



Plattsburgh, New York

Kristofer Gushlaw
Chief Plant Operator

Water Resource Recovery Facility
53 Green Street
Plattsburgh, NY 12901
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NOTICE TO BIDDERS

The Common Council of the City of Plattsburgh, New York will receive sealed bids up until **11:00 AM, Friday, February 25, 2022** at the City Clerk's Office, 41 City Hall Place, Plattsburgh, New York, for **Laboratory Services for the Water Resource Recovery Facility Contract #WRRF 2022-03**. The bids will be publicly opened and read aloud in the Common Council Chambers of the City Hall Building at 11:00 AM on this same date.

Specifications may be obtained at the Office of the City Clerk, 41 City Hall Place, Plattsburgh, New York 12901, or available for download at www.cityofplattsburgh.com under the "Find-Bid Opportunities" section on the bottom of the homepage.

Bids to be accompanied with a Non-Collusive Bidding Certificate.

Envelope containing a bid shall be plainly marked: "**Laboratory Services for the WRRF, Contract #WRRF 2022-03.**"

The Common Council of the City of Plattsburgh, New York, reserves the right to reject any and/or all bids and to waive any and/or all informalities that do not affect the validity of the bid.

Kristofer Gushlaw
WRRF Chief Plant Operator

BID SPECIFICATIONS

LABORATORY SERVICES

WATER RESOURCE RECOVERY FACILITY

CONTRACT NO. WRRF 2022-03

CHRISTOPHER ROSENQUEST, MAYOR

CITY OF PLATTSBURGH

CITY HALL

PLATTSBURGH, NEW YORK 12901

FEBRUARY 2022

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CONTRACT NO. WRRF 2022-03

ENVIRONMENTAL SERVICES DEPARTMENT

CITY HALL

**PLATTSBURGH, NEW YORK 12901
(518-563-7731)**

**JONATHAN P. RUFF
ENVIRONMENTAL MANAGER**

February 7, 2022

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INFORMATION FOR BIDDERS

1.1 OPENING OF BIDS

- A. Bids will be opened at the time and place set forth in the Notice to Bidders. Every bid received before that time, or authorized postponement thereof, will be opened and publicly read aloud. Bidders and other persons properly interested may be present in person or by representative.
- B. The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof or may waive any informalities in or reject any or all bids. Any bid may be withdrawn prior to the advertised time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 30 days after the actual opening thereof.
- C. Conditional bids will not be accepted.

1.2. PREPARATION OF PROPOSAL

- A. Proposals must be submitted on prescribed bid proposal forms or facsimiles thereof. All blank spaces must be filled in, in ink or typewritten, in both words and figures where so indicated.
- B. The bid proposal and required submittals must be submitted in a sealed envelope and shall have clearly designated on the outside the name and address of the bidder, the name of the project and the contract for which the proposal is being submitted for. Bids must be submitted to City Clerk, City of Plattsburgh, 41 City Hall Place, Plattsburgh, New York 12901. Bids are to be submitted in an envelope and plainly marked "**Laboratory Services for WRRF, Contract #WRRF 2022-03.**"

1.3 COPIES OF CONTRACT DOCUMENTS

- A. Copies of the contract documents may be obtained from the City Clerk, 41 City Hall Place, City of Plattsburgh, New York 12901, and on www.cityofplattsburgh.com, under "Bid Opportunities."

1.4 NON-COLLUSIVE BIDDING CERTIFICATE

- A. Each prime Bidder submitting a bid for any portion of the work contemplated by the bidding documents shall execute a Non-Collusive Certificate as required by applicable New York State law, in the form herein provided, to the effect that he has not colluded with any other person, firm or corporation in regard to any bid submitted. Such certificate shall be attached to the bid. Failure of any bidder to abide by this provision shall be cause for rejection of his bid.

INFORMATION FOR BIDDERS, CONTINUED

1.5 QUALIFICATION OF BIDDERS

- A. The Owner may make such investigation as he deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request.
- B. The Owner reserves the right to reject any bid if the evidence submitted by or investigation of such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated herein.
- C. The Owner requires the Bidder that is to do the work described in this contract to have a minimum of five (5) years laboratory experience. The bidder shall have demonstrated abilities in laboratory procedures and methods.

1.6. SUBCONTRACTOR

- A. The Bidder may designate a Subcontractor to do the work described herein and the Owner shall have the right to review and approve or disapprove the Subcontractor subject to the same conditions set forth in 1.5, Qualification of Bidders. Any such Subcontractor shall comply with all conditions set forth in this contract.
- B. Any subcontractor(s) used will be identified by the bidder. The testing done by each subcontractor shall be identified by the items as listed on the Bid Proposal Sheet. If no subcontractor is listed for an item, it is assumed that the actual bidder is doing the testing. Bidder will supply phone number and contact person for any subcontractor used.

1.7 CONDITIONS OF WORK

- A. The Bidder must furnish all labor and materials necessary to complete all testing requirements.

1.8 OBLIGATION OF BIDDERS

- A. At the time of the opening of bids, each bidder must be familiar with laboratory practices and methods, and to have read and to be thoroughly familiar with the bidding documents, including all Addenda. The failure or omission of any bidder to receive or examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect to his bid.

INFORMATION FOR BIDDERS, CONTINUED

1.9 ADDENDA AND INTERPRETATIONS

- A. No interpretations of the meaning of the Specifications or other contract documents will be made to any bidder orally. Every request for such interpretation shall be in writing to the City Environmental Manager, and to be given consideration, must be received at least 5 days prior to the date fixed for the opening of the bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications. Addenda will be mailed to all prospective bidders at the respective address furnished prior to the date as fixed for opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve any bidder from any obligations under their bid as submitted. All addenda so issued shall become part of the contract documents.

1.10 BASIS FOR AWARD

- A. Award will be made to the lowest responsible bidder as determined from the Bid Proposal. Unit prices shall govern in the event of a math error. On contracts with estimated quantities, the award will be made on the unit prices quoted.
- B. The Common Council of the City of Plattsburgh reserves the right to reject any or all bids received. The Common Council will regard all bids received as an agreement by the bidder to conform to all items of these specifications, unless specific exceptions are to the best interest of the City.

GENERAL CONDITIONS

2.1 CONTRACT AND CONTRACT DOCUMENTS

- A. The specifications and Addenda shall form part of Contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The Table of Contents, titles, headings, contained herein and in said documents are solely to facilitate reference to various provisions of the Contract documents and in no way affect, limit or cast light upon the interpretation of the provisions to which they refer.

2.2 DEFINITIONS

- A. "Contract" means the contract executed by the City of Plattsburgh and the Contractor.
- B. "Contractor" means the person, firm or corporation executing the agreement or the duly recognized assignee thereof, who will perform the work described in the drawings and specifications of the contract documents.
- C. "Sub-Contractor" means a person, firm or corporation supplying labor and materials or only labor for work under separate contract or agreement with the Contractor.
- D. "Engineer" means the City Environmental Manager of the City of Plattsburgh, a duly authorized person representing the City of Plattsburgh.
- E. "Owner" shall mean the City of Plattsburgh. All contracts and agreements connected with the Owner shall be executed by the Mayor.

