Cedar corporation
engineering | architecture | environmental | surveying
landscape architecture | planning | economic development

604 Wilson Avenue
Menomonie, WI 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com

July 8, 2021

Jim Junker
407 172nd Avenue
Somerset, WI 54025

RE: Junker Landfill
June 2021 Annual Sampling
License # 1972, Facility ID # 656026800

Dear Mr. Junker,

The 2021 annual sampling for Junker Landfill has been completed. The annual sampling includes the collection of samples from the leachate tank and monitoring wells (3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15A, 15B, 15C, and 16). Five new wells were constructed in May of this year to monitor the contamination plume sourced from the Junker Landfill. Another two wells were also constructed in May of this year for an adjacent groundwater contamination site. The seven new wells were sampled in late June and will be reported when the results are in.

Exceedance Notification

The following identifies compounds which were detected in the monitoring wells and leachate tank above the Ch. NR 140 Preventive Action Limit (PAL) or Enforcement Standard (ES) during the June 2021 sampling event.

	Iron (mg/L)	Manganese (mg/L)	Bis(2-ethylhexyl) phthalate) (ug/L)	Methylene Chloride (ug/L)	Tetra-chloro-ethylene (ug/L)	Tri-chloro-ethylene (ug/L)
PAL	*0.15*	*60*	*0.6*	*0.5*	*0.5*	*0.5*
ES	**0.3**	**300**	**6**	**5**	**5**	**5**
MW-3	**8.8**	**300**				*1.5*
MW-4						*0.98*
MW-6				*2.5 J*		
MW-7						*0.8*
MW-8				*2.4 J*		
MW-9				*2.5 J*		*1.5*
MW-10				*2.6 J*	*0.79*	*1.9*
MW-11						*0.93*
MW-13			*1.4 J*			**6.8**
MW-15A						*0.64*
MW-15B						*1.4*
MW-15C						*1.2*

Blank: No Exceedance
Italicized: PAL Exceedance
Bold: ES Exceedance
J: Result was detected between the limit of detection and limit of quantitation

The remainders of the PAL and ES exceedances reported were detected in the leachate sample.

Leachate – Arsenic (100 ug/L), Chromium (98 ug/L), Iron (2520 mg/L), Manganese (3200 ug/L), Nickel (48 ug/L), Silver (43 ug/L), Methylene Chloride (1.8 ug/L), Tetrahydrofuran (990 ug/L), Bis(2-ethylhexyl) phthalate (4.4 ug/L), and Chloride (408 mg/L).

Comments on exceedance trends in the monitoring well results are as follows: Iron and manganese were detected above the PAL and ES in MW-3, these results are consistent with past monitoring results. Bis(2-ethylhexyl) phthalate was detected in MW-13 for the first time. Detections of methylene chloride in the monitoring wells are not consistent with past monitoring results. This compound is a known lab contaminant. Therefore, all low-level detections could be suspected as lab contamination. Tetrachloroethylene has been consistently detected in MW-10 since 2012, concentrations have been relatively stable for the past four years. Trichloroethylene results have shown a slight decrease in MWs 3, 7, and 9 compared to the last sampling event; stable in MW-10; and a slight increase in MWs 4, 11, 13, 15A,15B, and C. The remainder of the results appear consistent with past sampling events, we will continue to monitor these trends.

Comments on exceedance trends in the leachate are as follows: Compared to last year's monitoring results, tetrahydrofuran, bis (2-ethylhexyl) phthalate, chloride, 1,2-dichloroethane, 1,2-dichloropropane, cis-1,2-dichloroethylene, tetrachloroethylene, trichloroethylene concentrations have decreased; arsenic, chromium, iron, manganese, nickel, silver, and methylene chloride concentrations have increased.

The electronic data has been forwarded to the Bureau of Solid Waste in Madison. If you have any questions or concerns, please do not hesitate to contact me or Mitch Evenson at 715-235-9081 or Kirsten.lee@cedarcorp.com. Also, if you would like to request a paper copy of the analytical results and/or tables, please contact me. Otherwise, the results will be published in the 2020 Annual Report at the beginning of next year.

Sincerely,

CEDAR CORPORATION

Kirsten Lee

Kirsten Lee

Environmental Specialist

Enclosure

cc: Candace Sykora, via email

GEMS Data Submittal Contact – WA/5, Bureau of Waste and Materials Management, WDNR, P.O. Box 7921, Madison, WI 53707-7921
(Data Disk and Environmental Monitoring Data Certification form only)

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Environmental Monitoring Data Certification

Form 4400-231 (R 5/17)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5, Wisconsin Department of Natural Resources, P.O. Box 7921, Madison, WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner)
Cedar Corporation

Contact for questions about data formatting. Include data preparer's name, telephone number and Email address:

Name	Phone No. (include area code)
Kirsten Lee	(715) 235-9081

Email
Kirsten.lee@cedarcorp.com

Facility Name
Former Junker Sanitary Landfill

License # / Monitoring ID	Facility ID (FID)
1972	656026806

Actual sampling dates (e.g., July 2-6, 2003)	The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)
June 16,17,18 2021	June 2021

Type of Data Submitted (Check all that apply):

- [X] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [X] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify):

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [X] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Facility Representative Name (Print)	Title	Phone No. (include area code)
Kirsten Lee	Environmental Specialist	(715) 235-9081

Signature: Kirsten Lee Date Signed (mm/dd/yyyy): 7/8/21

For DNR Use Only

Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] Found uploading problems on _____ Initials
- [ ] Notified contact of problems on _____ Uploaded data successfully on _____

EDD format(s): [ ] Diskette [ ] CD (initial submittal and follow-up) [ ] E-mail (follow-up only) [ ] Other: _____

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-201089-1
Client Project/Site: Junker LF - Leachate

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson

Authorized for release by:
7/7/2021 12:27:11 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Job ID: 500-201089-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-201089-1

Comments
No additional comments.

Receipt
The sample was received on 6/18/2021 9:20 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9º C.

Receipt Exceptions
Method SM 5210B: The following sample(s) was received outside of holding time for BOD analysis.

GC/MS VOA
Methods 624, 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Leachate (500-201089-1). Elevated reporting limits (RLs) are provided.

Method 8260B: The continuing calibration verification (CCV) associated with batch 606874 recovered above the upper control limit for Chloroethane and Dichlorodifluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: Leachate (500-201089-1).

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

GC/MS Semi VOA
Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 500-605069 and analytical batch 500-605186 recovered outside control limits for the following analytes: 4-Nitrophenol.

Method 8270D: The continuing calibration verification (CCV) analyzed in 500-605186 was outside the method criteria for the following analyte(s): Di-n-octyl phthalate, Carbazole, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4-Nitroaniline and Caprolactam. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 500-605186 was outside the method criteria for the following analyte(s): Hexachlorocyclopentadiene and Pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

Metals
Method 3010A: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: Leachate (500-201089-1). The reporting limits (RLs) have been adjusted proportionately.

Method 6010B: The method blank for preparation batch 500-605328 and analytical batch 500-605639 contained Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

General Chemistry
Methods 335.4, 9012B: The method blank for preparation batch 500-606230 and analytical batch 500-606491 contained Cyanide, Total above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 335.4: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Cyanide, Free in preparation batch 500-606230 and analytical batch 500-606753 were outside control limits. Sample matrix interference is suspected because the associated laboratory

Job ID: 500-201089-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

control sample (LCS) recovery was within acceptance limits.

Method 335.4: The distillation sample ID from the Cyanide, Total prep batch was used to identify this sample in the Free Cyanide batch. However, the sample was not distilled for Free Cyanide, instead it was run straight on the instrument per the SOP. Leachate (500-201089-1)

Method SM 5210B: One or more of the glucose-glutamic acid standards (LCS) replicates for BOD recovered outside the recovery limits; however, the average recovery is within control limits. The method requirement is for the average recovery of the LCS replicates to meet criteria; therefore, no further action is required. Data has been flagged to indicate individual LCS recoveries that did not meet criteria.

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Client Sample ID: Leachate

Lab Sample ID: 500-201089-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	22		10	1.7	ug/L	1		8260B	Total/NA
Benzene	0.21	J	0.50	0.15	ug/L	1		8260B	Total/NA
Chlorobenzene	0.62	J	1.0	0.39	ug/L	1		8260B	Total/NA
2,2-Dichloropropane	0.82	J	1.0	0.44	ug/L	1		8260B	Total/NA
Ethylbenzene	2.2		0.50	0.18	ug/L	1		8260B	Total/NA
Methylene Chloride	1.8	J	5.0	1.6	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.52	J	1.0	0.39	ug/L	1		8260B	Total/NA
Naphthalene	1.8		1.0	0.34	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	2.1		1.0	0.36	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	2.4		1.0	0.36	ug/L	1		8260B	Total/NA
Styrene	0.75	J	1.0	0.39	ug/L	1		8260B	Total/NA
Toluene	6.8		0.50	0.15	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	1.6		1.0	0.25	ug/L	1		8260B	Total/NA
Xylenes, Total	28		1.0	0.22	ug/L	1		8260B	Total/NA
Tetrahydrofuran - DL	990		100	19	ug/L	10		8260B	Total/NA
1,4-Dichlorobenzene	0.92	J	1.5	0.16	ug/L	1		8270D	Total/NA
2,4-Dimethylphenol	11		7.6	1.4	ug/L	1		8270D	Total/NA
Anthracene	0.31	J	0.76	0.25	ug/L	1		8270D	Total/NA
Bis(2-ethylhexyl) phthalate	4.4	J	7.6	1.3	ug/L	1		8270D	Total/NA
Carbazole	7.5	^c	3.8	0.27	ug/L	1		8270D	Total/NA
Naphthalene	0.74	J	0.76	0.23	ug/L	1		8270D	Total/NA
Phenanthrene	0.34	J	0.76	0.23	ug/L	1		8270D	Total/NA
Arsenic	0.10		0.10	0.037	mg/L	1		6010B	Total/NA
Chromium	0.098	J	0.10	0.017	mg/L	1		6010B	Total/NA
Copper	0.12	B	0.10	0.018	mg/L	1		6010B	Total/NA
Iron	2520	B ^	2.0	0.82	mg/L	1		6010B	Total/NA
Manganese	3.2	B	0.10	0.023	mg/L	1		6010B	Total/NA
Nickel	0.048	J	0.10	0.019	mg/L	1		6010B	Total/NA
Silver	0.043	J	0.050	0.015	mg/L	1		6010B	Total/NA
Zinc	0.35		0.20	0.050	mg/L	1		6010B	Total/NA
Mercury	0.00018	J	0.00020	0.000098	mg/L	1		7470A	Total/NA
Cyanide, Total	0.0045	J B	0.0050	0.0025	mg/L	1		335.4	Total/NA
Nitrogen, Kjeldahl	227	B	80.0	48.8	mg/L	2		4500 NH3 G	Total/NA
Alkalinity	1710		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Suspended Solids	1750		125	48.3	mg/L	1		SM 2540D	Total/NA
Chloride	408		40.0	19.9	mg/L	20		SM 4500 Cl- E	Total/NA
Phosphorus as P	5.3		1.3	0.60	mg/L	5		SM 4500 P E	Total/NA
Biochemical Oxygen Demand	51.0	*	2.0	2.0	mg/L	1		SM 5210B	Total/NA
Chemical Oxygen Demand	806		100	60.4	mg/L	10		SM 5220C	Total/NA
Field Color	Y				NONE	1		Field Sampling	Total/NA
Field Conductivity	499				umhos/cm	1		Field Sampling	Total/NA
Field Odor	Y				NONE	1		Field Sampling	Total/NA
Field pH	7.03				SU	1		Field Sampling	Total/NA
Field Temperature	22.1				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
335.4	Cyanide, Total	MCAWW	TAL CHI
4500 NH3 G	4500NH3 G - Nitrogen, Total Kjeldahl'	SM	TAL CHI
SM 2320B	Alkalinity	SM	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
SM 5210B	BOD, 5-Day	SM	TAL CHI
SM 5220C	COD	SM	TAL CHI
Field Sampling	Field Sampling	EPA	TAL CHI
3010A	Preparation, Total Metals	SW846	TAL CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI
Distill/CN	Distillation, Cyanide	None	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI
SM 5220	COD	SM	TAL CHI
SM4500Norg_C	Preparation, Nitrogen -Total Kjeldahl	SM	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-201089-1	Leachate	Leachate	06/16/21 16:00	06/18/21 09:20	

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Client Sample ID: Leachate

Date Collected: 06/16/21 16:00
Date Received: 06/18/21 09:20

Lab Sample ID: 500-201089-1

Matrix: Leachate

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**22**		10	1.7	ug/L			06/30/21 15:34	1
Benzene	**0.21**	**J**	0.50	0.15	ug/L			06/30/21 15:34	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 15:34	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 15:34	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 15:34	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 15:34	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 15:34	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 15:34	1
Chlorobenzene	**0.62**	**J**	1.0	0.39	ug/L			06/30/21 15:34	1
Chloroethane	<0.51	^c	1.0	0.51	ug/L			06/30/21 15:34	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 15:34	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 15:34	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 15:34	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 15:34	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 15:34	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 15:34	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 15:34	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 15:34	1
Dichlorodifluoromethane	<0.67	^c	3.0	0.67	ug/L			06/30/21 15:34	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/30/21 15:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 15:34	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 15:34	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 15:34	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 15:34	1
2,2-Dichloropropane	**0.82**	**J**	1.0	0.44	ug/L			06/30/21 15:34	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 15:34	1
Ethylbenzene	**2.2**		0.50	0.18	ug/L			06/30/21 15:34	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 15:34	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 15:34	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 15:34	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 15:34	1
Methyl bromide	<0.80		3.0	0.80	ug/L			06/30/21 15:34	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 15:34	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 15:34	1
Methylene Chloride	**1.8**	**J**	5.0	1.6	ug/L			06/30/21 15:34	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 15:34	1
Methyl tert-butyl ether	**0.52**	**J**	1.0	0.39	ug/L			06/30/21 15:34	1
Naphthalene	**1.8**		1.0	0.34	ug/L			06/30/21 15:34	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 15:34	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 15:34	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 15:34	1
1,4-Dichlorobenzene	**2.1**		1.0	0.36	ug/L			06/30/21 15:34	1
p-Isopropyltoluene	**2.4**		1.0	0.36	ug/L			06/30/21 15:34	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 15:34	1
Styrene	**0.75**	**J**	1.0	0.39	ug/L			06/30/21 15:34	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 15:34	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 15:34	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 15:34	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			06/30/21 15:34	1

Client Sample ID: Leachate

Date Collected: 06/16/21 16:00
Date Received: 06/18/21 09:20

Lab Sample ID: 500-201089-1

Matrix: Leachate

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**6.8**		0.50	0.15	ug/L			06/30/21 15:34	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 15:34	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 15:34	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 15:34	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 15:34	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 15:34	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 15:34	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			06/30/21 15:34	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/30/21 15:34	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 15:34	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 15:34	1
1,3,5-Trimethylbenzene	**1.6**		1.0	0.25	ug/L			06/30/21 15:34	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 15:34	1
Xylenes, Total	**28**		1.0	0.22	ug/L			06/30/21 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*		*06/30/21 15:34*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*06/30/21 15:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*		*06/30/21 15:34*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*06/30/21 15:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	**990**		100	19	ug/L			06/30/21 18:51	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*		*06/30/21 18:51*	*10*
Dibromofluoromethane	*99*		*75 - 120*		*06/30/21 18:51*	*10*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*		*06/30/21 18:51*	*10*
Toluene-d8 (Surr)	*93*		*75 - 120*		*06/30/21 18:51*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		1.5	0.18	ug/L		06/19/21 08:05	06/21/21 19:26	1
1,2-Dichlorobenzene	<0.19		1.5	0.19	ug/L		06/19/21 08:05	06/21/21 19:26	1
1,3-Dichlorobenzene	<0.16		1.5	0.16	ug/L		06/19/21 08:05	06/21/21 19:26	1
1,4-Dichlorobenzene	**0.92**	**J**	1.5	0.16	ug/L		06/19/21 08:05	06/21/21 19:26	1
1-Methylnaphthalene	<0.23		1.5	0.23	ug/L		06/19/21 08:05	06/21/21 19:26	1
2,2'-oxybis[1-chloropropane]	<0.29		1.5	0.29	ug/L		06/19/21 08:05	06/21/21 19:26	1
2,4,5-Trichlorophenol	<1.9		7.6	1.9	ug/L		06/19/21 08:05	06/21/21 19:26	1
2,4,6-Trichlorophenol	<0.54		3.8	0.54	ug/L		06/19/21 08:05	06/21/21 19:26	1
2,4-Dichlorophenol	<2.0		7.6	2.0	ug/L		06/19/21 08:05	06/21/21 19:26	1
2,4-Dimethylphenol	**11**		7.6	1.4	ug/L		06/19/21 08:05	06/21/21 19:26	1
2,4-Dinitrophenol	<6.5		15	6.5	ug/L		06/19/21 08:05	06/21/21 19:26	1
2,4-Dinitrotoluene	<0.19		0.76	0.19	ug/L		06/19/21 08:05	06/21/21 19:26	1
2,6-Dinitrotoluene	<0.056		0.76	0.056	ug/L		06/19/21 08:05	06/21/21 19:26	1
2-Chloronaphthalene	<0.18		1.5	0.18	ug/L		06/19/21 08:05	06/21/21 19:26	1
2-Chlorophenol	<0.42		3.8	0.42	ug/L		06/19/21 08:05	06/21/21 19:26	1
2-Methylnaphthalene	<0.049		1.5	0.049	ug/L		06/19/21 08:05	06/21/21 19:26	1
2-Methylphenol	<0.23		1.5	0.23	ug/L		06/19/21 08:05	06/21/21 19:26	1

Client Sample ID: Leachate
Date Collected: 06/16/21 16:00
Date Received: 06/18/21 09:20

