



September 21, 2018

Service Request No:R1807955

Russell Anderson
Casella Waste - Hyland
4 Chenell Drive
Suite 200
Concord, NH 03301

Laboratory Results for: Hyland Facility - Baseline Parameters

Dear Russell,

Enclosed are the results of the sample(s) submitted to our laboratory August 21, 2018
For your reference, these analyses have been assigned our service request number **R1807955**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

CC: Jon Brandes

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

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Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Received: 08/21/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 08/21/2018. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The sample was received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Metals:

Method 6010C, R1807955-001: The Relative Percent Difference (RPD) for the serial dilution test of one or more analytes was above the method control limits which indicates the presence of physical or chemical interference for analysis of these analytes in this sample matrix. Exceedances have been flagged.

General Chemistry:

Method SM5210B, R1807955-001: The sample was initially analyzed within holding time, however the dilution series did not meet the limit for residual oxygen of at least 1 mg/L. The sample was repeated out of holding time. Both results are reported and should be considered as estimated.

Volatiles by GC/MS:

No significant anomalies were noted with this analysis.

A handwritten signature in black ink, appearing to read "J. Amato".

Approved by _____

Date 09/21/2018



Sample Receipt Information

ALS Environmental—Rochester Laboratory

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Phone (585) 288-5380 Fax (585) 288-8475

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Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters

Service Request:R1807955

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1807955-001	Condensate-0818	8/20/2018	1010



ALS-Environmental
1565 Jefferson Rd, Bldg 300, Suite 360
Rochester, NY 14623
585.288.5380

Client: **Casella/On-Site**
6653 Herdman Road
Angelica, NY 14709
Project Manager: **Russ Anderson/Jon Brandes**

CHAIN of CUSTODY

Project: **Hyland Facility - Baseline Parameters**
Telephone No. 585-593-1824
Email: jonb@on-sitehs.com

Page 1 of 1

Method of Shipment

ups

Special Detection
Limit/Reporting

PDF to Lance and On-Site, and EDD to On-Site.

Sample I.D.

Lab Sample No.

No. of Containers

Soil

Water

Air

Other

Yes

No

Sampling Date

Sampling Time

GC/MS VOC's 8260 (HCl)

BOD (NP)

T-Cn (NaOH)

Alkalinity (NP)

Total Color (NP)

T-Metals (Baseline) (HNO3)

Hardness (HNO3)

TOC & Phenols (H2SO4)

TDS, Cr+6, NO3, Br, Cl, SO4 (NP)

NH3, TKN, COD (H2SO4)

Condensate-0818

11

X

X

X

8-20-18

1010

X

X

X

X

X

X

X

X

X

X

Sample Received Intact: Yes No

Temperature received:

Ice

No ice

Relinqu. by sampler (Sign & Print Name)

Kevin Dye / Kevin Dye

Date Time

8-20-18 1545

Received by (Sign & Print Name)

Relinquished by

Date Time

Received by

Relinquished by

Date Time

Received by

Relinquished by

Date Time

Received by laboratory

Date

Time

R1807955

Casella Waste - Hyland
Hyland Facility - Baseline Parameters



5

R E M A R K S

Lab Work No.



Cooler Receipt and Preservation Check Form

R1807955

5

Casella Waste - Hyland
Hyland Facility - Baseline Parameters

Project/Client _____ Folder Number _____

Cooler received on 8/21/18by: SECOURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<u>Y</u> N
2	Custody papers properly completed (ink, signed)?	<u>Y</u> N
3	Did all bottles arrive in good condition (unbroken)?	<u>Y</u> N
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<u>Y</u> N

5a	Perchlorate samples have required headspace?	Y N <u>NA</u>
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	<u>Y</u> N NA
6	Where did the bottles originate?	<u>ALS/ROC</u> CLIENT
7	Soil VOA received as: Bulk Encore 5035set	<u>NA</u>

8. Temperature Readings Date: 8/21/18 Time: 11:45 ID: IR#7 IR#9 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>4.7</u>	<u>4.9</u>	<u>1.9</u>				
Correction Factor (°C)	<u>+1.0</u>	<u>+1.0</u>	<u>--</u>				
Corrected Temp (°C)	<u>5.7</u>	<u>5.9</u>	<u>1.9</u>				
Temp from: Type of bottle	<u>Curm</u>	<u>→</u>	<u>→</u>				
Within 0-6°C?	<u>Y</u> N	<u>Y</u> N	<u>Y</u> N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: 202 by SE on 8/21/18 at 12:00
5035 samples placed in storage location: _____ by _____ on _____ at _____Cooler Breakdown/Preservation Check**: Date: 8/21/18 Time: 1555 by: E

