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November 10, 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 eighth Quarterly Monitoring Report required under the Remedial Action Work Plan ("RAWP"). It includes the field and laboratory results from the eighth 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 eighth quarterly sampling event Analytical Laboratory Results and Summary Tables (Attachment A) and a Data Validation Summary (Attachment B). Figure 1

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 eighth quarterly sampling event of the bioremediation program was conducted on August 8, 2016. This sampling effort is the last sampling and analysis event proposed in the 2014 RAWP. The laboratory parameters for the quarterly samples included analysis for volatile organic compounds ("VOCs"), sulfate, total organic carbon ("TOC"), and dissolved iron ("DO"). 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. For the purpose of assessing the continued viability of the bioremediation medium, the eighth quarterly sampling and analysis event includes a laboratory analytical regime to mirror the baseline (pre-injection) sampling and analysis effort completed on August 11, 2014. Therefore, the additional laboratory parameters of nitrate, total iron, total manganese, dissolved manganese, dissolved methane, dissolved ethane and dissolved ethene were selected for laboratory analysis.

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 1,720 parts per billion ("ppb") to 4,270 ppb. The pH levels within the samples collected from the four (4) wells ranged from 6.59 standard units ("SUs") to 7.53 SUs. Redox values of the samples collected from the four (4) wells ranged from -78 milliVolts ("mVs") to 31 mVs. Data interpretation is discussed in Section 5.0.

4.2 Groundwater Sample Laboratory Analytical Data Results

GWM Well MW-5A/AR

Chloroethane concentrations increased from 110 ppb in May 2016 to a value of 320 ppb in August 2016, which remains above the Class GA groundwater standard of 5 ppb. 1,1-dichloroethane concentrations increased from 8.6 ppb in May 2016 to 76 ppb in August 2016, above the Class GA groundwater standard of 5 ppb. 1,1-dichloroethene concentrations increased from ND in May 2016 to 2.9 ppb in August 2016, remaining below the Class GA groundwater standard of 5 ppb. Toluene concentrations increased from ND in May 2016 to 1.4 ppb in August 2016, remaining below the Class GA groundwater standard of 5 ppb. 1,1,1, trichloroethane concentrations increased from 5.2 ppb in May 2016 to 42 ppb in August 2016, remaining above the Class GA groundwater stnadard of 5 ppb. Vinyl chloride concentrations increased from ND in May 2016 to 2.3 ppb in August 2016, slightly above the Class GA groundwater standard of 2 ppb. Naphthalene concentrations increased from ND in May 2016 to 1.8 ppb in August 2016, remaining below the Class GA groundwater standard of 5 ppb. N-propylbenzene concentrations increased from ND in May 2016 to 1.4 ppb in August 2016, remaining below the Class GA groundwater standard of 5 ppb. 1,2,4 trimethylbenzene concentrations increased from 2.2 ppb in

May 2016 to 5.3 ppb in August 2016, slightly above the Class GA groundwater standard of 5 ppb. 1,3,5 trimethylbenzene/P ethyltoluene concentrations increased from ND in May 2016 to 1.49 ppb in August 2016, remaining below the Class GA groundwater standard of 5 ppb. N-butylbenzene concentrations increased from ND in May 2016 to 1.2 ppb (estimated value) in August 2016, remaining below the Class GA groundwater standard of 5 ppb. Sec-butylbenzene concentrations increased from ND in May 2016 to 1.7 ppb (estimated value) in August 2016, remaining below the Class GA groundwater standard of 5 ppb. The remaining VOC analytes were not detected within the August 2016 sample.

GWM Well MW-14

Acetone concentrations increased from 8.2 ppb (estimated value) in May, 2016 to 15 ppb in August 2016, remaining below the Class GA groundwater standard of 50 ppb. Chloroethane concentrations increased from ND in May 2016 to 8.9 ppb in August 2016, above the Class GA groundwater standard of 5 ppb. 1,1- dichloroethane concentrations decreased from 26 ppb in May 2016 to 12 ppb in August 2016, remaining above the Class GA standard of 5 ppb. 1,1-dichloroethene concentrations increased slightly from 2.3 ppb in May 2016 to 3.7 ppb in August 2016, remaining below the Class GA standard of 5 ppb. Vinyl chloride concentrations increased from ND in May 2016 to 3.1 ppb in August 2016, now above the Class GA groundwater standard of 2 ppb. The remaining VOC analytes were not detected within the August 2016 sample.

GWM Well MW-16

1,1- dichloroethane concentrations increased from ND in May 2016 to 9.1 ppb in August 2016, above the Class GA standard of 5 ppb. 1,1- dichloroethene concentrations increased, from ND in May 2016 to 4.5 in August 2016, remaining below the Class GA groundwater standard of 5 ppb. Tetrachloroethene concentrations increased from 1.3 ppb (estimated value) in May 2016 to the 2.4 ppb in August 2016, and remains below the Class GA groundwater standard of 5 ppb. The remaining VOC analytes were not detected within the August 2016 sample.

GWM Well MW-CHA-RFI-7

Each of the VOC concentrations from the sample collected from MW-CHA-RFI-7 during the Augusty 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. Redox values indicate that reducing conditions, (i.e. anaerobic conditions) exist for dechlorination.

5.2 Laboratory Data – Volatile Organic Compounds

Groundwater samples collected from Well MW-5A/AR experienced a slight increase in VOC concentrations in eleven (11) compounds. Five (5) analyte concentrations are above the Class GA groundwater standards (chloroethane, 1,1 dichloroethane, 1,1,1, trichloroethane, 1,2,4 trimethylbenzene and vinyl chloride). Seven (7) analyte concentrations increased, but remain below the Class GA groundwater standards (1,1 dichlorothene, toluene, naphthalene, n-propylbenzene, 1,3,5 trimethylbenzene P ethyltoluene, n-butylbenzene and sec-butylbenzene).

Groundwater samples collected from Well MW-14 experienced a slight increase in VOC concentrations in three (3) compounds. Two (2) analyte concentrations increased and are above the Class GA groundwater standards (chloroethane and vinyl chloride). Two (2) analyte concentrations increased, but remain below the Class GA groundwater standards (acetone and 1,1, dichlorethene). One analyte concentration decreased, but remains above the Class GA standard (1,1 dichloroethane).

Groundwater samples collected from Well MW-16 experienced a slight increase in VOC concentrations in three (3) compounds. One (1) analyte concentration is above the Class GA groundwater standard (1,1, dichloroethane). Two (2) analyte concentrations increased, but remain below the Class GA groundwater standards (1,1, dichloroethene and tetrachloroethene).

There were no detected VOC analytes within the groundwater sample collected in August 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.

5.3 Laboratory Data – Reductive Dechlorination Activity Indicator Parameters

Table 3 provides the results of reductive indicator parameter sampling and analysis. The groundwater samples analyzed for these parameters were collected on August 11, 2014 and August 8, 2016. A comparison of analytical results between August 11, 2014 and August 8, 2016 provide an indication of the current viability of the bioremediation process. Based on comparison of the nitrate and total dissolved iron concentrations, and the oxidation reduction potential (redox) values in Table 2, it appears that subsurface anaerobic conditions conducive to continued bioremediation exist. However, the dissolved ethene and dissolved ethane concentrations in Table 3 were lower than baseline values within wells MW-5A/AR, MW-14 and MW-16, and VOC concentrations are showing an upward trend (Tables 1a-1d), indicating that the efficacy of the 3DMe and BDI bioremediation media application is waning, as chlorinated solvent degradation is slowing.

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

Very truly yours,
Leader Consulting Services, Inc.

Keith D. Keller
Project Manager

Jeffrey A. Wittlinger, P.E., BCEE
Principal

Attachment A

Analytical Laboratory Results and Summary Tables

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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**	**August 2016**	
Quarterly Sampling Parameters														
Volatiles														
acetone	ND	ND	ND	ND	ND	440[9]	407	77[11]	110	ND	6.1	ND	ND	50 [4]
chlorobenzene	ND	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	320[11]	5
1,1-dichloroethane	650	1000	830	280	660[9]	110	325	41	3.5	ND	ND	8.6	76	5
1,1-dichloroethene	ND	110 [2]	29 [2]	11 [2]	22	ND	8.62	1.9	ND	1.1	ND	ND	2.9	5
cis-1,2 dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,4-dioxane	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	5
toluene	ND	ND	ND	ND	ND	ND	ND	ND	2.8	2.6	ND	ND	1.4	5
1,1,1-trichloroethane	890	3000	440	210	750[9]	33	200	ND	ND	ND	ND	5.2	42	5
1,1,2-trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
vinyl chloride	ND	ND	15 [2]	ND	14	6[2][10]	3.59	2.4	ND	ND	ND	ND	2.3	2
2-butanone (MEK)	ND	ND	ND	ND	ND	190[10]	82.1	4.5 [2]	ND	ND	8.6	ND	ND	50[4]
4-methyl-2-pentanone	ND	ND	ND	ND	ND	3 [2]	ND	ND	ND	ND	ND	ND	ND	[5]
naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	2.7	2.2	ND	ND	1.8	10[4]
n-propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.4	ND	ND	1.4	5
1,2,3 trichlorobenzene	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	0.5[4]
1,2,4 trichlorobenzene	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	2.1	5.1	5.4	2.5	2.2	5.3	5
1,3,5 trimethylbenzene/P ethyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	1.4	5
n-butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2 [13]	5
sec-butylbenzene	ND	ND	ND	ND	ND	ND	ND	1.1	1.2	1.3	ND	ND	1.7 [14]	5
1,2-dichloroethane	ND	ND	ND	ND	1 [2]	2 [2]	ND	ND	ND	1.8	ND	ND	ND	0.6
trichloroethene	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	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]	< 5,000	250,000
total organic carbon (TOC)	NA	NA	NA	NA	3,410	288,000	95,400	48,900	30,200	25,600	14,600	6,640	10,200	NS
dissolved iron	NA	NA	NA	NA	ND	50,600	42,900	5,780	6,050	30,700	14,400	10,900	13,900	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.
(13) The analyte was "cS" flagged, indicating that the calibration acceptability criteria was exceeded, and the value is estiimated. The recovery is outside the limits for this analyte.
(14) The recovery is outside the control limits for this analyte.
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	August 2016	
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]	15 [13]	50 [4]
chlorobenzene	ND	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	8.9	5
1,1-dichloroethane	86	79	67	53	47	1 [2]	43	48	31	22	16	26	12	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	3.7	5
cis-1,2 dichloroethene	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	[5]
tetrachloroethene	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	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	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	3.1	2
2-butanone (MEK)	ND	ND	ND	ND	2 [2]	3[2][10]	ND	2.2 [2]	ND	ND	ND	ND	ND	50[4]
4-methyl-2-pentanone	ND	ND	ND	ND	1 [2]	ND	ND	ND	ND	ND	ND	ND	ND	[5]
naphthalene	ND	ND	ND	ND	2[2][8]	ND	ND	ND	ND	ND	ND	ND	ND	10[4]
n-propylbenzene	ND	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	ND	5
hexachlorobutadiene	ND	ND	ND	ND	4[2][8]	ND	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	ND	5
1,2,4 trimethylbenzene	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	ND	ND	ND	5
sec-butylbenzene	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	0.6
trichloroethene	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	ND	7
Wet Chemistry and Dissolved Metals														
sulfate	NA	NA	NA	NA	14,900	25,700	31,200	31,000	<5,000	18,000	13,600	21,800	<5,000	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	96	NS
dissolved iron	NA	NA	NA	NA	6,130	16,200	8,410	9,130	9,920	19,500	21,900	12,500	35,000	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.
(13) the analyte was "c" flagged, indicating that the calibration acceptability ciriteria was exceeded for this analyte. The value is 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 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	August 2016	
Quarterly Sampling Parameters														
Volatiles														
acetone	ND	ND	ND	ND	2 [2][8]	ND	ND	4.6 [2]	ND	ND	ND	ND	ND	50 [4]
chlorobenzene	ND	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	ND	5
1,1-dichloroethane	17	7.9	33	14	14	19	7.18	14	73	8.4	5.2	ND	9.1	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	4.5	5
cis-1,2 dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	5
1,4-dioxane	ND	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]	2.4	5
toluene	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	1.9	ND	ND	ND	ND	1
vinyl chloride	ND	ND	ND	ND	ND	ND	ND	1	7.6	ND	ND	ND	ND	2
2-butanone (MEK)	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	[5]
naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10 [4]
n-propylbenzene	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	5
hexachlorobutadiene	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	5
1,2,4 trimethylbenzene	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	ND	ND	ND	5
sec-butylbenzene	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	0.6
trichloroethene	ND	ND	ND	ND	ND	3 [2]	ND	ND	1.2	ND	ND	ND	ND	5
chloroform	ND	ND	ND	ND	ND	ND	1.85	4.9	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]	8,670	250,000
total organic carbon (TOC)	NA	NA	NA	NA	8,650	10,800	4,220	11,700	28,000	6,180	4,940	2,700	5,510	NS
dissolved iron	NA	NA	NA	NA	ND	231	1,470	30.9 [2]	12.2 [2]	1,460	1,250	<100	310	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.
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-RFI-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	August 2016	
Quarterly Sampling Parameters												
Volatiles												
acetone	ND	ND	1[2][8]	ND	ND	2.7 [2]	ND	ND	ND	ND	ND	50 [4]
chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1-dichloroethene	ND	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	ND	5
1,4-dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	[5]
tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
toluene	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	5
1,1,2-trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
2-butanone (MEK)	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	[5]
naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10[4]
n-propylbenzene		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	5
hexachlorobutadiene	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	5
1,2,4 trimethylbenzene	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	ND	5
sec-butylbenzene	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	0.6
trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
chloroform	ND	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	36,400	250,000
total organic carbon (TOC)	NA	NA	938	42,800	746	1,200	584	550	843	ND	ND	NS
dissolved iron	NA	NA	ND	1,450	124	184	100 [12]	215	247	185	150	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

	MW-5A/AR								
Analyte	**August 2014 [4]**	**November 2014 [5]**	**February 2015**	**May 2015**	**August 2015**	**November 2015**	**February 2016**	**May 2016**	**August 2016**
dissolved oxygen[1]	1,150	1,860	1,910	910	300	500	1,500	2,200	2,470
pH[2]	7.66	7.07	6.74	6.43	6.61	6.63	6.43	6.90	6.84
redox[3]	-137	-90	-42	-73	-88	-44	-124	-62	-65

	MW-14								
Analyte	**August 2014 [4]**	**November 2014 [5]**	**February 2015**	**May 2015**	**August 2015**	**November 2015**	**February 2016**	**May 2016**	**August 2016**
dissolved oxygen[1]	1,940	2,110	1,720	1,280	1,100	700	2,700	2,010	2,410
pH[2]	7.19	7.41	6.98	6.58	6.68	6.65	6.45	6.91	6.59
redox[3]	7	-1	47	0	0	-7	-44	5	-78

	MW-16								
Analyte	**August 2014 [4]**	**November 2014 [5]**	**February 2015**	**May 2015**	**August 2015**	**November 2015**	**February 2016**	**May 2016**	**August 2016**
dissolved oxygen[1]	990	2,210	2,750	2,150	400	2,200	2,800	2,800	4,270
pH[2]	7.12	6.86	6.94	6.66	6.28	6.92	6.74	7.58	7.03
redox[3]	24	-14	12	151	49	48	45	73	31

	MW-CHA-RFI-7								
Analyte	**August 2014 [4]**	**November 2014 [5]**	**February 2015**	**May 2015**	**August 2015**	**November 2015**	**February 2016**	**May 2016**	**August 2016**
dissolved oxygen[1]	1,440	1,220	1,760	1,660	600	700	1,200	1,780	1,720
pH[2]	7.55	7.38	7.55	7.01	7.41	7.52	7.12	7.28	7.53
redox[3]	-36	-1	73	35	20	48	-90	31	-5

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.

