Confidential Communication Attorney/Client/Privileged Work Product Prepared for Counsel



July 11, 2016

Stora Enso C/O John T. Kolaga, Esq. Rupp Baase Pfalzgraf Cunningham LLC 1600 Liberty Building Buffalo, New York 14202

RE: IN-SITU BIOREMEDIATION MONITORING REPORT,
VAILS GATE MANUFACTURING, LLC, VAILS GATE,
NEW YORK, NYSDEC SITE No. 336065

Dear Mr. Kolaga:

Leader Consulting Services, Inc. ("Leader") is pleased to provide Rupp Baase Pfalzgraf Cunningham, LLC ("RBFC"), on behalf of Stora Enso, with this report summarizing the results of the In-Situ Bioremediation Quarterly Monitoring completed at the former Vails Gate Manufacturing facility ("VGM") at 1073 Route 94 in Vails Gate, New York (hereafter referred to as "the Site"). The Site is currently identified as the Vails Gate Business Center ("VGBC"). This is the seventh Quarterly Monitoring Report required under the Remedial Action Work Plan ("RAWP"). It includes the field and laboratory results from the seventh quarterly sampling event.

1.0 BACKGROUND AND PURPOSE

Leader was retained to implement the New York State Department of Environmental Conservation ("NYSDEC")-approved RAWP that was developed for Area of Concern 6 ("AOC 6") at the Site. As identified in the approved RAWP, In-situ bioremediation was the selected remedial alternative identified in the NYSDEC-approved Corrective Measure Study ("CMS"). The Site-specific Standards, Criteria and Guidance ("SCGs") applicable to the RAWP were developed to meet the Remedial Action Objectives ("RAOs") of the CMS. An "unrestricted use remedy" has been established for the Site, which is based on the regulatory standard values for Class GA groundwater identified in 6 NYCRR Part 703.5. The RAWP was developed to address the SCGs and RAOs for the Site. The RAWP has been implemented in accordance with NYSDEC Department of Environmental Remediation ("DER") Guidance Document DER-10, *Technical Guidance for Site Investigation and Remediation*.

2.0 SCOPE-OF-WORK

The scope of work for the In-Situ Bioremediation program identified in the RAWP was based on the March 2012 Phase II RCRA Facility Investigation ("RFI") and the 2013 CMS. Quarterly sampling and laboratory analyses of groundwater samples from four (4) groundwater monitoring wells (MW-14, MW-5A/AR, MW-16 and MW-CHA-RFI-7) are required per the RAWP. Included in this report are the seventh quarterly sampling event Analytical Laboratory Results and Summary Tables (Attachment A) and a Data Validation Summary (Attachment B). Figure 1

John Kolaga, Esq. July 11, 2016 Page 2

Confidential Communication Attorney/Client/Privileged Work Product Prepared for Counsel



includes the approximate Injection Point ("IP") locations used to apply bioremediation solutions into the subsurface at AOC 6, and the location of the monitoring wells.

3.0 QUARTERLY SAMPLING PROGRAM

The seventh quarterly sampling event of the bioremediation program was conducted on May 9, 2016. The laboratory parameters for the quarterly samples included analysis for volatile organic compounds ("VOCs"), sulfate, total organic carbon ("TOC"), and dissolved iron. The field parameters included dissolved oxygen ("DO"), pH, oxidation reduction potential ("redox"), temperature and turbidity. Laboratory and field data were reviewed to evaluate VOC concentrations and field data parameters from groundwater samples from each of the wells to assess the impact of biotreatment activity within AOC 6.

4.0 FIELD AND LABORATORY GROUNDWATER SAMPLE RESULTS

4.1 GROUNDWATER SAMPLE FIELD DATA RESULTS

The DO concentrations within the samples collected from the four (4) wells ranged from 1,780 parts per billion ("ppb") to 2,800 ppb. The pH levels within the samples collected from the four (4) wells ranged from 6.90 standard units ("SUs") to 7.58 SUs. Redox values of the samples collected from the four (4) wells ranged from -62 milliVolts ("mVs") to 73 mVs. Data interpretation is discussed in Section 4.0.

4.2 GROUNDWATER SAMPLE LABORATORY ANALYTICAL DATA RESULTS

GWM Well MW-5A/AR

Acetone concentrations decreased from 6.1 ppb in February 2016, to non-detect ("ND") in May 2016, remaining below the Class GA groundwater standard of 50 ppb. Chloroethane concentrations increased from 68 ppb in February 2016 to a value of 110 ppb in May 2016, which is above the Class GA groundwater standard of 5 ppb. 1,1-dichloroethane concentrations increased from ND in February 2016 to 8.6 ppb in May 2016, above the Class GA groundwater standard of 5 ppb. 1,1,1-trichloroethane concentrations increased from ND in February 2016 to 5.2 ppb in May 2016, slightly above the Class GA groundwater standard of 5 ppb. 2-butanone concentrations decreased from 8.6 ppb in February 2016 to ND in May 2016, remaining below the Class GA groundwater standard of 50 ppb. 1,2,4 trimethylbenzene concentrations decreased from 2.5 ppb in February 2016 to 2.25 ppb in May 2016, remaining below the Class GA groundwater standard of 5 ppb. The remaining VOC analytes were not detected within the May 2016 sample.

GWM Well MW-14

Acetone was detected within the 7th Quarter (May 2016) sample from MW-14 at a "J" flagged (estimated) value of 8.2 ppb, exhibiting a decrease in concentration from the 12 ppb detected in February 2016, remaining below the Class GA groundwater standard of 50 ppb. Chloroethane concentrations decreased slightly from 6.6 ppb in February 2016 to ND in May 2016, below the Class GA groundwater standard of 5 ppb. 1,1- dichloroethane concentrations increased from 16

John Kolaga, Esq. July 11, 2016 Page 3

Confidential Communication Attorney/Client/Privileged Work Product Prepared for Counsel



ppb in February 2016 to 26 ppb in May 2016, above the Class GA standard of 5 ppb. 1,1-dichloroethene concentrations increased slightly from 1.7 ppb in February 2016 to 2.3 ppb in May 2016, remaining below the Class GA standard of 5 ppb. Vinyl chloride concentrations decreased from 1.6 ppb in February 2016 to ND in May 2016, remaining below the Class GA groundwater standard of 2 ppb. The remaining VOC analytes were not detected within the May 2016 sample.

GWM Well MW-16

1,1- dichloroethane concentrations decreased from 5.2 ppb in February 2016 to ND in May 2016, now below the Class GA standard of 5 ppb. 1,1- dichloroethene concentrations also decreased, from 1.8 ppb in February 2016 to ND in May 2016, remaining below the Class GA groundwater standard of 5 ppb. Tetrachloroethene concentrations decreased from 2.5 ppb in February 2016 to the ("c") flagged (estimated) value of 1.3 ppb in May 2016, and remains below the Class GA groundwater standard of 5 ppb. The remaining VOC analytes were not detected within the May 2016 sample.

GWM Well MW-CHA-RFI-7

Each of the VOC concentrations from the sample collected from MW-CHA-RFI-7 during the May 2016 sampling event were non-detectable.

5.0 DATA INTERPRETATION

5.1 FIELD DATA

TOC concentrations remain sufficiently high in monitoring wells MW-5A/AR and MW-14 to allow for continuing microbial activity. Groundwater pH levels indicate an environment conducive to continued microbial activity. Though not fluctuating significantly since media injection, the redox values indicate that reducing conditions exist for dechlorination.

5.2 LABORATORY DATA

Dissolved iron and sulfate concentrations remain within ranges to support dechlorination. Well MW-5A/AR currently exhibits two (2) analyte concentrations (choloroethane and 1,1-dichloroethane) above Class GA groundwater standards, and one (1) analyte concentration (1,1-trichloroethane) slightly above Class GA groundwater standards. Well MW-14 currently exhibits one (1) analyte concentration (1,1-dichloroethane) above the Class GA groundwater standard. Well MW-16 currently exhibits no analyte concentrations above the Class GA groundwater standard.

There were no detected VOC analytes within the groundwater sample collected in May 2016 from MW-CHA-RFI-7. This groundwater monitoring well was included in this sampling program as it represents a "background" well, hydraulically upgradient and outside of the influence of AOC 6.

John Kolaga, Esq. July 11, 2016 Page 4

Confidential Communication Attorney/Client/Privileged Work Product Prepared for Counsel



It is important to note that the upcoming August 2016 sampling event will mark the completion of the scheduled 24 month remediation project. The August sampling event will include additional bioremediation indicator parameter laboratory analysis, identical to the baseline laboratory analysis completed in August 2014, and will provide the necessary data to further assess the effectiveness of the biotreatment media.

If you need any additional information, please contact the undersigned at (716) 565-0963.

Very truly yours,

Leader Consulting Services, Inc.

eith D. Heller

Keith D. Keller Project Manager

Jeffrey A. Wittlinger, P.E., BCEE

Principal

Attachment A

Analytical Laboratory Results and Summary Tables

TABLE 1a - MW-5A/AR

GROUNDWATER MONITORING WELL SAMPLE LABORATORY ANALYTICAL DATA SUMMARY - DECTECTED PARAMETERS

| | | | | | MW-5A | /AR | | | | | | | Class GA Groundwater Standard (ppb) (3) |
|----------------------------------|-----------|---------------|-------------------|--------------|--------------------|------------------------|---------------|---------------------|---------------------|---------------------|---------------|-----------|---|
| Analyte ⁽¹⁾ | June 2011 | November 2011 | July 2012 | January 2013 | August 2014 (6) | November 2014 (7) | February 2015 | May 2015 | August 2015 | November 2015 | February 2016 | May 2016 | |
| Quarterly Sampling Parameters | | | | | | | | | | | | | |
| Volatiles | | | | | | | | | | | | | |
| acetone | ND | ND | ND | ND | ND | 440 ⁽⁹⁾ | 407 | 77 ⁽¹¹⁾ | 110 | ND | 6.1 | ND | 50 ⁽⁴⁾ |
| chlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| chloroethane | 280 | 290 | 520 | 150 | 250 ⁽⁹⁾ | 590 ⁽⁹⁾⁽¹⁰⁾ | 1010 | 470 ⁽¹¹⁾ | 540 ⁽¹¹⁾ | 290 ⁽¹¹⁾ | 68 | 110 | 5 |
| I,1-dichloroethane | 650 | 1000 | 830 | 280 | 660 ⁽⁹⁾ | 110 | 325 | 41 | 3.5 | ND | ND | 8.6 | 5 |
| L,1-dichloroethene | ND | 110 (2) | 29 ⁽²⁾ | 11 (2) | 22 | ND | 8.62 | 1.9 | ND | 1.1 | ND | ND | 5 |
| cis-1,2 dichloroethene | ND ND | ND ND | ND | ND ND | ND ND | ND ND | ND | ND | ND ND | ND | ND ND | ND ND | 5 |
| L.4-dioxane | ND | ND | ND | ND ND | ND | ND ND | ND | ND ND | ND ND | ND | ND | ND ND | (5) |
| etrachloroethene | ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND | ND ND | ND ND | ND ND | ND | ND ND | 5 |
| oluene | ND | ND ND | ND | ND ND | ND | ND ND | ND | ND ND | 2.8 | 2.6 | ND | ND | 5 |
| I,1,1-trichloroethane | 890 | 3000 | 440 | 210 | 750 ⁽⁹⁾ | 33 | 200 | ND | ND | ND ND | ND | 5.2 | 5 |
| L.1.2-trichloroethane | ND | ND | ND | ND ND | ND ND | ND | ND ND | ND ND | ND ND | ND | ND | ND | 1 |
| vinyl chloride | ND | ND | 15 ⁽²⁾ | ND ND | 14 | 6 ⁽²⁾⁽¹⁰⁾ | 3.59 | 2.4 | ND ND | ND | ND ND | ND | 2 |
| 2-butanone (MEK) | ND ND | ND | ND | ND ND | ND | 190 ⁽¹⁰⁾ | 82.1 | 4.5 (2) | ND ND | ND | 8.6 | ND ND | 50 ⁽⁴⁾ |
| | 1 | | | | | 3 ⁽²⁾ | | | | 1 | | | (5) |
| 1-methyl-2-pentanone | ND | ND | ND | ND | ND | _ | ND | ND | ND | ND | ND | ND | 10 ⁽⁴⁾ |
| naphthalene | ND | ND | ND | ND | ND | ND ND | ND | ND ND | 2.7 | 2.2 | ND | ND | 5 |
| n-propylbenzene | ND | ND ND | ND | ND ND | ND ND | ND ND | ND | ND ND | 1.5 | 1.4 | ND ND | ND | 5 |
| 1,2,3 trichlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.5 ⁽⁴⁾ |
| nexachlorobutadiene | ND | ND | ND | ND | ND | ND ND | ND | ND | ND | ND | ND | ND | |
| 1,2,4 trichlorobenzene | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND 2.1 | ND 5.1 | ND 5.4 | ND 2.5 | ND 2.2 | 5 5 |
| 1,3,5 trimethylbenzene/P | ND | ND | ND | ND | ND | ND | ND | 2.1 | 5.1 | 5.4 | 2.5 | 2.2 | |
| ethyltoluene | ND | ND | ND | ND | ND | ND | ND | ND | 1.4 | ND | ND | ND | 5 |
| ec-butylbenzene | ND | ND | ND | ND | ND | ND | ND | 1.1 | 1.2 | 1.3 | ND | ND | 5 |
| 1,2-dichloroethane | ND | ND | ND | ND | 1 (2) | 2 (2) | ND | ND | ND | 1.8 | ND | ND | 0.6 |
| richloroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| chloroform | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 7 |
| Wet Chemistry and | | | | | | | | | | | | | |
| Dissolved Metals | | | | | | | | | | | | | |
| sulfate | NA | NA | NA | NA | 31,500 | <5,000 | <5,000 | 700 ⁽²⁾ | <5,000 | <5,000 | 3,240 | 1,020 (2) | 250,000 |
| otal organic carbon (TOC) | NA | NA | NA | NA | 3,410 | 288,000 | 95,400 | 48,900 | 30,200 | 25,600 | 14,600 | 6,640 | NS |
| dissolved iron | NA | NA | NA | NA | ND | 50,600 | 42,900 | 5,780 | 6,050 | 30,700 | 14,400 | 10,900 | as low as possible, NTE 500,000 |
| | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | |

NOTES:

- (1) All analyte values expressed as parts per billion ("ppb").
- (2) The analyte was "J" flagged, indicating that it was detected below the laboratory quantification limits, and should be considered estimated.
- (3) Standard is identified in 6 NYCRR, Part 703.5, Table 1, Water Quality Standards Surface Waters and Groundwater.
- (4) Standard is not identified in 6 NYCRR, Part 703.5, Table 1. NYSDEC TOGS 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations has been used.
- (5) Analyte Standard does not exist in Part 703.5, Table 1. Analyte is identified in TOGS 1.1.1, Table 3 as unregulated.
- (6) Sampling date of August 11, 2014, reflects pre-bioremediation injection date of August 13 and 14, 2014.
- (7) November 2014 sampling event reflects first post-bioremediation data.
- (8) The analyte was "B" flagged, indicating that it was detected in the laboratory method blank, and should be considered estimated.
- (9) The analyte was "E"flagged, indicating that the concentration exceeded the calibration range of the laboratory instrument, and should be considered an estimate.
- (10) The analyte was "Z"flagged, indicating that it did not meet the variability criteria for the continuous calibration check (CCV) of 20%, and the value should be considered estimated.
- (11) The analyte was "D" flagged, indicating that the surrogate concentration was diluted outside the laboratory acceptance criteria.
- (12) The analyte was "U " flagged, indicating that the analyte was not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.
- NA -Contaminant was not included for analysis during RFI.
- A value identified in red indicates a concentration of the analyte in excess of the 6 NYCRR, Part 703.5 Table 1 standard or NYSDEC TOGS 1.1.1 guidance value.