Lab Sample ID: 500-201089-1
Matrix: Leachate

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	<0.97		3.8	0.97	ug/L		06/19/21 08:05	06/21/21 19:26	1
2-Nitrophenol	<1.9		7.6	1.9	ug/L		06/19/21 08:05	06/21/21 19:26	1
3 & 4 Methylphenol	<0.34		1.5	0.34	ug/L		06/19/21 08:05	06/21/21 19:26	1
3,3'-Dichlorobenzidine	<1.3	^c	3.8	1.3	ug/L		06/19/21 08:05	06/21/21 19:26	1
3-Nitroaniline	<1.4	^c	7.6	1.4	ug/L		06/19/21 08:05	06/21/21 19:26	1
4,6-Dinitro-2-methylphenol	<4.5		15	4.5	ug/L		06/19/21 08:05	06/21/21 19:26	1
4-Bromophenyl phenyl ether	<0.41		3.8	0.41	ug/L		06/19/21 08:05	06/21/21 19:26	1
4-Chloro-3-methylphenol	<1.7		7.6	1.7	ug/L		06/19/21 08:05	06/21/21 19:26	1
4-Chloroaniline	<1.5		7.6	1.5	ug/L		06/19/21 08:05	06/21/21 19:26	1
4-Chlorophenyl phenyl ether	<0.48		3.8	0.48	ug/L		06/19/21 08:05	06/21/21 19:26	1
4-Nitroaniline	<1.3	^c	7.6	1.3	ug/L		06/19/21 08:05	06/21/21 19:26	1
4-Nitrophenol	<5.6	*	15	5.6	ug/L		06/19/21 08:05	06/21/21 19:26	1
Acenaphthene	<0.23		0.76	0.23	ug/L		06/19/21 08:05	06/21/21 19:26	1
Acenaphthylene	<0.20		0.76	0.20	ug/L		06/19/21 08:05	06/21/21 19:26	1
Anthracene	**0.31**	**J**	0.76	0.25	ug/L		06/19/21 08:05	06/21/21 19:26	1
Benzo[a]anthracene	<0.043		0.15	0.043	ug/L		06/19/21 08:05	06/21/21 19:26	1
Benzo[a]pyrene	<0.075		0.15	0.075	ug/L		06/19/21 08:05	06/21/21 19:26	1
Benzo[b]fluoranthene	<0.061		0.15	0.061	ug/L		06/19/21 08:05	06/21/21 19:26	1
Benzo[g,h,i]perylene	<0.28		0.76	0.28	ug/L		06/19/21 08:05	06/21/21 19:26	1
Benzo[k]fluoranthene	<0.048		0.15	0.048	ug/L		06/19/21 08:05	06/21/21 19:26	1
Benzoic acid	<4.4		15	4.4	ug/L		06/19/21 08:05	06/21/21 19:26	1
Benzyl alcohol	<4.6		15	4.6	ug/L		06/19/21 08:05	06/21/21 19:26	1
Bis(2-chloroethoxy)methane	<0.21		1.5	0.21	ug/L		06/19/21 08:05	06/21/21 19:26	1
Bis(2-chloroethyl)ether	<0.22		1.5	0.22	ug/L		06/19/21 08:05	06/21/21 19:26	1
Bis(2-ethylhexyl) phthalate	**4.4**	**J**	7.6	1.3	ug/L		06/19/21 08:05	06/21/21 19:26	1
Butyl benzyl phthalate	<0.36		1.5	0.36	ug/L		06/19/21 08:05	06/21/21 19:26	1
Carbazole	**7.5**	**^c**	3.8	0.27	ug/L		06/19/21 08:05	06/21/21 19:26	1
Chrysene	<0.052		0.15	0.052	ug/L		06/19/21 08:05	06/21/21 19:26	1
Dibenz(a,h)anthracene	<0.038		0.23	0.038	ug/L		06/19/21 08:05	06/21/21 19:26	1
Dibenzofuran	<0.20		1.5	0.20	ug/L		06/19/21 08:05	06/21/21 19:26	1
Diethyl phthalate	<0.27		3.8	0.27	ug/L		06/19/21 08:05	06/21/21 19:26	1
Dimethyl phthalate	<0.24		3.8	0.24	ug/L		06/19/21 08:05	06/21/21 19:26	1
Di-n-butyl phthalate	<0.55		3.8	0.55	ug/L		06/19/21 08:05	06/21/21 19:26	1
Di-n-octyl phthalate	<0.79	^c	7.6	0.79	ug/L		06/19/21 08:05	06/21/21 19:26	1
Fluoranthene	<0.34		0.76	0.34	ug/L		06/19/21 08:05	06/21/21 19:26	1
Fluorene	<0.18		0.76	0.18	ug/L		06/19/21 08:05	06/21/21 19:26	1
Hexachlorobenzene	<0.060		0.38	0.060	ug/L		06/19/21 08:05	06/21/21 19:26	1
Hexachlorobutadiene	<0.39		3.8	0.39	ug/L		06/19/21 08:05	06/21/21 19:26	1
Hexachlorocyclopentadiene	<4.8	^c	15	4.8	ug/L		06/19/21 08:05	06/21/21 19:26	1
Hexachloroethane	<0.45		3.8	0.45	ug/L		06/19/21 08:05	06/21/21 19:26	1
Indeno[1,2,3-cd]pyrene	<0.057		0.15	0.057	ug/L		06/19/21 08:05	06/21/21 19:26	1
Isophorone	<0.28		1.5	0.28	ug/L		06/19/21 08:05	06/21/21 19:26	1
Naphthalene	**0.74**	**J**	0.76	0.23	ug/L		06/19/21 08:05	06/21/21 19:26	1
Nitrobenzene	<0.34		0.76	0.34	ug/L		06/19/21 08:05	06/21/21 19:26	1
N-Nitrosodi-n-propylamine	<0.12		0.38	0.12	ug/L		06/19/21 08:05	06/21/21 19:26	1
N-Nitrosodiphenylamine	<0.28		1.5	0.28	ug/L		06/19/21 08:05	06/21/21 19:26	1
Pentachlorophenol	<3.0	^c	15	3.0	ug/L		06/19/21 08:05	06/21/21 19:26	1
Phenanthrene	**0.34**	**J**	0.76	0.23	ug/L		06/19/21 08:05	06/21/21 19:26	1
Phenol	<0.51		3.8	0.51	ug/L		06/19/21 08:05	06/21/21 19:26	1

Client Sample ID: Leachate

Date Collected: 06/16/21 16:00
Date Received: 06/18/21 09:20

Lab Sample ID: 500-201089-1

Matrix: Leachate

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.32		0.76	0.32	ug/L		06/19/21 08:05	06/21/21 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*40 - 145*	*06/19/21 08:05*	*06/21/21 19:26*	*1*
2-Fluorobiphenyl	*67*		*34 - 110*	*06/19/21 08:05*	*06/21/21 19:26*	*1*
2-Fluorophenol (Surr)	*48*		*27 - 110*	*06/19/21 08:05*	*06/21/21 19:26*	*1*
Nitrobenzene-d5 (Surr)	*72*		*36 - 120*	*06/19/21 08:05*	*06/21/21 19:26*	*1*
Phenol-d5 (Surr)	*40*		*20 - 110*	*06/19/21 08:05*	*06/21/21 19:26*	*1*
Terphenyl-d14 (Surr)	*80*		*40 - 145*	*06/19/21 08:05*	*06/21/21 19:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.10**		0.10	0.037	mg/L		06/21/21 19:00	06/22/21 16:25	1
Cadmium	<0.0043		0.020	0.0043	mg/L		06/21/21 19:00	06/22/21 16:25	1
Chromium	**0.098**	**J**	0.10	0.017	mg/L		06/21/21 19:00	06/22/21 16:25	1
Copper	**0.12**	**B**	0.10	0.018	mg/L		06/21/21 19:00	06/22/21 16:25	1
Iron	**2520**	**B ^**	2.0	0.82	mg/L		06/21/21 19:00	06/22/21 16:25	1
Lead	<0.027		0.050	0.027	mg/L		06/21/21 19:00	06/22/21 16:25	1
Manganese	**3.2**	**B**	0.10	0.023	mg/L		06/21/21 19:00	06/22/21 16:25	1
Molybdenum	<0.038		0.10	0.038	mg/L		06/21/21 19:00	06/22/21 16:25	1
Nickel	**0.048**	**J**	0.10	0.019	mg/L		06/21/21 19:00	06/22/21 16:25	1
Selenium	<0.053		0.10	0.053	mg/L		06/21/21 19:00	06/22/21 16:25	1
Silver	**0.043**	**J**	0.050	0.015	mg/L		06/21/21 19:00	06/22/21 16:25	1
Zinc	**0.35**		0.20	0.050	mg/L		06/25/21 08:23	06/29/21 15:13	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00018**	**J**	0.00020	0.000098	mg/L		06/24/21 08:35	06/25/21 07:02	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0045**	**J B**	0.0050	0.0025	mg/L		06/25/21 10:49	06/25/21 19:01	1
Nitrogen, Kjeldahl	**227**	**B**	80.0	48.8	mg/L		07/06/21 08:11	07/06/21 18:55	2
Alkalinity	**1710**		5.0	3.7	mg/L			06/24/21 22:14	1
Total Suspended Solids	**1750**		125	48.3	mg/L			06/23/21 03:01	1
Chloride	**408**		40.0	19.9	mg/L			06/30/21 18:22	20
Phosphorus as P	**5.3**		1.3	0.60	mg/L		06/30/21 12:00	07/01/21 14:32	5
Biochemical Oxygen Demand	**51.0**	*****	2.0	2.0	mg/L			06/18/21 13:09	1
Chemical Oxygen Demand	**806**		100	60.4	mg/L		06/28/21 11:36	06/28/21 14:34	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Field Color	**Y**				NONE			06/16/21 16:00	1
Field Conductivity	**499**				umhos/cm			06/16/21 16:00	1
Field Odor	**Y**				NONE			06/16/21 16:00	1
Field pH	**7.03**				SU			06/16/21 16:00	1
Field Temperature	**22.1**				Degrees C			06/16/21 16:00	1
Field Turbidity	**Y**				NONE			06/16/21 16:00	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

GC/MS VOA

Analysis Batch: 606874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	8260B	
500-201089-1 - DL	Leachate	Total/NA	Leachate	8260B	
MB 500-606874/6	Method Blank	Total/NA	Water	8260B	
LCS 500-606874/4	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 605069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	3510C	
MB 500-605069/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-605069/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-605069/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 605186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	8270D	605069
MB 500-605069/1-A	Method Blank	Total/NA	Water	8270D	605069
LCS 500-605069/2-A	Lab Control Sample	Total/NA	Water	8270D	605069
LCSD 500-605069/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	605069

Metals

Prep Batch: 605328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	3010A	
MB 500-605328/1-A	Method Blank	Total/NA	Water	3010A	
LCS 500-605328/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 605639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	6010B	605328
MB 500-605328/1-A	Method Blank	Total/NA	Water	6010B	605328
LCS 500-605328/2-A	Lab Control Sample	Total/NA	Water	6010B	605328

Prep Batch: 605947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	7470A	
MB 500-605947/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-605947/13-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 606188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	3010A	
MB 500-606188/1-A	Method Blank	Total/NA	Water	3010A	
LCS 500-606188/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 606231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	7470A	605947
MB 500-605947/12-A	Method Blank	Total/NA	Water	7470A	605947
LCS 500-605947/13-A	Lab Control Sample	Total/NA	Water	7470A	605947

QC Association Summary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Metals

Analysis Batch: 606889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	6010B	606188
MB 500-606188/1-A	Method Blank	Total/NA	Water	6010B	606188
LCS 500-606188/2-A	Lab Control Sample	Total/NA	Water	6010B	606188

General Chemistry

Analysis Batch: 605605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM 2540D	
MB 500-605605/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-605605/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 605921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM 5210B	
USB 500-605921/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 500-605921/2	Lab Control Sample	Total/NA	Water	SM 5210B	
LCS 500-605921/3	Lab Control Sample	Total/NA	Water	SM 5210B	
LCS 500-605921/4	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 606131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM 2320B	
MB 500-606131/54	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-606131/55	Lab Control Sample	Total/NA	Water	SM 2320B	

Prep Batch: 606230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	Distill/CN	
MB 500-606230/1-A	Method Blank	Total/NA	Water	Distill/CN	
HLCS 500-606230/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LCS 500-606230/3-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LLCS 500-606230/4-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 606303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-606230/1-A	Method Blank	Total/NA	Water	335.4	606230
HLCS 500-606230/2-A	Lab Control Sample	Total/NA	Water	335.4	606230
LCS 500-606230/3-A	Lab Control Sample	Total/NA	Water	335.4	606230
LLCS 500-606230/4-A	Lab Control Sample	Total/NA	Water	335.4	606230

Analysis Batch: 606491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	335.4	606230

Prep Batch: 606530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM 5220	
MB 500-606530/1-A	Method Blank	Total/NA	Water	SM 5220	
LCS 500-606530/2-A	Lab Control Sample	Total/NA	Water	SM 5220	

QC Association Summary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

General Chemistry

Analysis Batch: 606554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM 5220C	606530
MB 500-606530/1-A	Method Blank	Total/NA	Water	SM 5220C	606530
LCS 500-606530/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	606530

Prep Batch: 606992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM 4500 P B	
MB 500-606992/1-A	Method Blank	Total/NA	Water	SM 4500 P B	
LCS 500-606992/2-A	Lab Control Sample	Total/NA	Water	SM 4500 P B	

Analysis Batch: 607190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM 4500 Cl- E	
MB 500-607190/31	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-607190/32	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 607293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM 4500 P E	606992
MB 500-606992/1-A	Method Blank	Total/NA	Water	SM 4500 P E	606992
LCS 500-606992/2-A	Lab Control Sample	Total/NA	Water	SM 4500 P E	606992

Prep Batch: 607847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	SM4500Norg_C	
MB 500-607847/1-A	Method Blank	Total/NA	Water	SM4500Norg_C	
LCS 500-607847/2-A	Lab Control Sample	Total/NA	Water	SM4500Norg_C	

Analysis Batch: 608048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	4500 NH3 G	607847
MB 500-607847/1-A	Method Blank	Total/NA	Water	4500 NH3 G	607847
LCS 500-607847/2-A	Lab Control Sample	Total/NA	Water	4500 NH3 G	607847

Field Service / Mobile Lab

Analysis Batch: 607478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201089-1	Leachate	Total/NA	Leachate	Field Sampling	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Leachate — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-201089-1	Leachate	96	95	112	97
500-201089-1 - DL	Leachate	96	99	113	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
LCS 500-606874/4	Lab Control Sample	93	95	107	100
MB 500-606874/6	Method Blank	100	95	112	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Leachate — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(40-145)	(34-110)	(27-110)	(36-120)	(20-110)	(40-145)
500-201089-1	Leachate	94	67	48	72	40	80

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(40-145)	(34-110)	(27-110)	(36-120)	(20-110)	(40-145)
LCS 500-605069/2-A	Lab Control Sample	89	67	49	75	50	93
LCSD 500-605069/3-A	Lab Control Sample Dup	92	69	47	76	53	90
MB 500-605069/1-A	Method Blank	82	71	45	71	37	90

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl

Surrogate Summary

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-606874/6
Matrix: Water
Analysis Batch: 606874

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			06/30/21 11:51	1
Benzene	<0.15		0.50	0.15	ug/L			06/30/21 11:51	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 11:51	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 11:51	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 11:51	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 11:51	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 11:51	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/30/21 11:51	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 11:51	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 11:51	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 11:51	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 11:51	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 11:51	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 11:51	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 11:51	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			06/30/21 11:51	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/30/21 11:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 11:51	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/30/21 11:51	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 11:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/30/21 11:51	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 11:51	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 11:51	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 11:51	1
Methyl bromide	<0.80		3.0	0.80	ug/L			06/30/21 11:51	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 11:51	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 11:51	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/30/21 11:51	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 11:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/30/21 11:51	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 11:51	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 11:51	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 11:51	1
Styrene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 11:51	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 11:51	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 11:51	1

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

Lab Sample ID: MB 500-606874/6
Matrix: Water
Analysis Batch: 606874

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			06/30/21 11:51	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			06/30/21 11:51	1
Toluene	<0.15		0.50	0.15	ug/L			06/30/21 11:51	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 11:51	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 11:51	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 11:51	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 11:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 11:51	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			06/30/21 11:51	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/30/21 11:51	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 11:51	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/30/21 11:51	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 11:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/30/21 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*06/30/21 11:51*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*06/30/21 11:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*		*06/30/21 11:51*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*06/30/21 11:51*	*1*

Lab Sample ID: LCS 500-606874/4
Matrix: Water
Analysis Batch: 606874

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	48.2		ug/L		96	40 - 143
Benzene	50.0	47.9		ug/L		96	70 - 120
Bromobenzene	50.0	38.2		ug/L		76	70 - 122
Bromochloromethane	50.0	43.9		ug/L		88	65 - 122
Bromodichloromethane	50.0	41.8		ug/L		84	69 - 120
Bromoform	50.0	29.5		ug/L		59	56 - 132
Carbon disulfide	50.0	50.2		ug/L		100	66 - 120
Carbon tetrachloride	50.0	52.4		ug/L		105	59 - 133
Chlorobenzene	50.0	46.6		ug/L		93	70 - 120
Chloroethane	50.0	66.2		ug/L		132	48 - 136
Chloroform	50.0	48.9		ug/L		98	70 - 120
2-Chlorotoluene	50.0	47.9		ug/L		96	70 - 125
4-Chlorotoluene	50.0	48.0		ug/L		96	68 - 124
cis-1,2-Dichloroethylene	50.0	46.4		ug/L		93	70 - 125
cis-1,3-Dichloropropene	50.0	41.0		ug/L		82	64 - 127
Dibromochloromethane	50.0	34.2		ug/L		68	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	31.9		ug/L		64	56 - 123
1,2-Dibromoethane	50.0	38.2		ug/L		76	70 - 125
Dichlorodifluoromethane	50.0	67.3		ug/L		135	40 - 159
1,1-Dichloroethane	50.0	50.8		ug/L		102	70 - 125

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

Lab Sample ID: LCS 500-606874/4
Matrix: Water
Analysis Batch: 606874

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	51.0		ug/L		102	68 - 127
1,1-Dichloroethylene	50.0	52.2		ug/L		104	67 - 122
1,2-Dichloropropane	50.0	48.6		ug/L		97	67 - 130
1,3-Dichloropropane	50.0	42.6		ug/L		85	62 - 136
2,2-Dichloropropane	50.0	50.5		ug/L		101	58 - 139
1,1-Dichloropropene	50.0	52.8		ug/L		106	70 - 121
Ethylbenzene	50.0	50.0		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	60.6		ug/L		121	51 - 150
Isopropylbenzene	50.0	48.5		ug/L		97	70 - 126
1,3-Dichlorobenzene	50.0	44.6		ug/L		89	70 - 125
Methyl bromide	50.0	59.4		ug/L		119	40 - 152
Methyl chloride	50.0	61.3		ug/L		123	56 - 152
Methylene bromide	50.0	44.3		ug/L		89	70 - 120
Methylene Chloride	50.0	46.0		ug/L		92	69 - 125
Methyl ethyl ketone (MEK)	50.0	44.2		ug/L		88	46 - 144
Methyl tert-butyl ether	50.0	54.7		ug/L		109	55 - 123
Naphthalene	50.0	41.3		ug/L		83	53 - 144
n-Butylbenzene	50.0	58.6		ug/L		117	68 - 125
N-Propylbenzene	50.0	50.3		ug/L		101	69 - 127
1,2-Dichlorobenzene	50.0	42.8		ug/L		86	70 - 125
1,4-Dichlorobenzene	50.0	44.0		ug/L		88	70 - 120
p-Isopropyltoluene	50.0	55.2		ug/L		110	70 - 125
sec-Butylbenzene	50.0	53.3		ug/L		107	70 - 123
Styrene	50.0	46.1		ug/L		92	70 - 120
tert-Butylbenzene	50.0	51.5		ug/L		103	70 - 121
1,1,1,2-Tetrachloroethane	50.0	45.6		ug/L		91	70 - 125
1,1,2,2-Tetrachloroethane	50.0	34.8		ug/L		70	62 - 140
Tetrachloroethylene	50.0	47.0		ug/L		94	70 - 128
Tetrahydrofuran	100	101		ug/L		101	59 - 139
Toluene	50.0	47.6		ug/L		95	70 - 125
1,2-trans-Dichloroethylene	50.0	49.7		ug/L		99	70 - 125
trans-1,3-Dichloropropene	50.0	39.1		ug/L		78	62 - 128
1,2,3-Trichlorobenzene	50.0	48.6		ug/L		97	51 - 145
1,2,4-Trichlorobenzene	50.0	47.8		ug/L		96	57 - 137
1,1,1-Trichloroethane	50.0	54.9		ug/L		110	70 - 125
1,1,2-Trichloroethane	50.0	39.6		ug/L		79	71 - 130
Trichloroethylene	50.0	46.0		ug/L		92	70 - 125
Trichlorofluoromethane	50.0	52.7		ug/L		105	55 - 128
1,2,3-Trichloropropane	50.0	36.8		ug/L		74	50 - 133
1,2,4-Trimethylbenzene	50.0	49.2		ug/L		98	70 - 123
1,3,5-Trimethylbenzene	50.0	50.1		ug/L		100	70 - 123
Vinyl chloride	50.0	54.6		ug/L		109	64 - 126
Xylenes, Total	100	108		ug/L		108	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*72 - 124*
Dibromofluoromethane	*95*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 126*

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

Lab Sample ID: LCS 500-606874/4
Matrix: Water
Analysis Batch: 606874

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		75 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-605069/1-A
Matrix: Water
Analysis Batch: 605186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 605069

