# ATLANTIC TESTING LABORATORIES

**Canton**
6431 U.S. Highway 11
Canton, NY 13617
315-386-4578 (T)
atlantictesting.com

***WBE certified company***


November 3, 2022

Air Products & Chemicals Inc.
1940 Air Products Boulevard
Allentown, Pennsylvania 18106

Attn: Jonathan Traynor
Sr. Project Manager

Re: Soil Sampling and Analysis Services
Proposed Hydrogen Plant Site
Massena, New York
ATL Report No. CD10427CE-01-11-22

At the request of representatives of Air Products & Chemicals Inc., and in accordance with Atlantic Testing Laboratories, Limited (ATL) contract number CD998-1797-08-22, dated September 1, 2022, soil sampling was performed at the subject site on October 18, 2022. The sampling and subsequent laboratory analysis were conducted to evaluate the presence or absence of designated contaminants of concern at the Proposed Hydrogen Plant Site.

***Soil Sampling and Analysis***

The sampling event on October 18, 2022, included the collection of 5 grab soil samples from bore locations at the Proposed Hydrogen Plant Site off Pontoon Bridge Road, Massena, New York. The samples were collected in general accordance with New York State Department of Environmental Conservation (NYSDEC) soil sampling guidelines. The grab samples were identified as CD10427CE01, CD10427CE02, CD10427CE03, CD10427CE04, and CD10427CE05.

The samples were collected in clean laboratory glassware, with Teflon-lined lids, in accordance with industry standard protocol and applicable NYSDEC guidelines. Disposable sampling equipment (i.e., plastic bags and nitrile gloves) was utilized to collect the samples. Samples were stored in a cooler, with ice, and delivered to the laboratory.

The samples were submitted to Alpha Analytical, located in Westborough, Massachusetts, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) approved laboratory (ELAP No. 11148). The grab samples were laboratory analyzed for total volatile organic compounds (VOC), semi-volatile organic compounds (semi-VOC), pesticides, herbicides, polychlorinated biphenyls (PCB), and target analyte list (TAL) metals. A copy of the laboratory report and associated sample custody documentation for the referenced samples is contained in Attachment A. A tabular summary of laboratory analysis results, with comparison to NYSDEC Unrestricted Use Soil Cleanup Objectives (SCO), are provided in Table B-1 of Attachment B.

***Summary of Findings***

ATL performed sampling at the Proposed Hydrogen Plant Site in Massena, New York, as directed by Air Products & Chemicals Inc. Laboratory analysis of the grab soil samples identified detectable concentrations of one target VOC, one target semi-VOC, and various metals. Aluminum, Iron, Selenium, and Vanadium were detected at concentrations exceeding NYSDEC Soil Cleanup Objectives (SCO) for one or more of the samples. The remaining detected concentrations did not exceed the Unrestricted Use SCO established by the NYSDEC.

It is noted that ATL cannot warrant similar conditions would be encountered in other areas not specifically sampled.

Please contact our office should you have any questions, or if we may be of further assistance.

Sincerely,
*ATLANTIC TESTING LABORATORIES, Limited*

Jordan L. Stachowiak

Jordan L. Stachowiak
Project Scientist

CJD/js

# ATTACHMENT A

## LABORATORY REPORT AND

## ASSOCIATED SAMPLE CUSTODY DOCUMENTATION

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L2258475 |
| Client: | Atlantic Testing Laboratories, Limited<br>6431 US Highway 11<br>PO Box 29<br>Canton, NY 13617 |
| ATTN: | Cheyenne Dashnaw |
| Phone: | (315) 386-4578 |
| Project Name: | PROPOSED HYDROGEN PLANT |
| Project Number: | CD10427 |
| Report Date: | 10/26/22 |



Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

**Lab Number:** L2258475
**Report Date:** 10/26/22

| Alpha Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L2258475-01 | CD10427CE01 | SOIL | MASSENA,NY | 10/18/22 12:50 | 10/19/22 |
| L2258475-02 | CD10427CE02 | SOIL | MASSENA,NY | 10/18/22 13:30 | 10/19/22 |
| L2258475-03 | CD10427CE03 | SOIL | MASSENA,NY | 10/18/22 13:50 | 10/19/22 |
| L2258475-04 | CD10427CE04 | SOIL | MASSENA,NY | 10/18/22 14:30 | 10/19/22 |
| L2258475-05 | CD10427CE05 | SOIL | MASSENA,NY | 10/18/22 14:50 | 10/19/22 |

| | | | |
|---|---|---|---|
| **Project Name:** | PROPOSED HYDROGEN PLANT | **Lab Number:** | L2258475 |
| **Project Number:** | CD10427 | **Report Date:** | 10/26/22 |

## Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

| | | | |
|---|---|---|---|
| **Project Name:** | PROPOSED HYDROGEN PLANT | **Lab Number:** | L2258475 |
| **Project Number:** | CD10427 | **Report Date:** | 10/26/22 |

**Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L2258475-01 through -05: Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 10/26/22

# ORGANICS

# VOLATILES

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01
Client ID: CD10427CE01
Sample Location: MASSENA,NY

Date Collected: 10/18/22 12:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/23/22 15:57
Analyst: JIC
Percent Solids: 68%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 7.0 | 3.2 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.4 | 0.20 | 1 |
| Chloroform | ND | | ug/kg | 2.1 | 0.20 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 1.4 | 0.32 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 1.4 | 0.18 | 1 |
| Dibromochloromethane | ND | | ug/kg | 1.4 | 0.20 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.4 | 0.38 | 1 |
| Tetrachloroethene | ND | | ug/kg | 0.70 | 0.28 | 1 |
| Chlorobenzene | ND | | ug/kg | 0.70 | 0.18 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 5.6 | 0.98 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.4 | 0.36 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 0.70 | 0.23 | 1 |
| Bromodichloromethane | ND | | ug/kg | 0.70 | 0.15 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.4 | 0.38 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 0.70 | 0.22 | 1 |
| 1,3-Dichloropropene, Total | ND | | ug/kg | 0.70 | 0.22 | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 0.70 | 0.22 | 1 |
| Bromoform | ND | | ug/kg | 5.6 | 0.34 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 0.70 | 0.23 | 1 |
| Benzene | ND | | ug/kg | 0.70 | 0.23 | 1 |
| Toluene | ND | | ug/kg | 1.4 | 0.76 | 1 |
| Ethylbenzene | ND | | ug/kg | 1.4 | 0.20 | 1 |
| Chloromethane | ND | | ug/kg | 5.6 | 1.3 | 1 |
| Bromomethane | ND | | ug/kg | 2.8 | 0.82 | 1 |
| Vinyl chloride | ND | | ug/kg | 1.4 | 0.47 | 1 |
| Chloroethane | ND | | ug/kg | 2.8 | 0.64 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.4 | 0.33 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 2.1 | 0.19 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01 Date Collected: 10/18/22 12:50

Client ID: CD10427CE01 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Trichloroethene | ND | | ug/kg | 0.70 | 0.19 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 2.8 | 0.20 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 2.8 | 0.21 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 2.8 | 0.24 | 1 |
| Methyl tert butyl ether | ND | | ug/kg | 2.8 | 0.28 | 1 |
| p/m-Xylene | ND | | ug/kg | 2.8 | 0.79 | 1 |
| o-Xylene | ND | | ug/kg | 1.4 | 0.41 | 1 |
| Xylenes, Total | ND | | ug/kg | 1.4 | 0.41 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.4 | 0.24 | 1 |
| 1,2-Dichloroethene, Total | ND | | ug/kg | 1.4 | 0.19 | 1 |
| Dibromomethane | ND | | ug/kg | 2.8 | 0.33 | 1 |
| Styrene | ND | | ug/kg | 1.4 | 0.28 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 14 | 1.3 | 1 |
| Acetone | ND | | ug/kg | 14 | 6.8 | 1 |
| Carbon disulfide | ND | | ug/kg | 14 | 6.4 | 1 |
| 2-Butanone | ND | | ug/kg | 14 | 3.1 | 1 |
| Vinyl acetate | ND | | ug/kg | 14 | 3.0 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 14 | 1.8 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 2.8 | 0.18 | 1 |
| 2-Hexanone | ND | | ug/kg | 14 | 1.6 | 1 |
| Bromochloromethane | ND | | ug/kg | 2.8 | 0.29 | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 2.8 | 0.28 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 1.4 | 0.39 | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 2.8 | 0.23 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 0.70 | 0.18 | 1 |
| Bromobenzene | ND | | ug/kg | 2.8 | 0.20 | 1 |
| n-Butylbenzene | ND | | ug/kg | 1.4 | 0.23 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 1.4 | 0.20 | 1 |
| tert-Butylbenzene | ND | | ug/kg | 2.8 | 0.16 | 1 |
| o-Chlorotoluene | ND | | ug/kg | 2.8 | 0.27 | 1 |
| p-Chlorotoluene | ND | | ug/kg | 2.8 | 0.15 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 4.2 | 1.4 | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 5.6 | 0.24 | 1 |
| Isopropylbenzene | ND | | ug/kg | 1.4 | 0.15 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 1.4 | 0.15 | 1 |
| Naphthalene | ND | | ug/kg | 5.6 | 0.91 | 1 |
| Acrylonitrile | ND | | ug/kg | 5.6 | 1.6 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01 Date Collected: 10/18/22 12:50

Client ID: CD10427CE01 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| n-Propylbenzene | ND | | ug/kg | 1.4 | 0.24 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 2.8 | 0.45 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 2.8 | 0.38 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 2.8 | 0.27 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 2.8 | 0.47 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 110 | 49. | 1 |
| p-Diethylbenzene | ND | | ug/kg | 2.8 | 0.25 | 1 |
| p-Ethyltoluene | ND | | ug/kg | 2.8 | 0.54 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/kg | 2.8 | 0.27 | 1 |
| Ethyl ether | ND | | ug/kg | 2.8 | 0.48 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/kg | 7.0 | 2.0 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 124 | | 70-130 |
| Toluene-d8 | 101 | | 70-130 |
| 4-Bromofluorobenzene | 94 | | 70-130 |
| Dibromofluoromethane | 94 | | 70-130 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02
Client ID: CD10427CE02
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/23/22 16:18
Analyst: JIC
Percent Solids: 70%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 6.8 | 3.1 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.4 | 0.20 | 1 |
| Chloroform | ND | | ug/kg | 2.0 | 0.19 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 1.4 | 0.31 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 1.4 | 0.17 | 1 |
| Dibromochloromethane | ND | | ug/kg | 1.4 | 0.19 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.4 | 0.36 | 1 |
| Tetrachloroethene | ND | | ug/kg | 0.68 | 0.27 | 1 |
| Chlorobenzene | ND | | ug/kg | 0.68 | 0.17 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 5.4 | 0.94 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.4 | 0.35 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 0.68 | 0.23 | 1 |
| Bromodichloromethane | ND | | ug/kg | 0.68 | 0.15 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.4 | 0.37 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 0.68 | 0.21 | 1 |
| 1,3-Dichloropropene, Total | ND | | ug/kg | 0.68 | 0.21 | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 0.68 | 0.22 | 1 |
| Bromoform | ND | | ug/kg | 5.4 | 0.33 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 0.68 | 0.22 | 1 |
| Benzene | ND | | ug/kg | 0.68 | 0.22 | 1 |
| Toluene | 0.88 | J | ug/kg | 1.4 | 0.74 | 1 |
| Ethylbenzene | ND | | ug/kg | 1.4 | 0.19 | 1 |
| Chloromethane | ND | | ug/kg | 5.4 | 1.3 | 1 |
| Bromomethane | ND | | ug/kg | 2.7 | 0.79 | 1 |
| Vinyl chloride | ND | | ug/kg | 1.4 | 0.45 | 1 |
| Chloroethane | ND | | ug/kg | 2.7 | 0.61 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.4 | 0.32 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 2.0 | 0.18 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02 Date Collected: 10/18/22 13:30

Client ID: CD10427CE02 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Trichloroethene | ND | | ug/kg | 0.68 | 0.18 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 2.7 | 0.20 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 2.7 | 0.20 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 2.7 | 0.23 | 1 |
| Methyl tert butyl ether | ND | | ug/kg | 2.7 | 0.27 | 1 |
| p/m-Xylene | ND | | ug/kg | 2.7 | 0.76 | 1 |
| o-Xylene | ND | | ug/kg | 1.4 | 0.39 | 1 |
| Xylenes, Total | ND | | ug/kg | 1.4 | 0.39 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.4 | 0.24 | 1 |
| 1,2-Dichloroethene, Total | ND | | ug/kg | 1.4 | 0.18 | 1 |
| Dibromomethane | ND | | ug/kg | 2.7 | 0.32 | 1 |
| Styrene | ND | | ug/kg | 1.4 | 0.27 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 14 | 1.2 | 1 |
| Acetone | ND | | ug/kg | 14 | 6.5 | 1 |
| Carbon disulfide | ND | | ug/kg | 14 | 6.2 | 1 |
| 2-Butanone | ND | | ug/kg | 14 | 3.0 | 1 |
| Vinyl acetate | ND | | ug/kg | 14 | 2.9 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 14 | 1.7 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 2.7 | 0.17 | 1 |
| 2-Hexanone | ND | | ug/kg | 14 | 1.6 | 1 |
| Bromochloromethane | ND | | ug/kg | 2.7 | 0.28 | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 2.7 | 0.27 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 1.4 | 0.38 | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 2.7 | 0.23 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 0.68 | 0.18 | 1 |
| Bromobenzene | ND | | ug/kg | 2.7 | 0.20 | 1 |
| n-Butylbenzene | ND | | ug/kg | 1.4 | 0.23 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 1.4 | 0.20 | 1 |
| tert-Butylbenzene | ND | | ug/kg | 2.7 | 0.16 | 1 |
| o-Chlorotoluene | ND | | ug/kg | 2.7 | 0.26 | 1 |
| p-Chlorotoluene | ND | | ug/kg | 2.7 | 0.15 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 4.1 | 1.4 | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 5.4 | 0.23 | 1 |
| Isopropylbenzene | ND | | ug/kg | 1.4 | 0.15 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 1.4 | 0.15 | 1 |
| Naphthalene | ND | | ug/kg | 5.4 | 0.88 | 1 |
| Acrylonitrile | ND | | ug/kg | 5.4 | 1.6 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02 Date Collected: 10/18/22 13:30

Client ID: CD10427CE02 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| n-Propylbenzene | ND | | ug/kg | 1.4 | 0.23 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 2.7 | 0.44 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 2.7 | 0.37 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 2.7 | 0.26 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 2.7 | 0.45 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 110 | 48. | 1 |
| p-Diethylbenzene | ND | | ug/kg | 2.7 | 0.24 | 1 |
| p-Ethyltoluene | ND | | ug/kg | 2.7 | 0.52 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/kg | 2.7 | 0.26 | 1 |
| Ethyl ether | ND | | ug/kg | 2.7 | 0.46 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/kg | 6.8 | 1.9 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 119 | | 70-130 |
| Toluene-d8 | 100 | | 70-130 |
| 4-Bromofluorobenzene | 101 | | 70-130 |
| Dibromofluoromethane | 96 | | 70-130 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