TABLE 3

REDUCTIVE DECHLORINATION ACTIVITY INDICATOR PARAMETERS

	MW-5A/AR		MW-14		MW-16		MW-CHA-RFI-7	
Analyte [1]	**August 2014 [3]**	**August 2016**	**August 2014 [3]**	**August 2016**	**August 2014 [3]**	**August 2016**	**August 2014 [3]**	**August 2016**
Pre/Post Injection Parameters								
nitrate	ND	ND	ND	ND	ND	ND	ND	ND
total iron	3,850	14,300	223,000	95,000	1,860	5,040	5,430	513
dissolved iron	ND	13,900	6,130	35,000	ND	310	ND	150
total manganese	2,410	2,890	18,200	17,800	7,380	1,550	1,680	1,570
dissolved manganese	2,310	2,810	7,120	12,800	5,490	2,060	1,450	1,610
dissolved methane	2,300	9,700	890	5,200	370	40	2.8	2.7
dissolved ethane	14	2.9	0.24	0.064[2]	0.10[2]	0.027[2]	0.016[2]	0.0053[2]
dissolved ethene	2.1	0.059[2]	0.21	0.45	0.64	0.066[2]	0.024[2]	0.20[4]

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) Sampling date of August 11, 2014 reflects pre-bioremediation injection dates of August 13 and 14, 2014.

(4) The analytes was "U" flagged, indicating that it was not detected at or above the noted concentration.

ND - Analyte was not detected above analytical laboratory detection limits.

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): August 08, 2016
Lab Report ID: 16080179
Client Service Contact: Nick Nicholas (518) 346-4592

Analysis Included:
RSK-175 - Subcontracted
Misc Field Analysis
Dissolved Metals E200.7 - Sub Pace LI
VOCs E8260C - Sub Pace LI
Metals E200.7 - Sub Pace LI
Sulfate E300.0 - Sub Pace LI
Nitrate (NO3)
Total Organic Carbon

Roy Smith
Technical Director

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

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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

Pace Analytical
www.pacelabs.com

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.

<16080179P1>

160801791

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Leader Professional Services	Report To: Keith Keller	Attention: Keith Keller
Address: 2813 Wehrle Drive, Suite 1	Copy To: na	Company Name: Leader Professional Services
Williamsville, NY 14221		Address:
Email To:	Purchase Order No.:	Pace Quote Reference: #00012704
Phone: 716-565-0963 Fax: na	Project Name: Vails Gate Manufactur	Pace Project Manager: Nicholas Nicholas
Requested Due Date/TAT: Standard 2-Week	Project Number:	Pace Profile #:

REGULATORY PROGRAM

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: New York State

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Nitrate	Total Fe & Mn	Dissolved Fe & Mn	Sulfate	Total Organic Carbon	RSK-175 (Gases)***	8260 Full List	Pace Laboratory I.D.
1	Field Duplicate-01	WT	G	8/8/16	1132		12	X	X	X	X						X	X	X	X	X	X	X	LAT20447
2	MW-5A/AR	WT	G	8/8/16	1130		12	X	X	X	X						X	X	X	X	X	X	X	LAT20448
3	MW-14	WT	G	8/8/16	1115		12	X	X	X	X						X	X	X	X	X	X	X	LAT20449
4	MW-16	WT	G	8/8/16	1215		12	X	X	X	X						X	X	X	X	X	X	X	LAT20450
5	MW-CHA-RFI-7 MS/MSD	WT	G	8/8/16	1330		22	X	X	X	X						X	X	X	X	X	X	X	LAT20451
6	Trip Blank-01	WT	G	8/8/16	N/A		2				X												X	LAT20452
7																								
8																								
9																								
10																								
11																								
12																								

REQUESTED ANALYSES

*Specify Metals/Inorganics:
Iron
Manganese
*** *Methane, Ethane, & Ethene (RSK-175)*

Pace Laboratory I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
NYSDEC DER-10 EQuIS EDD	PACE	8/8/16	1515	PACE	8/8/16	1515

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
8.2	(Y)/N	(Y)/N	(Y)/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Matt Broker (PACE)

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 8/8/16

<16080179P2>

160801792

Sample Condition Upon Receipt

CLIENT NAME: Leader Professional Services

PROJECT: Wells Gate Manufacturing

COURIER: FedEx ☐ UPS ☐ Client ☐ Pace ☒ Other ☐

TRACKING # N/A

CUSTODY SEAL PRESENT: Yes ☐ No ☒ INTACT: Yes ☐ No ☐ N/A ☒

PACKING MATERIAL: Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other ☐ ICE USED: Wet ☒ Blue ☐ None ☐

THERMOMETER USED: #164 ☒ IR Gun 03 ☐ #160239773 ☐ #160239773-PRB ☐ COOLER TEMPERATURE (°C): 5.2

BIOLOGICAL TISSUE IS FROZEN: Yes ☐ No ☐ N/A ☒

COMMENTS: Temperature is Acceptable? ☒Yes ☐No

Chain of Custody Present:	☒Yes	☐No		1.
Chain of Custody Filled Out:	☒Yes	☐No		2.
Chain of Custody Relinquished:	☒Yes	☐No		3.
Sampler Name / Signature on COC:	☒Yes	☐No		4.
Samples Arrived within Hold Time:	☒Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☒Yes	☐No		6. Nitrate
Rush Turn Around Time Requested:	☐Yes	☒No		7. 2-weeks
Sufficient Volume:	☒Yes	☐No		8.
Correct Containers Used:	☒Yes	☐No		9.
- Pace Containers Used:	☒Yes	☐No		
Containers Intact:	☒Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC: - Includes date/time/ID/Analysis	☒Yes	☐No		12. No date/time indicated on sample labels.
All containers needing preservation have been checked:	☐Yes	☐No	☒N/A	13.
All containers needing preservation are in compliance with EPA recommendation: - Exceptions that are not checked: TOC, VOA, Subcontract Analyses	☐Yes	☐No	☒N/A	Initial when completed: N/A Lot # of added preservative: N/A
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14.
Trip Blank Present:	☒Yes	☐No	☐N/A	15.
Trip Blank Custody Seals Present:	☐Yes	☒No	☐N/A	
Pace Trip Blank Lot #: N/A				

Sample Receipt form filled in: DB 8/10/16

Line-Out (Includes Copying Shipping Documents and verifying sample pH): DB 8/8/16

Log In (Includes notifying PM of any discrepacies and documenting in LIMS): [illegible] 8/8/16

Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): DB 8/8/16

PACE Analytical Services, Inc. Ground water Field Log

Client: **Leader Consulting**

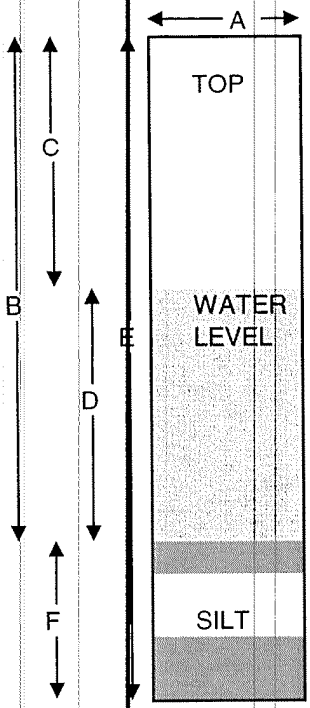
Project: **Vails Gate Manufacturing** PACE ID

Well ID.: **MW-5A/AR Field Dupe 1**

Condition of Well: Good Locked: Yes

Method of Evacuation: Peristaltic Pump Lock ID: Flush

Method of Sampling: Peristaltic Pump



A.	Diameter of Well	2.00	inches
B.	Well Depth Measured	6.50	feet
C.	Depth to Water	0.35	feet
D.	Length of Water Column (calculated)	6.15	feet
	Conversion Factor	0.16	------
	Well Volume (calculated)	0.98	gallons
	No. of Volumes to be Evacuated	3	------
	Total Volume to be Evacuated	2.94	gallons
	Actual Volume Evacuated	3.00	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling	
Date	8/8/16	8/8/16	
Time	10:56	11:30	
EH	-75	-65	mV
Temperature	24.8	25.1	C
pH	6.83	6.84	SU
Specific Cond.	956.6	1106	uS
Turbidity	94.8	15.2	NTU
Dissolved Oxygen	2.57	2.47	
Appearance	cloudy	clear	

Weather: 26C sunny

Observations: cloudy to clear

% Recharge:

Initial Depth to Water 0.35 feet

Recharge Depth to Water 2.43 feet

2nd water column height

1st water column height

Elevation(Top of Casing) N/A

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Sampler: Matt Broker

Signature:

1

PACE Analytical Services, Inc. Ground water Field Log

Client: **Leader Consulting**

Project: **Vails Gate Manufacturing**

Well ID.: **MW-14**

PACE ID

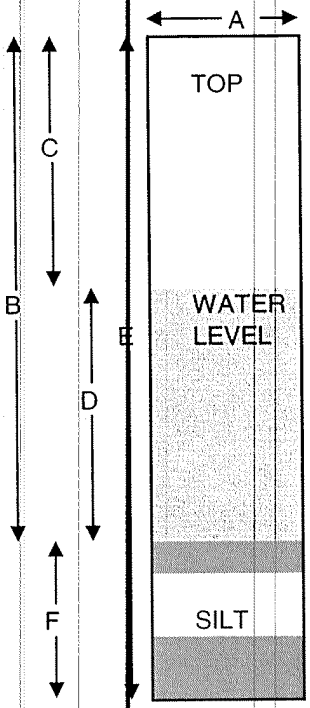
Condition of Well: Good

Locked: Yes

Method of Evacuation: Bailer

Lock ID: Flush

Method of Sampling: Bailer



A.	Diameter of Well	2.00	inches
B.	Well Depth Measured	13.00	feet
C.	Depth to Water	3.99	feet
D.	Length of Water Column (calculated)	9.01	feet
	Conversion Factor	0.16	------
	Well Volume (calculated)	1.44	gallons
	No. of Volumes to be Evacuated	3	------
	Total Volume to be Evacuated	4.32	gallons
	Actual Volume Evacuated	Dry @ 2.0	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling	
Date	8/8/16	8/8/16	
Time	10:40	11:15	
EH	-33	-78	mV
Temperature	23.3	21.8	C
pH	6.53	6.59	SU
Specific Cond.	1611	1737	uS
Turbidity	4.96	979	NTU
Dissolved Oxygen	2.12	2.41	
Appearance	clear	grey	

% Recharge:

Initial Depth to Water 3.99 feet

Recharge Depth to Water 8.74 feet

2nd water column height

1st water column height

Elevation(Top of Casing) N/A

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 26C sunny

Observations: Well between piller 2 and 3 slow recharge oily sheen

Well located in Unit 4-5

Oil all over bailer. Changed bailers before sampling

Sampler: Matt Broker

Signature:

1

PACE Analytical Services, Inc. Ground water Field Log

Client: **Leader Consulting**

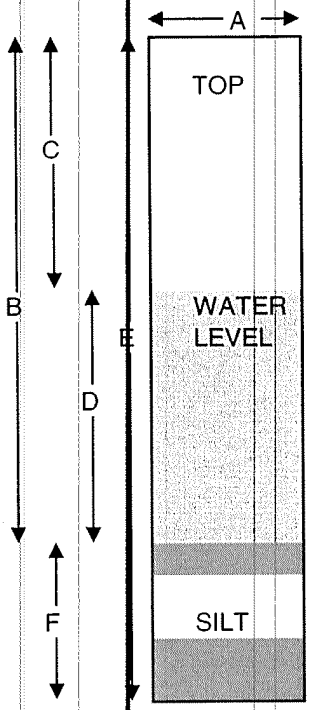
Project: **Vails Gate Manufacturing** PACE ID

