Y	4
VX0411WBL01	VX0411WBL01	1,1,2-Trichloro-1,2,2-Trifluoroethane		U		Y	4
VX0411WBS01	VX0411WBS01	1,1,2-Trichloro-1,2,2-Trifluoroethane	20.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,1,2-Trichloroethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,1,2-Trichloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,1,2-Trichloroethane		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,1,2-Trichloroethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,1,2-Trichloroethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,1,2-Trichloroethane		U		Y	4
VX0408WBL01	VX0408WBL01	1,1,2-Trichloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,1,2-Trichloroethane	19.5			Y	4
VX0411WBL01	VX0411WBL01	1,1,2-Trichloroethane		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	1,1,2-Trichloroethane	20.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,1-Dichloroethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,1-Dichloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,1-Dichloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,1-Dichloroethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,1-Dichloroethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,1-Dichloroethane		U		Y	4
VX0408WBL01	VX0408WBL01	1,1-Dichloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,1-Dichloroethane	18.5			Y	4
VX0411WBL01	VX0411WBL01	1,1-Dichloroethane		U		Y	4
VX0411WBS01	VX0411WBS01	1,1-Dichloroethane	21.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,1-Dichloroethene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,1-Dichloroethene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,1-Dichloroethene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,1-Dichloroethene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,1-Dichloroethene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,1-Dichloroethene		U		Y	4
VX0408WBL01	VX0408WBL01	1,1-Dichloroethene		U		Y	4
VX0408WBS01	VX0408WBS01	1,1-Dichloroethene	18.6			Y	4
VX0411WBL01	VX0411WBL01	1,1-Dichloroethene		U		Y	4
VX0411WBS01	VX0411WBS01	1,1-Dichloroethene	20.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2,3-Trichlorobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2,3-Trichlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,2,3-Trichlorobenzene		U		Y	4
VX0408WBL01	VX0408WBL01	1,2,3-Trichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,2,3-Trichlorobenzene	19.8			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
VX0411WBL01	VX0411WBL01	1,2,3-Trichlorobenzene		U		Y	4
VX0411WBS01	VX0411WBS01	1,2,3-Trichlorobenzene	20.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2,4-Trichlorobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2,4-Trichlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,2,4-Trichlorobenzene		U		Y	4
VX0408WBL01	VX0408WBL01	1,2,4-Trichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,2,4-Trichlorobenzene	19.5			Y	4
VX0411WBL01	VX0411WBL01	1,2,4-Trichlorobenzene		U		Y	4
VX0411WBS01	VX0411WBS01	1,2,4-Trichlorobenzene	19.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2-Dibromo-3-Chloropropane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2-Dibromo-3-Chloropropane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,2-Dibromo-3-Chloropropane		U		Y	4
VX0408WBL01	VX0408WBL01	1,2-Dibromo-3-Chloropropane		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dibromo-3-Chloropropane	17.6			Y	4
VX0411WBL01	VX0411WBL01	1,2-Dibromo-3-Chloropropane		U		Y	4
VX0411WBS01	VX0411WBS01	1,2-Dibromo-3-Chloropropane	20.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2-Dibromoethane (Ethylene Dibromide)		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2-Dibromoethane (Ethylene Dibromide)		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
VX0408WBL01	VX0408WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dibromoethane (Ethylene Dibromide)	18.8			Y	4
VX0411WBL01	VX0411WBL01	1,2-Dibromoethane (Ethylene Dibromide)		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	1,2-Dibromoethane (Ethylene Dibromide)	20.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2-Dichlorobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2-Dichlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,2-Dichlorobenzene		U		Y	4
VX0408WBL01	VX0408WBL01	1,2-Dichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dichlorobenzene	19.6			Y	4
VX0411WBL01	VX0411WBL01	1,2-Dichlorobenzene		U		Y	4
VX0411WBS01	VX0411WBS01	1,2-Dichlorobenzene	20.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2-Dichloroethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2-Dichloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2-Dichloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2-Dichloroethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2-Dichloroethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,2-Dichloroethane		U		Y	4
VX0408WBL01	VX0408WBL01	1,2-Dichloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dichloroethane	18.8			Y	4
VX0411WBL01	VX0411WBL01	1,2-Dichloroethane		U		Y	4
VX0411WBS01	VX0411WBS01	1,2-Dichloroethane	20.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2-Dichloroethane-D4	44.8			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2-Dichloroethane-D4	45.3			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2-Dichloroethane-D4	43.9			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2-Dichloroethane-D4	39.8			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2-Dichloroethane-D4	44.7			Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,2-Dichloroethane-D4	44.9			Y	4
VX0408WBL01	VX0408WBL01	1,2-Dichloroethane-D4	43.8			Y	4
VX0408WBS01	VX0408WBS01	1,2-Dichloroethane-D4	45.2			Y	4
VX0411WBL01	VX0411WBL01	1,2-Dichloroethane-D4	39.9			Y	4
VX0411WBS01	VX0411WBS01	1,2-Dichloroethane-D4	52.6			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2-Dichloropropane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2-Dichloropropane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2-Dichloropropane		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2-Dichloropropane		UD		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2-Dichloropropane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,2-Dichloropropane		U		Y	4
VX0408WBL01	VX0408WBL01	1,2-Dichloropropane		U		Y	4
VX0408WBS01	VX0408WBS01	1,2-Dichloropropane	19.1			Y	4
VX0411WBL01	VX0411WBL01	1,2-Dichloropropane		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	1,2-Dichloropropane	20.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,3-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,3-Dichlorobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,3-Dichlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,3-Dichlorobenzene		U		Y	4
VX0408WBL01	VX0408WBL01	1,3-Dichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,3-Dichlorobenzene	19.5			Y	4
VX0411WBL01	VX0411WBL01	1,3-Dichlorobenzene		U		Y	4
VX0411WBS01	VX0411WBS01	1,3-Dichlorobenzene	20.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,4-Dichlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,4-Dichlorobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,4-Dichlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	1,4-Dichlorobenzene		U		Y	4
VX0408WBL01	VX0408WBL01	1,4-Dichlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	1,4-Dichlorobenzene	19.5			Y	4
VX0411WBL01	VX0411WBL01	1,4-Dichlorobenzene		U		Y	4
VX0411WBS01	VX0411WBS01	1,4-Dichlorobenzene	19.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Hexanone		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Hexanone		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Hexanone		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Hexanone		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Hexanone		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	2-Hexanone		U		Y	4
VX0408WBL01	VX0408WBL01	2-Hexanone		U		Y	4
VX0408WBS01	VX0408WBS01	2-Hexanone	91.3			Y	4
VX0411WBL01	VX0411WBL01	2-Hexanone		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	2-Hexanone	110			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Acetone		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Acetone		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Acetone		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Acetone		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Acetone		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Acetone		U		Y	4
VX0408WBL01	VX0408WBL01	Acetone		U		Y	4
VX0408WBS01	VX0408WBS01	Acetone	91.4			Y	4
VX0411WBL01	VX0411WBL01	Acetone		U		Y	4
VX0411WBS01	VX0411WBS01	Acetone	110			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Benzene	12.2			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Benzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Benzene	910	E	J	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Benzene	640	D		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Benzene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Benzene		U		Y	4
VX0408WBL01	VX0408WBL01	Benzene		U		Y	4
VX0408WBS01	VX0408WBS01	Benzene	19.1			Y	4
VX0411WBL01	VX0411WBL01	Benzene		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Benzene	20.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Bromochloromethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Bromochloromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Bromochloromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Bromochloromethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Bromochloromethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Bromochloromethane		U		Y	4
VX0408WBL01	VX0408WBL01	Bromochloromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Bromochloromethane	17.4			Y	4
VX0411WBL01	VX0411WBL01	Bromochloromethane		U		Y	4
VX0411WBS01	VX0411WBS01	Bromochloromethane	21.1			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW25S-GW-20180403	J2216-01	Bromodichloromethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Bromodichloromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Bromodichloromethane		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Bromodichloromethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Bromodichloromethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Bromodichloromethane		U		Y	4
VX0408WBL01	VX0408WBL01	Bromodichloromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Bromodichloromethane	19.4			Y	4
VX0411WBL01	VX0411WBL01	Bromodichloromethane		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Bromodichloromethane	20.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Bromoform		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Bromoform		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Bromoform		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Bromoform		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Bromoform		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Bromoform		U		Y	4
VX0408WBL01	VX0408WBL01	Bromoform		U		Y	4
VX0408WBS01	VX0408WBS01	Bromoform	18.9			Y	4
VX0411WBL01	VX0411WBL01	Bromoform		U		Y	4
VX0411WBS01	VX0411WBS01	Bromoform	19.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Bromomethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Bromomethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Bromomethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Bromomethane		UDQ	UJ	Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Bromomethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Bromomethane		U		Y	4
VX0408WBL01	VX0408WBL01	Bromomethane		U		Y	4
VX0408WBS01	VX0408WBS01	Bromomethane	24.5			Y	4
VX0411WBL01	VX0411WBL01	Bromomethane		U		Y	4
VX0411WBS01	VX0411WBS01	Bromomethane	9.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Carbon Disulfide		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Carbon Disulfide		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Carbon Disulfide	1.7			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Carbon Disulfide		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Carbon Disulfide		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Carbon Disulfide		U		Y	4
VX0408WBL01	VX0408WBL01	Carbon Disulfide		U		Y	4
VX0408WBS01	VX0408WBS01	Carbon Disulfide	19			Y	4
VX0411WBL01	VX0411WBL01	Carbon Disulfide		U		Y	4
VX0411WBS01	VX0411WBS01	Carbon Disulfide	19.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Carbon Tetrachloride		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Carbon Tetrachloride		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Carbon Tetrachloride		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Carbon Tetrachloride		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Carbon Tetrachloride		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Carbon Tetrachloride		U		Y	4
VX0408WBL01	VX0408WBL01	Carbon Tetrachloride		U		Y	4
VX0408WBS01	VX0408WBS01	Carbon Tetrachloride	19.1			Y	4
VX0411WBL01	VX0411WBL01	Carbon Tetrachloride		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Carbon Tetrachloride	19.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Chlorobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Chlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Chlorobenzene	0.26	J	J	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Chlorobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Chlorobenzene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Chlorobenzene		U		Y	4
VX0408WBL01	VX0408WBL01	Chlorobenzene		U		Y	4
VX0408WBS01	VX0408WBS01	Chlorobenzene	19			Y	4
VX0411WBL01	VX0411WBL01	Chlorobenzene		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Chlorobenzene	20.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Chloroethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Chloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Chloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Chloroethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Chloroethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Chloroethane		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
VX0408WBL01	VX0408WBL01	Chloroethane		U		Y	4
VX0408WBS01	VX0408WBS01	Chloroethane	18.4			Y	4
VX0411WBL01	VX0411WBL01	Chloroethane		U		Y	4
VX0411WBS01	VX0411WBS01	Chloroethane	26.6			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Chloroform		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Chloroform		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Chloroform		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Chloroform		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Chloroform		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Chloroform		U		Y	4
VX0408WBL01	VX0408WBL01	Chloroform		U		Y	4
VX0408WBS01	VX0408WBS01	Chloroform	18.7			Y	4
VX0411WBL01	VX0411WBL01	Chloroform		U		Y	4
VX0411WBS01	VX0411WBS01	Chloroform	21.6			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Chloromethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Chloromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Chloromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Chloromethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Chloromethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Chloromethane		U		Y	4
VX0408WBL01	VX0408WBL01	Chloromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Chloromethane	19			Y	4
VX0411WBL01	VX0411WBL01	Chloromethane		U		Y	4
VX0411WBS01	VX0411WBS01	Chloromethane	17.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Cis-1,2-Dichloroethylene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Cis-1,2-Dichloroethylene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Cis-1,2-Dichloroethylene		U		Y	4
VX0408WBL01	VX0408WBL01	Cis-1,2-Dichloroethylene		U		Y	4
VX0408WBS01	VX0408WBS01	Cis-1,2-Dichloroethylene	18.4			Y	4
VX0411WBL01	VX0411WBL01	Cis-1,2-Dichloroethylene		U		Y	4
VX0411WBS01	VX0411WBS01	Cis-1,2-Dichloroethylene	21.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Cis-1,3-Dichloropropene		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Cis-1,3-Dichloropropene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Cis-1,3-Dichloropropene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Cis-1,3-Dichloropropene		U		Y	4
VX0408WBL01	VX0408WBL01	Cis-1,3-Dichloropropene		U		Y	4
VX0408WBS01	VX0408WBS01	Cis-1,3-Dichloropropene	19			Y	4
VX0411WBL01	VX0411WBL01	Cis-1,3-Dichloropropene		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Cis-1,3-Dichloropropene	19.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Cyclohexane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Cyclohexane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Cyclohexane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Cyclohexane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Cyclohexane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Cyclohexane		U		Y	4
VX0408WBL01	VX0408WBL01	Cyclohexane		U		Y	4
VX0408WBS01	VX0408WBS01	Cyclohexane	18.8			Y	4
VX0411WBL01	VX0411WBL01	Cyclohexane		U		Y	4
VX0411WBS01	VX0411WBS01	Cyclohexane	20.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Dibromochloromethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Dibromochloromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Dibromochloromethane		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Dibromochloromethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Dibromochloromethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Dibromochloromethane		U		Y	4
VX0408WBL01	VX0408WBL01	Dibromochloromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Dibromochloromethane	19.3			Y	4
VX0411WBL01	VX0411WBL01	Dibromochloromethane		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Dibromochloromethane	19.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Dibromofluoromethane	48.3			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Dibromofluoromethane	48.2			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW27S-GW-20180403	J2216-03	Dibromofluoromethane	48.7			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Dibromofluoromethane	39.6			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Dibromofluoromethane	47.7			Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Dibromofluoromethane	47.6			Y	4
VX0408WBL01	VX0408WBL01	Dibromofluoromethane	47.6			Y	4
VX0408WBS01	VX0408WBS01	Dibromofluoromethane	49			Y	4
VX0411WBL01	VX0411WBL01	Dibromofluoromethane	39.7			Y	4
VX0411WBS01	VX0411WBS01	Dibromofluoromethane	52.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Dichlorodifluoromethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Dichlorodifluoromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Dichlorodifluoromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Dichlorodifluoromethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Dichlorodifluoromethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Dichlorodifluoromethane		U		Y	4
VX0408WBL01	VX0408WBL01	Dichlorodifluoromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Dichlorodifluoromethane	19.4			Y	4
VX0411WBL01	VX0411WBL01	Dichlorodifluoromethane		U		Y	4
VX0411WBS01	VX0411WBS01	Dichlorodifluoromethane	21.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Ethylbenzene	0.45	J		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Ethylbenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Ethylbenzene	130		J	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Ethylbenzene	94.4	D		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Ethylbenzene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Ethylbenzene		U		Y	4
VX0408WBL01	VX0408WBL01	Ethylbenzene		U		Y	4
VX0408WBS01	VX0408WBS01	Ethylbenzene	19.1			Y	4
VX0411WBL01	VX0411WBL01	Ethylbenzene		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Ethylbenzene	20.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Isopropylbenzene (Cumene)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Isopropylbenzene (Cumene)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Isopropylbenzene (Cumene)	24.4		J	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Isopropylbenzene (Cumene)	18.8	D		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Isopropylbenzene (Cumene)		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Isopropylbenzene (Cumene)		U		Y	4
VX0408WBL01	VX0408WBL01	Isopropylbenzene (Cumene)		U		Y	4
VX0408WBS01	VX0408WBS01	Isopropylbenzene (Cumene)	19.4			Y	4
VX0411WBL01	VX0411WBL01	Isopropylbenzene (Cumene)		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Isopropylbenzene (Cumene)	20.6			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	m,p-Xylene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	m,p-Xylene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	m,p-Xylene	17.2		J	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	m,p-Xylene	12.4	JD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	m,p-Xylene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	m,p-Xylene		U		Y	4
VX0408WBL01	VX0408WBL01	m,p-Xylene		U		Y	4
VX0408WBS01	VX0408WBS01	m,p-Xylene	38.8			Y	4
VX0411WBL01	VX0411WBL01	m,p-Xylene		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	m,p-Xylene	40			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Methyl Acetate		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Methyl Acetate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Methyl Acetate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Methyl Acetate		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Methyl Acetate		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Methyl Acetate		U		Y	4
VX0408WBL01	VX0408WBL01	Methyl Acetate		U		Y	4
VX0408WBS01	VX0408WBS01	Methyl Acetate	18.4			Y	4
VX0411WBL01	VX0411WBL01	Methyl Acetate		U		Y	4
VX0411WBS01	VX0411WBS01	Methyl Acetate	22.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Methyl Ethyl Ketone (2-Butanone)		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
VX0408WBL01	VX0408WBL01	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
VX0408WBS01	VX0408WBS01	Methyl Ethyl Ketone (2-Butanone)	88.6			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
VX0411WBL01	VX0411WBL01	Methyl Ethyl Ketone (2-Butanone)		U		Y	4
VX0411WBS01	VX0411WBS01	Methyl Ethyl Ketone (2-Butanone)	110			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
VX0408WBL01	VX0408WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y	4
VX0408WBS01	VX0408WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanoı	91.8			Y	4
VX0411WBL01	VX0411WBL01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Methyl Isobutyl Ketone (4-Methyl-2-Pentanoı	110			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Methylcyclohexane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Methylcyclohexane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Methylcyclohexane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Methylcyclohexane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Methylcyclohexane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Methylcyclohexane		U		Y	4
VX0408WBL01	VX0408WBL01	Methylcyclohexane		U		Y	4
VX0408WBS01	VX0408WBS01	Methylcyclohexane	19.5			Y	4
VX0411WBL01	VX0411WBL01	Methylcyclohexane		U		Y	4
VX0411WBS01	VX0411WBS01	Methylcyclohexane	19.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Methylene Chloride		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Methylene Chloride		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Methylene Chloride		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Methylene Chloride		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Methylene Chloride		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Methylene Chloride		U		Y	4
VX0408WBL01	VX0408WBL01	Methylene Chloride		U		Y	4
VX0408WBS01	VX0408WBS01	Methylene Chloride	17.2			Y	4
VX0411WBL01	VX0411WBL01	Methylene Chloride		U		Y	4
VX0411WBS01	VX0411WBS01	Methylene Chloride	21.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	O-Xylene (1,2-Dimethylbenzene)	21		J	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	O-Xylene (1,2-Dimethylbenzene)	15.1	D		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
VX0408WBL01	VX0408WBL01	O-Xylene (1,2-Dimethylbenzene)		U		Y	4
VX0408WBS01	VX0408WBS01	O-Xylene (1,2-Dimethylbenzene)	19.2			Y	4
VX0411WBL01	VX0411WBL01	O-Xylene (1,2-Dimethylbenzene)		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	O-Xylene (1,2-Dimethylbenzene)	20.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	p-Bromofluorobenzene	45.9			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	p-Bromofluorobenzene	46.1			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	p-Bromofluorobenzene	46			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	p-Bromofluorobenzene	41.1			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	p-Bromofluorobenzene	46.1			Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	p-Bromofluorobenzene	45.8			Y	4
VX0408WBL01	VX0408WBL01	p-Bromofluorobenzene	45.3			Y	4
VX0408WBS01	VX0408WBS01	p-Bromofluorobenzene	47.8			Y	4
VX0411WBL01	VX0411WBL01	p-Bromofluorobenzene	39.2			Y	4
VX0411WBS01	VX0411WBS01	p-Bromofluorobenzene	49.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Styrene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Styrene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Styrene		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Styrene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Styrene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Styrene		U		Y	4
VX0408WBL01	VX0408WBL01	Styrene		U		Y	4
VX0408WBS01	VX0408WBS01	Styrene	19.3			Y	4
VX0411WBL01	VX0411WBL01	Styrene		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Styrene	20.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Tert-Butyl Alcohol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Tert-Butyl Alcohol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Tert-Butyl Alcohol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Tert-Butyl Alcohol		UD		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-EQUIP-BLANK-20180403	J2216-04	Tert-Butyl Alcohol		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Tert-Butyl Alcohol		U		Y	4
VX0408WBL01	VX0408WBL01	Tert-Butyl Alcohol		U		Y	4
VX0408WBS01	VX0408WBS01	Tert-Butyl Alcohol	93.5			Y	4
VX0411WBL01	VX0411WBL01	Tert-Butyl Alcohol		U		Y	4
VX0411WBS01	VX0411WBS01	Tert-Butyl Alcohol	120			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Tert-Butyl Methyl Ether	1.6			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Tert-Butyl Methyl Ether	4.5			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Tert-Butyl Methyl Ether	5.8			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Tert-Butyl Methyl Ether		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Tert-Butyl Methyl Ether		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Tert-Butyl Methyl Ether		U		Y	4
VX0408WBL01	VX0408WBL01	Tert-Butyl Methyl Ether		U		Y	4
VX0408WBS01	VX0408WBS01	Tert-Butyl Methyl Ether	18.9			Y	4
VX0411WBL01	VX0411WBL01	Tert-Butyl Methyl Ether		U		Y	4
VX0411WBS01	VX0411WBS01	Tert-Butyl Methyl Ether	21.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Tetrachloroethylene (PCE)		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Tetrachloroethylene (PCE)		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Tetrachloroethylene (PCE)		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Tetrachloroethylene (PCE)		U		Y	4
VX0408WBL01	VX0408WBL01	Tetrachloroethylene (PCE)		U		Y	4
VX0408WBS01	VX0408WBS01	Tetrachloroethylene (PCE)	19.5			Y	4
VX0411WBL01	VX0411WBL01	Tetrachloroethylene (PCE)		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Tetrachloroethylene (PCE)	20.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Toluene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Toluene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Toluene	9.4		J	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Toluene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Toluene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Toluene		U		Y	4
VX0408WBL01	VX0408WBL01	Toluene		U		Y	4
VX0408WBS01	VX0408WBS01	Toluene	18.9			Y	4
VX0411WBL01	VX0411WBL01	Toluene		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Toluene	20.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Toluene-D8	47			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Toluene-D8	46.9			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Toluene-D8	46.7			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Toluene-D8	40.4			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Toluene-D8	47			Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Toluene-D8	46.8			Y	4
VX0408WBL01	VX0408WBL01	Toluene-D8	46.7			Y	4
VX0408WBS01	VX0408WBS01	Toluene-D8	48.6			Y	4
VX0411WBL01	VX0411WBL01	Toluene-D8	40.2			Y	4
VX0411WBS01	VX0411WBS01	Toluene-D8	51.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Trans-1,2-Dichloroethene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Trans-1,2-Dichloroethene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Trans-1,2-Dichloroethene		U		Y	4
VX0408WBL01	VX0408WBL01	Trans-1,2-Dichloroethene		U		Y	4
VX0408WBS01	VX0408WBS01	Trans-1,2-Dichloroethene	19.1			Y	4
VX0411WBL01	VX0411WBL01	Trans-1,2-Dichloroethene		U		Y	4
VX0411WBS01	VX0411WBS01	Trans-1,2-Dichloroethene	20.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Trans-1,3-Dichloropropene		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Trans-1,3-Dichloropropene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Trans-1,3-Dichloropropene		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Trans-1,3-Dichloropropene		U		Y	4
VX0408WBL01	VX0408WBL01	Trans-1,3-Dichloropropene		U		Y	4
VX0408WBS01	VX0408WBS01	Trans-1,3-Dichloropropene	19			Y	4
VX0411WBL01	VX0411WBL01	Trans-1,3-Dichloropropene		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Trans-1,3-Dichloropropene	20			Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW25S-GW-20180403	J2216-01	Trichloroethylene (TCE)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Trichloroethylene (TCE)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Trichloroethylene (TCE)		U	UJ	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Trichloroethylene (TCE)		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Trichloroethylene (TCE)		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Trichloroethylene (TCE)		U		Y	4
VX0408WBL01	VX0408WBL01	Trichloroethylene (TCE)		U		Y	4
VX0408WBS01	VX0408WBS01	Trichloroethylene (TCE)	19.6			Y	4
VX0411WBL01	VX0411WBL01	Trichloroethylene (TCE)		U	UJ	Y	4
VX0411WBS01	VX0411WBS01	Trichloroethylene (TCE)	20.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Trichlorofluoromethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Trichlorofluoromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Trichlorofluoromethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Trichlorofluoromethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Trichlorofluoromethane		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Trichlorofluoromethane		U		Y	4
VX0408WBL01	VX0408WBL01	Trichlorofluoromethane		U		Y	4
VX0408WBS01	VX0408WBS01	Trichlorofluoromethane	18.5			Y	4
VX0411WBL01	VX0411WBL01	Trichlorofluoromethane		U		Y	4
VX0411WBS01	VX0411WBS01	Trichlorofluoromethane	21.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Vinyl Chloride		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Vinyl Chloride		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Vinyl Chloride		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Vinyl Chloride		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Vinyl Chloride		U		Y	4
QNWP8-TRIP-BLANK-2-2018032	J2216-05	Vinyl Chloride		U		Y	4
VX0408WBL01	VX0408WBL01	Vinyl Chloride		U		Y	4
VX0408WBS01	VX0408WBS01	Vinyl Chloride	18.1			Y	4
VX0411WBL01	VX0411WBL01	Vinyl Chloride		U		Y	4
VX0411WBS01	VX0411WBS01	Vinyl Chloride	20.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	1,2,4,5-Tetrachlorobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	1,2,4,5-Tetrachlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	1,2,4,5-Tetrachlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	1,2,4,5-Tetrachlorobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	1,2,4,5-Tetrachlorobenzene		U		Y	4
PB108007BL	PB108007BL	1,2,4,5-Tetrachlorobenzene		U		Y	4
PB108007BS	PB108007BS	1,2,4,5-Tetrachlorobenzene	43.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,3,4,6-Tetrachlorophenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2,3,4,6-Tetrachlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,3,4,6-Tetrachlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,3,4,6-Tetrachlorophenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,3,4,6-Tetrachlorophenol		U		Y	4
PB108007BL	PB108007BL	2,3,4,6-Tetrachlorophenol		U		Y	4
PB108007BS	PB108007BS	2,3,4,6-Tetrachlorophenol	49.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,4,5-Trichlorophenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2,4,5-Trichlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,4,5-Trichlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,4,5-Trichlorophenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,4,5-Trichlorophenol		U		Y	4
PB108007BL	PB108007BL	2,4,5-Trichlorophenol		U		Y	4
PB108007BS	PB108007BS	2,4,5-Trichlorophenol	46.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,4,6-Tribromophenol	110			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2,4,6-Tribromophenol	110			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,4,6-Tribromophenol	100			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,4,6-Tribromophenol	86.5			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,4,6-Tribromophenol	120			Y	4
PB108007BL	PB108007BL	2,4,6-Tribromophenol	140			Y	4
PB108007BS	PB108007BS	2,4,6-Tribromophenol	140			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,4,6-Trichlorophenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2,4,6-Trichlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,4,6-Trichlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,4,6-Trichlorophenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,4,6-Trichlorophenol		U		Y	4
PB108007BL	PB108007BL	2,4,6-Trichlorophenol		U		Y	4
PB108007BS	PB108007BS	2,4,6-Trichlorophenol	49			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,4-Dichlorophenol		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW25D-GW-20180403	J2216-02	2,4-Dichlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,4-Dichlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,4-Dichlorophenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,4-Dichlorophenol		U		Y	4
PB108007BL	PB108007BL	2,4-Dichlorophenol		U		Y	4
PB108007BS	PB108007BS	2,4-Dichlorophenol	54.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,4-Dimethylphenol		UQ		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2,4-Dimethylphenol		UQ		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,4-Dimethylphenol	17.7	Q	J	Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,4-Dimethylphenol	14.3	JDQ	J	Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,4-Dimethylphenol		UQ		Y	4
PB108007BL	PB108007BL	2,4-Dimethylphenol		U		Y	4
PB108007BS	PB108007BS	2,4-Dimethylphenol	61.6		J	Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,4-Dinitrophenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2,4-Dinitrophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,4-Dinitrophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,4-Dinitrophenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,4-Dinitrophenol		U		Y	4
PB108007BL	PB108007BL	2,4-Dinitrophenol		U		Y	4
PB108007BS	PB108007BS	2,4-Dinitrophenol	78.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,4-Dinitrotoluene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2,4-Dinitrotoluene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,4-Dinitrotoluene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,4-Dinitrotoluene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,4-Dinitrotoluene		U		Y	4
PB108007BL	PB108007BL	2,4-Dinitrotoluene		U		Y	4
PB108007BS	PB108007BS	2,4-Dinitrotoluene	47.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2,6-Dinitrotoluene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2,6-Dinitrotoluene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2,6-Dinitrotoluene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2,6-Dinitrotoluene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2,6-Dinitrotoluene		U		Y	4
PB108007BL	PB108007BL	2,6-Dinitrotoluene		U		Y	4
PB108007BS	PB108007BS	2,6-Dinitrotoluene	48.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Chloronaphthalene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Chloronaphthalene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Chloronaphthalene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Chloronaphthalene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Chloronaphthalene		U		Y	4
PB108007BL	PB108007BL	2-Chloronaphthalene		U		Y	4
PB108007BS	PB108007BS	2-Chloronaphthalene	44.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Chlorophenol		UQ		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Chlorophenol		UQ		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Chlorophenol		UQ		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Chlorophenol		UDQ		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Chlorophenol		UQ		Y	4
PB108007BL	PB108007BL	2-Chlorophenol		U		Y	4
PB108007BS	PB108007BS	2-Chlorophenol	55.8		J	Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Fluorobiphenyl	86.6			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Fluorobiphenyl	87			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Fluorobiphenyl	77			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Fluorobiphenyl	81			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Fluorobiphenyl	88.2			Y	4
PB108007BL	PB108007BL	2-Fluorobiphenyl	93			Y	4
PB108007BS	PB108007BS	2-Fluorobiphenyl	95.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Fluorophenol	74.8			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Fluorophenol	68.4			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Fluorophenol	53.9			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Fluorophenol	41.8			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Fluorophenol	60			Y	4
PB108007BL	PB108007BL	2-Fluorophenol	190			Y	4
PB108007BS	PB108007BS	2-Fluorophenol	180			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Methylnaphthalene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Methylnaphthalene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Methylnaphthalene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Methylnaphthalene		UD		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Methylnaphthalene		U		Y	4
PB108007BL	PB108007BL	2-Methylnaphthalene		U		Y	4
PB108007BS	PB108007BS	2-Methylnaphthalene	47.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Methylphenol (O-Cresol)		UQ		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Methylphenol (O-Cresol)		UQ		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Methylphenol (O-Cresol)		UQ		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Methylphenol (O-Cresol)		UDQ		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Methylphenol (O-Cresol)		UQ		Y	4
PB108007BL	PB108007BL	2-Methylphenol (O-Cresol)		U		Y	4
PB108007BS	PB108007BS	2-Methylphenol (O-Cresol)	52.5		J	Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Nitroaniline		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Nitroaniline		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Nitroaniline		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Nitroaniline		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Nitroaniline		U		Y	4
PB108007BL	PB108007BL	2-Nitroaniline		U		Y	4
PB108007BS	PB108007BS	2-Nitroaniline	49.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	2-Nitrophenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	2-Nitrophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	2-Nitrophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	2-Nitrophenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	2-Nitrophenol		U		Y	4
PB108007BL	PB108007BL	2-Nitrophenol		U		Y	4
PB108007BS	PB108007BS	2-Nitrophenol	49.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	3,3'-Dichlorobenzidine		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	3,3'-Dichlorobenzidine		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	3,3'-Dichlorobenzidine		U		Y	4
PB108007BL	PB108007BL	3,3'-Dichlorobenzidine		U		Y	4
PB108007BS	PB108007BS	3,3'-Dichlorobenzidine	15.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	3-Nitroaniline		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	3-Nitroaniline		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	3-Nitroaniline		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	3-Nitroaniline		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	3-Nitroaniline		U		Y	4
PB108007BL	PB108007BL	3-Nitroaniline		U		Y	4
PB108007BS	PB108007BS	3-Nitroaniline	15.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	4,6-Dinitro-2-Methylphenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	4,6-Dinitro-2-Methylphenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	4,6-Dinitro-2-Methylphenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	4,6-Dinitro-2-Methylphenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	4,6-Dinitro-2-Methylphenol		U		Y	4
PB108007BL	PB108007BL	4,6-Dinitro-2-Methylphenol		U		Y	4
PB108007BS	PB108007BS	4,6-Dinitro-2-Methylphenol	42.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	4-Bromophenyl Phenyl Ether		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	4-Bromophenyl Phenyl Ether		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	4-Bromophenyl Phenyl Ether		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	4-Bromophenyl Phenyl Ether		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	4-Bromophenyl Phenyl Ether		U		Y	4
PB108007BL	PB108007BL	4-Bromophenyl Phenyl Ether		U		Y	4
PB108007BS	PB108007BS	4-Bromophenyl Phenyl Ether	45.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	4-Chloro-3-Methylphenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	4-Chloro-3-Methylphenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	4-Chloro-3-Methylphenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	4-Chloro-3-Methylphenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	4-Chloro-3-Methylphenol		U		Y	4
PB108007BL	PB108007BL	4-Chloro-3-Methylphenol		U		Y	4
PB108007BS	PB108007BS	4-Chloro-3-Methylphenol	52.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	4-Chloroaniline		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	4-Chloroaniline		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	4-Chloroaniline		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	4-Chloroaniline		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	4-Chloroaniline		U		Y	4
PB108007BL	PB108007BL	4-Chloroaniline		U		Y	4
PB108007BS	PB108007BS	4-Chloroaniline	8.2	J		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW25S-GW-20180403	J2216-01	4-Chlorophenyl Phenyl Ether		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	4-Chlorophenyl Phenyl Ether		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	4-Chlorophenyl Phenyl Ether		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	4-Chlorophenyl Phenyl Ether		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	4-Chlorophenyl Phenyl Ether		U		Y	4
PB108007BL	PB108007BL	4-Chlorophenyl Phenyl Ether		U		Y	4
PB108007BS	PB108007BS	4-Chlorophenyl Phenyl Ether	44.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	4-Nitroaniline		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	4-Nitroaniline		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	4-Nitroaniline		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	4-Nitroaniline		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	4-Nitroaniline		U		Y	4
PB108007BL	PB108007BL	4-Nitroaniline		U		Y	4
PB108007BS	PB108007BS	4-Nitroaniline	41			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	4-Nitrophenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	4-Nitrophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	4-Nitrophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	4-Nitrophenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	4-Nitrophenol		U		Y	4
PB108007BL	PB108007BL	4-Nitrophenol		U		Y	4
PB108007BS	PB108007BS	4-Nitrophenol	100	E		Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Acenaphthene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Acenaphthene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Acenaphthene	21.9			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Acenaphthene	22.2	JD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Acenaphthene		U		Y	4
PB108007BL	PB108007BL	Acenaphthene		U		Y	4
PB108007BS	PB108007BS	Acenaphthene	49.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Acenaphthylene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Acenaphthylene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Acenaphthylene	2.7	J		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Acenaphthylene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Acenaphthylene		U		Y	4
PB108007BL	PB108007BL	Acenaphthylene		U		Y	4
PB108007BS	PB108007BS	Acenaphthylene	45.6			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Acetophenone		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Acetophenone		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Acetophenone		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Acetophenone		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Acetophenone		U		Y	4
PB108007BL	PB108007BL	Acetophenone		U		Y	4
PB108007BS	PB108007BS	Acetophenone	43.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Anthracene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Anthracene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Anthracene	2.4	J		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Anthracene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Anthracene		U		Y	4
PB108007BL	PB108007BL	Anthracene		U		Y	4
PB108007BS	PB108007BS	Anthracene	48.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Atrazine		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Atrazine		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Atrazine		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Atrazine		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Atrazine		U		Y	4
PB108007BL	PB108007BL	Atrazine		U		Y	4
PB108007BS	PB108007BS	Atrazine	50.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Benzaldehyde		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Benzaldehyde		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Benzaldehyde		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Benzaldehyde		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Benzaldehyde		U		Y	4
PB108007BL	PB108007BL	Benzaldehyde		U		Y	4
PB108007BS	PB108007BS	Benzaldehyde	18.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Benzo(A)Anthracene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Benzo(A)Anthracene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Benzo(A)Anthracene		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW27S-GW-20180403	J2216-03DL	Benzo(A)Anthracene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Benzo(A)Anthracene		U		Y	4
PB108007BL	PB108007BL	Benzo(A)Anthracene		U		Y	4
PB108007BS	PB108007BS	Benzo(A)Anthracene	47.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Benzo(A)Pyrene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Benzo(A)Pyrene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Benzo(A)Pyrene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Benzo(A)Pyrene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Benzo(A)Pyrene		U		Y	4
PB108007BL	PB108007BL	Benzo(A)Pyrene		U		Y	4
PB108007BS	PB108007BS	Benzo(A)Pyrene	47.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Benzo(B)Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Benzo(B)Fluoranthene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Benzo(B)Fluoranthene		U		Y	4
PB108007BL	PB108007BL	Benzo(B)Fluoranthene		U		Y	4
PB108007BS	PB108007BS	Benzo(B)Fluoranthene	46.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Benzo(G,H,I)Perylene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Benzo(G,H,I)Perylene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Benzo(G,H,I)Perylene		U		Y	4
PB108007BL	PB108007BL	Benzo(G,H,I)Perylene		U		Y	4
PB108007BS	PB108007BS	Benzo(G,H,I)Perylene	48.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Benzo(K)Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Benzo(K)Fluoranthene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Benzo(K)Fluoranthene		U		Y	4
PB108007BL	PB108007BL	Benzo(K)Fluoranthene		U		Y	4
PB108007BS	PB108007BS	Benzo(K)Fluoranthene	46.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Benzyl Butyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Benzyl Butyl Phthalate		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Benzyl Butyl Phthalate		U		Y	4
PB108007BL	PB108007BL	Benzyl Butyl Phthalate		U		Y	4
PB108007BS	PB108007BS	Benzyl Butyl Phthalate	49.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Biphenyl (Diphenyl)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Biphenyl (Diphenyl)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Biphenyl (Diphenyl)	5.5	J		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Biphenyl (Diphenyl)		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Biphenyl (Diphenyl)		U		Y	4
PB108007BL	PB108007BL	Biphenyl (Diphenyl)		U		Y	4
PB108007BS	PB108007BS	Biphenyl (Diphenyl)	45.6			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Bis(2-Chloroethoxy) Methane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Bis(2-Chloroethoxy) Methane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Bis(2-Chloroethoxy) Methane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Bis(2-Chloroethoxy) Methane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Bis(2-Chloroethoxy) Methane		U		Y	4
PB108007BL	PB108007BL	Bis(2-Chloroethoxy) Methane		U		Y	4
PB108007BS	PB108007BS	Bis(2-Chloroethoxy) Methane	50.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
PB108007BL	PB108007BL	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)		U		Y	4
PB108007BS	PB108007BS	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ethe	43			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Bis(2-Chloroisopropyl) Ether		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Bis(2-Chloroisopropyl) Ether		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Bis(2-Chloroisopropyl) Ether		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Bis(2-Chloroisopropyl) Ether		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Bis(2-Chloroisopropyl) Ether		U		Y	4
PB108007BL	PB108007BL	Bis(2-Chloroisopropyl) Ether		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
PB108007BS	PB108007BS	Bis(2-Chloroisopropyl) Ether	48.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Bis(2-Ethylhexyl) Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Bis(2-Ethylhexyl) Phthalate		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Bis(2-Ethylhexyl) Phthalate		U		Y	4
PB108007BL	PB108007BL	Bis(2-Ethylhexyl) Phthalate		U		Y	4
PB108007BS	PB108007BS	Bis(2-Ethylhexyl) Phthalate	49.6			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Caprolactam		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Caprolactam		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Caprolactam		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Caprolactam		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Caprolactam		U		Y	4
PB108007BL	PB108007BL	Caprolactam		U		Y	4
PB108007BS	PB108007BS	Caprolactam	49.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Carbazole		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Carbazole		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Carbazole	21.3			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Carbazole	22.2	JD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Carbazole		U		Y	4
PB108007BL	PB108007BL	Carbazole		U		Y	4
PB108007BS	PB108007BS	Carbazole	48.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Chrysene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Chrysene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Chrysene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Chrysene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Chrysene		U		Y	4
PB108007BL	PB108007BL	Chrysene		U		Y	4
PB108007BS	PB108007BS	Chrysene	46.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Dibenz(A,H)Anthracene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Dibenz(A,H)Anthracene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Dibenz(A,H)Anthracene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Dibenz(A,H)Anthracene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Dibenz(A,H)Anthracene		U		Y	4
PB108007BL	PB108007BL	Dibenz(A,H)Anthracene		U		Y	4
PB108007BS	PB108007BS	Dibenz(A,H)Anthracene	47.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Dibenzofuran		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Dibenzofuran		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Dibenzofuran	14.6			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Dibenzofuran	14.6	JD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Dibenzofuran		U		Y	4
PB108007BL	PB108007BL	Dibenzofuran		U		Y	4
PB108007BS	PB108007BS	Dibenzofuran	47.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Diethyl Phthalate		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Diethyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Diethyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Diethyl Phthalate		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Diethyl Phthalate		U		Y	4
PB108007BL	PB108007BL	Diethyl Phthalate		U		Y	4
PB108007BS	PB108007BS	Diethyl Phthalate	47.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Dimethyl Phthalate	5.3	J		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Dimethyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Dimethyl Phthalate	2.3	J		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Dimethyl Phthalate		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Dimethyl Phthalate		U		Y	4
PB108007BL	PB108007BL	Dimethyl Phthalate		U		Y	4
PB108007BS	PB108007BS	Dimethyl Phthalate	44.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Di-N-Butyl Phthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Di-N-Butyl Phthalate		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Di-N-Butyl Phthalate		U		Y	4
PB108007BL	PB108007BL	Di-N-Butyl Phthalate		U		Y	4
PB108007BS	PB108007BS	Di-N-Butyl Phthalate	50.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Di-N-Octylphthalate		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Di-N-Octylphthalate		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW27S-GW-20180403	J2216-03	Di-N-Octylphthalate		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Di-N-Octylphthalate		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Di-N-Octylphthalate		U		Y	4
PB108007BL	PB108007BL	Di-N-Octylphthalate		U		Y	4
PB108007BS	PB108007BS	Di-N-Octylphthalate	56.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Fluoranthene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Fluoranthene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Fluoranthene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Fluoranthene		U		Y	4
PB108007BL	PB108007BL	Fluoranthene		U		Y	4
PB108007BS	PB108007BS	Fluoranthene	48.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Fluorene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Fluorene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Fluorene	11.7			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Fluorene	12.1	JD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Fluorene		U		Y	4
PB108007BL	PB108007BL	Fluorene		U		Y	4
PB108007BS	PB108007BS	Fluorene	46.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Hexachlorobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Hexachlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Hexachlorobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Hexachlorobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Hexachlorobenzene		U		Y	4
PB108007BL	PB108007BL	Hexachlorobenzene		U		Y	4
PB108007BS	PB108007BS	Hexachlorobenzene	44.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Hexachlorobutadiene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Hexachlorobutadiene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Hexachlorobutadiene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Hexachlorobutadiene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Hexachlorobutadiene		U		Y	4
PB108007BL	PB108007BL	Hexachlorobutadiene		U		Y	4
PB108007BS	PB108007BS	Hexachlorobutadiene	41			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Hexachlorocyclopentadiene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Hexachlorocyclopentadiene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Hexachlorocyclopentadiene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Hexachlorocyclopentadiene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Hexachlorocyclopentadiene		U		Y	4
PB108007BL	PB108007BL	Hexachlorocyclopentadiene		U		Y	4
PB108007BS	PB108007BS	Hexachlorocyclopentadiene	81.6	E	J	Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Hexachloroethane		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Hexachloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Hexachloroethane		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Hexachloroethane		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Hexachloroethane		U		Y	4
PB108007BL	PB108007BL	Hexachloroethane		U		Y	4
PB108007BS	PB108007BS	Hexachloroethane	44.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Indeno(1,2,3-C,D)Pyrene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Indeno(1,2,3-C,D)Pyrene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Indeno(1,2,3-C,D)Pyrene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Indeno(1,2,3-C,D)Pyrene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Indeno(1,2,3-C,D)Pyrene		U		Y	4
PB108007BL	PB108007BL	Indeno(1,2,3-C,D)Pyrene		U		Y	4
PB108007BS	PB108007BS	Indeno(1,2,3-C,D)Pyrene	48.9			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Isophorone		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Isophorone		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Isophorone		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Isophorone		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Isophorone		U		Y	4
PB108007BL	PB108007BL	Isophorone		U		Y	4
PB108007BS	PB108007BS	Isophorone	48.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	M+P MethylPhenol		UQ		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	M+P MethylPhenol		UQ		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	M+P MethylPhenol		UQ		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	M+P MethylPhenol		UDQ		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	M+P MethylPhenol		UQ		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
PB108007BL	PB108007BL	M+P MethylPhenol		U		Y	4
PB108007BS	PB108007BS	M+P MethylPhenol	51.4		J	Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Naphthalene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Naphthalene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Naphthalene	220	E		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Naphthalene	240	D		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Naphthalene		U		Y	4
PB108007BL	PB108007BL	Naphthalene		U		Y	4
PB108007BS	PB108007BS	Naphthalene	46.8			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Nitrobenzene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Nitrobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Nitrobenzene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Nitrobenzene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Nitrobenzene		U		Y	4
PB108007BL	PB108007BL	Nitrobenzene		U		Y	4
PB108007BS	PB108007BS	Nitrobenzene	45.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Nitrobenzene-D5	84			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Nitrobenzene-D5	87.6			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Nitrobenzene-D5	76.6			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Nitrobenzene-D5	68.6			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Nitrobenzene-D5	86.7			Y	4
PB108007BL	PB108007BL	Nitrobenzene-D5	96.2			Y	4
PB108007BS	PB108007BS	Nitrobenzene-D5	97.2			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	N-Nitrosodi-N-Propylamine		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	N-Nitrosodi-N-Propylamine		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	N-Nitrosodi-N-Propylamine		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	N-Nitrosodi-N-Propylamine		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	N-Nitrosodi-N-Propylamine		U		Y	4
PB108007BL	PB108007BL	N-Nitrosodi-N-Propylamine		U		Y	4
PB108007BS	PB108007BS	N-Nitrosodi-N-Propylamine	47.7			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	N-Nitrosodiphenylamine		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	N-Nitrosodiphenylamine		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	N-Nitrosodiphenylamine		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	N-Nitrosodiphenylamine		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	N-Nitrosodiphenylamine		U		Y	4
PB108007BL	PB108007BL	N-Nitrosodiphenylamine		U		Y	4
PB108007BS	PB108007BS	N-Nitrosodiphenylamine	47.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Pentachlorophenol		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Pentachlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Pentachlorophenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Pentachlorophenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Pentachlorophenol		U		Y	4
PB108007BL	PB108007BL	Pentachlorophenol		U		Y	4
PB108007BS	PB108007BS	Pentachlorophenol	79.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Phenanthrene		U		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Phenanthrene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Phenanthrene	12.4			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Phenanthrene	12.7	JD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Phenanthrene		U		Y	4
PB108007BL	PB108007BL	Phenanthrene		U		Y	4
PB108007BS	PB108007BS	Phenanthrene	47.5			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Phenol	4.7	J		Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Phenol		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Phenol	3.3	J		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Phenol		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Phenol		U		Y	4
PB108007BL	PB108007BL	Phenol		U		Y	4
PB108007BS	PB108007BS	Phenol	55.9		J	Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Phenol-D6	44.1			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Phenol-D6	39.5			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Phenol-D6	32.9			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Phenol-D6	20.4			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Phenol-D6	31.9			Y	4
PB108007BL	PB108007BL	Phenol-D6	170			Y	4
PB108007BS	PB108007BS	Phenol-D6	160			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Pyrene		U		Y	4