**SAMPLE RESULTS**

Lab ID: L2258475-03
Client ID: CD10427CE03
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/23/22 16:38
Analyst: JIC
Percent Solids: 49%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 9.5 | 4.3 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.9 | 0.27 | 1 |
| Chloroform | ND | | ug/kg | 2.8 | 0.26 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 1.9 | 0.44 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 1.9 | 0.24 | 1 |
| Dibromochloromethane | ND | | ug/kg | 1.9 | 0.26 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.9 | 0.51 | 1 |
| Tetrachloroethene | ND | | ug/kg | 0.95 | 0.37 | 1 |
| Chlorobenzene | ND | | ug/kg | 0.95 | 0.24 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 7.6 | 1.3 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.9 | 0.49 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 0.95 | 0.32 | 1 |
| Bromodichloromethane | ND | | ug/kg | 0.95 | 0.21 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.9 | 0.52 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 0.95 | 0.30 | 1 |
| 1,3-Dichloropropene, Total | ND | | ug/kg | 0.95 | 0.30 | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 0.95 | 0.30 | 1 |
| Bromoform | ND | | ug/kg | 7.6 | 0.47 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 0.95 | 0.31 | 1 |
| Benzene | ND | | ug/kg | 0.95 | 0.31 | 1 |
| Toluene | 1.1 | J | ug/kg | 1.9 | 1.0 | 1 |
| Ethylbenzene | ND | | ug/kg | 1.9 | 0.27 | 1 |
| Chloromethane | ND | | ug/kg | 7.6 | 1.8 | 1 |
| Bromomethane | ND | | ug/kg | 3.8 | 1.1 | 1 |
| Vinyl chloride | ND | | ug/kg | 1.9 | 0.64 | 1 |
| Chloroethane | ND | | ug/kg | 3.8 | 0.86 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.9 | 0.45 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 2.8 | 0.26 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03 Date Collected: 10/18/22 13:50

Client ID: CD10427CE03 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Trichloroethene | ND | | ug/kg | 0.95 | 0.26 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 3.8 | 0.27 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 3.8 | 0.28 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 3.8 | 0.32 | 1 |
| Methyl tert butyl ether | ND | | ug/kg | 3.8 | 0.38 | 1 |
| p/m-Xylene | ND | | ug/kg | 3.8 | 1.1 | 1 |
| o-Xylene | ND | | ug/kg | 1.9 | 0.55 | 1 |
| Xylenes, Total | ND | | ug/kg | 1.9 | 0.55 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.9 | 0.33 | 1 |
| 1,2-Dichloroethene, Total | ND | | ug/kg | 1.9 | 0.26 | 1 |
| Dibromomethane | ND | | ug/kg | 3.8 | 0.45 | 1 |
| Styrene | ND | | ug/kg | 1.9 | 0.37 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 19 | 1.7 | 1 |
| Acetone | ND | | ug/kg | 19 | 9.1 | 1 |
| Carbon disulfide | ND | | ug/kg | 19 | 8.6 | 1 |
| 2-Butanone | ND | | ug/kg | 19 | 4.2 | 1 |
| Vinyl acetate | ND | | ug/kg | 19 | 4.1 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 19 | 2.4 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 3.8 | 0.24 | 1 |
| 2-Hexanone | ND | | ug/kg | 19 | 2.2 | 1 |
| Bromochloromethane | ND | | ug/kg | 3.8 | 0.39 | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 3.8 | 0.38 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 1.9 | 0.53 | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 3.8 | 0.32 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 0.95 | 0.25 | 1 |
| Bromobenzene | ND | | ug/kg | 3.8 | 0.27 | 1 |
| n-Butylbenzene | ND | | ug/kg | 1.9 | 0.32 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 1.9 | 0.28 | 1 |
| tert-Butylbenzene | ND | | ug/kg | 3.8 | 0.22 | 1 |
| o-Chlorotoluene | ND | | ug/kg | 3.8 | 0.36 | 1 |
| p-Chlorotoluene | ND | | ug/kg | 3.8 | 0.20 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 5.7 | 1.9 | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 7.6 | 0.32 | 1 |
| Isopropylbenzene | ND | | ug/kg | 1.9 | 0.21 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 1.9 | 0.21 | 1 |
| Naphthalene | ND | | ug/kg | 7.6 | 1.2 | 1 |
| Acrylonitrile | ND | | ug/kg | 7.6 | 2.2 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03 Date Collected: 10/18/22 13:50

Client ID: CD10427CE03 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| n-Propylbenzene | ND | | ug/kg | 1.9 | 0.32 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 3.8 | 0.61 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 3.8 | 0.52 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 3.8 | 0.36 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 3.8 | 0.63 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 150 | 66. | 1 |
| p-Diethylbenzene | ND | | ug/kg | 3.8 | 0.34 | 1 |
| p-Ethyltoluene | ND | | ug/kg | 3.8 | 0.73 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/kg | 3.8 | 0.36 | 1 |
| Ethyl ether | ND | | ug/kg | 3.8 | 0.65 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/kg | 9.5 | 2.7 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 118 | | 70-130 |
| Toluene-d8 | 103 | | 70-130 |
| 4-Bromofluorobenzene | 97 | | 70-130 |
| Dibromofluoromethane | 98 | | 70-130 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

**SAMPLE RESULTS**

Lab ID: L2258475-04
Client ID: CD10427CE04
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/23/22 16:59
Analyst: JIC
Percent Solids: 50%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 9.9 | 4.5 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 2.0 | 0.29 | 1 |
| Chloroform | ND | | ug/kg | 3.0 | 0.28 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 2.0 | 0.46 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 2.0 | 0.25 | 1 |
| Dibromochloromethane | ND | | ug/kg | 2.0 | 0.28 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 2.0 | 0.53 | 1 |
| Tetrachloroethene | ND | | ug/kg | 0.99 | 0.39 | 1 |
| Chlorobenzene | ND | | ug/kg | 0.99 | 0.25 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 7.9 | 1.4 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 2.0 | 0.51 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 0.99 | 0.33 | 1 |
| Bromodichloromethane | ND | | ug/kg | 0.99 | 0.22 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 2.0 | 0.54 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 0.99 | 0.31 | 1 |
| 1,3-Dichloropropene, Total | ND | | ug/kg | 0.99 | 0.31 | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 0.99 | 0.31 | 1 |
| Bromoform | ND | | ug/kg | 7.9 | 0.49 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 0.99 | 0.33 | 1 |
| Benzene | ND | | ug/kg | 0.99 | 0.33 | 1 |
| Toluene | 1.1 | J | ug/kg | 2.0 | 1.1 | 1 |
| Ethylbenzene | ND | | ug/kg | 2.0 | 0.28 | 1 |
| Chloromethane | ND | | ug/kg | 7.9 | 1.8 | 1 |
| Bromomethane | ND | | ug/kg | 4.0 | 1.2 | 1 |
| Vinyl chloride | ND | | ug/kg | 2.0 | 0.66 | 1 |
| Chloroethane | ND | | ug/kg | 4.0 | 0.90 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 2.0 | 0.47 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 3.0 | 0.27 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04 Date Collected: 10/18/22 14:30

Client ID: CD10427CE04 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Trichloroethene | ND | | ug/kg | 0.99 | 0.27 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 4.0 | 0.28 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 4.0 | 0.29 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 4.0 | 0.34 | 1 |
| Methyl tert butyl ether | ND | | ug/kg | 4.0 | 0.40 | 1 |
| p/m-Xylene | ND | | ug/kg | 4.0 | 1.1 | 1 |
| o-Xylene | ND | | ug/kg | 2.0 | 0.58 | 1 |
| Xylenes, Total | ND | | ug/kg | 2.0 | 0.58 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 2.0 | 0.35 | 1 |
| 1,2-Dichloroethene, Total | ND | | ug/kg | 2.0 | 0.27 | 1 |
| Dibromomethane | ND | | ug/kg | 4.0 | 0.47 | 1 |
| Styrene | ND | | ug/kg | 2.0 | 0.39 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 20 | 1.8 | 1 |
| Acetone | ND | | ug/kg | 20 | 9.5 | 1 |
| Carbon disulfide | ND | | ug/kg | 20 | 9.0 | 1 |
| 2-Butanone | ND | | ug/kg | 20 | 4.4 | 1 |
| Vinyl acetate | ND | | ug/kg | 20 | 4.2 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 20 | 2.5 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 4.0 | 0.25 | 1 |
| 2-Hexanone | ND | | ug/kg | 20 | 2.3 | 1 |
| Bromochloromethane | ND | | ug/kg | 4.0 | 0.40 | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 4.0 | 0.40 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 2.0 | 0.55 | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 4.0 | 0.33 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 0.99 | 0.26 | 1 |
| Bromobenzene | ND | | ug/kg | 4.0 | 0.29 | 1 |
| n-Butylbenzene | ND | | ug/kg | 2.0 | 0.33 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 2.0 | 0.29 | 1 |
| tert-Butylbenzene | ND | | ug/kg | 4.0 | 0.23 | 1 |
| o-Chlorotoluene | ND | | ug/kg | 4.0 | 0.38 | 1 |
| p-Chlorotoluene | ND | | ug/kg | 4.0 | 0.21 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 5.9 | 2.0 | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 7.9 | 0.33 | 1 |
| Isopropylbenzene | ND | | ug/kg | 2.0 | 0.22 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 2.0 | 0.22 | 1 |
| Naphthalene | ND | | ug/kg | 7.9 | 1.3 | 1 |
| Acrylonitrile | ND | | ug/kg | 7.9 | 2.3 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04 Date Collected: 10/18/22 14:30

Client ID: CD10427CE04 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| n-Propylbenzene | ND | | ug/kg | 2.0 | 0.34 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 4.0 | 0.64 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 4.0 | 0.54 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 4.0 | 0.38 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 4.0 | 0.66 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 160 | 70. | 1 |
| p-Diethylbenzene | ND | | ug/kg | 4.0 | 0.35 | 1 |
| p-Ethyltoluene | ND | | ug/kg | 4.0 | 0.76 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/kg | 4.0 | 0.38 | 1 |
| Ethyl ether | ND | | ug/kg | 4.0 | 0.68 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/kg | 9.9 | 2.8 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 120 | | 70-130 |
| Toluene-d8 | 105 | | 70-130 |
| 4-Bromofluorobenzene | 107 | | 70-130 |
| Dibromofluoromethane | 94 | | 70-130 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05
Client ID: CD10427CE05
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/23/22 17:20
Analyst: JIC
Percent Solids: 71%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 6.9 | 3.2 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.4 | 0.20 | 1 |
| Chloroform | ND | | ug/kg | 2.1 | 0.19 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 1.4 | 0.32 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 1.4 | 0.17 | 1 |
| Dibromochloromethane | ND | | ug/kg | 1.4 | 0.19 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.4 | 0.37 | 1 |
| Tetrachloroethene | ND | | ug/kg | 0.69 | 0.27 | 1 |
| Chlorobenzene | ND | | ug/kg | 0.69 | 0.18 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 5.5 | 0.96 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.4 | 0.36 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 0.69 | 0.23 | 1 |
| Bromodichloromethane | ND | | ug/kg | 0.69 | 0.15 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.4 | 0.38 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 0.69 | 0.22 | 1 |
| 1,3-Dichloropropene, Total | ND | | ug/kg | 0.69 | 0.22 | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 0.69 | 0.22 | 1 |
| Bromoform | ND | | ug/kg | 5.5 | 0.34 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 0.69 | 0.23 | 1 |
| Benzene | ND | | ug/kg | 0.69 | 0.23 | 1 |
| Toluene | ND | | ug/kg | 1.4 | 0.75 | 1 |
| Ethylbenzene | ND | | ug/kg | 1.4 | 0.20 | 1 |
| Chloromethane | ND | | ug/kg | 5.5 | 1.3 | 1 |
| Bromomethane | ND | | ug/kg | 2.8 | 0.80 | 1 |
| Vinyl chloride | ND | | ug/kg | 1.4 | 0.46 | 1 |
| Chloroethane | ND | | ug/kg | 2.8 | 0.62 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.4 | 0.33 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 2.1 | 0.19 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05 Date Collected: 10/18/22 14:50

Client ID: CD10427CE05 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Trichloroethene | ND | | ug/kg | 0.69 | 0.19 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 2.8 | 0.20 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 2.8 | 0.20 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 2.8 | 0.24 | 1 |
| Methyl tert butyl ether | ND | | ug/kg | 2.8 | 0.28 | 1 |
| p/m-Xylene | ND | | ug/kg | 2.8 | 0.78 | 1 |
| o-Xylene | ND | | ug/kg | 1.4 | 0.40 | 1 |
| Xylenes, Total | ND | | ug/kg | 1.4 | 0.40 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.4 | 0.24 | 1 |
| 1,2-Dichloroethene, Total | ND | | ug/kg | 1.4 | 0.19 | 1 |
| Dibromomethane | ND | | ug/kg | 2.8 | 0.33 | 1 |
| Styrene | ND | | ug/kg | 1.4 | 0.27 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 14 | 1.3 | 1 |
| Acetone | ND | | ug/kg | 14 | 6.6 | 1 |
| Carbon disulfide | ND | | ug/kg | 14 | 6.3 | 1 |
| 2-Butanone | ND | | ug/kg | 14 | 3.1 | 1 |
| Vinyl acetate | ND | | ug/kg | 14 | 3.0 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 14 | 1.8 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 2.8 | 0.18 | 1 |
| 2-Hexanone | ND | | ug/kg | 14 | 1.6 | 1 |
| Bromochloromethane | ND | | ug/kg | 2.8 | 0.28 | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 2.8 | 0.28 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 1.4 | 0.39 | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 2.8 | 0.23 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 0.69 | 0.18 | 1 |
| Bromobenzene | ND | | ug/kg | 2.8 | 0.20 | 1 |
| n-Butylbenzene | ND | | ug/kg | 1.4 | 0.23 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 1.4 | 0.20 | 1 |
| tert-Butylbenzene | ND | | ug/kg | 2.8 | 0.16 | 1 |
| o-Chlorotoluene | ND | | ug/kg | 2.8 | 0.26 | 1 |
| p-Chlorotoluene | ND | | ug/kg | 2.8 | 0.15 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 4.2 | 1.4 | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 5.5 | 0.23 | 1 |
| Isopropylbenzene | ND | | ug/kg | 1.4 | 0.15 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 1.4 | 0.15 | 1 |
| Naphthalene | ND | | ug/kg | 5.5 | 0.90 | 1 |
| Acrylonitrile | ND | | ug/kg | 5.5 | 1.6 | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05 Date Collected: 10/18/22 14:50

Client ID: CD10427CE05 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| n-Propylbenzene | ND | | ug/kg | 1.4 | 0.24 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 2.8 | 0.44 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 2.8 | 0.38 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 2.8 | 0.27 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 2.8 | 0.46 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 110 | 48. | 1 |
| p-Diethylbenzene | ND | | ug/kg | 2.8 | 0.24 | 1 |
| p-Ethyltoluene | ND | | ug/kg | 2.8 | 0.53 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/kg | 2.8 | 0.26 | 1 |
| Ethyl ether | ND | | ug/kg | 2.8 | 0.47 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/kg | 6.9 | 2.0 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 121 | | 70-130 |
| Toluene-d8 | 102 | | 70-130 |
| 4-Bromofluorobenzene | 100 | | 70-130 |
| Dibromofluoromethane | 97 | | 70-130 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/23/22 14:12
Analyst: AJK

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1703421-5 | | | | | |
| Methylene chloride | ND | | ug/kg | 5.0 | 2.3 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.0 | 0.14 |
| Chloroform | ND | | ug/kg | 1.5 | 0.14 |
| Carbon tetrachloride | ND | | ug/kg | 1.0 | 0.23 |
| 1,2-Dichloropropane | ND | | ug/kg | 1.0 | 0.12 |
| Dibromochloromethane | ND | | ug/kg | 1.0 | 0.14 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.0 | 0.27 |
| Tetrachloroethene | ND | | ug/kg | 0.50 | 0.20 |
| Chlorobenzene | ND | | ug/kg | 0.50 | 0.13 |
| Trichlorofluoromethane | ND | | ug/kg | 4.0 | 0.70 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.0 | 0.26 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 0.50 | 0.17 |
| Bromodichloromethane | ND | | ug/kg | 0.50 | 0.11 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.0 | 0.27 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 0.50 | 0.16 |
| 1,3-Dichloropropene, Total | ND | | ug/kg | 0.50 | 0.16 |
| 1,1-Dichloropropene | ND | | ug/kg | 0.50 | 0.16 |
| Bromoform | ND | | ug/kg | 4.0 | 0.25 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 0.50 | 0.17 |
| Benzene | ND | | ug/kg | 0.50 | 0.17 |
| Toluene | ND | | ug/kg | 1.0 | 0.54 |
| Ethylbenzene | ND | | ug/kg | 1.0 | 0.14 |
| Chloromethane | ND | | ug/kg | 4.0 | 0.93 |
| Bromomethane | ND | | ug/kg | 2.0 | 0.58 |
| Vinyl chloride | ND | | ug/kg | 1.0 | 0.34 |
| Chloroethane | ND | | ug/kg | 2.0 | 0.45 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.0 | 0.24 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 1.5 | 0.14 |
| Trichloroethene | ND | | ug/kg | 0.50 | 0.14 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/23/22 14:12
Analyst: AJK