Well ID.: **MW-16**

Condition of Well: Good Locked: Yes

Method of Evacuation: Peristaltic Pump Lock ID: Flush

Method of Sampling: Peristaltic Pump



A.	Diameter of Well	2.00	inches
B.	Well Depth Measured	13.63	feet
C.	Depth to Water	2.81	feet
D.	Length of Water Column (calculated)	10.82	feet
	Conversion Factor	0.16	------
	Well Volume (calculated)	1.73	gallons
	No. of Volumes to be Evacuated	3	------
	Total Volume to be Evacuated	5.19	gallons
	Actual Volume Evacuated	Dry @ 1.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling	
Date	8/8/16	8/8/16	
Time	11:46	12:15	
EH	-76	31	mV
Temperature	21.7	23.2	C
pH	7.01	7.03	SU
Specific Cond.	583.2	705.3	uS
Turbidity	39.2	396	NTU
Dissolved Oxygen	1.85	4.27	
Appearance	cloudy	cloudy	

% Recharge:

Initial Depth to Water 2.81 feet

Recharge Depth to Water 12.25 feet

2nd water column height

1st water column height

Elevation(Top of Casing) N/A

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 27C sunny

Observations: sample cloudy

Sampler: Matt Broker

Signature:

1

PACE Analytical Services, Inc. Ground water Field Log

Client: **Leader Consulting**

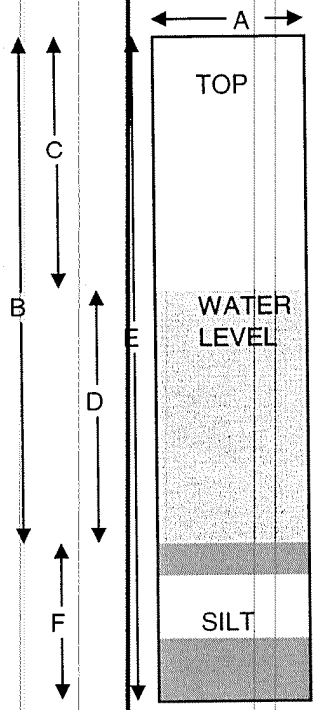
Project: **Vails Gate Manufacturing** PACE ID

Well ID.: **MW-CHA-RFI-7 MS/MSD**

Condition of Well: Good Locked: Yes

Method of Evacuation: Peristaltic Pump Lock ID: Flush

Method of Sampling: Peristaltic Pump



A.	Diameter of Well	2.00	inches
B.	Well Depth Measured	41.67	feet
C.	Depth to Water	0.00	feet
D.	Length of Water Column (calculated)	41.67	feet
	Conversion Factor	0.16	------
	Well Volume (calculated)	6.67	gallons
	No. of Volumes to be Evacuated	3	------
	Total Volume to be Evacuated	20.01	gallons
	Actual Volume Evacuated	15.00	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling	
Date	8/8/16	8/8/16	
Time	12:22	13:30	
EH	47	-5	mV
Temperature	18.8	23.3	C
pH	7.29	7.53	SU
Specific Cond.	1487	1473	uS
Turbidity	7.62	7.87	NTU
Dissolved Oxygen	1.62	1.72	
Appearance	clear	clear	

% Recharge:

Initial Depth to Water 0 feet

Recharge Depth to Water 24.03 feet

2nd water column height

1st water column height

Elevation(Top of Casing) N/A

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 27C sunny

Observations: sample clear

Sampler: Matt Broker

Signature:

1

PACE ANALYICAL INC.

FIELD CALIBRATION SHEET

DATE: 8/8/16 **SITE:** Vails Gate Manufacturing

TECHNICIAN: Matt Broker **WEATHER:** 26C sunny

INSTRUMENT:

PH	Myron Ultrameter II 6PFCe
CONDUCTIVITY	Myron Ultrameter II 6PFCe
TEMPERATURE	Myron Ultrameter II 6PFCe
DISSOLVED OXYGEN	Sper Scientific 850041
TURBIDITY	Hanna HI 98703

INSTRUMENT ANALYTE	STANDARD	INTIAL READING	ADJUSTED READING	TIME	NOTES
Ph	4.00	4.06	4.00	1031	
	7.00	7.21	7.00	1030	
	10.00	10.23	10.00	1032	
Conductivity	1413	1385	1413	1033	
Turbidity	<0.10	0.12	<0.10	1034	
	15	15.1	15	1035	
	100	99	100	1036	
	750	753	750	1037	

NOTES:

SAMPLE RECEIPT

SAMPLE RECEIPT REPORT
16080179

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: 16080179
REPORT: DATA PACKAGE
EDD: YES
LRF TAT: 2 WEEK

RECEIVED DATE: 08/08/2016 15:15
SHIPPED VIA: PICK UP [1,2]
SHIPPING ID: M. BROKER
NUMBER OF COOLERS: 1
CUSTODY SEAL INTACT: NA
COOLER STATUS: CHILLED
TEMPERATURE(S): [5] 8.2 °C

SAMPLE SEALS INTACT: NA
SAMPLES PRESERVED PER METHOD GUIDANCE: YES
[3] SAMPLES REC'D IN HOLDTIME: YES
DISPOSAL: BY LAB (45 DAYS)
COC DISCREPANCY: NO

COMMENTS:
NO DATE/TIME INDICATED ON SAMPLE LABELS.

3

CLIENT ID (LAB ID)	TAT-DUE Date [4]	DATE-TIME SAMPLED	MATRIX	METHOD	TEST DESCRIPTION	QC REQUEST
FIELD DUPLICATE-01 (AT20447)	2 WEEK 08-22-16	08/08/2016 11:32	Water		RSK-175 - Subcontracted	
	2 WEEK 08-22-16	08/08/2016 11:32	Water	Dissolved Metals E200.7	Dissolved Metals E200.7 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:32	Water	EPA 353.2 Rev. 2.0	Nitrate (NO3)	
	2 WEEK 08-22-16	08/08/2016 11:32	Water	Metals E200.7	Metals E200.7 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:32	Water	SM 5310B-00,-11	Total Organic Carbon	
	2 WEEK 08-22-16	08/08/2016 11:32	Water	Sulfate E300.0	Sulfate E300.0 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:32	Water	VOCs E8260C	VOCs E8260C - Sub Pace LI	
MW-5A/AR (AT20448)	2 WEEK 08-22-16	08/08/2016 11:30	Water		RSK-175 - Subcontracted	
	2 WEEK 08-22-16	08/08/2016 11:30	Water	Dissolved Metals E200.7	Dissolved Metals E200.7 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:30	Water	EPA 353.2 Rev. 2.0	Nitrate (NO3)	
	2 WEEK 08-22-16	08/08/2016 11:30	Water	Metals E200.7	Metals E200.7 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:30	Water	Misc Field Analysis	Misc Field Analysis	
	2 WEEK 08-22-16	08/08/2016 11:30	Water	SM 5310B-00,-11	Total Organic Carbon	
	2 WEEK 08-22-16	08/08/2016 11:30	Water	Sulfate E300.0	Sulfate E300.0 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:30	Water	VOCs E8260C	VOCs E8260C - Sub Pace LI	
MW-14 (AT20449)	2 WEEK 08-22-16	08/08/2016 11:15	Water		RSK-175 - Subcontracted	
	2 WEEK 08-22-16	08/08/2016 11:15	Water	Dissolved Metals E200.7	Dissolved Metals E200.7 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:15	Water	EPA 353.2 Rev. 2.0	Nitrate (NO3)	
	2 WEEK 08-22-16	08/08/2016 11:15	Water	Metals E200.7	Metals E200.7 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:15	Water	Misc Field Analysis	Misc Field Analysis	
	2 WEEK 08-22-16	08/08/2016 11:15	Water	SM 5310B-00,-11	Total Organic Carbon	
	2 WEEK 08-22-16	08/08/2016 11:15	Water	Sulfate E300.0	Sulfate E300.0 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 11:15	Water	VOCs E8260C	VOCs E8260C - Sub Pace LI	
MW-16 (AT20450)	2 WEEK 08-22-16	08/08/2016 12:15	Water		RSK-175 - Subcontracted	
	2 WEEK 08-22-16	08/08/2016 12:15	Water	Dissolved Metals E200.7	Dissolved Metals E200.7 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 12:15	Water	EPA 353.2 Rev. 2.0	Nitrate (NO3)	
	2 WEEK 08-22-16	08/08/2016 12:15	Water	Metals E200.7	Metals E200.7 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 12:15	Water	Misc Field Analysis	Misc Field Analysis	
	2 WEEK 08-22-16	08/08/2016 12:15	Water	SM 5310B-00,-11	Total Organic Carbon	
	2 WEEK 08-22-16	08/08/2016 12:15	Water	Sulfate E300.0	Sulfate E300.0 - Sub Pace LI	
	2 WEEK 08-22-16	08/08/2016 12:15	Water	VOCs E8260C	VOCs E8260C - Sub Pace LI	

SAMPLE RECEIPT REPORT
16080179

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: 16080179
REPORT: DATA PACKAGE
EDD: YES
LRF TAT: 2 WEEK

RECEIVED DATE: 08/08/2016 15:15
SHIPPED VIA: PICK UP
SHIPPING ID: M. BROKER
NUMBER OF COOLERS: 1
CUSTODY SEAL INTACT: NA
COOLER STATUS: CHILLED
TEMPERATURE(S): 8.2 °C

SAMPLE SEALS INTACT: NA
SAMPLES PRESERVED PER METHOD GUIDANCE: YES
SAMPLES REC'D IN HOLDTIME: YES
DISPOSAL: BY LAB (45 DAYS)
COC DISCREPANCY: NO

COMMENTS:
NO DATE/TIME INDICATED ON SAMPLE LABELS.

CLIENT ID (LAB ID)	TAT-DUE Date	DATE-TIME SAMPLED	MATRIX	METHOD	TEST DESCRIPTION	QC REQUEST
MW-CHA-RFI-7 (AT20451)	2 WEEK 08-22-16	08/08/2016 13:30	Water		RSK-175 - Subcontracted	MS, MSD
	2 WEEK 08-22-16	08/08/2016 13:30	Water	Dissolved Metals E200.7	Dissolved Metals E200.7 - Sub Pace LI	MS, MSD
	2 WEEK 08-22-16	08/08/2016 13:30	Water	EPA 353.2 Rev. 2.0	Nitrate (NO3)	MS, MSD
	2 WEEK 08-22-16	08/08/2016 13:30	Water	Metals E200.7	Metals E200.7 - Sub Pace LI	MS, MSD
	2 WEEK 08-22-16	08/08/2016 13:30	Water	Misc Field Analysis	Misc Field Analysis	
	2 WEEK 08-22-16	08/08/2016 13:30	Water	SM 5310B-00,-11	Total Organic Carbon	MS, MSD
	2 WEEK 08-22-16	08/08/2016 13:30	Water	Sulfate E300.0	Sulfate E300.0 - Sub Pace LI	MS, MSD
	2 WEEK 08-22-16	08/08/2016 13:30	Water	VOCs E8260C	VOCs E8260C - Sub Pace LI	MS, MSD
TRIP BLANK-01 (AT20452)	2 WEEK 08-22-16	08/08/2016	Water	VOCs E8260C	VOCs E8260C - Sub Pace LI	

[1]The 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.
[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 is not possible for the laboratory to perform the test in that time. Sample Certificates of Analysis reports are noted as such.
[4]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.
[5]All 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.
[6]Samples 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.

Reporting Parameters and Lists

EPA 353.2 Rev. 2.0 - Nitrate (NO3) - (mg/L)
- Nitrate
- Nitrate-Nitrite
- Nitrite

Misc Field Analysis - Misc Field Analysis - (mg/L)
- Dissolved Oxygen ($)
- pH ($)
- Reduction Potential ($)
- Specific Conductance ($)
- Static Water Level ($)
- Temperature ($)
- Turbidity ($)

SM 5310B-00,-11 - Total Organic Carbon - (mg/L)
- Total Organic Carbon

Wet Chemistry - TOC/DTOC

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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: 16080179-01 (AT20447)

Collection Date: 08/08/2016 11:32
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	913	SM 5310B	08/16/2016 22:23	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Total Organic Carbon	OC002	**9.79**	1.00	1.00		913

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

4

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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-5A/AR
Lab Sample ID: 16080179-02 (AT20448)

Collection Date: 08/08/2016 11:30
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	913	SM 5310B	08/16/2016 22:37	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Total Organic Carbon	OC002	**10.2**	1.00	1.00		913

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

4

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: 16080179-03 (AT20449)

Collection Date: 08/08/2016 11:15
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	913	SM 5310B	08/16/2016 22:52	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Total Organic Carbon	OC002	**96.0**	20.0	20.00		913

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

4

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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: 16080179-04 (AT20450)

Collection Date: 08/08/2016 12:15
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	913	SM 5310B	08/16/2016 23:08	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Total Organic Carbon	OC002	**5.51**	1.00	1.00		913

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

4

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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: 16080179-05 (AT20451)

Collection Date: 08/08/2016 13:30
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	913	SM 5310B	08/16/2016 23:24	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Total Organic Carbon	OC002	ND	1.00	1.00	U	913

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

4

Wet Chemistry - Nitrate-Nitrite

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: 16080179-01 (AT20447)

Collection Date: 08/08/2016 11:32
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	517	Nitrate - 353.2	08/09/2016 16:39	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Nitrate	NA	ND	0.165	1.00	U	517

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

5

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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-5A/AR
Lab Sample ID: 16080179-02 (AT20448)

Collection Date: 08/08/2016 11:30
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	517	Nitrate - 353.2	08/09/2016 16:41	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Nitrate	NA	ND	0.165	1.00	U	517

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

5

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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: 16080179-03 (AT20449)

Collection Date: 08/08/2016 11:15
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	517	Nitrate - 353.2	08/09/2016 16:42	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Nitrate	NA	ND	0.165	1.00	U	517

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

5

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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: 16080179-04 (AT20450)

Collection Date: 08/08/2016 12:15
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	517	Nitrate - 353.2	08/09/2016 16:43	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Nitrate	NA	ND	0.165	1.00	U	517

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

5

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: 16080179-05 (AT20451)

Collection Date: 08/08/2016 13:30
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	517	Nitrate - 353.2	08/09/2016 16:44	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Nitrate	NA	ND	0.165	1.00	U	517

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

5

Field Analysis

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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-5A/AR
Lab Sample ID: 16080179-02 (AT20448)

Collection Date: 08/08/2016 11:30
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	Field Test	Field Analysis	08/08/2016 11:30	MEB	NA	NA	NA

Analyte	CAS No.	Result		PQL	Dilution Factor	Flags	File ID
Dissolved Oxygen ($)	7782-44-7	2.47	(mg/L)	0.00	1.00		Field Test
pH ($)	NA	6.84	(pH)	0.00	1.00		Field Test
Reduction Potential ($)	NA	-65.0	(mV)	0.00	1.00		Field Test
Specific Conductance ($)	NA	1110	(umhos/cm	0.00	1.00		Field Test
Static Water Level ($)	NA	0.350	(ft btmp)	0.00	1.00		Field Test
Temperature ($)	NA	25.1	(°C)	0.00	1.00		Field Test
Turbidity ($)	NA	15.2	(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.