#sys_sample_code	lab_sample_id	chemical_name	result value	lab qualifiers	validator qualifiers	validated y/n	validation level
QNWP8-MW25D-GW-20180403	J2216-02	Pyrene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Pyrene		U		Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Pyrene		UD		Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Pyrene		U		Y	4
PB108007BL	PB108007BL	Pyrene		U		Y	4
PB108007BS	PB108007BS	Pyrene	46.3			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Terphenyl-D14	79.1			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Terphenyl-D14	79.1			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Terphenyl-D14	67.1			Y	4
QNWP8-MW25D-GW-20180403	J2216-02	Terphenyl-D14	67.1			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Terphenyl-D14	61			Y	4
QNWP8-MW27S-GW-20180403	J2216-03	Terphenyl-D14	61			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Terphenyl-D14	63.6			Y	4
QNWP8-MW27S-GW-20180403	J2216-03DL	Terphenyl-D14	63.6			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Terphenyl-D14	89.3			Y	4
QNWP8-EQUIP-BLANK-20180403	J2216-04	Terphenyl-D14	89.3			Y	4
PB108007BL	PB108007BL	Terphenyl-D14	99.1			Y	4
PB108007BL	PB108007BL	Terphenyl-D14	99.1			Y	4
PB108007BS	PB108007BS	Terphenyl-D14	99.4			Y	4
PB108007BS	PB108007BS	Terphenyl-D14	99.4			Y	4
QNWP8-MW25S-GW-20180403	J2216-01	Sulfide	3.36			N	
QNWP8-MW25S-GWMS	J2216-01MS	Sulfide	19.4			N	
QNWP8-MW25S-GWMSD	J2216-01MSD	Sulfide	19.5			N	
QNWP8-MW25D-GW-20180403	J2216-02	Sulfide	4.64			N	
QNWP8-MW27S-GW-20180403	J2216-03	Sulfide	17.8			N	
PB108030BL	PB108030BL	Sulfide		U		N	
PB108030BS	PB108030BS	Sulfide	20.0			N	

Appendix 2
Well Purge Logs

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8		SITE LOCATION: Long Island City, Queens, New York
Well No: MW- MW-245	SAMPLE ID: MW- QNWP8-MW245	DATE: 3/30/2018

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 8 feet 17.5	STATIC DEPTH TO WATER (feet): 4.98'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (14.21 feet – 4.98 feet) X 0.16 gallons/foot = 1.4 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 0940	PURGING ENDED AT: 1025	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm) mL/min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0945			500	4.98	8.55	3.49	26.1	0.00	14.12	1.8	2.24	-139	clear	organic
0950			475	4.99	8.55	3.48	21.0	0.00	14.04	1.8	2.23	-148		
0955			450	5.00	8.55	3.50	14.4	0.00	14.03	1.8	2.24	-154		
1000			450	5.00	8.56	3.52	10.0	0.00	14.27	1.8	2.25	-165		
1005			475	5.01	8.56	3.51	0.0	0.00	14.25	1.8	2.24	-172		
1010			450	5.03	8.57	3.50	0.0	0.00	14.26	1.8	2.24	-176		
1015			500	5.04	8.57	3.50	0.0	0.00	14.36	1.8	2.24	-187		
1020			500	5.06	8.56	3.51	0.0	0.00	14.36	1.8	2.25	-188		
1025			500	5.07	8.57	3.50	0.0	0.00	14.47	1.8	2.24	-191		
1055			500	5.10	8.58	3.50	0.0	0.00	14.49	1.8	2.24	-195		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1030	SAMPLING ENDED AT: 1050
PUMP OR TUBING DEPTH IN WELL (feet): 11	SAMPLE PUMP FLOW RATE (mL per minute): 500	TUBING MATERIAL CODE: teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW245	2	CG	40	HCl	–	8.58	TCL VOCs	PP
	1	AG	1000	–	–		TCL SVOCs	
	2	CG	40	HCl	–		TPH DRO	
	1	AG	1000	–	–		TPH GRO	
	1	PE	250	HNO_3	–		Total Iron	
	1	PE	500	$NaOH_2N$	–		Sulfide	
	1	PE	1000	–	–		Sulfate	
	1	PE	1000	–	–		Alkalinity	

REMARKS: 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW-24D	SAMPLE ID: MW- QNWP8- MW24D	DATE: 3/30/18

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 205 feet 28.5	STATIC DEPTH TO WATER (feet): 4.95	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (27.60 feet − 4.95 feet) X 0.16 gallons/foot = 3.6 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 22	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22	PURGING INITIATED AT: 0740	PURGING ENDED AT: 0850	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0745			400	4.95	8.41	3.89	0.0	12.78	14.72	2.0	2.49	-126	clear	organic
0750			450	4.95	8.39	3.88	0.0	12.05	15.19	2.0	2.48	-128		
0755			450	4.96	8.39	3.87	0.0	10.80	15.58	2.0	2.48	-134		
0800			475	4.96	8.39	3.88	0.0	10.60	15.62	2.0	2.48	-147		
0805			475	4.96	8.39	3.87	0.0	10.23	15.69	2.0	2.48	-151		
0810			500	4.97	8.39	3.87	0.0	10.21	15.73	2.0	2.48	-155		
0815			500	4.98	8.40	3.87	0.0	9.77	15.75	2.0	2.48	-159		
0820			500	4.99	8.40	3.87	0.0	9.54	15.82	2.0	2.48	-163		
0825			475	5.01	8.41	3.87	0.0	9.26	15.92	2.0	2.48	-165		
0830			450	5.02	8.41	3.87	0.0	8.69	15.92	2.0	2.47	-172		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES: Eva	SAMPLING INITIATED AT: 0855	SAMPLING ENDED AT: 0920
PUMP OR TUBING DEPTH IN WELL (feet): 22	SAMPLE PUMP FLOW RATE (mL per minute): 500	TUBING MATERIAL CODE: teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW24D	CG	2	40	HCl	-	8.41	TCL VOCs	PP
	AG	1	1000	-	-		TCL SVOCs	
	CG	2	40	HCl	-		TPH DRO	
	AG	1	1000	-	-		TPH GRO	
	PE	1	250	HNO_3	-		total Iron	
	PE	1	500	$NaOH_2N$	-		sulfide	
	PE	1	1000	-	-		sulfate	
	PE	1	1000	-	-		Alkalinity	