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1703421-5 | | | | | |
| 1,2-Dichlorobenzene | ND | | ug/kg | 2.0 | 0.14 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 2.0 | 0.15 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 2.0 | 0.17 |
| Methyl tert butyl ether | ND | | ug/kg | 2.0 | 0.20 |
| p/m-Xylene | ND | | ug/kg | 2.0 | 0.56 |
| o-Xylene | ND | | ug/kg | 1.0 | 0.29 |
| Xylenes, Total | ND | | ug/kg | 1.0 | 0.29 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.0 | 0.18 |
| 1,2-Dichloroethene, Total | ND | | ug/kg | 1.0 | 0.14 |
| Dibromomethane | ND | | ug/kg | 2.0 | 0.24 |
| Styrene | ND | | ug/kg | 1.0 | 0.20 |
| Dichlorodifluoromethane | ND | | ug/kg | 10 | 0.92 |
| Acetone | ND | | ug/kg | 10 | 4.8 |
| Carbon disulfide | ND | | ug/kg | 10 | 4.6 |
| 2-Butanone | ND | | ug/kg | 10 | 2.2 |
| Vinyl acetate | ND | | ug/kg | 10 | 2.2 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 10 | 1.3 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 2.0 | 0.13 |
| 2-Hexanone | ND | | ug/kg | 10 | 1.2 |
| Bromochloromethane | ND | | ug/kg | 2.0 | 0.20 |
| 2,2-Dichloropropane | ND | | ug/kg | 2.0 | 0.20 |
| 1,2-Dibromoethane | ND | | ug/kg | 1.0 | 0.28 |
| 1,3-Dichloropropane | ND | | ug/kg | 2.0 | 0.17 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 0.50 | 0.13 |
| Bromobenzene | ND | | ug/kg | 2.0 | 0.14 |
| n-Butylbenzene | ND | | ug/kg | 1.0 | 0.17 |
| sec-Butylbenzene | ND | | ug/kg | 1.0 | 0.15 |
| tert-Butylbenzene | ND | | ug/kg | 2.0 | 0.12 |
| o-Chlorotoluene | ND | | ug/kg | 2.0 | 0.19 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/23/22 14:12
Analyst: AJK

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1703421-5 | | | | | |
| p-Chlorotoluene | ND | | ug/kg | 2.0 | 0.11 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 3.0 | 1.0 |
| Hexachlorobutadiene | ND | | ug/kg | 4.0 | 0.17 |
| Isopropylbenzene | ND | | ug/kg | 1.0 | 0.11 |
| p-Isopropyltoluene | ND | | ug/kg | 1.0 | 0.11 |
| Naphthalene | ND | | ug/kg | 4.0 | 0.65 |
| Acrylonitrile | ND | | ug/kg | 4.0 | 1.2 |
| n-Propylbenzene | ND | | ug/kg | 1.0 | 0.17 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 2.0 | 0.32 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 2.0 | 0.27 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 2.0 | 0.19 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 2.0 | 0.33 |
| 1,4-Dioxane | ND | | ug/kg | 80 | 35. |
| p-Diethylbenzene | ND | | ug/kg | 2.0 | 0.18 |
| p-Ethyltoluene | ND | | ug/kg | 2.0 | 0.38 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/kg | 2.0 | 0.19 |
| Ethyl ether | ND | | ug/kg | 2.0 | 0.34 |
| trans-1,4-Dichloro-2-butene | ND | | ug/kg | 5.0 | 1.4 |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 120 | | 70-130 |
| Toluene-d8 | 97 | | 70-130 |
| 4-Bromofluorobenzene | 94 | | 70-130 |
| Dibromofluoromethane | 98 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

**Lab Number:** L2258475
**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1703421-3 WG1703421-4 | | | | | | | | |
| Methylene chloride | 93 | | 92 | | 70-130 | 1 | | 30 |
| 1,1-Dichloroethane | 90 | | 90 | | 70-130 | 0 | | 30 |
| Chloroform | 101 | | 100 | | 70-130 | 1 | | 30 |
| Carbon tetrachloride | 104 | | 107 | | 70-130 | 3 | | 30 |
| 1,2-Dichloropropane | 87 | | 87 | | 70-130 | 0 | | 30 |
| Dibromochloromethane | 98 | | 102 | | 70-130 | 4 | | 30 |
| 1,1,2-Trichloroethane | 91 | | 95 | | 70-130 | 4 | | 30 |
| Tetrachloroethene | 110 | | 112 | | 70-130 | 2 | | 30 |
| Chlorobenzene | 100 | | 102 | | 70-130 | 2 | | 30 |
| Trichlorofluoromethane | 110 | | 110 | | 70-139 | 0 | | 30 |
| 1,2-Dichloroethane | 100 | | 103 | | 70-130 | 3 | | 30 |
| 1,1,1-Trichloroethane | 107 | | 108 | | 70-130 | 1 | | 30 |
| Bromodichloromethane | 95 | | 96 | | 70-130 | 1 | | 30 |
| trans-1,3-Dichloropropene | 96 | | 100 | | 70-130 | 4 | | 30 |
| cis-1,3-Dichloropropene | 99 | | 99 | | 70-130 | 0 | | 30 |
| 1,1-Dichloropropene | 101 | | 105 | | 70-130 | 4 | | 30 |
| Bromoform | 92 | | 94 | | 70-130 | 2 | | 30 |
| 1,1,2,2-Tetrachloroethane | 82 | | 82 | | 70-130 | 0 | | 30 |
| Benzene | 96 | | 97 | | 70-130 | 1 | | 30 |
| Toluene | 95 | | 97 | | 70-130 | 2 | | 30 |
| Ethylbenzene | 98 | | 101 | | 70-130 | 3 | | 30 |
| Chloromethane | 69 | | 68 | | 52-130 | 1 | | 30 |
| Bromomethane | 130 | | 120 | | 57-147 | 8 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

**Lab Number:** L2258475
**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1703421-3 WG1703421-4 | | | | | | | | |
| Vinyl chloride | 86 | | 85 | | 67-130 | 1 | | 30 |
| Chloroethane | 87 | | 87 | | 50-151 | 0 | | 30 |
| 1,1-Dichloroethene | 103 | | 103 | | 65-135 | 0 | | 30 |
| trans-1,2-Dichloroethene | 94 | | 92 | | 70-130 | 2 | | 30 |
| Trichloroethene | 100 | | 101 | | 70-130 | 1 | | 30 |
| 1,2-Dichlorobenzene | 99 | | 100 | | 70-130 | 1 | | 30 |
| 1,3-Dichlorobenzene | 98 | | 99 | | 70-130 | 1 | | 30 |
| 1,4-Dichlorobenzene | 98 | | 99 | | 70-130 | 1 | | 30 |
| Methyl tert butyl ether | 98 | | 97 | | 66-130 | 1 | | 30 |
| p/m-Xylene | 103 | | 106 | | 70-130 | 3 | | 30 |
| o-Xylene | 102 | | 105 | | 70-130 | 3 | | 30 |
| cis-1,2-Dichloroethene | 94 | | 94 | | 70-130 | 0 | | 30 |
| Dibromomethane | 99 | | 98 | | 70-130 | 1 | | 30 |
| Styrene | 101 | | 104 | | 70-130 | 3 | | 30 |
| Dichlorodifluoromethane | 90 | | 91 | | 30-146 | 1 | | 30 |
| Acetone | 87 | | 87 | | 54-140 | 0 | | 30 |
| Carbon disulfide | 97 | | 96 | | 59-130 | 1 | | 30 |
| 2-Butanone | 74 | | 72 | | 70-130 | 3 | | 30 |
| Vinyl acetate | 73 | | 70 | | 70-130 | 4 | | 30 |
| 4-Methyl-2-pentanone | 77 | | 79 | | 70-130 | 3 | | 30 |
| 1,2,3-Trichloropropane | 93 | | 92 | | 68-130 | 1 | | 30 |
| 2-Hexanone | 73 | | 74 | | 70-130 | 1 | | 30 |
| Bromochloromethane | 98 | | 100 | | 70-130 | 2 | | 30 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

**Lab Number:** L2258475

**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1703421-3 WG1703421-4 | | | | | | | | |
| 2,2-Dichloropropane | 98 | | 98 | | 70-130 | 0 | | 30 |
| 1,2-Dibromoethane | 99 | | 101 | | 70-130 | 2 | | 30 |
| 1,3-Dichloropropane | 97 | | 100 | | 69-130 | 3 | | 30 |
| 1,1,1,2-Tetrachloroethane | 104 | | 106 | | 70-130 | 2 | | 30 |
| Bromobenzene | 97 | | 98 | | 70-130 | 1 | | 30 |
| n-Butylbenzene | 98 | | 100 | | 70-130 | 2 | | 30 |
| sec-Butylbenzene | 96 | | 98 | | 70-130 | 2 | | 30 |
| tert-Butylbenzene | 96 | | 97 | | 70-130 | 1 | | 30 |
| o-Chlorotoluene | 110 | | 111 | | 70-130 | 1 | | 30 |
| p-Chlorotoluene | 96 | | 97 | | 70-130 | 1 | | 30 |
| 1,2-Dibromo-3-chloropropane | 82 | | 87 | | 68-130 | 6 | | 30 |
| Hexachlorobutadiene | 108 | | 110 | | 67-130 | 2 | | 30 |
| Isopropylbenzene | 95 | | 96 | | 70-130 | 1 | | 30 |
| p-Isopropyltoluene | 97 | | 98 | | 70-130 | 1 | | 30 |
| Naphthalene | 91 | | 92 | | 70-130 | 1 | | 30 |
| Acrylonitrile | 70 | | 73 | | 70-130 | 4 | | 30 |
| n-Propylbenzene | 97 | | 98 | | 70-130 | 1 | | 30 |
| 1,2,3-Trichlorobenzene | 104 | | 105 | | 70-130 | 1 | | 30 |
| 1,2,4-Trichlorobenzene | 104 | | 104 | | 70-130 | 0 | | 30 |
| 1,3,5-Trimethylbenzene | 97 | | 99 | | 70-130 | 2 | | 30 |
| 1,2,4-Trimethylbenzene | 97 | | 98 | | 70-130 | 1 | | 30 |
| 1,4-Dioxane | 91 | | 90 | | 65-136 | 1 | | 30 |
| p-Diethylbenzene | 96 | | 96 | | 70-130 | 0 | | 30 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

**Lab Number:** L2258475
**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1703421-3 WG1703421-4 | | | | | | | | |
| p-Ethyltoluene | 98 | | 99 | | 70-130 | 1 | | 30 |
| 1,2,4,5-Tetramethylbenzene | 98 | | 99 | | 70-130 | 1 | | 30 |
| Ethyl ether | 98 | | 97 | | 67-130 | 1 | | 30 |
| trans-1,4-Dichloro-2-butene | 79 | | 79 | | 70-130 | 0 | | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 104 | | 103 | | 70-130 |
| Toluene-d8 | 100 | | 102 | | 70-130 |
| 4-Bromofluorobenzene | 95 | | 96 | | 70-130 |
| Dibromofluoromethane | 95 | | 95 | | 70-130 |

# SEMIVOLATILES

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01
Client ID: CD10427CE01
Sample Location: MASSENA,NY

Date Collected: 10/18/22 12:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/24/22 15:20
Analyst: MG
Percent Solids: 68%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:58

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 240 | 27. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 210 | 32. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 240 | 43. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 240 | 41. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 240 | 42. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 240 | 63. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 240 | 48. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 240 | 41. | 1 |
| Azobenzene | ND | | ug/kg | 240 | 23. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 240 | 36. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 280 | 41. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 260 | 24. | 1 |
| Isophorone | ND | | ug/kg | 210 | 31. | 1 |
| Nitrobenzene | ND | | ug/kg | 210 | 35. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 240 | 82. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 240 | 60. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 240 | 45. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 240 | 81. | 1 |
| Diethyl phthalate | ND | | ug/kg | 240 | 22. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 240 | 50. | 1 |
| Aniline | ND | | ug/kg | 280 | 110 | 1 |
| 4-Chloroaniline | ND | | ug/kg | 240 | 43. | 1 |
| Dibenzofuran | ND | | ug/kg | 240 | 22. | 1 |
| Acetophenone | ND | | ug/kg | 240 | 29. | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01 Date Collected: 10/18/22 12:50

Client ID: CD10427CE01 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 64 | | 25-120 |
| Phenol-d6 | 64 | | 10-120 |
| Nitrobenzene-d5 | 53 | | 23-120 |
| 2-Fluorobiphenyl | 51 | | 30-120 |
| 2,4,6-Tribromophenol | 41 | | 10-136 |
| 4-Terphenyl-d14 | 35 | | 18-120 |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02
Client ID: CD10427CE02
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/24/22 00:04
Analyst: WR
Percent Solids: 70%

Extraction Method: EPA 3546
Extraction Date: 10/23/22 09:30

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 230 | 27. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 210 | 32. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 230 | 42. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 230 | 40. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 230 | 41. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 230 | 62. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 230 | 46. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 230 | 40. | 1 |
| Azobenzene | ND | | ug/kg | 230 | 22. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 230 | 36. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 280 | 40. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 250 | 23. | 1 |
| Isophorone | ND | | ug/kg | 210 | 30. | 1 |
| Nitrobenzene | ND | | ug/kg | 210 | 34. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 230 | 80. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 230 | 59. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 230 | 44. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 230 | 79. | 1 |
| Diethyl phthalate | ND | | ug/kg | 230 | 22. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 230 | 49. | 1 |
| Aniline | ND | | ug/kg | 280 | 110 | 1 |
| 4-Chloroaniline | ND | | ug/kg | 230 | 42. | 1 |
| Dibenzofuran | ND | | ug/kg | 230 | 22. | 1 |
| Acetophenone | ND | | ug/kg | 230 | 29. | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02 Date Collected: 10/18/22 13:30

Client ID: CD10427CE02 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 48 | | 25-120 |
| Phenol-d6 | 47 | | 10-120 |
| Nitrobenzene-d5 | 44 | | 23-120 |
| 2-Fluorobiphenyl | 48 | | 30-120 |
| 2,4,6-Tribromophenol | 51 | | 10-136 |
| 4-Terphenyl-d14 | 42 | | 18-120 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03
Client ID: CD10427CE03
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/24/22 15:43
Analyst: MG
Percent Solids: 49%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:58

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 340 | 39. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 300 | 46. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 340 | 61. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 340 | 58. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 340 | 59. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 340 | 90. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 340 | 68. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 340 | 58. | 1 |
| Azobenzene | ND | | ug/kg | 340 | 32. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 340 | 52. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 400 | 58. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 360 | 34. | 1 |
| Isophorone | ND | | ug/kg | 300 | 44. | 1 |
| Nitrobenzene | ND | | ug/kg | 300 | 50. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 340 | 120 | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 340 | 85. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 340 | 64. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 340 | 110 | 1 |
| Diethyl phthalate | ND | | ug/kg | 340 | 31. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 340 | 71. | 1 |
| Aniline | ND | | ug/kg | 400 | 160 | 1 |
| 4-Chloroaniline | ND | | ug/kg | 340 | 62. | 1 |
| Dibenzofuran | ND | | ug/kg | 340 | 32. | 1 |
| Acetophenone | ND | | ug/kg | 340 | 42. | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03 Date Collected: 10/18/22 13:50