TABLE 1b - MW-14

GROUNDWATER MONITORING WELL SAMPLE LABORATORY ANALYTICAL DATA SUMMARY - DECTECTED PARAMETERS

| | | | | | MW | -14 | | | | | | | Class GA Groundwater Standard (ppb) ⁽³⁾ |
|----------------------------------|-----------|--------------------|-----------|--------------|---------------------|-------------------|---------------|----------|-------------|--|---------------|----------|---|
| Analyte ⁽¹⁾ | June 2011 | November 2011 | July 2012 | January 2013 | August 2014 (6) | November 2014 (7) | February 2015 | May 2015 | August 2015 | November 2015 | February 2016 | May 2016 | (bbs) |
| Quarterly Sampling Parameters | | | | | | | | | | | | | |
| Volatiles | | | | | | | | | | | | | |
| acetone | 19 | 45 | 35 | 11 | 19 ⁽⁹⁾ | ND | 27.3 | 16.0 | 12.0 | 12.0 | 12.0 | 8.2 (2) | 50 ⁽⁴⁾ |
| chlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| chloroethane | ND | ND | ND | ND | 1 ⁽²⁾ | ND | ND | 2.1 | 8.0 | 7.3 | 6.6 | ND | 5 |
| 1,1-dichloroethane | 86 | 79 | 67 | 53 | 47 | 1 (2) | 43 | 48 | 31 | 22 | 16 | 26 | 5 |
| 1,1-dichloroethene | 5.2 | 3.1 (2) | 4.6 (2) | 2.7 (2) | 3 (2) | 2 (2) | 3.51 | 3.1 | 3.6 | 3.5 | 1.7 | 2.3 | 5 |
| cis-1,2 dichloroethene | ND | ND | ND | ND | ND ND | ND ND | ND | ND | ND | ND | ND ND | ND ND | 5 |
| 1.4-dioxane | 420 | 620 | 490 | 270 | ND ND | ND | ND ND | ND | ND ND | ND ND | ND ND | ND | (5) |
| tetrachloroethene | ND | ND | ND | ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND | 5 |
| toluene | ND | ND | ND ND | ND | ND ND | ND ND | ND ND | ND | ND ND | ND ND | ND ND | ND | 5 |
| 1,1,1-trichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,1,2-trichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 |
| vinyl chloride | 5.2 | 4.6 ⁽²⁾ | 2.3 (2) | 2.1 (2) | 3 (2) | 2(2)(10) | 2.79 | 2.8 | 3.1 | 2.7 | 1.6 | ND | 2 |
| 2-butanone (MEK) | ND | ND | ND | ND | 2 (2) | 3(2)(10) | ND | 2.2 (2) | ND | ND | ND | ND | 50 ⁽⁴⁾ |
| 4-methyl-2-pentanone | ND | ND | ND | ND | 1 (2) | ND | ND | ND | ND | ND | ND | ND | (5) |
| naphthalene | ND | ND | ND | ND | 2 ⁽²⁾⁽⁸⁾ | ND | ND | ND | ND | ND | ND | ND | 10 ⁽⁴⁾ |
| n-propylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,2,3 trichlorobenzene | ND | ND | ND | ND | 2 ⁽²⁾⁽⁸⁾ | ND | ND | ND | ND | ND | ND | ND | 5 |
| hexachlorobutadiene | ND | ND | ND | ND | 4 ⁽²⁾⁽⁸⁾ | ND | ND | ND | ND | ND | ND | ND | 0.5 ⁽⁴⁾ |
| 1,2,4 trichlorobenzene | ND | ND | ND | ND | 1(2)(8) | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,2,4 trimethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,3,5 trimethylbenzene/P | | | | | | | | | | | | | 5 |
| ethyltoluene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | _ |
| sec-butylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,2-dichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.6 |
| trichloroethene | ND | ND | ND | ND | ND | ND ND | ND | ND | ND ND | ND | ND ND | ND | 5 |
| chloroform | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 7 |
| Wet Chemistry and | 1 | | | | <u> </u> | | | | | | | | |
| Dissolved Metals | | | | | | | | | | | | | |
| sulfate | NA | NA | NA | NA | 14,900 | 25,700 | 31,200 | 31,000 | <5,000 | 18,000 | 13,600 | 21,800 | 250,000 |
| total organic carbon (TOC) | NA | NA | NA | NA | 4,150 | 45,900 | 35,800 | 39,800 | 50,300 | 47,400 | 40,200 | 35,400 | NS |
| dissolved iron | NA | NA | NA | NA | 6,130 | 16,200 | 8,410 | 9,130 | 9,920 | 19,500 | 21,900 | 12,500 | as low as possible, NTE 500,000 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | ╂ |
| | | | l | | l . | | | | l | <u> </u> | | | |

NOTES

- (1) All analyte values expressed as parts per billion ("ppb").
- (2) The analyte was "J" flagged, indicating that it was detected below the laboratory quantification limits, and should be considered estimated.
- (3) Standard is identified in 6 NYCRR, Part 703.5, Table 1, Water Quality Standards Surface Waters and Groundwater
- (4) Standard is not identified in 6 NYCRR, Part 703.5, Table 1. NYSDEC TOGS 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations has been used
- (5) Analyte Standard does not exist in Part 703.5, Table 1. Analyte is identified in TOGS 1.1.1, Table 3 as unregulated
- (6) Sampling date of August 11, 2014, reflects pre-bioremediation injection date of August 13 and 14, 2014
- (7) November 2014 sampling event reflects first post-bioremediation data.
- (8) The analyte was "B" flagged, indicating that it was detected in the laboratory method blank, and should be considered estimated.
- (9) The analyte was "E"flagged, indicating that the concentration exceeded the calibration range of the laboratory instrument, and should be considered an estimate.
- (10) The analyte was "Z"flagged, indicating that it did not meet the variability criteria for the continuous calibration check (CCV) of 20%, and the value should be considered estimated.
- (11) The analyte was "D" flagged, indicating that the surrogate concentration was diluted outside the laboratory acceptance criteria.
- (12) The analyte was "U " flagged, indicating that the analyte was not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.
- NA -Contaminant was not included for analysis during RFI.
- A value identified in red indicates a concentration of the analyte in excess of the 6 NYCRR, Part 703.5 Table 1 standard or NYSDEC TOGS 1.1.1 guidance value

TABLE 1c - MW-16

GROUNDWATER MONITORING WELL SAMPLE LABORATORY ANALYTICAL DATA SUMMARY - DECTECTED PARAMETERS

| | | | | | | MW-16 | | | | | | | Class GA Groundwater Standard (ppb) ⁽³⁾ |
|--|-----------|--|-----------|--------------|----------------------------|-------------------|---------------|--------------------|--------------|---------------|---------------|----------------------|---|
| Analyte ⁽¹⁾ | June 2011 | November 2011 | July 2012 | January 2013 | August 2014 ⁽⁶⁾ | November 2014 (7) | February 2015 | May 2015 | August 2015 | November 2015 | February 2016 | May 2016 | |
| Quarterly Sampling Parameters | | | | | | | | | | | | | |
| Volatiles | | | | | | | | | | | | | |
| acetone | ND | ND | ND | ND | 2 ⁽²⁾⁽⁸⁾ | ND | ND | 4.6 ⁽²⁾ | ND | ND | ND | ND | 50 ⁽⁴⁾ |
| chlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| chloroethane | ND | ND | ND | ND | ND | ND | ND | ND | 3.7 | ND | ND | ND | 5 |
| 1,1-dichloroethane | 17 | 7.9 | 33 | 14 | 14 | 19 | 7.18 | 14 | 73 | 8.4 | 5.2 | ND | 5 |
| 1,1-dichloroethene | 3 (2) | 2.4 (2) | 8.7 | 5.6 | 7 | 9 ⁽²⁾ | 1.73 | 5.6 | 33 | 4.2 | 1.8 | ND | 5 |
| cis-1,2 dichloroethene | ND | ND | ND | ND | ND | ND | ND | ND | 3.4 | ND | ND | ND | 5 |
| 1,4-dioxane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | (5) |
| tetrachloroethene | ND | ND | 3.2 (2) | 3.9 (2) | 2 (2) | 3(2)(10) | 1.42 | 2.2 | 11 | 4.5 | 2.5 | 1.3 (13) | 5 |
| toluene | ND | ND | ND | ND | ND ND | ND | ND | ND | ND | ND | ND ND | ND ND | 5 |
| 1.1.1-trichloroethane | ND | 13 | 2.2 (2) | ND | 1 (2) | 2 (2) | ND | ND | 5.6 | ND | ND | ND ND | 5 |
| 1,1,2-trichloroethane | ND ND | ND | ND | ND | ND ND | ND | ND ND | ND ND | 1.9 | ND ND | ND ND | ND ND | 1 |
| vinyl chloride | ND | ND ND | ND | ND | ND ND | ND ND | ND | 1 | 7.6 | ND ND | ND ND | ND ND | 2 |
| 2-butanone (MEK) | ND | ND ND | ND | ND | ND | ND | ND | ND | ND | ND ND | ND ND | ND ND | 50 ⁽⁴⁾ |
| 4-methyl-2-pentanone | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | (5) |
| | | | | | | | | | | | | | 10 ⁽⁴⁾ |
| naphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND ND | ND ND | ND ND | |
| n-propylbenzene | ND | ND | ND | ND | ND | ND | ND | ND ND | ND ND | ND ND | ND ND | ND ND | <u>5</u> |
| 1,2,3 trichlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | | ND | |
| hexachlorobutadiene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.5 ⁽⁴⁾ |
| 1,2,4 trichlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND ND | ND ND | ND ND | 5 |
| 1,2,4 trimethylbenzene 1,3,5 trimethylbenzene/P | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| ethyltoluene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| sec-butylbenzene | ND ND | ND ND | ND | ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | 5 |
| 1,2-dichloroethane | ND | ND ND | ND | ND | ND ND | ND | ND | ND ND | ND ND | ND ND | ND ND | ND ND | 0.6 |
| trichloroethene | ND | ND ND | ND | ND | ND ND | 3 (2) | ND | ND ND | 1.2 | ND ND | ND ND | ND ND | 5 |
| chloroform | ND | ND | ND | ND | ND | ND | 1.85 | 4.9 | ND ND | ND ND | ND ND | ND ND | 7 |
| Wet Chemistry and Dissolved Metals | | | | | | | | | | | | | |
| sulfate | NA | NA | NA | NA | 14,400 | 17,900 | 18,800 | 20,500 | 25,300 | 13,000 | 10,900 | 3,570 ⁽²⁾ | 250,000 |
| total organic carbon (TOC) | NA NA | NA NA | NA NA | NA NA | 8,650 | 10,800 | 4,220 | 11,700 | 28,000 | 6,180 | 4,940 | 2,700 | NS NS |
| dissolved iron | NA | NA | NA | NA | ND | 231 | 1,470 | 30.9 (2) | 12.2 (2) | 1,460 | 1,250 | <100 | as low as possible, NTE 500,000 |
| | | | | | | | | | | | | | |
| | l | | | | | | | | | | | | 1 |

NOTES:

- (1) All analyte values expressed as parts per billion ("ppb").
- (2) The analyte was "J" flagged, indicating that it was detected below the laboratory quantification limits, and should be considered estimated.
- (3) Standard is identified in 6 NYCRR, Part 703.5, Table 1, Water Quality Standards Surface Waters and Groundwater.
- (4) Standard is not identified in 6 NYCRR, Part 703.5, Table 1. NYSDEC TOGS 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations has been used.
- (5) Analyte Standard does not exist in Part 703.5, Table 1. Analyte is identified in TOGS 1.1.1, Table 3 as unregulated.
- (6) Sampling date of August 11, 2014, reflects pre-bioremediation injection date of August 13 and 14, 2014.
- (7) November 2014 sampling event reflects first post-bioremediation data.
- (8) The analyte was "B" flagged, indicating that it was detected in the laboratory method blank, and should be considered estimated.
- (9) The analyte was "E"flagged, indicating that the concentration exceeded the calibration range of the laboratory instrument, and should be considered an estimate.
- (10) The analyte was "2"flagged, indicating that it did not meet the variability criteria for the continuous calibration check (CCV) of 20%, and the value should be considered estimated.
- (11) The analyte was "D" flagged, indicating that the surrogate concentration was diluted outside the laboratory acceptance criteria.
- (12) The analyte was "U" flagged, indicating that the analyte was not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.
- 13) The analyte was "c" flagged, indicating that the calibration acceptability criteria were exceeded, and the value should be considered estimated.
- NA -Contaminant was not included for analysis during RFI.

A value identified in red indicates a concentration of the analyte in excess of the 6 NYCRR, Part 703.5 Table 1 standard or NYSDEC TOGS 1.1.1 guidance value.

TABLE 1d - MW-CHA-RFI-7

GROUNDWATER MONITORING WELL SAMPLE LABORATORY ANALYTICAL DATA SUMMARY - DECTECTED PARAMETERS

| | | | | MW-CHA-RI | il-7 | | | | | | Class GA Groundwater Standard (ppb) (3) |
|----------------------------------|-----------|---------------|----------------------------|------------------------------|---------------|----------|-------------|---------------|---------------|----------|---|
| Analyte ⁽¹⁾ | June 2011 | November 2011 | August 2014 ⁽⁶⁾ | November 2014 ⁽⁷⁾ | February 2015 | May 2015 | August 2015 | November 2015 | February 2016 | May 2016 | W. V |
| Quarterly Sampling Parameters | | | | | | | | | | | |
| Volatiles | | | | | | | | | | | |
| acetone | ND | ND | 1(2)(8) | ND | ND | 2.7 (2) | ND | ND | ND | ND | 50 ⁽⁴⁾ |
| chlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| chloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,1-dichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,1-dichloroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| cis-1,2 dichloroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,4-dioxane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | (5) |
| tetrachloroethene | ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND | ND | ND | ND | 5 |
| toluene | ND | ND ND | ND ND | ND ND | ND | ND | ND ND | ND | ND | ND | 5 |
| 1,1,1-trichloroethane | ND | ND ND | ND ND | ND | ND | ND ND | ND | ND | ND | ND | 5 |
| 1,1,2-trichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 |
| vinyl chloride | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2 |
| 2-butanone (MEK) | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 50 ⁽⁴⁾ |
| 4-methyl-2-pentanone | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | (5) |
| naphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 10 ⁽⁴⁾ |
| n-propylbenzene | 110 | ND ND | ND ND | ND ND | ND | ND ND | ND | ND | ND | ND | 5 |
| 1,2,3 trichlorobenzene | ND | ND | ND | ND | ND | ND | ND ND | ND ND | ND ND | ND ND | 5 |
| hexachlorobutadiene | ND | ND | ND | ND | ND | ND | ND ND | ND ND | ND ND | ND ND | 0.5 ⁽⁴⁾ |
| 1,2,4 trichlorobenzene | ND | ND ND | ND ND | ND ND | ND ND | ND | ND ND | ND ND | ND ND | ND ND | 5 |
| 1,2,4 trimethylbenzene | ND | ND ND | ND ND | ND ND | ND | ND ND | ND ND | ND ND | ND ND | ND ND | 5 |
| 1,3,5 trimethylbenzene/P | | | | | | | | | | | |
| ethyltoluene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| sec-butylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,2-dichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.6 |
| trichloroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| chloroform | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 7 |
| Wet Chemistry and | | | | | | | | | | | |
| Dissolved Metals | | | | | | | | | | | |
| sulfate | NA | NA | 38,100 | 42,800 | 39,900 | 39,900 | 32,700 | 39,600 | 39,800 | 38,600 | 250,000 |
| total organic carbon (TOC) | NA | NA | 938 | 42,800 | 746 | 1,200 | 584 | 550 | 843 | ND | NS |
| dissolved iron | NA | NA | ND | 1,450 | 124 | 184 | 100 (12) | 215 | 247 | 185 | as low as possible, NTE 500,000 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

NOTES

- (1) All analyte values expressed as parts per billion ("ppb").
- (2) The analyte was "J" flagged, indicating that it was detected below the laboratory quantification limits, and should be considered estimated.
- (3) Standard is identified in 6 NYCRR, Part 703.5, Table 1, Water Quality Standards Surface Waters and Groundwater.
- (4) Standard is not identified in 6 NYCRR, Part 703.5, Table 1. NYSDEC TOGS 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations has been used.
- (5) Analyte Standard does not exist in Part 703.5, Table 1. Analyte is identified in TOGS 1.1.1, Table 3 as unregulated.
- (6) Sampling date of August 11, 2014, reflects pre-bioremediation injection date of August 13 and 14, 2014.
- (7) November 2014 sampling event reflects first post-bioremediation data.
- (8) The analyte was "B" flagged, indicating that it was detected in the laboratory method blank, and should be considered estimated.
- (9) The analyte was "E"flagged, indicating that the concentration exceeded the calibration range of the laboratory instrument, and should be considered an estimate.
- (10) The analyte was "Z"flagged, indicating that it did not meet the variability criteria for the continuous calibration check (CCV) of 20%, and the value should be considered estimated.
- (11) The analyte was "D" flagged, indicating that the surrogate concentration was diluted outside the laboratory acceptance criteria.
- (12) The analyte was "U " flagged, indicating that the analyte was not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.
- the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.
- NA -Contaminant was not included for analysis during RFI.

A value identified in red indicates a concentration of the analyte in excess of the 6 NYCRR, Part 703.5 Table 1 standard or NYSDEC TOGS 1.1.1 guidance value.