REMARKS: 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8		SITE LOCATION: Long Island City, Queens, New York
Well No: MW- MW-24D	SAMPLE ID: MW- QNWP8-MW24D	DATE: 3/30/2018

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 4.95	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0835			500	5.02	8.41	3.86	0.0	8.31	15.97	2.0	2.47	-175	clear	
0840			500	5.03	8.41	3.86	0.0	8.33	15.96	2.0	2.47	-177		
0845			500	5.04	8.41	3.87	0.0	8.20	15.99	2.0	2.47	-179		
0850			500	5.04	8.41	3.87	0.0	8.15	16.00	2.0	2.48	-180		
0925			500	5.06	8.41	3.87	0.0	8.05	16.02	2.0	2.48	-182		

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES: Eva	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW25S	SAMPLE ID: MW- QNWP8-MW25S	DATE: 4/3/18

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 21 feet 28.5	STATIC DEPTH TO WATER (feet): 7.90	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (19.6 feet – 7.90 feet) X 0.16 gallons/foot = 1.8 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 23	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 23	PURGING INITIATED AT: 0740	PURGING ENDED AT: 0850	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0745			500	7.90	7.78	11.3	14.1	1.94	12.44	6.4	7.06	-82	clear	-
0750			500	7.92	7.79	11.0	10.0	1.49	12.57	6.2	7.78	-100		
0755			475	7.92	7.76	10.2	22.2	1.22	12.80	5.6	6.21	-105		
0800			450	7.93	7.70	9.14	0.0	0.96	12.90	4.9	5.43	-110		
0805			400	7.93	7.57	7.54	0.0	0.58	12.98	4.1	4.81	-109		
0810			450	7.95	7.48	6.64	0.0	0.16	13.07	3.7	4.23	-107		
0815			450	7.96	7.45	6.25	0.0	0.00	13.17	3.4	3.92	-105		
0820			500	7.97	7.43	6.06	0.0	0.00	13.24	3.3	3.83	-105		
0825			500	7.99	7.42	5.97	0.0	0.00	13.30	3.2	3.75	-105		
0830			500	8.01	7.39	5.72	0.0	0.00	13.33	3.1	3.61	-107	↓	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0855	SAMPLING ENDED AT: 0920
PUMP OR TUBING DEPTH IN WELL (feet): 23	SAMPLE PUMP FLOW RATE (mL per minute): 500	TUBING MATERIAL CODE: teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW25S	2	CG	40	HCl	-	7.37	TCL VOCs	PP
	1	AG	1000	-	-		TCL SVOCs	
	2	CG	40	HCl	-		TPH DRO	
	1	AG	1000	-	-		TPH GRO	
	1	PE	250	HNO_3	-		total Iron	
	1	PE	500	$NaOH_2N$	-		sulfide	
	1	PE	1000	-	-		sulfate	
	1	PE	1000	-	-		Alkalinity	

REMARKS: 0.0ppm

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8		SITE LOCATION: Long Island City, Queens, New York
Well No: MW- MW-25S	SAMPLE ID: MW- MW-25S	DATE: 4/3/18

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.90	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
	11 ft min			

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0835			500	8.02	7.39	5.66	0.0	0.00	13.35	3.0	3.56	-108	clear	
0840			475	8.02	7.38	5.56	0.0	0.00	13.37	3.0	3.50	-110		
0845			450	8.05	7.39	5.53	0.0	0.00	13.40	3.0	3.48	-110		
0850			500	8.05	7.38	5.45	0.0	0.00	13.43	3.0	3.43	-112		
0925			500	8.08	7.37	5.38	0.0	0.00	13.50	3.0	3.38	-113		

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAICHBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW-25D	SAMPLE ID: MW- QNWP8-MW25D	DATE: 4/3/18

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 9.5 feet 19	STATIC DEPTH TO WATER (feet): 7.85	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (28.5 feet – 7.85 feet) X 0.16 gallons/foot = 3.3 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12	PURGING INITIATED AT: 0940	PURGING ENDED AT: 1040	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (ml/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0940			450	7.85	7.39	20.6	0.0	0.00	12.32	11.9	12.5	-101	clear	
0945			450	7.85	7.95	21.6	0.0	0.00	12.03	12.8	13.4	-126		
0950			475	7.87	7.96	21.7	0.0	0.00	12.09	12.8	13.4	-129		
0955			500	8.00	7.97	21.8	0.0	0.00	12.17	12.9	13.5	-131		
1000			475	8.00	7.98	21.7	0.0	0.00	12.26	12.8	13.5	-132		
1005			500	8.01	7.98	21.7	0.0	0.00	12.30	12.8	13.5	-133		
1010			500	8.02	7.98	21.6	0.0	0.00	12.35	12.8	13.4	-133		
1015			500	8.04	7.99	21.6	0.0	0.00	12.39	12.1	13.4	-134		
1020			500	8.05	8.00	22.2	0.0	0.00	12.40	12.8	13.7	-134		
1025			475	8.05	7.99	22.1	0.0	0.00	12.43	12.9	13.8	-135		

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1045	SAMPLING ENDED AT: 1110
PUMP OR TUBING DEPTH IN WELL (feet): 12	SAMPLE PUMP FLOW RATE (mL per minute): 500	TUBING MATERIAL CODE: teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW25D	2	CG	40	HCl	–	7.97	TCL VOC	PP
	1	AG	1000	–	–		TCL SVOC	
	2	CG	40	HCl	–		TPH DRO	
	1	AG	1000	–	–		TPH GRO	
	1	PE	250	HNO_3	–		total Iron	
	1	PE	500	$NaOH_2N$	–		sulfide	
	1	PE	1000	–	–		sulfate	
	1	PE	1000	–	–		Alkalinity	

REMARKS: 0.0 ppm

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8		SITE LOCATION: Long Island City, Queens, New York
Well No: MW- MW-25D	SAMPLE ID: MW- MW-25	DATE: 4/3/18

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.85	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1030			500	8.06	7.99	22.3	0.0	0.00	12.44	12.9	13.9	-136	clear	
1035			450	8.07	7.98	22.1	0.0	0.00	12.38	12.9	13.8	-138	"	
1040			475	8.07	7.98	22.2	0.0	0.00	12.39	12.9	13.9	-137	"	
1115			500	8.10	7.97	22.2	0.0	0.00	12.40	12.9	14.0	-138	"	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW26S	SAMPLE ID: MW- QNWP8- MW26S	DATE: 3/29/18

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 8 feet 18.5	STATIC DEPTH TO WATER (feet): 5.56	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (16.20 feet – 5.56 feet) X 0.16 gallons/foot = 1.7 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 1035	PURGING ENDED AT: 1120	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (ml/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP. (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1040			500	5.56	7.47	6.39	3.2	6.01	13.93	3.4	4.01	-209	clear yellow	organic odor
1045			450	5.56	7.50	6.51	0.0	6.78	14.13	3.5	4.11	-242		
1050			450	5.56	7.51	6.91	0.0	9.47	14.25	3.8	4.35	-279		
1055			450	5.57	7.49	6.78	0.0	11.20	14.64	3.7	4.26	-294		
1100			500	5.57	7.49	6.87	0.0	10.06	14.77	3.8	4.36	-302		
1105			500	5.59	7.48	7.24	0.0	8.61	15.06	4.0	4.59	-312		
1110			475	5.59	7.47	7.42	0.0	8.17	15.12	4.0	4.68	-316		
1115			500	5.60	7.47	7.50	0.0	7.44	15.16	4.1	4.71	-321		
1120			500	5.61	7.48	7.53	0.0	7.49	15.20	4.1	4.75	-325		
1150			500	5.62	7.48	7.57	0.0	7.52	15.25	4.1	4.80	-328		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES: Eva	SAMPLING INITIATED AT: 1145	SAMPLING ENDED AT: 1145
PUMP OR TUBING DEPTH IN WELL (feet): 11	SAMPLE PUMP FLOW RATE (mL per minute): 500	TUBING MATERIAL CODE: teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8- MW 26S	2	CG	40	HCL	–	7.48	TCL VOC	PP
	1	AG	1000	–	–		TCL SVOC	
	2	CG	40	HCL	–		TPH DRO	
	1	AG	1000	–	–		TPH GRO	
	1	PE	250	HNO_3	–		total Iron	
	1	PE	500	$NaOH_2N$	–		sulfide	
	1	PE	1000	–	–		sulfate	
	1	PE	1000	–	–		Alkalinity	

REMARKS: 1.2 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW-26D	SAMPLE ID: MW- MW26D	DATE: 3/29/18

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
								Product not detected by						
			D.T.W - 5.73'					probe however product						
			Bottom - 30.11'					was observed on bailer						
			≈ 1" of Product											

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW27S	SAMPLE ID: MW- QNWP8-MW27S	DATE: 4/3/2018

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 8.5 feet 18.5	STATIC DEPTH TO WATER (feet): 7.85'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (15.60 feet – 7.85 feet) X 0.16 gallons/foot = 1.24 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1130	PURGING ENDED AT: 1230	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (~~gpm~~) 11 ml/min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
11:35			475	7.85	7.98	5.64	280	10.88	13.82	2.8	3.34	-314	cloudy	organic
11:40			500	7.86	7.93	4.80	150	8.55	13.99	2.6	3.06	-333		
11:45			500	7.87	7.88	4.75	120	8.15	13.94	2.5	3.04	-338		
1150			475	7.89	7.85	4.79	88.7	7.43	13.99	2.5	3.05	-341		
1155			475	7.92	7.84	4.81	39.2	6.37	13.95	2.5	3.06	-345		
1200			450	7.93	7.83	4.82	3.2	4.72	13.90	2.6	3.08	-349	clear	
1205			450	7.93	7.81	4.83	0.0	3.52	13.93	2.6	3.09	-351		
1210			450	7.95	7.81	4.83	0.0	3.28	13.94	2.6	3.09	-351		
1215			475	7.96	7.82	4.82	0.0	3.18	13.91	2.6	3.09	-352		
1220			475	7.97	7.85	4.84	0.0	3.21	13.91	2.6	3.09	-352		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES: Eva	SAMPLING INITIATED AT: 1235	SAMPLING ENDED AT: 1300
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 450	TUBING MATERIAL CODE: teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW27S	2	CG	40	HCl	=	7.81	TCL VOC	PP
	1	AG	1000	=	=		TCL SVOC	
	2	CG	40	HCl	=		TPH DRO	
	1	AG	1000	=	=		TPH GRO	
	1	PE	250	HNO_3	=		Total Iron	
	1	PE	500	$NaOH_2N$	=		Sulfide	
	1	PE	1000	=	=		Sulfate	
	1	PE	1000	=	=		Alkalinity	

REMARKS: 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW275	SAMPLE ID: MW- MW275	DATE: 4/3/2018

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.85'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
1225			500	7.98	7.84	4.84	0.0	3.39	13.91	2.6	3.10	-354	clear	
1230			475	8.00	7.82	4.84	0.0	3.42	13.94	2.6	3.10	-355		
1305			500	8.02	7.81	4.83	0.0	3.45	13.91	2.6	3.09	-355		

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES: Eva	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8		SITE LOCATION: Long Island City, Queens, New York
Well No: MW- MW-27D	SAMPLE ID: MW- MW27D	DATE: 3/30/2018

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.32'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
				D.T.W – 7.32'										
				Bottom @ 30.47'										
				≈ 4" OF product on the bottom tip of bailer										

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8		SITE LOCATION: Long Island City, Queens, New York
Well No: MW- MW 30S	SAMPLE ID: MW- QNWP8-MW30S	DATE: 3/29/2018

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 5.5 feet 15	STATIC DEPTH TO WATER (feet): 7.18	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (14.85 feet – 7.18 feet) X 0.16 gallons/foot = 1.2 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 0945	PURGING ENDED AT: 1025	TOTAL VOLUME PURGED (gallons): 1.3

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (ml/min) (gpm)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0945			500	7.18	7.30	1.34	128	0.00	14.51	0.7	0.868	22	cloudy	organic odor
0950			450	7.18	7.15	1.17	89	0.00	14.46	0.6	0.739	27	"	
0955			450	7.19	7.13	0.953	61	0.00	14.24	0.5	0.614	10	"	
1000			400	7.19	7.14	0.942	50	0.00	14.18	0.5	0.601	-11	clear	
1005			400	7.20	7.14	0.918	31.2	0.00	14.02	0.4	0.588	-28	"	
1010			450	7.20	7.14	0.914	23.2	0.00	14.03	0.4	0.585	-31	clear	
1015			500	7.21	7.12	0.885	0.0	0.00	13.95	0.4	0.567	-38		
1020			500	7.22	7.12	0.882	0.0	0.00	13.88	0.4	0.565	-39		
1025			450	7.23	7.11	0.881	0.0	0.00	13.87	0.4	0.564	-39		
1050			450	7.24	7.09	0.877	0.0	0.00	13.85	0.4	0.561	-39		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAICH BOWSICA	SAMPLER(S) SIGNATURES: Eva	SAMPLING INITIATED AT: 1030	SAMPLING ENDED AT: 1045
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 450	TUBING MATERIAL CODE: teflon lined poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW30S	2	GG	40	HCL	–	7.09	TCL VOCs	PP
	1	AG	1000	–	–		TCL SVOCs	
	2	GG	40	HCL	–		TPH GRO	
	1	AG	1000	–	–		TPH DRO	
	1	PE	250	HNO_3	–		Total Iron	
	1	PE	500	$NaOH_2N$	–		Sulfide	
	1	PE	1000	–	–		Sulfate	
	1	PE	1000	–	–		Alkalinity	

REMARKS: 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8	SITE LOCATION: Long Island City, Queens, New York	
Well No: MW- MW-30D	SAMPLE ID: MW- QNWP8-MW30D	DATE: 3/29/2018

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to 19 feet 29	STATIC DEPTH TO WATER (feet): 7.52'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (28.30 feet – 7.52 feet) X 0.16 gallons/foot = 3.3 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12	PURGING INITIATED AT: 0815	PURGING ENDED AT: 0905	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (ml/min)	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0820			500	7.52	7.78	6.08	0.0	0.16	17.75	3.3	3.82	-119	clear	organic
0825			500	7.52	7.76	6.06	0.0	0.00	17.69	3.3	3.82	-118		
0830			450	7.53	7.73	6.01	0.0	0.00	17.49	3.3	3.78	-120		
0835			500	7.54	7.73	6.08	0.0	0.00	17.27	3.3	3.88	-122		
0840			500	7.54	7.72	6.07	0.0	0.00	16.49	3.3	3.83	-124		
0845			500	7.55	7.73	6.06	0.0	0.00	16.48	3.3	3.82	-124		
0850			500	7.57	7.72	6.06	0.0	0.00	16.24	3.3	3.82	-127		
0855			450	7.57	7.71	6.07	0.0	0.00	16.24	3.3	3.83	-128		
0900			500	7.58	7.71	6.06	0.0	0.00	16.12	3.3	3.82	-130		
0905			500	7.59	7.71	6.05	0.0	0.00	16.11	3.3	3.82	-130		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0925	SAMPLING ENDED AT: 0940
PUMP OR TUBING DEPTH IN WELL (feet): 12	SAMPLE PUMP FLOW RATE (mL per minute): 500	TUBING MATERIAL CODE: Teflon lined Poly	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
QNWP8-MW30D	2	CG	40	HCL	–	7.71	TCL VOCs	PP
	1	AG	1000	–	–		TCL SVOCs	
	2	CG	40	HCL	–		TPH DRO	
	1	AG	1000	–	–		TPH GRO	
	1	PE	250	HNO_3	–		total Iron	
	1	PE	500	$NaOH_2N$	–		sulfide	
	1	PE	1000	–	–		sulfate	
	1	PE	1000	–	–		Alkalinity	

REMARKS: 0.0 ppm

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Fleming-Lee Shue, Inc.
158 West 29th St, 9th Floor
New York, New York 10001
212-675-3225

GROUNDWATER SAMPLING LOG

SITE NAME: Queens West Development Parcel 8		SITE LOCATION: Long Island City, Queens, New York
Well No: MW- MW-30D	SAMPLE ID: MW- MW30D	DATE: 3/29/18

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): .006	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 7.52'	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm) ML/min	DEPTH TO WATER (feet)	pH (standard units)	COND. (µmhos/cm or µS/cm)	TURBIDITY (NTUs)	DISSOLVED OXYGEN (mg/L or % saturation)	TEMP (°C)	Salinity (%)	TDS (g/L)	ORP (mV)	COLOR	ODOR (describe)
0945			500	7.61	7.71	6.07	0.0	0.00	16.14	3.3	3.81	-132	clear	-

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: EVA JAKUBOWSKA	SAMPLER(S) SIGNATURES: Eva	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Appendix 3

Laboratory Groundwater Analytical Report

Included on Attached CD

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA FOR

VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS

GC SEMI-VOLATILES

METALS

GENERAL CHEMISTRY

PROJECT NAME : HUNTERS POINT - QUEENS WEST LIBRARY

LIRO ENGINEERS, INC.

690 Delaware Ave.

Buffalo, NY - 14209

Phone No: 716-882-5476

ORDER ID : J2173

ATTENTION : Steve Frank

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 04/06/2018

Dear Steve Frank,

6 water samples for the **Hunters Point - Queens West Library** project were received on **03/30/2018.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

The invoice for this workorder is also attached to the e-mail.

Regards,

Joseph Aragona

908 728 3147

joseph@chemtech.net

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. J2173
QUOTE NO.
COC Number 040825

CLIENT INFORMATION
REPORT TO BE SENT TO:
COMPANY: LiRO Engineers, Inc.
ADDRESS: 703 Horimer Street
CITY: Brooklyn STATE: NY ZIP: 11211
ATTENTION: Steve Frank
PHONE: 716 882 5476 FAX:

CLIENT PROJECT INFORMATION
PROJECT NAME: Queens West, Parcel 8, Hunters Point Library, DEC C241087
PROJECT NO.: 17-155-0265 LOCATION: LIC, NY
PROJECT MANAGER: Steve Frank
e-mail: franks@lino.com
PHONE: 716 882 5476 FAX:

CLIENT BILLING INFORMATION
BILL TO: PO#:
ADDRESS: same
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION
FAX: DAYS *
HARD COPY: DAYS *
EDD: 5 days DAYS *
PREAPPROVED TAT: ☒ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION
☐ LEVEL 1: Results only
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format:
☒ Others Full Category B

ANALYSIS
1 TCL VOCs 8260B
2 TCL SVOCs 8270
3 TPH DRO 8015
4 TPH GRO 8015
5 Total Iron 6010
6 Sulfide 376.1
7 Sulfate 300.0
8 Alkalinity
9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	QNWP8-MW26S-GW	GW		X	3/29/18	1125	10	X	X	X	X	X	X	X	X		← Specify Preservatives A-HCl B-HNO_3 C-H_2SO_4 D-NaOH E-ICE F-Other
2.	QNWP8-MW30S-GW	GW		X	"	1030	10	X	X	X	X	X	X	X	X		
3.	QNWP8-MW30D-GW	GW		X	"	0925	10	X	X	X	X	X	X	X	X		
4.	QNWP8-MW24S-GW	GW		X	3/30/18	1030	10	X	X	X	X	X	X	X	X		
5.	QNWP8-MW24D-GW	GW		X	"	0855	10	X	X	X	X	X	X	X	X		
6.	QNWP8-Trip Blank-1	DI water		X	—	—	2	X									
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY/SAMPLER:	DATE/TIME:	RECEIVED BY:
1. Eric	3/30/18 1325	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.	3/30/18 15:45	3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant Cooler Temp. 4.7°C
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments: Data Format: NY Regulatory, Full Category B NYSDEC EQUIS EDD
Ice in Cooler?: Yes

Page ___ of ___

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT CHEMTECH: ☒ PICKED UP ☐ OVERNIGHT
Shipment Complete: ☑ YES ☐ NO

Revision 8/2007

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18 11:25
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	2100		1	0.4	1	2	mg/L		04/04/18 16:05	SM2320 B
Sulfate	924	OR	1	0.13	0.375	0.75	mg/L		04/02/18 12:30	300.0
Sulfide	36.2		1	0.03	0.5	1	mg/L	04/02/18 08:00	04/02/18 14:18	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18 11:25
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	696	D	50	6.6	18.75	37.5	mg/L		04/02/18 18:51	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	980 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000695.D	20	04/02/18 08:49	04/03/18 21:34	PB107890