Client ID: CD10427CE03 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 72 | | 25-120 |
| Phenol-d6 | 71 | | 10-120 |
| Nitrobenzene-d5 | 56 | | 23-120 |
| 2-Fluorobiphenyl | 54 | | 30-120 |
| 2,4,6-Tribromophenol | 46 | | 10-136 |
| 4-Terphenyl-d14 | 39 | | 18-120 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04
Client ID: CD10427CE04
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/24/22 16:06
Analyst: MG
Percent Solids: 50%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:58

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 340 | 38. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 300 | 45. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 340 | 60. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 340 | 58. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 340 | 58. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 340 | 89. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 340 | 67. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 340 | 58. | 1 |
| Azobenzene | ND | | ug/kg | 340 | 32. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 340 | 51. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 400 | 57. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 360 | 34. | 1 |
| Isophorone | ND | | ug/kg | 300 | 44. | 1 |
| Nitrobenzene | ND | | ug/kg | 300 | 50. | 1 |
| Bis(2-ethylhexyl)phthalate | 140 | J | ug/kg | 340 | 120 | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 340 | 84. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 340 | 64. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 340 | 110 | 1 |
| Diethyl phthalate | ND | | ug/kg | 340 | 31. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 340 | 70. | 1 |
| Aniline | ND | | ug/kg | 400 | 160 | 1 |
| 4-Chloroaniline | ND | | ug/kg | 340 | 61. | 1 |
| Dibenzofuran | ND | | ug/kg | 340 | 32. | 1 |
| Acetophenone | ND | | ug/kg | 340 | 42. | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04 Date Collected: 10/18/22 14:30

Client ID: CD10427CE04 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 81 | | 25-120 |
| Phenol-d6 | 82 | | 10-120 |
| Nitrobenzene-d5 | 69 | | 23-120 |
| 2-Fluorobiphenyl | 70 | | 30-120 |
| 2,4,6-Tribromophenol | 55 | | 10-136 |
| 4-Terphenyl-d14 | 51 | | 18-120 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05
Client ID: CD10427CE05
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/24/22 16:30
Analyst: MG
Percent Solids: 71%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:58

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 230 | 26. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 210 | 31. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 230 | 42. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 230 | 40. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 230 | 40. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 230 | 62. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 230 | 46. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 230 | 40. | 1 |
| Azobenzene | ND | | ug/kg | 230 | 22. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 230 | 35. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 280 | 40. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 250 | 23. | 1 |
| Isophorone | ND | | ug/kg | 210 | 30. | 1 |
| Nitrobenzene | ND | | ug/kg | 210 | 34. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 230 | 80. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 230 | 58. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 230 | 44. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 230 | 79. | 1 |
| Diethyl phthalate | ND | | ug/kg | 230 | 22. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 230 | 49. | 1 |
| Aniline | ND | | ug/kg | 280 | 110 | 1 |
| 4-Chloroaniline | ND | | ug/kg | 230 | 42. | 1 |
| Dibenzofuran | ND | | ug/kg | 230 | 22. | 1 |
| Acetophenone | ND | | ug/kg | 230 | 29. | 1 |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05 Date Collected: 10/18/22 14:50

Client ID: CD10427CE05 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 81 | | 25-120 |
| Phenol-d6 | 81 | | 10-120 |
| Nitrobenzene-d5 | 64 | | 23-120 |
| 2-Fluorobiphenyl | 62 | | 30-120 |
| 2,4,6-Tribromophenol | 53 | | 10-136 |
| 4-Terphenyl-d14 | 48 | | 18-120 |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/24/22 09:52
Analyst: MG

Extraction Method: EPA 3546
Extraction Date: 10/22/22 22:18

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1702907-1 | | | | | |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 160 | 19. |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 150 | 22. |
| 1,2-Dichlorobenzene | ND | | ug/kg | 160 | 30. |
| 1,3-Dichlorobenzene | ND | | ug/kg | 160 | 28. |
| 1,4-Dichlorobenzene | ND | | ug/kg | 160 | 29. |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 160 | 44. |
| 2,4-Dinitrotoluene | ND | | ug/kg | 160 | 33. |
| 2,6-Dinitrotoluene | ND | | ug/kg | 160 | 28. |
| Azobenzene | ND | | ug/kg | 160 | 16. |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 160 | 25. |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 200 | 28. |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 180 | 17. |
| Isophorone | ND | | ug/kg | 150 | 22. |
| Nitrobenzene | ND | | ug/kg | 150 | 24. |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 160 | 57. |
| Butyl benzyl phthalate | ND | | ug/kg | 160 | 42. |
| Di-n-butylphthalate | ND | | ug/kg | 160 | 31. |
| Di-n-octylphthalate | ND | | ug/kg | 160 | 56. |
| Diethyl phthalate | ND | | ug/kg | 160 | 15. |
| Dimethyl phthalate | ND | | ug/kg | 160 | 35. |
| Aniline | ND | | ug/kg | 200 | 78. |
| 4-Chloroaniline | ND | | ug/kg | 160 | 30. |
| Dibenzofuran | ND | | ug/kg | 160 | 16. |
| Acetophenone | ND | | ug/kg | 160 | 20. |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/24/22 09:52
Analyst: MG

Extraction Method: EPA 3546
Extraction Date: 10/22/22 22:18

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1702907-1 | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 85 | | 25-120 |
| Phenol-d6 | 84 | | 10-120 |
| Nitrobenzene-d5 | 81 | | 23-120 |
| 2-Fluorobiphenyl | 66 | | 30-120 |
| 2,4,6-Tribromophenol | 56 | | 10-136 |
| 4-Terphenyl-d14 | 70 | | 18-120 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

**Lab Number:** L2258475

**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1702907-2 WG1702907-3 | | | | | | | | |
| 1,2,4-Trichlorobenzene | 72 | | 66 | | 38-107 | 9 | | 50 |
| Bis(2-chloroethyl)ether | 84 | | 76 | | 40-140 | 10 | | 50 |
| 1,2-Dichlorobenzene | 74 | | 67 | | 40-140 | 10 | | 50 |
| 1,3-Dichlorobenzene | 73 | | 66 | | 40-140 | 10 | | 50 |
| 1,4-Dichlorobenzene | 73 | | 67 | | 28-104 | 9 | | 50 |
| 3,3'-Dichlorobenzidine | 75 | | 79 | | 40-140 | 5 | | 50 |
| 2,4-Dinitrotoluene | 83 | | 79 | | 40-132 | 5 | | 50 |
| 2,6-Dinitrotoluene | 75 | | 71 | | 40-140 | 5 | | 50 |
| Azobenzene | 97 | | 91 | | 40-140 | 6 | | 50 |
| 4-Bromophenyl phenyl ether | 70 | | 66 | | 40-140 | 6 | | 50 |
| Bis(2-chloroisopropyl)ether | 100 | | 90 | | 40-140 | 11 | | 50 |
| Bis(2-chloroethoxy)methane | 85 | | 78 | | 40-117 | 9 | | 50 |
| Isophorone | 84 | | 78 | | 40-140 | 7 | | 50 |
| Nitrobenzene | 86 | | 78 | | 40-140 | 10 | | 50 |
| Bis(2-ethylhexyl)phthalate | 91 | | 85 | | 40-140 | 7 | | 50 |
| Butyl benzyl phthalate | 90 | | 82 | | 40-140 | 9 | | 50 |
| Di-n-butylphthalate | 93 | | 84 | | 40-140 | 10 | | 50 |
| Di-n-octylphthalate | 89 | | 82 | | 40-140 | 8 | | 50 |
| Diethyl phthalate | 83 | | 79 | | 40-140 | 5 | | 50 |
| Dimethyl phthalate | 74 | | 70 | | 40-140 | 6 | | 50 |
| Aniline | 71 | | 69 | | 40-140 | 3 | | 50 |
| 4-Chloroaniline | 89 | | 88 | | 40-140 | 1 | | 50 |
| Dibenzofuran | 82 | | 76 | | 40-140 | 8 | | 50 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

**Lab Number:** L2258475

**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1702907-2 WG1702907-3 | | | | | | | | |
| Acetophenone | 78 | | 71 | | 14-144 | 9 | | 50 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 85 | | 78 | | 25-120 |
| Phenol-d6 | 85 | | 80 | | 10-120 |
| Nitrobenzene-d5 | 82 | | 77 | | 23-120 |
| 2-Fluorobiphenyl | 68 | | 64 | | 30-120 |
| 2,4,6-Tribromophenol | 59 | | 56 | | 10-136 |
| 4-Terphenyl-d14 | 70 | | 66 | | 18-120 |

# PCBS

**Project Name:** PROPOSED HYDROGEN PLANT
**Lab Number:** L2258475
**Project Number:** CD10427
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01
Client ID: CD10427CE01
Sample Location: MASSENA,NY

Date Collected: 10/18/22 12:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/24/22 11:03
Analyst: JM
Percent Solids: 68%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:56
Cleanup Method: EPA 3665A
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | mg/kg | 0.0470 | 0.00418 | 1 | A |
| Aroclor 1221 | ND | | mg/kg | 0.0470 | 0.00471 | 1 | A |
| Aroclor 1232 | ND | | mg/kg | 0.0470 | 0.00997 | 1 | A |
| Aroclor 1242 | ND | | mg/kg | 0.0470 | 0.00634 | 1 | A |
| Aroclor 1248 | ND | | mg/kg | 0.0470 | 0.00705 | 1 | A |
| Aroclor 1254 | ND | | mg/kg | 0.0470 | 0.00514 | 1 | A |
| Aroclor 1260 | ND | | mg/kg | 0.0470 | 0.00869 | 1 | A |
| Aroclor 1262 | ND | | mg/kg | 0.0470 | 0.00597 | 1 | A |
| Aroclor 1268 | ND | | mg/kg | 0.0470 | 0.00487 | 1 | A |
| PCBs, Total | ND | | mg/kg | 0.0470 | 0.00418 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 55 | | 30-150 | A |
| Decachlorobiphenyl | 46 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 60 | | 30-150 | B |
| Decachlorobiphenyl | 47 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Lab Number:** L2258475
**Project Number:** CD10427
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02
Client ID: CD10427CE02
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/24/22 11:11
Analyst: JM
Percent Solids: 70%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:56
Cleanup Method: EPA 3665A
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | mg/kg | 0.0452 | 0.00402 | 1 | A |
| Aroclor 1221 | ND | | mg/kg | 0.0452 | 0.00453 | 1 | A |
| Aroclor 1232 | ND | | mg/kg | 0.0452 | 0.00959 | 1 | A |
| Aroclor 1242 | ND | | mg/kg | 0.0452 | 0.00610 | 1 | A |
| Aroclor 1248 | ND | | mg/kg | 0.0452 | 0.00679 | 1 | A |
| Aroclor 1254 | ND | | mg/kg | 0.0452 | 0.00495 | 1 | A |
| Aroclor 1260 | ND | | mg/kg | 0.0452 | 0.00836 | 1 | A |
| Aroclor 1262 | ND | | mg/kg | 0.0452 | 0.00575 | 1 | A |
| Aroclor 1268 | ND | | mg/kg | 0.0452 | 0.00469 | 1 | A |
| PCBs, Total | ND | | mg/kg | 0.0452 | 0.00402 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 65 | | 30-150 | A |
| Decachlorobiphenyl | 59 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 68 | | 30-150 | B |
| Decachlorobiphenyl | 54 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03
Client ID: CD10427CE03
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/24/22 11:19
Analyst: JM
Percent Solids: 49%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:56
Cleanup Method: EPA 3665A
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | mg/kg | 0.0671 | 0.00596 | 1 | A |
| Aroclor 1221 | ND | | mg/kg | 0.0671 | 0.00672 | 1 | A |
| Aroclor 1232 | ND | | mg/kg | 0.0671 | 0.0142 | 1 | A |
| Aroclor 1242 | ND | | mg/kg | 0.0671 | 0.00904 | 1 | A |
| Aroclor 1248 | ND | | mg/kg | 0.0671 | 0.0101 | 1 | A |
| Aroclor 1254 | ND | | mg/kg | 0.0671 | 0.00734 | 1 | A |
| Aroclor 1260 | ND | | mg/kg | 0.0671 | 0.0124 | 1 | A |
| Aroclor 1262 | ND | | mg/kg | 0.0671 | 0.00852 | 1 | A |
| Aroclor 1268 | ND | | mg/kg | 0.0671 | 0.00695 | 1 | A |
| PCBs, Total | ND | | mg/kg | 0.0671 | 0.00596 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 66 | | 30-150 | A |
| Decachlorobiphenyl | 56 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 66 | | 30-150 | B |
| Decachlorobiphenyl | 52 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04
Client ID: CD10427CE04
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/24/22 11:27
Analyst: JM
Percent Solids: 50%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:56
Cleanup Method: EPA 3665A
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | mg/kg | 0.0642 | 0.00570 | 1 | A |
| Aroclor 1221 | ND | | mg/kg | 0.0642 | 0.00643 | 1 | A |
| Aroclor 1232 | ND | | mg/kg | 0.0642 | 0.0136 | 1 | A |
| Aroclor 1242 | ND | | mg/kg | 0.0642 | 0.00865 | 1 | A |
| Aroclor 1248 | ND | | mg/kg | 0.0642 | 0.00962 | 1 | A |
| Aroclor 1254 | ND | | mg/kg | 0.0642 | 0.00702 | 1 | A |
| Aroclor 1260 | ND | | mg/kg | 0.0642 | 0.0118 | 1 | A |
| Aroclor 1262 | ND | | mg/kg | 0.0642 | 0.00815 | 1 | A |
| Aroclor 1268 | ND | | mg/kg | 0.0642 | 0.00665 | 1 | A |
| PCBs, Total | ND | | mg/kg | 0.0642 | 0.00570 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 67 | | 30-150 | A |
| Decachlorobiphenyl | 66 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 71 | | 30-150 | B |
| Decachlorobiphenyl | 57 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05
Client ID: CD10427CE05
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/24/22 11:35
Analyst: JM
Percent Solids: 71%

Extraction Method: EPA 3546
Extraction Date: 10/22/22 23:56
Cleanup Method: EPA 3665A
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | mg/kg | 0.0448 | 0.00397 | 1 | A |
| Aroclor 1221 | ND | | mg/kg | 0.0448 | 0.00448 | 1 | A |
| Aroclor 1232 | ND | | mg/kg | 0.0448 | 0.00949 | 1 | A |
| Aroclor 1242 | ND | | mg/kg | 0.0448 | 0.00603 | 1 | A |
| Aroclor 1248 | ND | | mg/kg | 0.0448 | 0.00671 | 1 | A |
| Aroclor 1254 | ND | | mg/kg | 0.0448 | 0.00490 | 1 | A |
| Aroclor 1260 | ND | | mg/kg | 0.0448 | 0.00827 | 1 | A |
| Aroclor 1262 | ND | | mg/kg | 0.0448 | 0.00568 | 1 | A |
| Aroclor 1268 | ND | | mg/kg | 0.0448 | 0.00464 | 1 | A |
| PCBs, Total | ND | | mg/kg | 0.0448 | 0.00397 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 64 | | 30-150 | A |
| Decachlorobiphenyl | 56 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 66 | | 30-150 | B |
| Decachlorobiphenyl | 53 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/24/22 09:17
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 10/22/22 21:32
Cleanup Method: EPA 3665A
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Column |
|---|---|---|---|---|---|---|
| Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-05 Batch: WG1703691-1 | | | | | | |
| Aroclor 1016 | ND | | mg/kg | 0.0315 | 0.00280 | A |
| Aroclor 1221 | ND | | mg/kg | 0.0315 | 0.00316 | A |
| Aroclor 1232 | ND | | mg/kg | 0.0315 | 0.00669 | A |
| Aroclor 1242 | ND | | mg/kg | 0.0315 | 0.00425 | A |
| Aroclor 1248 | ND | | mg/kg | 0.0315 | 0.00473 | A |
| Aroclor 1254 | ND | | mg/kg | 0.0315 | 0.00345 | A |
| Aroclor 1260 | ND | | mg/kg | 0.0315 | 0.00583 | A |
| Aroclor 1262 | ND | | mg/kg | 0.0315 | 0.00401 | A |
| Aroclor 1268 | ND | | mg/kg | 0.0315 | 0.00327 | A |
| PCBs, Total | ND | | mg/kg | 0.0315 | 0.00280 | A |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 100 | | 30-150 | A |
| Decachlorobiphenyl | 106 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 104 | | 30-150 | B |
| Decachlorobiphenyl | 108 | | 30-150 | B |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