6

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: 16080179-03 (AT20449)

Collection Date: 08/08/2016 11:15
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	Field Test	Field Analysis	08/08/2016 11:15	MEB	NA	NA	NA

Analyte	CAS No.	Result		PQL	Dilution Factor	Flags	File ID
Dissolved Oxygen ($)	7782-44-7	2.41	(mg/L)	0.00	1.00		Field Test
pH ($)	NA	6.59	(pH)	0.00	1.00		Field Test
Reduction Potential ($)	NA	-78.0	(mV)	0.00	1.00		Field Test
Specific Conductance ($)	NA	1740	(umhos/cm	0.00	1.00		Field Test
Static Water Level ($)	NA	3.99	(ft btmp)	0.00	1.00		Field Test
Temperature ($)	NA	21.8	(°C)	0.00	1.00		Field Test
Turbidity ($)	NA	979	(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.

6

Pace Analytical®

Analytical Sample Results

Job Number: 16080179

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: 16080179-04 (AT20450)

Collection Date: 08/08/2016 12:15
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	Field Test	Field Analysis	08/08/2016 12:15	MEB	NA	NA	NA

Analyte	CAS No.	Result		PQL	Dilution Factor	Flags	File ID
Dissolved Oxygen ($)	7782-44-7	4.27	(mg/L)	0.00	1.00		Field Test
pH ($)	NA	7.03	(pH)	0.00	1.00		Field Test
Reduction Potential ($)	NA	31.0	(mV)	0.00	1.00		Field Test
Specific Conductance ($)	NA	705	(umhos/cm	0.00	1.00		Field Test
Static Water Level ($)	NA	2.81	(ft btmp)	0.00	1.00		Field Test
Temperature ($)	NA	23.2	(°C)	0.00	1.00		Field Test
Turbidity ($)	NA	396	(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.

6

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: 16080179-05 (AT20451)

Collection Date: 08/08/2016 13:30
Sample Matrix: WATER
Received Date: 08/08/2016 15:15
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	Field Test	Field Analysis	08/08/2016 13:30	MEB	NA	NA	NA

Analyte	CAS No.	Result		PQL	Dilution Factor	Flags	File ID
Dissolved Oxygen ($)	7782-44-7	1.72	(mg/L)	0.00	1.00		Field Test
pH ($)	NA	7.53	(pH)	0.00	1.00		Field Test
Reduction Potential ($)	NA	-5.00	(mV)	0.00	1.00		Field Test
Specific Conductance ($)	NA	1470	(umhos/cm	0.00	1.00		Field Test
Static Water Level ($)	NA	0.00	(ft btmp)	0.00	1.00		Field Test
Temperature ($)	NA	23.3	(°C)	0.00	1.00		Field Test
Turbidity ($)	NA	7.87	(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.

Quality Control Samples (Field)

Pace Analytical®

Quality Control Results
Matrix Spike Sample (MS)

Job Number: 16080179

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 MS
Lab Sample ID: 16080179-05M (AT20451M)

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:		Nitrate - 353.2	08/09/2016 16:45	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Nitrate	NA	**3.84**	0.165	1.00		

Analyte Spiked	CAS No.	Sample (mg/L)	Added (mg/L)	MS (mg/L)	MS % Rec.	Q[1]	Limits (%)
Nitrate	NA		4.00	3.84	96.0		90.0-110

[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.

7

Pace Analytical®

Quality Control Results
Matrix Spike Duplicate (MSD)

Job Number: 16080179

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 MSD
Lab Sample ID: 16080179-05K (AT20451K)

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:		Nitrate - 353.2	08/09/2016 16:47	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Nitrate	NA	**3.85**	0.165	1.00		

								Precision			
Analyte Spiked	**CAS No.**	**Sample (mg/L)**	**Added (mg/L)**	**MSD (mg/L)**	**MSD % Rec.**	**Q[1]**	**Limits (%)**	**MS % Rec.**	**RPD**	**Q[1]**	**Limits (%)**
Nitrate	NA		4.00	3.85	96.3		90.0-110	96.0	0.260		20

[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.

7

Quality Control Samples (Lab)

Pace Analytical®

Quality Control Results
Method Blank

Job Number: 16080179

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 (AT20278B)
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:	913	SM 5310B	08/16/2016 19:09	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Total Organic Carbon	OC002	ND	1.00	1.00	U	913

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

8

Pace Analytical®

Quality Control Results
Lab Control Sample (LCS)

Job Number: 16080179

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 (AT20278L)
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:	913	SM 5310B	08/16/2016 19:22	JS	NA	NA	NA

Analyte Spiked	CAS No.	Added (mg/L)	LCS (mg/L)	LCS % Rec.	Q[1]	Limits (%)
Total Organic Carbon	OC002	10.0	10.3	103		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.

8

Pace Analytical®

Quality Control Results
Method Blank

Job Number: 16080179

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 (AT20447B)
Lab Sample ID: BLANK-28

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:	517	Nitrate - 353.2	08/09/2016 16:36	JS	NA	NA	NA

Analyte	CAS No.	Result (mg/L)	PQL	Dilution Factor	Flags	File ID
Nitrate	NA	ND	0.165	1.00	U	517

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

8

Pace Analytical®

Quality Control Results
Lab Control Sample (LCS)

Job Number: 16080179

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 (AT20447L)
Lab Sample ID: LCS-28

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:	517	Nitrate - 353.2	08/09/2016 16:37	JS	NA	NA	NA

Analyte Spiked	CAS No.	Added (mg/L)	LCS (mg/L)	LCS % Rec.	Q[1]	Limits (%)
Nitrate	NA	4.00	4.13	103		90.0-110

[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.

8

Subcontract Analysis

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

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.

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

Attn To : William A. Kotas

Collected : 8/8/2016 11:32:00 AM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20447

Lab No. : 1608986-001
Client Sample ID: FIELD DUPLICATE-01

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 : Prep Method: E200.7 Prep Date: 08/22/16 Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	14,100		1	ug/L	100	08/22/16 1:47 PM	Container-01 of 01
Manganese	2,820		1	ug/L	15.0	08/22/16 1:47 PM	Container-01 of 01

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,1,1-Trichloroethane	45		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,1,2,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,1,2-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,1-Dichloroethane	73		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,1-Dichloroethene	3.1		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,1-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2,3-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2,3-Trichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2,4-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2,4-Trimethylbenzene	5.6		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2-Dibromo-3-chloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2-Dibromoethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2-Dichloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,3,5-Trimethylbenzene/P-ethyltoluene	1.4		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,3-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,3-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
1,4-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
2,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
2-Butanone	< 5.0		1	µg/L	5.0	08/11/16 1:35 PM	Container-01 of 03
2-Chloroethylvinyl ether	NR	S	1	µg/L	10	08/11/16 1:35 PM	Container-01 of 03
2-Chlorotoluene/4-Chlorotoluene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
2-Hexanone	< 5.0		1	µg/L	5.0	08/11/16 1:35 PM	Container-01 of 03
4-Isopropyltoluene	< 1.0		1	µg/L	1.0	08/11/16 1:35 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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

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.

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

Attn To : William A. Kotas

Collected : 8/8/2016 11:32:00 AM
Received : 8/10/2016 9:35:00 AM AT20447
Collected By CLIENT

Lab No. : 1608986-001
Client Sample ID: FIELD DUPLICATE-01

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
4-Methyl-2-pentanone	< 5.0		1	µg/L	5.0	08/11/16 1:35 PM	Container-01 of 03
Acetone	< 10		1	µg/L	10	08/11/16 1:35 PM	Container-01 of 03
Benzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Bromobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Bromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Bromodichloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Bromoform	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Bromomethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Carbon disulfide	< 10		1	µg/L	10	08/11/16 1:35 PM	Container-01 of 03
Carbon tetrachloride	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Chlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Chloroethane	330	D	5	µg/L	5.0	08/15/16 11:38 AM	Container-02 of 03
Chloroform	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Chloromethane	< 1.0	c	1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
cis-1,2-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
cis-1,3-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Dibromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Dibromomethane	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Dichlorodifluoromethane	< 1.0	c	1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Ethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Hexachlorobutadiene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Isopropylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
m,p-Xylene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Methyl tert-butyl ether	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Methylene chloride	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Naphthalene	1.8		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
n-Butylbenzene	1.3	cS	1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
n-Propylbenzene	1.5		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
o-Xylene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
sec-Butylbenzene	1.7	S	1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
Styrene	< 1.0		1	µg/L	1.0	08/11/16 1:35 PM	Container-01 of 03
tert-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:35 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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

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

Attn To : William A. Kotas

Collected : 8/8/2016 11:32:00 AM
Received : 8/10/2016 9:35:00 AM AT20447
Collected By CLIENT

Lab No. : 1608986-001
Client Sample ID: FIELD DUPLICATE-01

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL		Analyzed:	Container:
Tetrachloroethene	< 1.0		1	µg/L	1.0		08/11/16 1:35 PM	Container-01 of 03
Toluene	1.4		1	µg/L	1.0		08/11/16 1:35 PM	Container-01 of 03
trans-1,2-Dichloroethene	< 1.0		1	µg/L	1.0		08/11/16 1:35 PM	Container-01 of 03
trans-1,3-Dichloropropene	< 1.0		1	µg/L	1.0		08/11/16 1:35 PM	Container-01 of 03
Trichloroethene	< 1.0		1	µg/L	1.0		08/11/16 1:35 PM	Container-01 of 03
Trichlorofluoromethane	< 1.0		1	µg/L	1.0		08/11/16 1:35 PM	Container-01 of 03
Vinyl acetate	< 10		1	µg/L	10		08/11/16 1:35 PM	Container-01 of 03
Vinyl chloride	2.3		1	µg/L	1.0		08/11/16 1:35 PM	Container-01 of 03
Surr: 1,2-Dichloroethane-d4	89.4		1	%Rec		Limit 68-153	08/11/16 1:35 PM	Container-01 of 03
Surr: 4-Bromofluorobenzene	85.7		1	%Rec		Limit 79-124	08/11/16 1:35 PM	Container-01 of 03
Surr: Toluene-d8	83.8		1	%Rec		Limit 69-124	08/11/16 1:35 PM	Container-01 of 03

NOTES:
NR=Analyte not reportable due to improper sample preservation.

Analytical Method: E300.0 : Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Sulfate	< 5.00		1	mg/L	5.00	08/19/16 5:36 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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

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

Attn To : William A. Kotas

Collected : 8/8/2016 11:30:00 AM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20448

Lab No. : 1608986-002
Client Sample ID: MW-5A/AR

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 : Prep Method: E200.7 Prep Date: 08/22/16 Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	14,300		1	ug/L	100	08/22/16 1:54 PM	Container-01 of 01
Manganese	2,890		1	ug/L	15.0	08/22/16 1:54 PM	Container-01 of 01

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,1,1-Trichloroethane	42		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,1,2,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,1,2-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,1-Dichloroethane	76		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,1-Dichloroethene	2.9		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,1-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2,3-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2,3-Trichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2,4-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2,4-Trimethylbenzene	5.3		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2-Dibromo-3-chloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2-Dibromoethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2-Dichloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,3,5-Trimethylbenzene/P-ethyltoluene	1.4		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,3-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,3-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
1,4-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
2,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
2-Butanone	< 5.0		1	µg/L	5.0	08/11/16 1:53 PM	Container-01 of 03
2-Chloroethylvinyl ether	NR	S	1	µg/L	10	08/11/16 1:53 PM	Container-01 of 03
2-Chlorotoluene/4-Chlorotoluene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
2-Hexanone	< 5.0		1	µg/L	5.0	08/11/16 1:53 PM	Container-01 of 03
4-Isopropyltoluene	< 1.0		1	µg/L	1.0	08/11/16 1:53 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
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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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

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Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Collected : 8/8/2016 11:30:00 AM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20448

Lab No. : 1608986-002
Client Sample ID: MW-5A/AR

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
4-Methyl-2-pentanone	< 5.0		1	µg/L	5.0	08/11/16 1:53 PM	Container-01 of 03
Acetone	< 10		1	µg/L	10	08/11/16 1:53 PM	Container-01 of 03
Benzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Bromobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Bromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Bromodichloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Bromoform	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Bromomethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Carbon disulfide	< 10		1	µg/L	10	08/11/16 1:53 PM	Container-01 of 03
Carbon tetrachloride	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Chlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Chloroethane	320	D	5	µg/L	5.0	08/15/16 11:20 AM	Container-02 of 03
Chloroform	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Chloromethane	< 1.0	c	1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
cis-1,2-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
cis-1,3-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Dibromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Dibromomethane	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Dichlorodifluoromethane	< 1.0	c	1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Ethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Hexachlorobutadiene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Isopropylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
m,p-Xylene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Methyl tert-butyl ether	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Methylene chloride	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Naphthalene	1.8		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
n-Butylbenzene	1.2	cS	1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
n-Propylbenzene	1.4		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
o-Xylene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
sec-Butylbenzene	1.7	S	1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
Styrene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03
tert-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:53 PM	Container-01 of 03

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Project Manager : Caitlin Panzarella

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2190 Technology Drive
Schenectady, NY 12308

Attn To : William A. Kotas

Collected : 8/8/2016 11:30:00 AM
Received : 8/10/2016 9:35:00 AM AT20448
Collected By CLIENT

Lab No. : 1608986-002
Client Sample ID: MW-5A/AR

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL		Analyzed:	Container:
Tetrachloroethene	< 1.0		1	µg/L	1.0		08/11/16 1:53 PM	Container-01 of 03
Toluene	1.4		1	µg/L	1.0		08/11/16 1:53 PM	Container-01 of 03
trans-1,2-Dichloroethene	< 1.0		1	µg/L	1.0		08/11/16 1:53 PM	Container-01 of 03
trans-1,3-Dichloropropene	< 1.0		1	µg/L	1.0		08/11/16 1:53 PM	Container-01 of 03
Trichloroethene	< 1.0		1	µg/L	1.0		08/11/16 1:53 PM	Container-01 of 03
Trichlorofluoromethane	< 1.0		1	µg/L	1.0		08/11/16 1:53 PM	Container-01 of 03
Vinyl acetate	< 10		1	µg/L	10		08/11/16 1:53 PM	Container-01 of 03
Vinyl chloride	2.3		1	µg/L	1.0		08/11/16 1:53 PM	Container-01 of 03
Surr: 1,2-Dichloroethane-d4	89.3		1	%Rec		Limit 68-153	08/11/16 1:53 PM	Container-01 of 03
Surr: 4-Bromofluorobenzene	83.2		1	%Rec		Limit 79-124	08/11/16 1:53 PM	Container-01 of 03
Surr: Toluene-d8	83.4		1	%Rec		Limit 69-124	08/11/16 1:53 PM	Container-01 of 03

NOTES:
NR=Analyte not reportable due to improper sample preservation.