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	14204		510	510	1020	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	0.75		29 - 130		75%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014587.D	10	04/03/18 15:57	FB040318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	8710		120	225	450	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	23.6		50 - 150		118%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	1640		1	12.5	12.5	50	ug/L	04/03/18 09:05	04/04/18 15:38	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104138.D	1	03/31/18 07:20	04/02/18 16:34	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.1	U	0.78	1	10.1	ug/L
108-95-2	Phenol	10.1	U	0.21	1	10.1	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.1	U	0.56	1	10.1	ug/L
95-57-8	2-Chlorophenol	10.1	U	0.55	1	10.1	ug/L
95-48-7	2-Methylphenol	33.6		0.24	1	10.1	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.1	U	0.17	1	10.1	ug/L
98-86-2	Acetophenone	10.1	U	0.14	1	10.1	ug/L
65794-96-9	3+4-Methylphenols	120	E	0.38	1	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.1	U	0.2	1	10.1	ug/L
67-72-1	Hexachloroethane	10.1	U	0.25	1	10.1	ug/L
98-95-3	Nitrobenzene	10.1	U	0.69	1	10.1	ug/L
78-59-1	Isophorone	10.1	U	0.3	1	10.1	ug/L
88-75-5	2-Nitrophenol	10.1	U	0.53	1	10.1	ug/L
105-67-9	2,4-Dimethylphenol	680	E	0.72	1	10.1	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.1	U	0.56	1	10.1	ug/L
120-83-2	2,4-Dichlorophenol	10.1	U	0.67	1	10.1	ug/L
91-20-3	Naphthalene	2000	E	0.12	1	10.1	ug/L
106-47-8	4-Chloroaniline	10.1	U	1	1	10.1	ug/L
87-68-3	Hexachlorobutadiene	10.1	U	0.25	1	10.1	ug/L
105-60-2	Caprolactam	10.1	U	1	1	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	10.1	U	0.4	1	10.1	ug/L
91-57-6	2-Methylnaphthalene	300	E	0.32	1	10.1	ug/L
77-47-4	Hexachlorocyclopentadiene	10.1	U	0.24	1	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	10.1	U	0.57	1	10.1	ug/L
95-95-4	2,4,5-Trichlorophenol	10.1	U	0.4	1	10.1	ug/L
92-52-4	1,1-Biphenyl	46.1		0.15	1	10.1	ug/L
91-58-7	2-Chloronaphthalene	10.1	U	0.16	1	10.1	ug/L
88-74-4	2-Nitroaniline	10.1	U	0.49	1	10.1	ug/L
131-11-3	Dimethylphthalate	5.8	J	0.22	1	10.1	ug/L
208-96-8	Acenaphthylene	8.1	J	0.71	1	10.1	ug/L
606-20-2	2,6-Dinitrotoluene	10.1	U	0.32	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104138.D	1	03/31/18 07:20	04/02/18 16:34	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.1	U	1	1	10.1	ug/L
83-32-9	Acenaphthene	98	E	0.21	1	10.1	ug/L
51-28-5	2,4-Dinitrophenol	10.1	U	2.1	8.1	10.1	ug/L
100-02-7	4-Nitrophenol	10.1	U	2	5.1	10.1	ug/L
132-64-9	Dibenzofuran	85.1	E	0.24	1	10.1	ug/L
121-14-2	2,4-Dinitrotoluene	10.1	U	1	1	10.1	ug/L
84-66-2	Diethylphthalate	10.1	U	0.38	1	10.1	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	60.2		0.31	1	10.1	ug/L
100-01-6	4-Nitroaniline	10.1	U	1.4	2	10.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.1	U	0.75	2	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	10.1	U	0.61	1	10.1	ug/L
101-55-3	4-Bromophenyl-phenylether	10.1	U	0.23	1	10.1	ug/L
118-74-1	Hexachlorobenzene	10.1	U	0.18	1	10.1	ug/L
1912-24-9	Atrazine	10.1	U	0.4	1	10.1	ug/L
87-86-5	Pentachlorophenol	10.1	U	1	1	10.1	ug/L
85-01-8	Phenanthrene	78.2		0.26	1	10.1	ug/L
120-12-7	Anthracene	14		0.16	1	10.1	ug/L
86-74-8	Carbazole	56.5		0.22	1	10.1	ug/L
84-74-2	Di-n-butylphthalate	10.1	U	1	1	10.1	ug/L
206-44-0	Fluoranthene	7.7	J	0.4	1	10.1	ug/L
129-00-0	Pyrene	4.5	J	0.2	1	10.1	ug/L
85-68-7	Butylbenzylphthalate	10.1	U	0.19	1	10.1	ug/L
91-94-1	3,3-Dichlorobenzidine	10.1	U	1	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	10.1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	10.1	U	0.18	1	10.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.1	U	0.16	1	10.1	ug/L
117-84-0	Di-n-octyl phthalate	10.1	U	0.52	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	10.1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	10.1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	10.1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.1	U	0.42	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104138.D	1	03/31/18 07:20	04/02/18 16:34	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.1	U	0.29	1	10.1	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.1	U	0.2	1	10.1	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.1	U	0.2	1	10.1	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	21.6		10 - 130		14%	SPK: 150
13127-88-3	Phenol-d6	31		10 - 130		21%	SPK: 150
4165-60-0	Nitrobenzene-d5	180	*	36 - 131		178%	SPK: 100
321-60-8	2-Fluorobiphenyl	83.2		39 - 131		83%	SPK: 100
118-79-6	2,4,6-Tribromophenol	95.7		25 - 155		64%	SPK: 150
1718-51-0	Terphenyl-d14	58.2		23 - 130		58%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	104262	6.97				
1146-65-2	Naphthalene-d8	185298	8.24				
15067-26-2	Acenaphthene-d10	187102	10				
1517-22-2	Phenanthrene-d10	254501	11.5				
1719-03-5	Chrysene-d12	221476	14.15				
1520-96-3	Perylene-d12	239663	15.7				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104153.D	5	03/31/18 07:20	04/03/18 01:46	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	50.5	UD	3.9	5.1	50.5	ug/L
108-95-2	Phenol	50.5	UD	1.1	5.1	50.5	ug/L
111-44-4	bis(2-Chloroethyl)ether	50.5	UD	2.8	5.1	50.5	ug/L
95-57-8	2-Chlorophenol	50.5	UD	2.7	5.1	50.5	ug/L
95-48-7	2-Methylphenol	53.1	D	1.2	5.1	50.5	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	50.5	UD	0.86	5.1	50.5	ug/L
98-86-2	Acetophenone	50.5	UD	0.71	5.1	50.5	ug/L
65794-96-9	3+4-Methylphenols	140	D	1.9	5.1	50.5	ug/L
621-64-7	n-Nitroso-di-n-propylamine	50.5	UD	1	5.1	50.5	ug/L
67-72-1	Hexachloroethane	50.5	UD	1.3	5.1	50.5	ug/L
98-95-3	Nitrobenzene	50.5	UD	3.4	5.1	50.5	ug/L
78-59-1	Isophorone	50.5	UD	1.5	5.1	50.5	ug/L
88-75-5	2-Nitrophenol	50.5	UD	2.6	5.1	50.5	ug/L
105-67-9	2,4-Dimethylphenol	480	ED	3.6	5.1	50.5	ug/L
111-91-1	bis(2-Chloroethoxy)methane	50.5	UD	2.8	5.1	50.5	ug/L
120-83-2	2,4-Dichlorophenol	50.5	UD	3.3	5.1	50.5	ug/L
91-20-3	Naphthalene	3100	ED	0.61	5.1	50.5	ug/L
106-47-8	4-Chloroaniline	50.5	UD	5.1	5.1	50.5	ug/L
87-68-3	Hexachlorobutadiene	50.5	UD	1.3	5.1	50.5	ug/L
105-60-2	Caprolactam	50.5	UD	5.1	5.1	50.5	ug/L
59-50-7	4-Chloro-3-methylphenol	50.5	UD	2	5.1	50.5	ug/L
91-57-6	2-Methylnaphthalene	260	D	1.6	5.1	50.5	ug/L
77-47-4	Hexachlorocyclopentadiene	50.5	UD	1.2	5.1	50.5	ug/L
88-06-2	2,4,6-Trichlorophenol	50.5	UD	2.8	5.1	50.5	ug/L
95-95-4	2,4,5-Trichlorophenol	50.5	UD	2	5.1	50.5	ug/L
92-52-4	1,1-Biphenyl	59	D	0.76	5.1	50.5	ug/L
91-58-7	2-Chloronaphthalene	50.5	UD	0.81	5.1	50.5	ug/L
88-74-4	2-Nitroaniline	50.5	UD	2.5	5.1	50.5	ug/L
131-11-3	Dimethylphthalate	50.5	UD	1.1	5.1	50.5	ug/L
208-96-8	Acenaphthylene	50.5	UD	3.5	5.1	50.5	ug/L
606-20-2	2,6-Dinitrotoluene	50.5	UD	1.6	5.1	50.5	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104153.D	5	03/31/18 07:20	04/03/18 01:46	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	50.5	UD	5.1	5.1	50.5	ug/L
83-32-9	Acenaphthene	140	D	1.1	5.1	50.5	ug/L
51-28-5	2,4-Dinitrophenol	50.5	UD	10.6	40.4	50.5	ug/L
100-02-7	4-Nitrophenol	50.5	UD	10.1	25.3	50.5	ug/L
132-64-9	Dibenzofuran	110	D	1.2	5.1	50.5	ug/L
121-14-2	2,4-Dinitrotoluene	50.5	UD	5.1	5.1	50.5	ug/L
84-66-2	Diethylphthalate	50.5	UD	1.9	5.1	50.5	ug/L
7005-72-3	4-Chlorophenyl-phenylether	50.5	UD	1.1	5.1	50.5	ug/L
86-73-7	Fluorene	79.6	D	1.6	5.1	50.5	ug/L
100-01-6	4-Nitroaniline	50.5	UD	6.9	10.1	50.5	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	50.5	UD	3.7	10.1	50.5	ug/L
86-30-6	n-Nitrosodiphenylamine	50.5	UD	3	5.1	50.5	ug/L
101-55-3	4-Bromophenyl-phenylether	50.5	UD	1.2	5.1	50.5	ug/L
118-74-1	Hexachlorobenzene	50.5	UD	0.91	5.1	50.5	ug/L
1912-24-9	Atrazine	50.5	UD	2	5.1	50.5	ug/L
87-86-5	Pentachlorophenol	50.5	UD	5.1	5.1	50.5	ug/L
85-01-8	Phenanthrene	92.8	D	1.3	5.1	50.5	ug/L
120-12-7	Anthracene	15.4	JD	0.81	5.1	50.5	ug/L
86-74-8	Carbazole	63.5	D	1.1	5.1	50.5	ug/L
84-74-2	Di-n-butylphthalate	50.5	UD	5.1	5.1	50.5	ug/L
206-44-0	Fluoranthene	50.5	UD	2	5.1	50.5	ug/L
129-00-0	Pyrene	50.5	UD	1	5.1	50.5	ug/L
85-68-7	Butylbenzylphthalate	50.5	UD	0.96	5.1	50.5	ug/L
91-94-1	3,3-Dichlorobenzidine	50.5	UD	5.1	5.1	50.5	ug/L
56-55-3	Benzo(a)anthracene	50.5	UD	0.81	5.1	50.5	ug/L
218-01-9	Chrysene	50.5	UD	0.91	5.1	50.5	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	50.5	UD	0.81	5.1	50.5	ug/L
117-84-0	Di-n-octyl phthalate	50.5	UD	2.6	5.1	50.5	ug/L
205-99-2	Benzo(b)fluoranthene	50.5	UD	1.5	5.1	50.5	ug/L
207-08-9	Benzo(k)fluoranthene	50.5	UD	0.91	5.1	50.5	ug/L
50-32-8	Benzo(a)pyrene	50.5	UD	0.71	5.1	50.5	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	50.5	UD	0.76	5.1	50.5	ug/L
53-70-3	Dibenzo(a,h)anthracene	50.5	UD	2.1	5.1	50.5	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-01DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104153.D	5	03/31/18 07:20	04/03/18 01:46	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	50.5	UD	1.5	5.1	50.5	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	50.5	UD	1	5.1	50.5	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	50.5	UD	1	5.1	50.5	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	15.1		10 - 130		10%	SPK: 150
13127-88-3	Phenol-d6	32.1		10 - 130		21%	SPK: 150
4165-60-0	Nitrobenzene-d5	120		36 - 131		116%	SPK: 100
321-60-8	2-Fluorobiphenyl	110		39 - 131		112%	SPK: 100
118-79-6	2,4,6-Tribromophenol	110		25 - 155		72%	SPK: 150
1718-51-0	Terphenyl-d14	64.2		23 - 130		64%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	86261	6.96				
1146-65-2	Naphthalene-d8	276384	8.25				
15067-26-2	Acenaphthene-d10	153283	10				
1517-22-2	Phenanthrene-d10	225019	11.49				
1719-03-5	Chrysene-d12	211886	14.14				
1520-96-3	Perylene-d12	203227	15.69				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GWDL2	SDG No.:	J2173
Lab Sample ID:	J2173-01DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104154.D	100	03/31/18 07:20	04/03/18 02:13	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	1000	UD	77.8	100	1000	ug/L
108-95-2	Phenol	1000	UD	21.2	100	1000	ug/L
111-44-4	bis(2-Chloroethyl)ether	1000	UD	55.6	100	1000	ug/L
95-57-8	2-Chlorophenol	1000	UD	54.5	100	1000	ug/L
95-48-7	2-Methylphenol	1000	UD	24.2	100	1000	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1000	UD	17.2	100	1000	ug/L
98-86-2	Acetophenone	1000	UD	14.1	100	1000	ug/L
65794-96-9	3+4-Methylphenols	1000	UD	38.4	100	1000	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1000	UD	20.2	100	1000	ug/L
67-72-1	Hexachloroethane	1000	UD	25.3	100	1000	ug/L
98-95-3	Nitrobenzene	1000	UD	68.7	100	1000	ug/L
78-59-1	Isophorone	1000	UD	30.3	100	1000	ug/L
88-75-5	2-Nitrophenol	1000	UD	52.5	100	1000	ug/L
105-67-9	2,4-Dimethylphenol	340	JD	71.7	100	1000	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1000	UD	55.6	100	1000	ug/L
120-83-2	2,4-Dichlorophenol	1000	UD	66.7	100	1000	ug/L
91-20-3	Naphthalene	6100	D	12.1	100	1000	ug/L
106-47-8	4-Chloroaniline	1000	UD	100	100	1000	ug/L
87-68-3	Hexachlorobutadiene	1000	UD	25.3	100	1000	ug/L
105-60-2	Caprolactam	1000	UD	100	100	1000	ug/L
59-50-7	4-Chloro-3-methylphenol	1000	UD	40.4	100	1000	ug/L
91-57-6	2-Methylnaphthalene	1000	UD	32.3	100	1000	ug/L
77-47-4	Hexachlorocyclopentadiene	1000	UD	24.2	100	1000	ug/L
88-06-2	2,4,6-Trichlorophenol	1000	UD	56.6	100	1000	ug/L
95-95-4	2,4,5-Trichlorophenol	1000	UD	40.4	100	1000	ug/L
92-52-4	1,1-Biphenyl	1000	UD	15.2	100	1000	ug/L
91-58-7	2-Chloronaphthalene	1000	UD	16.2	100	1000	ug/L
88-74-4	2-Nitroaniline	1000	UD	49.5	100	1000	ug/L
131-11-3	Dimethylphthalate	1000	UD	22.2	100	1000	ug/L
208-96-8	Acenaphthylene	1000	UD	70.7	100	1000	ug/L
606-20-2	2,6-Dinitrotoluene	1000	UD	32.3	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GWDL2	SDG No.:	J2173
Lab Sample ID:	J2173-01DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104154.D	100	03/31/18 07:20	04/03/18 02:13	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1000	UD	100	100	1000	ug/L
83-32-9	Acenaphthene	1000	UD	21.2	100	1000	ug/L
51-28-5	2,4-Dinitrophenol	1000	UD	210	810	1000	ug/L
100-02-7	4-Nitrophenol	1000	UD	200	510	1000	ug/L
132-64-9	Dibenzofuran	1000	UD	24.2	100	1000	ug/L
121-14-2	2,4-Dinitrotoluene	1000	UD	100	100	1000	ug/L
84-66-2	Diethylphthalate	1000	UD	38.4	100	1000	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1000	UD	21.2	100	1000	ug/L
86-73-7	Fluorene	1000	UD	31.3	100	1000	ug/L
100-01-6	4-Nitroaniline	1000	UD	140	200	1000	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	1000	UD	74.7	200	1000	ug/L
86-30-6	n-Nitrosodiphenylamine	1000	UD	60.6	100	1000	ug/L
101-55-3	4-Bromophenyl-phenylether	1000	UD	23.2	100	1000	ug/L
118-74-1	Hexachlorobenzene	1000	UD	18.2	100	1000	ug/L
1912-24-9	Atrazine	1000	UD	40.4	100	1000	ug/L
87-86-5	Pentachlorophenol	1000	UD	100	100	1000	ug/L
85-01-8	Phenanthrene	1000	UD	26.3	100	1000	ug/L
120-12-7	Anthracene	1000	UD	16.2	100	1000	ug/L
86-74-8	Carbazole	1000	UD	22.2	100	1000	ug/L
84-74-2	Di-n-butylphthalate	1000	UD	100	100	1000	ug/L
206-44-0	Fluoranthene	1000	UD	40.4	100	1000	ug/L
129-00-0	Pyrene	1000	UD	20.2	100	1000	ug/L
85-68-7	Butylbenzylphthalate	1000	UD	19.2	100	1000	ug/L
91-94-1	3,3-Dichlorobenzidine	1000	UD	100	100	1000	ug/L
56-55-3	Benzo(a)anthracene	1000	UD	16.2	100	1000	ug/L
218-01-9	Chrysene	1000	UD	18.2	100	1000	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1000	UD	16.2	100	1000	ug/L
117-84-0	Di-n-octyl phthalate	1000	UD	51.5	100	1000	ug/L
205-99-2	Benzo(b)fluoranthene	1000	UD	29.3	100	1000	ug/L
207-08-9	Benzo(k)fluoranthene	1000	UD	18.2	100	1000	ug/L
50-32-8	Benzo(a)pyrene	1000	UD	14.1	100	1000	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1000	UD	15.2	100	1000	ug/L
53-70-3	Dibenzo(a,h)anthracene	1000	UD	42.4	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GWDL2	SDG No.:	J2173
Lab Sample ID:	J2173-01DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104154.D	100	03/31/18 07:20	04/03/18 02:13	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1000	UD	29.3	100	1000	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1000	UD	20.2	100	1000	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	1000	UD	20.2	100	1000	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	2.3	*	10 - 130		2%	SPK: 150
13127-88-3	Phenol-d6	0	*	10 - 130		0%	SPK: 150
4165-60-0	Nitrobenzene-d5	20.1	*	36 - 131		20%	SPK: 100
321-60-8	2-Fluorobiphenyl	110		39 - 131		113%	SPK: 100
118-79-6	2,4,6-Tribromophenol	65.1		25 - 155		43%	SPK: 150
1718-51-0	Terphenyl-d14	62.8		23 - 130		63%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	75156	6.96				
1146-65-2	Naphthalene-d8	338300	8.24				
15067-26-2	Acenaphthene-d10	145804	10				
1517-22-2	Phenanthrene-d10	216310	11.49				
1719-03-5	Chrysene-d12	190736	14.14				
1520-96-3	Perylene-d12	176444	15.69				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047402.D	50		04/05/18 17:06	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	250	U	10	25	250	ug/L
74-87-3	Chloromethane	250	U	10	25	250	ug/L
75-01-4	Vinyl Chloride	250	U	17	25	250	ug/L
74-83-9	Bromomethane	250	U	10	25	250	ug/L
75-00-3	Chloroethane	250	U	10	25	250	ug/L
75-69-4	Trichlorofluoromethane	250	U	17.5	25	250	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	250	U	22.5	25	250	ug/L
75-65-0	Tert butyl alcohol	1300	U	25	130	1300	ug/L
75-35-4	1,1-Dichloroethene	250	U	23.5	25	250	ug/L
67-64-1	Acetone	1300	U	25	130	1300	ug/L
75-15-0	Carbon Disulfide	51	J	10	25	250	ug/L
1634-04-4	Methyl tert-butyl Ether	250	U	17.5	25	250	ug/L
79-20-9	Methyl Acetate	250	U	10	100	250	ug/L
75-09-2	Methylene Chloride	250	U	20.5	25	250	ug/L
156-60-5	trans-1,2-Dichloroethene	250	U	20.5	25	250	ug/L
75-34-3	1,1-Dichloroethane	250	U	18	25	250	ug/L
110-82-7	Cyclohexane	250	U	10	25	250	ug/L
78-93-3	2-Butanone	1300	U	66	130	1300	ug/L
56-23-5	Carbon Tetrachloride	250	U	10	25	250	ug/L
156-59-2	cis-1,2-Dichloroethene	250	U	17.5	25	250	ug/L
74-97-5	Bromochloromethane	250	U	10	25	250	ug/L
67-66-3	Chloroform	250	U	17	25	250	ug/L
71-55-6	1,1,1-Trichloroethane	250	U	20	37.5	250	ug/L
108-87-2	Methylcyclohexane	15	J	10	25	250	ug/L
71-43-2	Benzene	3000		16	25	250	ug/L
107-06-2	1,2-Dichloroethane	250	U	24	37.5	250	ug/L
79-01-6	Trichloroethene	250	U	14	25	250	ug/L
78-87-5	1,2-Dichloropropane	250	U	23	25	250	ug/L
75-27-4	Bromodichloromethane	250	U	18	25	250	ug/L
108-10-1	4-Methyl-2-Pentanone	1300	U	110	130	1300	ug/L
108-88-3	Toluene	410		18.5	25	250	ug/L
10061-02-6	t-1,3-Dichloropropene	250	U	14.5	25	250	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047402.D	50		04/05/18 17:06	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	250	U	15.5	25	250	ug/L
79-00-5	1,1,2-Trichloroethane	250	U	19	25	250	ug/L
591-78-6	2-Hexanone	1300	U	97	190	1300	ug/L
124-48-1	Dibromochloromethane	250	U	10	25	250	ug/L
106-93-4	1,2-Dibromoethane	250	U	20.5	25	250	ug/L
127-18-4	Tetrachloroethene	250	U	13.5	25	250	ug/L
108-90-7	Chlorobenzene	250	U	24.5	25	250	ug/L
100-41-4	Ethyl Benzene	610		10	25	250	ug/L
179601-23-1	m/p-Xylenes	810		47.5	50	500	ug/L
95-47-6	o-Xylene	550		21.5	25	250	ug/L
100-42-5	Styrene	250	U	18	25	250	ug/L
75-25-2	Bromoform	250	U	23.5	25	250	ug/L
98-82-8	Isopropylbenzene	34	J	22.5	25	250	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	250	U	15.5	25	250	ug/L
541-73-1	1,3-Dichlorobenzene	250	U	21.5	25	250	ug/L
106-46-7	1,4-Dichlorobenzene	250	U	16	25	250	ug/L
95-50-1	1,2-Dichlorobenzene	250	U	22.5	25	250	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	250	U	23	100	250	ug/L
120-82-1	1,2,4-Trichlorobenzene	250	U	10	25	250	ug/L
87-61-6	1,2,3-Trichlorobenzene	250	U	10	25	250	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.3		61 - 141		107%	SPK: 50
1868-53-7	Dibromofluoromethane	51		69 - 133		102%	SPK: 50
2037-26-5	Toluene-d8	52.6		65 - 126		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	53		58 - 135		106%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1088850	7.66				
540-36-3	1,4-Difluorobenzene	1748990	8.59				
3114-55-4	Chlorobenzene-d5	1694450	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	790979	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW26S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047402.D	50		04/05/18 17:06	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18 10:30
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	487		1	0.4	1	2	mg/L		04/04/18 16:29	SM2320 B
Sulfate	142	OR	1	0.13	0.375	0.75	mg/L		04/02/18 13:01	300.0
Sulfide	6.56		1	0.03	0.5	1	mg/L	04/02/18 08:00	04/02/18 14:32	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18 10:30
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-02DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	119	D	5	0.66	1.9	3.8	mg/L		04/02/18 19:22	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	985 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000683.D	1	04/02/18 08:49	04/03/18 13:54	PB107890

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	272		25	25.5	51	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	13.8		29 - 130		69%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014583.D	1	04/03/18 13:18	FB040318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	45	U	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	19.8		50 - 150		99%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	4040		1	12.5	12.5	50	ug/L	04/03/18 09:05	04/04/18 16:03	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033489.D	1	03/31/18 07:20	04/02/18 16:16	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.2	U	0.79	1	10.2	ug/L
108-95-2	Phenol	10.2	U	0.21	1	10.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.2	U	0.56	1	10.2	ug/L
95-57-8	2-Chlorophenol	10.2	U	0.55	1	10.2	ug/L
95-48-7	2-Methylphenol	10.2	U	0.24	1	10.2	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.2	U	0.17	1	10.2	ug/L
98-86-2	Acetophenone	10.2	U	0.14	1	10.2	ug/L
65794-96-9	3+4-Methylphenols	10.2	U	0.39	1	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.2	U	0.2	1	10.2	ug/L
67-72-1	Hexachloroethane	10.2	U	0.26	1	10.2	ug/L
98-95-3	Nitrobenzene	10.2	U	0.69	1	10.2	ug/L
78-59-1	Isophorone	10.2	U	0.31	1	10.2	ug/L
88-75-5	2-Nitrophenol	10.2	U	0.53	1	10.2	ug/L
105-67-9	2,4-Dimethylphenol	10.2	U	0.72	1	10.2	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.2	U	0.56	1	10.2	ug/L
120-83-2	2,4-Dichlorophenol	10.2	U	0.67	1	10.2	ug/L
91-20-3	Naphthalene	10.2	U	0.12	1	10.2	ug/L
106-47-8	4-Chloroaniline	10.2	U	1	1	10.2	ug/L
87-68-3	Hexachlorobutadiene	10.2	U	0.26	1	10.2	ug/L
105-60-2	Caprolactam	10.2	U	1	1	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	10.2	U	0.41	1	10.2	ug/L
91-57-6	2-Methylnaphthalene	10.2	U	0.33	1	10.2	ug/L
77-47-4	Hexachlorocyclopentadiene	10.2	U	0.24	1	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	10.2	U	0.57	1	10.2	ug/L
95-95-4	2,4,5-Trichlorophenol	10.2	U	0.41	1	10.2	ug/L
92-52-4	1,1-Biphenyl	10.2	U	0.15	1	10.2	ug/L
91-58-7	2-Chloronaphthalene	10.2	U	0.16	1	10.2	ug/L
88-74-4	2-Nitroaniline	10.2	U	0.5	1	10.2	ug/L
131-11-3	Dimethylphthalate	10.2	U	0.22	1	10.2	ug/L
208-96-8	Acenaphthylene	10.2	U	0.71	1	10.2	ug/L
606-20-2	2,6-Dinitrotoluene	10.2	U	0.33	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033489.D	1	03/31/18 07:20	04/02/18 16:16	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.2	U	1	1	10.2	ug/L
83-32-9	Acenaphthene	5.5	J	0.21	1	10.2	ug/L
51-28-5	2,4-Dinitrophenol	10.2	U	2.1	8.2	10.2	ug/L
100-02-7	4-Nitrophenol	10.2	U	2	5.1	10.2	ug/L
132-64-9	Dibenzofuran	10.2	U	0.24	1	10.2	ug/L
121-14-2	2,4-Dinitrotoluene	10.2	U	1	1	10.2	ug/L
84-66-2	Diethylphthalate	10.2	U	0.39	1	10.2	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.2	U	0.21	1	10.2	ug/L
86-73-7	Fluorene	10.2	U	0.32	1	10.2	ug/L
100-01-6	4-Nitroaniline	10.2	U	1.4	2	10.2	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.2	U	0.76	2	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	10.2	U	0.61	1	10.2	ug/L
101-55-3	4-Bromophenyl-phenylether	10.2	U	0.23	1	10.2	ug/L
118-74-1	Hexachlorobenzene	10.2	U	0.18	1	10.2	ug/L
1912-24-9	Atrazine	10.2	U	0.41	1	10.2	ug/L
87-86-5	Pentachlorophenol	10.2	U	1	1	10.2	ug/L
85-01-8	Phenanthrene	10.2	U	0.27	1	10.2	ug/L
120-12-7	Anthracene	10.2	U	0.16	1	10.2	ug/L
86-74-8	Carbazole	10.2	U	0.22	1	10.2	ug/L
84-74-2	Di-n-butylphthalate	10.2	U	1	1	10.2	ug/L
206-44-0	Fluoranthene	10.2	U	0.41	1	10.2	ug/L
129-00-0	Pyrene	10.2	U	0.2	1	10.2	ug/L
85-68-7	Butylbenzylphthalate	10.2	U	0.19	1	10.2	ug/L
91-94-1	3,3-Dichlorobenzidine	10.2	U	1	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.2	U	0.16	1	10.2	ug/L
117-84-0	Di-n-octyl phthalate	10.2	U	0.52	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.3	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033489.D	1	03/31/18 07:20	04/02/18 16:16	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.3	1	10.2	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.2	U	0.2	1	10.2	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.2	U	0.2	1	10.2	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	61.7		10 - 130		41%	SPK: 150
13127-88-3	Phenol-d6	31.4		10 - 130		21%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.1		36 - 131		89%	SPK: 100
321-60-8	2-Fluorobiphenyl	87.7		39 - 131		88%	SPK: 100
118-79-6	2,4,6-Tribromophenol	130		25 - 155		87%	SPK: 150
1718-51-0	Terphenyl-d14	83.3		23 - 130		83%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	33475	8.87				
1146-65-2	Naphthalene-d8	148727	11.75				
15067-26-2	Acenaphthene-d10	121376	15.48				
1517-22-2	Phenanthrene-d10	319555	18.21				
1719-03-5	Chrysene-d12	331458	22.55				
1520-96-3	Perylene-d12	353260	26.32				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047394.D	1		04/05/18 13:48	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047394.D	1		04/05/18 13:48	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53		61 - 141		106%	SPK: 50
1868-53-7	Dibromofluoromethane	52.1		69 - 133		104%	SPK: 50
2037-26-5	Toluene-d8	52.6		65 - 126		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	49		58 - 135		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	982375	7.67				
540-36-3	1,4-Difluorobenzene	1577700	8.58				
3114-55-4	Chlorobenzene-d5	1487410	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	579800	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047394.D	1		04/05/18 13:48	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18 09:25
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	2350		1	0.4	1	2	mg/L		04/04/18 16:35	SM2320 B
Sulfate	588	OR	1	0.13	0.375	0.75	mg/L		04/02/18 13:32	300.0
Sulfide	8.96		1	0.03	0.5	1	mg/L	04/02/18 08:00	04/02/18 14:35	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18 09:25
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-03DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	434	D	20	2.6	7.5	15	mg/L		04/02/18 19:53	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time
J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	990 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000696.D	20	04/02/18 08:49	04/03/18 22:03	PB107890