**Lab Number:** L2258475

**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits | Column |
|---|---|---|---|---|---|---|---|---|---|
| Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1703691-2 WG1703691-3 | | | | | | | | | |
| Aroclor 1016 | 107 | | 118 | | 40-140 | 10 | | 50 | A |
| Aroclor 1260 | 99 | | 109 | | 40-140 | 10 | | 50 | A |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria | Column |
|---|---|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 101 | | 110 | | 30-150 | A |
| Decachlorobiphenyl | 100 | | 111 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 104 | | 114 | | 30-150 | B |
| Decachlorobiphenyl | 109 | | 119 | | 30-150 | B |

# PESTICIDES

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01
Client ID: CD10427CE01
Sample Location: MASSENA,NY

Date Collected: 10/18/22 12:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/23/22 17:16
Analyst: AAR
Percent Solids: 68%

Extraction Method: EPA 3546
Extraction Date: 10/23/22 00:04
Cleanup Method: EPA 3620B
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Organochlorine Pesticides by GC - Westborough Lab** | | | | | | | |
| Delta-BHC | ND | | ug/kg | 2.21 | 0.433 | 1 | A |
| Lindane | ND | | ug/kg | 0.921 | 0.412 | 1 | A |
| Alpha-BHC | ND | | ug/kg | 0.921 | 0.262 | 1 | A |
| Beta-BHC | ND | | ug/kg | 2.21 | 0.838 | 1 | A |
| Heptachlor | ND | | ug/kg | 1.10 | 0.495 | 1 | A |
| Aldrin | ND | | ug/kg | 2.21 | 0.778 | 1 | A |
| Heptachlor epoxide | ND | | ug/kg | 4.14 | 1.24 | 1 | A |
| Endrin | ND | | ug/kg | 0.921 | 0.378 | 1 | A |
| Endrin aldehyde | ND | | ug/kg | 2.76 | 0.967 | 1 | A |
| Endrin ketone | ND | | ug/kg | 2.21 | 0.569 | 1 | A |
| Dieldrin | ND | | ug/kg | 1.38 | 0.691 | 1 | A |
| 4,4'-DDE | ND | | ug/kg | 2.21 | 0.511 | 1 | A |
| 4,4'-DDD | ND | | ug/kg | 2.21 | 0.788 | 1 | A |
| 4,4'-DDT | ND | | ug/kg | 2.21 | 1.78 | 1 | A |
| Endosulfan I | ND | | ug/kg | 2.21 | 0.522 | 1 | A |
| Endosulfan II | ND | | ug/kg | 2.21 | 0.738 | 1 | A |
| Endosulfan sulfate | ND | | ug/kg | 0.921 | 0.438 | 1 | A |
| Methoxychlor | ND | | ug/kg | 4.14 | 1.29 | 1 | A |
| Toxaphene | ND | | ug/kg | 41.4 | 11.6 | 1 | A |
| cis-Chlordane | ND | | ug/kg | 2.76 | 0.770 | 1 | A |
| trans-Chlordane | ND | | ug/kg | 2.76 | 0.729 | 1 | A |
| Chlordane | ND | | ug/kg | 18.4 | 7.32 | 1 | A |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01 Date Collected: 10/18/22 12:50

Client ID: CD10427CE01 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab | | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 92 | | 30-150 | A |
| Decachlorobiphenyl | 68 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 80 | | 30-150 | B |
| Decachlorobiphenyl | 83 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01
Client ID: CD10427CE01
Sample Location: MASSENA,NY
Date Collected: 10/18/22 12:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 10/22/22 20:09
Analyst: AKM
Percent Solids: 68%
Methylation Date: 10/22/22 11:25
Extraction Method: EPA 8151A
Extraction Date: 10/20/22 15:33

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Chlorinated Herbicides by GC - Westborough Lab** | | | | | | | |
| MCPP | ND | | ug/kg | 4830 | 1520 | 1 | A |
| MCPA | ND | | ug/kg | 4830 | 1370 | 1 | A |
| Dalapon | ND | | ug/kg | 48.3 | 15.8 | 1 | A |
| Dicamba | ND | | ug/kg | 48.3 | 8.12 | 1 | A |
| Dichloroprop | ND | | ug/kg | 48.3 | 13.9 | 1 | A |
| 2,4-D | ND | | ug/kg | 242 | 15.2 | 1 | A |
| 2,4-DB | ND | | ug/kg | 242 | 12.4 | 1 | A |
| 2,4,5-T | ND | | ug/kg | 242 | 7.49 | 1 | A |
| 2,4,5-TP (Silvex) | ND | | ug/kg | 242 | 6.43 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| DCAA | 127 | | 30-150 | A |
| DCAA | 110 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02
Client ID: CD10427CE02
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/23/22 17:29
Analyst: AAR
Percent Solids: 70%

Extraction Method: EPA 3546
Extraction Date: 10/23/22 00:04
Cleanup Method: EPA 3620B
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Organochlorine Pesticides by GC - Westborough Lab** | | | | | | | |
| Delta-BHC | ND | | ug/kg | 2.17 | 0.424 | 1 | A |
| Lindane | ND | | ug/kg | 0.902 | 0.403 | 1 | A |
| Alpha-BHC | ND | | ug/kg | 0.902 | 0.256 | 1 | A |
| Beta-BHC | ND | | ug/kg | 2.17 | 0.821 | 1 | A |
| Heptachlor | ND | | ug/kg | 1.08 | 0.486 | 1 | A |
| Aldrin | ND | | ug/kg | 2.17 | 0.763 | 1 | A |
| Heptachlor epoxide | ND | | ug/kg | 4.06 | 1.22 | 1 | A |
| Endrin | ND | | ug/kg | 0.902 | 0.370 | 1 | A |
| Endrin aldehyde | ND | | ug/kg | 2.71 | 0.948 | 1 | A |
| Endrin ketone | ND | | ug/kg | 2.17 | 0.558 | 1 | A |
| Dieldrin | ND | | ug/kg | 1.35 | 0.677 | 1 | A |
| 4,4'-DDE | ND | | ug/kg | 2.17 | 0.501 | 1 | A |
| 4,4'-DDD | ND | | ug/kg | 2.17 | 0.773 | 1 | A |
| 4,4'-DDT | ND | | ug/kg | 2.17 | 1.74 | 1 | A |
| Endosulfan I | ND | | ug/kg | 2.17 | 0.512 | 1 | A |
| Endosulfan II | ND | | ug/kg | 2.17 | 0.724 | 1 | A |
| Endosulfan sulfate | ND | | ug/kg | 0.902 | 0.430 | 1 | A |
| Methoxychlor | ND | | ug/kg | 4.06 | 1.26 | 1 | A |
| Toxaphene | ND | | ug/kg | 40.6 | 11.4 | 1 | A |
| cis-Chlordane | ND | | ug/kg | 2.71 | 0.754 | 1 | A |
| trans-Chlordane | ND | | ug/kg | 2.71 | 0.715 | 1 | A |
| Chlordane | ND | | ug/kg | 18.0 | 7.18 | 1 | A |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02 Date Collected: 10/18/22 13:30

Client ID: CD10427CE02 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab | | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 94 | | 30-150 | A |
| Decachlorobiphenyl | 65 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 82 | | 30-150 | B |
| Decachlorobiphenyl | 85 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02
Client ID: CD10427CE02
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 10/22/22 20:27
Analyst: AKM
Percent Solids: 70%
Methylation Date: 10/22/22 11:25

Extraction Method: EPA 8151A
Extraction Date: 10/20/22 15:33

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Chlorinated Herbicides by GC - Westborough Lab** | | | | | | | |
| MCPP | ND | | ug/kg | 4700 | 1480 | 1 | A |
| MCPA | ND | | ug/kg | 4700 | 1330 | 1 | A |
| Dalapon | ND | | ug/kg | 47.0 | 15.4 | 1 | A |
| Dicamba | ND | | ug/kg | 47.0 | 7.90 | 1 | A |
| Dichloroprop | ND | | ug/kg | 47.0 | 13.5 | 1 | A |
| 2,4-D | ND | | ug/kg | 235 | 14.8 | 1 | A |
| 2,4-DB | ND | | ug/kg | 235 | 12.1 | 1 | A |
| 2,4,5-T | ND | | ug/kg | 235 | 7.29 | 1 | A |
| 2,4,5-TP (Silvex) | ND | | ug/kg | 235 | 6.26 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| DCAA | 128 | | 30-150 | A |
| DCAA | 128 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03
Client ID: CD10427CE03
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/23/22 17:42
Analyst: AAR
Percent Solids: 49%

Extraction Method: EPA 3546
Extraction Date: 10/23/22 00:04
Cleanup Method: EPA 3620B
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Organochlorine Pesticides by GC - Westborough Lab** | | | | | | | |
| Delta-BHC | ND | | ug/kg | 3.18 | 0.622 | 1 | A |
| Lindane | ND | | ug/kg | 1.32 | 0.591 | 1 | A |
| Alpha-BHC | ND | | ug/kg | 1.32 | 0.376 | 1 | A |
| Beta-BHC | ND | | ug/kg | 3.18 | 1.20 | 1 | A |
| Heptachlor | ND | | ug/kg | 1.59 | 0.712 | 1 | A |
| Aldrin | ND | | ug/kg | 3.18 | 1.12 | 1 | A |
| Heptachlor epoxide | ND | | ug/kg | 5.95 | 1.79 | 1 | A |
| Endrin | ND | | ug/kg | 1.32 | 0.542 | 1 | A |
| Endrin aldehyde | ND | | ug/kg | 3.97 | 1.39 | 1 | A |
| Endrin ketone | ND | | ug/kg | 3.18 | 0.818 | 1 | A |
| Dieldrin | ND | | ug/kg | 1.98 | 0.992 | 1 | A |
| 4,4'-DDE | ND | | ug/kg | 3.18 | 0.734 | 1 | A |
| 4,4'-DDD | ND | | ug/kg | 3.18 | 1.13 | 1 | A |
| 4,4'-DDT | ND | | ug/kg | 3.18 | 2.55 | 1 | A |
| Endosulfan I | ND | | ug/kg | 3.18 | 0.750 | 1 | A |
| Endosulfan II | ND | | ug/kg | 3.18 | 1.06 | 1 | A |
| Endosulfan sulfate | ND | | ug/kg | 1.32 | 0.630 | 1 | A |
| Methoxychlor | ND | | ug/kg | 5.95 | 1.85 | 1 | A |
| Toxaphene | ND | | ug/kg | 59.5 | 16.7 | 1 | A |
| cis-Chlordane | ND | | ug/kg | 3.97 | 1.11 | 1 | A |
| trans-Chlordane | ND | | ug/kg | 3.97 | 1.05 | 1 | A |
| Chlordane | ND | | ug/kg | 26.5 | 10.5 | 1 | A |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03 Date Collected: 10/18/22 13:50

Client ID: CD10427CE03 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab | | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 75 | | 30-150 | A |
| Decachlorobiphenyl | 64 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 69 | | 30-150 | B |
| Decachlorobiphenyl | 70 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03
Client ID: CD10427CE03
Sample Location: MASSENA,NY

Date Collected: 10/18/22 13:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 10/22/22 20:45
Analyst: AKM
Percent Solids: 49%
Methylation Date: 10/22/22 11:25

Extraction Method: EPA 8151A
Extraction Date: 10/20/22 15:33

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Chlorinated Herbicides by GC - Westborough Lab** | | | | | | | |
| MCPP | ND | | ug/kg | 6670 | 2100 | 1 | A |
| MCPA | ND | | ug/kg | 6670 | 1890 | 1 | A |
| Dalapon | ND | | ug/kg | 66.7 | 21.8 | 1 | A |
| Dicamba | ND | | ug/kg | 66.7 | 11.2 | 1 | A |
| Dichloroprop | ND | | ug/kg | 66.7 | 19.1 | 1 | A |
| 2,4-D | ND | | ug/kg | 333 | 21.0 | 1 | A |
| 2,4-DB | ND | | ug/kg | 333 | 17.1 | 1 | A |
| 2,4,5-T | ND | | ug/kg | 333 | 10.3 | 1 | A |
| 2,4,5-TP (Silvex) | ND | | ug/kg | 333 | 8.87 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| DCAA | 143 | | 30-150 | A |
| DCAA | 118 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04
Client ID: CD10427CE04
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/23/22 17:54
Analyst: AAR
Percent Solids: 50%

Extraction Method: EPA 3546
Extraction Date: 10/23/22 00:04
Cleanup Method: EPA 3620B
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Organochlorine Pesticides by GC - Westborough Lab** | | | | | | | |
| Delta-BHC | ND | | ug/kg | 3.13 | 0.613 | 1 | A |
| Lindane | ND | | ug/kg | 1.30 | 0.583 | 1 | A |
| Alpha-BHC | ND | | ug/kg | 1.30 | 0.370 | 1 | A |
| Beta-BHC | ND | | ug/kg | 3.13 | 1.19 | 1 | A |
| Heptachlor | ND | | ug/kg | 1.56 | 0.702 | 1 | A |
| Aldrin | ND | | ug/kg | 3.13 | 1.10 | 1 | A |
| Heptachlor epoxide | ND | | ug/kg | 5.87 | 1.76 | 1 | A |
| Endrin | ND | | ug/kg | 1.30 | 0.535 | 1 | A |
| Endrin aldehyde | ND | | ug/kg | 3.91 | 1.37 | 1 | A |
| Endrin ketone | ND | | ug/kg | 3.13 | 0.806 | 1 | A |
| Dieldrin | ND | | ug/kg | 1.96 | 0.978 | 1 | A |
| 4,4'-DDE | ND | | ug/kg | 3.13 | 0.724 | 1 | A |
| 4,4'-DDD | ND | | ug/kg | 3.13 | 1.12 | 1 | A |
| 4,4'-DDT | ND | | ug/kg | 3.13 | 2.52 | 1 | A |
| Endosulfan I | ND | | ug/kg | 3.13 | 0.739 | 1 | A |
| Endosulfan II | ND | | ug/kg | 3.13 | 1.04 | 1 | A |
| Endosulfan sulfate | ND | | ug/kg | 1.30 | 0.621 | 1 | A |
| Methoxychlor | ND | | ug/kg | 5.87 | 1.82 | 1 | A |
| Toxaphene | ND | | ug/kg | 58.7 | 16.4 | 1 | A |
| cis-Chlordane | ND | | ug/kg | 3.91 | 1.09 | 1 | A |
| trans-Chlordane | ND | | ug/kg | 3.91 | 1.03 | 1 | A |
| Chlordane | ND | | ug/kg | 26.1 | 10.4 | 1 | A |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04 Date Collected: 10/18/22 14:30