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12	<u>204518</u>	NaOH	<u>✓</u>	<u>190853</u>	<u>6/19</u>				
≤2		HNO ₃	<u>✓</u>	<u>B2105E</u>	<u>↓</u>	<u>Sample will not adjust due to nature</u>			
≤2		H ₂ SO ₄	<u>✓</u>	<u>190642</u>	<u>↓</u>				
<4		NaHSO ₄							
5-9		For 608pest		No=Notify for 3day					
Residual Chlorine (-)		For <u>CN</u> <u>Phenol</u> , 625, 608pest, 522	<u>✓</u>	If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃							
		ZnAcetate	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	<u>4117090</u>	<u>7/19</u>				

Bottle lot numbers: 8-039-004 061118-DMMO 040918-ZHABE 050718-1BMC

Explain all Discrepancies/ Other Comments:

headspace: condensate (3 vials)

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: EPC Secondary Review: SMW 8/24/18

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the öNotesö column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an öimmediateö hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (×100% Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



Rochester Lab ID # for State Certifications¹

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID #
Delaware Approved	New Jersey ID # NY004	294100 A/B
DoD ELAP #65817	New York ID # 10145	Pennsylvania ID# 68-786
Florida ID # E87674	North Carolina #676	Rhode Island ID # 158
		Virginia #460167

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental>

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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dba ALS Environmental

Analyst Summary report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters

Service Request: R1807955

Sample Name: Condensate-0818
Lab Code: R1807955-001
Sample Matrix: Water

Date Collected: 08/20/18
Date Received: 08/21/18

Analysis Method	Extracted/Digested By	Analyzed By
351.2	NSMITH	GNITAJOUPPI
410.4		JQUACKENBUSH
7196A		MROGERSON
8260C		KRUEST
9012B	MROGERSON	GNITAJOUPPI
9056A		BKALKMAN
9066		BBOWE
ASTM D6919-09		BKALKMAN
SM 2120 B-2001(2011)		BKALKMAN
SM 2320 B-1997(2011)		CWOODS
SM 2340 B-1997(2011)		NA
SM 2540 C-1997(2011)		KAWONG
SM 5210 B-2001(2011)		AFELSER
SM 5310 C-2000(2011)		CWOODS



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.



Sample Results

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Volatile Organic Compounds by GC/MS

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dba ALS Environmental

Analytical Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Collected: 08/20/18 10:10
Date Received: 08/21/18 15:45

Sample Name: Condensate-0818
Lab Code: R1807955-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS using NYS DEC ASP HT