2.3 PERMITS AND INSPECTIONS

- A. The Contractor shall take out, at his own expense, all necessary permits, and give all notices required by law or municipal ordinances and shall pay all charges incidental to the lawful execution of the work done under this contract.

2.4 TIME OF CONTRACT

- A. The Contract period shall be for one (1) year, commencing on April 1, 2022, or as indicated otherwise in a formal Notice to Proceed. Contract period may be extended for three (3) additional one-year terms, with each year agreed upon by mutual agreement of the Owner and Contractor. Notice of extension must be in writing 60 days prior to each Contract expiration term.

GENERAL CONDITIONS CONTINUED...

2.5 TERMINATION OF CONTRACT

- A. The owner shall have the right to terminate the Contract after ten (10) days written notice in the event:
 - 1. The Contractor fails to perform under the terms of this Contract.
 - 2. The Contractor fails to proceed in a diligent and workmanlike manner as determined by the City Environmental Manager or Chief Plant Operator of the WRRF.

2.6 PAYMENT

- A. Payments will be made for satisfactory completion of work. The Contractor shall be responsible to comply with all recordkeeping and cost account requirements of the Engineer. The Contractor shall be paid only for work done in accordance with authorized Purchase Orders to be issued by the Chief Plant Operator of the WRRF.
- B. Payment shall be made at the unit price bid times the number of tests performed minus any adjustments as given under special conditions.
- C. The City of Plattsburgh (a municipal government) is exempt from payment of sales and compensating use taxes of the State of New York, and of cities and counties on all materials, services, and supplies sold to the City pursuant to this contract, and these taxes are not to be included in the bid price.
- D. Services will be ordered by the issuance of a purchase order as required.
- E. The estimated bid quantities are for bid evaluation purposes only. The City reserves the right to have more or less tests done than the actual bid quantity as determined by the actual analyses needed for reporting purposes for all sites.

BID PROPOSAL FORM
LABORATORY SERVICES FOR WATER RESOURCE RECOVERY FACILITY
CONTRACT #WRRF 2022-03

SUBMIT TO: City Clerk
41 City Hall Place
Plattsburgh, NY 12901

BID DUE DATE: Friday, February 25, 2022 11:00 a.m.

The undersigned hereby certifies he/she has examined and fully comprehends the requirements and intent of these specifications for the above project and offers to furnish all labor and equipment for or incidental to the work as detailed for the following Lump Sum Price:

ITEM	DESCRIPTION	TOTAL COST
1.	Provide Laboratory Services for the WRRF (From filled in pricing as specified herein itemized in Appendix C, this form to be included with this Bid Proposal Form).	
TOTAL AMOUNT FROM APPENDIX C		\$ _____

TOTAL BID: _____
IN WORDS

Addendum No. 1 Acknowledgement: _____
Addendum No. 2 Acknowledgement: _____
Addendum No. 3 Acknowledgement: _____

NAME OF FIRM: _____
ADDRESS: _____
SIGNATURE PRINTED: _____
AUTHORIZED SIGNATURE: _____ **TITLE** _____
CITY: _____ **STATE:** _____
TELEPHONE: _____ **FAX #:** _____
DATE: _____
NAME OF COMPANY CONTACT (PRINTED): _____ **EMAIL ADDRESS OF COMPANY CONTACT:** _____

- REQUIRED ATTACHMENTS:**
1. Non-Collusive Certificate.
 2. Appendix C - itemized form showing each item priced.
 3. Additional required submittals as outlined in Item 18 in the Technical Specifications.

TECHNICAL SPECIFICATIONS

**CITY OF PLATTSBURGH, NEW YORK'S
WATER RESOURCE RECOVERY FACILITY**

Laboratory Services Contract # WRRF 2022-03

General Description:

This work consists of professional laboratory analyses using samples submitted from our Water Resource Recovery Facility (WRRF, formerly Water Pollution Control Plant).

Samples are from many various sources and include, but are not limited to: distilled water, domestic wastewater, hauled wastewater, non-industrial wastewater, industrial wastewater, sludge, compost, stream water, leachate and groundwater samples.

Appendix A of this bid proposal provides general project names, sample matrices, and acceptable testing methods. Appendix B lists analytical parameters with required detection limits. Appendix C contains the estimated sample frequency based on the 2021 sample year frequency, with some anticipated changes for the future. **The actual frequency for 2022 may be more or less.** Appendix D provides examples of the Chains of Custody that will be used, and Appendix E provides an example of reporting expectations.

Special Conditions:

1. Laboratory Approval

All analyses must be performed by a **NEW YORK STATE ENVIRONMENTAL LABORATORY PROGRAM APPROVED (ELAP)** laboratory. Include a copy of the New York State Certificates of Approvals, for all individual analytes listed in Appendix C, with the bid submittal documents. In addition, copies of the Certificates of Approvals must be re-submitted by the successful bidder annually.

2. Turn Around Time (TAT)

It is expected that a TAT of 7-10 (maximum) calendar days from sample receipt will be met for all samples.

Normal reporting time requirements may be modified to lesser TAT with a frequency not to exceed 12 requests per month. If the City of Plattsburgh requests more than the stated frequency turn around advancements, then the normal customary quick turnaround charges may apply, unless waived

3. Required Detection Limits (DLs)

Analyses have required detection limits, which must be met. The listing of site specific and/or project specific sample required detection limits are given in Appendix B. The Chains of Custody (COCs) are examples of ones to be used, and will be modified by the City of Plattsburgh as needed. They have the current required detection limits on them for samples shipped.

Payment will not be made for analyses that do not meet the required detection limits (except as noted in item 13 below). If analyses that do not meet the required DLs exceed 1 sample per month, it shall be considered that the successful bidder is not meeting required detection limits and shall be just cause for immediately ending the contract.

The City of Plattsburgh reserves the right to modify the required detection limits on an as needed basis throughout the bid period. Other analytes not specifically mentioned in Appendices A, B or C shall have as low a detection limit as possible and be consistent with past values obtained per analyte per site. These items will have to be addressed on an as needed basis.

Consistently meeting the required detection limits will be a special condition of great concern.

4. Sample Bottles

New, appropriately cleaned and labeled, sample bottles are to be provided **at no additional charge**. Bottles are to be supplied, as requested, from our facility and are to be delivered expeditiously within 1 week of request time. Sample bottles are to include necessary preservatives prior to shipment to our facility. The sample bottles supplied shall meet all state and federal cleanliness and appropriateness requirements for the analysis to be performed. A copy of the successful bidder's laboratory sample preservation methods and requirements is to be supplied upon the first shipment of bottles.

5. Shipping

The City of Plattsburgh will ship samples on an as required basis. The City of Plattsburgh solely will determine how frequently shipments may be made. This could vary from one to several coolers per week. Shipping materials (i.e. coolers, ice packs, etc.) are to be returned from the successful bidder's laboratory to our lab within 1 week of shipment receipt.