Client ID: CD10427CE04 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab | | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 83 | | 30-150 | A |
| Decachlorobiphenyl | 70 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 74 | | 30-150 | B |
| Decachlorobiphenyl | 77 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04
Client ID: CD10427CE04
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:30
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 10/22/22 21:03
Analyst: AKM
Percent Solids: 50%
Methylation Date: 10/22/22 11:25

Extraction Method: EPA 8151A
Extraction Date: 10/20/22 15:33

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Chlorinated Herbicides by GC - Westborough Lab** | | | | | | | |
| MCPP | ND | | ug/kg | 6690 | 2110 | 1 | A |
| MCPA | ND | | ug/kg | 6690 | 1890 | 1 | A |
| Dalapon | ND | | ug/kg | 66.9 | 21.9 | 1 | A |
| Dicamba | ND | | ug/kg | 66.9 | 11.2 | 1 | A |
| Dichloroprop | ND | | ug/kg | 66.9 | 19.2 | 1 | A |
| 2,4-D | ND | | ug/kg | 334 | 21.1 | 1 | A |
| 2,4-DB | ND | | ug/kg | 334 | 17.2 | 1 | A |
| 2,4,5-T | ND | | ug/kg | 334 | 10.4 | 1 | A |
| 2,4,5-TP (Silvex) | ND | | ug/kg | 334 | 8.90 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| DCAA | 140 | | 30-150 | A |
| DCAA | **178** | Q | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05
Client ID: CD10427CE05
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/23/22 18:07
Analyst: AAR
Percent Solids: 71%

Extraction Method: EPA 3546
Extraction Date: 10/23/22 00:04
Cleanup Method: EPA 3620B
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Organochlorine Pesticides by GC - Westborough Lab** | | | | | | | |
| Delta-BHC | ND | | ug/kg | 2.16 | 0.424 | 1 | A |
| Lindane | ND | | ug/kg | 0.901 | 0.403 | 1 | A |
| Alpha-BHC | ND | | ug/kg | 0.901 | 0.256 | 1 | A |
| Beta-BHC | ND | | ug/kg | 2.16 | 0.820 | 1 | A |
| Heptachlor | ND | | ug/kg | 1.08 | 0.485 | 1 | A |
| Aldrin | ND | | ug/kg | 2.16 | 0.762 | 1 | A |
| Heptachlor epoxide | ND | | ug/kg | 4.06 | 1.22 | 1 | A |
| Endrin | ND | | ug/kg | 0.901 | 0.370 | 1 | A |
| Endrin aldehyde | ND | | ug/kg | 2.70 | 0.946 | 1 | A |
| Endrin ketone | ND | | ug/kg | 2.16 | 0.557 | 1 | A |
| Dieldrin | ND | | ug/kg | 1.35 | 0.676 | 1 | A |
| 4,4'-DDE | ND | | ug/kg | 2.16 | 0.500 | 1 | A |
| 4,4'-DDD | ND | | ug/kg | 2.16 | 0.772 | 1 | A |
| 4,4'-DDT | ND | | ug/kg | 2.16 | 1.74 | 1 | A |
| Endosulfan I | ND | | ug/kg | 2.16 | 0.511 | 1 | A |
| Endosulfan II | ND | | ug/kg | 2.16 | 0.723 | 1 | A |
| Endosulfan sulfate | ND | | ug/kg | 0.901 | 0.429 | 1 | A |
| Methoxychlor | ND | | ug/kg | 4.06 | 1.26 | 1 | A |
| Toxaphene | ND | | ug/kg | 40.6 | 11.4 | 1 | A |
| cis-Chlordane | ND | | ug/kg | 2.70 | 0.754 | 1 | A |
| trans-Chlordane | ND | | ug/kg | 2.70 | 0.714 | 1 | A |
| Chlordane | ND | | ug/kg | 18.0 | 7.17 | 1 | A |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05 Date Collected: 10/18/22 14:50

Client ID: CD10427CE05 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab | | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 84 | | 30-150 | A |
| Decachlorobiphenyl | 80 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 77 | | 30-150 | B |
| Decachlorobiphenyl | 84 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05
Client ID: CD10427CE05
Sample Location: MASSENA,NY

Date Collected: 10/18/22 14:50
Date Received: 10/19/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 10/22/22 21:21
Analyst: AKM
Percent Solids: 71%
Methylation Date: 10/22/22 11:25

Extraction Method: EPA 8151A
Extraction Date: 10/20/22 15:33

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Chlorinated Herbicides by GC - Westborough Lab** | | | | | | | |
| MCPP | ND | | ug/kg | 4600 | 1450 | 1 | A |
| MCPA | ND | | ug/kg | 4600 | 1300 | 1 | A |
| Dalapon | ND | | ug/kg | 46.0 | 15.0 | 1 | A |
| Dicamba | ND | | ug/kg | 46.0 | 7.73 | 1 | A |
| Dichloroprop | ND | | ug/kg | 46.0 | 13.2 | 1 | A |
| 2,4-D | ND | | ug/kg | 230 | 14.5 | 1 | A |
| 2,4-DB | ND | | ug/kg | 230 | 11.8 | 1 | A |
| 2,4,5-T | ND | | ug/kg | 230 | 7.13 | 1 | A |
| 2,4,5-TP (Silvex) | ND | | ug/kg | 230 | 6.12 | 1 | A |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| DCAA | 136 | | 30-150 | A |
| DCAA | 112 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 10/21/22 08:06
Analyst: AAR

Extraction Method: EPA 8151A
Extraction Date: 10/19/22 20:55

Methylation Date: 10/21/22 06:06

| Parameter | Result | Qualifier | Units | RL | MDL | Column |
|---|---|---|---|---|---|---|
| Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1701709-1 | | | | | | |
| MCPP | ND | | ug/kg | 3240 | 1020 | A |
| MCPA | ND | | ug/kg | 3240 | 917. | A |
| Dalapon | ND | | ug/kg | 32.4 | 10.6 | A |
| Dicamba | ND | | ug/kg | 32.4 | 5.44 | A |
| Dichloroprop | ND | | ug/kg | 32.4 | 9.30 | A |
| 2,4-D | ND | | ug/kg | 162 | 10.2 | A |
| 2,4-DB | ND | | ug/kg | 162 | 8.33 | A |
| 2,4,5-T | ND | | ug/kg | 162 | 5.02 | A |
| 2,4,5-TP (Silvex) | ND | | ug/kg | 162 | 4.31 | A |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| DCAA | 120 | | 30-150 | A |
| DCAA | 72 | | 30-150 | B |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/23/22 16:39
Analyst: AAR

Extraction Method: EPA 3546
Extraction Date: 10/23/22 00:04
Cleanup Method: EPA 3620B
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Column |
|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1702917-1 | | | | | | |
| Delta-BHC | ND | | ug/kg | 1.54 | 0.303 | A |
| Lindane | ND | | ug/kg | 0.644 | 0.288 | A |
| Alpha-BHC | ND | | ug/kg | 0.644 | 0.183 | A |
| Beta-BHC | ND | | ug/kg | 1.54 | 0.586 | A |
| Heptachlor | ND | | ug/kg | 0.773 | 0.346 | A |
| Aldrin | ND | | ug/kg | 1.54 | 0.544 | A |
| Heptachlor epoxide | ND | | ug/kg | 2.90 | 0.869 | A |
| Endrin | ND | | ug/kg | 0.644 | 0.264 | A |
| Endrin aldehyde | ND | | ug/kg | 1.93 | 0.676 | A |
| Endrin ketone | ND | | ug/kg | 1.54 | 0.398 | A |
| Dieldrin | ND | | ug/kg | 0.966 | 0.483 | A |
| 4,4'-DDE | ND | | ug/kg | 1.54 | 0.357 | A |
| 4,4'-DDD | ND | | ug/kg | 1.54 | 0.551 | A |
| 4,4'-DDT | ND | | ug/kg | 1.54 | 1.24 | A |
| Endosulfan I | ND | | ug/kg | 1.54 | 0.365 | A |
| Endosulfan II | ND | | ug/kg | 1.54 | 0.516 | A |
| Endosulfan sulfate | ND | | ug/kg | 0.644 | 0.306 | A |
| Methoxychlor | ND | | ug/kg | 2.90 | 0.901 | A |
| Toxaphene | ND | | ug/kg | 29.0 | 8.11 | A |
| cis-Chlordane | ND | | ug/kg | 1.93 | 0.538 | A |
| trans-Chlordane | ND | | ug/kg | 1.93 | 0.510 | A |
| Chlordane | ND | | ug/kg | 12.9 | 5.12 | A |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/23/22 16:39
Analyst: AAR

Extraction Method: EPA 3546
Extraction Date: 10/23/22 00:04
Cleanup Method: EPA 3620B
Cleanup Date: 10/23/22
Cleanup Method: EPA 3660B
Cleanup Date: 10/23/22

| Parameter | Result | Qualifier | Units | RL | MDL | Column |
|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1702917-1 | | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 121 | | 30-150 | A |
| Decachlorobiphenyl | 118 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 97 | | 30-150 | B |
| Decachlorobiphenyl | 110 | | 30-150 | B |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

**Lab Number:** L2258475

**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits | Column |
|---|---|---|---|---|---|---|---|---|---|
| Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1701709-2 WG1701709-3 | | | | | | | | | |
| MCPP | 116 | | 119 | | 30-150 | 3 | | 30 | A |
| MCPA | 110 | | 130 | | 30-150 | 17 | | 30 | A |
| Dalapon | 86 | | 99 | | 30-150 | 14 | | 30 | A |
| Dicamba | 111 | | 114 | | 30-150 | 3 | | 30 | A |
| Dichloroprop | 128 | | 126 | | 30-150 | 2 | | 30 | A |
| 2,4-D | 109 | | 109 | | 30-150 | 0 | | 30 | A |
| 2,4-DB | 96 | | 95 | | 30-150 | 1 | | 30 | A |
| 2,4,5-T | 108 | | 107 | | 30-150 | 1 | | 30 | A |
| 2,4,5-TP (Silvex) | 110 | | 108 | | 30-150 | 2 | | 30 | A |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria | Column |
|---|---|---|---|---|---|---|
| DCAA | 126 | | 130 | | 30-150 | A |
| DCAA | 76 | | 85 | | 30-150 | B |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

**Lab Number:** L2258475

**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits | Column |
|---|---|---|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1702917-2 WG1702917-3 | | | | | | | | | |
| Delta-BHC | 90 | | 90 | | 30-150 | 0 | | 30 | A |
| Lindane | 96 | | 100 | | 30-150 | 4 | | 30 | A |
| Alpha-BHC | 106 | | 109 | | 30-150 | 3 | | 30 | A |
| Beta-BHC | 96 | | 98 | | 30-150 | 2 | | 30 | A |
| Heptachlor | 109 | | 109 | | 30-150 | 0 | | 30 | A |
| Aldrin | 99 | | 99 | | 30-150 | 0 | | 30 | A |
| Heptachlor epoxide | 89 | | 87 | | 30-150 | 2 | | 30 | A |
| Endrin | 109 | | 106 | | 30-150 | 3 | | 30 | A |
| Endrin aldehyde | 85 | | 67 | | 30-150 | 24 | | 30 | A |
| Endrin ketone | 111 | | 104 | | 30-150 | 7 | | 30 | A |
| Dieldrin | 117 | | 116 | | 30-150 | 1 | | 30 | A |
| 4,4'-DDE | 113 | | 112 | | 30-150 | 1 | | 30 | A |
| 4,4'-DDD | 133 | | 129 | | 30-150 | 3 | | 30 | A |
| 4,4'-DDT | 127 | | 122 | | 30-150 | 4 | | 30 | A |
| Endosulfan I | 101 | | 100 | | 30-150 | 1 | | 30 | A |
| Endosulfan II | 110 | | 106 | | 30-150 | 4 | | 30 | A |
| Endosulfan sulfate | 98 | | 80 | | 30-150 | 20 | | 30 | A |
| Methoxychlor | 122 | | 113 | | 30-150 | 8 | | 30 | A |
| cis-Chlordane | 83 | | 82 | | 30-150 | 1 | | 30 | A |
| trans-Chlordane | 117 | | 114 | | 30-150 | 3 | | 30 | A |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1702917-2 WG1702917-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria | Column |
|---|---|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 105 | | 108 | | 30-150 | A |
| Decachlorobiphenyl | 93 | | 107 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 83 | | 85 | | 30-150 | B |
| Decachlorobiphenyl | 91 | | 95 | | 30-150 | B |

# METALS

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01 Date Collected: 10/18/22 12:50

Client ID: CD10427CE01 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 68%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 18000 | | mg/kg | 140 | 21. | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Antimony, Total | ND | | mg/kg | 2.2 | 0.19 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Arsenic, Total | 4.1 | | mg/kg | 0.70 | 0.09 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Barium, Total | 170 | | mg/kg | 4.2 | 0.30 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Beryllium, Total | 0.80 | | mg/kg | 0.42 | 0.12 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Cadmium, Total | 0.29 | | mg/kg | 0.28 | 0.04 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Calcium, Total | 6300 | | mg/kg | 700 | 85. | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Chromium, Total | 28 | | mg/kg | 2.8 | 0.65 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Cobalt, Total | 11 | | mg/kg | 0.70 | 0.07 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Copper, Total | 14 | | mg/kg | 2.8 | 0.27 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Iron, Total | 25000 | | mg/kg | 280 | 29. | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Lead, Total | 16 | | mg/kg | 0.84 | 0.20 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Magnesium, Total | 6100 | | mg/kg | 140 | 17. | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Manganese, Total | 520 | | mg/kg | 2.8 | 0.62 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Mercury, Total | ND | | mg/kg | 0.092 | 0.060 | 1 | 10/21/22 08:10 | 10/21/22 13:03 | EPA 7471B | 1,7471B | ZK |
| Nickel, Total | 21 | | mg/kg | 1.4 | 0.37 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Potassium, Total | 1800 | | mg/kg | 140 | 22. | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Selenium, Total | 5.2 | | mg/kg | 2.8 | 1.0 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Silver, Total | ND | | mg/kg | 0.70 | 0.07 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Sodium, Total | 110 | J | mg/kg | 210 | 16. | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Thallium, Total | 0.22 | J | mg/kg | 0.56 | 0.07 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Vanadium, Total | 40 | | mg/kg | 1.4 | 0.53 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |
| Zinc, Total | 63 | | mg/kg | 14 | 3.6 | 10 | 10/21/22 07:00 | 10/23/22 21:43 | EPA 3050B | 1,6020B | WKP |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02 Date Collected: 10/18/22 13:30

Client ID: CD10427CE02 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 70%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 8000 | | mg/kg | 140 | 20. | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Antimony, Total | ND | | mg/kg | 2.2 | 0.19 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Arsenic, Total | 3.8 | | mg/kg | 0.69 | 0.09 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Barium, Total | 56 | | mg/kg | 4.2 | 0.29 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Beryllium, Total | 0.42 | | mg/kg | 0.42 | 0.12 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Cadmium, Total | 0.26 | J | mg/kg | 0.28 | 0.04 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Calcium, Total | 5900 | | mg/kg | 690 | 84. | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Chromium, Total | 12 | | mg/kg | 2.8 | 0.65 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Cobalt, Total | 4.6 | | mg/kg | 0.69 | 0.07 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Copper, Total | 12 | | mg/kg | 2.8 | 0.27 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Iron, Total | 15000 | | mg/kg | 280 | 29. | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Lead, Total | 15 | | mg/kg | 0.83 | 0.20 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Magnesium, Total | 2200 | | mg/kg | 140 | 17. | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Manganese, Total | 410 | | mg/kg | 2.8 | 0.62 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Mercury, Total | ND | | mg/kg | 0.089 | 0.058 | 1 | 10/21/22 08:10 | 10/21/22 13:06 | EPA 7471B | 1,7471B | ZK |
| Nickel, Total | 9.9 | | mg/kg | 1.4 | 0.37 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Potassium, Total | 500 | | mg/kg | 140 | 22. | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Selenium, Total | 3.8 | | mg/kg | 2.8 | 1.0 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Silver, Total | ND | | mg/kg | 0.69 | 0.07 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Sodium, Total | 45 | J | mg/kg | 210 | 16. | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Thallium, Total | 0.10 | J | mg/kg | 0.56 | 0.07 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Vanadium, Total | 24 | | mg/kg | 1.4 | 0.53 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |
| Zinc, Total | 45 | | mg/kg | 14 | 3.6 | 10 | 10/21/22 07:00 | 10/23/22 21:48 | EPA 3050B | 1,6020B | WKP |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03 Date Collected: 10/18/22 13:50