Analytical Method: E300.0 : Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Sulfate	< 5.00		1	mg/L	5.00	08/19/16 5:49 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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J = Estimated value - below calibration range
M-, M+ = Matrix Spike recovery below / above control limit
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Caitlin Panzarella

Project Manager : Caitlin Panzarella

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

Attn To : William A. Kotas

Collected : 8/8/2016 11:15:00 AM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20449

Lab No. : 1608986-003
Client Sample ID: MW-14

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 : Prep Method: E200.7 Prep Date: 08/22/16 Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	95,900		1	ug/L	100	08/22/16 2:00 PM	Container-01 of 01
Manganese	17,800		1	ug/L	15.0	08/22/16 2:00 PM	Container-01 of 01

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,1,1-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,1,2,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,1,2-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,1-Dichloroethane	12		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,1-Dichloroethene	3.7		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,1-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2,3-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2,3-Trichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2,4-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2,4-Trimethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2-Dibromo-3-chloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2-Dibromoethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2-Dichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,3,5-Trimethylbenzene/P-ethyltoluene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,3-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,3-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
1,4-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
2,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
2-Butanone	< 5.0		1	µg/L	5.0	08/11/16 2:10 PM	Container-01 of 03
2-Chloroethylvinyl ether	NR	S	1	µg/L	10	08/11/16 2:10 PM	Container-01 of 03
2-Chlorotoluene/4-Chlorotoluene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
2-Hexanone	< 5.0		1	µg/L	5.0	08/11/16 2:10 PM	Container-01 of 03
4-Isopropyltoluene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03

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

Project Manager : Caitlin Panzarella

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Attn To : William A. Kotas

Collected : 8/8/2016 11:15:00 AM
Received : 8/10/2016 9:35:00 AM AT20449
Collected By CLIENT

Lab No. : 1608986-003
Client Sample ID: MW-14

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
4-Methyl-2-pentanone	< 5.0		1	µg/L	5.0	08/11/16 2:10 PM	Container-01 of 03
Acetone	15	c	1	µg/L	10	08/11/16 2:10 PM	Container-01 of 03
Benzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Bromobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Bromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Bromodichloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Bromoform	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Bromomethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Carbon disulfide	< 10		1	µg/L	10	08/11/16 2:10 PM	Container-01 of 03
Carbon tetrachloride	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Chlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Chloroethane	8.9		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Chloroform	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Chloromethane	< 1.0	c	1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
cis-1,2-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
cis-1,3-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Dibromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Dibromomethane	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Dichlorodifluoromethane	< 1.0	c	1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Ethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Hexachlorobutadiene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Isopropylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
m,p-Xylene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Methyl tert-butyl ether	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Methylene chloride	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Naphthalene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
n-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
n-Propylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
o-Xylene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
sec-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
Styrene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03
tert-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:10 PM	Container-01 of 03

Qualifiers: E = Value above quantitation range, Value estimated.
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Lab No. : 1608986-003
Client Sample ID: MW-14

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL		Analyzed:	Container:
Tetrachloroethene	< 1.0		1	µg/L	1.0		08/11/16 2:10 PM	Container-01 of 03
Toluene	< 1.0		1	µg/L	1.0		08/11/16 2:10 PM	Container-01 of 03
trans-1,2-Dichloroethene	< 1.0		1	µg/L	1.0		08/11/16 2:10 PM	Container-01 of 03
trans-1,3-Dichloropropene	< 1.0		1	µg/L	1.0		08/11/16 2:10 PM	Container-01 of 03
Trichloroethene	< 1.0		1	µg/L	1.0		08/11/16 2:10 PM	Container-01 of 03
Trichlorofluoromethane	< 1.0		1	µg/L	1.0		08/11/16 2:10 PM	Container-01 of 03
Vinyl acetate	< 10		1	µg/L	10		08/11/16 2:10 PM	Container-01 of 03
Vinyl chloride	3.1		1	µg/L	1.0		08/11/16 2:10 PM	Container-01 of 03
Surr: 1,2-Dichloroethane-d4	88.1		1	%Rec		Limit 68-153	08/11/16 2:10 PM	Container-01 of 03
Surr: 4-Bromofluorobenzene	85.3		1	%Rec		Limit 79-124	08/11/16 2:10 PM	Container-01 of 03
Surr: Toluene-d8	84.9		1	%Rec		Limit 69-124	08/11/16 2:10 PM	Container-01 of 03

NOTES:
NR=Analyte not reportable due to improper sample preservation.

Analytical Method: E300.0 : Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Sulfate	< 5.00		1	mg/L	5.00	08/19/16 6:03 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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Lab No. : 1608986-004
Client Sample ID: MW-16

Sample Information:
Type : Aqueous

Origin:

Collected : 8/8/2016 12:15:00 PM
Received : 8/10/2016 9:35:00 AM AT20450
Collected By CLIENT

Analytical Method: E200.7 : Prep Method: E200.7 Prep Date: 08/22/16 Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	5,040		1	ug/L	100	08/22/16 2:06 PM	Container-01 of 01
Manganese	1,550		1	ug/L	15.0	08/22/16 2:06 PM	Container-01 of 01

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,1,1-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,1,2,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,1,2-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,1-Dichloroethane	9.1		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,1-Dichloroethene	4.5		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,1-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2,3-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2,3-Trichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2,4-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2,4-Trimethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2-Dibromo-3-chloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2-Dibromoethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2-Dichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,3,5-Trimethylbenzene/P-ethyltoluene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,3-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,3-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
1,4-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
2,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
2-Butanone	< 5.0		1	µg/L	5.0	08/11/16 2:28 PM	Container-01 of 03
2-Chloroethylvinyl ether	NR	S	1	µg/L	10	08/11/16 2:28 PM	Container-01 of 03
2-Chlorotoluene/4-Chlorotoluene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
2-Hexanone	< 5.0		1	µg/L	5.0	08/11/16 2:28 PM	Container-01 of 03
4-Isopropyltoluene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03

Qualifiers: E = Value above quantitation range, Value estimated.
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D.F. = Dilution Factor D = Results for Dilution
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Caitlin Panzarella

Project Manager : Caitlin Panzarella

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Date Reported :

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

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

Attn To : William A. Kotas

Collected : 8/8/2016 12:15:00 PM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20450

Lab No. : 1608986-004
Client Sample ID: MW-16

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
4-Methyl-2-pentanone	< 5.0		1	µg/L	5.0	08/11/16 2:28 PM	Container-01 of 03
Acetone	< 10		1	µg/L	10	08/11/16 2:28 PM	Container-01 of 03
Benzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Bromobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Bromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Bromodichloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Bromoform	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Bromomethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Carbon disulfide	< 10		1	µg/L	10	08/11/16 2:28 PM	Container-01 of 03
Carbon tetrachloride	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Chlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Chloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Chloroform	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Chloromethane	< 1.0	c	1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
cis-1,2-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
cis-1,3-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Dibromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Dibromomethane	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Dichlorodifluoromethane	< 1.0	c	1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Ethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Hexachlorobutadiene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Isopropylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
m,p-Xylene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Methyl tert-butyl ether	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Methylene chloride	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Naphthalene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
n-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
n-Propylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
o-Xylene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
sec-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
Styrene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03
tert-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:28 PM	Container-01 of 03

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

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

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

LABORATORY RESULTS

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Lab No. : 1608986-004
Client Sample ID: MW-16

Sample Information:
Type : Aqueous

Origin:

Collected : 8/8/2016 12:15:00 PM
Received : 8/10/2016 9:35:00 AM AT20450
Collected By CLIENT

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL		Analyzed:	Container:
Tetrachloroethene	2.4		1	µg/L	1.0		08/11/16 2:28 PM	Container-01 of 03
Toluene	< 1.0		1	µg/L	1.0		08/11/16 2:28 PM	Container-01 of 03
trans-1,2-Dichloroethene	< 1.0		1	µg/L	1.0		08/11/16 2:28 PM	Container-01 of 03
trans-1,3-Dichloropropene	< 1.0		1	µg/L	1.0		08/11/16 2:28 PM	Container-01 of 03
Trichloroethene	< 1.0		1	µg/L	1.0		08/11/16 2:28 PM	Container-01 of 03
Trichlorofluoromethane	< 1.0		1	µg/L	1.0		08/11/16 2:28 PM	Container-01 of 03
Vinyl acetate	< 10		1	µg/L	10		08/11/16 2:28 PM	Container-01 of 03
Vinyl chloride	< 1.0		1	µg/L	1.0		08/11/16 2:28 PM	Container-01 of 03
Surr: 1,2-Dichloroethane-d4	88.3		1	%Rec		Limit 68-153	08/11/16 2:28 PM	Container-01 of 03
Surr: 4-Bromofluorobenzene	82.0		1	%Rec		Limit 79-124	08/11/16 2:28 PM	Container-01 of 03
Surr: Toluene-d8	84.4		1	%Rec		Limit 69-124	08/11/16 2:28 PM	Container-01 of 03

NOTES:
NR=Analyte not reportable due to improper sample preservation.

Analytical Method: E300.0 : Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Sulfate	8.67		1	mg/L	5.00	08/19/16 6:16 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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r = Reporting limit below calibration range. Value estimated.
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+ = NYSDOH ELAP does not offer certification for this analyte / matrix / method

Caitlin Panzarella

Project Manager : Caitlin Panzarella

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Date Reported :

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

LABORATORY RESULTS

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

Attn To : William A. Kotas

Collected : 8/8/2016 1:30:00 PM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20451

Lab No. : 1608986-005
Client Sample ID: MW-CHA-RFI-7 MS/MSD

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 : Prep Method: E200.7 Prep Date: 08/22/16 Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	513		1	ug/L	100	08/22/16 2:12 PM	Container-01 of 01
Manganese	1,570		1	ug/L	15.0	08/22/16 2:12 PM	Container-01 of 01

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,1,1-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,1,2,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,1,2-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,1-Dichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,1-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,1-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2,3-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2,3-Trichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2,4-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2,4-Trimethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2-Dibromo-3-chloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2-Dibromoethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2-Dichloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,3,5-Trimethylbenzene/P-ethyltoluene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,3-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,3-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
1,4-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
2,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
2-Butanone	< 5.0		1	µg/L	5.0	08/11/16 2:46 PM	Container-01 of 06
2-Chloroethylvinyl ether	NR	S	1	µg/L	10	08/11/16 2:46 PM	Container-01 of 06
2-Chlorotoluene/4-Chlorotoluene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
2-Hexanone	< 5.0		1	µg/L	5.0	08/11/16 2:46 PM	Container-01 of 06
4-Isopropyltoluene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06

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Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

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LABORATORY RESULTS

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

Attn To : William A. Kotas

Collected : 8/8/2016 1:30:00 PM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20451

Lab No. : 1608986-005
Client Sample ID: MW-CHA-RFI-7 MS/MSD

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
4-Methyl-2-pentanone	< 5.0		1	µg/L	5.0	08/11/16 2:46 PM	Container-01 of 06
Acetone	< 10		1	µg/L	10	08/11/16 2:46 PM	Container-01 of 06
Benzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Bromobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Bromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Bromodichloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Bromoform	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Bromomethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Carbon disulfide	< 10		1	µg/L	10	08/11/16 2:46 PM	Container-01 of 06
Carbon tetrachloride	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Chlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Chloroethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Chloroform	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Chloromethane	< 1.0	c	1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
cis-1,2-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
cis-1,3-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Dibromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Dibromomethane	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Dichlorodifluoromethane	< 1.0	c	1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Ethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Hexachlorobutadiene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Isopropylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
m,p-Xylene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Methyl tert-butyl ether	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Methylene chloride	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Naphthalene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
n-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
n-Propylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
o-Xylene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
sec-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
Styrene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06
tert-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 2:46 PM	Container-01 of 06

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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

Results are only for the samples and analytes requested.