Shipping costs are to be paid for by the successful bidder as well as any charges for sample pick up (if applicable). This includes shipment from Plattsburgh to the successful bidder's laboratory. All shipments must be arranged to arrive at the lab **overnight** from the City of Plattsburgh's facility to the successful bidder's laboratory. Reimbursement, if required, will occur quarterly (i.e. reimbursement from the successful bidder to the City of Plattsburgh.) Preferably, we would ship samples to your laboratory using your shipping vouchers or labels and/or Shipping account numbers.

6. Reporting

Analyses reports are to include, but not be limited to the following:

- parameter and methodology used
- sample results
- pql (practical quantitation limit)
- units
- analyst reference
- date sampled
- samplers name
- sample identification
- sample location
- collection method
- matrix
- commentary (case narratives) as appropriate for problems encountered
- A copy of a completed chain of custody must be included with the final report.
- An emailed PDF file(s) of completed results (final reports), **MUST** be sent as soon as they are available, and must be made within the time period stated above at no cost to the city. A substitute format may be acceptable. **Include a copy of a sample data report with bid submittal.**
- QA/QC data packages (see below).

7. Incidentals

Incidental procedures are to be included in the cost of analyses. This includes all necessary sample preparatory steps, including, but not limited to:

- Acid digestions per applicable methods
- EPA method 625 acid preparations and extractions
- EPA method 625 base neutral preparations and extractions
- Mercury/Metals digestions
- Special in house extractions or preparations
- Compositing procedures requested (this would include compositing a multiple-day sludge or compost sample into one sample prior to analyses, etc.)
- Percent solids must be included on the report for all sludge/soil analyses
- Percent solids determination based on constant weight methodology
- Any or all other necessary required and /or requested sample preparation steps.

8. Chains of Custody (COCs)

Chains of custody, exact or examples, thereof, to be used are given in Appendix D.

9. Reporting Examples

An example of reporting meeting requirements given for project specific items (see Item 6 and Item 14) is provided in Appendix E. Submitted final reports have to either be exactly the same or an agreed to format.

10. Pricing:

Pricing based on the above conditions is to be given as a line by line item in Appendix C.

11. Payments

Purchase order numbers are typically issued on an annual basis, are listed on the COCs, and are to be referenced on invoices. Payments are typically made within 30 days of receiving acceptable results.

Payments will not be made for the following:

- Results that do not meet the required detection limits as requested via the chains of custody submitted with samples (Appendix D, and as listed in Appendix B).
- Results reported that are out of the holding times as specified by New York State ELAP manual and/or Standard Methods for the Examination of Water and Wastewater, (current accepted edition), whichever is more stringent.
- Results that do not meet the test method requirements.
- Reports that do not meet the required turn around time.
- Any or all results that do not meet our data quality objectives.

12. Test Methods

For each analyte, one of the test methods outlined in Appendix A is required. If alternate methods are used, then they must be able to meet ELAP requirements and must also meet the detection limit requirements. Alternate methods need to have review and prior approval by the City of Plattsburgh.

13. Matrix Interference

It is recognized that upon occasion some samples will not meet reportable DLs due to non-target peak interference. If so, the successful bidder's laboratory will attempt any and all cleanup procedures possible. If then, the results still do not meet required DLs, the reasons for this noncompliance (i.e. with the required DLs) shall be documented with the reported results. In no circumstance, for any analyte, will the detection limit reported, exceed our WRRF (Water Pollution Control Plant) effluent SPDES limitations.

For the purposes of payment for work performed on samples with matrix interference, payment may be allowed for sample results that do not meet the required DLs (due to matrix interference), but only if approval by the City of Plattsburgh's contact is given prior to reporting sample results. If matrix interference problems are considered excessive, (excessive meaning more than 1 sample per month) payments for these samples may not be allowed and the stipulation given under required detection limits will apply.

14. Quality Assurance/Quality Control Data Packages

Level 1 QC package on 50% of sample submissions is required. A level 1 QC package is commonly defined as containing:

- Case Narrative
- QC Summary Sheets for:
 - Blanks
 - Surrogates
 - MS/MSD
 - Controls

Samples that are to be run for the Level 1 QC package will be asked for **on the COC** by the City of Plattsburgh (See Appendix D). This will typically be for samples identified by the SPDES/IPP Project code on the pricing bid sheet attached in Appendix C of this document, but may be for other projects as requested. This QC consideration must be included in the unit pricing in the bid sheet attached.

15. Responding to questions and complaints on data reported

We periodically will ask for a check of the data reported. Oral responses, if given, must be followed up with written responses. Written responses must be emailed back to our facility as soon as possible. (Preferably on or attached to the original data check request).

If re-analyses are performed and/or requested, the results of such re-analyses shall be emailed and back to our facility.

16. Performance

The successful bidder's performance will be judged by the ability to simultaneously and continuously meet all of the above requirements. Failure to perform for any of the above special conditions will be cause for immediate cancellation of the bid agreement.

17. Laboratory Compliance

The successful bidder must supply all necessary analyses and reports required by New York State Department of Environmental Conservation (NYS DEC) and the United States Environmental Protection agency (USEPA). This includes, **but is not limited to**:

1. Annual Discharge Monitoring Report MDL reports (Required by the NYS DEC) which shall include the parameter(s) certified, method used and the MDL achieved.
2. Annual DMR QA studies, required by USEPA. If requested analytes do not meet requirements, then follow up studies must be forwarded to the City of Plattsburgh's Water Pollution Control Plant, within time limit requirements.
3. Data must be submitted in accordance with the specifications and requirements set forth in the *"DMR MANUAL For Completing the Discharge Monitoring Report for the State Pollutant Discharge Elimination System (SPDES), 2002"*. This document may be located digitally at:

<https://www.dec.ny.gov/chemical/8461.html>

18. Submittals

The successful bidder must supply:

- Certificates of Approval for Laboratory Service, which include both the bidding laboratory's NY Lab Code and EPA Lab Codes, as well as any sub-contracting laboratories that would be running samples from your facility. These Certificates must cover all items listed in the bid sheets of Appendix C and analytes must be designated as approved in New York State.
- Results of the bidder's laboratory DMRQA 41 (for 2021) for all analytes listed in the bid sheets of Appendix C.
- Completion of Unit Prices and Line Item prices in Appendix C.
- Additional items as specified in the above sections 1-17.