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	130 U	130	6.3	25	08/23/18 13:25	
1,1,1-Trichloroethane (TCA)	130 U	130	6.3	25	08/23/18 13:25	
1,1,2,2-Tetrachloroethane	130 U	130	5.0	25	08/23/18 13:25	
1,1,2-Trichloroethane	130 U	130	6.3	25	08/23/18 13:25	
1,1-Dichloroethane (1,1-DCA)	130 U	130	5.0	25	08/23/18 13:25	
1,1-Dichloroethene (1,1-DCE)	130 U	130	7.0	25	08/23/18 13:25	
1,2,3-Trichloropropane	130 U	130	8.3	25	08/23/18 13:25	
1,2-Dibromo-3-chloropropane (DBCP)	130 U	130	12	25	08/23/18 13:25	
1,2-Dibromoethane	130 U	130	5.0	25	08/23/18 13:25	
1,2-Dichlorobenzene	130 U	130	5.0	25	08/23/18 13:25	
1,2-Dichloroethane	130 U	130	5.0	25	08/23/18 13:25	
1,2-Dichloropropane	130 U	130	5.3	25	08/23/18 13:25	
1,4-Dichlorobenzene	21 J	130	6.0	25	08/23/18 13:25	
2-Butanone (MEK)	5000	250	20	25	08/23/18 13:25	
2-Hexanone	28 J	250	8.5	25	08/23/18 13:25	
4-Methyl-2-pentanone	160 J	250	7.3	25	08/23/18 13:25	
Acetone	4400	250	53	25	08/23/18 13:25	
Acrylonitrile	2500 U	2500	21	25	08/23/18 13:25	
Benzene	8.8 J	130	5.0	25	08/23/18 13:25	
Bromochloromethane	130 U	130	8.3	25	08/23/18 13:25	
Bromodichloromethane	130 U	130	7.8	25	08/23/18 13:25	
Bromoform	130 U	130	9.0	25	08/23/18 13:25	
Bromomethane	130 U	130	18	25	08/23/18 13:25	
Carbon Disulfide	10 J	250	7.8	25	08/23/18 13:25	
Carbon Tetrachloride	130 U	130	8.5	25	08/23/18 13:25	
Chlorobenzene	130 U	130	5.0	25	08/23/18 13:25	
Chloroethane	130 U	130	5.8	25	08/23/18 13:25	
Chloroform	130 U	130	7.0	25	08/23/18 13:25	
Chloromethane	130 U	130	7.0	25	08/23/18 13:25	
Dibromochloromethane	130 U	130	5.0	25	08/23/18 13:25	
Dibromomethane	130 U	130	5.0	25	08/23/18 13:25	
Methylene Chloride	130 U	130	12	25	08/23/18 13:25	
Ethylbenzene	41 J	130	5.0	25	08/23/18 13:25	
Iodomethane	250 U	250	30	25	08/23/18 13:25	
Styrene	9.4 J	130	5.0	25	08/23/18 13:25	
Tetrachloroethene (PCE)	130 U	130	7.0	25	08/23/18 13:25	
Toluene	75 J	130	5.0	25	08/23/18 13:25	
Trichloroethene (TCE)	130 U	130	5.0	25	08/23/18 13:25	
Trichlorofluoromethane (CFC 11)	130 U	130	6.8	25	08/23/18 13:25	
Vinyl Acetate	250 U	250	33	25	08/23/18 13:25	
Vinyl Chloride	130 U	130	5.5	25	08/23/18 13:25	
cis-1,2-Dichloroethene	130 U	130	6.5	25	08/23/18 13:25	
cis-1,3-Dichloropropene	130 U	130	7.5	25	08/23/18 13:25	

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dba ALS Environmental

Analytical Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Collected: 08/20/18 10:10
Date Received: 08/21/18 15:45

Sample Name: Condensate-0818
Lab Code: R1807955-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS using NYS DEC ASP HT

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
m,p-Xylenes	78 J	130	5.3	25	08/23/18 13:25	
o-Xylene	35 J	130	5.0	25	08/23/18 13:25	
trans-1,2-Dichloroethene	130 U	130	6.5	25	08/23/18 13:25	
trans-1,3-Dichloropropene	130 U	130	7.5	25	08/23/18 13:25	
trans-1,4-Dichloro-2-butene	130 U	130	8.5	25	08/23/18 13:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/23/18 13:25	
Dibromofluoromethane	106	89 - 119	08/23/18 13:25	
Toluene-d8	103	87 - 121	08/23/18 13:25	



Metals

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METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Casella Waste Systems (Hampden M Service Request: Condensate-0818
Project No.: R1807955 Date Collected: 8/20/2018
Project Name: Date Received: 8/21/2018
Matrix: WATER Units: ug/L
Basis:

Sample Name: Condensate-0818 Lab Code: R1807955-001

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Aluminum	6010C	100	64.0	1.0	7650		
Antimony	6010C	60.0	5.8	1.0	88.2		
Arsenic	6010C	10.0	3.9	1.0	261		E
Barium	6010C	20.0	6.9	1.0	330		
Beryllium	6010C	3.0	0.220	1.0	0.400	J	
Boron	6010C	200	16.0	1.0	18.5	J	
Cadmium	6010C	5.0	0.590	1.0	5.0	U	
Mercury	7470A	0.200	0.077	1.0	7.6		
Calcium	6010C	1000	220	1.0	4070		
Chromium	6010C	10.0	1.4	1.0	13.0		
Cobalt	6010C	50.0	1.8	1.0	5.9	J	
Copper	6010C	20.0	6.3	1.0	22.5		
Iron	6010C	100	48.0	1.0	13800		
Lead	6010C	50.0	2.5	1.0	12.1	J	
Magnesium	6010C	1000	130	1.0	2420		
Manganese	6010C	10.0	5.1	1.0	270		
Nickel	6010C	40.0	2.6	1.0	7.6	J	
Potassium	6010C	2000	200	1.0	1560	J	
Selenium	6010C	10.0	4.6	1.0	10.0	U	
Silver	6010C	10.0	0.570	1.0	10.0	U	
Sodium	6010C	1000	170	1.0	356	J	
Thallium	6010C	10.0	6.6	1.0	10.0	U	
Vanadium	6010C	50.0	1.7	1.0	14.3	J	
Zinc	6010C	20.0	9.4	1.0	681		