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	10909		505	505	1010	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	0.61		29 - 130		61%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014588.D	10	04/03/18 16:56	FB040318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	3320		120	225	450	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.1		50 - 150		100%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	704		1	12.5	12.5	50	ug/L	04/03/18 09:05	04/04/18 16:07	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104140.D	1	03/31/18 07:20	04/02/18 17:26	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.2	U	0.78	1	10.2	ug/L
108-95-2	Phenol	9.7	J	0.21	1	10.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.2	U	0.56	1	10.2	ug/L
95-57-8	2-Chlorophenol	10.2	U	0.55	1	10.2	ug/L
95-48-7	2-Methylphenol	19.9		0.24	1	10.2	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.2	U	0.17	1	10.2	ug/L
98-86-2	Acetophenone	10.2	U	0.14	1	10.2	ug/L
65794-96-9	3+4-Methylphenols	29.3		0.39	1	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.2	U	0.2	1	10.2	ug/L
67-72-1	Hexachloroethane	10.2	U	0.25	1	10.2	ug/L
98-95-3	Nitrobenzene	10.2	U	0.69	1	10.2	ug/L
78-59-1	Isophorone	10.2	U	0.3	1	10.2	ug/L
88-75-5	2-Nitrophenol	10.2	U	0.53	1	10.2	ug/L
105-67-9	2,4-Dimethylphenol	200	E	0.72	1	10.2	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.2	U	0.56	1	10.2	ug/L
120-83-2	2,4-Dichlorophenol	10.2	U	0.67	1	10.2	ug/L
91-20-3	Naphthalene	1700	E	0.12	1	10.2	ug/L
106-47-8	4-Chloroaniline	10.2	U	1	1	10.2	ug/L
87-68-3	Hexachlorobutadiene	10.2	U	0.25	1	10.2	ug/L
105-60-2	Caprolactam	10.2	U	1	1	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	10.2	U	0.41	1	10.2	ug/L
91-57-6	2-Methylnaphthalene	300	E	0.32	1	10.2	ug/L
77-47-4	Hexachlorocyclopentadiene	10.2	U	0.24	1	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	10.2	U	0.57	1	10.2	ug/L
95-95-4	2,4,5-Trichlorophenol	10.2	U	0.41	1	10.2	ug/L
92-52-4	1,1-Biphenyl	38.7		0.15	1	10.2	ug/L
91-58-7	2-Chloronaphthalene	10.2	U	0.16	1	10.2	ug/L
88-74-4	2-Nitroaniline	10.2	U	0.5	1	10.2	ug/L
131-11-3	Dimethylphthalate	3.5	J	0.22	1	10.2	ug/L
208-96-8	Acenaphthylene	3.7	J	0.71	1	10.2	ug/L
606-20-2	2,6-Dinitrotoluene	10.2	U	0.32	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104140.D	1	03/31/18 07:20	04/02/18 17:26	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.2	U	1	1	10.2	ug/L
83-32-9	Acenaphthene	96	E	0.21	1	10.2	ug/L
51-28-5	2,4-Dinitrophenol	10.2	U	2.1	8.1	10.2	ug/L
100-02-7	4-Nitrophenol	10.2	U	2	5.1	10.2	ug/L
132-64-9	Dibenzofuran	78		0.24	1	10.2	ug/L
121-14-2	2,4-Dinitrotoluene	10.2	U	1	1	10.2	ug/L
84-66-2	Diethylphthalate	10.2	U	0.39	1	10.2	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.2	U	0.21	1	10.2	ug/L
86-73-7	Fluorene	39.1		0.31	1	10.2	ug/L
100-01-6	4-Nitroaniline	2.4	J	1.4	2	10.2	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.2	U	0.75	2	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	10.2	U	0.61	1	10.2	ug/L
101-55-3	4-Bromophenyl-phenylether	10.2	U	0.23	1	10.2	ug/L
118-74-1	Hexachlorobenzene	10.2	U	0.18	1	10.2	ug/L
1912-24-9	Atrazine	10.2	U	0.41	1	10.2	ug/L
87-86-5	Pentachlorophenol	10.2	U	1	1	10.2	ug/L
85-01-8	Phenanthrene	36.9		0.26	1	10.2	ug/L
120-12-7	Anthracene	3.1	J	0.16	1	10.2	ug/L
86-74-8	Carbazole	36.6		0.22	1	10.2	ug/L
84-74-2	Di-n-butylphthalate	10.2	U	1	1	10.2	ug/L
206-44-0	Fluoranthene	10.2	U	0.41	1	10.2	ug/L
129-00-0	Pyrene	10.2	U	0.2	1	10.2	ug/L
85-68-7	Butylbenzylphthalate	10.2	U	0.19	1	10.2	ug/L
91-94-1	3,3-Dichlorobenzidine	10.2	U	1	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.2	U	0.16	1	10.2	ug/L
117-84-0	Di-n-octyl phthalate	10.2	U	0.52	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.29	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104140.D	1	03/31/18 07:20	04/02/18 17:26	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.29	1	10.2	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.2	U	0.2	1	10.2	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.2	U	0.2	1	10.2	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	31.8		10 - 130		21%	SPK: 150
13127-88-3	Phenol-d6	23.1		10 - 130		15%	SPK: 150
4165-60-0	Nitrobenzene-d5	130		36 - 131		126%	SPK: 100
321-60-8	2-Fluorobiphenyl	67.1		39 - 131		67%	SPK: 100
118-79-6	2,4,6-Tribromophenol	74.6		25 - 155		50%	SPK: 150
1718-51-0	Terphenyl-d14	48.9		23 - 130		49%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	109456	6.97				
1146-65-2	Naphthalene-d8	194260	8.26				
15067-26-2	Acenaphthene-d10	190757	10				
1517-22-2	Phenanthrene-d10	278690	11.5				
1719-03-5	Chrysene-d12	222910	14.15				
1520-96-3	Perylene-d12	243370	15.7				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104212.D	50	03/31/18 07:20	04/04/18 07:34	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	510	UD	39.1	50.8	510	ug/L
108-95-2	Phenol	510	UD	10.7	50.8	510	ug/L
111-44-4	bis(2-Chloroethyl)ether	510	UD	27.9	50.8	510	ug/L
95-57-8	2-Chlorophenol	510	UD	27.4	50.8	510	ug/L
95-48-7	2-Methylphenol	510	UD	12.2	50.8	510	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	510	UD	8.6	50.8	510	ug/L
98-86-2	Acetophenone	510	UD	7.1	50.8	510	ug/L
65794-96-9	3+4-Methylphenols	510	UD	19.3	50.8	510	ug/L
621-64-7	n-Nitroso-di-n-propylamine	510	UD	10.2	50.8	510	ug/L
67-72-1	Hexachloroethane	510	UD	12.7	50.8	510	ug/L
98-95-3	Nitrobenzene	510	UD	34.5	50.8	510	ug/L
78-59-1	Isophorone	510	UD	15.2	50.8	510	ug/L
88-75-5	2-Nitrophenol	510	UD	26.4	50.8	510	ug/L
105-67-9	2,4-Dimethylphenol	510	UD	36	50.8	510	ug/L
111-91-1	bis(2-Chloroethoxy)methane	510	UD	27.9	50.8	510	ug/L
120-83-2	2,4-Dichlorophenol	510	UD	33.5	50.8	510	ug/L
91-20-3	Naphthalene	4300	ED	6.1	50.8	510	ug/L
106-47-8	4-Chloroaniline	510	UD	50.8	50.8	510	ug/L
87-68-3	Hexachlorobutadiene	510	UD	12.7	50.8	510	ug/L
105-60-2	Caprolactam	510	UD	50.8	50.8	510	ug/L
59-50-7	4-Chloro-3-methylphenol	510	UD	20.3	50.8	510	ug/L
91-57-6	2-Methylnaphthalene	210	JD	16.2	50.8	510	ug/L
77-47-4	Hexachlorocyclopentadiene	510	UD	12.2	50.8	510	ug/L
88-06-2	2,4,6-Trichlorophenol	510	UD	28.4	50.8	510	ug/L
95-95-4	2,4,5-Trichlorophenol	510	UD	20.3	50.8	510	ug/L
92-52-4	1,1-Biphenyl	510	UD	7.6	50.8	510	ug/L
91-58-7	2-Chloronaphthalene	510	UD	8.1	50.8	510	ug/L
88-74-4	2-Nitroaniline	510	UD	24.9	50.8	510	ug/L
131-11-3	Dimethylphthalate	510	UD	11.2	50.8	510	ug/L
208-96-8	Acenaphthylene	510	UD	35.5	50.8	510	ug/L
606-20-2	2,6-Dinitrotoluene	510	UD	16.2	50.8	510	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104212.D	50	03/31/18 07:20	04/04/18 07:34	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	510	UD	50.8	50.8	510	ug/L
83-32-9	Acenaphthene	150	JD	10.7	50.8	510	ug/L
51-28-5	2,4-Dinitrophenol	510	UD	110	410	510	ug/L
100-02-7	4-Nitrophenol	510	UD	100	250	510	ug/L
132-64-9	Dibenzofuran	110	JD	12.2	50.8	510	ug/L
121-14-2	2,4-Dinitrotoluene	510	UD	50.8	50.8	510	ug/L
84-66-2	Diethylphthalate	510	UD	19.3	50.8	510	ug/L
7005-72-3	4-Chlorophenyl-phenylether	510	UD	10.7	50.8	510	ug/L
86-73-7	Fluorene	510	UD	15.7	50.8	510	ug/L
100-01-6	4-Nitroaniline	510	UD	69	100	510	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	510	UD	37.6	100	510	ug/L
86-30-6	n-Nitrosodiphenylamine	510	UD	30.5	50.8	510	ug/L
101-55-3	4-Bromophenyl-phenylether	510	UD	11.7	50.8	510	ug/L
118-74-1	Hexachlorobenzene	510	UD	9.1	50.8	510	ug/L
1912-24-9	Atrazine	510	UD	20.3	50.8	510	ug/L
87-86-5	Pentachlorophenol	510	UD	50.8	50.8	510	ug/L
85-01-8	Phenanthrene	510	UD	13.2	50.8	510	ug/L
120-12-7	Anthracene	510	UD	8.1	50.8	510	ug/L
86-74-8	Carbazole	510	UD	11.2	50.8	510	ug/L
84-74-2	Di-n-butylphthalate	510	UD	50.8	50.8	510	ug/L
206-44-0	Fluoranthene	510	UD	20.3	50.8	510	ug/L
129-00-0	Pyrene	510	UD	10.2	50.8	510	ug/L
85-68-7	Butylbenzylphthalate	510	UD	9.6	50.8	510	ug/L
91-94-1	3,3-Dichlorobenzidine	510	UD	50.8	50.8	510	ug/L
56-55-3	Benzo(a)anthracene	510	UD	8.1	50.8	510	ug/L
218-01-9	Chrysene	510	UD	9.1	50.8	510	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	510	UD	8.1	50.8	510	ug/L
117-84-0	Di-n-octyl phthalate	510	UD	25.9	50.8	510	ug/L
205-99-2	Benzo(b)fluoranthene	510	UD	14.7	50.8	510	ug/L
207-08-9	Benzo(k)fluoranthene	510	UD	9.1	50.8	510	ug/L
50-32-8	Benzo(a)pyrene	510	UD	7.1	50.8	510	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	510	UD	7.6	50.8	510	ug/L
53-70-3	Dibenzo(a,h)anthracene	510	UD	21.3	50.8	510	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104212.D	50	03/31/18 07:20	04/04/18 07:34	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	510	UD	14.7	50.8	510	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	510	UD	10.2	50.8	510	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	510	UD	10.2	50.8	510	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	0.95	*	10 - 130		1%	SPK: 150
13127-88-3	Phenol-d6	1.8	*	10 - 130		1%	SPK: 150
4165-60-0	Nitrobenzene-d5	16	*	36 - 131		16%	SPK: 100
321-60-8	2-Fluorobiphenyl	75.2		39 - 131		75%	SPK: 100
118-79-6	2,4,6-Tribromophenol	58.9		25 - 155		39%	SPK: 150
1718-51-0	Terphenyl-d14	71.3		23 - 130		71%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	92401	6.96				
1146-65-2	Naphthalene-d8	405245	8.24				
15067-26-2	Acenaphthene-d10	208817	10				
1517-22-2	Phenanthrene-d10	384850	11.49				
1719-03-5	Chrysene-d12	265129	14.15				
1520-96-3	Perylene-d12	214485	15.7				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GWDL2	SDG No.:	J2173
Lab Sample ID:	J2173-03DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104222.D	100	03/31/18 07:20	04/04/18 11:58	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	1000	UD	78.2	100	1000	ug/L
108-95-2	Phenol	1000	UD	21.3	100	1000	ug/L
111-44-4	bis(2-Chloroethyl)ether	1000	UD	55.8	100	1000	ug/L
95-57-8	2-Chlorophenol	1000	UD	54.8	100	1000	ug/L
95-48-7	2-Methylphenol	1000	UD	24.4	100	1000	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1000	UD	17.3	100	1000	ug/L
98-86-2	Acetophenone	1000	UD	14.2	100	1000	ug/L
65794-96-9	3+4-Methylphenols	1000	UD	38.6	100	1000	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1000	UD	20.3	100	1000	ug/L
67-72-1	Hexachloroethane	1000	UD	25.4	100	1000	ug/L
98-95-3	Nitrobenzene	1000	UD	69	100	1000	ug/L
78-59-1	Isophorone	1000	UD	30.5	100	1000	ug/L
88-75-5	2-Nitrophenol	1000	UD	52.8	100	1000	ug/L
105-67-9	2,4-Dimethylphenol	1000	UD	72.1	100	1000	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1000	UD	55.8	100	1000	ug/L
120-83-2	2,4-Dichlorophenol	1000	UD	67	100	1000	ug/L
91-20-3	Naphthalene	3900	D	12.2	100	1000	ug/L
106-47-8	4-Chloroaniline	1000	UD	100	100	1000	ug/L
87-68-3	Hexachlorobutadiene	1000	UD	25.4	100	1000	ug/L
105-60-2	Caprolactam	1000	UD	100	100	1000	ug/L
59-50-7	4-Chloro-3-methylphenol	1000	UD	40.6	100	1000	ug/L
91-57-6	2-Methylnaphthalene	1000	UD	32.5	100	1000	ug/L
77-47-4	Hexachlorocyclopentadiene	1000	UD	24.4	100	1000	ug/L
88-06-2	2,4,6-Trichlorophenol	1000	UD	56.9	100	1000	ug/L
95-95-4	2,4,5-Trichlorophenol	1000	UD	40.6	100	1000	ug/L
92-52-4	1,1-Biphenyl	1000	UD	15.2	100	1000	ug/L
91-58-7	2-Chloronaphthalene	1000	UD	16.2	100	1000	ug/L
88-74-4	2-Nitroaniline	1000	UD	49.7	100	1000	ug/L
131-11-3	Dimethylphthalate	1000	UD	22.3	100	1000	ug/L
208-96-8	Acenaphthylene	1000	UD	71.1	100	1000	ug/L
606-20-2	2,6-Dinitrotoluene	1000	UD	32.5	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GWDL2	SDG No.:	J2173
Lab Sample ID:	J2173-03DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104222.D	100	03/31/18 07:20	04/04/18 11:58	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1000	UD	100	100	1000	ug/L
83-32-9	Acenaphthene	1000	UD	21.3	100	1000	ug/L
51-28-5	2,4-Dinitrophenol	1000	UD	210	810	1000	ug/L
100-02-7	4-Nitrophenol	1000	UD	200	510	1000	ug/L
132-64-9	Dibenzofuran	1000	UD	24.4	100	1000	ug/L
121-14-2	2,4-Dinitrotoluene	1000	UD	100	100	1000	ug/L
84-66-2	Diethylphthalate	1000	UD	38.6	100	1000	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1000	UD	21.3	100	1000	ug/L
86-73-7	Fluorene	1000	UD	31.5	100	1000	ug/L
100-01-6	4-Nitroaniline	1000	UD	140	200	1000	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	1000	UD	75.1	200	1000	ug/L
86-30-6	n-Nitrosodiphenylamine	1000	UD	60.9	100	1000	ug/L
101-55-3	4-Bromophenyl-phenylether	1000	UD	23.4	100	1000	ug/L
118-74-1	Hexachlorobenzene	1000	UD	18.3	100	1000	ug/L
1912-24-9	Atrazine	1000	UD	40.6	100	1000	ug/L
87-86-5	Pentachlorophenol	1000	UD	100	100	1000	ug/L
85-01-8	Phenanthrene	1000	UD	26.4	100	1000	ug/L
120-12-7	Anthracene	1000	UD	16.2	100	1000	ug/L
86-74-8	Carbazole	1000	UD	22.3	100	1000	ug/L
84-74-2	Di-n-butylphthalate	1000	UD	100	100	1000	ug/L
206-44-0	Fluoranthene	1000	UD	40.6	100	1000	ug/L
129-00-0	Pyrene	1000	UD	20.3	100	1000	ug/L
85-68-7	Butylbenzylphthalate	1000	UD	19.3	100	1000	ug/L
91-94-1	3,3-Dichlorobenzidine	1000	UD	100	100	1000	ug/L
56-55-3	Benzo(a)anthracene	1000	UD	16.2	100	1000	ug/L
218-01-9	Chrysene	1000	UD	18.3	100	1000	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1000	UD	16.2	100	1000	ug/L
117-84-0	Di-n-octyl phthalate	1000	UD	51.8	100	1000	ug/L
205-99-2	Benzo(b)fluoranthene	1000	UD	29.4	100	1000	ug/L
207-08-9	Benzo(k)fluoranthene	1000	UD	18.3	100	1000	ug/L
50-32-8	Benzo(a)pyrene	1000	UD	14.2	100	1000	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1000	UD	15.2	100	1000	ug/L
53-70-3	Dibenzo(a,h)anthracene	1000	UD	42.6	100	1000	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GWDL2	SDG No.:	J2173
Lab Sample ID:	J2173-03DL2	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104222.D	100	03/31/18 07:20	04/04/18 11:58	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1000	UD	29.4	100	1000	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1000	UD	20.3	100	1000	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	1000	UD	20.3	100	1000	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	3.3	*	10 - 130		2%	SPK: 150
13127-88-3	Phenol-d6	0	*	10 - 130		0%	SPK: 150
4165-60-0	Nitrobenzene-d5	8.1	*	36 - 131		8%	SPK: 100
321-60-8	2-Fluorobiphenyl	68.4		39 - 131		68%	SPK: 100
118-79-6	2,4,6-Tribromophenol	34.1	*	25 - 155		23%	SPK: 150
1718-51-0	Terphenyl-d14	69.4		23 - 130		69%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	109154	6.96				
1146-65-2	Naphthalene-d8	508804	8.24				
15067-26-2	Acenaphthene-d10	231745	9.99				
1517-22-2	Phenanthrene-d10	406220	11.49				
1719-03-5	Chrysene-d12	245967	14.14				
1520-96-3	Perylene-d12	218177	15.69				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047401.D	10		04/05/18 16:42	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	50	U	2	5	50	ug/L
74-87-3	Chloromethane	50	U	2	5	50	ug/L
75-01-4	Vinyl Chloride	50	U	3.4	5	50	ug/L
74-83-9	Bromomethane	50	U	2	5	50	ug/L
75-00-3	Chloroethane	50	U	2	5	50	ug/L
75-69-4	Trichlorofluoromethane	50	U	3.5	5	50	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	50	U	4.5	5	50	ug/L
75-65-0	Tert butyl alcohol	250	U	5	25	250	ug/L
75-35-4	1,1-Dichloroethene	50	U	4.7	5	50	ug/L
67-64-1	Acetone	120	J	5	25	250	ug/L
75-15-0	Carbon Disulfide	50	U	2	5	50	ug/L
1634-04-4	Methyl tert-butyl Ether	50	U	3.5	5	50	ug/L
79-20-9	Methyl Acetate	50	U	2	20	50	ug/L
75-09-2	Methylene Chloride	50	U	4.1	5	50	ug/L
156-60-5	trans-1,2-Dichloroethene	50	U	4.1	5	50	ug/L
75-34-3	1,1-Dichloroethane	50	U	3.6	5	50	ug/L
110-82-7	Cyclohexane	50	U	2	5	50	ug/L
78-93-3	2-Butanone	250	U	13.2	25	250	ug/L
56-23-5	Carbon Tetrachloride	50	U	2	5	50	ug/L
156-59-2	cis-1,2-Dichloroethene	50	U	3.5	5	50	ug/L
74-97-5	Bromochloromethane	50	U	2	5	50	ug/L
67-66-3	Chloroform	50	U	3.4	5	50	ug/L
71-55-6	1,1,1-Trichloroethane	50	U	4	7.5	50	ug/L
108-87-2	Methylcyclohexane	7.8	J	2	5	50	ug/L
71-43-2	Benzene	440		3.2	5	50	ug/L
107-06-2	1,2-Dichloroethane	50	U	4.8	7.5	50	ug/L
79-01-6	Trichloroethene	50	U	2.8	5	50	ug/L
78-87-5	1,2-Dichloropropane	50	U	4.6	5	50	ug/L
75-27-4	Bromodichloromethane	50	U	3.6	5	50	ug/L
108-10-1	4-Methyl-2-Pentanone	250	U	21	25	250	ug/L
108-88-3	Toluene	140		3.7	5	50	ug/L
10061-02-6	t-1,3-Dichloropropene	50	U	2.9	5	50	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047401.D	10		04/05/18 16:42	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	50	U	3.1	5	50	ug/L
79-00-5	1,1,2-Trichloroethane	50	U	3.8	5	50	ug/L
591-78-6	2-Hexanone	250	U	19.4	37.5	250	ug/L
124-48-1	Dibromochloromethane	50	U	2	5	50	ug/L
106-93-4	1,2-Dibromoethane	50	U	4.1	5	50	ug/L
127-18-4	Tetrachloroethene	50	U	2.7	5	50	ug/L
108-90-7	Chlorobenzene	50	U	4.9	5	50	ug/L
100-41-4	Ethyl Benzene	390		2	5	50	ug/L
179601-23-1	m/p-Xylenes	410		9.5	10	100	ug/L
95-47-6	o-Xylene	290		4.3	5	50	ug/L
100-42-5	Styrene	50	U	3.6	5	50	ug/L
75-25-2	Bromoform	50	U	4.7	5	50	ug/L
98-82-8	Isopropylbenzene	30.4	J	4.5	5	50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	50	U	3.1	5	50	ug/L
541-73-1	1,3-Dichlorobenzene	50	U	4.3	5	50	ug/L
106-46-7	1,4-Dichlorobenzene	50	U	3.2	5	50	ug/L
95-50-1	1,2-Dichlorobenzene	50	U	4.5	5	50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	50	U	4.6	20	50	ug/L
120-82-1	1,2,4-Trichlorobenzene	50	U	2	5	50	ug/L
87-61-6	1,2,3-Trichlorobenzene	50	U	2	5	50	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.4		61 - 141		107%	SPK: 50
1868-53-7	Dibromofluoromethane	52.4		69 - 133		105%	SPK: 50
2037-26-5	Toluene-d8	52.9		65 - 126		106%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.3		58 - 135		107%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1096850	7.66				
540-36-3	1,4-Difluorobenzene	1766970	8.59				
3114-55-4	Chlorobenzene-d5	1713270	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	801027	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/29/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW30D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047401.D	10		04/05/18 16:42	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18 10:30
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	525		1	0.4	1	2	mg/L		04/04/18 16:50	SM2320 B
Sulfate	9.6		1	0.13	0.375	0.75	mg/L		04/02/18 14:34	300.0
Sulfide	7.68		1	0.03	0.5	1	mg/L	04/02/18 08:00	04/02/18 14:38	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	985 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000685.D	1	04/02/18 08:49	04/03/18 14:51	PB107890