APPENDIX A

APPENDIX A
Acceptable Test Methods

Item#	PROJECT	Matrix	Item	Acceptable Method(s) - From 40 CFR Part 136
1	SLUDGE	Sludge/Soil	Chromium	ICP, EPA METHOD 6010, 6010C
2	SLUDGE	Sludge/Soil	Cadmium	ICP, EPA METHOD 6010, 6010C
3	SLUDGE	Sludge/Soil	Copper	ICP, EPA METHOD 6010, 6010C
4	SLUDGE	Sludge/Soil	Nickel	ICP, EPA METHOD 6010, 6010C
5	SLUDGE	Sludge/Soil	Lead	ICP, EPA METHOD 6010, 6010C
6	SLUDGE	Sludge/Soil	Zinc	ICP, EPA METHOD 6010, 6010C
7	SLUDGE	Sludge/Soil	Potassium	ICP, EPA METHOD 6010, 6010C
8	SLUDGE	Sludge/Soil	Arsenic	ICP, EPA METHOD 6010, 6010C
9	SLUDGE	Sludge/Soil	Molybdenum	ICP, EPA METHOD 6010
10	SLUDGE	Sludge/Soil	Selenium	ICP, EPA METHOD 6010, 6010C, EPA 7010
11	SLUDGE	Sludge/Soil	Mercury	SW-846 METHOD 7471, 7471B
12	SLUDGE	Sludge/Soil	PCBs (Need Low Detection Limit)	EPA 8082, 8082A
13	SLUDGE	Sludge/Soil	Cyanide (Sludge Only)	SW-846 METHOD 9012, 9012B
14	SLUDGE	Sludge/Soil	Nitrate	EPA 9056, 9056A, 9210, 9210A
15	SLUDGE	Sludge/Soil	Nitrite	EPA 9056, 9056A
16	SLUDGE	Sludge/Soil	Total Kjeldahl Nitrogen (TKN)	SM4500-N C, EPA351.1, EPA 351.2
17	SLUDGE	Sludge/Soil	Volatile Organic Compounds	EPA 8260 or 8260C, plus %SOLIDS ON COMPOSITE
18	SLUDGE	Sludge/Soil	Semivolatile Organic Compounds	EPA 8270 ACID EXTRACTABLES, 8270D ACID EXTRACTABLES
19	SLUDGE	Sludge/Soil	Semivolatile BASE NEUTRALS+BENZIDINE	EPA 8270, 8270D BASE NEUTRALS plus BENZIDINE
20	SLUDGE	Sludge/Soil	Pesticides/PCBs(Need Low Detection Limit)	PCB 8082/Pest 8081, 8082A
21	SLUDGE	Sludge/Soil	Total Phenols	EPA 9066
22	SLUDGE	Sludge/Soil	Full TCLP Analyses	See note below
23	SLUDGE	Sludge/Soil	Total Volatile Solids	SM2540G
24	SLUDGE	Sludge/Soil	Total Phosphorus	SM4500-P E, EPA 365.1, 365.2, 365.3
25	SLUDGE	Sludge/Soil	Ammonia Nitrogen as N	SM4500-NH3 G, EPA 350.1
26	SLUDGE	Sludge/Soil	pH	SW9045D
27	SLUDGE	Sludge/Soil	REACTIVE CYANIDE	SW7.3.3.2
28	SLUDGE	Sludge/Soil	REACTIVE SULFIDE	SW7.3.4.2
29	SLUDGE	Sludge/Soil	% Solids	Dry Weight Percent
30	SLUDGE	Sludge/Soil	Silver	ICP, EPA METHOD 6010, 6010C
31	SLUDGE	Sludge/Soil	Barium	ICP, EPA METHOD 6010, 6010C
32	SLUDGE	Sludge/Soil	Paint Filter/Free Liquid	EPA 9095B
33	SPDES/IPP	Wastewater/Industrial WW	EPA 625 Base Neutrals - 47 Compounds	EPA 625
34	SPDES/IPP	Wastewater/Industrial WW	EPA 625 Acid Extractables - 11 Compounds	EPA 625
35	SPDES/IPP	Wastewater/Industrial WW	Volatile Organic Compounds	EPA 8260, 8260C, 624.1
36	SPDES/IPP	Wastewater/Industrial WW	Volatile Organic Compounds - BLANK	EPA 8260, 8260C, 624.1
37	SPDES/IPP	Wastewater/Industrial WW	EPA 608 Pesticides/PCBs - 25 Compounds	EPA 608
38	SPDES/IPP	Wastewater/Industrial WW	EPA Priority Pollutant Metals - 13 Metals	ICP,EPA 200.7, 200.8, 200.9(TI), EPA Methods'83, 3113B, 245.1
39	SPDES/IPP	Wastewater/Industrial WW	Molybdenum	ICP, EPA METHOD 200.7
40	SPDES/IPP	Wastewater/Industrial WW	Total Cyanide	EPA 335.4, Kelada-01, SM4500-CN- G
41	SPDES/IPP	Wastewater/Industrial WW	Low Level Mercury	EPA Method 1631
42	SPDES/IPP	Wastewater/Industrial WW	Low Level Mercury - BLANK	EPA Method 1631
43	SPDES/IPP	Wastewater/Industrial WW	Total Aluminum with Digestion	ICP, EPA METHOD 200.7
44	ALT TWS	Groundwater	Nitrates	EPA 300.0/SM 19 4500 NO3 H, EPA353.2-TRAACS, 300.0
45	ALT TWS	Groundwater	Chemical Oxygen Demand (COD)	EPA 410.4, HACH 8000, SM5220 C,D
46	ALT TWS	Groundwater	Total Organic Carbon (TOC)	SM 5310C, 415.2, 9060A, SM5310, SM5310C
47	ALT TWS	Groundwater	TDS(@180C)	SM2540C
48	ALT TWS	Groundwater	Sulfate	EPA 300.0, ASTM D516-90,02, SM4500SO4D
49	ALT TWS	Groundwater	Alkalinity (AS CaCO3)	SM 2320B / EPA 310.2
50	ALT TWS	Groundwater	Chloride	EPA 300.0/SM4500 Cl C, SM20 4500Cl B/E, SM4500Cl E
51	ALT TWS	Groundwater	Total Hardness (AS CaCO3)	SM 2340B, 2340C, 200.7
52	ALT TWS	Groundwater	Turbidity	EPA 1983 (180.1), SM2130B
53	ALT TWS	Groundwater	Color	SM2120 B
54	ALT TWS	Groundwater	Volatile Organic Compounds	EPA 624
55	ALT TWS	Groundwater	EPA 624-TRANSPORT BLANK	EPA 624
56	ALT TWS	Groundwater	Cyanide	EPA 335.2, 335.3, or 335.4, Kelada-01
57	ALT TWS	Groundwater	Total Kjeldahl Nitrogen (TKN)	SM4500-NH3 E, EPA 351.1, EPA 351.2 (DL required=1 mg/L)
58	ALT TWS	Groundwater	Ammonia as Nitrogen	EPA 350.1 (DL required=1 mg/L as N)
59	ALT TWS	Groundwater	Total Metals Including: B, K, Na, Fe, Mn, Mg, Al, Ca, Sb, As, Be, Ba, Cd, Cr, Hex-Cr, Cu, Pb, Hg, Ni, Se, Ag, Ti, Zn	200.7, 200.8, 245.1, SM3500Cr D, TL 200.9