TABLE 2
GROUNDWATER MONITORING WELL SAMPLE FIELD DATA

| | | | | M\ | N-5A/AR | | | |
|---------------------------------|-----------------|------------------------------|---------------|----------|-------------|---------------|---------------|----------|
| Analyte | August 2014 (4) | November 2014 ⁽⁵⁾ | February 2015 | May 2015 | August 2015 | November 2015 | February 2016 | May 2016 |
| | | | | | | | | |
| dissolved oxygen ⁽¹⁾ | 1,150 | 1,860 | 1,910 | 910 | 300 | 500 | 1,500 | 2,200 |
| pH ⁽²⁾ | 7.66 | 7.07 | 6.74 | 6.43 | 6.61 | 6.63 | 6.43 | 6.90 |
| redox ⁽³⁾ | -137 | -90 | -42 | -73 | -88 | -44 | -124 | -62 |
| | | | | | | | | |

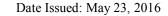
| | MW-14 August 2014 (4) November 2014 (5) February 2015 May 2015 August 2015 November 2015 February 2016 May 2016 1,940 2,110 1,720 1,280 1,100 700 2,700 2,010 7.19 7.41 6.98 6.58 6.68 6.65 6.45 6.91 | | | | | | | | | | | | |
|---------------------------------|--|-------------------|---------------|---------------|---------------|----------|-------|-------|--|--|--|--|--|
| Analyte | August 2014 (4) | November 2014 (5) | February 2015 | November 2015 | February 2016 | May 2016 | | | | | | | |
| | | | | | | | | | | | | | |
| dissolved oxygen ⁽¹⁾ | 1,940 | 2,110 | 1,720 | 1,280 | 1,100 | 700 | 2,700 | 2,010 | | | | | |
| pH ⁽²⁾ | 7.19 | 7.41 | 6.98 | 6.58 | 6.68 | 6.65 | 6.45 | 6.91 | | | | | |
| redox ⁽³⁾ | 7 | -1 | 47 | 0 | 0 | -7 | -44 | 5 | | | | | |
| | | | | | | | | | | | | | |

| | MW-16 August 2014 (4) November 2014 (5) February 2015 May 2015 August 2015 November 2015 February 2016 May 2016 990 2,210 2,750 2,150 400 2,200 2,800 2,800 7,12 6,86 6,94 6,66 6,28 6,92 6,74 7,58 | | | | | | | | | | | | | |
|---------------------------------|--|-------|-------|-------|------|-------|-------|-------|--|--|--|--|--|--|
| Analyte | August 2014 (4) November 2014 (5) February 2015 May 2015 August 2015 November 2015 February 2016 1) 990 2,210 2,750 2,150 400 2,200 2,800 7.12 6.86 6.94 6.66 6.28 6.92 6.74 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| dissolved oxygen ⁽¹⁾ | 990 | 2,210 | 2,750 | 2,150 | 400 | 2,200 | 2,800 | 2,800 | | | | | | |
| pH ⁽²⁾ | 7.12 | 6.86 | 6.94 | 6.66 | 6.28 | 6.92 | 6.74 | 7.58 | | | | | | |
| redox ⁽³⁾ | 24 | -14 | 12 | 151 | 49 | 48 | 45 | 73 | | | | | | |
| | | | • | | | | | | | | | | | |

| | | | | MW- | CHA-RFI-7 | | | |
|---------------------------------|-----------------|-------------------|---------------|----------|-------------|---------------|---------------|----------|
| Analyte | August 2014 (4) | November 2014 (5) | February 2015 | May 2015 | August 2015 | November 2015 | February 2016 | May 2016 |
| | | | | | | | | |
| dissolved oxygen ⁽¹⁾ | 1,440 | 1,220 | 1,760 | 1,660 | 600 | 700 | 1,200 | 1,780 |
| pH ⁽²⁾ | 7.55 | 7.38 | 7.55 | 7.01 | 7.41 | 7.52 | 7.12 | 7.28 |
| redox ⁽³⁾ | -36 | -1 | 73 | 35 | 20 | 48 | -90 | 31 |
| | | | | | | | | |

NOTES:

- (1) Value expressed as parts per billion ("ppb").
- (2) Value expressed as Standard Unit.
- (3) Value expressed as milliVolts (mV).
- (4) Sampling date of August 11, 2014, reflects pre-bioremediation injection date of August 13 and 14, 2014
- (5) November 2014 sampling event reflects first post-bioremediation data.





Pace Analytical e-Report

*Issuance of this report is prior to full data package.

Report prepared for:

LEADER CONSULTING SERVICES, INC.

2813 WEHRLE DRIVE

SUITE 1

WILLIAMSVILLE, NY 14221 CONTACT: KEITH KELLER

Project ID: VAILS GATE MANUFACTURING

Sampling Date(s): May 09, 2016 Lab Report ID: 16050187

Client Service Contact: Nick Nicholas (518) 346-4592

Analysis Included:

Misc Field Analysis

Dissolved Metals E200.7 - Sub Pace LI

VOCs E8260C - Sub Pace LI Sulfate E300.0 - Sub Pace LI Total Organic Carbon

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within the document relate only to the samples included in this report. Pace Analytical is responsible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Roy Smith Technical Director TNI

Certifications: New York (EPA: NY00906, ELAP: 11078), New Jersey (NY026), Connecticut (PH-0337), Massachusetts (M-NY906), Virginia (460241)

Pace Analytical Services, Inc. | 2190 Technology Drive | Schenectady, NY 12308 Phone: 518.346.4592 | internet: www.pacelabs.com This page intentionally left blank.

Table of Contents

| Section 1: QUALIFIERS | 4 |
|--|----|
| Section 2: SAMPLE CHAIN OF CUSTODY | 6 |
| Section 3: SAMPLE RECEIPT | 14 |
| Section 4: Wet Chemistry - TOC/DTOC. | 17 |
| Section 5: Field Analysis | 23 |
| Section 6: Quality Control Samples (Lab) | 28 |
| Section 7: Subcontract Analysis | 31 |

1

2

4

5

6

7

QUALIFIERS

Definitions

- B Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.
- D Surrogate was diluted. The analysis of the sample required a dilution such that the surrogate concentration was diluted outside the laboratory acceptance criteria.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be reanalyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
- MDL Adjusted Method Detection Limit.
- P Indicates relative percent difference (RPD) between primary and secondary gas chromatograph (GC) column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary gas chromatograph (GC) column analysis exceeds 25 %.
- PQL Practical Quantitation Limit. PQLs are adjusted for sample weight/volume and dilution factors.
- RL Reporting Limit Denotes lowest analyte concentration reportable for the sample based on regulatory or project specific limits.
- U Denotes analyte not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.
- Z Chromatographic interference due to polychlorinated biphenyl (PCB) co-elution.
- * Value not within control limits.

SAMPLE CHAIN OF CUSTODY



New York Office 2190 Technology Dr. Schenectady, NY 12308 (518) 346-4592

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



| Section A Section B Required Client Information: Required Proje | ect Information: | Section C Invoice Information: | | | | | | Page | e: 1 | of | 1 |
|---|---|--------------------------------------|--|--|---|----------------|------------------|------------|---------------|--------------------------|----------------|
| Company: Leader Professional Services Report To: Ke | eith Keller | Attention: Ke | ith Keller | | | RE | GULATORY PROG | RAM | | | |
| Address: 2813 Wehrle Drive, Suite 1 Copy To: na | | Company Name: Lea | ader Profess | ional Services | ☐ NPDES ☐ G | ROUND WATER | T DRINKING WATER | | | 200 | |
| Williamsville, NY 14221 | | Address: | | | FUST FR | CRA T | OTHER | | | | |
| Email To: Purchase Order No.: | | Pace Quote Reference: | #00012704 | | SITE | | NI | | | | |
| Phone: 716-565-0963 Fax: na Project Name: | Vails Gate Manufactur | Pace Project Manager: | Nicholas Ni | cholas | LOCATION | 1 | ive | w York Sta | te | | |
| Requested Due Date/TAT: Standard 2-Week Project Number: | | Dana Daniila II | | | | Filtered (Y/N) | | | fy Metals/Inc | organic | s: |
| | | Pace Profile #: | | | | REQUESTED ANAL | YSES | Iron | | | |
| Section D Required MATRIX CODE Client Information | СОМР | LECTION | ERS | Preservatives | Fe Carbor ist | E C | | | | | |
| SAMPLE ID SAMPLE ID SAMPLE ID SOURCE (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE TISSUE DW WATER WAY WATER WAY WATER WA WATE WATE WA WATE WA WA WA TO SOURCE SOURCE OR OR OR OR TISSUE TS | SAMPLE TYPE G=GRAB C=COMP TAU | SAMPLE TEMP AT COLLECTIO | # OF CONTAINERS Unpreserved H ₂ SO ₄ | HNO ₃ HCI NaOH Na ₂ S ₂ O ₃ Methanol | Other Dissolved Fe Sulfate Total Organic Carbor 8260 Full List Field- DO, Conductivi | Temp, pH, I | | F | 'ace Labora | itory I. | D. |
| Field Duplicate-01 w | 1 G 5/9/16 | 1213 | 7 x | x x | x x x x x | | | ATO | 0700 | | |
| 2 MW-5A/AR wi | 1 G S/9/14 | 1213 | 7 x | x x | x x x x x | x x | | AT | 10701 | | |
| MW-14 W1 | G 5/9/16 | 1200 | 7 x | x x | x x x x x | x x | | TA | 10701 | | |
| 4 MW-16 w | 1 G 3/9/16 | 1145 | 7 x | x x | | x x | | AT | 10703 | | |
| 5. MW-CHA-RFI-7 MS/MSD wi | 1 G 54/16 | 1336 | 17 x | x x | x x x x x | x x | | ATTI | 0704 | ſ | |
| 6 Trip Blank-01 w | 1 G 5/9/16 | N/A | 2 | x | x | | | | 10705 | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | - | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| | | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| | UISHED BY / AFFILIA | TION DATE | TIME | ACCEPTED BY | Y / AFFILIATION | DATE | TIME | s | AMPLE COND | ITIONS | |
| NYSDEC DER-10 EQuIS EDD |) PACE | 5/9/16 | 1520 | //H | 2. | 5/9/16 | 15:20 | 8.76 | | Y'N Y(N | Y/N (BAN |
| | | | | | | | | | | X.X | /\ N/\ |
| | | | | | | | | | | // Y/N | //N // |
| | | ER NAME AND SIGN | ATURE | | | | | ပ္ | | | |
| | | Name of SAMPLER: TURE of SAMPLER: | Matt Broker | (PACE) | DATE Signed (MM / DD / YY); | -/a/s | | Temp in °C | Received | Custody Sealed Cooler | samples Intact |



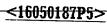
Sample Condition Upon Receipt

| | | | | | | CLIENT | NAME: | Leade/ | | |
|--|----------------------|----------------------|----------------|--------------|--------------|-----------|-------------------|-----------------|-----------|---------------------|
| | | | | | | PROJEC | $CT: \mathcal{V}$ | rails Gate | | |
| COURIER: FedEx UPS C | ient 🗆 | Pace _∕ ∞∠ | Other | | | | | | | |
| TRACKING # | | CUSTODY | SEAL PRESEN | T: Yes 🗆 | No 🔊 | ~ IN | NTACT: Yes | No 🗆 | N | I/A⊅ z ∽ |
| PACKING MATERIAL: Bubble Wrap □ | Bubble Bags | 0 | None 🗆 | Other 🗆 | | ICE USE | ED: Wet, 🕾 | _ Blue □_ | No | ne 🗆 |
| THERMOMETER USED: #164 □ IR Gu | n 03⁄2\ | #122087 | ′967 □ | | COOLER TE | MPERAT | TURE (°C): | <u>8-7°</u> | Ç | |
| BIOLOGICAL TISSUE IS FROZEN: Yes | No □ | N/AXS | | | | Temp: | should be | above freezing | to 6°C | |
| COMMENTS: | | | | | Temperatu | re is Acc | eptable? | j∕Él¥es | □No | |
| Chain of Custody Present: | V ELYes | □No | | 1. | | | | | | |
| Chain of Custody Filled Out: | ⊘ Z ÍYes | □No | | 2. | | | | | | |
| Chain of Custody Relinquished: | ANYes | □No | | 3. | CWO1 | | | | | |
| Sampler Name / Signature on COC: | 'XX Yes | □No | | 4. | | | | | | |
| Samples Arrived within Hold Time: | Yes | □No | | 5. | | | | | | |
| Short Hold Time Analysis (<72hr): | □Yes | æNo | | 6. | | | | | | |
| Rush Turn Around Time Requested: | □Yes | ∀ 21100 | | 7. | | | | | | |
| Sufficient Volume: | Æ⊒Yes | □No | | 8. | | | | | | |
| Correct Containers Used: | Σ⊟Yes | □No | | 9. | | | | | | |
| - Pace Containers Used: | ⊁ ⊟Yes | □No | | | | | | | | |
| Containers Intact: | ¥⊟Yes | □No | | 10. | | | | | | |
| Filtered volume received for Dissolved tes | ts:′ _{□Yes} | □No | Æ N/A | 11. | | | | | | |
| Sample Labels match COC: | ≻EYes | □No | | 12. | | | | | | |
| Includes date/time/ID/Analysis | | | | | | | | | | |
| All containers needing preservation have been checked: | □Yes | □No | A\N ₽ | 13. | | | | | | |
| All containers needing preservation are in | □Yes | □No | >€N/A | | | | | | | |
| compliance with EPA recommendation: | | | • | Initial whe | n | | | | | |
| - Exceptions that are not checked: TOC, VOA, Subcor | ntract Analyses | | | completed | : <u>N/4</u> | Lot # o | of added p | reservative: | J/A | |
| Headspace in VOA Vials (>6mm): | □Yes | ∕2 1No | XBN/A ()R | 14. | | | | - | | |
| Trip Blank Present: | Y≝Yes | □No | DNA OR | 15. | | | | | | |
| Trip Blank Custody Seals Present: | y ⊡ Yes | □No | TENIA COR | | | | | | | |
| Pace Trip Blank Lot #: | 16-0717TB | • | , 20(| | | | | | | |
| Sample Receipt form filled in: $fAw 5/ol$ | 16 | Line-Out | (Includes Cop | ying Shippi | ng Documei | nts and | verifying | sample pH): | <u>ar</u> | 5/,10,116 |
| | | Log In (In | cludes notifyi | ing PM of ar | ny discrepad | cies and | d documei | nting in LIMS): | AJB | 5/9/16 |
| | | Labeling (| Includes Scar | nning Bottle | s and enter | ring LAB | B IDs into p | pH logbook): | <u>ar</u> | 5/10/16 |

Document Control# F-NY-C-034-rev 00 (15July2015)

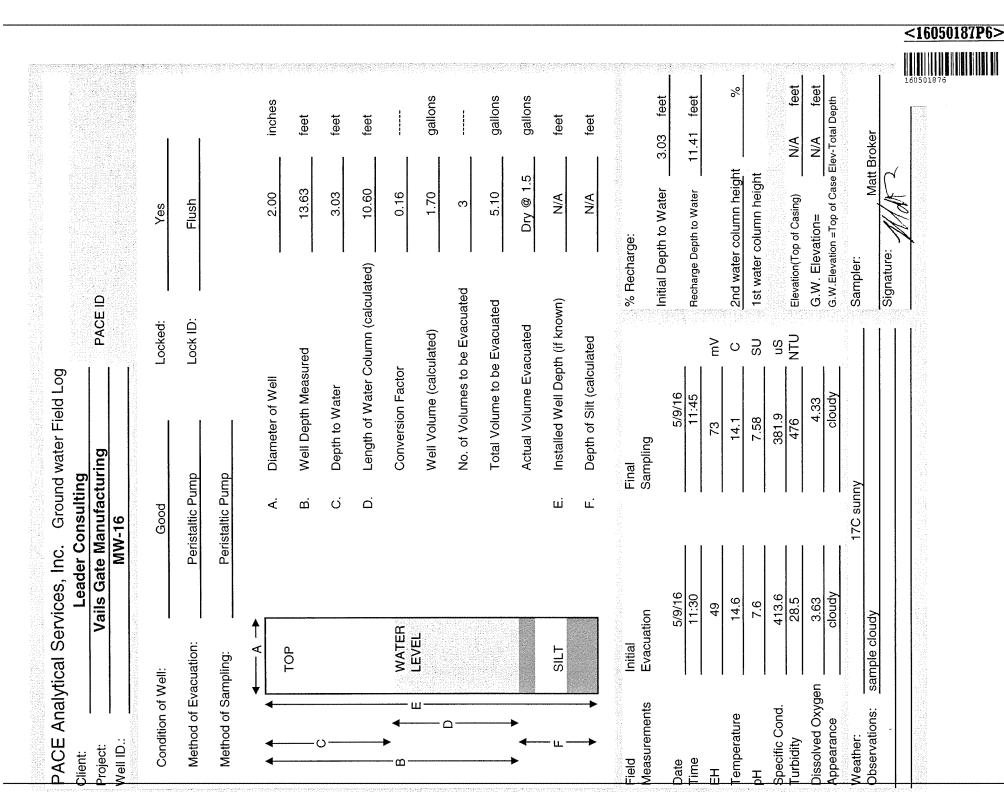
| | | | | | | | | XX 4 2 44 7 47 | S | ************************************** | v | S | | | | <u>.</u> | # | % | | 1605 • • • • • • • • • • • • • • • • • • • | 01873 | |
|--|--------------------|-----------------------|---------------------|------------------|---------------------|----------------|-------------------------------------|-------------------|--------------------------|---|------------------------------|-------------------------|---------------------------------|---------------------------|-------------|------------------------|----------------------------|-------------------------|-------------------------|---|-------------------------------------|----------------------|
| | 1 | l | | inches | feet | feet | feet | 1 | gallons | 1 | gallons | gallons | feet | feet | | 0 feet | 23.76 feet | | | N/A f | N/A f | oker |
| | Yes | Flush | | 2.00 | 41.67 | 0.00 | d) 41.67 | 0.16 | 6.67 | 3 | 20.01 | 15.00 | N/A | N/A | % Recharge: | Initial Depth to Water | Recharge Depth to Water 23 | 2nd water column height | 1st water column height | Elevation(Top of Casing) | G.W. Elevation= N/A fea | Sampler: Matt Broker |
| PACE ID | * ∺ | ا ت | | | | | (calculate | | | cuated | Jated | 70 | (uwot | | % Re | Initia | Reche | 2nd) | 1st w | Eleva | G.W. | Sampler: |
| nsulting nufacturing PA(7 MS/MSD | Locked: | Lock ID: | | | sured | | Column | ō | lculated) | o be Eva | be Evacı | vacuated | epth (if kr | culated | | | } | ≧ ∪ I | ns I | Sn I | 1 1 | |
| g iring MSD | | d | d | Diameter of Well | Well Depth Measured | Depth to Water | Length of Water Column (calculated) | Conversion Factor | Well Volume (calculated) | No. of Volumes to be Evacuated | Total Volume to be Evacuated | Actual Volume Evacuated | Installed Well Depth (if known) | Depth of Silt (calculated | Final | 5/9/16 | 13:30 | 2 2 2 | 7.28 | 1489 | 1.78 clear | |
| Leader Consulting /ails Gate Manufacturing MW-CHA-RFI-7 MS/MSD | Good | Peristaltic Pump | Peristaltic Pump | ď. | ю́ | o' | Ö. | | | | | | ш | ιĽ | | | | | | | | 18C sunny |
| Nient: Leader C Vails Gate N Vell ID: MW-CHA-RI | :H: | uation: | pling: | A | TOP | | | WATER | | | | | SILT | | Initial | 5/9/16 | 12:30 | 14.7 | 7.22 | 1536 | | sample clear |
| Olient: Project: Well ID.: | Condition of Well: | Method of Evacuation: | Method of Sampling: | ↓ | | υ | | — · | ш | | | → | — <u>"</u> | → | Field | Date | Time | En Temperature | PH PG REGIO | Specific Cond. Turbidity | , Dissolved Oxygen Appearance | .;; |