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	420		25	25.5	51	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	13.9		29 - 130		70%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014584.D	1	04/03/18 13:48	FB040318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	37	J	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	22		50 - 150		110%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	3400		1	12.5	12.5	50	ug/L	04/03/18 09:05	04/04/18 16:12	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104139.D	1	03/31/18 07:20	04/02/18 17:00	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.1	U	0.78	1	10.1	ug/L
108-95-2	Phenol	10.1	U	0.21	1	10.1	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.1	U	0.56	1	10.1	ug/L
95-57-8	2-Chlorophenol	10.1	U	0.55	1	10.1	ug/L
95-48-7	2-Methylphenol	10.1	U	0.24	1	10.1	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.1	U	0.17	1	10.1	ug/L
98-86-2	Acetophenone	10.1	U	0.14	1	10.1	ug/L
65794-96-9	3+4-Methylphenols	10.1	U	0.38	1	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.1	U	0.2	1	10.1	ug/L
67-72-1	Hexachloroethane	10.1	U	0.25	1	10.1	ug/L
98-95-3	Nitrobenzene	10.1	U	0.69	1	10.1	ug/L
78-59-1	Isophorone	10.1	U	0.3	1	10.1	ug/L
88-75-5	2-Nitrophenol	10.1	U	0.53	1	10.1	ug/L
105-67-9	2,4-Dimethylphenol	10.1	U	0.72	1	10.1	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.1	U	0.56	1	10.1	ug/L
120-83-2	2,4-Dichlorophenol	10.1	U	0.67	1	10.1	ug/L
91-20-3	Naphthalene	140	E	0.12	1	10.1	ug/L
106-47-8	4-Chloroaniline	10.1	U	1	1	10.1	ug/L
87-68-3	Hexachlorobutadiene	10.1	U	0.25	1	10.1	ug/L
105-60-2	Caprolactam	10.1	U	1	1	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	10.1	U	0.4	1	10.1	ug/L
91-57-6	2-Methylnaphthalene	10.1	U	0.32	1	10.1	ug/L
77-47-4	Hexachlorocyclopentadiene	10.1	U	0.24	1	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	10.1	U	0.57	1	10.1	ug/L
95-95-4	2,4,5-Trichlorophenol	10.1	U	0.4	1	10.1	ug/L
92-52-4	1,1-Biphenyl	2.7	J	0.15	1	10.1	ug/L
91-58-7	2-Chloronaphthalene	10.1	U	0.16	1	10.1	ug/L
88-74-4	2-Nitroaniline	10.1	U	0.49	1	10.1	ug/L
131-11-3	Dimethylphthalate	2.4	J	0.22	1	10.1	ug/L
208-96-8	Acenaphthylene	10.1	U	0.71	1	10.1	ug/L
606-20-2	2,6-Dinitrotoluene	10.1	U	0.32	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104139.D	1	03/31/18 07:20	04/02/18 17:00	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.1	U	1	1	10.1	ug/L
83-32-9	Acenaphthene	12.2		0.21	1	10.1	ug/L
51-28-5	2,4-Dinitrophenol	10.1	U	2.1	8.1	10.1	ug/L
100-02-7	4-Nitrophenol	10.1	U	2	5.1	10.1	ug/L
132-64-9	Dibenzofuran	9.7	J	0.24	1	10.1	ug/L
121-14-2	2,4-Dinitrotoluene	10.1	U	1	1	10.1	ug/L
84-66-2	Diethylphthalate	10.1	U	0.38	1	10.1	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	9.8	J	0.31	1	10.1	ug/L
100-01-6	4-Nitroaniline	10.1	U	1.4	2	10.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.1	U	0.75	2	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	10.1	U	0.61	1	10.1	ug/L
101-55-3	4-Bromophenyl-phenylether	10.1	U	0.23	1	10.1	ug/L
118-74-1	Hexachlorobenzene	10.1	U	0.18	1	10.1	ug/L
1912-24-9	Atrazine	10.1	U	0.4	1	10.1	ug/L
87-86-5	Pentachlorophenol	10.1	U	1	1	10.1	ug/L
85-01-8	Phenanthrene	16		0.26	1	10.1	ug/L
120-12-7	Anthracene	4	J	0.16	1	10.1	ug/L
86-74-8	Carbazole	2.2	J	0.22	1	10.1	ug/L
84-74-2	Di-n-butylphthalate	10.1	U	1	1	10.1	ug/L
206-44-0	Fluoranthene	2.4	J	0.4	1	10.1	ug/L
129-00-0	Pyrene	2	J	0.2	1	10.1	ug/L
85-68-7	Butylbenzylphthalate	10.1	U	0.19	1	10.1	ug/L
91-94-1	3,3-Dichlorobenzidine	10.1	U	1	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	10.1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	10.1	U	0.18	1	10.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.1	U	0.16	1	10.1	ug/L
117-84-0	Di-n-octyl phthalate	10.1	U	0.52	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	10.1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	10.1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	10.1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.1	U	0.42	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104139.D	1	03/31/18 07:20	04/02/18 17:00	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.1	U	0.29	1	10.1	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.1	U	0.2	1	10.1	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.1	U	0.2	1	10.1	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	47.5		10 - 130		32%	SPK: 150
13127-88-3	Phenol-d6	30.3		10 - 130		20%	SPK: 150
4165-60-0	Nitrobenzene-d5	83		36 - 131		83%	SPK: 100
321-60-8	2-Fluorobiphenyl	86.3		39 - 131		86%	SPK: 100
118-79-6	2,4,6-Tribromophenol	100		25 - 155		70%	SPK: 150
1718-51-0	Terphenyl-d14	76.7		23 - 130		77%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	101451	6.96				
1146-65-2	Naphthalene-d8	406533	8.25				
15067-26-2	Acenaphthene-d10	198096	10				
1517-22-2	Phenanthrene-d10	322889	11.49				
1719-03-5	Chrysene-d12	228547	14.15				
1520-96-3	Perylene-d12	236204	15.69				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-04DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104155.D	5	03/31/18 07:20	04/03/18 02:39	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	50.5	UD	3.9	5.1	50.5	ug/L
108-95-2	Phenol	50.5	UD	1.1	5.1	50.5	ug/L
111-44-4	bis(2-Chloroethyl)ether	50.5	UD	2.8	5.1	50.5	ug/L
95-57-8	2-Chlorophenol	50.5	UD	2.7	5.1	50.5	ug/L
95-48-7	2-Methylphenol	50.5	UD	1.2	5.1	50.5	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	50.5	UD	0.86	5.1	50.5	ug/L
98-86-2	Acetophenone	50.5	UD	0.71	5.1	50.5	ug/L
65794-96-9	3+4-Methylphenols	50.5	UD	1.9	5.1	50.5	ug/L
621-64-7	n-Nitroso-di-n-propylamine	50.5	UD	1	5.1	50.5	ug/L
67-72-1	Hexachloroethane	50.5	UD	1.3	5.1	50.5	ug/L
98-95-3	Nitrobenzene	50.5	UD	3.4	5.1	50.5	ug/L
78-59-1	Isophorone	50.5	UD	1.5	5.1	50.5	ug/L
88-75-5	2-Nitrophenol	50.5	UD	2.6	5.1	50.5	ug/L
105-67-9	2,4-Dimethylphenol	50.5	UD	3.6	5.1	50.5	ug/L
111-91-1	bis(2-Chloroethoxy)methane	50.5	UD	2.8	5.1	50.5	ug/L
120-83-2	2,4-Dichlorophenol	50.5	UD	3.3	5.1	50.5	ug/L
91-20-3	Naphthalene	180	D	0.61	5.1	50.5	ug/L
106-47-8	4-Chloroaniline	50.5	UD	5.1	5.1	50.5	ug/L
87-68-3	Hexachlorobutadiene	50.5	UD	1.3	5.1	50.5	ug/L
105-60-2	Caprolactam	50.5	UD	5.1	5.1	50.5	ug/L
59-50-7	4-Chloro-3-methylphenol	50.5	UD	2	5.1	50.5	ug/L
91-57-6	2-Methylnaphthalene	50.5	UD	1.6	5.1	50.5	ug/L
77-47-4	Hexachlorocyclopentadiene	50.5	UD	1.2	5.1	50.5	ug/L
88-06-2	2,4,6-Trichlorophenol	50.5	UD	2.8	5.1	50.5	ug/L
95-95-4	2,4,5-Trichlorophenol	50.5	UD	2	5.1	50.5	ug/L
92-52-4	1,1-Biphenyl	50.5	UD	0.76	5.1	50.5	ug/L
91-58-7	2-Chloronaphthalene	50.5	UD	0.81	5.1	50.5	ug/L
88-74-4	2-Nitroaniline	50.5	UD	2.5	5.1	50.5	ug/L
131-11-3	Dimethylphthalate	50.5	UD	1.1	5.1	50.5	ug/L
208-96-8	Acenaphthylene	50.5	UD	3.5	5.1	50.5	ug/L
606-20-2	2,6-Dinitrotoluene	50.5	UD	1.6	5.1	50.5	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-04DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104155.D	5	03/31/18 07:20	04/03/18 02:39	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	50.5	UD	5.1	5.1	50.5	ug/L
83-32-9	Acenaphthene	12.6	JD	1.1	5.1	50.5	ug/L
51-28-5	2,4-Dinitrophenol	50.5	UD	10.6	40.4	50.5	ug/L
100-02-7	4-Nitrophenol	50.5	UD	10.1	25.3	50.5	ug/L
132-64-9	Dibenzofuran	50.5	UD	1.2	5.1	50.5	ug/L
121-14-2	2,4-Dinitrotoluene	50.5	UD	5.1	5.1	50.5	ug/L
84-66-2	Diethylphthalate	50.5	UD	1.9	5.1	50.5	ug/L
7005-72-3	4-Chlorophenyl-phenylether	50.5	UD	1.1	5.1	50.5	ug/L
86-73-7	Fluorene	50.5	UD	1.6	5.1	50.5	ug/L
100-01-6	4-Nitroaniline	50.5	UD	6.9	10.1	50.5	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	50.5	UD	3.7	10.1	50.5	ug/L
86-30-6	n-Nitrosodiphenylamine	50.5	UD	3	5.1	50.5	ug/L
101-55-3	4-Bromophenyl-phenylether	50.5	UD	1.2	5.1	50.5	ug/L
118-74-1	Hexachlorobenzene	50.5	UD	0.91	5.1	50.5	ug/L
1912-24-9	Atrazine	50.5	UD	2	5.1	50.5	ug/L
87-86-5	Pentachlorophenol	50.5	UD	5.1	5.1	50.5	ug/L
85-01-8	Phenanthrene	15.8	JD	1.3	5.1	50.5	ug/L
120-12-7	Anthracene	50.5	UD	0.81	5.1	50.5	ug/L
86-74-8	Carbazole	50.5	UD	1.1	5.1	50.5	ug/L
84-74-2	Di-n-butylphthalate	50.5	UD	5.1	5.1	50.5	ug/L
206-44-0	Fluoranthene	50.5	UD	2	5.1	50.5	ug/L
129-00-0	Pyrene	50.5	UD	1	5.1	50.5	ug/L
85-68-7	Butylbenzylphthalate	50.5	UD	0.96	5.1	50.5	ug/L
91-94-1	3,3-Dichlorobenzidine	50.5	UD	5.1	5.1	50.5	ug/L
56-55-3	Benzo(a)anthracene	50.5	UD	0.81	5.1	50.5	ug/L
218-01-9	Chrysene	50.5	UD	0.91	5.1	50.5	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	50.5	UD	0.81	5.1	50.5	ug/L
117-84-0	Di-n-octyl phthalate	50.5	UD	2.6	5.1	50.5	ug/L
205-99-2	Benzo(b)fluoranthene	50.5	UD	1.5	5.1	50.5	ug/L
207-08-9	Benzo(k)fluoranthene	50.5	UD	0.91	5.1	50.5	ug/L
50-32-8	Benzo(a)pyrene	50.5	UD	0.71	5.1	50.5	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	50.5	UD	0.76	5.1	50.5	ug/L
53-70-3	Dibenzo(a,h)anthracene	50.5	UD	2.1	5.1	50.5	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-04DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104155.D	5	03/31/18 07:20	04/03/18 02:39	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	50.5	UD	1.5	5.1	50.5	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	50.5	UD	1	5.1	50.5	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	50.5	UD	1	5.1	50.5	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	23.7		10 - 130		16%	SPK: 150
13127-88-3	Phenol-d6	17.3		10 - 130		12%	SPK: 150
4165-60-0	Nitrobenzene-d5	78		36 - 131		78%	SPK: 100
321-60-8	2-Fluorobiphenyl	110		39 - 131		108%	SPK: 100
118-79-6	2,4,6-Tribromophenol	92.9		25 - 155		62%	SPK: 150
1718-51-0	Terphenyl-d14	77.6		23 - 130		78%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	83261	6.96				
1146-65-2	Naphthalene-d8	361399	8.24				
15067-26-2	Acenaphthene-d10	154686	10				
1517-22-2	Phenanthrene-d10	229672	11.49				
1719-03-5	Chrysene-d12	205564	14.14				
1520-96-3	Perylene-d12	191610	15.69				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047395.D	1		04/05/18 14:13	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	6.5		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047395.D	1		04/05/18 14:13	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	3.7		0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	1.2	J	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.78	J	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.95	J	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	52.9		61 - 141		106%	SPK: 50
1868-53-7	Dibromofluoromethane	52.4		69 - 133		105%	SPK: 50
2037-26-5	Toluene-d8	52.3		65 - 126		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.1		58 - 135		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	985923	7.66				
540-36-3	1,4-Difluorobenzene	1579530	8.59				
3114-55-4	Chlorobenzene-d5	1486900	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	641529	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24S-GW	SDG No.:	J2173
Lab Sample ID:	J2173-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047395.D	1		04/05/18 14:13	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18 08:55
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	510		1	0.4	1	2	mg/L		04/04/18 16:58	SM2320 B
Sulfate	8.1		1	0.13	0.375	0.75	mg/L		04/02/18 16:16	300.0
Sulfide	8.48		1	0.03	0.5	1	mg/L	04/02/18 08:00	04/02/18 14:42	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	990 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000686.D	1	04/02/18 08:49	04/03/18 15:20	PB107890

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	565		25	25.5	51	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	14.9		29 - 130		75%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014585.D	1	04/03/18 14:18	FB040318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	103		12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	22.8		50 - 150		114%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	50	U	1	12.5	12.5	50	ug/L	04/03/18 09:05	04/04/18 16:51	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104141.D	1	03/31/18 07:20	04/02/18 17:52	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.2	U	0.78	1	10.2	ug/L
108-95-2	Phenol	10.2	U	0.21	1	10.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.2	U	0.56	1	10.2	ug/L
95-57-8	2-Chlorophenol	10.2	U	0.55	1	10.2	ug/L
95-48-7	2-Methylphenol	10.2	U	0.24	1	10.2	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.2	U	0.17	1	10.2	ug/L
98-86-2	Acetophenone	10.2	U	0.14	1	10.2	ug/L
65794-96-9	3+4-Methylphenols	10.2	U	0.39	1	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.2	U	0.2	1	10.2	ug/L
67-72-1	Hexachloroethane	10.2	U	0.25	1	10.2	ug/L
98-95-3	Nitrobenzene	10.2	U	0.69	1	10.2	ug/L
78-59-1	Isophorone	10.2	U	0.3	1	10.2	ug/L
88-75-5	2-Nitrophenol	10.2	U	0.53	1	10.2	ug/L
105-67-9	2,4-Dimethylphenol	10.2	U	0.72	1	10.2	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.2	U	0.56	1	10.2	ug/L
120-83-2	2,4-Dichlorophenol	10.2	U	0.67	1	10.2	ug/L
91-20-3	Naphthalene	240	E	0.12	1	10.2	ug/L
106-47-8	4-Chloroaniline	10.2	U	1	1	10.2	ug/L
87-68-3	Hexachlorobutadiene	10.2	U	0.25	1	10.2	ug/L
105-60-2	Caprolactam	10.2	U	1	1	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	10.2	U	0.41	1	10.2	ug/L
91-57-6	2-Methylnaphthalene	2.5	J	0.32	1	10.2	ug/L
77-47-4	Hexachlorocyclopentadiene	10.2	U	0.24	1	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	10.2	U	0.57	1	10.2	ug/L
95-95-4	2,4,5-Trichlorophenol	10.2	U	0.41	1	10.2	ug/L
92-52-4	1,1-Biphenyl	5.7	J	0.15	1	10.2	ug/L
91-58-7	2-Chloronaphthalene	10.2	U	0.16	1	10.2	ug/L
88-74-4	2-Nitroaniline	10.2	U	0.5	1	10.2	ug/L
131-11-3	Dimethylphthalate	2.1	J	0.22	1	10.2	ug/L
208-96-8	Acenaphthylene	10.2	U	0.71	1	10.2	ug/L
606-20-2	2,6-Dinitrotoluene	10.2	U	0.32	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104141.D	1	03/31/18 07:20	04/02/18 17:52	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.2	U	1	1	10.2	ug/L
83-32-9	Acenaphthene	17		0.21	1	10.2	ug/L
51-28-5	2,4-Dinitrophenol	10.2	U	2.1	8.1	10.2	ug/L
100-02-7	4-Nitrophenol	10.2	U	2	5.1	10.2	ug/L
132-64-9	Dibenzofuran	12.2		0.24	1	10.2	ug/L
121-14-2	2,4-Dinitrotoluene	10.2	U	1	1	10.2	ug/L
84-66-2	Diethylphthalate	10.2	U	0.39	1	10.2	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.2	U	0.21	1	10.2	ug/L
86-73-7	Fluorene	12		0.31	1	10.2	ug/L
100-01-6	4-Nitroaniline	10.2	U	1.4	2	10.2	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.2	U	0.75	2	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	10.2	U	0.61	1	10.2	ug/L
101-55-3	4-Bromophenyl-phenylether	10.2	U	0.23	1	10.2	ug/L
118-74-1	Hexachlorobenzene	10.2	U	0.18	1	10.2	ug/L
1912-24-9	Atrazine	10.2	U	0.41	1	10.2	ug/L
87-86-5	Pentachlorophenol	10.2	U	1	1	10.2	ug/L
85-01-8	Phenanthrene	17.1		0.26	1	10.2	ug/L
120-12-7	Anthracene	4.3	J	0.16	1	10.2	ug/L
86-74-8	Carbazole	6.1	J	0.22	1	10.2	ug/L
84-74-2	Di-n-butylphthalate	10.2	U	1	1	10.2	ug/L
206-44-0	Fluoranthene	2.8	J	0.41	1	10.2	ug/L
129-00-0	Pyrene	2.7	J	0.2	1	10.2	ug/L
85-68-7	Butylbenzylphthalate	10.2	U	0.19	1	10.2	ug/L
91-94-1	3,3-Dichlorobenzidine	10.2	U	1	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.2	U	0.16	1	10.2	ug/L
117-84-0	Di-n-octyl phthalate	10.2	U	0.52	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.29	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104141.D	1	03/31/18 07:20	04/02/18 17:52	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.29	1	10.2	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.2	U	0.2	1	10.2	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.2	U	0.2	1	10.2	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	42.6		10 - 130		28%	SPK: 150
13127-88-3	Phenol-d6	28		10 - 130		19%	SPK: 150
4165-60-0	Nitrobenzene-d5	92.3		36 - 131		92%	SPK: 100
321-60-8	2-Fluorobiphenyl	87.7		39 - 131		88%	SPK: 100
118-79-6	2,4,6-Tribromophenol	110		25 - 155		74%	SPK: 150
1718-51-0	Terphenyl-d14	81.7		23 - 130		82%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	108405	6.96				
1146-65-2	Naphthalene-d8	410086	8.25				
15067-26-2	Acenaphthene-d10	208736	10				
1517-22-2	Phenanthrene-d10	343166	11.49				
1719-03-5	Chrysene-d12	230912	14.15				
1520-96-3	Perylene-d12	235507	15.69				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-05DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104173.D	5	03/31/18 07:20	04/03/18 10:32	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	50.8	UD	3.9	5.1	50.8	ug/L
108-95-2	Phenol	50.8	UD	1.1	5.1	50.8	ug/L
111-44-4	bis(2-Chloroethyl)ether	50.8	UD	2.8	5.1	50.8	ug/L
95-57-8	2-Chlorophenol	50.8	UD	2.7	5.1	50.8	ug/L
95-48-7	2-Methylphenol	50.8	UD	1.2	5.1	50.8	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	50.8	UD	0.86	5.1	50.8	ug/L
98-86-2	Acetophenone	50.8	UD	0.71	5.1	50.8	ug/L
65794-96-9	3+4-Methylphenols	50.8	UD	1.9	5.1	50.8	ug/L
621-64-7	n-Nitroso-di-n-propylamine	50.8	UD	1	5.1	50.8	ug/L
67-72-1	Hexachloroethane	50.8	UD	1.3	5.1	50.8	ug/L
98-95-3	Nitrobenzene	50.8	UD	3.5	5.1	50.8	ug/L
78-59-1	Isophorone	50.8	UD	1.5	5.1	50.8	ug/L
88-75-5	2-Nitrophenol	50.8	UD	2.6	5.1	50.8	ug/L
105-67-9	2,4-Dimethylphenol	50.8	UD	3.6	5.1	50.8	ug/L
111-91-1	bis(2-Chloroethoxy)methane	50.8	UD	2.8	5.1	50.8	ug/L
120-83-2	2,4-Dichlorophenol	50.8	UD	3.4	5.1	50.8	ug/L
91-20-3	Naphthalene	370	D	0.61	5.1	50.8	ug/L
106-47-8	4-Chloroaniline	50.8	UD	5.1	5.1	50.8	ug/L
87-68-3	Hexachlorobutadiene	50.8	UD	1.3	5.1	50.8	ug/L
105-60-2	Caprolactam	50.8	UD	5.1	5.1	50.8	ug/L
59-50-7	4-Chloro-3-methylphenol	50.8	UD	2	5.1	50.8	ug/L
91-57-6	2-Methylnaphthalene	50.8	UD	1.6	5.1	50.8	ug/L
77-47-4	Hexachlorocyclopentadiene	50.8	UD	1.2	5.1	50.8	ug/L
88-06-2	2,4,6-Trichlorophenol	50.8	UD	2.8	5.1	50.8	ug/L
95-95-4	2,4,5-Trichlorophenol	50.8	UD	2	5.1	50.8	ug/L
92-52-4	1,1-Biphenyl	50.8	UD	0.76	5.1	50.8	ug/L
91-58-7	2-Chloronaphthalene	50.8	UD	0.81	5.1	50.8	ug/L
88-74-4	2-Nitroaniline	50.8	UD	2.5	5.1	50.8	ug/L
131-11-3	Dimethylphthalate	50.8	UD	1.1	5.1	50.8	ug/L
208-96-8	Acenaphthylene	50.8	UD	3.6	5.1	50.8	ug/L
606-20-2	2,6-Dinitrotoluene	50.8	UD	1.6	5.1	50.8	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-05DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104173.D	5	03/31/18 07:20	04/03/18 10:32	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	50.8	UD	5.1	5.1	50.8	ug/L
83-32-9	Acenaphthene	18.5	JD	1.1	5.1	50.8	ug/L
51-28-5	2,4-Dinitrophenol	50.8	UD	10.7	40.6	50.8	ug/L
100-02-7	4-Nitrophenol	50.8	UD	10.2	25.4	50.8	ug/L
132-64-9	Dibenzofuran	12.9	JD	1.2	5.1	50.8	ug/L
121-14-2	2,4-Dinitrotoluene	50.8	UD	5.1	5.1	50.8	ug/L
84-66-2	Diethylphthalate	50.8	UD	1.9	5.1	50.8	ug/L
7005-72-3	4-Chlorophenyl-phenylether	50.8	UD	1.1	5.1	50.8	ug/L
86-73-7	Fluorene	13.2	JD	1.6	5.1	50.8	ug/L
100-01-6	4-Nitroaniline	50.8	UD	6.9	10.2	50.8	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	50.8	UD	3.8	10.2	50.8	ug/L
86-30-6	n-Nitrosodiphenylamine	50.8	UD	3	5.1	50.8	ug/L
101-55-3	4-Bromophenyl-phenylether	50.8	UD	1.2	5.1	50.8	ug/L
118-74-1	Hexachlorobenzene	50.8	UD	0.91	5.1	50.8	ug/L
1912-24-9	Atrazine	50.8	UD	2	5.1	50.8	ug/L
87-86-5	Pentachlorophenol	50.8	UD	5.1	5.1	50.8	ug/L
85-01-8	Phenanthrene	19.6	JD	1.3	5.1	50.8	ug/L
120-12-7	Anthracene	50.8	UD	0.81	5.1	50.8	ug/L
86-74-8	Carbazole	50.8	UD	1.1	5.1	50.8	ug/L
84-74-2	Di-n-butylphthalate	50.8	UD	5.1	5.1	50.8	ug/L
206-44-0	Fluoranthene	50.8	UD	2	5.1	50.8	ug/L
129-00-0	Pyrene	50.8	UD	1	5.1	50.8	ug/L
85-68-7	Butylbenzylphthalate	50.8	UD	0.96	5.1	50.8	ug/L
91-94-1	3,3-Dichlorobenzidine	50.8	UD	5.1	5.1	50.8	ug/L
56-55-3	Benzo(a)anthracene	50.8	UD	0.81	5.1	50.8	ug/L
218-01-9	Chrysene	50.8	UD	0.91	5.1	50.8	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	50.8	UD	0.81	5.1	50.8	ug/L
117-84-0	Di-n-octyl phthalate	50.8	UD	2.6	5.1	50.8	ug/L
205-99-2	Benzo(b)fluoranthene	50.8	UD	1.5	5.1	50.8	ug/L
207-08-9	Benzo(k)fluoranthene	50.8	UD	0.91	5.1	50.8	ug/L
50-32-8	Benzo(a)pyrene	50.8	UD	0.71	5.1	50.8	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	50.8	UD	0.76	5.1	50.8	ug/L
53-70-3	Dibenzo(a,h)anthracene	50.8	UD	2.1	5.1	50.8	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GWDL	SDG No.:	J2173
Lab Sample ID:	J2173-05DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF104173.D	5	03/31/18 07:20	04/03/18 10:32	PB107874

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	50.8	UD	1.5	5.1	50.8	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	50.8	UD	1	5.1	50.8	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	50.8	UD	1	5.1	50.8	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	50.3		10 - 130		34%	SPK: 150
13127-88-3	Phenol-d6	31.1		10 - 130		21%	SPK: 150
4165-60-0	Nitrobenzene-d5	74.7		36 - 131		75%	SPK: 100
321-60-8	2-Fluorobiphenyl	120		39 - 131		123%	SPK: 100
118-79-6	2,4,6-Tribromophenol	110		25 - 155		75%	SPK: 150
1718-51-0	Terphenyl-d14	94.2		23 - 130		94%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	76990	6.96				
1146-65-2	Naphthalene-d8	322668	8.25				
15067-26-2	Acenaphthene-d10	129736	10				
1517-22-2	Phenanthrene-d10	206912	11.5				
1719-03-5	Chrysene-d12	192873	14.15				
1520-96-3	Perylene-d12	127738	15.69				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047396.D	1		04/05/18 14:37	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.47	J	0.2	0.2	1	ug/L
71-43-2	Benzene	30.9		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	2.2		0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047396.D	1		04/05/18 14:37	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	14.9		0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	4.4		0.4	0.4	2	ug/L
95-47-6	o-Xylene	4.5		0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	2		0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	52.3		61 - 141		104%	SPK: 50
1868-53-7	Dibromofluoromethane	52.4		69 - 133		105%	SPK: 50
2037-26-5	Toluene-d8	52.8		65 - 126		106%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.1		58 - 135		106%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1054040	7.66				
540-36-3	1,4-Difluorobenzene	1689600	8.59				
3114-55-4	Chlorobenzene-d5	1628550	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	757257	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-MW24D-GW	SDG No.:	J2173
Lab Sample ID:	J2173-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047396.D	1		04/05/18 14:37	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-TRIPBLANK-1	SDG No.:	J2173
Lab Sample ID:	J2173-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047393.D	1		04/05/18 13:23	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-TRIPBLANK-1	SDG No.:	J2173
Lab Sample ID:	J2173-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047393.D	1		04/05/18 13:23	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	52.7		61 - 141		105%	SPK: 50
1868-53-7	Dibromofluoromethane	51.6		69 - 133		103%	SPK: 50
2037-26-5	Toluene-d8	52.3		65 - 126		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	50		58 - 135		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	874678	7.67				
540-36-3	1,4-Difluorobenzene	1403030	8.59				
3114-55-4	Chlorobenzene-d5	1331210	11.41				
3855-82-1	1,4-Dichlorobenzene-d4	528169	13.35				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/30/18
Project:	Hunters Point - Queens West Library	Date Received:	03/30/18
Client Sample ID:	QNWP8-TRIPBLANK-1	SDG No.:	J2173
Lab Sample ID:	J2173-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN047393.D	1		04/05/18 13:23	VN040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA FOR

VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS

GC SEMI-VOLATILES

METALS

GENERAL CHEMISTRY

PROJECT NAME : HUNTERS POINT - QUEENS WEST LIBRARY

LIRO ENGINEERS, INC.

690 Delaware Ave.

Buffalo, NY - 14209

Phone No: 716-882-5476

ORDER ID : J2216

ATTENTION : Jon Williams

NELAP ACCREDITED TNI LABORATORY

ANAB ACCREDITED ISO/IEC 17025 DOD ELAP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 04/11/2018

Dear Jon Williams,

5 water samples for the **Hunters Point - Queens West Library** project were received on **04/04/2018.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

The invoice for this workorder is also attached to the e-mail.

Regards,

Joseph Aragona

908 728 3147

joseph@chemtech.net

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. J2216.
QUOTE NO.
COC Number 2020518

CLIENT INFORMATION
REPORT TO BE SENT TO:
COMPANY: URO Engineers, Inc.
ADDRESS: 703 Grimer str.
CITY: Brooklyn STATE: NY ZIP: 11211
ATTENTION: Steve Frank
PHONE: 716 882 5476 FAX: ——

CLIENT PROJECT INFORMATION
PROJECT NAME: Queens West Parcel B, Hunters Point Library, DEC C241087
PROJECT NO.: 17-155-0265 LOCATION: LIC, NY
PROJECT MANAGER: Steve Frank
e-mail: franks@uro.com
PHONE: 716 882 5476 FAX: ——

CLIENT BILLING INFORMATION
BILL TO: PO#:
ADDRESS: Same
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION
FAX: ____ DAYS *
HARD COPY: ____ DAYS *
EDD: 5 days DAYS *
PREAPPROVED TAT: ☒ YES ☐ NO
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION
☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☒ Other Full Category B
☐ EDD FORMAT ____

ANALYSIS
MeOH extraction requires an additional 4 oz jar for percent solid.