APPENDIX A
Acceptable Test Methods

Item#	PROJECT	Matrix	Item	Acceptable Method(s) - From 40 CFR Part 136
60	LEACHATE	Wastewater-Landfill	Volatile Organic Compounds	EPA 8260, 8260C, 624.1
61	LEACHATE	Wastewater-Landfill	Volatile Organic Compounds - BLANK	EPA 8260, 8260C, 624.1
62	LEACHATE	Wastewater-Landfill	Al, Ba, Bo, Cl, Co, Fe, Mg, Mn, Na, Vn, Mo	ICP, EPA METHOD 200.7, 200.8
63	LEACHATE	Wastewater-Landfill	Chloride	EPA 300.0/SM4500 Cl C, SM20 4500Cl B/E, SM4500Cl E
64	LEACHATE	Wastewater-Landfill	Hexavalent Chromium	SM3500-Cr D
65	LEACHATE	Wastewater-Landfill	Nitrate	EPA 300.0/SM 19 4500 NO3 H, EPA 353.2
66	LEACHATE	Wastewater-Landfill	Nitrite	EPA 300.0/SM4500-NO2 B, EPA 353.2
67	LEACHATE	Wastewater-Landfill	Sulfate	EPA 300.0, ASTM D516-90,02, SM4500SO4D
68	LEACHATE	Wastewater-Landfill	EPA Priority Pollutant Metals - 13 Metals	ICP, EPA 200.7, 200.8, 200.9(TI), EPA Methods'83, 3113B, 245.1
69	LEACHATE	Wastewater-Landfill	Oil & Grease	EPA 1664 A/B
70	LEACHATE	Wastewater-Landfill	EPA 625 Base Neutrals - 47 Compounds	EPA 625
71	LEACHATE	Wastewater-Landfill	EPA 625 Acid Extractables - 11 Compounds	EPA 625
72	LEACHATE	Wastewater-Landfill	Total Phosphorus	SM4500-P E, EPA 365.1 (DL required=0.1 mg/L)
73	LEACHATE	Wastewater-Landfill	Total Kjeldahl Nitrogen (TKN)	SM4500-NH3 E, EPA 351.1, EPA 351.2 (DL required=1 mg/L)
74	LEACHATE	Wastewater-Landfill	Ammonia as Nitrogen	EPA 350.1 (DL required=1 mg/L as N)
75	LEACHATE	Wastewater-Landfill	EPA 608 Pesticides/PCBs - 25 Compounds	EPA 608
76	LEACHATE	Wastewater-Landfill	Low Level Mercury	EPA Method 1631
77	LEACHATE	Wastewater-Landfill	Low Level Mercury - BLANK	EPA Method 1631
78	LEACHATE	Wastewater-Landfill	Total Cyanide	EPA 335.4, Kelada-01, SM4500-CN- G
79	SEPTAGE	Hauled Waste	Al, Ba, Bo, Cl, Co, Fe, Mg, Mn, Na, Vn, Mo	ICP, EPA METHOD 200.7, 200.8
80	SEPTAGE	Hauled Waste	EPA Priority Pollutant Metals - 13 Metals	ICP, EPA 200.7, 200.8, 200.9(TI), EPA Methods'83, 3113B, 245.1
81	MISC	Water - Any project	TOTAL SUSPENDED SOLIDS	SM2540 D
	Note:	Sludge Full TCLP		SW846 8260C, 8081B, S2540G, 6010C, 7470A, 8270D, 8151,1311, etc

APPENDIX B

APPENDIX B - Required Detection Limits

LEACHATE - Required Detection Limits

Item #	Parameter	Required DL mg/L
1	1,1,1-Trichloroethane	0.01
2	1,1-Dichloroethane	0.01
3	1,2-Dibromomethane	0.01
4	Acetone	0.01
5	Aluminum	0.1
6	Antimony	0.06
7	Arsenic	0.005
8	Barium	0.05
9	Benzidine	0.0001
10	Beryllium	0.001
11	Bis(2-ethylhexyl)phthalate est	0.005
12	Boron	0.05
13	Cadmium	0.0005
14	Carbon Disulfide	0.01
15	Chloride	1
16	Chromium	0.01
17	Chromium, hex	0.02
18	Cobalt	0.05
19	Copper	0.01
20	Copper,dissolved	0.01
21	Cyanide	0.01
22	Iron	0.05
23	Lead	0.003
24	Magnesium	0.05
25	Manganese	0.05
26	Mercury	0.0002
27	Mercury - Low Level Method 1631E	0.5 ng/L
28	Methyl Ethyl Ketone (2BUTANONE)	0.01
29	Methylene Chloride	0.001
30	Molybdenum	0.01
31	Naphthalene	0.005
32	Nickel	0.01
33	Nitrate	0.02
34	Nitrite	0.02
35	Pentachlorophenol	0.01
36	Phenol (4AAP)	0.01
37	Selenium	0.005
38	Silver	0.001
39	SODIUM	0.5
40	SULFATE	2
41	Thallium	0.005
42	Toluene	0.001
43	Trichloroethylene	0.001
44	Trichlorofluoromethane	0.01
45	Vanadium	0.05
46	Zinc	0.02
47	OIL & GREASE	5
48	BOD	5
49	Total Suspended Solids	5
50	Total Solids	50
51	Total Phosphorus	0.1
52	PCB1016, PCB1221, PCB1232, PCB1242, PCB1248, PCB1254, PCB1260	0.0001

WASTEWATER- Required Detection Limits

Item #	Parameter	Required DL mg/L
1	Arsenic, Total	0.005
2	Bis(2-ethylhexyl)phthalate	0.005
3	Cadmium, Total	0.0005
4	Chromium, Total	0.01
5	Copper, Total	0.01
6	Cyanide, Total	0.01
7	Lead, Total	0.003
8	Mercury, Total	0.0002
9	Mercury - Low Level Method 1631E	0.5 ng/L
10	Molybdenum, Total	0.005
11	Naphthalene	0.005
12	Nickel, Total	0.01
13	Selenium, Total	0.005
14	Silver, Total	0.001
15	Zinc, Total	0.02