% Solids: 0.0

Comments:



General Chemistry

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Analytical Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Collected: 08/20/18 10:10
Date Received: 08/21/18 15:45

Sample Name: Condensate-0818
Lab Code: R1807955-001

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	4920	mg/L	8.0	4.0	4	08/28/18 05:18	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	1850	mg/L	15	3	3000	09/12/18 04:43	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	>1200	mg/L	2.0	-	1	08/22/18 09:39	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2630	mg/L	20	-	10	08/29/18 13:55	NA	*
Bromide	9056A	1.0 U	mg/L	1.0	0.4	10	08/21/18 18:43	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	65	mg/L	10	0.5	10	09/07/18 14:57	NA	
Chemical Oxygen Demand, Total	410.4	4040	mg/L	50	33	10	09/14/18 16:47	NA	
Chloride	9056A	2.0 U	mg/L	2.0	0.2	10	08/21/18 18:43	NA	
Chromium, Hexavalent	7196A	0.10 U	mg/L	0.10	0.04	10	08/21/18 19:06	NA	
Color, True	SM 2120 B-2001(2011)	280	ColorUnits	10	-	10	08/21/18 17:20	NA	
Cyanide, Total	9012B	0.010 U	mg/L	0.010	0.002	1	08/28/18 12:38	08/27/18	
Hardness, Total as CaCO ₃	SM 2340 B-1997(2011)	20.1	mg/L	6.62	-	1	NA	NA	
Nitrate as Nitrogen	9056A	1.0 U	mg/L	1.0	0.04	10	08/21/18 18:43	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1470	mg/L	80	30	4	09/11/18 12:34	09/10/18	
pH of Color Analysis	SM 2120 B-2001(2011)	8.16	pH Units	-	-	10	08/21/18 17:20	NA	
Phenolics, Total Recoverable	9066	4.95	mg/L	0.50	0.19	100	08/30/18 13:45	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	135	mg/L	59	21	1	08/24/18 12:30	NA	
Sulfate	9056A	73.5	mg/L	2.0	0.2	10	08/21/18 18:43	NA	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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ALS Group USA, Corp.
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QA/QC Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS using NYS DEC ASP HT

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85-122	89-119	87-121
Condensate-0818	R1807955-001	97	106	103
Method Blank	RQ1808803-04	98	108	104
Lab Control Sample	RQ1808803-03	101	107	103

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1808803-04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS using NYS DEC ASP HT

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	5.0 U	5.0	0.25	1	08/23/18 12:32	
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.25	1	08/23/18 12:32	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/23/18 12:32	
1,1,2-Trichloroethane	5.0 U	5.0	0.25	1	08/23/18 12:32	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/23/18 12:32	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.28	1	08/23/18 12:32	
1,2,3-Trichloropropane	5.0 U	5.0	0.33	1	08/23/18 12:32	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/23/18 12:32	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/23/18 12:32	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/23/18 12:32	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/23/18 12:32	
1,2-Dichloropropane	5.0 U	5.0	0.21	1	08/23/18 12:32	
1,4-Dichlorobenzene	5.0 U	5.0	0.24	1	08/23/18 12:32	
2-Butanone (MEK)	10 U	10	0.78	1	08/23/18 12:32	
2-Hexanone	10 U	10	0.34	1	08/23/18 12:32	
4-Methyl-2-pentanone	10 U	10	0.29	1	08/23/18 12:32	
Acetone	10 U	10	2.1	1	08/23/18 12:32	
Acrylonitrile	100 U	100	0.84	1	08/23/18 12:32	
Benzene	5.0 U	5.0	0.20	1	08/23/18 12:32	
Bromochloromethane	5.0 U	5.0	0.33	1	08/23/18 12:32	
Bromodichloromethane	5.0 U	5.0	0.31	1	08/23/18 12:32	
Bromoform	5.0 U	5.0	0.36	1	08/23/18 12:32	
Bromomethane	5.0 U	5.0	0.70	1	08/23/18 12:32	
Carbon Disulfide	10 U	10	0.31	1	08/23/18 12:32	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/23/18 12:32	
Chlorobenzene	5.0 U	5.0	0.20	1	08/23/18 12:32	
Chloroethane	5.0 U	5.0	0.23	1	08/23/18 12:32	
Chloroform	5.0 U	5.0	0.28	1	08/23/18 12:32	
Chloromethane	5.0 U	5.0	0.28	1	08/23/18 12:32	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/23/18 12:32	
Dibromomethane	5.0 U	5.0	0.20	1	08/23/18 12:32	
Methylene Chloride	5.0 U	5.0	0.47	1	08/23/18 12:32	
Ethylbenzene	5.0 U	5.0	0.20	1	08/23/18 12:32	
Iodomethane	10 U	10	1.2	1	08/23/18 12:32	
Styrene	5.0 U	5.0	0.20	1	08/23/18 12:32	
Tetrachloroethene (PCE)	5.0 U	5.0	0.28	1	08/23/18 12:32	
Toluene	5.0 U	5.0	0.20	1	08/23/18 12:32	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/23/18 12:32	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.27	1	08/23/18 12:32	
Vinyl Acetate	10 U	10	1.3	1	08/23/18 12:32	
Vinyl Chloride	5.0 U	5.0	0.22	1	08/23/18 12:32	
cis-1,2-Dichloroethene	5.0 U	5.0	0.26	1	08/23/18 12:32	
cis-1,3-Dichloropropene	5.0 U	5.0	0.30	1	08/23/18 12:32	