Client ID: CD10427CE03 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 49%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 6200 | | mg/kg | 200 | 29. | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Antimony, Total | ND | | mg/kg | 3.1 | 0.26 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Arsenic, Total | 3.0 | | mg/kg | 0.98 | 0.13 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Barium, Total | 42 | | mg/kg | 5.8 | 0.41 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Beryllium, Total | 0.33 | J | mg/kg | 0.58 | 0.17 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Cadmium, Total | 0.30 | J | mg/kg | 0.39 | 0.05 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Calcium, Total | 5800 | | mg/kg | 980 | 120 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Chromium, Total | 10 | | mg/kg | 3.9 | 0.91 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Cobalt, Total | 3.4 | | mg/kg | 0.98 | 0.10 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Copper, Total | 10 | | mg/kg | 3.9 | 0.38 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Iron, Total | 12000 | | mg/kg | 390 | 40. | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Lead, Total | 15 | | mg/kg | 1.2 | 0.28 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Magnesium, Total | 1900 | | mg/kg | 200 | 24. | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Manganese, Total | 120 | | mg/kg | 3.9 | 0.87 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Mercury, Total | ND | | mg/kg | 0.127 | 0.083 | 1 | 10/21/22 08:10 | 10/21/22 13:10 | EPA 7471B | 1,7471B | ZK |
| Nickel, Total | 9.0 | | mg/kg | 2.0 | 0.52 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Potassium, Total | 370 | | mg/kg | 200 | 31. | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Selenium, Total | 3.4 | J | mg/kg | 3.9 | 1.5 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Silver, Total | ND | | mg/kg | 0.98 | 0.10 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Sodium, Total | 44 | J | mg/kg | 290 | 23. | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Thallium, Total | ND | | mg/kg | 0.78 | 0.10 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Vanadium, Total | 20 | | mg/kg | 2.0 | 0.74 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |
| Zinc, Total | 32 | | mg/kg | 20 | 5.1 | 10 | 10/21/22 07:00 | 10/23/22 21:54 | EPA 3050B | 1,6020B | WKP |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04 Date Collected: 10/18/22 14:30

Client ID: CD10427CE04 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 50%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 10000 | | mg/kg | 200 | 29. | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Antimony, Total | 0.82 | J | mg/kg | 3.1 | 0.26 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Arsenic, Total | 5.4 | | mg/kg | 0.98 | 0.13 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Barium, Total | 74 | | mg/kg | 5.9 | 0.41 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Beryllium, Total | 0.68 | | mg/kg | 0.59 | 0.17 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Cadmium, Total | 0.74 | | mg/kg | 0.39 | 0.05 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Calcium, Total | 8500 | | mg/kg | 980 | 120 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Chromium, Total | 19 | | mg/kg | 3.9 | 0.91 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Cobalt, Total | 4.5 | | mg/kg | 0.98 | 0.10 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Copper, Total | 24 | | mg/kg | 3.9 | 0.38 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Iron, Total | 17000 | | mg/kg | 390 | 40. | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Lead, Total | 20 | | mg/kg | 1.2 | 0.28 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Magnesium, Total | 3400 | | mg/kg | 200 | 24. | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Manganese, Total | 160 | | mg/kg | 3.9 | 0.87 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Mercury, Total | 0.141 | | mg/kg | 0.130 | 0.085 | 1 | 10/21/22 08:10 | 10/21/22 13:13 | EPA 7471B | 1,7471B | ZK |
| Nickel, Total | 17 | | mg/kg | 2.0 | 0.52 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Potassium, Total | 570 | | mg/kg | 200 | 31. | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Selenium, Total | 5.6 | | mg/kg | 3.9 | 1.5 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Silver, Total | 0.13 | J | mg/kg | 0.98 | 0.10 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Sodium, Total | 68 | J | mg/kg | 290 | 23. | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Thallium, Total | 0.21 | J | mg/kg | 0.78 | 0.10 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Vanadium, Total | 33 | | mg/kg | 2.0 | 0.74 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |
| Zinc, Total | 52 | | mg/kg | 20 | 5.1 | 10 | 10/21/22 07:00 | 10/26/22 11:22 | EPA 3050B | 1,6020B | SV |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05 Date Collected: 10/18/22 14:50

Client ID: CD10427CE05 Date Received: 10/19/22

Sample Location: MASSENA,NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 71%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 6400 | | mg/kg | 140 | 20. | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Antimony, Total | 0.29 | J | mg/kg | 2.2 | 0.18 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Arsenic, Total | 4.1 | | mg/kg | 0.68 | 0.09 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Barium, Total | 57 | | mg/kg | 4.0 | 0.28 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Beryllium, Total | 0.30 | J | mg/kg | 0.40 | 0.12 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Cadmium, Total | 0.25 | J | mg/kg | 0.27 | 0.04 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Calcium, Total | 3600 | | mg/kg | 680 | 82. | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Chromium, Total | 9.9 | | mg/kg | 2.7 | 0.63 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Cobalt, Total | 4.4 | | mg/kg | 0.68 | 0.07 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Copper, Total | 11 | | mg/kg | 2.7 | 0.26 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Iron, Total | 14000 | | mg/kg | 270 | 28. | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Lead, Total | 17 | | mg/kg | 0.81 | 0.20 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Magnesium, Total | 1600 | | mg/kg | 140 | 17. | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Manganese, Total | 520 | | mg/kg | 2.7 | 0.60 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Mercury, Total | ND | | mg/kg | 0.090 | 0.059 | 1 | 10/21/22 08:10 | 10/21/22 13:16 | EPA 7471B | 1,7471B | ZK |
| Nickel, Total | 9.3 | | mg/kg | 1.4 | 0.36 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Potassium, Total | 620 | | mg/kg | 140 | 21. | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Selenium, Total | 1.9 | J | mg/kg | 2.7 | 1.0 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Silver, Total | ND | | mg/kg | 0.68 | 0.07 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Sodium, Total | 33 | J | mg/kg | 200 | 16. | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Thallium, Total | 0.12 | J | mg/kg | 0.54 | 0.07 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Vanadium, Total | 20 | | mg/kg | 1.4 | 0.51 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |
| Zinc, Total | 35 | | mg/kg | 14 | 3.5 | 10 | 10/21/22 07:00 | 10/26/22 11:27 | EPA 3050B | 1,6020B | SV |

**Project Name:** PROPOSED HYDROGEN PLANT **Lab Number:** L2258475

**Project Number:** CD10427 **Report Date:** 10/26/22

# Method Blank Analysis
# Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1702281-1 | | | | | | | | | | |
| Aluminum, Total | ND | | mg/kg | 100 | 15. | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Antimony, Total | ND | | mg/kg | 1.6 | 0.14 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Arsenic, Total | ND | | mg/kg | 0.50 | 0.07 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Barium, Total | ND | | mg/kg | 3.0 | 0.21 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Beryllium, Total | ND | | mg/kg | 0.30 | 0.09 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Cadmium, Total | ND | | mg/kg | 0.20 | 0.03 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Calcium, Total | ND | | mg/kg | 500 | 61. | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Chromium, Total | ND | | mg/kg | 2.0 | 0.47 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Cobalt, Total | ND | | mg/kg | 0.50 | 0.05 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Copper, Total | ND | | mg/kg | 2.0 | 0.19 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Iron, Total | ND | | mg/kg | 200 | 21. | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Lead, Total | ND | | mg/kg | 0.60 | 0.15 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Magnesium, Total | ND | | mg/kg | 100 | 12. | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Manganese, Total | ND | | mg/kg | 2.0 | 0.44 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Nickel, Total | ND | | mg/kg | 1.0 | 0.27 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Potassium, Total | ND | | mg/kg | 100 | 16. | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Selenium, Total | ND | | mg/kg | 2.0 | 0.76 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Silver, Total | ND | | mg/kg | 0.50 | 0.05 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Sodium, Total | ND | | mg/kg | 150 | 12. | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Thallium, Total | 0.06 | J | mg/kg | 0.40 | 0.05 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Vanadium, Total | ND | | mg/kg | 1.0 | 0.38 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |
| Zinc, Total | ND | | mg/kg | 10 | 2.6 | 10 | 10/21/22 07:00 | 10/23/22 21:11 | 1,6020B | WKP |

**Prep Information**

Digestion Method: EPA 3050B

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1702283-1 | | | | | | | | | | |
| Mercury, Total | ND | | mg/kg | 0.083 | 0.054 | 1 | 10/21/22 08:10 | 10/21/22 12:11 | 1,7471B | ZK |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

# Method Blank Analysis
# Batch Quality Control

**Prep Information**

Digestion Method: EPA 7471B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

**Lab Number:** L2258475

**Report Date:** 10/26/22

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1702281-2 SRM Lot Number: D113-540 | | | | | | | | |
| Aluminum, Total | 76 | | - | | 51-149 | - | | 20 |
| Antimony, Total | 163 | | - | | 20-250 | - | | 20 |
| Arsenic, Total | 96 | | - | | 70-130 | - | | 20 |
| Barium, Total | 96 | | - | | 75-125 | - | | 20 |
| Beryllium, Total | 92 | | - | | 75-125 | - | | 20 |
| Cadmium, Total | 94 | | - | | 75-125 | - | | 20 |
| Calcium, Total | 90 | | - | | 73-128 | - | | 20 |
| Chromium, Total | 98 | | - | | 70-130 | - | | 20 |
| Cobalt, Total | 94 | | - | | 75-125 | - | | 20 |
| Copper, Total | 89 | | - | | 75-125 | - | | 20 |
| Iron, Total | 103 | | - | | 36-164 | - | | 20 |
| Lead, Total | 106 | | - | | 72-128 | - | | 20 |
| Magnesium, Total | 89 | | - | | 63-138 | - | | 20 |
| Manganese, Total | 92 | | - | | 77-123 | - | | 20 |
| Nickel, Total | 89 | | - | | 70-130 | - | | 20 |
| Potassium, Total | 86 | | - | | 59-141 | - | | 20 |
| Selenium, Total | 99 | | - | | 66-134 | - | | 20 |
| Silver, Total | 98 | | - | | 70-131 | - | | 20 |
| Sodium, Total | 91 | | - | | 35-164 | - | | 20 |
| Thallium, Total | 97 | | - | | 70-130 | - | | 20 |
| Vanadium, Total | 97 | | - | | 74-126 | - | | 20 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

**Lab Number:** L2258475

**Report Date:** 10/26/22

| Parameter | LCS %Recovery | LCSD %Recovery | %Recovery Limits | RPD | RPD Limits |
|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1702281-2 SRM Lot Number: D113-540 | | | | | |
| Zinc, Total | 88 | - | 70-130 | - | 20 |
| Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1702283-2 SRM Lot Number: D113-540 | | | | | |
| Mercury, Total | 95 | - | 60-140 | - | |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1702281-3 QC Sample: L2258487-01 Client ID: MS Sample | | | | | | | | | | | | |
| Aluminum, Total | 9300 | 192 | 9000 | **0** | Q | - | - | | 75-125 | - | | 20 |
| Antimony, Total | 2.9 | 48.1 | 46 | 90 | | - | - | | 75-125 | - | | 20 |
| Arsenic, Total | 9.8 | 11.6 | 21 | 97 | | - | - | | 75-125 | - | | 20 |
| Barium, Total | 100 | 192 | 290 | 99 | | - | - | | 75-125 | - | | 20 |
| Beryllium, Total | 0.44 | 4.81 | 4.8 | 90 | | - | - | | 75-125 | - | | 20 |
| Cadmium, Total | 0.15J | 5.1 | 5.3 | 104 | | - | - | | 75-125 | - | | 20 |
| Calcium, Total | 19000 | 963 | 18000 | **0** | Q | - | - | | 75-125 | - | | 20 |
| Chromium, Total | 16 | 19.2 | 32 | 83 | | - | - | | 75-125 | - | | 20 |
| Cobalt, Total | 8.5 | 48.1 | 50 | 86 | | - | - | | 75-125 | - | | 20 |
| Copper, Total | 64 | 24.1 | 67 | **12** | Q | - | - | | 75-125 | - | | 20 |
| Iron, Total | 26000 | 96.3 | 25000 | **0** | Q | - | - | | 75-125 | - | | 20 |
| Lead, Total | 77 | 51 | 120 | 84 | | - | - | | 75-125 | - | | 20 |
| Magnesium, Total | 5400 | 963 | 5000 | **0** | Q | - | - | | 75-125 | - | | 20 |
| Manganese, Total | 210 | 48.1 | 210 | **0** | Q | - | - | | 75-125 | - | | 20 |
| Nickel, Total | 15 | 48.1 | 57 | 87 | | - | - | | 75-125 | - | | 20 |
| Potassium, Total | 3000 | 963 | 4100 | 114 | | - | - | | 75-125 | - | | 20 |
| Selenium, Total | 2.4 | 11.6 | 14 | 121 | | - | - | | 75-125 | - | | 20 |
| Silver, Total | 0.12J | 28.9 | 27 | 93 | | - | - | | 75-125 | - | | 20 |
| Sodium, Total | 1200 | 963 | 2000 | 83 | | - | - | | 75-125 | - | | 20 |
| Thallium, Total | 0.24J | 11.6 | 11 | 95 | | - | - | | 75-125 | - | | 20 |
| Vanadium, Total | 20 | 48.1 | 67 | 98 | | - | - | | 75-125 | - | | 20 |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

**Lab Number:** L2258475
**Report Date:** 10/26/22

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | | MSD Found | MSD %Recovery | Recovery Limits | RPD | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1702281-3 QC Sample: L2258487-01 Client ID: MS Sample | | | | | | | | | | |
| Zinc, Total | 98 | 48.1 | 100 | **4** | Q | - | - | 75-125 | - | 20 |
| Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1702283-3 QC Sample: L2258803-01 Client ID: MS Sample | | | | | | | | | | |
| Mercury, Total | 6.03 | 1.42 | 8.93 | **204** | Q | - | - | 80-120 | - | 20 |

# Lab Duplicate Analysis

***Batch Quality Control***

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

***Lab Number:*** L2258475

***Report Date:*** 10/26/22

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1702281-4 QC Sample: L2258487-01 Client ID: DUP Sample | | | | | | |
| Lead, Total | 77 | 59 | mg/kg | **26** | Q | 20 |
| Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1702283-4 QC Sample: L2258803-01 Client ID: DUP Sample | | | | | | |
| Mercury, Total | 6.03 | 6.29 | mg/kg | 4 | | 20 |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

# Lab Serial Dilution Analysis
**Batch Quality Control**

**Lab Number:** L2258475
**Report Date:** 10/26/22

| Parameter | Native Sample | Serial Dilution | Units | % D | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1702281-6 QC Sample: L2258487-01 Client ID: DUP Sample | | | | | | |
| Lead, Total | 77 | 77 | mg/kg | 0 | | 20 |

# INORGANICS
# &
# MISCELLANEOUS

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-01
Client ID: CD10427CE01
Sample Location: MASSENA,NY
Sample Depth:
Matrix: Soil