APPENDIX C

APPENDIX C
Pricing

Item#	PROJECT	Matrix	Estimated Quantity	Item	Price Per Unit*	Total Price this Line*
1	SLUDGE	Sludge/Soil	12	Chromium		
2	SLUDGE	Sludge/Soil	12	Cadmium		
3	SLUDGE	Sludge/Soil	12	Copper		
4	SLUDGE	Sludge/Soil	12	Nickel		
5	SLUDGE	Sludge/Soil	12	Lead		
6	SLUDGE	Sludge/Soil	12	Zinc		
7	SLUDGE	Sludge/Soil	12	Potassium		
8	SLUDGE	Sludge/Soil	12	Arsenic		
9	SLUDGE	Sludge/Soil	12	Molybdenum		
10	SLUDGE	Sludge/Soil	12	Selenium		
11	SLUDGE	Sludge/Soil	12	Mercury		
12	SLUDGE	Sludge/Soil	12	PCBs (Need Low Detection Limit)		
13	SLUDGE	Sludge/Soil	6	Cyanide (Sludge Only)		
14	SLUDGE	Sludge/Soil	12	Nitrate		
15	SLUDGE	Sludge/Soil	12	Nitrite		
16	SLUDGE	Sludge/Soil	12	Total Kjeldahl Nitrogen (TKN)		
17	SLUDGE	Sludge/Soil	1	8260 Volatile Organic Compounds w/ % solids		
18	SLUDGE	Sludge/Soil	1	8270 Semivolatile Organic Compounds + Acid Extractables		
19	SLUDGE	Sludge/Soil	1	8270 Semivolatile Base Neutrals + Benzidine		
20	SLUDGE	Sludge/Soil	1	Pesticides/PCBs(Need Low Detection Limit)		
21	SLUDGE	Sludge/Soil	1	Total Phenols		
22	SLUDGE	Sludge/Soil	1	Full TCLP Analyses		
23	SLUDGE	Sludge/Soil	12	Total Volatile Solids		
24	SLUDGE	Sludge/Soil	12	Total Phosphorus		
25	SLUDGE	Sludge/Soil	12	Ammonia Nitrogen as N		
26	SLUDGE	Sludge/Soil	12	pH		
27	SLUDGE	Sludge/Soil	1	REACTIVE Cyanide		
28	SLUDGE	Sludge/Soil	1	REACTIVE Sulfide		
29	SLUDGE	Sludge/Soil	15	% (Solids Dry Weight Percent)		
30	SLUDGE	Sludge/Soil	1	Barium		
31	SLUDGE	Sludge/Soil	1	Silver		
32	SLUDGE	Sludge/Soil	6	Paint Filter/Free Liquid		
33	SPDES/IPP	Wastewater/Industrial WW	16	EPA 625 Base Neutrals - 47 Compounds		
34	SPDES/IPP	Wastewater/Industrial WW	4	EPA 625 Acid Extractables - 11 Compounds		
35	SPDES/IPP	Wastewater/Industrial WW	6	624 Volatile Organic Compounds		
36	SPDES/IPP	Wastewater/Industrial WW	4	624 - VOC - Transport Blank		
37	SPDES/IPP	Wastewater/Industrial WW	4	EPA 608 Pesticides/PCBs - 25 Compounds		
38	SPDES/IPP	Wastewater/Industrial WW	32	EPA Priority Pollutant Metals - 13 Metals		
39	SPDES/IPP	Wastewater/Industrial WW	32	Total Molybdenum		
40	SPDES/IPP	Wastewater/Industrial WW	32	Total Cyanide		
41	SPDES/IPP	Wastewater/Industrial WW	16	Low Level Mercury		
42	SPDES/IPP	Wastewater/Industrial WW	8	Low Level Mercury Blank		
43	SPDES/IPP	Wastewater/Industrial WW	12	Total Aluminum with Digestion		
44	ALT TWS	Groundwater	6	Nitrates		
45	ALT TWS	Groundwater	6	Chemical Oxygen Demand (COD)		
46	ALT TWS	Groundwater	6	Total Organic Carbon (TOC)		
47	ALT TWS	Groundwater	6	TDS(@180C)		
48	ALT TWS	Groundwater	6	Sulfate		
49	ALT TWS	Groundwater	6	Alkalinity (AS CaCO3)		
50	ALT TWS	Groundwater	6	Chloride		
51	ALT TWS	Groundwater	6	Total Hardness (AS CaCO3)		
52	ALT TWS	Groundwater	6	Turbidity		
53	ALT TWS	Groundwater	6	Color		
54	ALT TWS	Groundwater	6	Volatile Organic Compounds		
55	ALT TWS	Groundwater	6	624 - VOC - Transport Blank		
56	ALT TWS	Groundwater	6	Cyanide		
57	ALT TWS	Groundwater	6	Total Kjeldahl Nitrogen (TKN)		
58	ALT TWS	Groundwater	6	Ammonia as Nitrogen		
59	ALT TWS	Groundwater	6	23 Total Metals Including: B, K, Na, Fe, Mn, Mg, Al, Ca, Sb, As, Be, Ba, Cd, Cr, Hex-Cr, Cu, Pb, Hg, Ni, Se, Ag, Tl, Zn		

APPENDIX C
Pricing

Item#	PROJECT	Matrix	Estimated Quantity	Item	Price Per Unit*	Total Price this Line*
60	LEACHATE	Wastewater-Landfill	3	624 - Volatile Organic Compounds		
61	LEACHATE	Wastewater-Landfill	2	624 - VOC - Transport Blank		
62	LEACHATE	Wastewater-Landfill	3	Total Metals: Al, Ba, Bo, Cl, Co, Fe, Mg, Mn, Na, Vn, Mo, Sb, As, Be		
63	LEACHATE	Wastewater-Landfill	3	Chloride		
64	LEACHATE	Wastewater-Landfill	3	Hexavalent Chromium		
65	LEACHATE	Wastewater-Landfill	3	Nitrate		
66	LEACHATE	Wastewater-Landfill	3	Nitrite		
67	LEACHATE	Wastewater-Landfill	3	Sulfate		
68	LEACHATE	Wastewater-Landfill	3	EPA Priority Pollutant Metals - 13 Metals		
69	LEACHATE	Wastewater-Landfill	3	Oil & Grease		
70	LEACHATE	Wastewater-Landfill	3	EPA 625 Base Neutrals - 47 Compounds		
71	LEACHATE	Wastewater-Landfill	3	EPA 625 Acid Extractables - 11 Compounds		
72	LEACHATE	Wastewater-Landfill	6	Total Phosphorus		
73	LEACHATE	Wastewater-Landfill	6	Total Kjeldahl Nitrogen (TKN)		
74	LEACHATE	Wastewater-Landfill	6	Ammonia as Nitrogen		
75	LEACHATE	Wastewater-Landfill	3	EPA 608 Pesticides/PCBs - 25 Compounds		
76	LEACHATE	Wastewater-Landfill	6	Low Level Mercury		
77	LEACHATE	Wastewater-Landfill	3	Low Level Mercury Blank		
78	LEACHATE	Wastewater-Landfill	6	Total Cyanide		
79	SEPTAGE	Hauled Waste	10	Al, Ba, Bo, Cl, Co, Fe, Mg, Mn, Na, Vn, Mo		
80	SEPTAGE	Hauled Waste	10	EPA Priority Pollutant Metals - 13 Metals		
81	MISC	Water - Any project	20	Total Suspended Solids		
Total Price for Items 1-81 above =						

* Prices must be based on Accepted Methods in Appendix A and Required Detection Limits in Appendix B

Bidding Lab Name = _____ Date: _____

APPENDIX D

CHAIN OF CUSTODY RECORD

Analytical Laboratory:

Client Information:

City of Plattsburgh WPCP/WRRF

Contact: Janelle Henry

Phone: 518-536-7476

Email: henryj@cityofplattsburgh-ny.gov

Phone: _____

Contact: _____

Project Location: City of Plattsburgh Sludge - Annual

Purchase Order # _____

TAT: Normal/Expedited

Sampler's Name: _____

(Print)

SMPL #	Sample ID	Sample Date	Time	Matrix	Type	#	Pres. Type	Detection Limit PPB	Analyses
	WPCP Sludge			Soil	Composite (5 day)	1	7	See below	Total (As, Cr, Cd, Cu, K, Mo, Ni, Pb, Se, Zn, Hg, Ag, Ba)*, Total Phosphorus, Total PCB's, % solids, % volatile solids, NO2, NO3, TKN, Ammonia Nitrogen, Total Cyanide, Paint Filter Test, Reactive Sulfide, Reactive Cyanide
	WPCP Sludge			Soil	Grab	1	7		pH