| | | | | | | | | | | TARRY. | | | | | | PER SERVE | | | | gerater, | | | | 1605 | 1874 |
|------------------------|--|----------|--------------------|-----------------------|---------------------|------------------|---------------------|----------------|-------------------------------------|-------------------|--------------------------|--------------------------------|------------------------------|-------------------------|---------------------------------|---------------------------|-----------------------|------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-----------------|---|---|
| | | | | | | inches | feet | feet | feet | | gallons | | gallons | gallons | feet | feet | | 3.84 feet | 9.15 feet | % | | N/A feet | N/A feet | | roker |
| | | | Yes | Flush | | 2.00 | 13.00 | 3.84 | 9.16 | 0.16 | 1.47 | က | 4.41 | Dry @ 2.0 | N/A | N/A | je: | | | 2nd water column height | 1st water column height | of Casing) | | | Matt Broker |
| | PACE ID | | ö | ة | | ı | í | ı | (calculated) | 1 | ı | acuated | | T) | (uwot | | % Recharge: | Initial Depth to Water | Recharge Depth to Water | 2nd water o | 1st water o | Elevation(Top of Casing) | G.W. Elevation= | Sampler: | Signature: |
| go- | _ <u>^</u> _ | | Locked: | Lock ID: | | = | asured | <u>.</u> | er Column | ctor | salculated) | s to be Eva | o be Evacı | Evacuated | Jepth (if kr | alculated | | | | € 0 | ns | Su | | 2. 2 2. 2 2. 2 2. 2 2. 2 2. 2 2. 2 3. 2 3 | |
| Ground water Field Log | g ıring | | | | | Diameter of Well | Well Depth Measured | Depth to Water | Length of Water Column (calculated) | Conversion Factor | Well Volume (calculated) | No. of Volumes to be Evacuated | Total Volume to be Evacuated | Actual Volume Evacuated | Installed Well Depth (if known) | Depth of Silt (calculated | Final Sampling | 5/9/16 | 12:20 | 16.9 | 6.91 | 1526 82 | 2.01 | Same Characters and the standard | slow recharge oily sheen ted in Unit 4-5 |
| | Leader Consulting Vails Gate Manufacturing | MW-14 | Good | Bailer | Bailer | ď. | ю́ | Ö | Ö | | | | | | ш | щ | E Š | | | | | | | 17C sunny | 2 and 3 slow recharge Well located in Unit 4-5 |
| Services, Inc. | Leade Vails Gat | | | in: | | † | | | | WATER | | | | | - | | Initial Evacuation | 5/9/16 | 11:05 | -94 | 7.38 | 1681 | 1.82 | and the particular and area | Well between piller 2 a |
| ACE Analytical | | | Condition of Well: | Method of Evacuation: | Method of Sampling: | ↓ | <u> </u> | | | —— r | n | | | + | SIF. | | | | | | | ond. | ssolved Oxygen | | |
| ACE | llent: roject: | ell ID.: | Condit | Metho | Metho | 4 | | ر——د —— | | ► -a- | | | - | ← | — ш — | | eld easurements | a t | e e | ٦ emperature | _ | pecific Condurbidity | ssolved O | eather: | oservations: |





| ition of Well: MW-5AAR Field Dupe 1 | | Leader Consulting | | | | |
|--|-----------------------|------------------------------------|---|---------------------|----------------------------------|-----------------------------|
| Condition of Well: Good Lock ID: Flush Method of Sampling: Peristatilic Pump Lock ID: Flush Method of Sampling: Peristatilic Pump Lock ID: Flush C. Depth to Water C. Depth to Water 6.20 feet C. Depth to Water C. Depth to Water 0.16 C. Depth to Water Column (calculated) 0.29 gallo D. Length of Water Column (calculated) 0.99 gallo D. Length of Water Column (calculated) 0.99 gallo D. Length of Sitt (calculated) 0.99 gallo D. Signific (calculated) 0.99 sampling | | s Gate Manufact -5A/AR Field Du | | PACE ID | | |
| Method of Evacuation: Peristatic Pump Lock ID: Flush Method of Sampling: Peristatic Pump A. Diameter of Well 2.00 inch leat C. Depth to Water C. Depth to Water Column (calculated) 6.20 feet C. Depth to Water Column (calculated) 6.20 feet D. Length of Water Column (calculated) 0.99 gallo No. of Volumes to be Evacuated 2.97 gallo No. of Volumes to be Evacuated 3.00 gallo Actual Volume Evacuated 2.97 gallo Actual Volume Evacuated 3.00 gallo Actual Volume Evacuated 2.97 gallo Actual Volume Evacuated 2.97 gallo Actual Volume Evacuated 3.00 gallo Actual Volume Evacuated 2.97 gallo Actual Volume Evacuated 3.00 gallo Actual Volume Evacuated 2.97 gallo Actual Volume Evacuated 2.97 gallo Actual Volume Evacuated 3.00 gallo Actual Volume Evacuated 3 | Condition of Well: | Good | Loc | ked: | Yes | |
| Method of Sampling: Peristatilic Pump A. Diameter of Well 200 inche C Depth to Water C. Depth to Water Column (calculated) 6.20 feet C Depth to Water Column (calculated) 6.20 feet C Depth to Water Column (calculated) 6.20 feet C Depth to Water Column (calculated) 0.16 D Length of Water Column (calculated) 0.39 gallo No. of Volumes to be Evacuated 3 Total Volume (calculated) 0.39 gallo Actual Volume (salculated) 0.39 gallo Actual Volume (salculated) 0.39 gallo F Depth of Sift (calculated) 3 Actual Volume Evacuated 3.00 gallo feet F Depth of Sift (calculated) N/A feet F Finitial Depth of Sift (calculated) N/A feet F Forestall Volume Evacuated 3.00 gallo F Forestall Volume (salculated) 2.90 | Method of Evacuation: | Peristaltic Pur | | k D: | Flush | |
| MATER A | Method of Sampling: | Peristaltic Pur | du | | | |
| C | ↑ ∀ ↓ ↓ | V | Diameter of Well | | 2.00 | inches |
| WATER Conversion Factor 0.30 feet | <u></u> | œ. | Well Depth Measured | | 6.50 | feet |
| WATER Conversion Factor Conversion Conversion Factor Conversion Conversion Factor Conversion |)—— | Ö | Depth to Water | | 0.30 | - feet |
| WATER WATER Conversion Factor O.16 | | Ö | Length of Water Colum | nn (calculated) | | - feet |
| F SILT E. Installed Well Volume to be Evacuated 3.00 gallo | B WATER | | Conversion Factor | | 0.16 | |
| No. of Volumes to be Evacuated 3 | C | | Well Volume (calculate | (p; | 0.99 | gallons |
| Total Volume to be Evacuated 2.97 gallo | | | No. of Volumes to be E | vacuated | က | |
| SILT E. Installed Well Depth (if known) N/A feet | | | Total Volume to be Eva | acuated | 2.97 | gallons |
| SILT E. Installed Well Depth (if Known) NJA feet | | | Actual Volume Evacua | ted | 3.00 | gallons |
| The parameter Final Final Final Sampling Final Final | SILT | ш | Installed Well Depth (if | known) | N/A | feet |
| id Initial Final % Recharge: asurements Evacuation Sampling Initial Depth to Water 0.3 fe e 5/9/16 5/9/16 Recharge Depth to Water 2.2 fe nperature 11:50 -62 mV 2.2 fe nperature 13:9 14:9 C 2nd water column height roffic Cond. 208.3 6:9 SU 1st water column height roffic Cond. 208.3 762.8 uS Elevation(Top of Casing) N/A solved Oxygen 1.78 LO.8 NTU G.W. Elevation = Top of Case Elev-Total Department of Case Elev-Total | | ш | Depth of Silt (calculate | Ð | N/A | feet |
| Exercise | lirements | E 0 | inal Samolina | % Rech | | |
| 11:50 | | | | Initial D | epth to Water | |
| nperature 13.9 -62 mV mV Independent of the column second of the colu | | | 5/9/16 12:13 | Recharge | Depth to Water | 2 |
| nperature 13.9 14.9 C 2nd water column height and the column height at the column heig | | | | | | |
| colific Cond. 208.3 6.9 SU 1st water column height bidity 225 uS Elevation(Top of Casing) N/A solved Oxygen 1.78 2.2 G.W. Elevation = N/A searance cloudy clear G.W. Elevation = Top of Case Elev-Total Degrather: ather: 17C sunny Sampler: servations: Silty bottom thick grey while purging then cleared up Signature: | nperature | | | | er column height | % |
| 208.3 762.8 uS uS NTU Elevation(Top of Casing) N/A /gen 1.78 2.2 G.W. Elevation = N/A cloudy clear G.W. Elevation = Top of Case Elev-Total Degration = Top of Case Elev-Total Degration 3ilty bottom thick grey while purging then cleared up Sampler: Matt Broker Signature: Signature: | | | | | er column height | |
| /gen 1.78 2.2 G.W. Elevation= N/A cloudy clear G.W. Elevation = Top of Case Elev-Total Degration = Top of Case Elev-Total Degrature = Top | | | | | (Top of Casing) | |
| Sampler: Silty bottom thick grey while purging then cleared up Signature: | | | 2.2 clear | G.W. El G.W.Elev | evation= ation =Top of Case E | N/A feet lev-Total Depth |
| Signature: | | 17C sunny | // / / / / / / / / / / / / / / / / / / | Sample | | Brokor |
| | . | gieg wille puiging | מסוסוסוסוסוסוסוסוסוסוסוסוסוסוסוסוסוסוסו | Signatu | | Di Onei |



<16050187P7> 100101037

FIELD CALIBRATION SHEET PACE ANALYICAL INC.

Vails Gate Manufacturing 16C sunny SITE: 5/9/16 DATE:

WEATHER: Matt Broker

TECHNICIAN:

INSTRUMENT:

Myron Ultrameter II 6PFCe Myron Ultrameter II 6PFCe DISSOLVED OXYGEN TEMPERATURE CONDUCTIVITY 표

Myron Ultrameter II 6PFCe Sper Scientific 850041 Hanna HI 98703

TURBIDITY

| INSTRUMENT STANDARD ANALYTE | INTIAL READING | ADJUSTED READING | TIME | NOTES |
|---------------------------------|-------------------|---------------------|------|-------|
| 4.00 | 4.04 | 4.00 | 1056 | |
| 7.00 | 7.21 | 7.00 | 1055 | |
| 10.00 | 10.04 | 10.00 | 1057 | |
| | | | | |
| 1413 | 1421 | 1413 | 1058 | |
| | | | | |
| | | | | |
| <0.10 | 0.13 | <0.10 | 1059 | |
| 15 | 15.4 | 15 | 1100 | |
| 100 | 97 | 100 | 1101 | |
| 750 | 750 | 750 | 1102 | |
| | | | | |

NOTES:

SAMPLE RECEIPT



SAMPLE RECEIPT REPORT 16050187

Pace Analytical Services, Inc. 2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

CLIENT: LEADER CONSULTING SERVICES, INC.

PROJECT: VAILS GATE MANUFACTURING

LRF: 16050187

REPORT: DATA PACKAGE

EDD: YES LRF TAT: 2 WEEK **RECEIVED DATE:** 05/09/2016 15:20

SAMPLE SEALS INTACT: NA SHIPPED VIA: PICK UP 1, SAMPLES PRESERVED PER METHOD GUIDANCE: YES

³ SAMPLES REC'D IN HOLDTIME: YES SHIPPING ID:

DISPOSAL: BY LAB (45 DAYS) NUMBER OF COOLERS: 1 CUSTODY SEAL INTACT: NA **COC DISCREPANCY: NO**

COOLER STATUS: CHILLED **TEMPERATURE(S):** \$.7 (IR) °C

COMMENTS:

| CLIENT ID (LAB ID) | TAT-DUE Date | DATE-TIME SAMPLED | MATRIX | METHOD | TEST DESCRIPTION | QC REQUES |
|------------------------------|-----------------|----------------------|--------|---------------------|---------------------------------------|--------------|
| FIELD DUPLICATE-01 (AT10700) | 2 WEEK 05-23-16 | 05/09/2016 12:15 | Water | E200.7 | Dissolved Metals E200.7 - Sub Pace LI | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:15 | Water | Misc Field Analysis | Misc Field Analysis | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:15 | Water | SM 5310B-00,-11 | Total Organic Carbon | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:15 | Water | Sulfate E300.0 | Sulfate E300.0 - Sub Pace LI | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:15 | Water | VOCs E8260C | VOCs E8260C - Sub Pace LI | |
| MW-5A/AR (AT10701) | 2 WEEK 05-23-16 | 05/09/2016 12:13 | Water | E200.7 | Dissolved Metals E200.7 - Sub Pace LI | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:13 | Water | Misc Field Analysis | Misc Field Analysis | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:13 | Water | SM 5310B-00,-11 | Total Organic Carbon | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:13 | Water | Sulfate E300.0 | Sulfate E300.0 - Sub Pace LI | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:13 | Water | VOCs E8260C | VOCs E8260C - Sub Pace LI | |
| MW-14 (AT10702) | 2 WEEK 05-23-16 | 05/09/2016 12:20 | Water | E200.7 | Dissolved Metals E200.7 - Sub Pace LI | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:20 | Water | Misc Field Analysis | Misc Field Analysis | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:20 | Water | SM 5310B-00,-11 | Total Organic Carbon | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:20 | Water | Sulfate E300.0 | Sulfate E300.0 - Sub Pace LI | |
| | 2 WEEK 05-23-16 | 05/09/2016 12:20 | Water | VOCs E8260C | VOCs E8260C - Sub Pace LI | |
| MW-16 (AT10703) | 2 WEEK 05-23-16 | 05/09/2016 11:45 | Water | E200.7 | Dissolved Metals E200.7 - Sub Pace LI | |
| | 2 WEEK 05-23-16 | 05/09/2016 11:45 | Water | Misc Field Analysis | Misc Field Analysis | |
| | 2 WEEK 05-23-16 | 05/09/2016 11:45 | Water | SM 5310B-00,-11 | Total Organic Carbon | |
| | 2 WEEK 05-23-16 | 05/09/2016 11:45 | Water | Sulfate E300.0 | Sulfate E300.0 - Sub Pace LI | |
| | 2 WEEK 05-23-16 | 05/09/2016 11:45 | Water | VOCs E8260C | VOCs E8260C - Sub Pace LI | |
| MW-CHA-RFI-7 (AT10704) | 2 WEEK 05-23-16 | 05/09/2016 13:30 | Water | E200.7 | Dissolved Metals E200.7 - Sub Pace LI | MS, MSD |
| | 2 WEEK 05-23-16 | 05/09/2016 13:30 | Water | Misc Field Analysis | Misc Field Analysis | |
| | 2 WEEK 05-23-16 | 05/09/2016 13:30 | Water | SM 5310B-00,-11 | Total Organic Carbon | MS, MSD |
| | 2 WEEK 05-23-16 | 05/09/2016 13:30 | Water | Sulfate E300.0 | Sulfate E300.0 - Sub Pace LI | MS, MSD |
| | 2 WEEK 05-23-16 | 05/09/2016 13:30 | Water | VOCs E8260C | VOCs E8260C - Sub Pace LI | MS, MSD |
| TRIP BLANK-01 (AT10705) | 2 WEEK 05-23-16 | 05/09/2016 | Water | VOCs E8260C | VOCs E8260C - Sub Pace LI | |

¹The pH preservation check of Oil and Grease (Method 1664) and Total Organic Carbon (Method 5310B) are performed as soon as possible after sample receipt and may not be included in this report.

Reporting Parameters and Lists

Misc Field Analysis - Misc Field Analysis - (mg/L)

Dissolved Oxygen (\$)

Flow (\$) pH (\$)

Reduction Potential (\$)

Specific Conductance (\$)

Misc Field Analysis - Misc Field Analysis - (mg/L)

Static Water Level (\$)

Sulfite (\$)

Temperature (\$)

Total Residual Chlorine (\$)

Turbidity (\$)

This report may not be reproduced except in full, without the written approval of Pace Analytical Services, Inc.