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		1.6	0.19	ug/L		06/19/21 08:05	06/21/21 12:00	1
1,2-Dichlorobenzene	<0.20		1.6	0.20	ug/L		06/19/21 08:05	06/21/21 12:00	1
1,3-Dichlorobenzene	<0.17		1.6	0.17	ug/L		06/19/21 08:05	06/21/21 12:00	1
1,4-Dichlorobenzene	<0.17		1.6	0.17	ug/L		06/19/21 08:05	06/21/21 12:00	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		06/19/21 08:05	06/21/21 12:00	1
2,2'-oxybis[1-chloropropane]	<0.30		1.6	0.30	ug/L		06/19/21 08:05	06/21/21 12:00	1
2,4,5-Trichlorophenol	<2.1		8.0	2.1	ug/L		06/19/21 08:05	06/21/21 12:00	1
2,4,6-Trichlorophenol	<0.57		4.0	0.57	ug/L		06/19/21 08:05	06/21/21 12:00	1
2,4-Dichlorophenol	<2.1		8.0	2.1	ug/L		06/19/21 08:05	06/21/21 12:00	1
2,4-Dimethylphenol	<1.4		8.0	1.4	ug/L		06/19/21 08:05	06/21/21 12:00	1
2,4-Dinitrophenol	<6.9		16	6.9	ug/L		06/19/21 08:05	06/21/21 12:00	1
2,4-Dinitrotoluene	<0.20		0.80	0.20	ug/L		06/19/21 08:05	06/21/21 12:00	1
2,6-Dinitrotoluene	<0.059		0.80	0.059	ug/L		06/19/21 08:05	06/21/21 12:00	1
2-Chloronaphthalene	<0.19		1.6	0.19	ug/L		06/19/21 08:05	06/21/21 12:00	1
2-Chlorophenol	<0.45		4.0	0.45	ug/L		06/19/21 08:05	06/21/21 12:00	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		06/19/21 08:05	06/21/21 12:00	1
2-Methylphenol	<0.24		1.6	0.24	ug/L		06/19/21 08:05	06/21/21 12:00	1
2-Nitroaniline	<1.0		4.0	1.0	ug/L		06/19/21 08:05	06/21/21 12:00	1
2-Nitrophenol	<2.0		8.0	2.0	ug/L		06/19/21 08:05	06/21/21 12:00	1
3 & 4 Methylphenol	<0.36		1.6	0.36	ug/L		06/19/21 08:05	06/21/21 12:00	1
3,3'-Dichlorobenzidine	<1.4		4.0	1.4	ug/L		06/19/21 08:05	06/21/21 12:00	1
3-Nitroaniline	<1.4		8.0	1.4	ug/L		06/19/21 08:05	06/21/21 12:00	1
4,6-Dinitro-2-methylphenol	<4.7		16	4.7	ug/L		06/19/21 08:05	06/21/21 12:00	1
4-Bromophenyl phenyl ether	<0.43		4.0	0.43	ug/L		06/19/21 08:05	06/21/21 12:00	1
4-Chloro-3-methylphenol	<1.8		8.0	1.8	ug/L		06/19/21 08:05	06/21/21 12:00	1
4-Chloroaniline	<1.6		8.0	1.6	ug/L		06/19/21 08:05	06/21/21 12:00	1
4-Chlorophenyl phenyl ether	<0.51		4.0	0.51	ug/L		06/19/21 08:05	06/21/21 12:00	1
4-Nitroaniline	<1.3		8.0	1.3	ug/L		06/19/21 08:05	06/21/21 12:00	1
4-Nitrophenol	<5.9		16	5.9	ug/L		06/19/21 08:05	06/21/21 12:00	1
Acenaphthene	<0.25		0.80	0.25	ug/L		06/19/21 08:05	06/21/21 12:00	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		06/19/21 08:05	06/21/21 12:00	1
Anthracene	<0.27		0.80	0.27	ug/L		06/19/21 08:05	06/21/21 12:00	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		06/19/21 08:05	06/21/21 12:00	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		06/19/21 08:05	06/21/21 12:00	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		06/19/21 08:05	06/21/21 12:00	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		06/19/21 08:05	06/21/21 12:00	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		06/19/21 08:05	06/21/21 12:00	1
Benzoic acid	<4.6		16	4.6	ug/L		06/19/21 08:05	06/21/21 12:00	1
Benzyl alcohol	<4.8		16	4.8	ug/L		06/19/21 08:05	06/21/21 12:00	1
Bis(2-chloroethoxy)methane	<0.23		1.6	0.23	ug/L		06/19/21 08:05	06/21/21 12:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-605069/1-A
Matrix: Water
Analysis Batch: 605186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 605069

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	<0.23		1.6	0.23	ug/L		06/19/21 08:05	06/21/21 12:00	1
Bis(2-ethylhexyl) phthalate	<1.4		8.0	1.4	ug/L		06/19/21 08:05	06/21/21 12:00	1
Butyl benzyl phthalate	<0.38		1.6	0.38	ug/L		06/19/21 08:05	06/21/21 12:00	1
Carbazole	<0.28		4.0	0.28	ug/L		06/19/21 08:05	06/21/21 12:00	1
Chrysene	<0.055		0.16	0.055	ug/L		06/19/21 08:05	06/21/21 12:00	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		06/19/21 08:05	06/21/21 12:00	1
Dibenzofuran	<0.21		1.6	0.21	ug/L		06/19/21 08:05	06/21/21 12:00	1
Diethyl phthalate	<0.29		4.0	0.29	ug/L		06/19/21 08:05	06/21/21 12:00	1
Dimethyl phthalate	<0.25		4.0	0.25	ug/L		06/19/21 08:05	06/21/21 12:00	1
Di-n-butyl phthalate	0.605	J	4.0	0.58	ug/L		06/19/21 08:05	06/21/21 12:00	1
Di-n-octyl phthalate	<0.84		8.0	0.84	ug/L		06/19/21 08:05	06/21/21 12:00	1
Fluoranthene	<0.36		0.80	0.36	ug/L		06/19/21 08:05	06/21/21 12:00	1
Fluorene	<0.20		0.80	0.20	ug/L		06/19/21 08:05	06/21/21 12:00	1
Hexachlorobenzene	<0.064		0.40	0.064	ug/L		06/19/21 08:05	06/21/21 12:00	1
Hexachlorobutadiene	<0.41		4.0	0.41	ug/L		06/19/21 08:05	06/21/21 12:00	1
Hexachlorocyclopentadiene	<5.1		16	5.1	ug/L		06/19/21 08:05	06/21/21 12:00	1
Hexachloroethane	<0.48		4.0	0.48	ug/L		06/19/21 08:05	06/21/21 12:00	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		06/19/21 08:05	06/21/21 12:00	1
Isophorone	<0.30		1.6	0.30	ug/L		06/19/21 08:05	06/21/21 12:00	1
Naphthalene	<0.25		0.80	0.25	ug/L		06/19/21 08:05	06/21/21 12:00	1
Nitrobenzene	<0.36		0.80	0.36	ug/L		06/19/21 08:05	06/21/21 12:00	1
N-Nitrosodi-n-propylamine	<0.12		0.40	0.12	ug/L		06/19/21 08:05	06/21/21 12:00	1
N-Nitrosodiphenylamine	<0.30		1.6	0.30	ug/L		06/19/21 08:05	06/21/21 12:00	1
Pentachlorophenol	<3.2		16	3.2	ug/L		06/19/21 08:05	06/21/21 12:00	1
Phenanthrene	<0.24		0.80	0.24	ug/L		06/19/21 08:05	06/21/21 12:00	1
Phenol	<0.54		4.0	0.54	ug/L		06/19/21 08:05	06/21/21 12:00	1
Pyrene	<0.34		0.80	0.34	ug/L		06/19/21 08:05	06/21/21 12:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*40 - 145*	*06/19/21 08:05*	*06/21/21 12:00*	*1*
2-Fluorobiphenyl	*71*		*34 - 110*	*06/19/21 08:05*	*06/21/21 12:00*	*1*
2-Fluorophenol (Surr)	*45*		*27 - 110*	*06/19/21 08:05*	*06/21/21 12:00*	*1*
Nitrobenzene-d5 (Surr)	*71*		*36 - 120*	*06/19/21 08:05*	*06/21/21 12:00*	*1*
Phenol-d5 (Surr)	*37*		*20 - 110*	*06/19/21 08:05*	*06/21/21 12:00*	*1*
Terphenyl-d14 (Surr)	*90*		*40 - 145*	*06/19/21 08:05*	*06/21/21 12:00*	*1*

Lab Sample ID: LCS 500-605069/2-A
Matrix: Water
Analysis Batch: 605186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 605069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	32.0	15.6		ug/L		49	26 - 110
1,2-Dichlorobenzene	32.0	14.9		ug/L		46	26 - 110
1,3-Dichlorobenzene	32.0	14.4		ug/L		45	22 - 110
1,4-Dichlorobenzene	32.0	15.0		ug/L		47	23 - 110
1-Methylnaphthalene	32.0	19.5		ug/L		61	38 - 110
2,2'-oxybis[1-chloropropane]	32.0	21.6		ug/L		67	38 - 140
2,4,5-Trichlorophenol	32.0	25.7		ug/L		80	63 - 124

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-605069/2-A
Matrix: Water
Analysis Batch: 605186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 605069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,6-Trichlorophenol	32.0	25.0		ug/L		78	62 - 121
2,4-Dichlorophenol	32.0	23.9		ug/L		75	58 - 120
2,4-Dimethylphenol	32.0	24.0		ug/L		75	51 - 115
2,4-Dinitrophenol	64.0	55.0		ug/L		86	37 - 130
2,4-Dinitrotoluene	32.0	29.7		ug/L		93	63 - 129
2,6-Dinitrotoluene	32.0	27.1		ug/L		85	63 - 129
2-Chloronaphthalene	32.0	19.8		ug/L		62	39 - 110
2-Chlorophenol	32.0	21.4		ug/L		67	59 - 110
2-Methylnaphthalene	32.0	18.9		ug/L		59	34 - 110
2-Methylphenol	32.0	20.9		ug/L		65	53 - 115
2-Nitroaniline	32.0	28.9		ug/L		90	59 - 138
2-Nitrophenol	32.0	23.5		ug/L		73	59 - 115
3 & 4 Methylphenol	32.0	20.2		ug/L		63	50 - 116
3,3'-Dichlorobenzidine	32.0	38.4		ug/L		120	60 - 132
3-Nitroaniline	32.0	24.4		ug/L		76	47 - 123
4,6-Dinitro-2-methylphenol	64.0	54.7		ug/L		86	50 - 129
4-Bromophenyl phenyl ether	32.0	22.5		ug/L		70	58 - 120
4-Chloro-3-methylphenol	32.0	27.5		ug/L		86	64 - 128
4-Chloroaniline	32.0	24.4		ug/L		76	35 - 128
4-Chlorophenyl phenyl ether	32.0	22.0		ug/L		69	48 - 116
4-Nitroaniline	32.0	32.3		ug/L		101	35 - 110
4-Nitrophenol	64.0	30.1		ug/L		47	20 - 110
Acenaphthene	32.0	22.9		ug/L		72	46 - 110
Acenaphthylene	32.0	23.3		ug/L		73	47 - 113
Anthracene	32.0	26.3		ug/L		82	67 - 118
Benzo[a]anthracene	32.0	29.8		ug/L		93	70 - 126
Benzo[a]pyrene	32.0	36.4		ug/L		114	70 - 135
Benzo[b]fluoranthene	32.0	32.8		ug/L		103	69 - 136
Benzo[g,h,i]perylene	32.0	31.8		ug/L		99	70 - 135
Benzo[k]fluoranthene	32.0	29.3		ug/L		92	70 - 133
Benzoic acid	64.0	28.7		ug/L		45	10 - 112
Benzyl alcohol	32.0	19.7		ug/L		62	46 - 132
Bis(2-chloroethoxy)methane	32.0	25.9		ug/L		81	59 - 118
Bis(2-chloroethyl)ether	32.0	21.3		ug/L		67	54 - 112
Bis(2-ethylhexyl) phthalate	32.0	33.5		ug/L		105	69 - 136
Butyl benzyl phthalate	32.0	31.3		ug/L		98	68 - 135
Carbazole	32.0	43.6		ug/L		136	61 - 145
Chrysene	32.0	29.3		ug/L		92	68 - 129
Dibenz(a,h)anthracene	32.0	33.2		ug/L		104	70 - 134
Dibenzofuran	32.0	22.3		ug/L		70	51 - 110
Diethyl phthalate	32.0	29.1		ug/L		91	62 - 123
Dimethyl phthalate	32.0	26.6		ug/L		83	63 - 122
Di-n-butyl phthalate	32.0	29.9		ug/L		93	69 - 129
Di-n-octyl phthalate	32.0	36.0		ug/L		113	68 - 137
Fluoranthene	32.0	29.4		ug/L		92	68 - 126
Fluorene	32.0	23.6		ug/L		74	53 - 120
Hexachlorobenzene	32.0	24.1		ug/L		75	61 - 126
Hexachlorobutadiene	32.0	14.3		ug/L		45	20 - 100
Hexachlorocyclopentadiene	32.0	<5.1		ug/L		15	10 - 105

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-605069/2-A
Matrix: Water
Analysis Batch: 605186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 605069

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hexachloroethane			32.0	13.3		ug/L		42	20 - 100		
Indeno[1,2,3-cd]pyrene			32.0	32.8		ug/L		103	65 - 133		
Isophorone			32.0	24.9		ug/L		78	54 - 127		
Naphthalene			32.0	18.0		ug/L		56	36 - 110		
Nitrobenzene			32.0	23.1		ug/L		72	54 - 121		
N-Nitrosodi-n-propylamine			32.0	22.6		ug/L		71	47 - 131		
N-Nitrosodiphenylamine			32.0	29.8		ug/L		93	66 - 120		
Pentachlorophenol			64.0	40.6		ug/L		63	42 - 148		
Phenanthrene			32.0	25.7		ug/L		80	65 - 120		
Phenol			32.0	15.0		ug/L		47	33 - 100		
Pyrene			32.0	28.0		ug/L		88	70 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*40 - 145*
2-Fluorobiphenyl	*67*		*34 - 110*
2-Fluorophenol (Surr)	*49*		*27 - 110*
Nitrobenzene-d5 (Surr)	*75*		*36 - 120*
Phenol-d5 (Surr)	*50*		*20 - 110*
Terphenyl-d14 (Surr)	*93*		*40 - 145*

Lab Sample ID: LCSD 500-605069/3-A
Matrix: Water
Analysis Batch: 605186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 605069

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene			32.0	16.2		ug/L		51	26 - 110	4	20
1,2-Dichlorobenzene			32.0	15.3		ug/L		48	26 - 110	3	20
1,3-Dichlorobenzene			32.0	14.8		ug/L		46	22 - 110	3	20
1,4-Dichlorobenzene			32.0	15.4		ug/L		48	23 - 110	3	20
1-Methylnaphthalene			32.0	20.2		ug/L		63	38 - 110	4	20
2,2'-oxybis[1-chloropropane]			32.0	23.2		ug/L		72	38 - 140	7	20
2,4,5-Trichlorophenol			32.0	26.7		ug/L		83	63 - 124	4	20
2,4,6-Trichlorophenol			32.0	26.8		ug/L		84	62 - 121	7	20
2,4-Dichlorophenol			32.0	25.9		ug/L		81	58 - 120	8	20
2,4-Dimethylphenol			32.0	26.5		ug/L		83	51 - 115	10	20
2,4-Dinitrophenol			64.0	59.2		ug/L		92	37 - 130	7	20
2,4-Dinitrotoluene			32.0	30.4		ug/L		95	63 - 129	2	20
2,6-Dinitrotoluene			32.0	27.9		ug/L		87	63 - 129	3	20
2-Chloronaphthalene			32.0	21.0		ug/L		66	39 - 110	6	20
2-Chlorophenol			32.0	23.7		ug/L		74	59 - 110	10	20
2-Methylnaphthalene			32.0	19.7		ug/L		62	34 - 110	4	20
2-Methylphenol			32.0	23.2		ug/L		73	53 - 115	11	20
2-Nitroaniline			32.0	31.3		ug/L		98	59 - 138	8	20
2-Nitrophenol			32.0	25.1		ug/L		78	59 - 115	7	20
3 & 4 Methylphenol			32.0	22.7		ug/L		71	50 - 116	12	20
3,3'-Dichlorobenzidine			32.0	40.2		ug/L		125	60 - 132	4	20
3-Nitroaniline			32.0	25.9		ug/L		81	47 - 123	6	20
4,6-Dinitro-2-methylphenol			64.0	56.6		ug/L		88	50 - 129	3	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-605069/3-A
Matrix: Water
Analysis Batch: 605186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 605069

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Bromophenyl phenyl ether	32.0	23.3		ug/L		73	58 - 120	3	20
4-Chloro-3-methylphenol	32.0	30.4		ug/L		95	64 - 128	10	20
4-Chloroaniline	32.0	25.8		ug/L		80	35 - 128	5	20
4-Chlorophenyl phenyl ether	32.0	22.6		ug/L		70	48 - 116	3	20
4-Nitroaniline	32.0	32.9		ug/L		103	35 - 110	2	20
4-Nitrophenol	64.0	37.3	*	ug/L		58	20 - 110	21	20
Acenaphthene	32.0	24.0		ug/L		75	46 - 110	5	20
Acenaphthylene	32.0	24.7		ug/L		77	47 - 113	6	20
Anthracene	32.0	26.3		ug/L		82	67 - 118	0	20
Benzo[a]anthracene	32.0	29.1		ug/L		91	70 - 126	2	20
Benzo[a]pyrene	32.0	35.7		ug/L		111	70 - 135	2	20
Benzo[b]fluoranthene	32.0	33.2		ug/L		104	69 - 136	1	20
Benzo[g,h,i]perylene	32.0	31.3		ug/L		98	70 - 135	1	20
Benzo[k]fluoranthene	32.0	30.5		ug/L		95	70 - 133	4	20
Benzoic acid	64.0	30.0		ug/L		47	10 - 112	4	20
Benzyl alcohol	32.0	22.5		ug/L		70	46 - 132	13	20
Bis(2-chloroethoxy)methane	32.0	27.7		ug/L		87	59 - 118	7	20
Bis(2-chloroethyl)ether	32.0	23.6		ug/L		74	54 - 112	10	20
Bis(2-ethylhexyl) phthalate	32.0	32.6		ug/L		102	69 - 136	3	20
Butyl benzyl phthalate	32.0	31.4		ug/L		98	68 - 135	0	20
Carbazole	32.0	43.4		ug/L		136	61 - 145	1	20
Chrysene	32.0	29.4		ug/L		92	68 - 129	0	20
Dibenz(a,h)anthracene	32.0	32.3		ug/L		101	70 - 134	3	20
Dibenzofuran	32.0	23.2		ug/L		72	51 - 110	4	20
Diethyl phthalate	32.0	29.7		ug/L		93	62 - 123	2	20
Dimethyl phthalate	32.0	28.0		ug/L		88	63 - 122	5	20
Di-n-butyl phthalate	32.0	29.8		ug/L		93	69 - 129	0	20
Di-n-octyl phthalate	32.0	36.0		ug/L		112	68 - 137	0	20
Fluoranthene	32.0	29.4		ug/L		92	68 - 126	0	20
Fluorene	32.0	24.4		ug/L		76	53 - 120	4	20
Hexachlorobenzene	32.0	23.8		ug/L		74	61 - 126	1	20
Hexachlorobutadiene	32.0	14.8		ug/L		46	20 - 100	3	20
Hexachlorocyclopentadiene	32.0	5.52	J	ug/L		17	10 - 105	11	20
Hexachloroethane	32.0	14.5		ug/L		45	20 - 100	8	20
Indeno[1,2,3-cd]pyrene	32.0	31.6		ug/L		99	65 - 133	4	20
Isophorone	32.0	27.0		ug/L		84	54 - 127	8	20
Naphthalene	32.0	18.9		ug/L		59	36 - 110	5	20
Nitrobenzene	32.0	25.2		ug/L		79	54 - 121	9	20
N-Nitrosodi-n-propylamine	32.0	24.4		ug/L		76	47 - 131	8	20
N-Nitrosodiphenylamine	32.0	29.8		ug/L		93	66 - 120	0	20
Pentachlorophenol	64.0	37.0		ug/L		58	42 - 148	9	20
Phenanthrene	32.0	26.0		ug/L		81	65 - 120	1	20
Phenol	32.0	16.8		ug/L		52	33 - 100	11	20
Pyrene	32.0	27.8		ug/L		87	70 - 126	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*40 - 145*
2-Fluorobiphenyl	*69*		*34 - 110*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-605069/3-A
Matrix: Water
Analysis Batch: 605186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 605069

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*47*		*27 - 110*
Nitrobenzene-d5 (Surr)	*76*		*36 - 120*
Phenol-d5 (Surr)	*53*		*20 - 110*
Terphenyl-d14 (Surr)	*90*		*40 - 145*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-605328/1-A
Matrix: Water
Analysis Batch: 605639