1	2	3	4	5	6	7	8	9
TCL VOCs	TCL SVOCs	TPH DRO	TPH GRO	Total Iron	Sulfide	Sulfate	Alkalinity	

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	QNWP8-MW25S-GW	GW		X	4/3/18	0855	10	A	E	E	A	B	D	E	E		← Specify Preservatives A-HCl B-HNO_3 C-H_2SO_4 D-NaOH E-ICE F-Other
2.	QNWP8-MW25D-GW	GW		X		1045	10	X	X	X	X	X	X	X	X		
3.	QNWP8-MW27S-GW	GW		X		1235	10	X	X	X	X	X	X	X	X		
4.	QNWP8-Equip. Blank	DI W.		X	↓	1330	7	X	X	X	X	X					
5.	QNWP8-Trip Blank 2	DI W.		X	3/28/18	—	2	X									
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

	DATE/TIME		
1. RELINQUISHED BY SAMPLER: [signature]	4/4/18 10:00	1. RECEIVED BY: [signature]	
2. RELINQUISHED BY: [signature]	DATE/TIME:	2. RECEIVED BY:	
3. RELINQUISHED BY: [signature]	DATE/TIME: 4/4/18 15:55	3. RECEIVED FOR LAB BY: [signature]	

Comments: Data Format: NY Regulatory, Full Category B
NYSDEC EQUIS EDD

Cooler Temp.: 3.2°C
Shipment
Complete: ☒ Yes ☐ No
By Client: ____
By Chemtech: Yes

Revision 7/2017

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18 08:55
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	236		1	0.4	1	2	mg/L		04/09/18 16:11	SM2320 B
Sulfate	387	OR	1	0.13	0.375	0.75	mg/L		04/05/18 13:49	300.0
Sulfide	3.36		1	0.03	0.5	1	mg/L	04/05/18 12:50	04/05/18 15:22	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18 08:55
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	287	D	20	2.6	7.5	15	mg/L		04/05/18 17:56	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	985 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000748.D	1	04/05/18 08:23	04/06/18 17:12	PB108009

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	132		25	25.5	51	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	9.9		29 - 130		50%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014648.D	1	04/05/18 10:25	FB040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	14	J	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	19.6		50 - 150		98%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	593		1	12.5	12.5	50	ug/L	04/05/18 08:31	04/05/18 22:06	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033597.D	1	04/05/18 08:15	04/05/18 17:56	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.2	U	0.78	1	10.2	ug/L
108-95-2	Phenol	4.7	J	0.21	1	10.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.2	U	0.56	1	10.2	ug/L
95-57-8	2-Chlorophenol	10.2	U	0.55	1	10.2	ug/L
95-48-7	2-Methylphenol	10.2	U	0.24	1	10.2	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.2	U	0.17	1	10.2	ug/L
98-86-2	Acetophenone	10.2	U	0.14	1	10.2	ug/L
65794-96-9	3+4-Methylphenols	10.2	U	0.39	1	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.2	U	0.2	1	10.2	ug/L
67-72-1	Hexachloroethane	10.2	U	0.25	1	10.2	ug/L
98-95-3	Nitrobenzene	10.2	U	0.69	1	10.2	ug/L
78-59-1	Isophorone	10.2	U	0.3	1	10.2	ug/L
88-75-5	2-Nitrophenol	10.2	U	0.53	1	10.2	ug/L
105-67-9	2,4-Dimethylphenol	10.2	U	0.72	1	10.2	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.2	U	0.56	1	10.2	ug/L
120-83-2	2,4-Dichlorophenol	10.2	U	0.67	1	10.2	ug/L
91-20-3	Naphthalene	10.2	U	0.12	1	10.2	ug/L
106-47-8	4-Chloroaniline	10.2	U	1	1	10.2	ug/L
87-68-3	Hexachlorobutadiene	10.2	U	0.25	1	10.2	ug/L
105-60-2	Caprolactam	10.2	U	1	1	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	10.2	U	0.41	1	10.2	ug/L
91-57-6	2-Methylnaphthalene	10.2	U	0.32	1	10.2	ug/L
77-47-4	Hexachlorocyclopentadiene	10.2	U	0.24	1	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	10.2	U	0.57	1	10.2	ug/L
95-95-4	2,4,5-Trichlorophenol	10.2	U	0.41	1	10.2	ug/L
92-52-4	1,1-Biphenyl	10.2	U	0.15	1	10.2	ug/L
91-58-7	2-Chloronaphthalene	10.2	U	0.16	1	10.2	ug/L
88-74-4	2-Nitroaniline	10.2	U	0.5	1	10.2	ug/L
131-11-3	Dimethylphthalate	5.3	J	0.22	1	10.2	ug/L
208-96-8	Acenaphthylene	10.2	U	0.71	1	10.2	ug/L
606-20-2	2,6-Dinitrotoluene	10.2	U	0.32	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033597.D	1	04/05/18 08:15	04/05/18 17:56	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.2	U	1	1	10.2	ug/L
83-32-9	Acenaphthene	10.2	U	0.21	1	10.2	ug/L
51-28-5	2,4-Dinitrophenol	10.2	U	2.1	8.1	10.2	ug/L
100-02-7	4-Nitrophenol	10.2	U	2	5.1	10.2	ug/L
132-64-9	Dibenzofuran	10.2	U	0.24	1	10.2	ug/L
121-14-2	2,4-Dinitrotoluene	10.2	U	1	1	10.2	ug/L
84-66-2	Diethylphthalate	10.2	U	0.39	1	10.2	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.2	U	0.21	1	10.2	ug/L
86-73-7	Fluorene	10.2	U	0.31	1	10.2	ug/L
100-01-6	4-Nitroaniline	10.2	U	1.4	2	10.2	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.2	U	0.75	2	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	10.2	U	0.61	1	10.2	ug/L
101-55-3	4-Bromophenyl-phenylether	10.2	U	0.23	1	10.2	ug/L
118-74-1	Hexachlorobenzene	10.2	U	0.18	1	10.2	ug/L
1912-24-9	Atrazine	10.2	U	0.41	1	10.2	ug/L
87-86-5	Pentachlorophenol	10.2	U	1	1	10.2	ug/L
85-01-8	Phenanthrene	10.2	U	0.26	1	10.2	ug/L
120-12-7	Anthracene	10.2	U	0.16	1	10.2	ug/L
86-74-8	Carbazole	10.2	U	0.22	1	10.2	ug/L
84-74-2	Di-n-butylphthalate	10.2	U	1	1	10.2	ug/L
206-44-0	Fluoranthene	10.2	U	0.41	1	10.2	ug/L
129-00-0	Pyrene	10.2	U	0.2	1	10.2	ug/L
85-68-7	Butylbenzylphthalate	10.2	U	0.19	1	10.2	ug/L
91-94-1	3,3-Dichlorobenzidine	10.2	U	1	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.2	U	0.16	1	10.2	ug/L
117-84-0	Di-n-octyl phthalate	10.2	U	0.52	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.29	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033597.D	1	04/05/18 08:15	04/05/18 17:56	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.29	1	10.2	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.2	U	0.2	1	10.2	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.2	U	0.2	1	10.2	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	74.8		10 - 130		50%	SPK: 150
13127-88-3	Phenol-d6	44.1		10 - 130		29%	SPK: 150
4165-60-0	Nitrobenzene-d5	84		36 - 131		84%	SPK: 100
321-60-8	2-Fluorobiphenyl	86.6		39 - 131		87%	SPK: 100
118-79-6	2,4,6-Tribromophenol	110		25 - 155		74%	SPK: 150
1718-51-0	Terphenyl-d14	79.1		23 - 130		79%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	36364	8.86				
1146-65-2	Naphthalene-d8	180647	11.74				
15067-26-2	Acenaphthene-d10	141427	15.47				
1517-22-2	Phenanthrene-d10	326320	18.21				
1719-03-5	Chrysene-d12	325008	22.55				
1520-96-3	Perylene-d12	339796	26.31				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000738.D	1		04/08/18 18:12	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1.6		0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	12.2		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000738.D	1		04/08/18 18:12	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.45	J	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.8		61 - 141		90%	SPK: 50
1868-53-7	Dibromofluoromethane	48.3		69 - 133		97%	SPK: 50
2037-26-5	Toluene-d8	47		65 - 126		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.9		58 - 135		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	318808	5.67				
540-36-3	1,4-Difluorobenzene	448106	6.87				
3114-55-4	Chlorobenzene-d5	413686	10.12				
3855-82-1	1,4-Dichlorobenzene-d4	244763	12.09				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000738.D	1		04/08/18 18:12	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18 10:45
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	228		1	0.4	1	2	mg/L		04/09/18 16:15	SM2320 B
Sulfate	858	OR	1	0.13	0.375	0.75	mg/L		04/05/18 14:19	300.0
Sulfide	4.64		1	0.03	0.5	1	mg/L	04/05/18 12:50	04/05/18 15:35	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18 10:45
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-02DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	638	D	50	6.6	18.75	37.5	mg/L		04/05/18 18:27	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	985 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000749.D	1	04/05/18 08:23	04/06/18 17:40	PB108009

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	133		25	25.5	51	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	13.4		29 - 130		67%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014649.D	1	04/05/18 10:55	FB040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	45	U	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.9		50 - 150		104%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	137		1	12.5	12.5	50	ug/L	04/05/18 08:31	04/05/18 22:31	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033598.D	1	04/05/18 08:15	04/05/18 18:33	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.2	U	0.79	1	10.2	ug/L
108-95-2	Phenol	10.2	U	0.21	1	10.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.2	U	0.56	1	10.2	ug/L
95-57-8	2-Chlorophenol	10.2	U	0.55	1	10.2	ug/L
95-48-7	2-Methylphenol	10.2	U	0.24	1	10.2	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.2	U	0.17	1	10.2	ug/L
98-86-2	Acetophenone	10.2	U	0.14	1	10.2	ug/L
65794-96-9	3+4-Methylphenols	10.2	U	0.39	1	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.2	U	0.2	1	10.2	ug/L
67-72-1	Hexachloroethane	10.2	U	0.26	1	10.2	ug/L
98-95-3	Nitrobenzene	10.2	U	0.69	1	10.2	ug/L
78-59-1	Isophorone	10.2	U	0.31	1	10.2	ug/L
88-75-5	2-Nitrophenol	10.2	U	0.53	1	10.2	ug/L
105-67-9	2,4-Dimethylphenol	10.2	U	0.72	1	10.2	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.2	U	0.56	1	10.2	ug/L
120-83-2	2,4-Dichlorophenol	10.2	U	0.67	1	10.2	ug/L
91-20-3	Naphthalene	10.2	U	0.12	1	10.2	ug/L
106-47-8	4-Chloroaniline	10.2	U	1	1	10.2	ug/L
87-68-3	Hexachlorobutadiene	10.2	U	0.26	1	10.2	ug/L
105-60-2	Caprolactam	10.2	U	1	1	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	10.2	U	0.41	1	10.2	ug/L
91-57-6	2-Methylnaphthalene	10.2	U	0.33	1	10.2	ug/L
77-47-4	Hexachlorocyclopentadiene	10.2	U	0.24	1	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	10.2	U	0.57	1	10.2	ug/L
95-95-4	2,4,5-Trichlorophenol	10.2	U	0.41	1	10.2	ug/L
92-52-4	1,1-Biphenyl	10.2	U	0.15	1	10.2	ug/L
91-58-7	2-Chloronaphthalene	10.2	U	0.16	1	10.2	ug/L
88-74-4	2-Nitroaniline	10.2	U	0.5	1	10.2	ug/L
131-11-3	Dimethylphthalate	10.2	U	0.22	1	10.2	ug/L
208-96-8	Acenaphthylene	10.2	U	0.71	1	10.2	ug/L
606-20-2	2,6-Dinitrotoluene	10.2	U	0.33	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033598.D	1	04/05/18 08:15	04/05/18 18:33	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.2	U	1	1	10.2	ug/L
83-32-9	Acenaphthene	10.2	U	0.21	1	10.2	ug/L
51-28-5	2,4-Dinitrophenol	10.2	U	2.1	8.2	10.2	ug/L
100-02-7	4-Nitrophenol	10.2	U	2	5.1	10.2	ug/L
132-64-9	Dibenzofuran	10.2	U	0.24	1	10.2	ug/L
121-14-2	2,4-Dinitrotoluene	10.2	U	1	1	10.2	ug/L
84-66-2	Diethylphthalate	10.2	U	0.39	1	10.2	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.2	U	0.21	1	10.2	ug/L
86-73-7	Fluorene	10.2	U	0.32	1	10.2	ug/L
100-01-6	4-Nitroaniline	10.2	U	1.4	2	10.2	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.2	U	0.76	2	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	10.2	U	0.61	1	10.2	ug/L
101-55-3	4-Bromophenyl-phenylether	10.2	U	0.23	1	10.2	ug/L
118-74-1	Hexachlorobenzene	10.2	U	0.18	1	10.2	ug/L
1912-24-9	Atrazine	10.2	U	0.41	1	10.2	ug/L
87-86-5	Pentachlorophenol	10.2	U	1	1	10.2	ug/L
85-01-8	Phenanthrene	10.2	U	0.27	1	10.2	ug/L
120-12-7	Anthracene	10.2	U	0.16	1	10.2	ug/L
86-74-8	Carbazole	10.2	U	0.22	1	10.2	ug/L
84-74-2	Di-n-butylphthalate	10.2	U	1	1	10.2	ug/L
206-44-0	Fluoranthene	10.2	U	0.41	1	10.2	ug/L
129-00-0	Pyrene	10.2	U	0.2	1	10.2	ug/L
85-68-7	Butylbenzylphthalate	10.2	U	0.19	1	10.2	ug/L
91-94-1	3,3-Dichlorobenzidine	10.2	U	1	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.2	U	0.16	1	10.2	ug/L
117-84-0	Di-n-octyl phthalate	10.2	U	0.52	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.3	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033598.D	1	04/05/18 08:15	04/05/18 18:33	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.3	1	10.2	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.2	U	0.2	1	10.2	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.2	U	0.2	1	10.2	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	68.4		10 - 130		46%	SPK: 150
13127-88-3	Phenol-d6	39.5		10 - 130		26%	SPK: 150
4165-60-0	Nitrobenzene-d5	87.6		36 - 131		88%	SPK: 100
321-60-8	2-Fluorobiphenyl	87		39 - 131		87%	SPK: 100
118-79-6	2,4,6-Tribromophenol	110		25 - 155		75%	SPK: 150
1718-51-0	Terphenyl-d14	67.1		23 - 130		67%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	38342	8.86				
1146-65-2	Naphthalene-d8	188241	11.74				
15067-26-2	Acenaphthene-d10	143952	15.47				
1517-22-2	Phenanthrene-d10	325795	18.2				
1719-03-5	Chrysene-d12	316009	22.55				
1520-96-3	Perylene-d12	332505	26.31				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000739.D	1		04/08/18 18:37	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	4.5		0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000739.D	1		04/08/18 18:37	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.3		61 - 141		91%	SPK: 50
1868-53-7	Dibromofluoromethane	48.2		69 - 133		96%	SPK: 50
2037-26-5	Toluene-d8	46.9		65 - 126		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.1		58 - 135		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	323206	5.67				
540-36-3	1,4-Difluorobenzene	453628	6.87				
3114-55-4	Chlorobenzene-d5	423857	10.12				
3855-82-1	1,4-Dichlorobenzene-d4	249783	12.09				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW25D-GW	SDG No.:	J2216
Lab Sample ID:	J2216-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000739.D	1		04/08/18 18:37	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18 12:35
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	173		1	0.4	1	2	mg/L		04/09/18 16:22	SM2320 B
Sulfate	308	OR	1	0.13	0.375	0.75	mg/L		04/05/18 14:50	300.0
Sulfide	17.8		1	0.03	0.5	1	mg/L	04/05/18 12:50	04/05/18 15:38	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18 12:35
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-03DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	239	D	10	1.3	3.75	7.5	mg/L		04/05/18 18:58	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	990 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000780.D	5	04/05/18 08:23	04/07/18 12:41	PB108009

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	3010		126	126.5	253	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	3.56		29 - 130		89%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014650.D	2	04/05/18 11:25	FB040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	884		24	45	90	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.3		50 - 150		101%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	2040		1	12.5	12.5	50	ug/L	04/05/18 08:31	04/05/18 22:35	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033599.D	1	04/05/18 08:15	04/05/18 19:11	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.2	U	0.78	1	10.2	ug/L
108-95-2	Phenol	3.3	J	0.21	1	10.2	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.2	U	0.56	1	10.2	ug/L
95-57-8	2-Chlorophenol	10.2	U	0.55	1	10.2	ug/L
95-48-7	2-Methylphenol	10.2	U	0.24	1	10.2	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.2	U	0.17	1	10.2	ug/L
98-86-2	Acetophenone	10.2	U	0.14	1	10.2	ug/L
65794-96-9	3+4-Methylphenols	10.2	U	0.39	1	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.2	U	0.2	1	10.2	ug/L
67-72-1	Hexachloroethane	10.2	U	0.25	1	10.2	ug/L
98-95-3	Nitrobenzene	10.2	U	0.69	1	10.2	ug/L
78-59-1	Isophorone	10.2	U	0.3	1	10.2	ug/L
88-75-5	2-Nitrophenol	10.2	U	0.53	1	10.2	ug/L
105-67-9	2,4-Dimethylphenol	17.7		0.72	1	10.2	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.2	U	0.56	1	10.2	ug/L
120-83-2	2,4-Dichlorophenol	10.2	U	0.67	1	10.2	ug/L
91-20-3	Naphthalene	220	E	0.12	1	10.2	ug/L
106-47-8	4-Chloroaniline	10.2	U	1	1	10.2	ug/L
87-68-3	Hexachlorobutadiene	10.2	U	0.25	1	10.2	ug/L
105-60-2	Caprolactam	10.2	U	1	1	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	10.2	U	0.41	1	10.2	ug/L
91-57-6	2-Methylnaphthalene	10.2	U	0.32	1	10.2	ug/L
77-47-4	Hexachlorocyclopentadiene	10.2	U	0.24	1	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	10.2	U	0.57	1	10.2	ug/L
95-95-4	2,4,5-Trichlorophenol	10.2	U	0.41	1	10.2	ug/L
92-52-4	1,1-Biphenyl	5.5	J	0.15	1	10.2	ug/L
91-58-7	2-Chloronaphthalene	10.2	U	0.16	1	10.2	ug/L
88-74-4	2-Nitroaniline	10.2	U	0.5	1	10.2	ug/L
131-11-3	Dimethylphthalate	2.3	J	0.22	1	10.2	ug/L
208-96-8	Acenaphthylene	2.7	J	0.71	1	10.2	ug/L
606-20-2	2,6-Dinitrotoluene	10.2	U	0.32	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033599.D	1	04/05/18 08:15	04/05/18 19:11	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.2	U	1	1	10.2	ug/L
83-32-9	Acenaphthene	21.9		0.21	1	10.2	ug/L
51-28-5	2,4-Dinitrophenol	10.2	U	2.1	8.1	10.2	ug/L
100-02-7	4-Nitrophenol	10.2	U	2	5.1	10.2	ug/L
132-64-9	Dibenzofuran	14.6		0.24	1	10.2	ug/L
121-14-2	2,4-Dinitrotoluene	10.2	U	1	1	10.2	ug/L
84-66-2	Diethylphthalate	10.2	U	0.39	1	10.2	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.2	U	0.21	1	10.2	ug/L
86-73-7	Fluorene	11.7		0.31	1	10.2	ug/L
100-01-6	4-Nitroaniline	10.2	U	1.4	2	10.2	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.2	U	0.75	2	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	10.2	U	0.61	1	10.2	ug/L
101-55-3	4-Bromophenyl-phenylether	10.2	U	0.23	1	10.2	ug/L
118-74-1	Hexachlorobenzene	10.2	U	0.18	1	10.2	ug/L
1912-24-9	Atrazine	10.2	U	0.41	1	10.2	ug/L
87-86-5	Pentachlorophenol	10.2	U	1	1	10.2	ug/L
85-01-8	Phenanthrene	12.4		0.26	1	10.2	ug/L
120-12-7	Anthracene	2.4	J	0.16	1	10.2	ug/L
86-74-8	Carbazole	21.3		0.22	1	10.2	ug/L
84-74-2	Di-n-butylphthalate	10.2	U	1	1	10.2	ug/L
206-44-0	Fluoranthene	10.2	U	0.41	1	10.2	ug/L
129-00-0	Pyrene	10.2	U	0.2	1	10.2	ug/L
85-68-7	Butylbenzylphthalate	10.2	U	0.19	1	10.2	ug/L
91-94-1	3,3-Dichlorobenzidine	10.2	U	1	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.2	U	0.16	1	10.2	ug/L
117-84-0	Di-n-octyl phthalate	10.2	U	0.52	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.29	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033599.D	1	04/05/18 08:15	04/05/18 19:11	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.29	1	10.2	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.2	U	0.2	1	10.2	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.2	U	0.2	1	10.2	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	53.9		10 - 130		36%	SPK: 150
13127-88-3	Phenol-d6	32.9		10 - 130		22%	SPK: 150
4165-60-0	Nitrobenzene-d5	76.6		36 - 131		77%	SPK: 100
321-60-8	2-Fluorobiphenyl	77		39 - 131		77%	SPK: 100
118-79-6	2,4,6-Tribromophenol	100		25 - 155		67%	SPK: 150
1718-51-0	Terphenyl-d14	61		23 - 130		61%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	41277	8.86				
1146-65-2	Naphthalene-d8	199917	11.74				
15067-26-2	Acenaphthene-d10	146044	15.48				
1517-22-2	Phenanthrene-d10	331217	18.21				
1719-03-5	Chrysene-d12	328328	22.55				
1520-96-3	Perylene-d12	354122	26.31				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033623.D	5	04/05/18 08:15	04/06/18 10:36	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	50.8	UD	3.9	5.1	50.8	ug/L
108-95-2	Phenol	50.8	UD	1.1	5.1	50.8	ug/L
111-44-4	bis(2-Chloroethyl)ether	50.8	UD	2.8	5.1	50.8	ug/L
95-57-8	2-Chlorophenol	50.8	UD	2.7	5.1	50.8	ug/L
95-48-7	2-Methylphenol	50.8	UD	1.2	5.1	50.8	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	50.8	UD	0.86	5.1	50.8	ug/L
98-86-2	Acetophenone	50.8	UD	0.71	5.1	50.8	ug/L
65794-96-9	3+4-Methylphenols	50.8	UD	1.9	5.1	50.8	ug/L
621-64-7	n-Nitroso-di-n-propylamine	50.8	UD	1	5.1	50.8	ug/L
67-72-1	Hexachloroethane	50.8	UD	1.3	5.1	50.8	ug/L
98-95-3	Nitrobenzene	50.8	UD	3.5	5.1	50.8	ug/L
78-59-1	Isophorone	50.8	UD	1.5	5.1	50.8	ug/L
88-75-5	2-Nitrophenol	50.8	UD	2.6	5.1	50.8	ug/L
105-67-9	2,4-Dimethylphenol	14.3	JD	3.6	5.1	50.8	ug/L
111-91-1	bis(2-Chloroethoxy)methane	50.8	UD	2.8	5.1	50.8	ug/L
120-83-2	2,4-Dichlorophenol	50.8	UD	3.4	5.1	50.8	ug/L
91-20-3	Naphthalene	240	D	0.61	5.1	50.8	ug/L
106-47-8	4-Chloroaniline	50.8	UD	5.1	5.1	50.8	ug/L
87-68-3	Hexachlorobutadiene	50.8	UD	1.3	5.1	50.8	ug/L
105-60-2	Caprolactam	50.8	UD	5.1	5.1	50.8	ug/L
59-50-7	4-Chloro-3-methylphenol	50.8	UD	2	5.1	50.8	ug/L
91-57-6	2-Methylnaphthalene	50.8	UD	1.6	5.1	50.8	ug/L
77-47-4	Hexachlorocyclopentadiene	50.8	UD	1.2	5.1	50.8	ug/L
88-06-2	2,4,6-Trichlorophenol	50.8	UD	2.8	5.1	50.8	ug/L
95-95-4	2,4,5-Trichlorophenol	50.8	UD	2	5.1	50.8	ug/L
92-52-4	1,1-Biphenyl	50.8	UD	0.76	5.1	50.8	ug/L
91-58-7	2-Chloronaphthalene	50.8	UD	0.81	5.1	50.8	ug/L
88-74-4	2-Nitroaniline	50.8	UD	2.5	5.1	50.8	ug/L
131-11-3	Dimethylphthalate	50.8	UD	1.1	5.1	50.8	ug/L
208-96-8	Acenaphthylene	50.8	UD	3.6	5.1	50.8	ug/L
606-20-2	2,6-Dinitrotoluene	50.8	UD	1.6	5.1	50.8	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033623.D	5	04/05/18 08:15	04/06/18 10:36	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	50.8	UD	5.1	5.1	50.8	ug/L
83-32-9	Acenaphthene	22.2	JD	1.1	5.1	50.8	ug/L
51-28-5	2,4-Dinitrophenol	50.8	UD	10.7	40.6	50.8	ug/L
100-02-7	4-Nitrophenol	50.8	UD	10.2	25.4	50.8	ug/L
132-64-9	Dibenzofuran	14.6	JD	1.2	5.1	50.8	ug/L
121-14-2	2,4-Dinitrotoluene	50.8	UD	5.1	5.1	50.8	ug/L
84-66-2	Diethylphthalate	50.8	UD	1.9	5.1	50.8	ug/L
7005-72-3	4-Chlorophenyl-phenylether	50.8	UD	1.1	5.1	50.8	ug/L
86-73-7	Fluorene	12.1	JD	1.6	5.1	50.8	ug/L
100-01-6	4-Nitroaniline	50.8	UD	6.9	10.2	50.8	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	50.8	UD	3.8	10.2	50.8	ug/L
86-30-6	n-Nitrosodiphenylamine	50.8	UD	3	5.1	50.8	ug/L
101-55-3	4-Bromophenyl-phenylether	50.8	UD	1.2	5.1	50.8	ug/L
118-74-1	Hexachlorobenzene	50.8	UD	0.91	5.1	50.8	ug/L
1912-24-9	Atrazine	50.8	UD	2	5.1	50.8	ug/L
87-86-5	Pentachlorophenol	50.8	UD	5.1	5.1	50.8	ug/L
85-01-8	Phenanthrene	12.7	JD	1.3	5.1	50.8	ug/L
120-12-7	Anthracene	50.8	UD	0.81	5.1	50.8	ug/L
86-74-8	Carbazole	22.2	JD	1.1	5.1	50.8	ug/L
84-74-2	Di-n-butylphthalate	50.8	UD	5.1	5.1	50.8	ug/L
206-44-0	Fluoranthene	50.8	UD	2	5.1	50.8	ug/L
129-00-0	Pyrene	50.8	UD	1	5.1	50.8	ug/L
85-68-7	Butylbenzylphthalate	50.8	UD	0.96	5.1	50.8	ug/L
91-94-1	3,3-Dichlorobenzidine	50.8	UD	5.1	5.1	50.8	ug/L
56-55-3	Benzo(a)anthracene	50.8	UD	0.81	5.1	50.8	ug/L
218-01-9	Chrysene	50.8	UD	0.91	5.1	50.8	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	50.8	UD	0.81	5.1	50.8	ug/L
117-84-0	Di-n-octyl phthalate	50.8	UD	2.6	5.1	50.8	ug/L
205-99-2	Benzo(b)fluoranthene	50.8	UD	1.5	5.1	50.8	ug/L
207-08-9	Benzo(k)fluoranthene	50.8	UD	0.91	5.1	50.8	ug/L
50-32-8	Benzo(a)pyrene	50.8	UD	0.71	5.1	50.8	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	50.8	UD	0.76	5.1	50.8	ug/L
53-70-3	Dibenzo(a,h)anthracene	50.8	UD	2.1	5.1	50.8	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-03DL	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	985 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033623.D	5	04/05/18 08:15	04/06/18 10:36	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	50.8	UD	1.5	5.1	50.8	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	50.8	UD	1	5.1	50.8	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	50.8	UD	1	5.1	50.8	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	41.8		10 - 130		28%	SPK: 150
13127-88-3	Phenol-d6	20.4		10 - 130		14%	SPK: 150
4165-60-0	Nitrobenzene-d5	68.6		36 - 131		69%	SPK: 100
321-60-8	2-Fluorobiphenyl	81		39 - 131		81%	SPK: 100
118-79-6	2,4,6-Tribromophenol	86.5		25 - 155		58%	SPK: 150
1718-51-0	Terphenyl-d14	63.6		23 - 130		64%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	43641	8.86				
1146-65-2	Naphthalene-d8	206974	11.74				
15067-26-2	Acenaphthene-d10	149820	15.48				
1517-22-2	Phenanthrene-d10	324839	18.21				
1719-03-5	Chrysene-d12	329312	22.55				
1520-96-3	Perylene-d12	341810	26.31				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000740.D	1		04/08/18 19:03	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1.7		0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	5.8		0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	910	E	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	9.4		0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000740.D	1		04/08/18 19:03	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.26	J	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	130		0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	17.2		0.4	0.4	2	ug/L
95-47-6	o-Xylene	21		0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	24.4		0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.9		61 - 141		88%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		69 - 133		97%	SPK: 50
2037-26-5	Toluene-d8	46.7		65 - 126		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	46		58 - 135		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	312910	5.68				
540-36-3	1,4-Difluorobenzene	432304	6.87				
3114-55-4	Chlorobenzene-d5	402698	10.12				
3855-82-1	1,4-Dichlorobenzene-d4	241661	12.09				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GW	SDG No.:	J2216
Lab Sample ID:	J2216-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000740.D	1		04/08/18 19:03	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-03DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000777.D	10		04/11/18 14:39	VX041118