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Analytical Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1808803-04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS using NYS DEC ASP HT

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
m,p-Xylenes	5.0 U	5.0	0.21	1	08/23/18 12:32	
o-Xylene	5.0 U	5.0	0.20	1	08/23/18 12:32	
trans-1,2-Dichloroethene	5.0 U	5.0	0.26	1	08/23/18 12:32	
trans-1,3-Dichloropropene	5.0 U	5.0	0.30	1	08/23/18 12:32	
trans-1,4-Dichloro-2-butene	5.0 U	5.0	0.34	1	08/23/18 12:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/23/18 12:32	
Dibromofluoromethane	108	89 - 119	08/23/18 12:32	
Toluene-d8	104	87 - 121	08/23/18 12:32	

ALS Group USA, Corp.
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QA/QC Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Analyzed: 08/23/18

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS using NYS DEC ASP HT

Units:ug/L
Basis:NA

Lab Control Sample
RQ1808803-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	8260C	17.5	20.0	87	76-129
1,1,1-Trichloroethane (TCA)	8260C	18.7	20.0	93	75-125
1,1,2,2-Tetrachloroethane	8260C	17.5	20.0	88	78-126
1,1,2-Trichloroethane	8260C	20.4	20.0	102	82-121
1,1-Dichloroethane (1,1-DCA)	8260C	20.0	20.0	100	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	19.0	20.0	95	71-118
1,2,3-Trichloropropane	8260C	18.0	20.0	90	75-118
1,2-Dibromo-3-chloropropane (DBCP)	8260C	16.1	20.0	80	55-136
1,2-Dibromoethane	8260C	19.1	20.0	96	82-127
1,2-Dichlorobenzene	8260C	17.7	20.0	89	80-119
1,2-Dichloroethane	8260C	21.5	20.0	107	71-127
1,2-Dichloropropane	8260C	19.3	20.0	97	80-119
1,4-Dichlorobenzene	8260C	16.9	20.0	84	79-119
2-Butanone (MEK)	8260C	19.3	20.0	96	61-137
2-Hexanone	8260C	18.6	20.0	93	63-124
4-Methyl-2-pentanone	8260C	20.7	20.0	104	66-124
Acetone	8260C	17.8	20.0	89	40-161
Acrylonitrile	8260C	103	100	103	71-130
Benzene	8260C	19.6	20.0	98	79-119
Bromochloromethane	8260C	18.8	20.0	94	81-126
Bromodichloromethane	8260C	20.1	20.0	100	81-123
Bromoform	8260C	18.4	20.0	92	65-146
Bromomethane	8260C	17.6	20.0	88	42-166
Carbon Disulfide	8260C	18.6	20.0	93	66-128
Carbon Tetrachloride	8260C	18.7	20.0	93	70-127
Chlorobenzene	8260C	16.7	20.0	83	80-121
Chloroethane	8260C	17.3	20.0	86	62-131
Chloroform	8260C	20.1	20.0	101	79-120
Chloromethane	8260C	20.5	20.0	102	65-135
Dibromochloromethane	8260C	20.0	20.0	100	72-128
Dibromomethane	8260C	20.7	20.0	104	80-118
Methylene Chloride	8260C	18.1	20.0	91	73-122
Ethylbenzene	8260C	16.3	20.0	82	76-120