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 605328

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0037		0.010	0.0037	mg/L		06/21/21 19:00	06/22/21 15:42	1
Cadmium	0.000528	J	0.0020	0.00043	mg/L		06/21/21 19:00	06/22/21 15:42	1
Chromium	<0.0017		0.010	0.0017	mg/L		06/21/21 19:00	06/22/21 15:42	1
Copper	0.00415	J	0.010	0.0018	mg/L		06/21/21 19:00	06/22/21 15:42	1
Iron	0.468	^	0.20	0.082	mg/L		06/21/21 19:00	06/22/21 15:42	1
Lead	<0.0027		0.0050	0.0027	mg/L		06/21/21 19:00	06/22/21 15:42	1
Manganese	0.00612	J	0.010	0.0023	mg/L		06/21/21 19:00	06/22/21 15:42	1
Molybdenum	<0.0038		0.010	0.0038	mg/L		06/21/21 19:00	06/22/21 15:42	1
Nickel	<0.0019		0.010	0.0019	mg/L		06/21/21 19:00	06/22/21 15:42	1
Selenium	<0.0053		0.010	0.0053	mg/L		06/21/21 19:00	06/22/21 15:42	1
Silver	<0.0015		0.0050	0.0015	mg/L		06/21/21 19:00	06/22/21 15:42	1

Lab Sample ID: LCS 500-605328/2-A
Matrix: Water
Analysis Batch: 605639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 605328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.101		mg/L		101	80 - 120
Cadmium	0.0500	0.0481		mg/L		96	80 - 120
Chromium	0.200	0.197		mg/L		99	80 - 120
Copper	0.250	0.263		mg/L		105	80 - 120
Iron	1.00	0.973	^	mg/L		97	80 - 120
Lead	0.100	0.0952		mg/L		95	80 - 120
Manganese	0.500	0.491		mg/L		98	80 - 120
Molybdenum	1.00	1.04		mg/L		104	80 - 120
Nickel	0.500	0.511		mg/L		102	80 - 120
Selenium	0.100	0.0902		mg/L		90	80 - 120
Silver	0.0500	0.0484		mg/L		97	80 - 120

Lab Sample ID: MB 500-606188/1-A
Matrix: Water
Analysis Batch: 606889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 606188

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<0.0050		0.020	0.0050	mg/L		06/25/21 08:23	06/29/21 14:41	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-606188/2-A
Matrix: Water
Analysis Batch: 606889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 606188

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.500	0.462		mg/L		92	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-605947/12-A
Matrix: Water
Analysis Batch: 606231

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 605947

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		06/24/21 08:35	06/25/21 06:02	1

Lab Sample ID: LCS 500-605947/13-A
Matrix: Water
Analysis Batch: 606231

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 605947

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00189		mg/L		94	80 - 120

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 500-606230/1-A
Matrix: Water
Analysis Batch: 606303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 606230

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00320	J	0.0050	0.0025	mg/L		06/25/21 10:49	06/25/21 15:40	1

Lab Sample ID: HLCS 500-606230/2-A
Matrix: Water
Analysis Batch: 606303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 606230

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.500	0.452		mg/L		90	90 - 110

Lab Sample ID: LCS 500-606230/3-A
Matrix: Water
Analysis Batch: 606303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 606230

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0919		mg/L		92	85 - 115

Lab Sample ID: LLCS 500-606230/4-A
Matrix: Water
Analysis Batch: 606303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 606230

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0463		mg/L		93	75 - 125

Method: 4500 NH3 G - 4500NH3 G - Nitrogen, Total Kjeldahl'

Lab Sample ID: MB 500-607847/1-A
Matrix: Water
Analysis Batch: 608048

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 607847

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	0.347	J	0.40	0.24	mg/L		07/06/21 08:11	07/06/21 18:44	1

Lab Sample ID: LCS 500-607847/2-A
Matrix: Water
Analysis Batch: 608048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 607847

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	2.00	2.01		mg/L		101	80 - 120

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-606131/54
Matrix: Water
Analysis Batch: 606131

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			06/24/21 21:35	1

Lab Sample ID: LCS 500-606131/55
Matrix: Water
Analysis Batch: 606131

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	98.88		mg/L		99	90 - 110

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

Lab Sample ID: MB 500-605605/1
Matrix: Water
Analysis Batch: 605605

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.8		12.5	4.8	mg/L			06/23/21 01:49	1

Lab Sample ID: LCS 500-605605/2
Matrix: Water
Analysis Batch: 605605

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	200	205.5		mg/L		103	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-607190/31
Matrix: Water
Analysis Batch: 607190

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		2.0	1.0	mg/L			06/30/21 17:42	1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 500-607190/32
Matrix: Water
Analysis Batch: 607190

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			20.0	20.61		mg/L		103	85 - 115		

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 500-606992/1-A
Matrix: Water
Analysis Batch: 607293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 606992

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	<0.024		0.050	0.024	mg/L		06/30/21 12:00	07/01/21 13:29	1

Lab Sample ID: LCS 500-606992/2-A
Matrix: Water
Analysis Batch: 607293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 606992

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Phosphorus as P			0.502	0.511		mg/L		102	80 - 120		

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 500-605921/1
Matrix: Water
Analysis Batch: 605921

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

Analyte	USB Result	USB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.0		2.0	2.0	mg/L			06/18/21 11:00	1

Lab Sample ID: LCS 500-605921/2
Matrix: Water
Analysis Batch: 605921

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	246.7	*	mg/L		125	84.6 - 115.4		

Lab Sample ID: LCS 500-605921/3
Matrix: Water
Analysis Batch: 605921

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	236.2	*	mg/L		119	84.6 - 115.4		

Lab Sample ID: LCS 500-605921/4
Matrix: Water
Analysis Batch: 605921

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	182.2		mg/L		92	84.6 - 115.4		

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Method: SM 5220C - COD

Lab Sample ID: MB 500-606530/1-A
Matrix: Water
Analysis Batch: 606554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 606530

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<60.4		100	60.4	mg/L		06/28/21 11:36	06/28/21 14:25	10

Lab Sample ID: LCS 500-606530/2-A
Matrix: Water
Analysis Batch: 606554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 606530

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	500	500.0		mg/L		100	85 - 115

Lab Chronicle

Client: Cedar Corporation
Project/Site: Junker LF - Leachate

Job ID: 500-201089-1

Client Sample ID: Leachate

Date Collected: 06/16/21 16:00
Date Received: 06/18/21 09:20

Lab Sample ID: 500-201089-1

Matrix: Leachate

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	606874	06/30/21 15:34	JMP	TAL CHI
Total/NA	Analysis	8260B	DL	10	606874	06/30/21 18:51	JMP	TAL CHI
Total/NA	Prep	3510C			605069	06/19/21 08:05	CLL	TAL CHI
Total/NA	Analysis	8270D		1	605186	06/21/21 19:26	AJD	TAL CHI
Total/NA	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Total/NA	Analysis	6010B		1	606889	06/29/21 15:13	EEN	TAL CHI
Total/NA	Prep	3010A			605328	06/21/21 19:00	LMN	TAL CHI
Total/NA	Analysis	6010B		1	605639	06/22/21 16:25	EEN	TAL CHI
Total/NA	Prep	7470A			605947	06/24/21 08:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	606231	06/25/21 07:02	MJG	TAL CHI
Total/NA	Prep	Distill/CN			606230	06/25/21 10:49	PSP	TAL CHI
Total/NA	Analysis	335.4		1	606491	06/25/21 19:01	PSP	TAL CHI
Total/NA	Prep	SM4500Norg_C			607847	07/06/21 08:11	ACG1	TAL CHI
Total/NA	Analysis	4500 NH3 G		2	608048	07/06/21 18:55	ACG1	TAL CHI
Total/NA	Analysis	SM 2320B		1	606131	06/24/21 22:14	EAT	TAL CHI
Total/NA	Analysis	SM 2540D		1	605605		CLB	TAL CHI
					(Start)	06/23/21 03:01		
					(End)	06/23/21 03:04		
Total/NA	Analysis	SM 4500 Cl- E		20	607190	06/30/21 18:22	MS	TAL CHI
Total/NA	Prep	SM 4500 P B			606992	06/30/21 12:00	MS	TAL CHI
Total/NA	Analysis	SM 4500 P E		5	607293	07/01/21 14:32	MS	TAL CHI
Total/NA	Analysis	SM 5210B		1	605921	06/18/21 13:09	JGM	TAL CHI
Total/NA	Prep	SM 5220			606530	06/28/21 11:36	JGM	TAL CHI
Total/NA	Analysis	SM 5220C		10	606554	06/28/21 14:34	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607478	06/16/21 16:00	JVB	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Job ID: 500-201089-1
Project/Site: Junker LF - Leachate

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Chain of Custody Record 494060

eurofins Environment Testing TestAmerica

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager Kirsten Lee	Site Contact	Date 6/16/21	COC No
Company Name Cedar Corp	Tel/Email	Lab Contact Sample RF	Carrier	1 of 1 COCs
Address	Analysis Turnaround Time			Sampler KAL
City/State/Zip	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only
Phone 715-235-9081	TAT if different from Below _____			Walk-in Client
Fax	☐ 2 weeks			Lab Sampling
Project Name Junker LF	☐ 1 week			
Site	☐ 2 days			Job / SDG No 500-201089
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	See attached	pH	Temp °C	Cond uS	DUR #	500-201089 COC	T/C/O Sample Specific Notes
1 Leachate	6/15/21	1600	G	L	9			X	7.03	28.1	4410	401		V/Bm/Y

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments

EDDs, BOD short hold time 2.9

Custody Seals Intact. ☒ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd _____ Corr'd _____ | Therm ID No _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Kirsten Lee	Cedar Corp	6/16/21 0700			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
			Stephanie Hernandez	ETA-CHI	6/18/21 0920

500-201089

TASK 6
ANNUAL MONITORING/SAMPLING REQUIREMENTS
(June)

Cedar Corporation
Junker Landfill Gas Extraction System

Task Description	Comments

Task 1 -- Weekly Monitoring/Sampling Requirements
Task 2 -- Bi-Weekly Monitoring/Sampling Requirements
Task 3 -- Monthly Monitoring/Sampling Requirements
Task 4 -- Quarterly Monitoring/Sampling Requirements
Task 5 – Semi-Annual Monitoring/Sampling Requirements, plus the following:

FENCED AREA AT FLARE BUILDING

Sample blower for following analyses:	Sample port after valve following blower with Summa canister Sample annually
VOC scan (EPA Method TO-14 or 15)	
Sample condensate/leachate from storage tank and test for the following.	Sample obtained from access port w/ disposable bailer
Field Conductivity at 25° C	Electronic submittal of data to Madison
Field pH	
Total Suspended Solids (TSS)*	Method SM25440D
$BOD_{5\ Day}$ (2-day hold)*	Method SM5210B
COD	Method 410 4
Fe, Mn, Cu, Ni, Zn, Mo, total	Method 200 7 or 6010
As, Cd, Cr, Pb, Hg, Se, Ag, total	Method 200 7 or 6010 (Hg by EPA 245 1)
Cyanide	Method 335.4 or 9010A
Alkalinity	Method 310 2
Chlorides	Method 325 2
Total Kjeldahl Nitrogen	Method 351.2
Total Phosphorous	Method 365 1
VOCs (Chloroform included)	Method 8021 or 8260
Semi-Volatiles	Method 8270

*$BOD_{5\ Day}$ and TSS are analyzed by the waste treatment facility each month

Confirm seals in both driplegs -- sediment not obstructing "U" position	Landfill

GROUNDWATER MONITORING

A. Monitoring Wells

Sample groundwater for analysis from the following monitoring wells MW-3, MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14,	WaTerra groundwater sampling equipment used for collecting samples. Field blanks (2) do not need to be collected so long as WaTerra method is used for sample collection.

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-201089-1

Login Number: 201089
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	BOD past hold
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

6/17 & 6/18/21 KAL/BJI 75F Cloudy

MW#	DTW	TOC	GWE	Time	Date	T/C/O	pH	°C Temp	µS Cond	DNR#	
3	~~broken~~ 86.74	986.92	~~900.18~~	~~0830~~	6/~~18~~/21	Mod/cl/N	7.63	17.5	417	~~3~~	
4	116.86	1017.64	900.78	0930	6/18/21	N/cl/N	7.50	16.8	501	4	
6	109.44	needs to be resurveyed		1330	6/17/21	slt/tan/N	7.13	21.6	615	6	
7	111.10	1013.01	901.91	10:30	6/18/21	~~slt~~/cl/N	7.52	19.8	500	7	
8	102.34	needs to be resurveyed		1310	6/17/21	slt/tan/N	7.51	22.1	512	8	
9	106.46	↓		1340	6/17/21	N/cl/N	7.42	21.7	488	9	
10	107.38			1410	6/17/21	N/cl/N	7.50	21.9	488	10	
11	130.21	1034.16	903.95	1000	6/17/21	N/cl/N	7.72	19.9	452	15	
12	154.85	1065.54	910.69	1315	6/18/21	slt/cl/N	7.23	23.1	632	17	
* 13	110.06	1011.85	901.79	0915	6/17/21	slt/cl/N	7.61	18.1	514	19	
14	69.49	970.75	901.26	1100	6/17/21	slt/tan/N	7.24	19.5	608	21	
15A	70.33	924.29	853.96	1130	6/17/21	~~slt/cl~~/N	~~7.88~~	~~17.5~~	~~521~~	23	
15B	70.55	924.52	853.97	~~1145~~ 1200	6/17/21	N/cl/N	7.70	17.9	542	25	
15C	70.30	924.66	854.36	~~1200~~ 1145	6/17/21	N/cl/N	7.49	19.0	506	27	
16	59.33	915.13	855.80	1240	6/17/21	N/cl/N	7.33	24.7	499	29	needs a lock
116	—	—	—	—	6/17/21	—	—	—	—	—	
Blower	—	—	—	1600	6/16/21	—	—	—	—	—	
Leachate	—	—	—	1600	6/16/21	V/Brn/Y	7.03	22.1	4410	401	

collected GPS coordinates

* SVOCs

Pinkys pumped 36" 1,680 gallons

Rite in the Rain

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-201198-1
Client Project/Site: Junker Landfill

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson

Authorized for release by:
7/6/2021 4:39:59 PM

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Laboratory: Eurofins TestAmerica, Chicago

Narrative

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Comments
No additional comments.

Receipt
The samples were received on 6/22/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.4º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 500-607193 recovered above the upper control limit for Bromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-3 (500-201198-1), MW-4 (500-201198-2) and MW-7 (500-201198-3).

Method 8260B: The laboratory control sample (LCS) for analytical batch 500-607193 recovered outside control limits for the following analytes: Bromomethane, Dibromomethane, Trichlorofluromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) and the laboratory control sample (LCS) associated with batch 500-607393 recovered above the upper control limit for Bromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: MW-12 (500-201198-4).

Method 8260B: Acetone was detected in the following sample: MW-12 (500-201198-4). The method blank associated with this sample was below the reporting limit for Acetone. Acetone is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

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

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-3 — Lab Sample ID: 500-201198-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	10	1.7	ug/L	1		8260B	Total/NA
Trichloroethylene	1.5		0.50	0.16	ug/L	1		8260B	Total/NA
Iron	8.8		0.20	0.082	mg/L	1		6010B	Dissolved
Manganese	0.30		0.010	0.0023	mg/L	1		6010B	Dissolved
Hardness as calcium carbonate	188		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	188		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	12.7		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	17.2		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	86.74				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	417				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.63				SU	1		Field Sampling	Total/NA
Field Temperature	17.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	900.18				ft	1		Field Sampling	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 500-201198-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	0.98		0.50	0.16	ug/L	1		8260B	Total/NA
Hardness as calcium carbonate	246		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	205		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	16.0		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	15.7		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	116.86				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	501				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.50				SU	1		Field Sampling	Total/NA
Field Temperature	16.8				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	900.78				ft	1		Field Sampling	Total/NA

Client Sample ID: MW-7 — Lab Sample ID: 500-201198-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	0.80		0.50	0.16	ug/L	1		8260B	Total/NA
Hardness as calcium carbonate	253		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	206		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	16.9		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	16.7		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	111.10				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	500				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.52				SU	1		Field Sampling	Total/NA
Field Temperature	19.8				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	901.91				ft	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-12

Lab Sample ID: 500-201198-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	27		10	1.7	ug/L	1		8260B	Total/NA
Trichlorofluoromethane	1.1		1.0	0.43	ug/L	1		8260B	Total/NA
Iron	0.12	J	0.20	0.082	mg/L	1		6010B	Dissolved
Hardness as calcium carbonate	358		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	318		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	2.3		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	8.1	J	10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	154.85				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	632				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.23				SU	1		Field Sampling	Total/NA
Field Temperature	23.1				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	910.69				ft	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL CHI
SM 2320B	Alkalinity	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 5220C	COD	SM	TAL CHI
Field Sampling	Field Sampling	EPA	TAL CHI
3010A	Preparation, Total Metals	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 5220	COD	SM	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-201198-1	MW-3	Water	06/18/21 08:30	06/22/21 10:00	
500-201198-2	MW-4	Water	06/18/21 09:30	06/22/21 10:00	
500-201198-3	MW-7	Water	06/18/21 10:30	06/22/21 10:00	
500-201198-4	MW-12	Water	06/18/21 13:15	06/22/21 10:00	