Sampled By: (Signature) _____ Date _____ Time _____

Received By: (Signature) _____ Date _____ Time _____

Relinquished By: (Signature) _____ Date _____ Time _____

Received By: (Signature) _____ Date _____ Time _____

Dispatched By: (Signature) _____ Date _____ Time _____

Received For Laboratory By: _____ Date _____ Time _____

PRESERVATIVES

- 1. HCl
- 2. HNO3
- 3. NaOH
- 4. NaS2O3
- 5. H2SO4
- 6. Filtered
- 7. Refrigerated
- 8. Other: _____

SAMPLE CONDITION

- 1. Samples received intact? YES/NO
- 2. Custody seal(s) intact? YES/NO
- 3. Proper preservation? YES/NO
- 4. COC rec'd w/samples? YES/NO
- 5. Temperature Received: _____

REQUIRED DETECTION LIMITS

- Total Metals (PPM) (Mg/Kg Dry Wt)**
- As 1.5
 - Cd 2
 - Cr 5
 - Cu 25
 - Pb 20
 - Hg 0.5
 - Ag 25
 - Zn 20
 - Ni 20
 - Se 1
 - Mo 10

Method of Shipment:

UPS Fedex Hand Delivered

Date of Shipment: _____

NOTES:

SEND A COPY OF THIS COC, COMPLETED, BACK TO OUR LABORATORY

Report units in (mg/Kg dry weight)

*This is an expanded metals list adding Silver and Barium

Other

- Cyanide 0.5 mg/kg
- Ammonia Nitrogen 100 mg/kg
- Total Phosphorus 100 mg/kg
- TKN 100 mg/kg
- PCBs 1 mg/kg

To: [REDACTED]
 Phone [REDACTED], FAX [REDACTED]

CHAIN OF CUSTODY RECORD

SAMPLER'S NAME>> _____

CLIENT: CITY OF PLATTSBURGH-WPCP
 CLIENT CONTACT: Janelle Henry
 CLIENT PHONE 518-536-7476

(PLEASE PRINT)

PROJECT LOCATION:>> __CITY OF PLATTSBURGH

Lab. Services Contact: Brady Kalkman

PURCHASE ORDER # _____

TURNAROUND TIME REQUESTED: NORMAL

SMPL #	SAMPLEID	Sample Date	Time	Matrix	Type	NOC	Pres.	Detection Limit PPB	ANALYSES
	TEST WELL#			WATER	GRAB	1	7	SeeBelow	TOC, Total Phenols
	TEST WELL#			WATER	GRAB	1	7	SeeBelow	TKN,COD,AMMONIA NITROGEN
	TEST WELL#			WATER	GRAB	1	10	SeeBelow	SM3500-Cr6+, 300.0-CL, NO3, SO4, TDS
	TEST WELL#			WATER	GRAB	1	10	SeeBelow	COLOR,TURBIDITY
	TEST WELL#			WATER	GRAB	1	3	SeeBelow	CYANIDE
	TEST WELL#			WATER	GRAB	1	10	SeeBelow	Alkalinity
	TEST WELL#			WATER	GRAB	1	2	SeeBelow	245.1 Mercury
	TEST WELL#			WATER	GRAB	1	2	SeeBelow	200.7 TOTAL SB,AS,BE,CD,CR,CU,PB,HG,NI,SE,AG, TL, ZN, B,K,NA,FE,MN,MG,AL,CA,BA,HARDNESS

SAMPLED BY:(SIGNATURE) _____ Date _____ Time _____
 >> _____
 RELINQUISHED BY:(SIGNATURE) _____

 DISPATCHED BY:(SIGNATURE) _____

RECEIVED BY:(SIGNATURE) _____ DATE/TIME _____

 RECEIVED BY:(SIGNATURE) _____

 RECEIVED FOR LABORATORY BY: _____

PRESERVATIVES

- 1. HCL
- 2. HNO3
- 3. NAOH
- 4. NAS2O3
- 5. ZN ACET
- 6. ASCORBIC
- 7. H2SO4
- 8. FILTERED
- 9. N (NOT PRESERVED)
- 10. OTHER_ICED__

SAMPLE CONDITION:

- 1. SAMPLES INTACT? Yes/No
- 2. CUSTODY SEALS INTACT? Yes/No
- 3. PRESERVED PROPERLY? Yes/No
- 4. COC Received with Samples Yes/No
- 5. Temperature received:

METHOD OF SHIPMENT: UPS DATE:>> _____

NOTES/COMMENTS:

SEND A COPY OF THIS COC, COMPLETED, BACK TO OUR LAB

REPORT VALUES WITH THESE DETECTION LIMITS OR AS PER LATEST NYS360 REGS
 COCAL.S.XLS Revised 10/20/2021

**For the above Analyses listing these are the
 DETECTION LIMIT REQUIREMENTS: (IN PPB)**

Total Phenols	1 ppb
CR	10 (TOTAL AND CR+6) CYANIDE-TOTAL 10 PPB
CU	10
PB	3 TOC < 1 MG/L
SB	60 TURBIDITY < 1 NTU
NI	30 COD < 10 MG/L
FE	10 COLOR 5 UNITS
TL	1 Ammonia Nitrogen 0.1 mg/l
ZN	10 DISSOLVED SOLIDS 10 MG/L
MN	10 CHLORIDE < 2 MG/L
BE	5 SULFATE < 10 MG/L
HG	0.2 ALKALINITY(CACO3) < 2 MG/L
AL	200 HARDNESS < 4 MG/L
B	500 Barium <0.01 mg/L
CA	2000 Mo <0.005 mg/L
MG	500 TKN 0.1 MG/L
K	
SE	5
AG	10
NA	200

APPENDIX E

Table of Contents

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Definitions/Glossary

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Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative



Narrative

Job Narrative

Comments

No additional comments.

Receipt

The sample was received on 6/11/2021 10:00 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

GC/MS VOA

Method 8260C: Due to the coelution of , Ethyl Acetate with 2-Butanone (MEK) in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) associated with batch <Analytical Batch>. The following sample was affected : WS-6102021 (480-185939-1).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-585563 recovered above the upper control limit for cis-1,3-Dichloropropene, Trichlorofluoromethane. The sample associated with this CCV was non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: WS-6102021 (480-185939-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Oil & Grease	3.3	J B	5.1	1.4	mg/L	1		1664A	Total/NA
pH	7.03	HF	0.100	0.100	SU	1		9040C	Total/NA
Temperature	21.5	HF	0.00100	0.00100	Degrees C	1		9040C	Total/NA
Total Suspended Solids	10.0		4.0	4.0	mg/L	1		SM 2540D	Total/NA



This Detection Summary does not include radiochemical test results.