Page 1 of 2

The pH preservation check of aqueous volatile samples is not performed until after the analysis of the sample to maintain zero headspace and is not included in this report.

3 Samples received for pH analysis are not marked as a hold time exceedance here. SW-846 methods suggests analysis to be done within 15 minutes of sample collection. Because of transportation time it 4 is not possible for the laboratory to perform the test in that time. Sample Certificates of Analysis reports are noted as such.

Samples arriving at the laboratory after 4:00 pm are assigned a due date as if they arrived the following business day unless other arrangements have been made

The due date represents the date the lab report is expected to be completed on or before 5:00 pm (EST) for the date specified.

⁵All samples which require thermal preservation shall be considered acceptable when received greater than 6 degrees Celsius if they are collected on the same day as received and there is evidence that the chilling process has begun, such as arrival on ice. Control limits are between 0-6 Degrees Celsius. Control limits do not apply for metals analysis.

⁶Samples requesting analysis for Orthophosphate (SM 4500-P E-99,-11) require the samples to be filtered in the field within 15 minutes of the sampling event. Samples that are received unfiltered will be noted as not method compliant on the Certificates of Analysis.





SAMPLE RECEIPT REPORT 16050187

Pace Analytical Services, Inc. 2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Total Organic Carbon

16050187 - Page 16 of 61

Wet Chemistry - TOC/DTOC





Job Number: 16050187

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: LEADER CONSULTING SERVICES, INC.

Project: VAILS GATE MANUFACTURING

Client Sample ID: FIELD DUPLICATE-01

Lab Sample ID: 16050187-01 (AT10700)

Collection Date: 05/09/2016 12:15

Sample Matrix: WATER

Received Date: 05/09/2016 15:20

Percent Solid: N/A

| | Batch ID | Method | Date | Analyst | Init Wt./Vol. | Final Vol. | Column | |
|---------------|----------|----------|------------------|---------|----------------------|------------|---------|---|
| Analysis 1: | 885 | SM 5310B | 05/17/2016 14:08 | JS | NA | NA | NA | |
| Analyte | | CAS No. | Result (mg/L) | PQL | Dilution Fact | or Flags | File ID | |
| Total Organic | | OC002 | 6.67 | 1.00 | 1.00 | | 885 | - |

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.





Job Number: 16050187

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

885

Client: LEADER CONSULTING SERVICES, INC.

Project: VAILS GATE MANUFACTURING

Client Sample ID: MW-5A/AR

Total Organic Carbon

Lab Sample ID: 16050187-02 (AT10701)

Collection Date: 05/09/2016 12:13

Sample Matrix: WATER

Received Date: 05/09/2016 15:20

1.00

Percent Solid: N/A

| Analyte | | CAS No. | Result (mg/L) | PQL | Dilution Fact | tor Flags | File ID |
|-------------|----------|----------|------------------|---------|---------------|------------|---------|
| Analysis 1: | 885 | SM 5310B | 05/17/2016 14:21 | JS | NA | NA | NA |
| | Batch ID | Method | Date | Analyst | Init Wt./Vol. | Final Vol. | Column |

1.00

6.64

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

OC002





Job Number: 16050187

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

885

Client: LEADER CONSULTING SERVICES, INC. Collection Date: 05/09/2016 12:20

Project: VAILS GATE MANUFACTURING

Sample Matrix: WATER

Client Sample ID: MW-14 Received Date: 05/09/2016 15:20

35.4

Lab Sample ID: 16050187-03 (AT10702) **Percent Solid:** N/A

| Analysis 1: Analyte | 885 | CAS No. | 05/17/2016 14:37 Result (mg/L) | PQL | Dilution Fac | tor Flogs | File ID | _ |
|----------------------|----------|---------|---------------------------------|-----|---------------|------------|---------|---|
| Augloria 1 | Batch ID | Method | Date | | Init Wt./Vol. | Final Vol. | Column | |

1.00

1.00

ND: Denotes analyte not detected at a concentration greater than the PQL.

Total Organic Carbon

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

OC002





Job Number: 16050187

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: LEADER CONSULTING SERVICES, INC.

Project: VAILS GATE MANUFACTURING

Client Sample ID: MW-16

Lab Sample ID: 16050187-04 (AT10703)

Collection Date: 05/09/2016 11:45

Sample Matrix: WATER

Received Date: 05/09/2016 15:20

Percent Solid: N/A

| | Batch ID | Method | Date | Analyst | Init Wt./Vol. | Final Vol. | Column | |
|-------------|----------|----------|------------------|---------|---------------|------------|---------|--|
| Analysis 1: | 885 | SM 5310B | 05/17/2016 14:53 | JS | NA | NA | NA | |
| | | | | | | | | |
| Analyte | | CAS No. | Result (mg/L) | PQL | Dilution Fact | tor Flags | File ID | |

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.





Total Organic Carbon

Analytical Sample Results

Job Number: 16050187

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

885

Client: LEADER CONSULTING SERVICES, INC. Collection Date: 05/09/2016 13:30

Project: VAILS GATE MANUFACTURING

Sample Matrix: WATER

Client Sample ID: MW-CHA-RFI-7 Received Date: 05/09/2016 15:20

ND

Lab Sample ID: 16050187-05 (AT10704) **Percent Solid:** N/A

| | Batch ID | Method | Date | Analyst | Init Wt./Vol. | Final Vol. | Column |
|-------------|----------|----------|------------------|---------|---------------|------------|---------|
| Analysis 1: | 885 | SM 5310B | 05/17/2016 15:05 | JS | NA | NA | NA |
| Analyte | | CAS No. | Result (mg/L) | PQL | Dilution Fac | tor Flags | File ID |

1.00

1.00

U

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

OC002

Field Analysis





Job Number: 16050187

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: LEADER CONSULTING SERVICES, INC. Collection Date: 05/09/2016 12:13

Project: VAILS GATE MANUFACTURING

Sample Matrix: WATER

Client Sample ID: MW-5A/AR Received Date: 05/09/2016 15:20

Lab Sample ID: 16050187-02 (AT10701) **Percent Solid:** N/A

| Batch ID | Method | Date | Analyst | | nal Vol. | Column |
|---------------------------|----------------|------------------|---------|------------------------|----------|------------|
| Analysis 1: Field Test | Field Analysis | 05/09/2016 12:13 | MEB | NA | NA | NA |
| Analyte | CAS No. | Result | PQL | Dilution Factor | Flags | File ID |
| Dissolved Oxygen (\$) | 7782-44-7 | 2.20 (mg/L) | 0.00 | 1.00 | | Field Test |
| pH (\$) | NA | 6.90 (pH) | 0.00 | 1.00 | | Field Test |
| Reduction Potential (\$) | NA | -62.0 (mV) | 0.00 | 1.00 | | Field Test |
| Specific Conductance (\$) | NA | 763 (umhos/cn | 0.00 | 1.00 | | Field Test |
| Static Water Level (\$) | NA | 0.300 (ft btmp) | 0.00 | 1.00 | | Field Test |
| Temperature (\$) | NA | 14.9 (°C) | 0.00 | 1.00 | | Field Test |
| Turbidity (\$) | NA | 10.8 (NTU) | 0.00 | 1.00 | | Field Test |

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Note: This is field generated data. (\$) NYSDOH-ELAP does not currently offer NELAC certification for this parameter.





Job Number: 16050187

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: LEADER CONSULTING SERVICES, INC.

Project: VAILS GATE MANUFACTURING

Client Sample ID: MW-14

Lab Sample ID: 16050187-03 (AT10702)

Collection Date: 05/09/2016 12:20

Sample Matrix: WATER

Received Date: 05/09/2016 15:20

Percent Solid: N/A

| Batch ID | Method | Date | Analyst | | nal Vol. | Column |
|---------------------------|----------------|------------------|---------|------------------------|----------|------------|
| Analysis 1: Field Test | Field Analysis | 05/09/2016 12:20 | MEB | NA | NA | NA |
| Analyte | CAS No. | Result | PQL | Dilution Factor | Flags | File ID |
| Dissolved Oxygen (\$) | 7782-44-7 | 2.01 (mg/L) | 0.00 | 1.00 | | Field Test |
| pH (\$) | NA | 6.91 (pH) | 0.00 | 1.00 | | Field Test |
| Reduction Potential (\$) | NA | 5.00 (mV) | 0.00 | 1.00 | | Field Test |
| Specific Conductance (\$) | NA | 1530 (umhos/cn | 0.00 | 1.00 | | Field Test |
| Static Water Level (\$) | NA | 3.84 (ft btmp) | 0.00 | 1.00 | | Field Test |
| Temperature (\$) | NA | 16.9 (°C) | 0.00 | 1.00 | | Field Test |
| Turbidity (\$) | NA | 82.0 (NTU) | 0.00 | 1.00 | | Field Test |

ND: Denotes analyte not detected at a concentration greater than the PQL.

Note: This is field generated data. (\$) NYSDOH-ELAP does not currently offer NELAC certification for this parameter.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.





Job Number: 16050187

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: LEADER CONSULTING SERVICES, INC.

Project: VAILS GATE MANUFACTURING

Client Sample ID: MW-16

Lab Sample ID: 16050187-04 (AT10703)

Collection Date: 05/09/2016 11:45

Sample Matrix: WATER

Received Date: 05/09/2016 15:20

Percent Solid: N/A

| Batch ID | Method | Date | Analyst | | nal Vol. | Column |
|---------------------------|----------------|------------------|---------|------------------------|----------|------------|
| Analysis 1: Field Test | Field Analysis | 05/09/2016 11:45 | MEB | NA | NA | NA |
| Analyte | CAS No. | Result | PQL | Dilution Factor | Flags | File ID |
| Dissolved Oxygen (\$) | 7782-44-7 | 4.33 (mg/L) | 0.00 | 1.00 | | Field Test |
| pH (\$) | NA | 7.58 (pH) | 0.00 | 1.00 | | Field Test |
| Reduction Potential (\$) | NA | 73.0 (mV) | 0.00 | 1.00 | | Field Test |
| Specific Conductance (\$) | NA | 382 (umhos/cm | 0.00 | 1.00 | | Field Test |
| Static Water Level (\$) | NA | 3.03 (ft btmp) | 0.00 | 1.00 | | Field Test |
| Temperature (\$) | NA | 14.1 (°C) | 0.00 | 1.00 | | Field Test |
| Turbidity (\$) | NA | 476 (NTU) | 0.00 | 1.00 | | Field Test |

ND: Denotes analyte not detected at a concentration greater than the PQL.

Note: This is field generated data. (\$) NYSDOH-ELAP does not currently offer NELAC certification for this parameter.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.





Analytical Sample Results

Job Number: 16050187

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: LEADER CONSULTING SERVICES, INC.

Project: VAILS GATE MANUFACTURING

Client Sample ID: MW-CHA-RFI-7

Lab Sample ID: 16050187-05 (AT10704)

Collection Date: 05/09/2016 13:30

Sample Matrix: WATER

Received Date: 05/09/2016 15:20

Percent Solid: N/A

| Batch ID | Method | Date | Analyst | | nal Vol. | Column |
|---------------------------|----------------|------------------|---------|------------------------|----------|------------|
| Analysis 1: Field Test | Field Analysis | 05/09/2016 13:30 | MEB | NA | NA | NA |
| Analyte | CAS No. | Result | PQL | Dilution Factor | Flags | File ID |
| Dissolved Oxygen (\$) | 7782-44-7 | 1.78 (mg/L) | 0.00 | 1.00 | | Field Test |
| pH (\$) | NA | 7.28 (pH) | 0.00 | 1.00 | | Field Test |
| Reduction Potential (\$) | NA | 31.0 (mV) | 0.00 | 1.00 | | Field Test |
| Specific Conductance (\$) | NA | 1490 (umhos/cn | 0.00 | 1.00 | | Field Test |
| Static Water Level (\$) | NA | 0.00 (ft btmp) | 0.00 | 1.00 | | Field Test |
| Temperature (\$) | NA | 15.2 (°C) | 0.00 | 1.00 | | Field Test |
| Turbidity (\$) | NA | 6.19 (NTU) | 0.00 | 1.00 | | Field Test |

ND: Denotes analyte not detected at a concentration greater than the PQL.

Note: This is field generated data. (\$) NYSDOH-ELAP does not currently offer NELAC certification for this parameter.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Quality Control Samples (Lab)





Quality Control Results Method Blank

Job Number: 16050187

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: LEADER CONSULTING SERVICES, INC.
Project: VAILS GATE MANUFACTURING
Client Sample ID: Method Blank (AT10700B)

Lab Sample ID: BLANK-01

Collection Date: N/A Sample Matrix: WATER Received Date: N/A Percent Solid: N/A

| | Batch ID | Method | Date | Analyst | Init Wt./Vol. | Final Vol. | Column |
|-------------|----------|----------|------------------|---------|----------------------|------------|---------|
| Analysis 1: | 885 | SM 5310B | 05/17/2016 13:41 | JS | NA | NA | NA |
| | | | | | | | |
| Analyte | | CAS No. | Result (mg/L) | PQL | Dilution Fact | tor Flags | File ID |

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.





Quality Control Results Lab Control Sample (LCS)

Job Number: 16050187

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: LEADER CONSULTING SERVICES, INC. Project: VAILS GATE MANUFACTURING

Client Sample ID: Lab Control Sample (AT10700L)

Lab Sample ID: LCS-01

Collection Date: N/A Sample Matrix: WATER Received Date: N/A Percent Solid: N/A

| | Batch ID | Method | Date | Analyst | Init Wt./Vol. | Final Vol. | Column |
|-------------|----------|----------|------------------|---------|---------------|------------|--------|
| Analysis 1: | 885 | SM 5310B | 05/17/2016 13:54 | JS | NA | NA | NA |

| | | Added | LCS | LCS | Limits |
|----------------------|---------|--------|--------|--------|----------|
| Analyte Spiked | CAS No. | (mg/L) | (mg/L) | % Rec. | Q (%) |
| Total Organic Carbon | OC002 | 10.0 | 10.1 | 101 | 85.0-115 |

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Subcontract Analysis



PACE ANALYTICAL 575 Broad Hollow Road Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436

Website: www.pacelabs.com

Case Narrative

WO#: **1605941**Date: **5/23/2016**

CLIENT: Pace Analytical Services Inc.

Project: 16050187 LEADER VGM

Upon receipt at Long Island lab sample -002C was improperly preserved due to misidentification of sample bottle. As per sampler identification it was clarified that sample -002C was the same sample as Duplicate -001C. Sample -001C was poured off and aliquot was analyzed as sample -002C.





TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

Pace Analytical Services Inc. 2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10700

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: | E200.7 : | | | | | | Analyst: JA |
|--------------------|-----------|---------|------------------|-------------|--------------|--------------------|--------------------|
| Parameter(s) | <u> 1</u> | Results | <u>Qualifier</u> | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| on | | 11,000 | | 1 | ug/L | 05/21/2016 1:49 AM | Container-01 of 01 |

Lab No. : 1605941-001

Client Sample ID: FIELD DUPLICATE-01

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

 \ensuremath{c} = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 2 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received : 5/11/2016 10:14:00 AM AT10700

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Lab No. : 1605941-001 Type : Aqueous Client Sample ID: FIELD DUPLICATE-01

Origin:

| Collected By CLIENT | | | | | |
|---|-------------------|----------------|--------------|---------------------|--------------------|
| Analytical Method: SW8260C: | <u>Pre</u> | o Method: 5030 | C | | Analyst: KG |
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | <u>Analyzed:</u> | Container: |
| 1,1,1,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,1,1-Trichloroethane | 10 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,1,2,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,1,2-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,1-Dichloroethane | 14 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,1-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,1-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2,3-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2,3-Trichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2,4-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2,4-Trimethylbenzene | 2.2 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2-Dibromo-3-chloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2-Dibromoethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,3,5-Trimethylbenzene/P- ethyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,3-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,3-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 1,4-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 2,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 2-Butanone | < 5.0 c | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 2-Chloroethylvinyl ether | NR | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 2-Chlorotoluene/4-Chlorotoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 2-Hexanone | < 5.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 4-Isopropyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| 4-Methyl-2-pentanone | < 5.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Acetone | < 10 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Benzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| | | | | | |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 3 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10700

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Lab No. : 1605941-001 Sample Information: Type : Aqueous

Client Sample ID: FIELD DUPLICATE-01

Origin:

| Collected By CLIENT | | | | | |
|-----------------------------|-------------------|----------------------|--------------|---------------------|--------------------|
| Analytical Method: SW8260C: | <u>Prep M</u> | <u>Method:</u> 50300 | | | Analyst: KG |
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Bromobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Bromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Bromodichloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Bromoform | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Bromomethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Carbon disulfide | < 10 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Carbon tetrachloride | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Chlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Chloroethane | 110 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Chloroform | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Chloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| cis-1,2-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| cis-1,3-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Dibromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Dibromomethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Dichlorodifluoromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Ethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Hexachlorobutadiene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Isopropylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| m,p-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Methyl tert-butyl ether | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Methylene chloride | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Naphthalene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| n-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| n-Propylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| o-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| sec-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Styrene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| tert-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| Tetrachloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:39 AM | Container-01 of 03 |
| | | | | | |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 4 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10700