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-3
Date Collected: 06/18/21 08:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.0	J	10	1.7	ug/L			07/01/21 16:48	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 16:48	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 16:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 16:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 16:48	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 16:48	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 16:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 16:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 16:48	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 16:48	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 16:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 16:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 16:48	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 16:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 16:48	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 16:48	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 16:48	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 16:48	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 16:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 16:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 16:48	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 16:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 16:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 16:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 16:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 16:48	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 16:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 16:48	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 16:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 16:48	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 16:48	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 16:48	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 16:48	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 16:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 16:48	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 16:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 16:48	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 16:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 16:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 16:48	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 16:48	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 16:48	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 16:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 16:48	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 16:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 16:48	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 16:48	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 16:48	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 16:48	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-3
Date Collected: 06/18/21 08:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 16:48	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 16:48	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 16:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 16:48	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 16:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 16:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 16:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 16:48	1
Trichloroethylene	**1.5**		0.50	0.16	ug/L			07/01/21 16:48	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 16:48	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 16:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 16:48	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 16:48	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 16:48	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*		*07/01/21 16:48*	*1*
Dibromofluoromethane	*114*		*75 - 120*		*07/01/21 16:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 126*		*07/01/21 16:48*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*07/01/21 16:48*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**8.8**		0.20	0.082	mg/L		06/28/21 08:30	06/28/21 18:30	1
Manganese	**0.30**		0.010	0.0023	mg/L		06/28/21 08:30	06/28/21 18:30	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**188**		0.91	0.46	mg/L		06/28/21 08:30	06/29/21 07:44	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**188**		5.0	3.7	mg/L			06/30/21 20:26	1
Chloride	**12.7**		2.0	1.0	mg/L			07/05/21 16:13	1
Chemical Oxygen Demand	**17.2**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**86.74**				ft			06/18/21 08:30	1
Field Color	**N**				NONE			06/18/21 08:30	1
Field Conductivity	**417**				umhos/cm			06/18/21 08:30	1
Field Odor	**N**				NONE			06/18/21 08:30	1
Field pH	**7.63**				SU			06/18/21 08:30	1
Field Temperature	**17.5**				Degrees C			06/18/21 08:30	1
Field Turbidity	**Y**				NONE			06/18/21 08:30	1
Groundwater Elevation (ft MSL)	**900.18**				ft			06/18/21 08:30	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-4
Date Collected: 06/18/21 09:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 17:16	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 17:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 17:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 17:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 17:16	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 17:16	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 17:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 17:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 17:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 17:16	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 17:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 17:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 17:16	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 17:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 17:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 17:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 17:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 17:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 17:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 17:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 17:16	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 17:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 17:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 17:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 17:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 17:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 17:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 17:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 17:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 17:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 17:16	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 17:16	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 17:16	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 17:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 17:16	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 17:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 17:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 17:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 17:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 17:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 17:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 17:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 17:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 17:16	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 17:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 17:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 17:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 17:16	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 17:16	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-4
Date Collected: 06/18/21 09:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 17:16	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 17:16	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 17:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 17:16	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 17:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 17:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 17:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 17:16	1
Trichloroethylene	**0.98**		0.50	0.16	ug/L			07/01/21 17:16	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 17:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 17:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 17:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 17:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 17:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*72 - 124*		*07/01/21 17:16*	*1*
Dibromofluoromethane	*112*		*75 - 120*		*07/01/21 17:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*07/01/21 17:16*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*07/01/21 17:16*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/28/21 08:30	06/28/21 18:33	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/28/21 08:30	06/28/21 18:33	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**246**		0.91	0.46	mg/L		06/28/21 08:30	06/29/21 07:44	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**205**		5.0	3.7	mg/L			06/30/21 20:33	1
Chloride	**16.0**		2.0	1.0	mg/L			07/05/21 16:13	1
Chemical Oxygen Demand	**15.7**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:18	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**116.86**				ft			06/18/21 09:30	1
Field Color	**N**				NONE			06/18/21 09:30	1
Field Conductivity	**501**				umhos/cm			06/18/21 09:30	1
Field Odor	**N**				NONE			06/18/21 09:30	1
Field pH	**7.50**				SU			06/18/21 09:30	1
Field Temperature	**16.8**				Degrees C			06/18/21 09:30	1
Field Turbidity	**N**				NONE			06/18/21 09:30	1
Groundwater Elevation (ft MSL)	**900.78**				ft			06/18/21 09:30	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-7
Date Collected: 06/18/21 10:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 17:44	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 17:44	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 17:44	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 17:44	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 17:44	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 17:44	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 17:44	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 17:44	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 17:44	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 17:44	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 17:44	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 17:44	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 17:44	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 17:44	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 17:44	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 17:44	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 17:44	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 17:44	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 17:44	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 17:44	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 17:44	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 17:44	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 17:44	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 17:44	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 17:44	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 17:44	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 17:44	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 17:44	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 17:44	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 17:44	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 17:44	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 17:44	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 17:44	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 17:44	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 17:44	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 17:44	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 17:44	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 17:44	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 17:44	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 17:44	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 17:44	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 17:44	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 17:44	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 17:44	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 17:44	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 17:44	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 17:44	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 17:44	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 17:44	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-7
Date Collected: 06/18/21 10:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-3
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 17:44	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 17:44	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 17:44	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 17:44	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 17:44	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 17:44	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 17:44	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 17:44	1
Trichloroethylene	**0.80**		0.50	0.16	ug/L			07/01/21 17:44	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 17:44	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 17:44	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 17:44	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 17:44	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 17:44	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*72 - 124*		*07/01/21 17:44*	*1*
Dibromofluoromethane	*111*		*75 - 120*		*07/01/21 17:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 126*		*07/01/21 17:44*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*07/01/21 17:44*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/28/21 08:30	06/28/21 18:36	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/28/21 08:30	06/28/21 18:36	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**253**		0.91	0.46	mg/L		06/28/21 08:30	06/29/21 07:44	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**206**		5.0	3.7	mg/L			06/30/21 20:45	1
Chloride	**16.9**		2.0	1.0	mg/L			07/05/21 16:14	1
Chemical Oxygen Demand	**16.7**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**111.10**				ft			06/18/21 10:30	1
Field Color	**N**				NONE			06/18/21 10:30	1
Field Conductivity	**500**				umhos/cm			06/18/21 10:30	1
Field Odor	**N**				NONE			06/18/21 10:30	1
Field pH	**7.52**				SU			06/18/21 10:30	1
Field Temperature	**19.8**				Degrees C			06/18/21 10:30	1
Field Turbidity	**Y**				NONE			06/18/21 10:30	1
Groundwater Elevation (ft MSL)	**901.91**				ft			06/18/21 10:30	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-12
Date Collected: 06/18/21 13:15
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	27		10	1.7	ug/L			07/02/21 10:26	1
Benzene	<0.15		0.50	0.15	ug/L			07/02/21 10:26	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/02/21 10:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/02/21 10:26	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/02/21 10:26	1
Bromoform	<0.48		1.0	0.48	ug/L			07/02/21 10:26	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/02/21 10:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/02/21 10:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/02/21 10:26	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/02/21 10:26	1
Chloroform	<0.37		2.0	0.37	ug/L			07/02/21 10:26	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/02/21 10:26	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/02/21 10:26	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/02/21 10:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/02/21 10:26	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/02/21 10:26	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/02/21 10:26	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/02/21 10:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/02/21 10:26	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/02/21 10:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/02/21 10:26	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/02/21 10:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/02/21 10:26	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/02/21 10:26	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/02/21 10:26	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/02/21 10:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/02/21 10:26	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/02/21 10:26	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/02/21 10:26	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/02/21 10:26	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/02/21 10:26	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/02/21 10:26	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/02/21 10:26	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/02/21 10:26	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/02/21 10:26	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/02/21 10:26	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/02/21 10:26	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/02/21 10:26	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/02/21 10:26	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/02/21 10:26	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/02/21 10:26	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/02/21 10:26	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/02/21 10:26	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/02/21 10:26	1
Styrene	<0.39		1.0	0.39	ug/L			07/02/21 10:26	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/02/21 10:26	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/02/21 10:26	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/02/21 10:26	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/02/21 10:26	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-12
Date Collected: 06/18/21 13:15
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/02/21 10:26	1
Toluene	<0.15		0.50	0.15	ug/L			07/02/21 10:26	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/02/21 10:26	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/02/21 10:26	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/02/21 10:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/02/21 10:26	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/02/21 10:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/02/21 10:26	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/02/21 10:26	1
Trichlorofluoromethane	**1.1**		1.0	0.43	ug/L			07/02/21 10:26	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/02/21 10:26	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/02/21 10:26	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/02/21 10:26	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/02/21 10:26	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/02/21 10:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*72 - 124*		*07/02/21 10:26*	*1*
Dibromofluoromethane	*109*		*75 - 120*		*07/02/21 10:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*		*07/02/21 10:26*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*07/02/21 10:26*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.12**	**J**	0.20	0.082	mg/L		06/28/21 08:30	06/28/21 18:40	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/28/21 08:30	06/28/21 18:40	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**358**		0.91	0.46	mg/L		06/28/21 08:30	06/29/21 07:44	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**318**		5.0	3.7	mg/L			06/30/21 20:52	1
Chloride	**2.3**		2.0	1.0	mg/L			07/05/21 16:14	1
Chemical Oxygen Demand	**8.1**	**J**	10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:20	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**154.85**				ft			06/18/21 13:15	1
Field Color	**N**				NONE			06/18/21 13:15	1
Field Conductivity	**632**				umhos/cm			06/18/21 13:15	1
Field Odor	**N**				NONE			06/18/21 13:15	1
Field pH	**7.23**				SU			06/18/21 13:15	1
Field Temperature	**23.1**				Degrees C			06/18/21 13:15	1
Field Turbidity	**Y**				NONE			06/18/21 13:15	1
Groundwater Elevation (ft MSL)	**910.69**				ft			06/18/21 13:15	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Metals

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

General Chemistry

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

GC/MS VOA

Analysis Batch: 607193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Total/NA	Water	8260B	
500-201198-2	MW-4	Total/NA	Water	8260B	
500-201198-3	MW-7	Total/NA	Water	8260B	
MB 500-607193/6	Method Blank	Total/NA	Water	8260B	
LCS 500-607193/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 607393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-4	MW-12	Total/NA	Water	8260B	
MB 500-607393/7	Method Blank	Total/NA	Water	8260B	
LCS 500-607393/3	Lab Control Sample	Total/NA	Water	8260B	

Metals

Prep Batch: 606487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Dissolved	Water	3010A	
500-201198-2	MW-4	Dissolved	Water	3010A	
500-201198-3	MW-7	Dissolved	Water	3010A	
500-201198-4	MW-12	Dissolved	Water	3010A	
MB 500-606487/1-A	Method Blank	Total/NA	Water	3010A	
LCS 500-606487/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 606650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Dissolved	Water	6010B	606487
500-201198-2	MW-4	Dissolved	Water	6010B	606487
500-201198-3	MW-7	Dissolved	Water	6010B	606487
500-201198-4	MW-12	Dissolved	Water	6010B	606487
MB 500-606487/1-A	Method Blank	Total/NA	Water	6010B	606487
LCS 500-606487/2-A	Lab Control Sample	Total/NA	Water	6010B	606487

Analysis Batch: 606697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Dissolved	Water	SM 2340B	606487
500-201198-2	MW-4	Dissolved	Water	SM 2340B	606487
500-201198-3	MW-7	Dissolved	Water	SM 2340B	606487
500-201198-4	MW-12	Dissolved	Water	SM 2340B	606487

General Chemistry

Analysis Batch: 607165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Dissolved	Water	SM 2320B	
500-201198-2	MW-4	Dissolved	Water	SM 2320B	
500-201198-3	MW-7	Dissolved	Water	SM 2320B	
500-201198-4	MW-12	Dissolved	Water	SM 2320B	
MB 500-607165/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-607165/3	Lab Control Sample	Total/NA	Water	SM 2320B	

QC Association Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

General Chemistry

Prep Batch: 607399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Dissolved	Water	SM 5220	
500-201198-2	MW-4	Dissolved	Water	SM 5220	
500-201198-3	MW-7	Dissolved	Water	SM 5220	
500-201198-4	MW-12	Dissolved	Water	SM 5220	
MB 500-607399/1-A	Method Blank	Total/NA	Water	SM 5220	
LCS 500-607399/2-A	Lab Control Sample	Total/NA	Water	SM 5220	

Analysis Batch: 607527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Dissolved	Water	SM 5220C	607399
500-201198-2	MW-4	Dissolved	Water	SM 5220C	607399
500-201198-3	MW-7	Dissolved	Water	SM 5220C	607399
500-201198-4	MW-12	Dissolved	Water	SM 5220C	607399
MB 500-607399/1-A	Method Blank	Total/NA	Water	SM 5220C	607399
LCS 500-607399/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	607399

Analysis Batch: 607925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Dissolved	Water	SM 4500 Cl- E	
500-201198-2	MW-4	Dissolved	Water	SM 4500 Cl- E	
500-201198-3	MW-7	Dissolved	Water	SM 4500 Cl- E	
500-201198-4	MW-12	Dissolved	Water	SM 4500 Cl- E	
MB 500-607925/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-607925/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Field Service / Mobile Lab

Analysis Batch: 607491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201198-1	MW-3	Total/NA	Water	Field Sampling	
500-201198-2	MW-4	Total/NA	Water	Field Sampling	
500-201198-3	MW-7	Total/NA	Water	Field Sampling	
500-201198-4	MW-12	Total/NA	Water	Field Sampling	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-201198-1	MW-3	87	114	122	93
500-201198-2	MW-4	85	112	118	94
500-201198-3	MW-7	86	111	115	95
500-201198-4	MW-12	85	109	113	96
LCS 500-607193/4	Lab Control Sample	84	110	114	96
LCS 500-607393/3	Lab Control Sample	83	105	112	96
MB 500-607193/6	Method Blank	86	109	116	96
MB 500-607393/7	Method Blank	87	111	115	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-607193/6
Matrix: Water
Analysis Batch: 607193

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 12:37	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 12:37	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 12:37	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 12:37	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 12:37	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 12:37	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 12:37	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 12:37	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 12:37	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 12:37	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 12:37	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 12:37	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 12:37	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 12:37	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 12:37	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 12:37	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 12:37	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 12:37	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 12:37	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 12:37	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 12:37	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 12:37	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 12:37	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 12:37	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/01/21 12:37	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 12:37	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/01/21 12:37	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 12:37	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 12:37	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 12:37	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 12:37	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 12:37	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 12:37	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 12:37	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 12:37	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 12:37	1

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

Lab Sample ID: MB 500-607193/6
Matrix: Water
Analysis Batch: 607193

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 12:37	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 12:37	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 12:37	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 12:37	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 12:37	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 12:37	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 12:37	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 12:37	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/01/21 12:37	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/01/21 12:37	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 12:37	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 12:37	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 12:37	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*72 - 124*		*07/01/21 12:37*	*1*
Dibromofluoromethane	*109*		*75 - 120*		*07/01/21 12:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*		*07/01/21 12:37*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*07/01/21 12:37*	*1*

Lab Sample ID: LCS 500-607193/4
Matrix: Water
Analysis Batch: 607193

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	50.0		ug/L		100	40 - 143
Benzene	50.0	53.9		ug/L		108	70 - 120
Bromobenzene	50.0	50.1		ug/L		100	70 - 122
Bromochloromethane	50.0	59.3		ug/L		119	65 - 122
Bromodichloromethane	50.0	57.7		ug/L		115	69 - 120
Bromoform	50.0	62.5		ug/L		125	56 - 132
Carbon disulfide	50.0	52.0		ug/L		104	66 - 120
Carbon tetrachloride	50.0	65.9		ug/L		132	59 - 133
Chlorobenzene	50.0	51.1		ug/L		102	70 - 120
Chloroethane	50.0	48.8		ug/L		98	48 - 136
Chloroform	50.0	55.1		ug/L		110	70 - 120
2-Chlorotoluene	50.0	47.8		ug/L		96	70 - 125
4-Chlorotoluene	50.0	48.4		ug/L		97	68 - 124
cis-1,2-Dichloroethylene	50.0	52.5		ug/L		105	70 - 125
cis-1,3-Dichloropropene	50.0	52.8		ug/L		106	64 - 127
Dibromochloromethane	50.0	56.4		ug/L		113	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	50.8		ug/L		102	56 - 123
1,2-Dibromoethane	50.0	52.2		ug/L		104	70 - 125
Dichlorodifluoromethane	50.0	59.1		ug/L		118	40 - 159
1,1-Dichloroethane	50.0	47.4		ug/L		95	70 - 125

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

Lab Sample ID: LCS 500-607193/4
Matrix: Water
Analysis Batch: 607193

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	56.6		ug/L		113	68 - 127
1,1-Dichloroethylene	50.0	53.0		ug/L		106	67 - 122
1,2-Dichloropropane	50.0	44.7		ug/L		89	67 - 130
1,3-Dichloropropane	50.0	55.3		ug/L		111	62 - 136
2,2-Dichloropropane	50.0	56.4		ug/L		113	58 - 139
1,1-Dichloropropene	50.0	59.2		ug/L		118	70 - 121
Ethylbenzene	50.0	52.0		ug/L		104	70 - 123
Hexachlorobutadiene	50.0	48.2		ug/L		96	51 - 150
Isopropylbenzene	50.0	49.4		ug/L		99	70 - 126
1,3-Dichlorobenzene	50.0	50.9		ug/L		102	70 - 125
Methyl bromide	50.0	88.6	*	ug/L		177	40 - 152
Methyl chloride	50.0	38.7		ug/L		77	56 - 152
Methylene bromide	50.0	60.4	*	ug/L		121	70 - 120
Methylene Chloride	50.0	50.7		ug/L		101	69 - 125
Methyl ethyl ketone (MEK)	50.0	44.4		ug/L		89	46 - 144
Methyl tert-butyl ether	50.0	53.7		ug/L		107	55 - 123
Naphthalene	50.0	41.3		ug/L		83	53 - 144
n-Butylbenzene	50.0	48.9		ug/L		98	68 - 125
N-Propylbenzene	50.0	48.7		ug/L		97	69 - 127
1,2-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 125
1,4-Dichlorobenzene	50.0	51.4		ug/L		103	70 - 120
p-Isopropyltoluene	50.0	49.0		ug/L		98	70 - 125
sec-Butylbenzene	50.0	48.7		ug/L		97	70 - 123
Styrene	50.0	55.2		ug/L		110	70 - 120
tert-Butylbenzene	50.0	47.0		ug/L		94	70 - 121
1,1,1,2-Tetrachloroethane	50.0	56.5		ug/L		113	70 - 125
1,1,2,2-Tetrachloroethane	50.0	46.0		ug/L		92	62 - 140
Tetrachloroethylene	50.0	57.0		ug/L		114	70 - 128
Tetrahydrofuran	100	81.8		ug/L		82	59 - 139
Toluene	50.0	51.4		ug/L		103	70 - 125
1,2-trans-Dichloroethylene	50.0	52.5		ug/L		105	70 - 125
trans-1,3-Dichloropropene	50.0	54.7		ug/L		109	62 - 128
1,2,3-Trichlorobenzene	50.0	42.5		ug/L		85	51 - 145
1,2,4-Trichlorobenzene	50.0	45.4		ug/L		91	57 - 137
1,1,1-Trichloroethane	50.0	61.1		ug/L		122	70 - 125
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	71 - 130
Trichloroethylene	50.0	58.2		ug/L		116	70 - 125
Trichlorofluoromethane	50.0	65.4	*	ug/L		131	55 - 128
1,2,3-Trichloropropane	50.0	51.7		ug/L		103	50 - 133
1,2,4-Trimethylbenzene	50.0	50.3		ug/L		101	70 - 123
1,3,5-Trimethylbenzene	50.0	49.7		ug/L		99	70 - 123
Vinyl chloride	50.0	46.2		ug/L		92	64 - 126
Xylenes, Total	100	106		ug/L		106	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*
Dibromofluoromethane	*110*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*

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

Lab Sample ID: LCS 500-607193/4
Matrix: Water
Analysis Batch: 607193

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	96		75 - 120

Lab Sample ID: MB 500-607393/7
Matrix: Water
Analysis Batch: 607393

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/02/21 09:58	1
Benzene	<0.15		0.50	0.15	ug/L			07/02/21 09:58	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/02/21 09:58	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/02/21 09:58	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/02/21 09:58	1
Bromoform	<0.48		1.0	0.48	ug/L			07/02/21 09:58	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/02/21 09:58	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/02/21 09:58	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/02/21 09:58	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/02/21 09:58	1
Chloroform	<0.37		2.0	0.37	ug/L			07/02/21 09:58	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/02/21 09:58	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/02/21 09:58	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/02/21 09:58	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/02/21 09:58	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/02/21 09:58	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/02/21 09:58	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/02/21 09:58	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/02/21 09:58	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/02/21 09:58	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/02/21 09:58	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/02/21 09:58	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/02/21 09:58	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/02/21 09:58	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/02/21 09:58	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/02/21 09:58	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/02/21 09:58	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/02/21 09:58	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/02/21 09:58	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/02/21 09:58	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/02/21 09:58	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/02/21 09:58	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/02/21 09:58	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/02/21 09:58	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/02/21 09:58	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/02/21 09:58	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/02/21 09:58	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/02/21 09:58	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/02/21 09:58	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/02/21 09:58	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/02/21 09:58	1

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

Lab Sample ID: MB 500-607393/7
Matrix: Water
Analysis Batch: 607393

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/02/21 09:58	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/02/21 09:58	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/02/21 09:58	1
Styrene	<0.39		1.0	0.39	ug/L			07/02/21 09:58	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/02/21 09:58	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/02/21 09:58	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/02/21 09:58	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/02/21 09:58	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/02/21 09:58	1
Toluene	<0.15		0.50	0.15	ug/L			07/02/21 09:58	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/02/21 09:58	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/02/21 09:58	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/02/21 09:58	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/02/21 09:58	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/02/21 09:58	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/02/21 09:58	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/02/21 09:58	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/02/21 09:58	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/02/21 09:58	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/02/21 09:58	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/02/21 09:58	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/02/21 09:58	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/02/21 09:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*		*07/02/21 09:58*	*1*
Dibromofluoromethane	*111*		*75 - 120*		*07/02/21 09:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 126*		*07/02/21 09:58*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*07/02/21 09:58*	*1*

Lab Sample ID: LCS 500-607393/3
Matrix: Water
Analysis Batch: 607393

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	43.6		ug/L		87	40 - 143
Benzene	50.0	49.9		ug/L		100	70 - 120
Bromobenzene	50.0	46.2		ug/L		92	70 - 122
Bromochloromethane	50.0	51.8		ug/L		104	65 - 122
Bromodichloromethane	50.0	52.2		ug/L		104	69 - 120
Bromoform	50.0	56.8		ug/L		114	56 - 132
Carbon disulfide	50.0	46.3		ug/L		93	66 - 120
Carbon tetrachloride	50.0	62.4		ug/L		125	59 - 133
Chlorobenzene	50.0	47.9		ug/L		96	70 - 120
Chloroethane	50.0	47.3		ug/L		95	48 - 136
Chloroform	50.0	50.8		ug/L		102	70 - 120
2-Chlorotoluene	50.0	45.5		ug/L		91	70 - 125
4-Chlorotoluene	50.0	46.6		ug/L		93	68 - 124