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	10	UD	2	2	10	ug/L
74-87-3	Chloromethane	10	UD	2	2	10	ug/L
75-01-4	Vinyl Chloride	10	UD	2	2	10	ug/L
74-83-9	Bromomethane	10	UD	2	2	10	ug/L
75-00-3	Chloroethane	10	UD	2	5	10	ug/L
75-69-4	Trichlorofluoromethane	10	UD	2	2	10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	10	UD	2	2	10	ug/L
75-65-0	Tert butyl alcohol	250	UD	5	37.5	250	ug/L
75-35-4	1,1-Dichloroethene	10	UD	2	2	10	ug/L
67-64-1	Acetone	50	UD	5	10	50	ug/L
75-15-0	Carbon Disulfide	10	UD	2	2	10	ug/L
1634-04-4	Methyl tert-butyl Ether	10	UD	3.5	5	10	ug/L
79-20-9	Methyl Acetate	10	UD	2	5	10	ug/L
75-09-2	Methylene Chloride	10	UD	2	2	10	ug/L
156-60-5	trans-1,2-Dichloroethene	10	UD	2	2	10	ug/L
75-34-3	1,1-Dichloroethane	10	UD	2	2	10	ug/L
110-82-7	Cyclohexane	10	UD	2	2	10	ug/L
78-93-3	2-Butanone	50	UD	13.2	25	50	ug/L
56-23-5	Carbon Tetrachloride	10	UD	2	2	10	ug/L
156-59-2	cis-1,2-Dichloroethene	10	UD	2	2	10	ug/L
74-97-5	Bromochloromethane	10	UD	2	5	10	ug/L
67-66-3	Chloroform	10	UD	2	2	10	ug/L
71-55-6	1,1,1-Trichloroethane	10	UD	2	2	10	ug/L
108-87-2	Methylcyclohexane	10	UD	2	2	10	ug/L
71-43-2	Benzene	640	D	2	2	10	ug/L
107-06-2	1,2-Dichloroethane	10	UD	2	2	10	ug/L
79-01-6	Trichloroethene	10	UD	2	2	10	ug/L
78-87-5	1,2-Dichloropropane	10	UD	2	2	10	ug/L
75-27-4	Bromodichloromethane	10	UD	2	2	10	ug/L
108-10-1	4-Methyl-2-Pentanone	50	UD	10	10	50	ug/L
108-88-3	Toluene	10	UD	2	2	10	ug/L
10061-02-6	t-1,3-Dichloropropene	10	UD	2	2	10	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-03DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000777.D	10		04/11/18 14:39	VX041118

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	10	UD	2	2	10	ug/L
79-00-5	1,1,2-Trichloroethane	10	UD	2	2	10	ug/L
591-78-6	2-Hexanone	50	UD	19.4	25	50	ug/L
124-48-1	Dibromochloromethane	10	UD	2	2	10	ug/L
106-93-4	1,2-Dibromoethane	10	UD	2	2	10	ug/L
127-18-4	Tetrachloroethene	10	UD	2	2	10	ug/L
108-90-7	Chlorobenzene	10	UD	2	2	10	ug/L
100-41-4	Ethyl Benzene	94.4	D	2	2	10	ug/L
179601-23-1	m/p-Xylenes	12.4	JD	4	4	20	ug/L
95-47-6	o-Xylene	15.1	D	2	2	10	ug/L
100-42-5	Styrene	10	UD	2	2	10	ug/L
75-25-2	Bromoform	10	UD	2	2	10	ug/L
98-82-8	Isopropylbenzene	18.8	D	2	2	10	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	10	UD	2	2	10	ug/L
541-73-1	1,3-Dichlorobenzene	10	UD	2	2	10	ug/L
106-46-7	1,4-Dichlorobenzene	10	UD	2	2	10	ug/L
95-50-1	1,2-Dichlorobenzene	10	UD	2	2	10	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	10	UD	2	2	10	ug/L
120-82-1	1,2,4-Trichlorobenzene	10	UD	2	2	10	ug/L
87-61-6	1,2,3-Trichlorobenzene	10	UD	2	2	10	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	39.8		61 - 141		80%	SPK: 50
1868-53-7	Dibromofluoromethane	39.6		69 - 133		79%	SPK: 50
2037-26-5	Toluene-d8	40.4		65 - 126		81%	SPK: 50
460-00-4	4-Bromofluorobenzene	41.1		58 - 135		82%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	304819	5.67				
540-36-3	1,4-Difluorobenzene	425530	6.87				
3114-55-4	Chlorobenzene-d5	405247	10.12				
3855-82-1	1,4-Dichlorobenzene-d4	253209	12.09				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-MW27S-GWDL	SDG No.:	J2216
Lab Sample ID:	J2216-03DL	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000777.D	10		04/11/18 14:39	VX041118

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	Water
Analytical Method:	8015B DRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	990 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG000751.D	1	04/05/18 08:23	04/06/18 18:38	PB108009

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
DRO	DRO	71		25	25.5	51	ug/L
SURROGATES							
16416-32-3	Tetracosane-d50	11.2		29 - 130		56%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	Water
Analytical Method:	8015B GRO	% Moisture:	100 Decanted:
Sample Wt/Vol:	5 Units: mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB014647.D	1	04/05/18 9:55	FB040518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
GRO	GRO	45	U	12	22.5	45	ug/L
SURROGATES							
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.2		50 - 150		101%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7439-89-6	Iron	50	U	1	12.5	12.5	50	ug/L	04/05/18 08:31	04/05/18 22:39	SW6010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group3				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033675.D	1	04/05/18 08:15	04/09/18 11:37	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
100-52-7	Benzaldehyde	10.1	U	0.78	1	10.1	ug/L
108-95-2	Phenol	10.1	U	0.21	1	10.1	ug/L
111-44-4	bis(2-Chloroethyl)ether	10.1	U	0.56	1	10.1	ug/L
95-57-8	2-Chlorophenol	10.1	U	0.55	1	10.1	ug/L
95-48-7	2-Methylphenol	10.1	U	0.24	1	10.1	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	10.1	U	0.17	1	10.1	ug/L
98-86-2	Acetophenone	10.1	U	0.14	1	10.1	ug/L
65794-96-9	3+4-Methylphenols	10.1	U	0.38	1	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	10.1	U	0.2	1	10.1	ug/L
67-72-1	Hexachloroethane	10.1	U	0.25	1	10.1	ug/L
98-95-3	Nitrobenzene	10.1	U	0.69	1	10.1	ug/L
78-59-1	Isophorone	10.1	U	0.3	1	10.1	ug/L
88-75-5	2-Nitrophenol	10.1	U	0.53	1	10.1	ug/L
105-67-9	2,4-Dimethylphenol	10.1	U	0.72	1	10.1	ug/L
111-91-1	bis(2-Chloroethoxy)methane	10.1	U	0.56	1	10.1	ug/L
120-83-2	2,4-Dichlorophenol	10.1	U	0.67	1	10.1	ug/L
91-20-3	Naphthalene	10.1	U	0.12	1	10.1	ug/L
106-47-8	4-Chloroaniline	10.1	U	1	1	10.1	ug/L
87-68-3	Hexachlorobutadiene	10.1	U	0.25	1	10.1	ug/L
105-60-2	Caprolactam	10.1	U	1	1	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	10.1	U	0.4	1	10.1	ug/L
91-57-6	2-Methylnaphthalene	10.1	U	0.32	1	10.1	ug/L
77-47-4	Hexachlorocyclopentadiene	10.1	U	0.24	1	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	10.1	U	0.57	1	10.1	ug/L
95-95-4	2,4,5-Trichlorophenol	10.1	U	0.4	1	10.1	ug/L
92-52-4	1,1-Biphenyl	10.1	U	0.15	1	10.1	ug/L
91-58-7	2-Chloronaphthalene	10.1	U	0.16	1	10.1	ug/L
88-74-4	2-Nitroaniline	10.1	U	0.49	1	10.1	ug/L
131-11-3	Dimethylphthalate	10.1	U	0.22	1	10.1	ug/L
208-96-8	Acenaphthylene	10.1	U	0.71	1	10.1	ug/L
606-20-2	2,6-Dinitrotoluene	10.1	U	0.32	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033675.D	1	04/05/18 08:15	04/09/18 11:37	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	10.1	U	1	1	10.1	ug/L
83-32-9	Acenaphthene	10.1	U	0.21	1	10.1	ug/L
51-28-5	2,4-Dinitrophenol	10.1	U	2.1	8.1	10.1	ug/L
100-02-7	4-Nitrophenol	10.1	U	2	5.1	10.1	ug/L
132-64-9	Dibenzofuran	10.1	U	0.24	1	10.1	ug/L
121-14-2	2,4-Dinitrotoluene	10.1	U	1	1	10.1	ug/L
84-66-2	Diethylphthalate	10.1	U	0.38	1	10.1	ug/L
7005-72-3	4-Chlorophenyl-phenylether	10.1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	10.1	U	0.31	1	10.1	ug/L
100-01-6	4-Nitroaniline	10.1	U	1.4	2	10.1	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	10.1	U	0.75	2	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	10.1	U	0.61	1	10.1	ug/L
101-55-3	4-Bromophenyl-phenylether	10.1	U	0.23	1	10.1	ug/L
118-74-1	Hexachlorobenzene	10.1	U	0.18	1	10.1	ug/L
1912-24-9	Atrazine	10.1	U	0.4	1	10.1	ug/L
87-86-5	Pentachlorophenol	10.1	U	1	1	10.1	ug/L
85-01-8	Phenanthrene	10.1	U	0.26	1	10.1	ug/L
120-12-7	Anthracene	10.1	U	0.16	1	10.1	ug/L
86-74-8	Carbazole	10.1	U	0.22	1	10.1	ug/L
84-74-2	Di-n-butylphthalate	10.1	U	1	1	10.1	ug/L
206-44-0	Fluoranthene	10.1	U	0.4	1	10.1	ug/L
129-00-0	Pyrene	10.1	U	0.2	1	10.1	ug/L
85-68-7	Butylbenzylphthalate	10.1	U	0.19	1	10.1	ug/L
91-94-1	3,3-Dichlorobenzidine	10.1	U	1	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	10.1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	10.1	U	0.18	1	10.1	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	10.1	U	0.16	1	10.1	ug/L
117-84-0	Di-n-octyl phthalate	10.1	U	0.52	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	10.1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	10.1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	10.1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.1	U	0.42	1	10.1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG033675.D	1	04/05/18 08:15	04/09/18 11:37	PB108007

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	10.1	U	0.29	1	10.1	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	10.1	U	0.2	1	10.1	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	10.1	U	0.2	1	10.1	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	60		10 - 130		40%	SPK: 150
13127-88-3	Phenol-d6	31.9		10 - 130		21%	SPK: 150
4165-60-0	Nitrobenzene-d5	86.7		36 - 131		87%	SPK: 100
321-60-8	2-Fluorobiphenyl	88.2		39 - 131		88%	SPK: 100
118-79-6	2,4,6-Tribromophenol	120		25 - 155		80%	SPK: 150
1718-51-0	Terphenyl-d14	89.3		23 - 130		89%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	39958	8.86				
1146-65-2	Naphthalene-d8	170138	11.74				
15067-26-2	Acenaphthene-d10	122531	15.47				
1517-22-2	Phenanthrene-d10	324341	18.21				
1719-03-5	Chrysene-d12	337654	22.55				
1520-96-3	Perylene-d12	353643	26.31				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000736.D	1		04/08/18 17:21	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000736.D	1		04/08/18 17:21	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.7		61 - 141		89%	SPK: 50
1868-53-7	Dibromofluoromethane	47.7		69 - 133		95%	SPK: 50
2037-26-5	Toluene-d8	47		65 - 126		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.1		58 - 135		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	320747	5.67				
540-36-3	1,4-Difluorobenzene	449506	6.87				
3114-55-4	Chlorobenzene-d5	420249	10.12				
3855-82-1	1,4-Dichlorobenzene-d4	243368	12.09				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	04/03/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-EQUIP-BLANK	SDG No.:	J2216
Lab Sample ID:	J2216-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000736.D	1		04/08/18 17:21	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/28/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-TRIP-BLANK-2	SDG No.:	J2216
Lab Sample ID:	J2216-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000737.D	1		04/08/18 17:46	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	1	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	1	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	1	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U	0.2	0.2	1	ug/L
75-65-0	Tert butyl alcohol	25	U	0.5	3.8	25	ug/L
75-35-4	1,1-Dichloroethene	1	U	0.2	0.2	1	ug/L
67-64-1	Acetone	5	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	1	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	1	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	1	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	1	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	1	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	1	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	1	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	1	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	1	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	1	U	0.2	0.2	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	1	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	1	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	1	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	1	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	5	U	1	1	5	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/28/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-TRIP-BLANK-2	SDG No.:	J2216
Lab Sample ID:	J2216-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000737.D	1		04/08/18 17:46	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
10061-01-5	cis-1,3-Dichloropropene	1	U	0.2	0.2	1	ug/L
79-00-5	1,1,2-Trichloroethane	1	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	1	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	1	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
100-42-5	Styrene	1	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	1	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.9		61 - 141		90%	SPK: 50
1868-53-7	Dibromofluoromethane	47.6		69 - 133		95%	SPK: 50
2037-26-5	Toluene-d8	46.8		65 - 126		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.8		58 - 135		92%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	317404	5.67				
540-36-3	1,4-Difluorobenzene	447090	6.87				
3114-55-4	Chlorobenzene-d5	414492	10.12				
3855-82-1	1,4-Dichlorobenzene-d4	243666	12.09				

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/28/18
Project:	Hunters Point - Queens West Library	Date Received:	04/04/18
Client Sample ID:	QNWP8-TRIP-BLANK-2	SDG No.:	J2216
Lab Sample ID:	J2216-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX000737.D	1		04/08/18 17:46	VX040818

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Appendix 1
Environmental Easement

New York State Department of Environmental Conservation
Office of General Counsel, 14th Floor
625 Broadway, Albany, New York 12233-1500
Fax: (518) 402-9018 or (518) 402-9019
Website: www.dec.ny.gov

Joe Martens
Commissioner

August 26, 2011

Clinton N. Daggan Esq.,
Kramer Levin Naftalis & Frankel LLP
1177 Avenue of the Americas
New York, New York 10036

Re: BCP Site No. C241087
Queens West (Hunter's Point) Parcel 8 Site

Dear Attorney Daggan,

Enclosed please find an originally-executed Environmental Easement covering the above – referenced property, which was accepted by the Department. Please have the easement and the enclosed TP 584 & 584.2 form recorded in the Office of the City Register of the City of New York, in the manner prescribed by New York State Property Law Article 9 and Environmental Conservation Law Article 71, Title 36. Once the Environmental Easement is recorded, the local municipality will need to be notified as well as the Notice to any parties identified as having an interest in the property, as set forth in Schedule "B" of the Title Commitment.

Please return a copy of the recorded easement marked by the City Register's Office with the date and location of recording, executed title affidavits, a certified copy of the municipal notice, copy of notice for any interested parties along with proof of service and recording on the same, and the final title insurance policy to my attention. The information from the recorded easement and recorded notices are necessary to process the Certificate of Completion. However, be advised that failure to receive the additional documents requested above within thirty days of the filing of the easement may result in revocation of Certificate of Completion.

If you have any questions, or if you need further assistance with this matter, do not hesitate to contact me.

Very truly yours,

Yvonne Ward
Senior Attorney

Enclosure: Environmental Easement
TP 584.2 & TP 584

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.

2011090700456001001EA17A

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 10**

Document ID: 2011090700456001 Document Date: 08-25-2011 Preparation Date: 09-07-2011
Document Type: EASEMENT
Document Page Count: 9

PRESENTER:	**RETURN TO:**
CLINTON DAGGAN KRAMER LEVIN NAFTALIS & FRANKEL LLP 1177 AVENUE OF THE AMERICAS NEW YORK, NY 10036 212-715-9194 cdaggan@kramerlevin.com	CLINTON DAGGAN KRAMER LEVIN NAFTALIS & FRANKEL LLP 1177 AVENUE OF THE AMERICAS NEW YORK, NY 10036 212-715-9194 cdaggan@kramerlevin.com

PROPERTY DATA

Borough	Block	Lot	Unit	Address
QUEENS	19	21	Partial Lot	N/A 48TH AVENUE

Property Type: NON-RESIDENTIAL VACANT LAND Easement

CROSS REFERENCE DATA

CRFN_____ ***or*** Document ID_____ ***or*** _____ Year____ Reel ___ Page ____ ***or*** File Number_____

PARTIES

GRANTOR/SELLER:	**GRANTEE/BUYER:**
QUEENS WEST DEVELOPMENT CORPORATION 633 THIRD AVENUE, 37TH FLOOR NEW YORK, NY 10017	NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION 625 BROADWAY ALBANY, NY 12233

FEES AND TAXES

Mortgage		
Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	82.00
Affidavit Fee:	$	0.00

Filing Fee:		
	$	0.00
NYC Real Property Transfer Tax:		
	$	0.00
NYS Real Estate Transfer Tax:		
	$	0.00

RECORDED OR FILED IN THE OFFICE OF THE CITY REGISTER OF THE CITY OF NEW YORK

Recorded/Filed 09-14-2011 15:07
City Register File No.(CRFN):
2011000326218

City Register Official Signature

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

THIS INDENTURE made this 25th day of August, 2011, between Owner(s) Queens West Development Corporation, a public benefit corporation of the State of New York, having an office at 633 Third Avenue, 37th Floor, New York, New York 10017 (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233.

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

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

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

WHEREAS, Grantor is the owner of real property located at the address of 4-56 47th Road in the Borough and County of Queens and State of New York, known and designated on the tax map of the Office of the City Register of the City of New York as tax map parcel numbers: Block 19 Lot 21 f/k/a Block 19 Lot 19, being the same as that property conveyed to Grantor by Letters Patent dated December 10, 1999 and recorded in the City Register of the City of New York in Reel 590 Page 1561. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.736 +/- acres, and is hereinafter more fully described in the Land Title Survey dated April 1, 2011 prepared by Montrose Surveying Co., LLP, City and Land Surveyors, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

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

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of BCA Index No Number: W2-1059-10-03, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

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

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.

(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.

(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

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

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

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

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved b the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5 the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

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

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the

Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

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

Parties shall address correspondence to:
Site Number: C241087
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:
Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

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

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

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

Grantor: Queens West Development Corporation

By: _____

Print Name: Paul Januszewski

Title: President Date: 8/19/11

Grantor's Acknowledgment

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

On the 19TH day of AUGUST, in the year 20 11, before me, the undersigned, personally appeared PAUL JANUSZEWSKI, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

SIMON WYNN
Notary Public, State of New York
No. 02WY4792002
Qualified in New York County
Commission Expires Aug. 31, 2013

SEAL

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

By: _____
Dale A. Desnoyers, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 25th day of August, in the year 2011, before me, the undersigned, personally appeared Dale A. Desnoyers, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

SEAL

SCHEDULE "A" PROPERTY DESCRIPTION

Address: 4-56 47th Road, Queens, NY
Tax Map: Tax Lot 9021 Block 17 Lot 21

ALL that certain lot, piece or parcel of land, situate, lying and being in the Borough and County of Queens, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the southerly side of 47th Road (formerly Seventh Street) with the westerly side of Center Boulevard, as said boulevard is shown on the City of New York, Borough of Queens, Office of the President Topographical Bureau Map No. 4876 showing a change in the street system, said point also being distant 458.60 feet westerly along the southerly side of said 47th Road from the corner formed by the intersection of the said southerly side of said 47th Road with the westerly side of 5th Street (formerly West Avenue);

THENCE along the westerly side of said Center Boulevard south 6 degrees, 26 minutes, 24.2 seconds west, 198.15 feet;

THENCE still along the westerly side of said Center Boulevard along the arc of a curve bearing to the right having a central angle of 0 degrees, 36 minutes, 12.5 seconds and a radius of 1550 feet, a distance of 16.33 feet;

THENCE south 75 degrees, 17 minutes, 05 seconds west, 121.64 feet to the easterly line of the Commerce Grant to Cyrus M. Warren, 4/30/1890; (Book 47 of Patents Page 43);

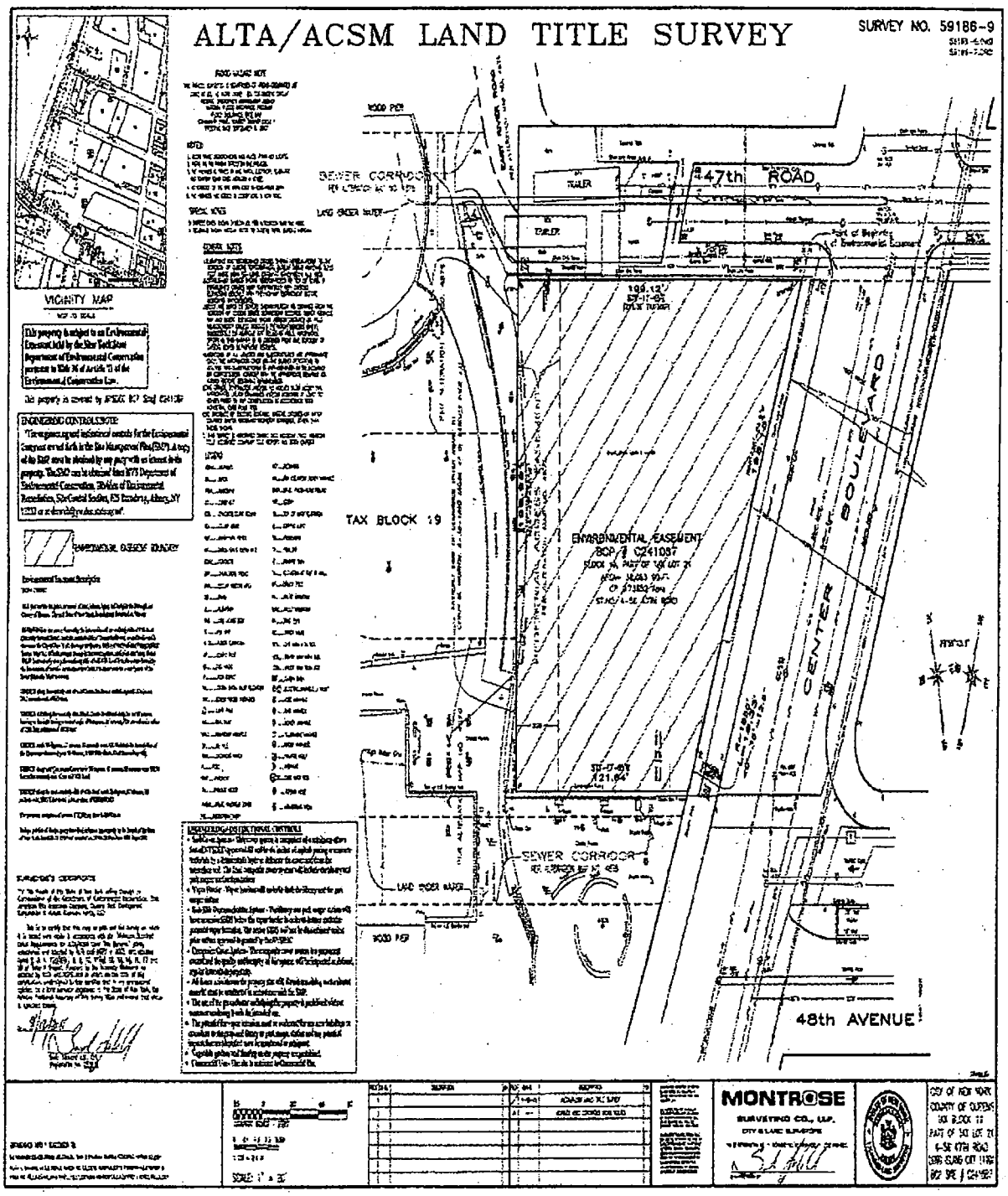
THENCE along said Commerce Grant north 14 degrees, 42 minutes, 55 seconds west 199.99 feet to the southerly side of the said 47th Road;

THENCE along the said southerly side of 47th Road north 75 degrees, 17 minutes, 05 seconds east, 199.12 feet to the point or place of BEGINNING.

The premises comprises of an area of 32,083 sq. ft. or 0.73652 acre.

Being a portion of that property described in letters patent made by the People of the State of New York dated 12-10-1999 and recorded on 10-04-2000 as Reel 5690 Page 1561.

SURVEY


ALTA/ACSM LAND TITLE SURVEY
SURVEY NO. 59186-9
VICINITY MAP
47th ROAD
48th AVENUE
CENTER BOULEVARD
TAX BLOCK 19
ENVIRONMENTAL EASEMENT
BCP # C241087
SEWER CORRIDOR
MONTROSE
SURVEYING CO., LLP.