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: SW8260C: | | Prep M | 1ethod: 5030 | С | | | | Analyst: KG |
|-----------------------------|-----------|----------|--------------|--------------|-------|--------|---------------------|--------------------|
| Parameter(s) | Results Q | ualifier | <u>D.F.</u> | <u>Units</u> | | | Analyzed: | Container: |
| Toluene | < 1.0 | | 1 | μg/L | | | 05/18/2016 11:39 AM | Container-01 of 03 |
| trans-1,2-Dichloroethene | < 1.0 | | 1 | μg/L | | | 05/18/2016 11:39 AM | Container-01 of 03 |
| trans-1,3-Dichloropropene | < 1.0 | | 1 | μg/L | | | 05/18/2016 11:39 AM | Container-01 of 03 |
| Trichloroethene | < 1.0 | | 1 | μg/L | | | 05/18/2016 11:39 AM | Container-01 of 03 |
| Trichlorofluoromethane | < 1.0 | | 1 | μg/L | | | 05/18/2016 11:39 AM | Container-01 of 03 |
| Vinyl acetate | < 10 | | 1 | μg/L | | | 05/18/2016 11:39 AM | Container-01 of 03 |
| Vinyl chloride | < 1.0 | | 1 | μg/L | | | 05/18/2016 11:39 AM | Container-01 of 03 |
| Surr: 1,2-Dichloroethane-d4 | 82.2 | | 1 | %Rec | Limit | 68-153 | 05/18/2016 11:39 AM | Container-01 of 03 |
| Surr: 4-Bromofluorobenzene | 105 | | 1 | %Rec | Limit | 79-124 | 05/18/2016 11:39 AM | Container-01 of 03 |
| Surr: Toluene-d8 | 93.8 | | 1 | %Rec | Limit | 69-124 | 05/18/2016 11:39 AM | Container-01 of 03 |

Lab No. : 1605941-001

Client Sample ID: FIELD DUPLICATE-01

NOTES:

NR=Analyte not reportable due to improper sample preservation.

| Analytical Method: E300.0: | | | | | | Analyst: bka |
|----------------------------|---------|------------------|-------------|--------------|--------------------|--------------------|
| Parameter(s) | Results | <u>Qualifier</u> | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Sulfate | 1.33 | J | 1 | mg/L | 05/20/2016 5:55 AM | Container-01 of 01 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

 \ensuremath{c} = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 5 of 26





TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

Pace Analytical Services Inc. 2190 Technology Drive

Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10701

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: | E200.7 : | | | | | Analyst: JA |
|--------------------|----------|--------------|-------------|--------------|--------------------|--------------------|
| Parameter(s) | Resu | ts Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Iron | 10,9 | 00 | 1 | ug/L | 05/21/2016 1:55 AM | Container-01 of 01 |

Lab No. : 1605941-002

Client Sample ID: MW-5A/AR

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

 \ensuremath{c} = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 6 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10701

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Lab No. : 1605941-002

Client Sample ID: MW-5A/AR

Sample Information:

Type: Aqueous

Origin:

| Collected By CLIENT | | | | | |
|---------------------------------------|------------------|-----------------|--------------|---------------------|--------------------|
| Analytical Method: SW8260C: | Pr | ep Method: 5030 | OC | | Analyst: KG |
| Parameter(s) | Results Qualifie | <u>er D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| 1,1,1,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,1,1-Trichloroethane | 5.2 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,1,2,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,1,2-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,1-Dichloroethane | 8.6 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,1-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,1-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2,3-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2,3-Trichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2,4-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2,4-Trimethylbenzene | 2.2 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2-Dibromo-3-chloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2-Dibromoethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,3,5-Trimethylbenzene/P-ethyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,3-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,3-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 1,4-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 2,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 2-Butanone | < 5.0 c | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 2-Chloroethylvinyl ether | NR | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 2-Chlorotoluene/4-Chlorotoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 2-Hexanone | < 5.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 4-Isopropyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| 4-Methyl-2-pentanone | < 5.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Acetone | < 10 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Benzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| | | | | | |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 7 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10701

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Lab No. : 1605941-002

Client Sample ID: MW-5A/AR

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: SW8260C: | Prep I | Method: 5030 | C | | Analyst: KG |
|-----------------------------|-------------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Bromobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Bromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Bromodichloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Bromoform | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Bromomethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Carbon disulfide | < 10 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Carbon tetrachloride | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Chlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Chloroethane | 110 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Chloroform | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Chloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| cis-1,2-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| cis-1,3-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Dibromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Dibromomethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Dichlorodifluoromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Ethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Hexachlorobutadiene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Isopropylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| m,p-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Methyl tert-butyl ether | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Methylene chloride | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Naphthalene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| n-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| n-Propylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| o-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| sec-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Styrene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| tert-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |
| Tetrachloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:57 AM | Container-01 of 03 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Pangarella
Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 8 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10701

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: SW8260C: | | Prep Method: 5030 | С | | | Analyst: KG |
|-----------------------------|------------|-------------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qu | alifier D.F. | <u>Units</u> | | Analyzed: | Container: |
| Toluene | < 1.0 | 1 | μg/L | | 05/18/2016 11:57 AM | Container-01 of 03 |
| trans-1,2-Dichloroethene | < 1.0 | 1 | μg/L | | 05/18/2016 11:57 AM | Container-01 of 03 |
| trans-1,3-Dichloropropene | < 1.0 | 1 | μg/L | | 05/18/2016 11:57 AM | Container-01 of 03 |
| Trichloroethene | < 1.0 | 1 | μg/L | | 05/18/2016 11:57 AM | Container-01 of 03 |
| Trichlorofluoromethane | < 1.0 | 1 | μg/L | | 05/18/2016 11:57 AM | Container-01 of 03 |
| Vinyl acetate | < 10 | 1 | μg/L | | 05/18/2016 11:57 AM | Container-01 of 03 |
| Vinyl chloride | < 1.0 | 1 | μg/L | | 05/18/2016 11:57 AM | Container-01 of 03 |
| Surr: 1,2-Dichloroethane-d4 | 82.5 | 1 | %Rec | Limit 68-153 | 05/18/2016 11:57 AM | Container-01 of 03 |
| Surr: 4-Bromofluorobenzene | 107 | 1 | %Rec | Limit 79-124 | 05/18/2016 11:57 AM | Container-01 of 03 |
| Surr: Toluene-d8 | 95.4 | 1 | %Rec | Limit 69-124 | 05/18/2016 11:57 AM | Container-01 of 03 |
| | | | | | | |

Lab No. : 1605941-002

Client Sample ID: MW-5A/AR

NOTES:

NR=Analyte not reportable due to improper sample preservation.

| Analytical Method: E300.0: | | | | | <u>Analy</u> | <u>/st:</u> bka |
|----------------------------|---------|------------------|-------------|--------------|--------------------------|-----------------|
| Parameter(s) | Results | <u>Qualifier</u> | <u>D.F.</u> | <u>Units</u> | Analyzed: Co | ntainer: |
| Sulfate | 1.02 | J | 1 | mg/L | 05/20/2016 6:09 AM Conta | ainer-01 of 01 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 9 of 26





TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478 www.pacelabs.com

Pace Analytical Services Inc. 2190 Technology Drive

Schenectady, NY 12308 Attn To: William A. Kotas

Collected :5/9/2016

AT10702 Received :5/11/2016 10:14:00 AM

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: E200.7 : | | | | | | Analyst: JA |
|-----------------------------|---------|-----------|-------------|--------------|--------------------|--------------------|
| Parameter(s) | Results | Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Iron | 12,500 | | 1 | ug/L | 05/21/2016 2:01 AM | Container-01 of 01 |

Lab No. : 1605941-003

Client Sample ID: MW-14

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported: 5/23/2016

Cathlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 10 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10702

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Lab No. : 1605941-003 Type : Aqueous Client Sample ID: MW-14

Origin:

| Analytical Method: SW8260C: | Pre | ep Method: 5030 | OC | | Analyst: KG |
|---------------------------------------|------------------|-----------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifie | <u>r D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| 1,1,1,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,1,1-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,1,2,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,1,2-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,1-Dichloroethane | 26 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,1-Dichloroethene | 2.3 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,1-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2,3-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2,3-Trichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2,4-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2,4-Trimethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2-Dibromo-3-chloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2-Dibromoethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,3,5-Trimethylbenzene/P-ethyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,3-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,3-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 1,4-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 2,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 2-Butanone | < 5.0 c | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 2-Chloroethylvinyl ether | NR | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 2-Chlorotoluene/4-Chlorotoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 2-Hexanone | < 5.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 4-Isopropyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| 4-Methyl-2-pentanone | < 5.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Acetone | 8.2 J | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Benzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

 \ensuremath{c} = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 11 of 26



TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478 www.pacelabs.com

Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected :5/9/2016

AT10702 :5/11/2016 10:14:00 AM Received

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information: Lab No. : 1605941-003

Type: Aqueous

Origin:

| Analytical Method: SW8260C: | Prep N | Method: 5030 | OC | | Analyst: KG |
|-----------------------------|-------------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Bromobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Bromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Bromodichloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Bromoform | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Bromomethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Carbon disulfide | < 10 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Carbon tetrachloride | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Chlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Chloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Chloroform | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Chloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| cis-1,2-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| cis-1,3-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Dibromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Dibromomethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Dichlorodifluoromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Ethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Hexachlorobutadiene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Isopropylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| m,p-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Methyl tert-butyl ether | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Methylene chloride | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Naphthalene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| n-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| n-Propylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| o-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| sec-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Styrene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| tert-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |
| Tetrachloroethene | < 1.0 | 1 | μg/L | 05/18/2016 12:15 PM | Container-01 of 03 |

Client Sample ID: MW-14

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported: 5/23/2016

Cathlin Panzarella Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 12 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received : 5/11/2016 10:14:00 AM AT10702

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: SW8260C: | | Prep M | <u>1ethod:</u> 5030 | OC | | | | Analyst: KG |
|-----------------------------|------------|-----------------|---------------------|--------------|-------|--------|---------------------|--------------------|
| Parameter(s) | Results Qu | <u>ıalifier</u> | <u>D.F.</u> | <u>Units</u> | | | Analyzed: | Container: |
| Toluene | < 1.0 | | 1 | μg/L | | | 05/18/2016 12:15 PM | Container-01 of 03 |
| trans-1,2-Dichloroethene | < 1.0 | | 1 | μg/L | | | 05/18/2016 12:15 PM | Container-01 of 03 |
| trans-1,3-Dichloropropene | < 1.0 | | 1 | μg/L | | | 05/18/2016 12:15 PM | Container-01 of 03 |
| Trichloroethene | < 1.0 | | 1 | μg/L | | | 05/18/2016 12:15 PM | Container-01 of 03 |
| Trichlorofluoromethane | < 1.0 | | 1 | μg/L | | | 05/18/2016 12:15 PM | Container-01 of 03 |
| Vinyl acetate | < 10 | | 1 | μg/L | | | 05/18/2016 12:15 PM | Container-01 of 03 |
| Vinyl chloride | 1.9 | | 1 | μg/L | | | 05/18/2016 12:15 PM | Container-01 of 03 |
| Surr: 1,2-Dichloroethane-d4 | 83.5 | | 1 | %Rec | Limit | 68-153 | 05/18/2016 12:15 PM | Container-01 of 03 |
| Surr: 4-Bromofluorobenzene | 106 | | 1 | %Rec | Limit | 79-124 | 05/18/2016 12:15 PM | Container-01 of 03 |
| Surr: Toluene-d8 | 94.9 | | 1 | %Rec | Limit | 69-124 | 05/18/2016 12:15 PM | Container-01 of 03 |

Lab No. : 1605941-003

Client Sample ID: MW-14

NOTES:

NR=Analyte not reportable due to improper sample preservation.

| Analytical Method: E300.0: | | | | | Analyst: bka |
|----------------------------|-------------------|-------------|--------------|--------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Sulfate | 21.8 | 1 | mg/L | 05/20/2016 6:22 AM | Container-01 of 01 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 13 of 26





TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

Pace Analytical Services Inc. 2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10703

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: E200.7 : | | | | | | Analyst: JA |
|-----------------------------|---------|-----------|-------------|--------------|--------------------|--------------------|
| Parameter(s) | Results | Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Iron | < 100 | | 1 | ug/L | 05/21/2016 2:07 AM | Container-01 of 01 |

Lab No. : 1605941-004

Client Sample ID: MW-16

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 14 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10703

Collected By CLIENT

LABORATORY RESULTS

Lab No. : 1605941-004

Client Sample ID: MW-16

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Collected By CLIENT | | | | |
|---|------------------|-----------------|--------------|--|
| Analytical Method: SW8260C : | <u>Pre</u> | ep Method: 5030 | С | Analyst: KG |
| Parameter(s) | Results Qualifie | <u>r D.F.</u> | <u>Units</u> | Analyzed: Container: |
| 1,1,1,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,1,1-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,1,2,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,1,2-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,1-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,1-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,1-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2,3-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2,3-Trichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2,4-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2,4-Trimethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2-Dibromo-3-chloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2-Dibromoethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,3,5-Trimethylbenzene/P- ethyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,3-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,3-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 1,4-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 2,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 2-Butanone | < 5.0 c | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 2-Chloroethylvinyl ether | NR | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 2-Chlorotoluene/4-Chlorotoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 2-Hexanone | < 5.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 4-Isopropyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| 4-Methyl-2-pentanone | < 5.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| Acetone | < 10 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| Benzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM Container-01 of 03 |
| | | | | |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 15 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10703

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Lab No. : **1605941-004** Type : Aqueous

Origin:

| Analytical Method: SW8260C: | | Prep Method: 5030 | OC | | Analyst: KG |
|-----------------------------|-------------|-------------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qua | lifier D.F. | <u>Units</u> | Analyzed: | Container: |
| Bromobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Bromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Bromodichloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Bromoform | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Bromomethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Carbon disulfide | < 10 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Carbon tetrachloride | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Chlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Chloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Chloroform | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Chloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| cis-1,2-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| cis-1,3-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Dibromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Dibromomethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Dichlorodifluoromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Ethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Hexachlorobutadiene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Isopropylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| m,p-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Methyl tert-butyl ether | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Methylene chloride | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Naphthalene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| n-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| n-Propylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| o-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| sec-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Styrene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| tert-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |
| Tetrachloroethene | 1.3 | 1 | μg/L | 05/18/2016 12:34 PM | Container-01 of 03 |

Client Sample ID: MW-16

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlen Pangarella
Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 16 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received : 5/11/2016 10:14:00 AM AT10703

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: SW8260C: | Prep I | Method: 5030 | OC | | | Analyst: KG |
|-----------------------------|-------------------|--------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | | Analyzed: | Container: |
| Toluene | < 1.0 | 1 | μg/L | | 05/18/2016 12:34 PM | Container-01 of 03 |
| trans-1,2-Dichloroethene | < 1.0 | 1 | μg/L | | 05/18/2016 12:34 PM | Container-01 of 03 |
| trans-1,3-Dichloropropene | < 1.0 | 1 | μg/L | | 05/18/2016 12:34 PM | Container-01 of 03 |
| Trichloroethene | < 1.0 | 1 | μg/L | | 05/18/2016 12:34 PM | Container-01 of 03 |
| Trichlorofluoromethane | < 1.0 | 1 | μg/L | | 05/18/2016 12:34 PM | Container-01 of 03 |
| Vinyl acetate | < 10 | 1 | μg/L | | 05/18/2016 12:34 PM | Container-01 of 03 |
| Vinyl chloride | < 1.0 | 1 | μg/L | | 05/18/2016 12:34 PM | Container-01 of 03 |
| Surr: 1,2-Dichloroethane-d4 | 83.1 | 1 | %Rec | Limit 68-153 | 05/18/2016 12:34 PM | Container-01 of 03 |
| Surr: 4-Bromofluorobenzene | 105 | 1 | %Rec | Limit 79-124 | 05/18/2016 12:34 PM | Container-01 of 03 |
| Surr: Toluene-d8 | 94.7 | 1 | %Rec | Limit 69-124 | 05/18/2016 12:34 PM | Container-01 of 03 |

Lab No. : 1605941-004

Client Sample ID: MW-16

NOTES:

NR=Analyte not reportable due to improper sample preservation.

| Analytical Method: E300.0: | | | | | Analyst: b | oka |
|----------------------------|---------|------------------|-------------|--------------|--------------------------------|-----------|
| Parameter(s) | Results | <u>Qualifier</u> | <u>D.F.</u> | <u>Units</u> | Analyzed: Container | <u>r:</u> |
| Sulfate | 3.57 | J | 1 | mg/L | 05/20/2016 6:36 AM Container-0 | 1 of 01 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

 \ensuremath{c} = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panyarella
Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 17 of 26





TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478 www.pacelabs.com

Pace Analytical Services Inc. 2190 Technology Drive

Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10704

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: E200.7 : | | | | | Analyst: JA |
|-----------------------------|-------------------|-------------|--------------|--------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Iron | 185 | 1 | ug/L | 05/21/2016 2:13 AM | Container-01 of 03 |

Lab No. : 1605941-005

Client Sample ID: MW-CHA-RFI-7

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 18 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10704