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

Lab Sample ID: LCS 500-607393/3
Matrix: Water
Analysis Batch: 607393

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethylene	50.0	47.3		ug/L		95	70 - 125
cis-1,3-Dichloropropene	50.0	48.1		ug/L		96	64 - 127
Dibromochloromethane	50.0	51.7		ug/L		103	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	45.7		ug/L		91	56 - 123
1,2-Dibromoethane	50.0	45.7		ug/L		91	70 - 125
Dichlorodifluoromethane	50.0	56.7		ug/L		113	40 - 159
1,1-Dichloroethane	50.0	43.0		ug/L		86	70 - 125
1,2-Dichloroethane	50.0	51.1		ug/L		102	68 - 127
1,1-Dichloroethylene	50.0	48.7		ug/L		97	67 - 122
1,2-Dichloropropane	50.0	41.2		ug/L		82	67 - 130
1,3-Dichloropropane	50.0	48.8		ug/L		98	62 - 136
2,2-Dichloropropane	50.0	52.4		ug/L		105	58 - 139
1,1-Dichloropropene	50.0	54.8		ug/L		110	70 - 121
Ethylbenzene	50.0	49.5		ug/L		99	70 - 123
Hexachlorobutadiene	50.0	51.2		ug/L		102	51 - 150
Isopropylbenzene	50.0	47.6		ug/L		95	70 - 126
1,3-Dichlorobenzene	50.0	48.2		ug/L		96	70 - 125
Methyl bromide	50.0	85.7	*	ug/L		171	40 - 152
Methyl chloride	50.0	36.6		ug/L		73	56 - 152
Methylene bromide	50.0	52.6		ug/L		105	70 - 120
Methylene Chloride	50.0	44.9		ug/L		90	69 - 125
Methyl ethyl ketone (MEK)	50.0	38.1		ug/L		76	46 - 144
Methyl tert-butyl ether	50.0	46.7		ug/L		93	55 - 123
Naphthalene	50.0	34.9		ug/L		70	53 - 144
n-Butylbenzene	50.0	48.3		ug/L		97	68 - 125
N-Propylbenzene	50.0	47.0		ug/L		94	69 - 127
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 125
1,4-Dichlorobenzene	50.0	48.1		ug/L		96	70 - 120
p-Isopropyltoluene	50.0	47.8		ug/L		96	70 - 125
sec-Butylbenzene	50.0	47.5		ug/L		95	70 - 123
Styrene	50.0	50.8		ug/L		102	70 - 120
tert-Butylbenzene	50.0	45.7		ug/L		91	70 - 121
1,1,1,2-Tetrachloroethane	50.0	53.0		ug/L		106	70 - 125
1,1,2,2-Tetrachloroethane	50.0	40.2		ug/L		80	62 - 140
Tetrachloroethylene	50.0	53.7		ug/L		107	70 - 128
Tetrahydrofuran	100	69.0		ug/L		69	59 - 139
Toluene	50.0	48.8		ug/L		98	70 - 125
1,2-trans-Dichloroethylene	50.0	48.2		ug/L		96	70 - 125
trans-1,3-Dichloropropene	50.0	49.4		ug/L		99	62 - 128
1,2,3-Trichlorobenzene	50.0	37.1		ug/L		74	51 - 145
1,2,4-Trichlorobenzene	50.0	39.8		ug/L		80	57 - 137
1,1,1-Trichloroethane	50.0	57.0		ug/L		114	70 - 125
1,1,2-Trichloroethane	50.0	46.2		ug/L		92	71 - 130
Trichloroethylene	50.0	53.4		ug/L		107	70 - 125
Trichlorofluoromethane	50.0	63.9		ug/L		128	55 - 128
1,2,3-Trichloropropane	50.0	46.8		ug/L		94	50 - 133
1,2,4-Trimethylbenzene	50.0	47.4		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	50.0	47.7		ug/L		95	70 - 123
Vinyl chloride	50.0	44.3		ug/L		89	64 - 126

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

Lab Sample ID: LCS 500-607393/3
Matrix: Water
Analysis Batch: 607393

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	100	99.5		ug/L		100	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*
Dibromofluoromethane	*105*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*
Toluene-d8 (Surr)	*96*		*75 - 120*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-606487/1-A
Matrix: Water
Analysis Batch: 606650

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 606487

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/28/21 08:30	06/28/21 17:42	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/28/21 08:30	06/28/21 17:42	1

Lab Sample ID: LCS 500-606487/2-A
Matrix: Water
Analysis Batch: 606650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 606487

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1.00	1.07		mg/L		107	80 - 120
Manganese	0.500	0.480		mg/L		96	80 - 120

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-607165/2
Matrix: Water
Analysis Batch: 607165

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			06/30/21 18:15	1

Lab Sample ID: LCS 500-607165/3
Matrix: Water
Analysis Batch: 607165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	102.7		mg/L		103	90 - 110

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-607925/16
Matrix: Water
Analysis Batch: 607925

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		2.0	1.0	mg/L			07/05/21 16:10	1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 500-607925/17
Matrix: Water
Analysis Batch: 607925

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	20.73		mg/L		104	85 - 115

Method: SM 5220C - COD

Lab Sample ID: MB 500-607399/1-A
Matrix: Water
Analysis Batch: 607527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 607399

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<6.0		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:00	1

Lab Sample ID: LCS 500-607399/2-A
Matrix: Water
Analysis Batch: 607527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 607399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	48.48		mg/L		97	85 - 115

Lab Chronicle

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-3
Date Collected: 06/18/21 08:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 16:48	JDD	TAL CHI
Dissolved	Prep	3010A			606487	06/28/21 08:30	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606650	06/28/21 18:30	EEN	TAL CHI
Dissolved	Prep	3010A			606487	06/28/21 08:30	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606697	06/29/21 07:44	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 20:26	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:13	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:16	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607491	06/18/21 08:30	JVB	TAL CHI

Client Sample ID: MW-4
Date Collected: 06/18/21 09:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 17:16	JDD	TAL CHI
Dissolved	Prep	3010A			606487	06/28/21 08:30	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606650	06/28/21 18:33	EEN	TAL CHI
Dissolved	Prep	3010A			606487	06/28/21 08:30	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606697	06/29/21 07:44	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 20:33	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:13	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:18	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607491	06/18/21 09:30	JVB	TAL CHI

Client Sample ID: MW-7
Date Collected: 06/18/21 10:30
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 17:44	JDD	TAL CHI
Dissolved	Prep	3010A			606487	06/28/21 08:30	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606650	06/28/21 18:36	EEN	TAL CHI
Dissolved	Prep	3010A			606487	06/28/21 08:30	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606697	06/29/21 07:44	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 20:45	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:14	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:19	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607491	06/18/21 10:30	JVB	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Client Sample ID: MW-12

Date Collected: 06/18/21 13:15
Date Received: 06/22/21 10:00

Lab Sample ID: 500-201198-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607393	07/02/21 10:26	JDD	TAL CHI
Dissolved	Prep	3010A			606487	06/28/21 08:30	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606650	06/28/21 18:40	EEN	TAL CHI
Dissolved	Prep	3010A			606487	06/28/21 08:30	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606697	06/29/21 07:44	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 20:52	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:14	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:20	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607491	06/18/21 13:15	JVB	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201198-1

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: BJI	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-92191-30169 3
Client Contact: Kirsten Lee	Phone:	E-Mail: sandra.fredrick@eurofinset.com	State of Origin:	Page: 1 of 3
Company: Cedar Corporation	PWSID:			Job #: 500-201198

Address: 604 Wilson Avenue	Due Date Requested:	Analysis Requested
City: Menomonie	TAT Requested (days):	
State, Zip: WI 54751	Compliance Project: Δ Yes Δ No	
Phone: 715-235-9081(Tel)	PO #: Purchase Order not required	
Email: kirsten.lee@cedarcorp.com	WO #:	
Project Name: Junker Landfill	Project #: 50006557	
Site:	SSOW#:	

500-201198 COC

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Alk, Chloride, COD	Total Hardness, Filtered	Diss. Fe, Mn, Filtered	VOCs	Total Number of containers	Special Instructions/Note
				Preservation Code:									
1	MW-3	6/18/21	0830	G	Water			X	X	X	X	6	
2	MW-4	↓	0930	↓	Water			↓	↓	↓	↓	↓	
3	MW-7		1030		Water								
4	MW-12		1115		Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements: EDDs, wrong dates on vials, please log labels as "MW" not "JMW"

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Kirsten Lee	6/21/21 0830	Cedarcorp	Allison Scott	6/22/21 1000	ENCHL
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		0.4

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-201198-1

Login Number: 201198
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

6/17/21 & 6/18/21 KAL/BUI 75F Cloudy

MW#	DTW	TOC	GWE	Time	Date
3	~~broken~~ 86.74	986.92	~~900.18~~	~~0830~~	6/~~18~~/21
4	116.86	1017.64	900.78	0930	6/18/21
6	109.44	needs to be resurveyed		1330	6/17/21
7	111.10	1013.01	901.91	10:30	6/18/21
8	102.34	needs to be resurveyed		1310	6/17/21
9	106.46	↓		1340	6/17/21
10	107.38			1410	6/17/21
11	130.21	1034.16	903.95	1000	6/17/21
12	154.85	1065.54	910.69	1315	6/18/21
* 13	110.06	1011.85	901.79	0915	6/17/21
14	69.49	970.75	901.26	1100	6/17/21
15A	70.33	924.29	853.96	1130	6/17/21
15B	70.55	924.52	853.97	~~1145~~ 1200	6/17/21
15C	70.30	924.66	854.36	~~1200~~ 1145	6/17/21
16	59.33	915.13	855.80	1240	6/17/21
116	—	—	—	—	6/17/21
Blower	—	—	—	1600	6/16/21
Leachate	—	—	—	1600	6/16/21

collected GPS coordinates

* SVOCs

Pinkys pumped 36" 1,680 gallons

T/C/O	pH	°C Temp	µS Cond	DNR#	
Mad/cl/N	7.63	17.5	417	3	
N/cl/N	7.50	16.8	501	4	
slt/tan/N	7.13	21.6	615	6	
~~slt~~/cl/N	7.52	19.8	500	7	
slt/tan/N	7.51	22.1	512	8	
N/cl/N	7.42	21.7	488	9	
N/cl/N	7.50	21.9	488	10	
N/cl/N	7.72	19.9	452	15	
slt/cl/N	7.23	23.1	632	17	
slt/cl/N	7.61	18.1	514	19	
slt/tan/N	7.24	19.5	608	21	
~~slt/cl~~/N	~~7.08~~	~~17.5~~	~~521~~	23	
N/cl/N	7.70	17.9	542	25	
N/cl/N	7.49	19.0	506	27	
N/cl/N	7.33	24.7	499	29	needs a lock
—	—	—	—	—	
—	—	—	—	—	
V/Brn/Y	7.03	22.1	4410	401	

Rite in the Rain

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-201166-1
Client Project/Site: Junker Landfill
Revision: 1

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson

Sandra Fredrick

Authorized for release by:
7/7/2021 4:38:04 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Case Narrative

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Job ID: 500-201166-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-201166-1

Comments
No additional comments.

Receipt
The samples were received on 6/19/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were -0.1º C and 1.2º C.

Revised Report
Revision added to correct field data to indicate no odor for samples MW-6 and MW-8.

Receipt Exceptions
The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC). COC list date 6/17/21 for all samples however all sample containers list date as 6/16/21. Logged per COC per client.

GC/MS VOA
Method 8260B: Acetone/ Methylene chloride were detected in the following samples: MW-6 (500-201166-1), MW-8 (500-201166-2), MW-9 (500-201166-3), MW-10 (500-201166-4), MW-14 (500-201166-7), MW-15A (500-201166-8) and Trip Blank (500-201166-13). The method blanks associated with these samples was below the reporting limit for these compounds. Methylene chloride and Acetone are known lab contaminants; therefore all low level detects for thESE compound could be suspected as lab contamination.

Method 8260B: The continuing calibration verification (CCVIS) associated with batch 606874 recovered above the upper control limit for Chloroethane and Dichlorodifluoromethane. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-6 (500-201166-1), MW-8 (500-201166-2), MW-9 (500-201166-3) and MW-10 (500-201166-4).

Method 8260B: The continuing calibration verification (CCV) associated with batch 606957 recovered above the upper control limit for Methyl bromide. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported. The associated sample is impacted: Trip Blank (500-201166-13).

Method 8260B: The laboratory control sample (LCS) and continuing calibration verification (CCVIS) for 607193 recovered outside control limits for the following analytes: Methyl bromide, Methylene bromide, and Trchlorofluoromethane. These analytes were biased high in the LCS/CCVIS and were below the reporting limit in the associated samples; therefore, the data have been reported.MW-11 (500-201166-5), MW-13 (500-201166-6), MW-14 (500-201166-7), MW-15A (500-201166-8), MW-15B (500-201166-9), MW-15C (500-201166-10), MW-16 (500-201166-11) and MW-116 (500-201166-12)

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

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) analyzed in batch 500-605296 was outside the method criteria for the following analyte(s): Butyl benzyl phthalate, Carbazole, Hexachlorobenzene, Hexachlorocyclopentadiene, Pentachlorophenol and 2,4,6-Tribromophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 500-605213 was outside the method criteria for the following analyte(s): 4-Nitrophenol, Bis(2-ethylhexyl) phthalate and Butyl benzyl phthalate. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

Metals
Method 6010B: The continuing calibration blank (CCB) at line 78 contained Iron above the reporting limit (RL). The sample MW-6

Job ID: 500-201166-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

(500-201166-1), MW-8 (500-201166-2), MW-9 (500-201166-3), MW-10 (500-201166-4) and MW-11 (500-201166-5) associated with this CCB did not contain the target compound; therefore, re-analysis of samples was not performed.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-6 — Lab Sample ID: 500-201166-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.5	J	5.0	1.6	ug/L	1		8260B	Total/NA
Manganese	0.0029	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Hardness as calcium carbonate	304		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	163		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	30.9		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	52.5		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	109.44				ft	1		Field Sampling	Total/NA
Field Color	Y				NONE	1		Field Sampling	Total/NA
Field Conductivity	615				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.13				SU	1		Field Sampling	Total/NA
Field Temperature	21.6				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 500-201166-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.4	J	5.0	1.6	ug/L	1		8260B	Total/NA
Hardness as calcium carbonate	270		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	200		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	21.5		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	7.1	J	10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	102.34				ft	1		Field Sampling	Total/NA
Field Color	Y				NONE	1		Field Sampling	Total/NA
Field Conductivity	512				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.51				SU	1		Field Sampling	Total/NA
Field Temperature	22.1				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 500-201166-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.5	J	5.0	1.6	ug/L	1		8260B	Total/NA
Trichloroethylene	1.5		0.50	0.16	ug/L	1		8260B	Total/NA
Hardness as calcium carbonate	261		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	207		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	13.7		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	15.7		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	106.46				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	488				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.42				SU	1		Field Sampling	Total/NA
Field Temperature	21.7				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 500-201166-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.80	J ^c	3.0	0.67	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.59	J	1.0	0.41	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-10 (Continued) — Lab Sample ID: 500-201166-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.6	J	5.0	1.6	ug/L	1		8260B	Total/NA
Tetrachloroethylene	0.79	J	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethylene	1.9		0.50	0.16	ug/L	1		8260B	Total/NA
Trichlorofluoromethane	1.7		1.0	0.43	ug/L	1		8260B	Total/NA
Hardness as calcium carbonate	262		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	208		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	11.1		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	18.7		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	107.38				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	488				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.50				SU	1		Field Sampling	Total/NA
Field Temperature	21.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA

Client Sample ID: MW-11 — Lab Sample ID: 500-201166-5

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	0.93		0.50	0.16	ug/L	1		8260B	Total/NA
Iron	0.13	J B ^	0.20	0.082	mg/L	1		6010B	Dissolved
Hardness as calcium carbonate	237		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	195		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	10.4		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	13.1		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	130.21				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	452				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.72				SU	1		Field Sampling	Total/NA
Field Temperature	19.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	903.95				ft	1		Field Sampling	Total/NA

Client Sample ID: MW-13 — Lab Sample ID: 500-201166-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	6.8		0.50	0.16	ug/L	1		8260B	Total/NA
Trichlorofluoromethane	0.91	J *	1.0	0.43	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.4	J	7.9	1.3	ug/L	1		8270D	Total/NA
Hardness as calcium carbonate	252		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	219		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	14.9		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Depth to Water (ft from MP)	110.06				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	514				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.61				SU	1		Field Sampling	Total/NA
Field Temperature	18.1				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	901.79				ft	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-14 — Lab Sample ID: 500-201166-7

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.6	J	10	1.7	ug/L	1		8260B	Total/NA
Trichloroethylene	0.19	J	0.50	0.16	ug/L	1		8260B	Total/NA
Manganese	0.010		0.010	0.0023	mg/L	1		6010B	Dissolved
Hardness as calcium carbonate	277		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	231		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	31.3		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	8.1	J	10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	69.49				ft	1		Field Sampling	Total/NA
Field Color	Y				NONE	1		Field Sampling	Total/NA
Field Conductivity	608				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.24				SU	1		Field Sampling	Total/NA
Field Temperature	19.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	901.26				ft	1		Field Sampling	Total/NA

Client Sample ID: MW-15A — Lab Sample ID: 500-201166-8

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J	10	1.7	ug/L	1		8260B	Total/NA
Trichloroethylene	0.64		0.50	0.16	ug/L	1		8260B	Total/NA
Manganese	0.0032	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Hardness as calcium carbonate	256		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	226		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	16.2		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	16.2		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	70.33				ft	1		Field Sampling	Total/NA
Field Color	Y				NONE	1		Field Sampling	Total/NA
Field Conductivity	521				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.88				SU	1		Field Sampling	Total/NA
Field Temperature	17.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	853.96				ft	1		Field Sampling	Total/NA

Client Sample ID: MW-15B — Lab Sample ID: 500-201166-9

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethylene	1.4		0.50	0.16	ug/L	1		8260B	Total/NA
Hardness as calcium carbonate	263		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	217		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	21.0		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Depth to Water (ft from MP)	70.55				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	542				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.70				SU	1		Field Sampling	Total/NA
Field Temperature	17.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	853.97				ft	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-15C — Lab Sample ID: 500-201166-10

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.27	J	0.50	0.15	ug/L	1		8260B	Total/NA
Trichloroethylene	1.2		0.50	0.16	ug/L	1		8260B	Total/NA
Manganese	0.0081	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Hardness as calcium carbonate	248		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	228		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	18.0		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	11.6		10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	70.30				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	506				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.49				SU	1		Field Sampling	Total/NA
Field Temperature	19.0				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	854.36				ft	1		Field Sampling	Total/NA

Client Sample ID: MW-16 — Lab Sample ID: 500-201166-11

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Hardness as calcium carbonate	256		0.91	0.46	mg/L	1		SM 2340B	Dissolved
Alkalinity	228		5.0	3.7	mg/L	1		SM 2320B	Dissolved
Chloride	6.0		2.0	1.0	mg/L	1		SM 4500 Cl- E	Dissolved
Chemical Oxygen Demand	7.6	J	10.0	6.0	mg/L	1		SM 5220C	Dissolved
Depth to Water (ft from MP)	59.33				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Conductivity	499				umhos/cm	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.33				SU	1		Field Sampling	Total/NA
Field Temperature	24.7				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	855.80				ft	1		Field Sampling	Total/NA

Client Sample ID: MW-116 — Lab Sample ID: 500-201166-12

No Detections.