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QA/QC Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Analyzed: 08/23/18

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS using NYS DEC ASP HT

Units:ug/L
Basis:NA

Lab Control Sample
RQ1808803-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iodomethane	8260C	18.0	20.0	90	18-160
Styrene	8260C	18.0	20.0	90	80-124
Tetrachloroethene (PCE)	8260C	16.5	20.0	83	72-125
Toluene	8260C	18.7	20.0	93	79-119
Trichloroethene (TCE)	8260C	19.0	20.0	95	74-122
Trichlorofluoromethane (CFC 11)	8260C	21.3	20.0	106	71-136
Vinyl Acetate	8260C	19.3	20.0	97	52-174
Vinyl Chloride	8260C	20.7	20.0	104	74-159
cis-1,2-Dichloroethene	8260C	18.6	20.0	93	80-121
cis-1,3-Dichloropropene	8260C	19.1	20.0	95	77-122
m,p-Xylenes	8260C	32.9	40.0	82	80-126
o-Xylene	8260C	16.3	20.0	82	79-123
trans-1,2-Dichloroethene	8260C	18.9	20.0	94	73-118
trans-1,3-Dichloropropene	8260C	19.2	20.0	96	71-133
trans-1,4-Dichloro-2-butene	8260C	16.6	20.0	83	39-137



Metals

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METALS

-3-

BLANKS

Contract: R1807955

Lab Code: Case No.: SAS No.: SDG NO.: Condensate-0

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	Continuing Calibration Blank ug/L						Preparation Blank		M	
	C	1	C	2	C	3	C				C
Aluminum	64.00	U	64.00	U	64.00	U	64.00	U	64.000	U	P
Antimony	5.80	U	5.80	U	5.80	U	5.80	U	5.800	U	P
Arsenic	3.90	U	3.90	U	3.90	U	3.90	U	3.900	U	P
Barium	6.90	U	6.90	U	6.90	U	6.90	U	6.900	U	P
Beryllium	0.22	U	0.22	U	0.22	U	0.22	U	0.300	J	P
Boron	16.00	U	16.00	U	16.00	U	16.00	U	16.000	U	P
Cadmium	0.59	U	0.59	U	0.59	U	0.59	U	0.590	U	P
Mercury	0.077	U	0.077	U	0.077	U	0.077	U	0.077	U	CV
Calcium	220.00	U	220.00	U	220.00	U	220.00	U	220.000	U	P
Chromium	1.40	U	1.40	U	1.40	U	1.40	U	1.400	U	P
Cobalt	1.80	U	1.80	U	1.80	U	1.80	U	1.800	U	P
Copper	6.30	U	6.30	U	6.30	U	6.30	U	6.300	U	P
Iron	48.00	U	48.00	U	48.00	U	48.00	U	48.000	U	P
Lead	2.50	U	2.50	U	2.50	U	-2.80	J	-3.700	J	P
Magnesium	130.00	U	130.00	U	130.00	U	130.00	U	130.000	U	P
Manganese	5.10	U	5.10	U	5.10	U	5.10	U	5.100	U	P
Nickel	2.60	U	2.60	U	2.60	U	2.60	U	2.600	U	P
Potassium	200.00	U	200.00	U	200.00	U	200.00	U	200.000	U	P
Selenium	4.60	U	-6.50	J	4.60	U	4.60	U	7.200	J	P
Silver	0.57	U	0.57	U	0.57	U	0.57	U	0.570	U	P
Sodium	170.00	U	170.00	U	170.00	U	170.00	U	181.300	J	P
Thallium	6.60	U	6.60	U	6.60	U	6.60	U	6.600	U	P
Vanadium	1.70	U	1.70	U	1.70	U	1.70	U	-2.600	J	P
Zinc	9.40	U	9.40	U	9.40	U	9.40	U	9.400	U	P

Comments:

METALS

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BLANKS

Contract: R1807955

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: Condensate-0

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	Continuing Calibration Blank ug/L						Preparation Blank	C	M
		1	C	2	C	3	C			
Aluminum		64.00	U	64.00	U					P
Antimony		5.80	U	5.80	U					P
Arsenic		3.90	U	3.90	U					P
Barium		6.90	U	6.90	U					P
Beryllium		0.22	U	0.22	U					P
Boron		16.00	U	16.00	U					P
Cadmium		0.59	U	0.59	U					P
Mercury		0.077	U	0.077	U					CV
Calcium		220.00	U	220.00	U					P
Chromium		1.40	U	1.40	U					P
Cobalt		1.80	U	1.80	U					P
Copper		6.30	U	6.30	U					P
Iron		48.00	U	48.00	U					P
Lead		2.50	U	2.50	U					P
Magnesium		130.00	U	130.00	U					P
Manganese		5.10	U	5.10	U					P
Nickel		2.60	U	2.60	U					P
Potassium		200.00	U	200.00	U					P
Selenium		4.60	U	7.50	J					P
Silver		0.57	U	0.57	U					P
Sodium		170.00	U	170.00	U					P
Thallium		6.60	U	6.60	U					P
Vanadium		1.70	U	1.70	U					P
Zinc		9.40	U	9.40	U					P

Comments:

METALS
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DUPLICATES

SAMPLE NO.

DLCSW

Contract: R1807955

Lab Code: Case No.: SAS No.: SDG NO.: Condensate-0

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		1910		1890		1		P
Antimony		472		474		0		P
Arsenic		43		42		2		P
Barium		2040		2030		0		P
Beryllium		50		50		0		P
Boron		1010		1000		1		P
Cadmium		52		52		0		P
Chromium		205		203		1		P
Cobalt		520		515		1		P
Copper		249		246		1		P
Iron		1000		986		1		P
Lead		514		508		1		P
Magnesium		2000		1980		1		P
Manganese		504		499		1		P
Nickel		513		506		1		P
Potassium		19200		19100		1		P
Selenium		1070		1060		1		P
Silver		50		50		0		P
Sodium		19200		19100		1		P
Thallium		1910		1890		1		P
Vanadium		495		490		1		P
Zinc		529		514		3		P

Comments:

METALS
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DUPLICATES

SAMPLE NO.

DLCSW

Contract: R1807955

Lab Code: Case No.: SAS No.: SDG NO.: Condensate-0

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)C	Duplicate (D)C	RPD	Q	M
Calcium		1980	1940	2		P

Comments:

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1807955

Lab Code: Case No.: SAS No.: SDG NO.: Condensate-0

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	2000	1910	96						
Antimony	500	472	94						
Arsenic	40	43	108						
Barium	2000	2040	102						
Beryllium	50	50	100						
Boron	1000	1010	101						
Cadmium	50	52	104						
Mercury	1.000	0.892	89						
Calcium	2000	1980	99						
Chromium	200	205	102						
Cobalt	500	520	104						
Copper	250	249	100						
Iron	1000	1000	100						
Lead	500	514	103						
Magnesium	2000	2000	100						
Manganese	500	504	101						
Nickel	500	513	103						
Potassium	20000	19200	96						
Selenium	1010	1070	106						
Silver	50	50	100						
Sodium	20000	19200	96						
Thallium	2000	1910	96						
Vanadium	500	495	99						
Zinc	500	529	106						

Comments:

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1807955

Lab Code: Case No.: SAS No.: SDG NO.: Condensate-0

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	2000	1890	94						
Antimony	500	474	95						
Arsenic	40	42	105						
Barium	2000	2030	102						
Beryllium	50	50	100						
Boron	1000	1000	100						
Cadmium	50	52	104						
Calcium	2000	1940	97						
Chromium	200	203	102						
Cobalt	500	515	103						
Copper	250	246	98						
Iron	1000	986	99						
Lead	500	508	102						
Magnesium	2000	1980	99						
Manganese	500	499	100						
Nickel	500	506	101						
Potassium	20000	19100	96						
Selenium	1010	1060	105						
Silver	50	50	100						
Sodium	20000	19100	96						
Thallium	2000	1890	94						
Vanadium	500	490	98						
Zinc	500	514	103						

Comments:



General Chemistry

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Analytical Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: R1807955-MB1