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

Attn To : William A. Kotas

Collected : 8/8/2016 1:30:00 PM
Received : 8/10/2016 9:35:00 AM AT20451
Collected By CLIENT

Lab No. : 1608986-005
Client Sample ID: MW-CHA-RFI-7 MS/MSD

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL		Analyzed:	Container:
Tetrachloroethene	< 1.0		1	µg/L	1.0		08/11/16 2:46 PM	Container-01 of 06
Toluene	< 1.0		1	µg/L	1.0		08/11/16 2:46 PM	Container-01 of 06
trans-1,2-Dichloroethene	< 1.0		1	µg/L	1.0		08/11/16 2:46 PM	Container-01 of 06
trans-1,3-Dichloropropene	< 1.0		1	µg/L	1.0		08/11/16 2:46 PM	Container-01 of 06
Trichloroethene	< 1.0		1	µg/L	1.0		08/11/16 2:46 PM	Container-01 of 06
Trichlorofluoromethane	< 1.0		1	µg/L	1.0		08/11/16 2:46 PM	Container-01 of 06
Vinyl acetate	< 10		1	µg/L	10		08/11/16 2:46 PM	Container-01 of 06
Vinyl chloride	< 1.0		1	µg/L	1.0		08/11/16 2:46 PM	Container-01 of 06
Surr: 1,2-Dichloroethane-d4	90.5		1	%Rec		Limit 68-153	08/11/16 2:46 PM	Container-01 of 06
Surr: 4-Bromofluorobenzene	84.1		1	%Rec		Limit 79-124	08/11/16 2:46 PM	Container-01 of 06
Surr: Toluene-d8	84.8		1	%Rec		Limit 69-124	08/11/16 2:46 PM	Container-01 of 06

NOTES:
NR=Analyte not reportable due to improper sample preservation.

Analytical Method: E300.0 : Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Sulfate	36.4		1	mg/L	5.00	08/19/16 6:30 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
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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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Lab No. : 1608986-006
Client Sample ID: TRIP BLANK-01

Sample Information:
Type : Aqueous

Origin:

Collected : 8/8/2016
Received : 8/10/2016 9:35:00 AM AT20452
Collected By CLIENT

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,1,1-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,1,2,2-Tetrachloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,1,2-Trichloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,1-Dichloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,1-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,1-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2,3-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2,3-Trichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2,4-Trichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2,4-Trimethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2-Dibromo-3-chloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2-Dibromoethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2-Dichloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,3,5-Trimethylbenzene/P-ethyltoluene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,3-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,3-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
1,4-Dichlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
2,2-Dichloropropane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
2-Butanone	< 5.0		1	µg/L	5.0	08/11/16 1:17 PM	Container-01 of 02
2-Chloroethylvinyl ether	NR	S	1	µg/L	10	08/11/16 1:17 PM	Container-01 of 02
2-Chlorotoluene/4-Chlorotoluene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
2-Hexanone	< 5.0		1	µg/L	5.0	08/11/16 1:17 PM	Container-01 of 02
4-Isopropyltoluene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
4-Methyl-2-pentanone	< 5.0		1	µg/L	5.0	08/11/16 1:17 PM	Container-01 of 02
Acetone	< 10		1	µg/L	10	08/11/16 1:17 PM	Container-01 of 02
Benzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Bromobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Bromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Bromodichloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02

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

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

LABORATORY RESULTS

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

Attn To : William A. Kotas

Collected : 8/8/2016
Received : 8/10/2016 9:35:00 AM AT20452
Collected By CLIENT

Lab No. : 1608986-006
Client Sample ID: TRIP BLANK-01

Sample Information:
Type : Aqueous

Origin:

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Bromoform	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Bromomethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Carbon disulfide	< 10		1	µg/L	10	08/11/16 1:17 PM	Container-01 of 02
Carbon tetrachloride	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Chlorobenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Chloroethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Chloroform	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Chloromethane	< 1.0	c	1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
cis-1,2-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
cis-1,3-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Dibromochloromethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Dibromomethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Dichlorodifluoromethane	< 1.0	c	1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Ethylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Hexachlorobutadiene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Isopropylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
m,p-Xylene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Methyl tert-butyl ether	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Methylene chloride	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Naphthalene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
n-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
n-Propylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
o-Xylene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
sec-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Styrene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
tert-Butylbenzene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Tetrachloroethene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Toluene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
trans-1,2-Dichloroethene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
trans-1,3-Dichloropropene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Trichloroethene	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02
Trichlorofluoromethane	< 1.0		1	µg/L	1.0	08/11/16 1:17 PM	Container-01 of 02

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Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

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Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Lab No. : 1608986-006
Client Sample ID: TRIP BLANK-01

Sample Information:
Type : Aqueous

Origin:

Collected : 8/8/2016
Received : 8/10/2016 9:35:00 AM AT20452
Collected By CLIENT

Analytical Method: SW8260C : Prep Method: 5030C Analyst: KG

Parameter(s)	Results	Qualifier	D.F.	Units	PQL		Analyzed:	Container:
Vinyl acetate	< 10		1	µg/L	10		08/11/16 1:17 PM	Container-01 of 02
Vinyl chloride	< 1.0		1	µg/L	1.0		08/11/16 1:17 PM	Container-01 of 02
Surr: 1,2-Dichloroethane-d4	90.4		1	%Rec		Limit 68-153	08/11/16 1:17 PM	Container-01 of 02
Surr: 4-Bromofluorobenzene	83.7		1	%Rec		Limit 79-124	08/11/16 1:17 PM	Container-01 of 02
Surr: Toluene-d8	84.4		1	%Rec		Limit 69-124	08/11/16 1:17 PM	Container-01 of 02

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
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r = Reporting limit below calibration range. Value estimated.
S = Recovery outside of control limits for this analyte
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Caitlin Panzarella

Project Manager : Caitlin Panzarella

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Date Reported :

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

Sample Receipt Checklist

Client Name **PACE-NY** Date and Time Received: **8/10/2016 9:35:00 AM**

Work Order Number: **1608986** RcptNo: **1** Received by **Paige Doherty**

Completed by: Paige Doherty Reviewed by: Caitlin Panzarella

Completed Date: 8/10/2016 12:54:41 PM Reviewed Date: 8/15/2016 1:03:48 PM

Carrier name: FedEx

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Are matrices correctly identified on Chain of custody?	Yes	☑	No	☐		
Is it clear what analyses were requested?	Yes	☑	No	☐		
Custody seals intact on sample bottles?	Yes	☐	No	☐	Not Present	☑
Samples in proper container/bottle?	Yes	☑	No	☐		
Were correct preservatives used and noted?	Yes	☑	No	☐	NA	☐
Preservative added to bottles:						
Sample Condition?	Intact	☑	Broken	☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
Were container labels complete (ID, Pres, Date)?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
Was an attempt made to cool the samples?	Yes	☑	No	☐	NA	☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes	☑	No	☐	NA	☐
Response when temperature is outside of range:						
Sample Temp. taken and recorded upon receipt?	Yes	☑	No	☐	To	0.6 º
Water - Were bubbles absent in VOC vials?	Yes	☑	No	☐	No Vials	☐
Water - Was there Chlorine Present?	Yes	☐	No	☐	NA	☑
Water - pH acceptable upon receipt?	Yes	☑	No	☐	No Water	☐
Are Samples considered acceptable?	Yes	☑	No	☐		
Custody Seals present?	Yes	☑	No	☐		
Airbill or Sticker?	Air Bil	☑	Sticker	☐	Not Present	☐
Airbill No:	6903 0826 5783					

Case Number: SDG: PACE-NY423 SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

Sample preservation not verified at Schenectady lab.

CorrectiveAction:

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1608986

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

Pace-LI

Pace-NY 504 | 504F

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

Pace Analytical Services, Inc.

2190 Technology Drive, Schenectady, NY 12308
Telephone (518) 346-4592 Fax (518) 381-6055
www.pacelabs.com

LRF # 16080179
(LAB USE ONLY)

DISPOSAL REQUIREMENTS: (To be filled in by Client)

- ○ RETURN TO CLIENT
- ● DISPOSAL BY RECEIVING LAB
- ○ ARCHIVAL BY RECEIVING LAB

Additional charges incurred for disposal (if hazardous) or archival.
Call for details.

CLIENT (REPORTS TO BE SENT TO): PACE	PROJECT#/PROJECT NAME: 16080179
PROJECT MANAGER: Nick Nicholas	LOCATION (CITY/STATE) ADDRESS: NY
Project: VGM	REQUIRED TURN AROUND TIME: 8/22/2016
Notes: PRESERVATION NOT VERIFIED AT SCHENECTADY LAB. METALS: FE, MN; DISSOLVED METALS: FE, MN.	NAME OF COURIER (IF USED):

ENTER ANALYSIS AND METHOD NUMBER REQUESTED

PRESERVATIVE KEY: 0 - ICE; 1 - HCL; 2 - HNO3; 3 - H2SO4; 4 - NaOH; 5 - Zn. Acetate; 6 - MeOH; 7 - NaHS04; 8 - Other (Na2SO3)

ELECTRONIC RESULTS	nicholas.nicholas@pacelabs.com Nicole.Johnson@pacelabs.com			GRAB/	LAB SAMPLE ID	PRESERVATIVE CODE:								
						BOTTLE TYPE:								
						BOTTLE SIZE:								
SAMPLE ID	DATE	TIME	MATRIX	COMP	(LAB USE ONLY)	NUMBER OF CONTAINERS	Dissolved Metals E200.7	VOCs E8260C *	Metals E200.7 *	Sulfate E300.0 *				REMARKS:
FIELD DUPLICATE-01	8/8/16	11:32	L	GRAB	AT20447		X	X	X	X				
MW-5A/AR	8/8/16	11:30	L	GRAB	AT20448		X	X	X	X				16089886
MW-14	8/8/16	11:15	L	GRAB	AT20449		X	X	X	X				
MW-16	8/8/16	12:15	L	GRAB	AT20450		X	X	X	X				16089A07- diss
MW-CHA-RFI-7 MS/MSD	8/8/16	13:30	L	GRAB	AT20451		X	X	X	X				MS/MSD
TRIP BLANK-01	8/8/16		L	GRAB	AT20452			X						

AMBIENT OR CHILLED:	TEMP: 6.0	COC TAPE: (Y) N	PROPERLY PRESERVED: (Y) N
RECEIVED BROKEN OR LEAKING: Y (N)		COC DISCREPANCIES: Y (N)	RECVD W/I HOLDING TIMES: (Y) N

OTHER NOTES: Data Package [LEVEL-4] EDD: EQUIS-DEC-DER

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
PRINTED NAME	PRINTED NAME	PRINTED NAME	PRINTED NAME	PRINTED NAME	PRINTED NAME
COMPANY	COMPANY	COMPANY	COMPANY	COMPANY	COMPANY
DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
			8/10/16 9:35		

S:\LOGIN\MDLCOCS

~~1608~~ 6903 0826 5783

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical
www.pacelabs.com

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

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

<16080179P1>

160801791

Page: 1 of 1

Section A Required Client Information:

Company:	Leader Professional Services
Address:	2813 Wehrle Drive, Suite 1
	Williamsville, NY 14221
Email To:	
Phone:	716-565-0963 Fax: na
Requested Due Date/TAT:	Standard 2-Week

Section B Required Project Information:

Report To:	Keith Keller
Copy To:	na
Purchase Order No.:	
Project Name:	Vails Gate Manufactu
Project Number:	

Section C Invoice Information:

Attention:	Keith Keller
Company Name:	Leader Professional Services
Address:	
Pace Quote Reference:	#00012704
Pace Project Manager:	Nicholas Nicholas
Pace Profile #:	

REGULATORY PROGRAM

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER_______

SITE LOCATION: New York State

Filtered (Y/N): Y (Dissolved Fe & Mn)

*Specify Metals/Inorganics: *Iron* *Manganese*
**** Methane, Ethane, & Ethene (RSK-175)*

Section D Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Required. Sample IDs MUST BE UNIQUE

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLE DATE	SAMPLE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Nitrate	Total Fe & Mn	Dissolved Fe & Mn	Sulfate	Total Organic Carbon	RSK-175 (Gases)***	8260 Full List	Pace Laboratory I.D.
1	Field Duplicate-01	WT	G	8/8/16	1132		12	X	X	X	X					X	X	X	X	X	X	X	1AT20447
2	MW-5A/AR	WT	G	8/8/16	1130		12	X	X	X	X					X	X	X	X	X	X	X	1AT20448
3	MW-14	WT	G	8/8/16	1115		12	X	X	X	X					X	X	X	X	X	X	X	1AT20449
4	MW-16	WT	G	8/8/16	1215		12	X	X	X	X					X	X	X	X	X	X	X	1AT20450
5	MW-CHA-RFI-7 MS/MSD	WT	G	8/8/16	1330		22	X	X	X	X					X	X	X	X	X	X	X	1AT20451
6	Trip Blank-01	WT	G	8/8/16	N/A		2				X											X	1AT20452
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
NYSDEC DER-10 EQuIS EDD	MBTO PACE	8/8/16	1515	[signature] PACE	8/8/16	1515	8.2	Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N

SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Matt Broker (PACE)

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 8/8/16

<16080179P2>

160801792

Sample Condition Upon Receipt

CLIENT NAME: Leader Professional Services

PROJECT : Veils Gate Manufacturing

COURIER: FedEx ☐ UPS ☐ Client ☐ Pace ☒ Other ☐

TRACKING # N/A **CUSTODY SEAL PRESENT:** Yes ☐ No ☒ **INTACT:** Yes ☐ No ☐ N/A ☒

PACKING MATERIAL: Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other ☐ **ICE USED:** Wet ☒ Blue ☐ None ☐

THERMOMETER USED: #164 ☒ IR Gun 03 ☐ #160239773 ☐ #160239773-PRB ☐ **COOLER TEMPERATURE (°C):** 5.2

BIOLOGICAL TISSUE IS FROZEN: Yes ☐ No ☐ N/A ☒

COMMENTS:

Temperature is Acceptable? ☒Yes ☐No

Chain of Custody Present:	☒Yes	☐No		1.
Chain of Custody Filled Out:	☒Yes	☐No		2.
Chain of Custody Relinquished:	☒Yes	☐No		3.
Sampler Name / Signature on COC:	☒Yes	☐No		4.
Samples Arrived within Hold Time:	☒Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☒Yes	☐No		6. Nitrate
Rush Turn Around Time Requested:	☐Yes	☒No		7. 2-weeks
Sufficient Volume:	☒Yes	☐No		8.
Correct Containers Used:	☒Yes	☐No		9.
- Pace Containers Used:	☒Yes	☐No		
Containers Intact:	☒Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC: - Includes date/time/ID/Analysis	☒Yes	☐No		12. No date / time indicated on sample labels.
All containers needing preservation have been checked:	☐Yes	☐No	☒N/A	13.
All containers needing preservation are in compliance with EPA recommendation: - Exceptions that are not checked: TOC, VOA, Subcontract Analyses	☐Yes	☐No	☒N/A	Initial when completed: N/A Lot # of added preservative: N/A
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14.
Trip Blank Present:	☒Yes	☐No	☐N/A	15.
Trip Blank Custody Seals Present:	☐Yes	☒No	☐N/A	
Pace Trip Blank Lot #: N/A				

Sample Receipt form filled in: _____

Line-Out (Includes Copying Shipping Documents and verifying sample pH): DB 8/8/16

Log In (Includes notifying PM of any discrepacies and documenting in LIMS): EMP 8/8/16

Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): DB 8/8/16

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

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.

Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Collected : 8/8/2016 11:32:00 AM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20447

Lab No. : 1608A07-001
Client Sample ID: FIELD DUPLICATE-01

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 :

Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	13,600		1	ug/L	100	08/22/16 12:35 PM	Container-01 of 01
Manganese	2,720		1	ug/L	15.0	08/22/16 12:35 PM	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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

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.

Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Collected : 8/8/2016 11:30:00 AM
Received : 8/10/2016 9:35:00 AM
Collected By CLIENT

AT20448

Lab No. : 1608A07-002
Client Sample ID: MW-5A/AR

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 :

Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	13,900		1	ug/L	100	08/22/16 12:41 PM	Container-01 of 01
Manganese	2,810		1	ug/L	15.0	08/22/16 12:41 PM	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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

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.

Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Collected : 8/8/2016 11:15:00 AM
Received : 8/10/2016 9:35:00 AM AT20449
Collected By CLIENT

Lab No. : 1608A07-003
Client Sample ID: MW-14

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 : Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	35,400		1	ug/L	100	08/22/16 12:47 PM	Container-01 of 01
Manganese	12,800		1	ug/L	15.0	08/22/16 12:47 PM	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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

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.

Pace Analytical Services Inc.
2190 Technology Drive
Schenectady, NY 12308
Attn To : William A. Kotas

Collected : 8/8/2016 12:15:00 PM
Received : 8/10/2016 9:35:00 AM AT20450
Collected By CLIENT

Lab No. : 1608A07-004
Client Sample ID: MW-16

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 : Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	310		1	ug/L	100	08/22/16 12:53 PM	Container-01 of 01
Manganese	2,060		1	ug/L	15.0	08/22/16 12:53 PM	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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

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.

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

Attn To : William A. Kotas

Collected : 8/8/2016 1:30:00 PM
Received : 8/10/2016 9:35:00 AM AT20451
Collected By CLIENT

Lab No. : 1608A07-005

Client Sample ID: MW-CHA-RFI-7 MS/MSD

Sample Information:
Type : Aqueous

Origin:

Analytical Method: E200.7 : Analyst: JA

Parameter(s)	Results	Qualifier	D.F.	Units	PQL	Analyzed:	Container:
Iron	150		1	ug/L	100	08/22/16 12:59 PM	Container-01 of 01
Manganese	1,610		1	ug/L	15.0	08/22/16 12:59 PM	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

Caitlin Panzarella

Project Manager : Caitlin Panzarella

Test results meet the requirements of NELAC unless otherwise noted.

Date Reported :

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

Sample Receipt Checklist

Client Name **PACE-NY** Date and Time Received: **8/10/2016 9:35:00 AM**

Work Order Number: **1608A07** RcptNo: **1** Received by **Paige Doherty**

Completed by: Paige Doherty Reviewed by: Caitlin Panzarella

Completed Date: 8/10/2016 12:55:10 PM Reviewed Date: 8/15/2016 1:17:22 PM

Carrier name: FedEx

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Are matrices correctly identified on Chain of custody?	Yes	☑	No	☐		
Is it clear what analyses were requested?	Yes	☑	No	☐		
Custody seals intact on sample bottles?	Yes	☐	No	☐	Not Present	☑
Samples in proper container/bottle?	Yes	☑	No	☐		
Were correct preservatives used and noted?	Yes	☑	No	☐	NA	☐
Preservative added to bottles:						
Sample Condition?	Intact	☑	Broken	☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
Were container labels complete (ID, Pres, Date)?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
Was an attempt made to cool the samples?	Yes	☑	No	☐	NA	☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes	☑	No	☐	NA	☐
Response when temperature is outside of range:						
Sample Temp. taken and recorded upon receipt?	Yes	☑	No	☐	To	0.6 º
Water - Were bubbles absent in VOC vials?	Yes	☐	No	☐	No Vials	☑
Water - Was there Chlorine Present?	Yes	☐	No	☐	NA	☑
Water - pH acceptable upon receipt?	Yes	☑	No	☐	No Water	☐
Are Samples considered acceptable?	Yes	☑	No	☐		
Custody Seals present?	Yes	☑	No	☐		
Airbill or Sticker?	Air Bil	☑	Sticker	☐	Not Present	☐
Airbill No:	6903 0826 5783					

Case Number: SDG: PACE-NY504F SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

Sample preservation not verified at Schenectady lab.

CorrectiveAction:

Pace Analytical
575 Broad Hollow Road , Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478 www.pacelabs.com

WorkOrder :
1608A07

Certifications

STATE	CERTIFICATION #
NEW YORK	10478
NEW JERSEY	NY158
CONNECTICUT	PH-0435
MARYLAND	208
MASSACHUSETTS	M-NY026
NEW HAMPSHIRE	2987
RHODE ISLAND	LAO00340
PENNSYLVANIA	68-00350

Pace-LI

Mule-NY 504 | 504F

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

Pace Analytical Services, Inc.

2190 Technology Drive, Schenectady, NY 12308
Telephone (518) 346-4592 Fax (518) 381-6055
www.pacelabs.com

LRF # 16080179
(LAB USE ONLY)

DISPOSAL REQUIREMENTS: (To be filled in by Client)

- ○ RETURN TO CLIENT
- ● DISPOSAL BY RECEIVING LAB
- ○ ARCHIVAL BY RECEIVING LAB

Additional charges incurred for disposal (if hazardous) or archival.
Call for details.

CLIENT (REPORTS TO BE SENT TO): **PACE**	PROJECT#/PROJECT NAME: **16080179**
PROJECT MANAGER: **Nick Nicholas**	LOCATION (CITY/STATE) ADDRESS: **NY**
Project: **VGM**	REQUIRED TURN AROUND TIME: **8/22/2016**
Notes: **PRESERVATION NOT VERIFIED AT SCHENECTADY LAB. METALS: FE, MN; DISSOLVED METALS: FE, MN.**	NAME OF COURIER (IF USED):

ENTER ANALYSIS AND METHOD NUMBER REQUESTED

PRESERVATIVE KEY: 0 - ICE; 1 - HCL; 2 - HNO3; 3 - H2SO4; 4 - NaOH; 5 - Zn. Acetate; 6 - MeOH; 7 - NaHS04; 8 - Other (Na2SO3)

ELECTRONIC RESULTS: nicholas.nicholas@pacelabs.com; Nicole.Johnson@pacelabs.com

SAMPLE ID	DATE	TIME	MATRIX	GRAB/ COMP	LAB SAMPLE ID (LAB USE ONLY)	NUMBER OF CONTAINERS	Dissolved Metals E200.7	VOCs E8260C *	Metals E200.7 *	Sulfate E300.0 *	REMARKS:
FIELD DUPLICATE-01	8/8/16	11:32	L	GRAB	AT20447		X	X	X	X	16089886
MW-5A/AR	8/8/16	11:30	L	GRAB	AT20448		X	X	X	X	16089886
MW-14	8/8/16	11:15	L	GRAB	AT20449		X	X	X	X	16089886
MW-16	8/8/16	12:15	L	GRAB	AT20450		X	X	X	X	16089886
MW-CHA-RFI-7 MS/MSD	8/8/16	13:30	L	GRAB	AT20451		X	X	X	X	16089886
TRIP BLANK-01	8/8/16		L	GRAB	AT20452			X			

AMBIENT OR CHILLED:	TEMP: 6.0	COC TAPE: (Y) N	PROPERLY PRESERVED: (Y) N
RECEIVED BROKEN OR LEAKING: Y (N)		COC DISCREPANCIES: Y (N)	RECVD W/I HOLDING TIMES: (Y) N

OTHER NOTES: Data Package [LEVEL-4] EDD: EQUIS-DEC-DER

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
PRINTED NAME	PRINTED NAME	PRINTED NAME	PRINTED NAME	PRINTED NAME	PRINTED NAME
COMPANY	COMPANY FedEx	COMPANY	COMPANY Pace-LI	COMPANY	COMPANY
DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME 8/10/16 9:35	DATE/TIME	DATE/TIME

S:\LOGIN\MDLCOCS

~~1608~~ 6903 0826 5783

Pace Analytical
www.pacelabs.com
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.

<16080179P1>

160801791

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Leader Professional Services	Report To: Keith Keller	Attention: Keith Keller
Address: 2813 Wehrle Drive, Suite 1	Copy To: na	Company Name: Leader Professional Services
Williamsville, NY 14221		Address:
Email To:	Purchase Order No.:	Pace Quote Reference: #00012704
Phone: 716-565-0963 Fax: na	Project Name: Vails Gate Manufactu	Pace Project Manager: Nicholas Nicholas
Requested Due Date/TAT: Standard 2-Week	Project Number:	Pace Profile #:

REGULATORY PROGRAM

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

SITE LOCATION: New York State

*Specify Metals/Inorganics: Iron, Manganese
*** Methane, Ethane, & Ethene (RSK-175)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE (DRINKING WATER DW, WATER WT, WASTE WATER WW, PRODUCT P, SOIL/SOLID SL, OIL OL, WIPE WP, AIR AR, OTHER OT, TISSUE TS)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Nitrate	Total Fe & Mn	Dissolved Fe & Mn	Sulfate	Total Organic Carbon	RSK-175 (Gases)***	8260 Full List	Filtered (Y/N)	Pace Laboratory I.D.
																Y								
1	Field Duplicate-01	WT	WT	G	8/8/16	1132		12	X	X	X	X					X	X	X	X	X	X	X		LAT20447
2	MW-5A/AR	WT	WT	G	8/8/16	1130		12	X	X	X	X					X	X	X	X	X	X	X		LAT20448
3	MW-14	WT	WT	G	8/8/16	1115		12	X	X	X	X					X	X	X	X	X	X	X		LAT20449
4	MW-16	WT	WT	G	8/8/16	1215		12	X	X	X	X					X	X	X	X	X	X	X		LAT20450
5	MW-CHA-RFI-7 MS/MSD	WT	WT	G	8/8/16	1330		22	X	X	X	X					X	X	X	X	X	X	X		LAT20451
6	Trip Blank-01	WT	WT	G	8/8/16	N/A		2				X											X		LAT20452
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
NYSDEC DER-10 EQuIS EDD	[signature] PACE	8/8/16	1515	[signature] PACE	8/8/16	1515

SAMPLE CONDITIONS

Temp In °C	Received on Ice	Custody Sealed Cooler	Samples Intact
8.2	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Matt Broker (PACE)

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 8/8/16

<16080179P2>

160801792

Sample Condition Upon Receipt

CLIENT NAME: Leader Professional Services

PROJECT : Veils Gate Manufacturing

COURIER: FedEx ☐ UPS ☐ Client ☐ Pace ☒ Other ☐

TRACKING # N/A

CUSTODY SEAL PRESENT: Yes ☐ No ☒ **INTACT:** Yes ☐ No ☐ N/A ☒

PACKING MATERIAL: Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other ☐ **ICE USED:** Wet ☒ Blue ☐ None ☐

THERMOMETER USED: #164 ☒ IR Gun 03 ☐ #160239773 ☐ #160239773-PRB ☐ **COOLER TEMPERATURE (°C):** 5.2

BIOLOGICAL TISSUE IS FROZEN: Yes ☐ No ☐ N/A ☒

COMMENTS:

Temperature is Acceptable? ☒Yes ☐No

Chain of Custody Present:	☒Yes	☐No		1.
Chain of Custody Filled Out:	☒Yes	☐No		2.
Chain of Custody Relinquished:	☒Yes	☐No		3.
Sampler Name / Signature on COC:	☒Yes	☐No		4.
Samples Arrived within Hold Time:	☒Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☒Yes	☐No		6. Nitrate
Rush Turn Around Time Requested:	☐Yes	☒No		7. 2-weeks
Sufficient Volume:	☒Yes	☐No		8.
Correct Containers Used:	☒Yes	☐No		9.
- Pace Containers Used:	☒Yes	☐No		
Containers Intact:	☒Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC: - Includes date/time/ID/Analysis	☒Yes	☐No		12. No date/time indicated on sample labels.
All containers needing preservation have been checked:	☐Yes	☐No	☒N/A	13.
All containers needing preservation are in compliance with EPA recommendation: - Exceptions that are not checked: TOC, VOA, Subcontract Analyses	☐Yes	☐No	☒N/A	Initial when completed: N/A Lot # of added preservative: N/A
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14.
Trip Blank Present:	☒Yes	☐No	☐N/A	15.
Trip Blank Custody Seals Present:	☐Yes	☒No	☐N/A	
Pace Trip Blank Lot #: N/A				

Sample Receipt form filled in: _____

Line-Out (Includes Copying Shipping Documents and verifying sample pH): DB 8/8/16

Log In (Includes notifying PM of any discrepacies and documenting in LIMS): EMP 8/8/16

Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): DB 8/8/16

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

August 19, 2016

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

RE: **VGM / 16080179**

Pace Workorder: 19867

Dear Nicholas Nicholas:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, August 10, 2016. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ruth Welsh 08/19/2016
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email info@microseeps.com.