Client Sample ID: Trip Blank — Lab Sample ID: 500-201166-13

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.1	J	10	1.7	ug/L	1		8260B	Total/NA
Methylene Chloride	5.7		5.0	1.6	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL CHI
SM 2320B	Alkalinity	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 5220C	COD	SM	TAL CHI
Field Sampling	Field Sampling	EPA	TAL CHI
3010A	Preparation, Total Metals	SW846	TAL CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 5220	COD	SM	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-201166-1	MW-6	Water	06/17/21 13:30	06/19/21 10:30	
500-201166-2	MW-8	Water	06/17/21 13:10	06/19/21 10:30	
500-201166-3	MW-9	Water	06/17/21 13:40	06/19/21 10:30	
500-201166-4	MW-10	Water	06/17/21 14:10	06/19/21 10:30	
500-201166-5	MW-11	Water	06/17/21 10:00	06/19/21 10:30	
500-201166-6	MW-13	Water	06/17/21 09:15	06/19/21 10:30	
500-201166-7	MW-14	Water	06/17/21 11:00	06/19/21 10:30	
500-201166-8	MW-15A	Water	06/17/21 11:30	06/19/21 10:30	
500-201166-9	MW-15B	Water	06/17/21 12:00	06/19/21 10:30	
500-201166-10	MW-15C	Water	06/17/21 11:45	06/19/21 10:30	
500-201166-11	MW-16	Water	06/17/21 12:40	06/19/21 10:30	
500-201166-12	MW-116	Water	06/17/21 00:00	06/19/21 10:30	
500-201166-13	Trip Blank	Water	06/17/21 00:00	06/19/21 10:30	

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-6

Date Collected: 06/17/21 13:30
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			06/30/21 19:19	1
Benzene	<0.15		0.50	0.15	ug/L			06/30/21 19:19	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 19:19	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 19:19	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 19:19	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 19:19	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 19:19	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 19:19	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/30/21 19:19	1
Chloroethane	<0.51	^c	1.0	0.51	ug/L			06/30/21 19:19	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 19:19	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 19:19	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 19:19	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 19:19	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 19:19	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 19:19	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 19:19	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 19:19	1
Dichlorodifluoromethane	<0.67	^c	3.0	0.67	ug/L			06/30/21 19:19	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/30/21 19:19	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 19:19	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 19:19	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 19:19	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 19:19	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/30/21 19:19	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 19:19	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/30/21 19:19	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 19:19	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 19:19	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 19:19	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 19:19	1
Methyl bromide	<0.80		3.0	0.80	ug/L			06/30/21 19:19	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 19:19	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 19:19	1
Methylene Chloride	**2.5**	**J**	5.0	1.6	ug/L			06/30/21 19:19	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 19:19	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/30/21 19:19	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/30/21 19:19	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 19:19	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 19:19	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 19:19	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/30/21 19:19	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/30/21 19:19	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 19:19	1
Styrene	<0.39		1.0	0.39	ug/L			06/30/21 19:19	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 19:19	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 19:19	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 19:19	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			06/30/21 19:19	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-6
Date Collected: 06/17/21 13:30
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			06/30/21 19:19	1
Toluene	<0.15		0.50	0.15	ug/L			06/30/21 19:19	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 19:19	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 19:19	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 19:19	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 19:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 19:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 19:19	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			06/30/21 19:19	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/30/21 19:19	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 19:19	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 19:19	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/30/21 19:19	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 19:19	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/30/21 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*06/30/21 19:19*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*06/30/21 19:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*06/30/21 19:19*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*06/30/21 19:19*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/25/21 21:33	1
Manganese	**0.0029**	**J**	0.010	0.0023	mg/L		06/25/21 08:23	06/25/21 21:33	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**304**		0.91	0.46	mg/L		06/25/21 08:23	06/28/21 08:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**163**		5.0	3.7	mg/L			06/30/21 18:39	1
Chloride	**30.9**		2.0	1.0	mg/L			07/05/21 16:10	1
Chemical Oxygen Demand	**52.5**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**109.44**				ft			06/17/21 13:30	1
Field Color	**Y**				NONE			06/17/21 13:30	1
Field Conductivity	**615**				umhos/cm			06/17/21 13:30	1
Field Odor	**N**				NONE			06/17/21 13:30	1
Field pH	**7.13**				SU			06/17/21 13:30	1
Field Temperature	**21.6**				Degrees C			06/17/21 13:30	1
Field Turbidity	**Y**				NONE			06/17/21 13:30	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-8
Date Collected: 06/17/21 13:10
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			06/30/21 19:47	1
Benzene	<0.15		0.50	0.15	ug/L			06/30/21 19:47	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 19:47	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 19:47	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 19:47	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 19:47	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 19:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 19:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/30/21 19:47	1
Chloroethane	<0.51	^c	1.0	0.51	ug/L			06/30/21 19:47	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 19:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 19:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 19:47	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 19:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 19:47	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 19:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 19:47	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 19:47	1
Dichlorodifluoromethane	<0.67	^c	3.0	0.67	ug/L			06/30/21 19:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/30/21 19:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 19:47	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 19:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 19:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 19:47	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/30/21 19:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 19:47	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/30/21 19:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 19:47	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 19:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 19:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 19:47	1
Methyl bromide	<0.80		3.0	0.80	ug/L			06/30/21 19:47	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 19:47	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 19:47	1
Methylene Chloride	**2.4**	**J**	5.0	1.6	ug/L			06/30/21 19:47	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 19:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/30/21 19:47	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/30/21 19:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 19:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 19:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 19:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/30/21 19:47	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/30/21 19:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 19:47	1
Styrene	<0.39		1.0	0.39	ug/L			06/30/21 19:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 19:47	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 19:47	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 19:47	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			06/30/21 19:47	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-8

Date Collected: 06/17/21 13:10
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			06/30/21 19:47	1
Toluene	<0.15		0.50	0.15	ug/L			06/30/21 19:47	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 19:47	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 19:47	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 19:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 19:47	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 19:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 19:47	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			06/30/21 19:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/30/21 19:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 19:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 19:47	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/30/21 19:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 19:47	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/30/21 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*06/30/21 19:47*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*06/30/21 19:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*		*06/30/21 19:47*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*06/30/21 19:47*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/25/21 22:18	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/25/21 08:23	06/25/21 22:18	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**270**		0.91	0.46	mg/L		06/25/21 08:23	06/28/21 08:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**200**		5.0	3.7	mg/L			06/30/21 18:46	1
Chloride	**21.5**		2.0	1.0	mg/L			07/05/21 16:10	1
Chemical Oxygen Demand	**7.1**	**J**	10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:06	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**102.34**				ft			06/17/21 13:10	1
Field Color	**Y**				NONE			06/17/21 13:10	1
Field Conductivity	**512**				umhos/cm			06/17/21 13:10	1
Field Odor	**N**				NONE			06/17/21 13:10	1
Field pH	**7.51**				SU			06/17/21 13:10	1
Field Temperature	**22.1**				Degrees C			06/17/21 13:10	1
Field Turbidity	**Y**				NONE			06/17/21 13:10	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-9
Date Collected: 06/17/21 13:40
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			06/30/21 20:14	1
Benzene	<0.15		0.50	0.15	ug/L			06/30/21 20:14	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 20:14	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 20:14	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 20:14	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 20:14	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 20:14	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 20:14	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/30/21 20:14	1
Chloroethane	<0.51	^c	1.0	0.51	ug/L			06/30/21 20:14	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 20:14	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 20:14	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 20:14	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 20:14	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 20:14	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 20:14	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 20:14	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 20:14	1
Dichlorodifluoromethane	<0.67	^c	3.0	0.67	ug/L			06/30/21 20:14	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/30/21 20:14	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 20:14	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 20:14	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 20:14	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 20:14	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/30/21 20:14	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 20:14	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/30/21 20:14	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 20:14	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 20:14	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 20:14	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 20:14	1
Methyl bromide	<0.80		3.0	0.80	ug/L			06/30/21 20:14	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 20:14	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 20:14	1
Methylene Chloride	**2.5**	**J**	5.0	1.6	ug/L			06/30/21 20:14	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 20:14	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/30/21 20:14	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/30/21 20:14	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 20:14	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 20:14	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 20:14	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/30/21 20:14	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/30/21 20:14	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 20:14	1
Styrene	<0.39		1.0	0.39	ug/L			06/30/21 20:14	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 20:14	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 20:14	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 20:14	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			06/30/21 20:14	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-9

Date Collected: 06/17/21 13:40
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-3

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			06/30/21 20:14	1
Toluene	<0.15		0.50	0.15	ug/L			06/30/21 20:14	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 20:14	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 20:14	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 20:14	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 20:14	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 20:14	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 20:14	1
Trichloroethylene	**1.5**		0.50	0.16	ug/L			06/30/21 20:14	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/30/21 20:14	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 20:14	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 20:14	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/30/21 20:14	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 20:14	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/30/21 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*06/30/21 20:14*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*06/30/21 20:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*06/30/21 20:14*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*06/30/21 20:14*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/25/21 22:21	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/25/21 08:23	06/25/21 22:21	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**261**		0.91	0.46	mg/L		06/25/21 08:23	06/28/21 08:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**207**		5.0	3.7	mg/L			06/30/21 18:53	1
Chloride	**13.7**		2.0	1.0	mg/L			07/05/21 16:11	1
Chemical Oxygen Demand	**15.7**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:07	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**106.46**				ft			06/17/21 13:40	1
Field Color	**N**				NONE			06/17/21 13:40	1
Field Conductivity	**488**				umhos/cm			06/17/21 13:40	1
Field Odor	**N**				NONE			06/17/21 13:40	1
Field pH	**7.42**				SU			06/17/21 13:40	1
Field Temperature	**21.7**				Degrees C			06/17/21 13:40	1
Field Turbidity	**N**				NONE			06/17/21 13:40	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-10
Date Collected: 06/17/21 14:10
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			06/30/21 20:43	1
Benzene	<0.15		0.50	0.15	ug/L			06/30/21 20:43	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 20:43	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 20:43	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 20:43	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 20:43	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 20:43	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 20:43	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/30/21 20:43	1
Chloroethane	<0.51	^c	1.0	0.51	ug/L			06/30/21 20:43	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 20:43	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 20:43	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 20:43	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 20:43	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 20:43	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 20:43	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 20:43	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 20:43	1
Dichlorodifluoromethane	**0.80**	**J ^c**	3.0	0.67	ug/L			06/30/21 20:43	1
1,1-Dichloroethane	**0.59**	**J**	1.0	0.41	ug/L			06/30/21 20:43	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 20:43	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 20:43	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 20:43	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 20:43	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/30/21 20:43	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 20:43	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/30/21 20:43	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 20:43	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 20:43	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 20:43	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 20:43	1
Methyl bromide	<0.80		3.0	0.80	ug/L			06/30/21 20:43	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 20:43	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 20:43	1
Methylene Chloride	**2.6**	**J**	5.0	1.6	ug/L			06/30/21 20:43	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 20:43	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/30/21 20:43	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/30/21 20:43	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 20:43	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 20:43	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 20:43	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/30/21 20:43	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/30/21 20:43	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 20:43	1
Styrene	<0.39		1.0	0.39	ug/L			06/30/21 20:43	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 20:43	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 20:43	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 20:43	1
Tetrachloroethylene	**0.79**	**J**	1.0	0.37	ug/L			06/30/21 20:43	1

Client Sample ID: MW-10
Date Collected: 06/17/21 14:10
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			06/30/21 20:43	1
Toluene	<0.15		0.50	0.15	ug/L			06/30/21 20:43	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 20:43	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 20:43	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 20:43	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 20:43	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 20:43	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 20:43	1
Trichloroethylene	**1.9**		0.50	0.16	ug/L			06/30/21 20:43	1
Trichlorofluoromethane	**1.7**		1.0	0.43	ug/L			06/30/21 20:43	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 20:43	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 20:43	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/30/21 20:43	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 20:43	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/30/21 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*06/30/21 20:43*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*06/30/21 20:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*06/30/21 20:43*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*06/30/21 20:43*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/25/21 22:24	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/25/21 08:23	06/25/21 22:24	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**262**		0.91	0.46	mg/L		06/25/21 08:23	06/28/21 08:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**208**		5.0	3.7	mg/L			06/30/21 19:01	1
Chloride	**11.1**		2.0	1.0	mg/L			07/05/21 16:11	1
Chemical Oxygen Demand	**18.7**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:02	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**107.38**				ft			06/17/21 14:10	1
Field Color	**N**				NONE			06/17/21 14:10	1
Field Conductivity	**488**				umhos/cm			06/17/21 14:10	1
Field Odor	**N**				NONE			06/17/21 14:10	1
Field pH	**7.50**				SU			06/17/21 14:10	1
Field Temperature	**21.9**				Degrees C			06/17/21 14:10	1
Field Turbidity	**N**				NONE			06/17/21 14:10	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-11
Date Collected: 06/17/21 10:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 13:05	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 13:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 13:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 13:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 13:05	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 13:05	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 13:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 13:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 13:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 13:05	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 13:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 13:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 13:05	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 13:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 13:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 13:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 13:05	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 13:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 13:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 13:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 13:05	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 13:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 13:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 13:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 13:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 13:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 13:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 13:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 13:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 13:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 13:05	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 13:05	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 13:05	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 13:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 13:05	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 13:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 13:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 13:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 13:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 13:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 13:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 13:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 13:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 13:05	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 13:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 13:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 13:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 13:05	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 13:05	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-11
Date Collected: 06/17/21 10:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 13:05	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 13:05	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 13:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 13:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 13:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 13:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 13:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 13:05	1
Trichloroethylene	**0.93**		0.50	0.16	ug/L			07/01/21 13:05	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 13:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 13:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 13:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 13:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 13:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*		*07/01/21 13:05*	*1*
Dibromofluoromethane	*111*		*75 - 120*		*07/01/21 13:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*		*07/01/21 13:05*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*07/01/21 13:05*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.13**	**J B ^**	0.20	0.082	mg/L		06/25/21 08:23	06/25/21 22:28	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/25/21 08:23	06/25/21 22:28	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**237**		0.91	0.46	mg/L		06/25/21 08:23	06/28/21 08:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**195**		5.0	3.7	mg/L			06/30/21 19:15	1
Chloride	**10.4**		2.0	1.0	mg/L			07/05/21 16:11	1
Chemical Oxygen Demand	**13.1**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:09	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**130.21**				ft			06/17/21 10:00	1
Field Color	**N**				NONE			06/17/21 10:00	1
Field Conductivity	**452**				umhos/cm			06/17/21 10:00	1
Field Odor	**N**				NONE			06/17/21 10:00	1
Field pH	**7.72**				SU			06/17/21 10:00	1
Field Temperature	**19.9**				Degrees C			06/17/21 10:00	1
Field Turbidity	**N**				NONE			06/17/21 10:00	1
Groundwater Elevation (ft MSL)	**903.95**				ft			06/17/21 10:00	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-13
Date Collected: 06/17/21 09:15
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 13:33	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 13:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 13:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 13:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 13:33	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 13:33	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 13:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 13:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 13:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 13:33	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 13:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 13:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 13:33	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 13:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 13:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 13:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 13:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 13:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 13:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 13:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 13:33	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 13:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 13:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 13:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 13:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 13:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 13:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 13:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 13:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 13:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 13:33	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 13:33	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 13:33	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 13:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 13:33	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 13:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 13:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 13:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 13:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 13:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 13:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 13:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 13:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 13:33	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 13:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 13:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 13:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 13:33	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 13:33	1

Client Sample ID: MW-13
Date Collected: 06/17/21 09:15
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-6
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 13:33	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 13:33	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 13:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 13:33	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 13:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 13:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 13:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 13:33	1
Trichloroethylene	**6.8**		0.50	0.16	ug/L			07/01/21 13:33	1
Trichlorofluoromethane	**0.91**	**J ***	1.0	0.43	ug/L			07/01/21 13:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 13:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 13:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 13:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 13:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*07/01/21 13:33*	*1*
Dibromofluoromethane	*114*		*75 - 120*		*07/01/21 13:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*07/01/21 13:33*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*07/01/21 13:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		1.6	0.19	ug/L		06/21/21 07:12	06/21/21 21:28	1
1,2-Dichlorobenzene	<0.19		1.6	0.19	ug/L		06/21/21 07:12	06/21/21 21:28	1
1,3-Dichlorobenzene	<0.16		1.6	0.16	ug/L		06/21/21 07:12	06/21/21 21:28	1
1,4-Dichlorobenzene	<0.16		1.6	0.16	ug/L		06/21/21 07:12	06/21/21 21:28	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		06/21/21 07:12	06/21/21 21:28	1
2,2'-oxybis[1-chloropropane]	<0.30		1.6	0.30	ug/L		06/21/21 07:12	06/21/21 21:28	1
2,4,5-Trichlorophenol	<2.0		7.9	2.0	ug/L		06/21/21 07:12	06/21/21 21:28	1
2,4,6-Trichlorophenol	<0.56		3.9	0.56	ug/L		06/21/21 07:12	06/21/21 21:28	1
2,4-Dichlorophenol	<2.0		7.9	2.0	ug/L		06/21/21 07:12	06/21/21 21:28	1
2,4-Dimethylphenol	<1.4		7.9	1.4	ug/L		06/21/21 07:12	06/21/21 21:28	1
2,4-Dinitrophenol	<6.8		16	6.8	ug/L		06/21/21 07:12	06/21/21 21:28	1
2,4-Dinitrotoluene	<0.19		0.79	0.19	ug/L		06/21/21 07:12	06/21/21 21:28	1
2,6-Dinitrotoluene	<0.058		0.79	0.058	ug/L		06/21/21 07:12	06/21/21 21:28	1
2-Chloronaphthalene	<0.18		1.6	0.18	ug/L		06/21/21 07:12	06/21/21 21:28	1
2-Chlorophenol	<0.44		3.9	0.44	ug/L		06/21/21 07:12	06/21/21 21:28	1
2-Methylnaphthalene	<0.051		1.6	0.051	ug/L		06/21/21 07:12	06/21/21 21:28	1
2-Methylphenol	<0.24		1.6	0.24	ug/L		06/21/21 07:12	06/21/21 21:28	1
2-Nitroaniline	<1.0		3.9	1.0	ug/L		06/21/21 07:12	06/21/21 21:28	1
2-Nitrophenol	<2.0		7.9	2.0	ug/L		06/21/21 07:12	06/21/21 21:28	1
3 & 4 Methylphenol	<0.35		1.6	0.35	ug/L		06/21/21 07:12	06/21/21 21:28	1
3,3'-Dichlorobenzidine	<1.3		3.9	1.3	ug/L		06/21/21 07:12	06/21/21 21:28	1
3-Nitroaniline	<1.4		7.9	1.4	ug/L		06/21/21 07:12	06/21/21 21:28	1
4,6-Dinitro-2-methylphenol	<4.6		16	4.6	ug/L		06/21/21 07:12	06/21/21 21:28	1
4-Bromophenyl phenyl ether	<0.42		3.9	0.42	ug/L		06/21/21 07:12	06/21/21 21:28	1
4-Chloro-3-methylphenol	<1.8		7.9	1.8	ug/L		06/21/21 07:12	06/21/21 21:28	1
4-Chloroaniline	<1.6		7.9	1.6	ug/L		06/21/21 07:12	06/21/21 21:28	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-13
Date Collected: 06/17/21 09:15
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	<0.50		3.9	0.50	ug/L		06/21/21 07:12	06/21/21 21:28	1
4-Nitroaniline	<1.3		7.9	1.3	ug/L		06/21/21 07:12	06/21/21 21:28	1
4-Nitrophenol	<5.8		16	5.8	ug/L		06/21/21 07:12	06/21/21 21:28	1
Acenaphthene	<0.24		0.79	0.24	ug/L		06/21/21 07:12	06/21/21 21:28	1
Acenaphthylene	<0.21		0.79	0.21	ug/L		06/21/21 07:12	06/21/21 21:28	1
Anthracene	<0.26		0.79	0.26	ug/L		06/21/21 07:12	06/21/21 21:28	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		06/21/21 07:12	06/21/21 21:28	1
Benzo[a]pyrene	<0.078		0.16	0.078	ug/L		06/21/21 07:12	06/21/21 21:28	1
Benzo[b]fluoranthene	<0.063		0.16	0.063	ug/L		06/21/21 07:12	06/21/21 21:28	1
Benzo[g,h,i]perylene	<0.29		0.79	0.29	ug/L		06/21/21 07:12	06/21/21 21:28	1
Benzo[k]fluoranthene	<0.050		0.16	0.050	ug/L		06/21/21 07:12	06/21/21 21:28	1
Benzoic acid	<4.5		16	4.5	ug/L		06/21/21 07:12	06/21/21 21:28	1
Benzyl alcohol	<4.7		16	4.7	ug/L		06/21/21 07:12	06/21/21 21:28	1
Bis(2-chloroethoxy)methane	<0.22		1.6	0.22	ug/L		06/21/21 07:12	06/21/21 21:28	1
Bis(2-chloroethyl)ether	<0.23		1.6	0.23	ug/L		06/21/21 07:12	06/21/21 21:28	1
Bis(2-ethylhexyl) phthalate	**1.4**	**J**	7.9	1.3	ug/L		06/21/21 07:12	06/21/21 21:28	1
Butyl benzyl phthalate	<0.38	^c	1.6	0.38	ug/L		06/21/21 07:12	06/21/21 21:28	1
Carbazole	<0.28	^c	3.9	0.28	ug/L		06/21/21 07:12	06/21/21 21:28	1
Chrysene	<0.054		0.16	0.054	ug/L		06/21/21 07:12	06/21/21 21:28	1
Dibenz(a,h)anthracene	<0.040		0.24	0.040	ug/L		06/21/21 07:12	06/21/21 21:28	1
Dibenzofuran	<0.21		1.6	0.21	ug/L		06/21/21 07:12	06/21/21 21:28	1
Diethyl phthalate	<0.28		3.9	0.28	ug/L		06/21/21 07:12	06/21/21 21:28	1
Dimethyl phthalate	<0.25		3.9	0.25	ug/L		06/21/21 07:12	06/21/21 21:28	1
Di-n-butyl phthalate	<0.57		3.9	0.57	ug/L		06/21/21 07:12	06/21/21 21:28	1
Di-n-octyl phthalate	<0.83		7.9	0.83	ug/L		06/21/21 07:12	06/21/21 21:28	1
Fluoranthene	<0.36		0.79	0.36	ug/L		06/21/21 07:12	06/21/21 21:28	1
Fluorene	<0.19		0.79	0.19	ug/L		06/21/21 07:12	06/21/21 21:28	1
Hexachlorobenzene	<0.062	^c	0.39	0.062	ug/L		06/21/21 07:12	06/21/21 21:28	1
Hexachlorobutadiene	<0.40		3.9	0.40	ug/L		06/21/21 07:12	06/21/21 21:28	1
Hexachlorocyclopentadiene	<5.0	^c	16	5.0	ug/L		06/21/21 07:12	06/21/21 21:28	1
Hexachloroethane	<0.47		3.9	0.47	ug/L		06/21/21 07:12	06/21/21 21:28	1
Indeno[1,2,3-cd]pyrene	<0.059		0.16	0.059	ug/L		06/21/21 07:12	06/21/21 21:28	1
Isophorone	<0.29		1.6	0.29	ug/L		06/21/21 07:12	06/21/21 21:28	1
Naphthalene	<0.24		0.79	0.24	ug/L		06/21/21 07:12	06/21/21 21:28	1
Nitrobenzene	<0.35		0.79	0.35	ug/L		06/21/21 07:12	06/21/21 21:28	1
N-Nitrosodi-n-propylamine	<0.12		0.39	0.12	ug/L		06/21/21 07:12	06/21/21 21:28	1
N-Nitrosodiphenylamine	<0.29		1.6	0.29	ug/L		06/21/21 07:12	06/21/21 21:28	1
Pentachlorophenol	<3.1	^c	16	3.1	ug/L		06/21/21 07:12	06/21/21 21:28	1
Phenanthrene	<0.24		0.79	0.24	ug/L		06/21/21 07:12	06/21/21 21:28	1
Phenol	<0.53		3.9	0.53	ug/L		06/21/21 07:12	06/21/21 21:28	1
Pyrene	<0.34		0.79	0.34	ug/L		06/21/21 07:12	06/21/21 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*62*	*^c*	*40 - 145*	*06/21/21 07:12*	*06/21/21 21:28*	*1*
2-Fluorobiphenyl	*91*		*34 - 110*	*06/21/21 07:12*	*06/21/21 21:28*	*1*
2-Fluorophenol (Surr)	*56*		*27 - 110*	*06/21/21 07:12*	*06/21/21 21:28*	*1*
Nitrobenzene-d5 (Surr)	*89*		*36 - 120*	*06/21/21 07:12*	*06/21/21 21:28*	*1*
Phenol-d5 (Surr)	*40*		*20 - 110*	*06/21/21 07:12*	*06/21/21 21:28*	*1*
Terphenyl-d14 (Surr)	*134*		*40 - 145*	*06/21/21 07:12*	*06/21/21 21:28*	*1*