Service Request: R1807955
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1.0	1	08/28/18 02:32	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0008 J	mg/L	0.0050	0.0008	1	09/12/18 03:22	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0 U	mg/L	2.0	-	1	08/22/18 17:46	NA	
Bromide	9056A	0.10 U	mg/L	0.10	0.04	1	08/21/18 18:28	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	0.2 J	mg/L	1.0	0.05	1	09/07/18 14:13	NA	
Chemical Oxygen Demand, Total	410.4	5.0 U	mg/L	5.0	3.3	1	09/14/18 16:47	NA	
Chloride	9056A	0.20 U	mg/L	0.20	0.02	1	08/21/18 18:28	NA	
Chromium, Hexavalent	7196A	0.010 U	mg/L	0.010	0.004	1	08/21/18 19:05	NA	
Color, True	SM 2120 B-2001(2011)	1.0	ColorUnits	1.0	-	1	08/21/18 17:20	NA	
Cyanide, Total	9012B	0.010 U	mg/L	0.010	0.002	1	08/28/18 12:13	08/27/18	
Nitrate as Nitrogen	9056A	0.10 U	mg/L	0.10	0.004	1	08/21/18 18:28	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.20 U	mg/L	0.20	0.08	1	09/11/18 12:25	09/10/18	
Phenolics, Total Recoverable	9066	0.0050 U	mg/L	0.0050	0.0019	1	08/30/18 13:45	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	10 U	mg/L	10	4	1	08/24/18 12:30	NA	
Sulfate	9056A	0.20 U	mg/L	0.20	0.02	1	08/21/18 18:28	NA	

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Analytical Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1807955-MB2

Service Request: R1807955
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0 U	mg/L	2.0	1	08/29/18 19:44	

ALS Group USA, Corp.
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QA/QC Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Collected: 08/20/18
Date Received: 08/21/18
Date Analyzed: 08/21/18 - 09/07/18

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: Condensate-0818 **Units:** mg/L
Lab Code: R1807955-001 **Basis:** NA

Matrix Spike
R1807955-001MS

Duplicate Matrix Spike
R1807955-001DMS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent	7196A	0.10 U	0.84	1.00	84 *	0.66	1.00	66 *	85-115	23*	20
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	65	155	100	90	179	100	114	48-135	14	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

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QA/QC Report

Client: Casella Waste Systems (Hampden ME)
Project Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955**Date Collected:** 08/20/18**Date Received:** 08/21/18**Date Analyzed:** 08/21/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Condensate-0818**Units:** ColorUnits**Lab Code:** R1807955-001**Basis:** NA

				Duplicate Sample R1807955- 001DUP			
Analyte Name	Analysis Method	MRL	Sample Result	Result	Average	RPD	RPD Limit
Color, True	SM 2120 B-2001(2011)	10	280	280	280	<1	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

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QA/QC Report

Client: Casella Waste Systems (Hampden ME)
Project Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955**Date Collected:** 08/20/18**Date Received:** 08/21/18**Date Analyzed:** 08/21/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Condensate-0818**Units:** pH Units**Lab Code:** R1807955-001**Basis:** NA

					Duplicate Sample R1807955- 001DUP		
Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit
pH of Color Analysis	SM 2120 B-2001(2011)	-	8.16	8.16	8.16	<1	

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
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QA/QC Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Analyzed: 08/21/18 - 09/14/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1807955-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	22.0	20.0	110	80-120
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.500	0.500	100	90-110
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	213	198	108	85-115
Bromide	9056A	0.950	1.00	95	80-120
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	9.76	10.0	98	80-121
Chemical Oxygen Demand, Total	410.4	509	500	102	90-110
Chloride	9056A	2.05	2.00	102	80-120
Chromium, Hexavalent	7196A	0.104	0.100	104	80-120
Cyanide, Total	9012B	0.0908	0.100	91	85-115
Nitrate as Nitrogen	9056A	1.02	1.00	102	80-120
Nitrogen, Total Kjeldahl (TKN)	351.2	2.42	2.50	97	90-110
Phenolics, Total Recoverable	9066	0.0377	0.0400	94	85-115
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	904	914	99	90-110
Sulfate	9056A	2.06	2.00	103	80-120

ALS Group USA, Corp.
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QA/QC Report

Client: Casella Waste Systems (Hampden ME)
Project: Hyland Facility - Baseline Parameters
Sample Matrix: Water

Service Request: R1807955
Date Analyzed: 08/28/18 - 08/29/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1807955-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	189	198	96	85-115
Cyanide, Total	9012B	0.543	0.600	90	85-115