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Lab No. : 1605941-005

Client Sample ID: MW-CHA-RFI-7

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: SW8260C: | <u>Pre</u> r | Method: 5030 | OC | | Analyst: KG |
|---|-------------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| 1,1,1,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,1,1-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,1,2,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,1,2-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,1-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,1-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,1-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2,3-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2,3-Trichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2,4-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2,4-Trimethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2-Dibromo-3-chloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2-Dibromoethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,3,5-Trimethylbenzene/P- ethyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,3-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,3-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 1,4-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 2,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 2-Butanone | < 5.0 c | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 2-Chloroethylvinyl ether | NR | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 2-Chlorotoluene/4-Chlorotoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 2-Hexanone | < 5.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 4-Isopropyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| 4-Methyl-2-pentanone | < 5.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Acetone | < 10 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Benzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 19 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10704

Collected By CLIENT

LABORATORY RESULTS

Lab No. : 1605941-005

Client Sample ID: MW-CHA-RFI-7

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: SW8260C: | Prep I | Method: 5030 | C | | Analyst: KG |
|-----------------------------|-------------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Bromobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Bromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Bromodichloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Bromoform | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Bromomethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Carbon disulfide | < 10 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Carbon tetrachloride | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Chlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Chloroethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Chloroform | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Chloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| cis-1,2-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| cis-1,3-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Dibromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Dibromomethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Dichlorodifluoromethane | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Ethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Hexachlorobutadiene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Isopropylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| m,p-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Methyl tert-butyl ether | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Methylene chloride | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Naphthalene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| n-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| n-Propylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| o-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| sec-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Styrene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| tert-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |
| Tetrachloroethene | < 1.0 | 1 | μg/L | 05/18/2016 12:52 PM | Container-01 of 09 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Pangarella
Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 20 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received : 5/11/2016 10:14:00 AM AT10704

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Aqueous

Origin:

| Analytical Method: SW8260C : | Prep N | Method: 5030 | С | | | Analyst: KG |
|------------------------------|-------------------|--------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | | Analyzed: | Container: |
| Toluene | < 1.0 | 1 | μg/L | | 05/18/2016 12:52 PM | Container-01 of 09 |
| trans-1,2-Dichloroethene | < 1.0 | 1 | μg/L | | 05/18/2016 12:52 PM | Container-01 of 09 |
| trans-1,3-Dichloropropene | < 1.0 | 1 | μg/L | | 05/18/2016 12:52 PM | Container-01 of 09 |
| Trichloroethene | < 1.0 | 1 | μg/L | | 05/18/2016 12:52 PM | Container-01 of 09 |
| Trichlorofluoromethane | < 1.0 | 1 | μg/L | | 05/18/2016 12:52 PM | Container-01 of 09 |
| Vinyl acetate | < 10 | 1 | μg/L | | 05/18/2016 12:52 PM | Container-01 of 09 |
| Vinyl chloride | < 1.0 | 1 | μg/L | | 05/18/2016 12:52 PM | Container-01 of 09 |
| Surr: 1,2-Dichloroethane-d4 | 83.0 | 1 | %Rec | Limit 68-153 | 05/18/2016 12:52 PM | Container-01 of 09 |
| Surr: 4-Bromofluorobenzene | 105 | 1 | %Rec | Limit 79-124 | 05/18/2016 12:52 PM | Container-01 of 09 |
| Surr: Toluene-d8 | 94.4 | 1 | %Rec | Limit 69-124 | 05/18/2016 12:52 PM | Container-01 of 09 |

Lab No. : 1605941-005

Client Sample ID: MW-CHA-RFI-7

NOTES:

NR=Analyte not reportable due to improper sample preservation.

| Analytical Method: E300. | 0 : | | | | <u>Analyst:</u> bka |
|--------------------------|-------------------|-------------|--------------|--------------------|---------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Sulfate | 38.6 | 1 | mg/L | 05/20/2016 6:49 AM | Container-01 of 03 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panyarella
Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 21 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10705

Collected By CLIENT

LABORATORY RESULTS

Lab No. : 1605941-006

Client Sample ID: TRIP BLANK-01

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Trip Blank

Origin:

| Analytical Method: SW8260C : | <u>Pr</u> | ep Method: 503 | 0C | | Analyst: KG |
|---|------------------|----------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifie | <u>r D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| 1,1,1,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,1,1-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,1,2,2-Tetrachloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,1,2-Trichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,1-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 1,1-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 1,1-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 1,2,3-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,2,3-Trichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,2,4-Trichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,2,4-Trimethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,2-Dibromo-3-chloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,2-Dibromoethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,2-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,2-Dichloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 1,3,5-Trimethylbenzene/P- ethyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 1,3-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 1,3-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 1,4-Dichlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 2,2-Dichloropropane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 2-Butanone | < 5.0 c | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 2-Chloroethylvinyl ether | NR | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 2-Chlorotoluene/4-Chlorotoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 2-Hexanone | < 5.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| 4-Isopropyltoluene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| 4-Methyl-2-pentanone | < 5.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Acetone | < 10 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |
| Benzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 0 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 22 of 26



Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected : 5/9/2016

Received :5/11/2016 10:14:00 AM AT10705

Collected By CLIENT

LABORATORY RESULTS

Lab No. : 1605941-006

Client Sample ID: TRIP BLANK-01

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Trip Blank

Origin:

| Analytical Method: SW8260C: | Prep I | Method: 5030 | С | | Analyst: KG |
|-----------------------------|-------------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | Analyzed: | Container: |
| Bromobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Bromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Bromodichloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Bromoform | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Bromomethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Carbon disulfide | < 10 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Carbon tetrachloride | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Chlorobenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Chloroethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Chloroform | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Chloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| cis-1,2-Dichloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| cis-1,3-Dichloropropene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Dibromochloromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Dibromomethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Dichlorodifluoromethane | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Ethylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Hexachlorobutadiene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Isopropylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| m,p-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Methyl tert-butyl ether | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Methylene chloride | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Naphthalene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| n-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| n-Propylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| o-Xylene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| sec-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Styrene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| tert-Butylbenzene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |
| Tetrachloroethene | < 1.0 | 1 | μg/L | 05/18/2016 11:21 AM | Container-01 of 02 |

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported : 5/23/2016

Cathlin Pangarella
Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 23 of 26





TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478 www.pacelabs.com

Pace Analytical Services Inc.

2190 Technology Drive Schenectady, NY 12308

Attn To: William A. Kotas

Collected :5/9/2016

AT10705 Received :5/11/2016 10:14:00 AM

Collected By CLIENT

LABORATORY RESULTS

Results are only for the samples and analytes requested.

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the tests requested.

Sample Information:

Type: Trip Blank

Origin:

| Analytical Method: SW8260C : | Prep I | Method: 5030 | С | | | Analyst: KG |
|------------------------------|-------------------|--------------|--------------|--------------|---------------------|--------------------|
| Parameter(s) | Results Qualifier | <u>D.F.</u> | <u>Units</u> | | Analyzed: | Container: |
| Toluene | < 1.0 | 1 | μg/L | | 05/18/2016 11:21 AM | Container-01 of 02 |
| trans-1,2-Dichloroethene | < 1.0 | 1 | μg/L | | 05/18/2016 11:21 AM | Container-01 of 02 |
| trans-1,3-Dichloropropene | < 1.0 | 1 | μg/L | | 05/18/2016 11:21 AM | Container-01 of 02 |
| Trichloroethene | < 1.0 | 1 | μg/L | | 05/18/2016 11:21 AM | Container-01 of 02 |
| Trichlorofluoromethane | < 1.0 | 1 | μg/L | | 05/18/2016 11:21 AM | Container-01 of 02 |
| Vinyl acetate | < 10 | 1 | μg/L | | 05/18/2016 11:21 AM | Container-01 of 02 |
| Vinyl chloride | < 1.0 | 1 | μg/L | | 05/18/2016 11:21 AM | Container-01 of 02 |
| Surr: 1,2-Dichloroethane-d4 | 82.0 | 1 | %Rec | Limit 68-153 | 05/18/2016 11:21 AM | Container-01 of 02 |
| Surr: 4-Bromofluorobenzene | 105 | 1 | %Rec | Limit 79-124 | 05/18/2016 11:21 AM | Container-01 of 02 |
| Surr: Toluene-d8 | 95.6 | 1 | %Rec | Limit 69-124 | 05/18/2016 11:21 AM | Container-01 of 02 |

Lab No. : 1605941-006

Client Sample ID: TRIP BLANK-01

NOTES:

NR=Analyte not reportable due to improper sample preservation.

Qualifiers: E = Value above quantitation range, Value estimated.

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

c = Calibration acceptability criteria exceeded for this analyte. Value estimated

H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range

M-, M+ = Matrix Spike recovery below / above control limit

N = Indicates presumptive evidence of compound

P = Duplicate RPD outside of control limit

r = Reporting limit below calibration range. Value estimated.

S = Recovery outside of control limits for this analyte

+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method Date Reported: 5/23/2016

Cathlin Panzarella

Project Manager: Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 24 of 26



PACE ANALYTICAL 575 Broad Hollow Road Melville, NY 11747

Sample Receipt Checklist

TEL: (631) 694-3040 FAX: (631) 420-8436 Website: <u>www.pacelabs.com</u>

| Client Name PACE-N | ΙΥ | | | Date and I | ime Received: | 5/11/2016 10:14:00 AM |
|----------------------------|-------------------------------|-------------------------|----------|--------------|---------------|--|
| Work Order Number: 1 | 605941 Rcp | tNo: 1 | | Received b | y Paige Dohe | erty |
| Completed by: | aige Doher | ly | Revi | lewed by: Ca | thinT | Panzarella |
| Completed Date: | 5/11/2016 1:00:32 PM | - | Revi | ewed Date: | | <u>3 11:12:40 AM</u> |
| Carrier name: FedEx | | | | | | |
| Chain of custody present | t? | Yes | ✓ | No 🗌 | | |
| Chain of custody signed | when relinquished and recei | ved? Yes | ✓ | No 🗌 | | |
| Chain of custody agrees | with sample labels? | Yes | ✓ | No 🗌 | | |
| Are matrices correctly id- | entified on Chain of custody? | ? Yes | ✓ | No \square | | |
| Is it clear what analyses | were requested? | Yes | ✓ | No 🗌 | | |
| Custody seals intact on s | sample bottles? | Yes | | No 🗌 | Not Present | ✓ |
| Samples in proper conta | iner/bottle? | Yes | ✓ | No \square | | |
| Were correct preservativ | es used and noted? | Yes | ✓ | No \square | NA | |
| Preservative added to bo | ottles: | | | | | |
| Sample Condition? | | Intact | ✓ | Broken | Leaking | |
| Sufficient sample volume | e for indicated test? | Yes | ✓ | No 🗌 | | |
| Were container labels co | omplete (ID, Pres, Date)? | Yes | ✓ | No 🗌 | | |
| All samples received with | nin holding time? | Yes | ✓ | No 🗆 | | |
| Was an attempt made to | cool the samples? | Yes | ✓ | No 🗌 | NA | |
| All samples received at a | a temp. of > 0° C to 6.0° C? | Yes | ✓ | No 🗌 | NA | |
| Response when tempera | ature is outside of range: | | | | | |
| Sample Temp. taken and | d recorded upon receipt? | Yes | ✓ | No 🗌 | To 1 | 1.2 ° |
| Water - Were bubbles at | osent in VOC vials? | Yes | ✓ | No 🗆 | No Vials | |
| Water - Was there Chlor | ine Present? | Yes | | No 🗆 | NA | \checkmark |
| Water - pH acceptable u | pon receipt? | Yes | ✓ | No \square | No Water | |
| Are Samples considered | acceptable? | Yes | ✓ | No 🗌 | | |
| Custody Seals present? | | Yes | ✓ | No 🗆 | | |
| Airbill or Sticker? | | Air Bil | ✓ | Sticker | Not Present | <u>.</u> |
| Airbill No: | | 6661 5 | | | | |
| Case Number: | SDG: | | ç | SAS: | | |
| Case Hamber. | PACE-NY45 | 5 | • | 5710. | | |
| | | | | | | |
| Any No response should | d be detailed in the comment | s section below if appl | icable | • | | |
| | | | | ====== | | ======== |
| Client Contacted? | ☐ Yes ☐ No 🗹 | NA Person Conta | acted: | | | |
| Contact Mode: | Phone: Fax: | Email: | | In Person: | | |
| Client Instructions: | | | | | | |
| Date Contacted: | | Contacted By: | | | | |
| Regarding: | | • | | | | |
| Comments: | | | | | | |
| | ot verified at Schenectady la | ıb. | | | | |
| | | | | | | As per sampler identification it quot was analyzed as sample - |
| CorrectiveAction: | | | | | | |
| | | | | | | |



 $\frac{\text{WorkOrder:}}{1605941}$

Certifications

| STATE | CERTIFICATION # |
|---------------|------------------------|
| NEW YORK | 10478 |
| NEW JERSEY | NY158 |
| CONNECTICUT | PH-0435 |
| MARYLAND | 208 |
| MASSACHUSETTS | M-NY026 |
| NEW HAMPSHIRE | 2987 |
| RHODE ISLAND | LAO 00340 |
| PENNSYLVANIA | 68-00350 |

Page 26 of 26

DY CE-CI

S:YOGINIMDICOCS 8 - Other (Na2SO3) OTHER NOTES: Data Package [LEVEL-4] EDD: EQUIS-DEC-DER PRESERVATIVE KEY DAR JOST TO 5 - Zn. Acetate 7 - NaHSO4 3 - H2SO4 6 - MeOH 2 - HN03 4 - NaOH 0 - ICE 1 - HCL DISPOSAL REQUIREMENTS: (To be filled in by Client) REMARKS ENTER ANALYSIS AND METHOD NUMBER REQUESTED Additional charges incurred for disposal (if hazardous) or archival. RINTED NAME DISPOSAL BY RECEIVING LAB ARCHIVAL BY RECEIVING LAB DATE/TIME MS/MSD RETURN TO CLIENT RELINQUISHED BY HDPE 250ML RINTED NAME (0.00E) ^{@]@][n}S SIGNATURE 3X VIAL DATE/TIME COMPANY 40ML z (0₉₂₈₎ 201 HDPE 250ML × × × (7.005) NOPA .2210 RECVD W/I HOLDING TIMES. PRESERVATIVE CODE: × × × BOTTLE TYPE: PROPERLY PRESERVED: BOTTLE SIZE: × × × (LAB USE ONLY) DATE/TIME 15 Ω. 2 2 2 NUMBER OF CONTAINERS 5/23/2016 LRF # 16050187 (LAB USE ONLY) PAGE 10F 1 SAMPLE ID LAB RELINQUISHED BY AT10700 AT10702 GRAB | AT10703 GRAB | AT10704 GRAB | AT10705 AT10701 \in OCATION (CITY/STATE) ADDRESS REQUIRED TURN AROUND TIME GRAB NAME OF COURIER (IF USED) GRAB GRAB PROJECT#/PROJECT NAME: RINTED NAME GRAB/ COMP SIGNATURE 2190 Technology Drive, Schenectady, NY 12308 Telephone (518) 346-4592 Fax (518) 381-6055 DATE/TIME OMPANY Pace Analytical Services, Inc. COC DISCREPANCIES: 16050187 CHAIN OF CUSTODY RECORD MATRIX COC TAPE: ž S nicholas.nicholas@pacelabs.com RECEIVED BY AMPLES FOR DISSOLVED METALS ANALYSIS ARE FIELD FILTERTED. SAMPLE RESERVATION NOT VERIFIED AT SCHENECTADY LAB. Nicole. Johnson@pacelabs.com EADER PROFESSIONAL SERVICES: VAILS GATE MANUFACTURING TIME B 5/9/16 5/9/16 5/9/16 5/9/16 5/9/16 5/9/16 ATE/TIME DATE OMPANY TEMP: (C) CLIENT (REPORTS TO BE SENT TO): www.pacelabs.com RECEIVED BROKEN OR LEAKING: IELD DUPLICATE-01 ELECTRONIC RESULTS SAMPLE ID Nick Nicholas MBIENT OR CHILLED: ROJECT MANAGER WW-CHA-RFI-7 TRIP BLANK-01 S/10 JW-5A/AR PACE MW-14 **MW-15**

1.11. 5000 73/1.1.

samples intact

Sealed Coole Custody

Received on Ice

O° ni qmeT

DATE Signed (MM / DD / YY);

PRINT Name of SAMPLER: Matt Broker (PACE)

SIGNATURE of SAMPLER:

SAMPLER NAME AND SIGNATURE



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

*Specify Metals/Inorganics: New York State Page: REGULATORY PROGRAM DRINKING WATER [8] OTHER Filtered (Y/N) GROUND WATER F RCRA LOCATION SITE € NPDES TSU _ Company Name: Leader Professional Services Vails Gate Manufactur Pace Project Manager. Nicholas Nicholas Pace Quote Reference: #00012704 Keith Keller Invoice Information: Section C Attention: Address: Section B Required Project Information: Report To: Keith Keller Copy To: na Project Name: Purchase Order No.: Company: Leader Professional Services 2813 Wehrle Drive, Suite 1 Williamsville, NY 14221 Fax: na Required Client Information: 716-565-0963 Section A ddress: Email To: Phone:

| Specify Interais/Interganics: | | | Pace Laboratory I.D. | | | POPPAN PROPRIEST TO THE | | | | | | | | | SAMPLE CONDITIONS | N/A N/A | | | N/A N/A |
|---|------------|----------------|--|--------------------|---------|--|---------|---------------------|---------------|-------|-----|----|----|----|-------------------------------|-------------------------|---|-----|------------|
| | | | | | | | | | | | | | | | TIME | | | | |
| | D ANALYSES | | | | | | | | | | | | | | | | - | | |
| | REQUESTED | ist ivitoub | 8260 Full L Field- DO, Con Temp, pH, I Turbidity | ×××× | x x x x | ×××× | x x x x | ×××× | × | | | | | | DATE | | | | |
| | | | Dissolved Dissolved Dissolved Dissolved | × | ××× | × × | X X X | ××× | | | | | | | ACCEPTED BY / AFFILIATION | | | | |
| | | Preservatives | HUO3 NAOH NA ₂ S ₂ O3 Methanol | × | × | × | × × | × | × | | | | | | ACCEPTED (| | - | | |
| | | | SAMPLE TEMP AT CO | 7 × | , 7 x | 7 x | × 2 | 17 x | 5 | | | | | | TIME | | | | |
| Pace Profile #: | | | SAMPLE | | | | | | | - | | | | | TION DATE | | | | |
| | | СОМР | © SAMPLE DATE | | | | | | | | | | | | RELINQUISHED BY / AFFILIATION | | | j | |
| Project Number: | | 3c | NATRIX COL | WT G | WT G | WT G | WT G | WT G | WT G | | | | | | RELINQUISE | | | | |
| Requested Due Date/TAT: Standard 2-Week Project Number: | | Sab | SAMPLE ID FORGATOR NATIONAL STATEMENTS WAS WASTERVATED FORGATOR STATEMENT ST | Field Duplicate-01 | W-5A/AR | 8 MW-14 | MW-16 | MW-CHA-RFI-7 MS/MSD | Trip Blank-01 | 7 | (T) | 01 | 11 | 12 | ADDITIONAL COMMENTS | NYSDEC DER-10 EQuIS EDD | 1 | · · | |

2190 Technology Dr. Schenectady, NY 12308 (518) 346-4592

Pace Analytical

New York Office

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

<16050187P2>

N/A N/A peguli seidure *Specify Metals/Inorganics: Iron Pace Laboratory I.D. SAMPLE CONDITIONS elooO belses N/X N/A N/A Custody 90| NV JWA N/A Received on New York State 8.742 Page: O° ni qmeT REGULATORY PROGRAM TORINKING WATER TIME 500 OTHER GROUND WATER DATE (MM / DD / YY): S/9/K × Turbidity × ××× × RCRA Temp, pH, Eh, × ×××× LOCATION × × Field- DO, Conductivi ××× SITE 1814 Full List × × Total Organic Carbor × ACCEPTED BY / AFFILIATION × NPDES Sulfate TSU ___ 2 × Dissolved Fe × × × × ther lethanol Leader Professional Services eOs2ssbl Preservatives HOP PRINT Name of SAMPLER: Matt Broker (PACE) Vails Gate Manufactul Pace Project Manager. Nicholas Nicholas EON Pace Quote Reference: #00012704 *OS² 3251 TIME Keith Keller SAMPLER NAME AND SIGNATURE 17 # OF CONTAINERS MPLE TEMP AT COLLECTIO 1/4/1/ DATE SIGNATURE of SAMPLER: Invoice Information: Сотралу Name: SAMPLE Pace Profile #: TIME Section C 5121 1330 123 N/A 1145 Attention: Address: RELINQUISHED BY / AFFILIATION PREK SAMPLE 5/9/16 DATE 3/19/16 54116 3/0/5 राधार 51916 Required Project Information: Report To: Keith Keller SAMPLE TYPE G=GAAB C=CO G G G G g G WT WT WT M ₹ ¥ MATRIX CODE Copy To: na Standard 2-Week Project Number Project Name: Section B Purchase Order No.: 3000 Valid Matrix Codes MATRIX MW-CHA-RFI-7 MS/MSD Company: Leader Professional Services Field Duplicate-01 Address: 2813 Wehrle Drive, Suite 1 Trip Blank-01 MW-5A/AR ADDITIONAL COMMENTS Williamsville, NY 14221 MW-16 (A-Z, 0-9 / .-) Sample IDs MUST BE UNIQUE Fax: na AYSDEC DER-10 EQuIS EDD SAMPLE ID Requested Due Date/TAT: Required Client Information: 716-565-0963 Section D Clent Information Email To: Phone: # M3TI

2190 Technology Dr. Schenectady, NY 12308

Pace Analytical

New York Office

(518) 346-4592

Sample Condition Upon Receipt

| | | | | | CLIENT NAME: | Leadel | | |
|---|-------------------------|---------------------------|--------------|--------------------|--|-------------------------------------|-------------|---------|
| | | | | | PROJECT: | vails Gate | | |
| dEx 🗆 | Client | Pace & | Other | | 1 | ı | - 4 |) |
| TRACKING# | 1 | CUSTODY SEAL PRESENT: Yes | AL PRESENT | : Yes □ No Ø | ☑ INTACT: Yes □ | | NAM | Á |
| PACKING MATERIAL: Bubble Wrap | Bubble Bags | ags No | None 🗆 | Other | ICE USED: Wet | Blue | None □ | |
| THERMOMETER USED: #164 [] IR | IR Gun 03/3 | #122087967 | 7 | COOLE | COOLER TEMPERATURE (°C): | 8.75 | | |
| BIOLOGICAL TISSUE IS FROZEN: Yes | □ oN | N/A/N | | | Temp should be | Femp should be above freezing to 6℃ | to 6°C | |
| COMMENTS: | | | | Tempe | Temperature is Acceptable? |) ∕D ¥es | ON | |
| Chain of Custody Present: | CALVes | □No | | 1. | | | | |
| Chain of Custody Filled Out: | .Σζίγes | ON [| | 2. | | | | |
| Chain of Custody Relinquished: | ÆYes | □No | | 3. | | | | |
| Sampler Name / Signature on COC: | ` X İ'Yes | □No | , | 4. | | | | |
| Samples Arrived within Hold Time: | X Yes | □No | | 5. | | | | |
| Short Hold Time Analysis (<72hr): | □Yes | ØÅN₀ | | 6. | | | | |
| Rush Turn Around Time Requested: | □Yes | | | 7. | | | | |
| Sufficient Volume: | .e.}Yes | □No | 50 | 8. | | | | |
| Correct Containers Used: | TYes | □No | | 9. | | | | |
| - Pace Containers Used: | 知Yes | □No | | | | | | |
| Containers Intact: | Æ9Yes | No | | 10. | | | | |
| Filtered volume received for Dissolved tests: □ves | tests:'□ _{Yes} | × °N□ | AZIN'A | 11. | | | | |
| Sample Labels match COC: | Ares | ONO | | 12. | - | | | |
| - Includes date/time/ID/Analysis | | - | | | | | | |
| All containers needing preservation have been checked: | en 🗆 Yes | × °N □ | ANA ANA | 13. | | | | |
| All containers needing preservation are in | □Yes | ₹ °N□ | AND Y | | | | | |
| compliance with EPA recommendation: | | | | Initial when | | - | \$ | |
| - Exceptions that are not checked: TOC, VOA, Subcontract Analyses | bcontract Analyses | | J | completed: N/A | Lot # of added preservative: | reservative: | 1/t | |
| Headspace in VOA Vials (>6mm): | □Yes | | WIE CR | 14. | | | | |
| Trip Blank Present: | 首Yes | ₹ <u>8</u> 0 | YEAR COR | 15. | | | | |
| Trip Blank Custody Seals Present: 1000×1000 | 87 LITO- 21 POSO | % □ | 西斯岛 | | | | | |
| | | | cludes Copy | ing Shipping Docu | Line-Out (Includes Copying Shipping Documents and verifying sample pH): | sample pH): | 8 | 91/01/5 |
| | | Log In (Inclu | des notifyir | ig PM of any discr | Log In (Includes notifying PM of any discrepacies and documenting in LIMS) | nting in LIMS): | A38 5 | 11/6/16 |
| | | Labeling (Inc | ludes Scan | ning Bottles and e | Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): | pH logbook): | <u>ar</u> 5 | 1/0//10 |

Attachment B Data Validation Summary

ME Holvey Consulting, LLC



Data Usability Summary Report – July 2016 Vails Gate 737.004

Data Usability

The Quality Assurance Project Plan ("QAPP") was prepared for this project by Clough Harbor & Associates, LLP. The QAPP presents the policies, organization, objectives, functional activities, and specific Quality Assurance ("QA") and Quality Control ("QC") measures designed to achieve the data quality goals associated with this investigation. The QAPP identifies procedures for sample preparation and handling, sample chain-of-custody, laboratory analyses, and reporting that were implemented during this investigation to ensure the accuracy and integrity of the data generated during the investigation.

Leader Consulting Services, Inc. conducted the Site Investigation and Remedial Activities of the Vails Gate site.

Data Summary

The Data Usability Review and Data Validation Compliance Chart has been completed for the laboratory deliverable packages generated by Pace Analytical Laboratories, Inc. ("Pace"), pertaining to samples collected at the Vails Gate Site on May 9, 2016. A total of four (4) samples were collected during the May 2016 sampling event and analyzed for VOCs, metals, and wet chemistry. The following USEPA Methodologies were used to analyze these samples for the following analytes:

Volatiles (VOCs) USEPA Method 8260

Dissolved Iron by ICP USEPA Method 200.7 Rev. 4.4

Miscellaneous Field Analysis Dissolved Oxygen, pH, Reduction Potential, Temperature, Turbidity

Total Organic Carbon ("TOC") USEPA SM 5310B-00.11

Sulfate USEPA 300.0

Trip blank, field duplicate, surrogates, internal standards, reference samples, matrix spikes, and matrix spike duplicates were included and processed.

Samples were collected and received on the following schedule:

| Sample Package ID | Date Collected | Date Received by Pace | Sample Matrix | Requested Analyses | Sample Temperature (°C) |
|-------------------------|-------------------|--|------------------|--|-------------------------------|
| 16050187 | 05/09/2016 | 05/09/2016 (Schenectady) 05/11/2016 (Long Island) | Water | TCL 8260 Metals Misc. Field Analysis TOC Sulfate | 8.7 |

Data usability and validation was performed with guidance from the most current editions of the USEPA CLP National Functional Guidelines for Inorganic and Organic Data Review. The following items were reviewed:

- Data Completeness;
- Custody Documentation;
- Holding Times;
- Sample Blanks Review;
- Field Duplicate Samples;
- Matrix Spike Samples and Duplicates; and
- Control Spike/Laboratory Control Samples.

Those items showing deficiencies, if any, are discussed in the attached Data Validation Compliance Chart. All others were found to be acceptable as outlined in the above-mentioned usability procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the reported data, and generated in compliance with protocol requirements.

The following sample results are acceptable but positive results may be considered estimated due to continuing calibration:

➤ MW-16 for tetrachloroethylene was flagged as estimated due to the calibration acceptability criteria was exceeded.

In summary, sample processing was conducted with compliance to protocol requirements and with adherence to quality criteria and the reported results are considered "usable".

The Data Validation Compliance Chart is also included with this report.

Custody Documentation

Chain of Custody (COC) forms are used to document the history of sample possession from the time the sample containers leave their point of origin (usually the laboratory performing the analyses) to the time the samples are received by the laboratory. COCs are considered legal documents.

The Chain of Custody accurately documents the sample collection.

Accuracy, Precision, and Sensitivity of Analyses

The fundamental QA objective with respect to the accuracy, precision, and sensitivity of analytical data is to achieve the QC acceptance of each analytical protocol. Accuracy and precision are determined using matrix spike ("MS") and matrix spike duplicate ("MSD") samples.

Accuracy is a measure of the difference of a set of analytical results to the accepted or expected values. Accuracy was assessed by using the MS/MSD and surrogate spike recovery data. Recovery values were reported within the QC limits for each analytical parameter group.

Precision is a measure of the mutual agreement between measurements of the same parameter.

The sample results for the Vails Gate Project are considered "usable".

Completeness, Representativeness, and Comparability of Data

Completeness is the measure of the amount of valid data obtained from a measurement system compared with the amount expected to be obtained under normal conditions. Review of the analytical data packages provided by Pace indicates that the requested parameters were analyzed for and reported by the laboratory for each sample submitted under proper chain-of-custody procedures. Based upon MEHC's review of the laboratory data, a usable data level was achieved.

Representativeness of the data is obtained through the design of the sampling program and the adherence to established sample collection procedures, sample-handling SOPs, and analytical procedures. The sampling program outlined in the Work Plan was designed to provide for data representative of site conditions taking into consideration past disposal practices, existing data from past studies, and the physical site setting. Each of the monitoring wells was installed in accordance with established industry and regulatory protocols.

The laboratory maintained all holding times for the specific analytical protocols.

Comparability of the data is derived from the evaluation of field duplicate samples and the adherence to established sampling and analytical procedures. A field duplicate is an independent sample collected as close as possible to the original aliquot from the same sampling point. All of the groundwater samples were analyzed utilizing standardized USEPA methodologies performed in accordance with the latest version of the NYSDEC ASP protocols.

Quality Control Checks

Holding/Storage Blanks

Holding blanks are samples of reagent water prepared by the laboratory and carried through the field sampling and sample handling and shipping process. Holding blanks are analyzed as separate samples to evaluate the level of contamination associated with the collection, handling, and/or shipping of the VOC sample aliquots.

For this investigation, a holding blank was not submitted with samples collected on May 9, 2016.

Trip Blanks

A trip blank is provided with each shipping container of samples to be analyzed for volatile organic compounds (VOCs). Analysis of trip blanks determines whether a sample bottle was contaminated during shipment from the manufacturer, while in bottle storage, in shipment to the laboratory, or during analysis at a laboratory. Trip blanks consist of an aliquot of distilled water sealed in a sample bottle, prepared by the analytical laboratory prior to shipping the sample bottles. A Trip blank was included with the shipment of aqueous samples for VOC analysis.

For this investigation, a trip blank was submitted with the VOC aliquot of the groundwater samples collected on May 9, 2016. No VOC compounds were detected in the trip blank analyzed during this investigation.

Field Blanks

Given that dedicated sampling equipment was utilized for the collection of each groundwater sample, field blanks were not collected or analyzed during this sampling event.

Method Blanks

A method blank is a sample of reagent water, which is carried through the analytical procedure alongside the project samples to determine the level of laboratory background and reagent contamination.

For this investigation, a method blank was submitted with the VOC aliquot of the groundwater samples collected on May 9, 2016. No VOC compounds were detected in the method blank analyzed during this investigation.

Matrix Spike/Matrix Spike Duplicate Samples

For the Vails Gate project, one (1) MS/MSD was collected and analyzed. The following sample results are acceptable:

Sample MW-CHA-RFI-7 was submitted for matrix spike/ matrix spike duplicate (MS/MSD) analysis, and a lab-fortified blank (LFB) was analyzed. All percent recoveries were within or above QC limits. Spike recoveries showed 14 out 132 outside limits.

These results are detailed in the Data Validation Compliance Chart.

Surrogate Analyses

Surrogates are compounds added directly to every standard, blank, MS/MSD, and sample at a known concentration, prior to extraction or analysis; and used to evaluate the analytical efficiency by measuring percent recovery of those compounds upon analysis. The laboratory reported surrogate recoveries were within established QC limits for the surrogates in each analyzed sample.

The sample results for the Vails Gate Project are considered "usable".

Data Validation Compliance Chart Vails Gate

May 6, 2016 Sampling Event

| Sample ID | 16050187 Water | | | | | |
|--|--|---|---|---|--|--|
| Matrix | | | | | | |
| Analysis | TCL 8260 | Metals (Dissolved Iron Only) | Miscellaneous Field Parameters | Wet Chemistry: | | |
| Holding Times | Samples were analyzed within USEPA holding times. | Samples were analyzed within USEPA holding times | Samples were analyzed in the field. | Samples were analyzed within USEPA holding times | | |
| Calibration | In the initial calibrations, average response factors were employed as applicable, and regression functions were used for the compounds with an RSD above 20%. In the continuing calibration verification(s) (CCV), the variability for some compounds was above 20%. MW-16 result for tetrachloroethylene was flagged due to calibration acceptability, the result is considered estimated. All data quality objectives were satisfied. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | | |
| Method Blanks | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | | |
| Matrix Spike/Matrix Spike Duplicate | Sample MW-CHA-RFI-7 was submitted for matrix spike/ matrix spike duplicate (MS/MSD) analysis. 14 out of 132 percent recoveries were outside of QC limits. All RPDs were met. All percent recoveries were within or above QC limits. All data quality objectives were satisfied. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | | |
| Surrogates | All data quality objectives were satisfied. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | | |

Data Validation Compliance Chart Vails Gate

| Sample ID | 16050187 | | | | | |
|--------------------|--|---|---|---|--|--|
| Matrix | Water | | | | | |
| Analysis | TCL 8260 | Metals (Dissolved Iron Only) | Miscellaneous Field Parameters | Wet Chemistry: | | |
| Internal Standards | All data quality objectives were satisfied. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | | |
| Reference Sample | All laboratory internal quality control samples were within acceptable ranges. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | All quality assurance parameters were met for these analyses. | | |
| Data Usability | Data is acceptable. | Data is acceptable. | Data is acceptable. | Data is acceptable. | | |

Attachment C

Figure 1