Surrogate Summary

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(77-120)	(73-120)	(75-123)	(80-120)
480-185939-1	WS-6102021	93	85	86	94
LCS 480-585563/4	Lab Control Sample	91	89	87	95
MB 480-585563/6	Method Blank	87	81	83	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)



QC Sample Results

Client:
Project/Site:

Job ID: 4

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID:
Matrix: Water
Analysis Batch: :

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/15/21 22:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/15/21 22:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/15/21 22:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/15/21 22:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			06/15/21 22:55	1
Benzene	ND		1.0	0.41	ug/L			06/15/21 22:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			06/15/21 22:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/15/21 22:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/15/21 22:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/15/21 22:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/15/21 22:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			06/15/21 22:55	1
Styrene	ND		1.0	0.73	ug/L			06/15/21 22:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/15/21 22:55	1
Toluene	ND		1.0	0.51	ug/L			06/15/21 22:55	1
Trichloroethene	ND		1.0	0.46	ug/L			06/15/21 22:55	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			06/15/21 22:55	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			06/15/21 22:55	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			06/15/21 22:55	1
Bromobenzene	ND		1.0	0.80	ug/L			06/15/21 22:55	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			06/15/21 22:55	1
m,p-Xylene	ND		2.0	0.66	ug/L			06/15/21 22:55	1
Naphthalene	ND		1.0	0.43	ug/L			06/15/21 22:55	1
n-Butylbenzene	ND		1.0	0.64	ug/L			06/15/21 22:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			06/15/21 22:55	1
o-Xylene	ND		1.0	0.76	ug/L			06/15/21 22:55	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			06/15/21 22:55	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			06/15/21 22:55	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	87		77 - 120		06/15/21 22:55	1
4-Bromofluorobenzene (Surr)	81		73 - 120		06/15/21 22:55	1
Dibromofluoromethane (Surr)	83		75 - 123		06/15/21 22:55	1
Toluene-d8 (Surr)	89		80 - 120		06/15/21 22:55	1

Lab Sample ID:
Matrix: Water
Analysis Batch:

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,2,4-Trichlorobenzene	25.0	22.2		ug/L		89	79 - 122
1,2-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 124
1,3-Dichlorobenzene	25.0	26.0		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	80 - 120
1,2,3-Trichlorobenzene	25.0	21.2		ug/L		85	75 - 123
Benzene	25.0	26.1		ug/L		104	71 - 124
1,2,4-Trimethylbenzene	25.0	27.2		ug/L		109	76 - 121
Chlorobenzene	25.0	25.9		ug/L		103	60 - 120



QC Sample Results

Client:
 Project/Site:

Job ID:

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID:
 Matrix: Water
 Analysis Batch:

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	25.0	26.8		ug/L		107	77 - 123
Isopropylbenzene	25.0	27.4		ug/L		110	77 - 122
Methyl tert-butyl ether	25.0	22.3		ug/L		89	77 - 120
1,3,5-Trimethylbenzene	25.0	27.8		ug/L		111	77 - 121
Styrene	25.0	27.6		ug/L		110	80 - 120
Tetrachloroethene	25.0	26.1		ug/L		104	74 - 122
Toluene	25.0	27.4		ug/L		110	80 - 122
Trichloroethene	25.0	26.8		ug/L		107	74 - 123
2-Chlorotoluene	25.0	25.5		ug/L		102	76 - 121
4-Chlorotoluene	25.0	28.3		ug/L		113	77 - 121
4-Isopropyltoluene	25.0	27.0		ug/L		108	73 - 120
Bromobenzene	25.0	25.6		ug/L		102	78 - 120
Hexachlorobutadiene	25.0	22.8		ug/L		91	68 - 131
m,p-Xylene	25.0	27.5		ug/L		110	76 - 122
Naphthalene	25.0	21.5		ug/L		86	66 - 125
n-Butylbenzene	25.0	27.7		ug/L		111	71 - 128
N-Propylbenzene	25.0	27.7		ug/L		111	75 - 127
o-Xylene	25.0	26.2		ug/L		105	76 - 122
sec-Butylbenzene	25.0	26.8		ug/L		107	74 - 127
tert-Butylbenzene	25.0	25.4		ug/L		102	75 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		77 - 120
4-Bromofluorobenzene (Surr)	89		73 - 120
Dibromofluoromethane (Surr)	87		75 - 123
Toluene-d8 (Surr)	95		80 - 120

Method: 1664A - HEM and SGT-HEM

Lab Sample ID:
 Matrix: Water
 Analysis Batch:

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch:

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	2.50	J	5.0	1.4	mg/L		06/18/21 09:34	06/18/21 12:06	1

Lab Sample ID:
 Matrix: Water
 Analysis Batch:

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch:

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	35.70		mg/L		89	78 - 114



QC Sample Results

Client:
Project/Site:

Job ID: 157

Method: 9040C - pH

Lab Sample ID:
Matrix: Water
Analysis Batch:

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.080		SU		101	99 - 101

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID:
Matrix: Water
Analysis Batch:

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0 mg/L			06/12/21 13:05	1

Lab Sample ID:
Matrix: Water
Analysis Batch:

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	2770	2751		mg/L		99	88 - 110



QC Association Summary

Client:
Project/Site:

Job ID:

GC/MS VOA

Analysis Batch:

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-185939-1	WS-6102021	Total/NA	Water	8260C	
MB 480-585563/6	Method Blank	Total/NA	Water	8260C	
LCS 480-585563/4	Lab Control Sample	Total/NA	Water	8260C	

General Chemistry

Analysis Batch:

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-185939-1	WS-6102021	Total/NA	Water	SM 2540D	
MB 480-585132/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-585132/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch:

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-185939-1	WS-6102021	Total/NA	Water	9040C	
LCS 480-585484/23	Lab Control Sample	Total/NA	Water	9040C	

Prep Batch:

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-185939-1	WS-6102021	Total/NA	Water	1664A	
MB 480-586004/1-A	Method Blank	Total/NA	Water	1664A	
LCS 480-586004/2-A	Lab Control Sample	Total/NA	Water	1664A	

Analysis Batch:

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-185939-1	WS-6102021	Total/NA	Water	1664A	586004
MB 480-586004/1-A	Method Blank	Total/NA	Water	1664A	586004
LCS 480-586004/2-A	Lab Control Sample	Total/NA	Water	1664A	586004



Lab Chronicle

Client: i
Project/Site:

Job ID: 4

Client Sample ID:

Date Collected:

Date Received: i

Lab Sample ID:

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	585563	06/16/21 00:02	AXK	TAL BUF
Total/NA	Prep	1664A			586004	06/18/21 09:34	KEB	TAL BUF
Total/NA	Analysis	1664A		1	586052	06/18/21 12:06	KEB	TAL BUF
Total/NA	Analysis	9040C		1	585484	06/15/21 12:46	JPS	TAL BUF
Total/NA	Analysis	SM 2540D		1	585132	06/12/21 13:05	CSS	TAL BUF

Laboratory References:



Accreditation/Certification Summary

Client:
Project/Site:

Job ID:

Laboratory:

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below

Authority	Program	Identification Number	Expiration Date
New York	NELAP		

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1664A	1664A	Water	Oil & Grease
9040C		Water	pH
9040C		Water	Temperature



Method Summary

Client:
Project/Site:

Job ID: *

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	
1664A	HEM and SGT-HEM	1664A	
9040C	pH	SW846	
SM 2540D	Solids, Total Suspended (TSS)	SM	
1664A	HEM and SGT-HEM (SPE)	1664A	
5030C	Purge and Trap	SW846	

Protocol References:

1664A = EPA-821-98-002

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:



Sample Summary

Client:
Project/Site:

Job ID:

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
		Water	06/10/21 11:20	06/11/21 10:00	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