Total Number of Pages ____

CERTIFICATE OF ANALYSIS

Pace Analytical Energy Services LLC
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Phone: (412) 826-5245
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LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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SAMPLE SUMMARY

Workorder: 19867 VGM / 16080179

Lab ID	Sample ID	Matrix	Date Collected	Date Received
198670001	FIELD DUPLICATE-01	Water	8/8/2016 11:32	8/10/2016 11:00
198670002	MW-5A/AR	Water	8/8/2016 11:30	8/10/2016 11:00
198670003	MW-14	Water	8/8/2016 11:15	8/10/2016 11:00
198670004	MW-16	Water	8/8/2016 12:15	8/10/2016 11:00
198670005	MW-CHA-RFI-7	Water	8/8/2016 13:30	8/10/2016 11:00
198670006	MW-CHA-RFI-7 MS	Water	8/8/2016 13:30	8/10/2016 11:00
198670007	MW-CHA-RFI-7 MSD	Water	8/8/2016 13:30	8/10/2016 11:00

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PROJECT SUMMARY

Workorder: 19867 VGM / 16080179

Workorder Comments

The samples 19867 (0001-0007) were collected in an alternate container type, than that assigned to PAES method RSK175. Sample container was hydrochloric acid preserved.

Batch Comments

Batch: DISG/5554 - RSK175 QC

Due to a mechanical failure, the laboratories room temperature increased beyond the method maximum temperature of 27 degrees Celsius, for sample preparation and analysis. As a result, the concentrations reported may be biased low by approximately 5 to 6 percent.

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ANALYTICAL RESULTS

Workorder: 19867 VGM / 16080179

Lab ID: **198670001** Date Received: 8/10/2016 11:00 Matrix: Water

Sample ID: **FIELD DUPLICATE-01** Date Collected: 8/8/2016 11:32

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: EPA RSK175			Analytical Method: EPA RSK175					
Methane	**8100**	ug/l	50	1.9	100	8/17/2016 12:43	AK	d,B
Ethane	**3.2**	ug/l	0.20	0.0050	1	8/17/2016 09:05	AK	
Ethene	**0.072J**	ug/l	0.20	0.0070	1	8/17/2016 09:05	AK	

Report ID: 19867 - 826915

CERTIFICATE OF ANALYSIS

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ANALYTICAL RESULTS

Workorder: 19867 VGM / 16080179

Lab ID: **198670002** Date Received: 8/10/2016 11:00 Matrix: Water
Sample ID: **MW-5A/AR** Date Collected: 8/8/2016 11:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: EPA RSK175			Analytical Method: EPA RSK175					
Methane	**9700**	ug/l	50	1.9	100	8/17/2016 12:53	AK	d,B
Ethane	**2.9**	ug/l	0.20	0.0050	1	8/17/2016 09:16	AK	
Ethene	**0.059J**	ug/l	0.20	0.0070	1	8/17/2016 09:16	AK	

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ANALYTICAL RESULTS

Workorder: 19867 VGM / 16080179

Lab ID: **198670003** Date Received: 8/10/2016 11:00 Matrix: Water

Sample ID: **MW-14** Date Collected: 8/8/2016 11:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: EPA RSK175			Analytical Method: EPA RSK175					
Methane	**5200**	ug/l	50	1.9	100	8/17/2016 13:04	AK	d,B
Ethane	**0.064J**	ug/l	0.20	0.0050	1	8/17/2016 09:26	AK	
Ethene	**0.45**	ug/l	0.20	0.0070	1	8/17/2016 09:26	AK	

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ANALYTICAL RESULTS

Workorder: 19867 VGM / 16080179

Lab ID: **198670004** Date Received: 8/10/2016 11:00 Matrix: Water

Sample ID: **MW-16** Date Collected: 8/8/2016 12:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: EPA RSK175		Analytical Method: EPA RSK175						
Methane	**40**	ug/l	0.50	0.019	1	8/17/2016 09:36	AK	B
Ethane	**0.027J**	ug/l	0.20	0.0050	1	8/17/2016 09:36	AK	
Ethene	**0.066J**	ug/l	0.20	0.0070	1	8/17/2016 09:36	AK	

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ANALYTICAL RESULTS

Workorder: 19867 VGM / 16080179

Lab ID: **198670005** Date Received: 8/10/2016 11:00 Matrix: Water
Sample ID: **MW-CHA-RFI-7** Date Collected: 8/8/2016 13:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: EPA RSK175			Analytical Method: EPA RSK175					
Methane	**2.7**	ug/l	0.50	0.019	1	8/17/2016 09:48	AK	B
Ethane	**0.0053J**	ug/l	0.20	0.0050	1	8/17/2016 09:48	AK	
Ethene	**0.20 U**	ug/l	0.20	0.0070	1	8/17/2016 09:48	AK	

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ANALYTICAL RESULTS

Workorder: 19867 VGM / 16080179

Lab ID: **198670006** Date Received: 8/10/2016 11:00 Matrix: Water

Sample ID: **MW-CHA-RFI-7 MS** Date Collected: 8/8/2016 13:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: EPA RSK175			Analytical Method: EPA RSK175					
Methane	**38**	ug/l	0.50	0.019	1	8/17/2016 09:59	AK	B
Ethane	**67**	ug/l	0.20	0.0050	1	8/17/2016 09:59	AK	
Ethene	**65**	ug/l	0.20	0.0070	1	8/17/2016 09:59	AK	

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ANALYTICAL RESULTS

Workorder: 19867 VGM / 16080179

Lab ID: **198670007** Date Received: 8/10/2016 11:00 Matrix: Water

Sample ID: **MW-CHA-RFI-7 MSD** Date Collected: 8/8/2016 13:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: EPA RSK175			Analytical Method: EPA RSK175					
Methane	**38**	ug/l	0.50	0.019	1	8/17/2016 10:12	AK	B
Ethane	**66**	ug/l	0.20	0.0050	1	8/17/2016 10:12	AK	
Ethene	**64**	ug/l	0.20	0.0070	1	8/17/2016 10:12	AK	

CERTIFICATE OF ANALYSIS

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 19867 VGM / 16080179

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
B	The analyte was detected in the associated blank.
d	The analyte concentration was determined from a dilution.

Attachment B

Data Validation Summary

2813 Wehrle Drive • Suite 1 • Williamsville, New York • 14221
phone: 716-565-0963 • fax: 716-565-0964 • leadercs.com

Data Usability Summary Report – November 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 August 8, 2016. A total of four (4) samples were collected during the August 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 & Manganese 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)
16080179	08/08/2016	08/08/2016 (Schenectady) 08/10/2016 (Long Island)	Water	TCL 8260 Metals Misc. Field Analysis TOC Sulfate	8.2

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-5A/AR for n-butylbenzene was flagged as estimated due to the calibration acceptability criteria was exceeded for that analyte.

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 August 8, 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 August 8, 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 August 8, 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 with the exception of no recovery for chloroethylvinylether due to the addition of preservative to the samples and LFBs. Spike recoveries showed 13 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

August 8, 2016 Sampling Event

Sample ID	**16080179**			
Matrix	**Water**			
Analysis	**TCL 8260**	**Metals (Dissolved Iron and Manganese)**	**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-5A/AR result for n-butylbenzene 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. 13 out of 132 percent recoveries were outside of QC limits with the exception of no recovery for chloroethylvinylether due to the addition of preservative to the samples and LFBs. 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.

Data Validation Compliance Chart
Vails Gate

Sample ID	**16080179**			
Matrix	**Water**			
Analysis	**TCL 8260**	**Metals (Dissolved Iron and Manganese)**	**Miscellaneous Field Parameters**	**Wet Chemistry:**
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.
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

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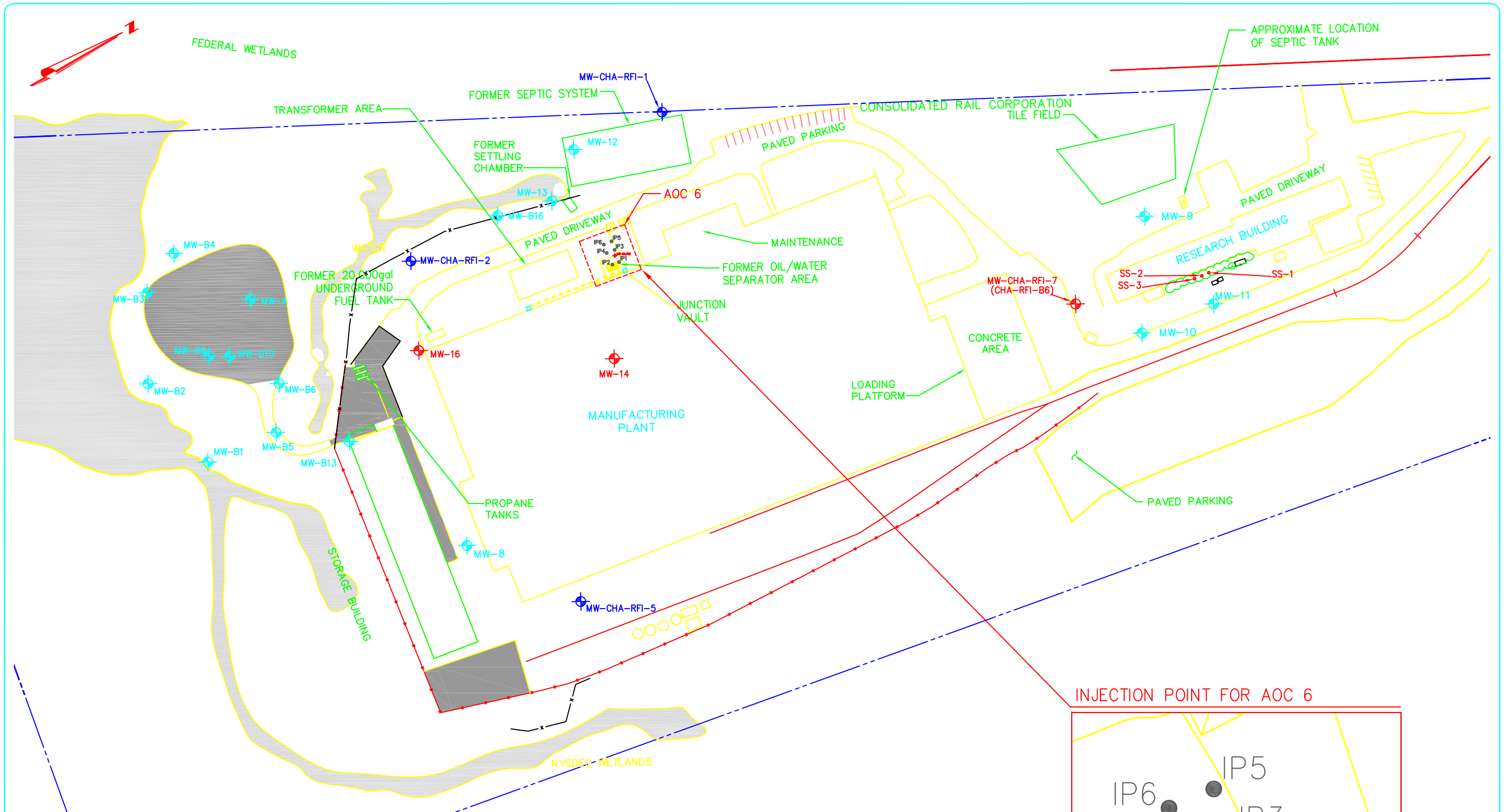


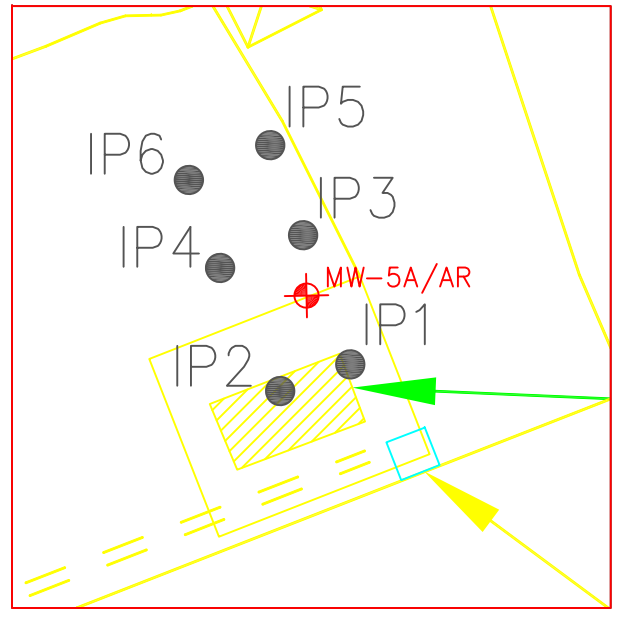
LEGEND

- Phase II RFI 2011 Monitoring Well Installation
- Existing Monitoring Well
- Injection Point
- Quarterly Monitoring Well

NOTES

1) Base map prepared by CHA
2) Phase II RFI test boring/monitoring well and sampling locations located by Leader based on standard surveying techniques.
3) Drawing considered accurate to the degree implied by the method used.

INJECTION POINT FOR AOC 6



No.	Submittal / Revision	Appd	By	Date
1	Phase II RFI	KK	HK	9/2011
2	Corrective Measures Study	KK	HK	12/2012
3	Remedial Action Work Plan	KK	HK	3/2014
4	Bioremediation Report	KK	HK	12/2014

VAILS GATE
MANUFACTURING FACILITY
VAILS GATE, NEW YORK

Leader Consulting Services, Inc.
2813 Wehrle Drive, Suite 1, Williamsville, NY 14221
Phone: (716) 565-0963 Fax: (716) 565-0964

Designed By: CHA Date: 01/12/06
Drawn By: CHA Date: 01/10/06
Revised By: The Leader Group Date: 12/9/12

BIOREMEDIATION PROJECT

IN-SITU INJECTION POINT LOCATIONS FOR AOC 6

Issue Date: 12/9/14 | Project No.: 737.003 | Scale: NTS

Figure No.
1