Date Collected: 10/18/22 12:50
Date Received: 10/19/22
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Solids, Total | 68.3 | | % | 0.100 | NA | 1 | - | 10/20/22 13:57 | 121,2540G | RI |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-02
Client ID: CD10427CE02
Sample Location: MASSENA,NY
Sample Depth:
Matrix: Soil

Date Collected: 10/18/22 13:30
Date Received: 10/19/22
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Solids, Total | 70.3 | | % | 0.100 | NA | 1 | - | 10/20/22 13:57 | 121,2540G | RI |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-03
Client ID: CD10427CE03
Sample Location: MASSENA,NY
Sample Depth:
Matrix: Soil

Date Collected: 10/18/22 13:50
Date Received: 10/19/22
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Solids, Total | 49.2 | | % | 0.100 | NA | 1 | - | 10/20/22 13:57 | 121,2540G | RI |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-04
Client ID: CD10427CE04
Sample Location: MASSENA,NY
Sample Depth:
Matrix: Soil

Date Collected: 10/18/22 14:30
Date Received: 10/19/22
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Solids, Total | 49.6 | | % | 0.100 | NA | 1 | - | 10/20/22 13:57 | 121,2540G | RI |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427
**Lab Number:** L2258475
**Report Date:** 10/26/22

## SAMPLE RESULTS

Lab ID: L2258475-05
Client ID: CD10427CE05
Sample Location: MASSENA,NY
Sample Depth:
Matrix: Soil

Date Collected: 10/18/22 14:50
Date Received: 10/19/22
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Solids, Total | 70.7 | | % | 0.100 | NA | 1 | - | 10/20/22 13:57 | 121,2540G | RI |

# Lab Duplicate Analysis

***Batch Quality Control***

**Project Name:** PROPOSED HYDROGEN PLANT

**Project Number:** CD10427

***Lab Number:*** L2258475

***Report Date:*** 10/26/22

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1702093-1 QC Sample: L2258302-01 Client ID: DUP Sample | | | | | | |
| Solids, Total | 82.4 | 81.6 | % | 1 | | 20 |

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

**Lab Number:** L2258475
**Report Date:** 10/26/22

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

### Cooler Information

| Cooler | Custody Seal |
|---|---|
| A | Absent |

### Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2258475-01A | Vial Large Septa unpreserved (4oz) | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-01B | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),AL-6020T(180),CO-6020T(180) |
| L2258475-01C | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(365) |
| L2258475-01D | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(365) |
| L2258475-01E | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(365) |
| L2258475-01F | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(365) |
| L2258475-01X | Vial MeOH preserved split | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-01Y | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-01Z | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-02A | Vial Large Septa unpreserved (4oz) | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-02B | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | SE-6020T(180),TL-6020T(180),FE-6020T(180),BA-6020T(180),NI-6020T(180),CR-6020T(180),CA-6020T(180),K-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),HG-T(28),MG-6020T(180),AL-6020T(180),CD-6020T(180),AG-6020T(180),CO-6020T(180) |
| L2258475-02C | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-02D | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |



*Values in parentheses indicate holding time in days

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

**Lab Number:** L2258475
**Report Date:** 10/26/22

## Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2258475-02E | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-02F | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-02X | Vial MeOH preserved split | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-02Y | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-02Z | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-03A | Vial Large Septa unpreserved (4oz) | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-03B | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),K-6020T(180),CA-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AG-6020T(180),HG-T(28),MG-6020T(180),AL-6020T(180),CD-6020T(180),CO-6020T(180) |
| L2258475-03C | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(365) |
| L2258475-03D | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(365) |
| L2258475-03E | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(365) |
| L2258475-03F | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(365) |
| L2258475-03X | Vial MeOH preserved split | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-03Y | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-03Z | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-04A | Vial Large Septa unpreserved (4oz) | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-04B | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | TL-6020T(180),SE-6020T(180),BA-6020T(180),FE-6020T(180),CA-6020T(180),K-6020T(180),CR-6020T(180),NI-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),HG-T(28),AG-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),CO-6020T(180) |
| L2258475-04C | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-04D | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |



*Values in parentheses indicate holding time in days

**Project Name:** PROPOSED HYDROGEN PLANT
**Project Number:** CD10427

**Lab Number:** L2258475
**Report Date:** 10/26/22

## Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2258475-04E | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-04F | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-04X | Vial MeOH preserved split | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-04Y | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-04Z | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-05A | Vial Large Septa unpreserved (4oz) | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-05B | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | SE-6020T(180),BA-6020T(180),FE-6020T(180),TL-6020T(180),CA-6020T(180),K-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),MG-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180) |
| L2258475-05C | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-05D | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-05E | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-05F | Glass 120ml/4oz unpreserved | A | NA | | 2.5 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),HERB-8151(14) |
| L2258475-05X | Vial MeOH preserved split | A | NA | | 2.5 | Y | Absent | | NYTCL-8260(14) |
| L2258475-05Y | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |
| L2258475-05Z | Vial Water preserved split | A | NA | | 2.5 | Y | Absent | **21-OCT-22 12:52** | NYTCL-8260(14) |



*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | PROPOSED HYDROGEN PLANT | **Lab Number:** | L2258475 |
| **Project Number:** | CD10427 | **Report Date:** | 10/26/22 |

## GLOSSARY

***Acronyms***

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
| **Project Name:** | PROPOSED HYDROGEN PLANT | **Lab Number:** | L2258475 |
| **Project Number:** | CD10427 | **Report Date:** | 10/26/22 |

***Footnotes***

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

***Terms***

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

***Data Qualifiers***

**A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

**B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

**C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

**D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

**E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

**F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

**G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

**H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

**I** - The lower value for the two columns has been reported due to obvious interference.

**J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
| **Project Name:** | PROPOSED HYDROGEN PLANT | **Lab Number:** | L2258475 |
| **Project Number:** | CD10427 | **Report Date:** | 10/26/22 |

***Data Qualifiers***

Identified Compounds (TICs).

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**S** - Analytical results are from modified screening analysis.

**V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

| | | | |
|---|---|---|---|
| **Project Name:** | PROPOSED HYDROGEN PLANT | **Lab Number:** | L2258475 |
| **Project Number:** | CD10427 | **Report Date:** | 10/26/22 |

## REFERENCES


1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.


## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

# Certification Information

**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**
**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene
**EPA 625/625.1:** alpha-Terpineol
**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
**EPA 8270D/8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
**SM4500**: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

**Mansfield Facility**
**SM 2540D:** TSS
**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**Biological Tissue Matrix:** EPA 3050B

**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

***Drinking Water***
**EPA 300.0**: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
**EPA 332**: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
**Microbiology**: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

***Non-Potable Water***
**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
**EPA 624.1**: Volatile Halocarbons & Aromatics,
**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
**Microbiology**: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

**Mansfield Facility:**

***Drinking Water***
**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
**EPA 522, EPA 537.1.**

***Non-Potable Water***
**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
**EPA 245.1** Hg.
**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

No: 14349

L2258475

# ATLANTIC TESTING LABORATORIES

## Environmental Chain-Of-Custody Record


**Albany** — 22 Corporate Drive, Clifton Park, NY 12065, 518/383-9144 (T), 518/383-9166 (F), labsAT@atlantictesting.com

**Binghamton** — 126 Park Avenue, Binghamton, NY 13903, 607/773-1812 (T), 607/773-1835 (F), labsBT@atlantictesting.com

**Canton** — 6431 U.S. Highway 11, Canton, NY 13617, 315/386-4578 (T), 315/386-1012 (F), labsCT@atlantictesting.com

**Elmira** — 2330 Route 352, Elmira, NY 14903, 607/737-0700 (T), 607/737-0714 (F), labsHT@atlantictesting.com

**Plattsburgh** — 130 Arizona Ave, Plattsburgh, NY 12903, 518/563-5878 (T), 518/562-1321 (F), labsPL@atlantictesting.com

**Poughkeepsie** — 251 Upper North Road, Highland, NY 12528, 845/691-6098 (T), 845/691-6099 (F), labsPT@atlantictesting.com

**Rochester** — 3495 Winton Place, Rochester, NY 14623, 585/427-9020 (T), 585/427-9021 (F), labsRT@atlantictesting.com

**Syracuse** — 6085 Court Street Road, Syracuse, NY 13206, 315/699-5281 (T), 315/699-3374 (F), labsST@atlantictesting.com

**Utica** — 301 St. Anthony Street, Utica, NY 13501, 315/735-3309 (T), 315/735-0742 (F), labsUT@atlantictesting.com

**Watertown** — 26581 NYS Route 283, Watertown, NY 13601, 315/786-7887 (T), 315/786-2022 (F), labsWT@atlantictesting.com


| Project No. | Client Name | QA/QC Code | Parameters | Report Distribution |
|---|---|---|---|---|
| CD10427 Page 1 of 1 | Air Products & Chemicals Inc. | ☐ NYSDEC ☐ SW-846 ☐ NYSDOH ☐ CLP ☐ Other | | TAT Required: ☐ 6hr ☐ 12hr ☐ 24hr ☐ 48hr ☐ 72hr ☒ 5day ☐ 10day ☐ Other |
| ATL Project Contact: | Cheyenne Dashnaw | Project Location | | E-mail Results: labsct @atlantictesting.com |
| Project Name: | Proposed Hydrogen Plant | Massena, NY | | |

| Date | Time | Field Sample No. | Sample Location | Sample Type | No. of Containers | EPA 8260 - VOC | EPA 8270 (BN) Semi-VOC | EPA 8081 Pesticides | EPA 8082 PCB | TAL Metals | EPA 8151 Herbicides | Notes | Laboratory Sample ID No. | Custody Seal: X= intact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/18/22 | 1250 | CD10427CE01 | North of B-1 | G/S | 6 | X | X | X | X | X | X | | | |
| 10/18/22 | 1330 | CD10427CE02 | North of B-2 | G/S | 6 | X | X | X | X | X | X | | | |
| 10/18/22 | 1350 | CD10427CE03 | South of B-3 | G/S | 6 | X | X | X | X | X | X | | | |
| 10/18/22 | 1430 | CD10427CE04 | North of B-4 | G/S | 6 | X | X | X | X | X | X | | | |
| 10/18/22 | 1450 | CD10427CE05 | North of B-5 | G/S | 6 | X | X | X | X | X | X | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Samplers Name: | Jordan Stevens | Date: | 10/19/22 | Received for Name: | Date: | Shipment Rec'd Intact? |
| Samplers Signature: | | Time: | 1500 | Laboratory Signature: | Time: | ☐ YES ☐ NO |

| Samples Relinquished By: | | | Samples Received By: | | | Sample Type Code Key: | | | | Laboratory Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| Name: | Jordan Stevens | Date: 10/19/22 | Name: | ATL | Date: 10/19/22 | Description: C Composite; G Grab; Q QA/QC; O Other | | | | |
| Signature: | | Time: 1245 | Signature: | Secure Storage | Time: 1245 | Matrix: DW Drinking Water; GW Groundwater; WW Wastewater; SM Stormwater; O Oil; L Liquid; S Soil; SL Sludge; WS Solid Waste; B Bulk; WP Wipe; A Air | | | | |
| Name: | ATL | Date: 10/19/22 | Name: | ATL C. Steele | Date: 10/19/22 | | | | | |
| Signature: | Secure Storage | Time: 1745 | Signature: | Chi Steele | Time: 1745 | | | | | |

Chi Steele 10/19/22 1745

10/20/22 0010

**Distribution:** White with Samples; Pink to ATL Files

ENV-001B

pdrive:Forms\Environmental\OfficeForms\Environmental Chain-Of-Custody Record rev 6: 02/22/19

# ATTACHMENT B

## SUMMARY OF LABORATORY RESULTS

# Table B-1
# Summary of Laboratory Analysis Results
# Proposed Hydrogen Plant, Massena, New York
# Soil Samples Collected October 18, 2022

| Sample Identification | CD10427CD01 | CD10427CD02 | CD10427CD03 | CD10427CD04 | CD10427CD05 | NYSDEC Unrestricted Use Soil Cleanup Objectives |
|---|---|---|---|---|---|---|
| **Sample Date** | **10-18-2022** | **10-18-2022** | **10-18-2022** | **10-18-2022** | **10-18-2022** | |
| **Sample Type** | **Grab** | **Grab** | **Grab** | **Grab** | **Grab** | |
| **Volatile Organic Compounds (ppm)** | | | | | | |
| Toluene | ND | 0.00088 | 0.0011 | 0.0011 | ND | 0.7 |
| All Other Target VOC | ND | ND | ND | ND | ND | **---** |
| **Semi-VOC (ppm)** | | | | | | |
| Bis(2-ethylhexyl)phthalate | ND | ND | ND | 0.14 | ND | 50 |
| All Other Target Semi-VOC | ND | ND | ND | ND | ND | --- |
| **Pesticides (ppm)** | | | | | | |
| All Other Target Pesticides | ND | ND | ND | ND | ND | --- |
| **Herbicides (ppm)** | | | | | | |
| All Other Target Herbicides | ND | ND | ND | ND | ND | --- |
| **Polychlorinated Biphenyl (ppm)** | | | | | | |
| Total PCB | ND | ND | ND | ND | ND | 0.1 |
| **TAL Metals (ppm)** | | | | | | |
| Silver | ND | ND | ND | 0.13 | ND | 2 |
| Aluminum | **18,000** | 8,000 | 6,200 | 10,000 | 6,400 | 10,000[1] |
| Arsenic | 4.1 | 3.8 | 3 | 5.4 | 4.1 | 13 |
| Barium | 170 | 56 | 42 | 74 | 57 | 350 |
| Beryllium | 0.80 | 0.42 | 0.33 | 0.68 | 0.30 | 7.2 |
| Calcium | 6,300 | 5,900 | 5,800 | 8,500 | 3,600 | 10,000[1] |
| Cadmium | 0.29 | 0.26 | 0.30 | 0.74 | 0.25 | 2.5 |
| Cobalt | 11 | 4.6 | 3.4 | 4.5 | 4.4 | 20[1] |
| Chromium | 28 | 12 | 10 | 19 | 9.9 | 30 |
| Copper | 14 | 12 | 10 | 24 | 11 | 50 |
| Iron | **25,000** | **15,000** | **12,000** | **17,000** | **14,000** | 2,000[1] |
| Mercury | ND | ND | ND | 0.141 | ND | 0.18 |
| Potassium | 1,800 | 500 | 370 | 570 | 620 | -- |
| Magnesium | 6,100 | 2,200 | 1,900 | 3,400 | 1,600 | -- |
| Manganese | 520 | 410 | 120 | 160 | 520 | 1,600 |
| Sodium | 110 | 45 | 44 | 68 | 33 | -- |
| Nickel | 21 | 9.9 | 9 | 17 | 9.3 | 30 |
| Lead | 16 | 15 | 15 | 20 | 17 | 63 |
| Antimony | ND | ND | ND | 0.82 | 0.29 | 12[1] |
| Selenium | **5.2** | 3.8 | 3.4 | **5.6** | 1.9 | 3.9 |
| Thallium | 0.22 | 0.10 | ND | 0.21 | 0.12 | 5[1] |
| Vanadium | **40** | 24 | 20 | 33 | 20 | 39[1] |
| Zinc | 63 | 45 | 32 | 52 | 35 | 109 |

*NOTES*:

Samples collected by representatives of Atlantic Testing Laboratories, Limited, and analyzed by Alpha Analytical of Westborough, Massachusetts (NYSDOH ELAP No. 11148).

All laboratory results and guidance values are expressed in parts per million (ppm), or mg/kg.

ND = Not detected above respective method detection limit

NYSDEC Soil Cleanup Objectives (SCO) were obtained from the NYSDEC Final Commissioner Policy, CP-51, dated October 21, 2010, and are representative of the 6 NYCRR Part 375 Unrestricted Use SCO.

[1] Compound is not listed in 6 NYCRR Part 375. Value provided is the most restrictive of Supplemental Soil Cleanup Objectives listed in CP-51.