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-13

Date Collected: 06/17/21 09:15
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-6

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/29/21 15:23	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/25/21 08:23	06/29/21 15:23	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**252**		0.91	0.46	mg/L		06/25/21 08:23	06/30/21 08:54	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**219**		5.0	3.7	mg/L			06/30/21 19:26	1
Chloride	**14.9**		2.0	1.0	mg/L			07/05/21 16:11	1
Chemical Oxygen Demand	<6.0		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:10	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**110.06**				ft			06/17/21 09:15	1
Field Color	**N**				NONE			06/17/21 09:15	1
Field Conductivity	**514**				umhos/cm			06/17/21 09:15	1
Field Odor	**N**				NONE			06/17/21 09:15	1
Field pH	**7.61**				SU			06/17/21 09:15	1
Field Temperature	**18.1**				Degrees C			06/17/21 09:15	1
Field Turbidity	**Y**				NONE			06/17/21 09:15	1
Groundwater Elevation (ft MSL)	**901.79**				ft			06/17/21 09:15	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-14
Date Collected: 06/17/21 11:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.6	J	10	1.7	ug/L			07/01/21 14:01	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 14:01	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:01	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 14:01	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 14:01	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 14:01	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 14:01	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 14:01	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:01	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 14:01	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 14:01	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 14:01	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 14:01	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 14:01	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 14:01	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 14:01	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 14:01	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 14:01	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 14:01	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 14:01	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 14:01	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 14:01	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 14:01	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 14:01	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 14:01	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 14:01	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 14:01	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 14:01	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:01	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 14:01	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:01	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 14:01	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 14:01	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 14:01	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 14:01	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 14:01	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 14:01	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 14:01	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:01	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 14:01	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 14:01	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:01	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 14:01	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:01	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 14:01	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:01	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 14:01	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 14:01	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 14:01	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-14
Date Collected: 06/17/21 11:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 14:01	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 14:01	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 14:01	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 14:01	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 14:01	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 14:01	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 14:01	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 14:01	1
Trichloroethylene	**0.19**	**J**	0.50	0.16	ug/L			07/01/21 14:01	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 14:01	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 14:01	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:01	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 14:01	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 14:01	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*		*07/01/21 14:01*	*1*
Dibromofluoromethane	*112*		*75 - 120*		*07/01/21 14:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 126*		*07/01/21 14:01*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*07/01/21 14:01*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/29/21 15:26	1
Manganese	**0.010**		0.010	0.0023	mg/L		06/25/21 08:23	06/29/21 15:26	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**277**		0.91	0.46	mg/L		06/25/21 08:23	06/30/21 08:54	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**231**		5.0	3.7	mg/L			06/30/21 19:33	1
Chloride	**31.3**		2.0	1.0	mg/L			07/05/21 16:12	1
Chemical Oxygen Demand	**8.1**	**J**	10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:11	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**69.49**				ft			06/17/21 11:00	1
Field Color	**Y**				NONE			06/17/21 11:00	1
Field Conductivity	**608**				umhos/cm			06/17/21 11:00	1
Field Odor	**N**				NONE			06/17/21 11:00	1
Field pH	**7.24**				SU			06/17/21 11:00	1
Field Temperature	**19.5**				Degrees C			06/17/21 11:00	1
Field Turbidity	**Y**				NONE			06/17/21 11:00	1
Groundwater Elevation (ft MSL)	**901.26**				ft			06/17/21 11:00	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-15A

Date Collected: 06/17/21 11:30
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.1	J	10	1.7	ug/L			07/01/21 14:29	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 14:29	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:29	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 14:29	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 14:29	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 14:29	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 14:29	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 14:29	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:29	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 14:29	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 14:29	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 14:29	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 14:29	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 14:29	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 14:29	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 14:29	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 14:29	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 14:29	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 14:29	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 14:29	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 14:29	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 14:29	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 14:29	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 14:29	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 14:29	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 14:29	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 14:29	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 14:29	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:29	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 14:29	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:29	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 14:29	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 14:29	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 14:29	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 14:29	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 14:29	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 14:29	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 14:29	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:29	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 14:29	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 14:29	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:29	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 14:29	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:29	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 14:29	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:29	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 14:29	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 14:29	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 14:29	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-15A

Date Collected: 06/17/21 11:30
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-8

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 14:29	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 14:29	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 14:29	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 14:29	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 14:29	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 14:29	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 14:29	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 14:29	1
Trichloroethylene	**0.64**		0.50	0.16	ug/L			07/01/21 14:29	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 14:29	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 14:29	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:29	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 14:29	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 14:29	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*		*07/01/21 14:29*	*1*
Dibromofluoromethane	*114*		*75 - 120*		*07/01/21 14:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*07/01/21 14:29*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*07/01/21 14:29*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/29/21 15:30	1
Manganese	**0.0032**	**J**	0.010	0.0023	mg/L		06/25/21 08:23	06/29/21 15:30	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**256**		0.91	0.46	mg/L		06/25/21 08:23	06/30/21 08:54	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**226**		5.0	3.7	mg/L			06/30/21 19:41	1
Chloride	**16.2**		2.0	1.0	mg/L			07/05/21 16:12	1
Chemical Oxygen Demand	**16.2**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**70.33**				ft			06/17/21 11:30	1
Field Color	**Y**				NONE			06/17/21 11:30	1
Field Conductivity	**521**				umhos/cm			06/17/21 11:30	1
Field Odor	**N**				NONE			06/17/21 11:30	1
Field pH	**7.88**				SU			06/17/21 11:30	1
Field Temperature	**17.5**				Degrees C			06/17/21 11:30	1
Field Turbidity	**Y**				NONE			06/17/21 11:30	1
Groundwater Elevation (ft MSL)	**853.96**				ft			06/17/21 11:30	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-15B
Date Collected: 06/17/21 12:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 14:57	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 14:57	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:57	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 14:57	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 14:57	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 14:57	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 14:57	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 14:57	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:57	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 14:57	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 14:57	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 14:57	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 14:57	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 14:57	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 14:57	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 14:57	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 14:57	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 14:57	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 14:57	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 14:57	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 14:57	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 14:57	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 14:57	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 14:57	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 14:57	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 14:57	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 14:57	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 14:57	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:57	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 14:57	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:57	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 14:57	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 14:57	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 14:57	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 14:57	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 14:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 14:57	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 14:57	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 14:57	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 14:57	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 14:57	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:57	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 14:57	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:57	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 14:57	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 14:57	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 14:57	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 14:57	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 14:57	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-15B

Date Collected: 06/17/21 12:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-9

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 14:57	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 14:57	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 14:57	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 14:57	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 14:57	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 14:57	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 14:57	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 14:57	1
Trichloroethylene	**1.4**		0.50	0.16	ug/L			07/01/21 14:57	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 14:57	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 14:57	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 14:57	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 14:57	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 14:57	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*07/01/21 14:57*	*1*
Dibromofluoromethane	*110*		*75 - 120*		*07/01/21 14:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*07/01/21 14:57*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*07/01/21 14:57*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/29/21 15:43	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/25/21 08:23	06/29/21 15:43	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**263**		0.91	0.46	mg/L		06/25/21 08:23	06/30/21 08:54	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**217**		5.0	3.7	mg/L			06/30/21 19:49	1
Chloride	**21.0**		2.0	1.0	mg/L			07/05/21 16:12	1
Chemical Oxygen Demand	<6.0		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**70.55**				ft			06/17/21 12:00	1
Field Color	**N**				NONE			06/17/21 12:00	1
Field Conductivity	**542**				umhos/cm			06/17/21 12:00	1
Field Odor	**N**				NONE			06/17/21 12:00	1
Field pH	**7.70**				SU			06/17/21 12:00	1
Field Temperature	**17.9**				Degrees C			06/17/21 12:00	1
Field Turbidity	**N**				NONE			06/17/21 12:00	1
Groundwater Elevation (ft MSL)	**853.97**				ft			06/17/21 12:00	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-15C
Date Collected: 06/17/21 11:45
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 15:25	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 15:25	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 15:25	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 15:25	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 15:25	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 15:25	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 15:25	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 15:25	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 15:25	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 15:25	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 15:25	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 15:25	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 15:25	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 15:25	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 15:25	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 15:25	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 15:25	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 15:25	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 15:25	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 15:25	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 15:25	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 15:25	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 15:25	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 15:25	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 15:25	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 15:25	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 15:25	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 15:25	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 15:25	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 15:25	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 15:25	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 15:25	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 15:25	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 15:25	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 15:25	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 15:25	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 15:25	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 15:25	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 15:25	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 15:25	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 15:25	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 15:25	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 15:25	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 15:25	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 15:25	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 15:25	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 15:25	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 15:25	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 15:25	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-15C
Date Collected: 06/17/21 11:45
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-10
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 15:25	1
Toluene	**0.27**	**J**	0.50	0.15	ug/L			07/01/21 15:25	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 15:25	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 15:25	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 15:25	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 15:25	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 15:25	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 15:25	1
Trichloroethylene	**1.2**		0.50	0.16	ug/L			07/01/21 15:25	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 15:25	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 15:25	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 15:25	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 15:25	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 15:25	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*		*07/01/21 15:25*	*1*
Dibromofluoromethane	*113*		*75 - 120*		*07/01/21 15:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*07/01/21 15:25*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*07/01/21 15:25*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/29/21 15:46	1
Manganese	**0.0081**	**J**	0.010	0.0023	mg/L		06/25/21 08:23	06/29/21 15:46	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**248**		0.91	0.46	mg/L		06/25/21 08:23	06/30/21 08:54	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**228**		5.0	3.7	mg/L			06/30/21 19:56	1
Chloride	**18.0**		2.0	1.0	mg/L			07/05/21 16:12	1
Chemical Oxygen Demand	**11.6**		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**70.30**				ft			06/17/21 11:45	1
Field Color	**N**				NONE			06/17/21 11:45	1
Field Conductivity	**506**				umhos/cm			06/17/21 11:45	1
Field Odor	**N**				NONE			06/17/21 11:45	1
Field pH	**7.49**				SU			06/17/21 11:45	1
Field Temperature	**19.0**				Degrees C			06/17/21 11:45	1
Field Turbidity	**N**				NONE			06/17/21 11:45	1
Groundwater Elevation (ft MSL)	**854.36**				ft			06/17/21 11:45	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-16

Date Collected: 06/17/21 12:40
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 15:53	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 15:53	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 15:53	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 15:53	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 15:53	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 15:53	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 15:53	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 15:53	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 15:53	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 15:53	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 15:53	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 15:53	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 15:53	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 15:53	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 15:53	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 15:53	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 15:53	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 15:53	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 15:53	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 15:53	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 15:53	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 15:53	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 15:53	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 15:53	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 15:53	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 15:53	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 15:53	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 15:53	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 15:53	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 15:53	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 15:53	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 15:53	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 15:53	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 15:53	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 15:53	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 15:53	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 15:53	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 15:53	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 15:53	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 15:53	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 15:53	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 15:53	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 15:53	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 15:53	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 15:53	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 15:53	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 15:53	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 15:53	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 15:53	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-16
Date Collected: 06/17/21 12:40
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-11
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 15:53	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 15:53	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 15:53	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 15:53	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 15:53	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 15:53	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 15:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 15:53	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/01/21 15:53	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 15:53	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 15:53	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 15:53	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 15:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 15:53	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*		*07/01/21 15:53*	*1*
Dibromofluoromethane	*113*		*75 - 120*		*07/01/21 15:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 126*		*07/01/21 15:53*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*07/01/21 15:53*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.082		0.20	0.082	mg/L		06/25/21 08:23	06/29/21 15:49	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/25/21 08:23	06/29/21 15:49	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**256**		0.91	0.46	mg/L		06/25/21 08:23	06/30/21 08:54	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**228**		5.0	3.7	mg/L			06/30/21 20:03	1
Chloride	**6.0**		2.0	1.0	mg/L			07/05/21 16:12	1
Chemical Oxygen Demand	**7.6**	**J**	10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**59.33**				ft			06/17/21 12:40	1
Field Color	**N**				NONE			06/17/21 12:40	1
Field Conductivity	**499**				umhos/cm			06/17/21 12:40	1
Field Odor	**N**				NONE			06/17/21 12:40	1
Field pH	**7.33**				SU			06/17/21 12:40	1
Field Temperature	**24.7**				Degrees C			06/17/21 12:40	1
Field Turbidity	**N**				NONE			06/17/21 12:40	1
Groundwater Elevation (ft MSL)	**855.80**				ft			06/17/21 12:40	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-116

Date Collected: 06/17/21 00:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 16:20	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 16:20	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 16:20	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 16:20	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 16:20	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 16:20	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 16:20	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 16:20	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 16:20	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 16:20	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 16:20	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 16:20	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 16:20	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 16:20	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 16:20	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 16:20	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 16:20	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 16:20	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 16:20	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 16:20	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 16:20	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 16:20	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 16:20	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 16:20	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 16:20	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 16:20	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 16:20	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 16:20	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 16:20	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 16:20	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 16:20	1
Methyl bromide	<0.80	^c *	3.0	0.80	ug/L			07/01/21 16:20	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 16:20	1
Methylene bromide	<0.27	*	1.0	0.27	ug/L			07/01/21 16:20	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 16:20	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 16:20	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 16:20	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 16:20	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 16:20	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 16:20	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 16:20	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 16:20	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 16:20	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 16:20	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 16:20	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 16:20	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 16:20	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 16:20	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 16:20	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-116
Date Collected: 06/17/21 00:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-12
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 16:20	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 16:20	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 16:20	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 16:20	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 16:20	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 16:20	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 16:20	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 16:20	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/01/21 16:20	1
Trichlorofluoromethane	<0.43	*	1.0	0.43	ug/L			07/01/21 16:20	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 16:20	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 16:20	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 16:20	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 16:20	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*07/01/21 16:20*	*1*
Dibromofluoromethane	*114*		*75 - 120*		*07/01/21 16:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*07/01/21 16:20*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*07/01/21 16:20*	*1*

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: Trip Blank

Date Collected: 06/17/21 00:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.1**	**J**	10	1.7	ug/L			06/30/21 17:56	1
Benzene	<0.15		0.50	0.15	ug/L			06/30/21 17:56	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 17:56	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 17:56	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 17:56	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 17:56	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 17:56	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 17:56	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/30/21 17:56	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/30/21 17:56	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 17:56	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 17:56	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 17:56	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 17:56	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 17:56	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 17:56	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 17:56	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 17:56	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			06/30/21 17:56	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/30/21 17:56	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 17:56	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 17:56	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 17:56	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 17:56	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/30/21 17:56	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 17:56	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/30/21 17:56	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 17:56	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 17:56	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 17:56	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 17:56	1
Methyl bromide	<0.80	^c	3.0	0.80	ug/L			06/30/21 17:56	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 17:56	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 17:56	1
Methylene Chloride	**5.7**		5.0	1.6	ug/L			06/30/21 17:56	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 17:56	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/30/21 17:56	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/30/21 17:56	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 17:56	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 17:56	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 17:56	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/30/21 17:56	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/30/21 17:56	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 17:56	1
Styrene	<0.39		1.0	0.39	ug/L			06/30/21 17:56	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 17:56	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 17:56	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 17:56	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			06/30/21 17:56	1

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: Trip Blank

Date Collected: 06/17/21 00:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-13

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<1.9		10	1.9	ug/L			06/30/21 17:56	1
Toluene	<0.15		0.50	0.15	ug/L			06/30/21 17:56	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 17:56	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 17:56	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 17:56	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 17:56	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 17:56	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 17:56	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			06/30/21 17:56	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/30/21 17:56	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 17:56	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 17:56	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/30/21 17:56	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 17:56	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/30/21 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*06/30/21 17:56*	*1*
Dibromofluoromethane	*112*		*75 - 120*		*06/30/21 17:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*06/30/21 17:56*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*06/30/21 17:56*	*1*

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Reported value was between the limit of detection and the limit of quantitation.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

General Chemistry

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

QC Association Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

GC/MS VOA

Analysis Batch: 606874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Total/NA	Water	8260B	
500-201166-2	MW-8	Total/NA	Water	8260B	
500-201166-3	MW-9	Total/NA	Water	8260B	
500-201166-4	MW-10	Total/NA	Water	8260B	
MB 500-606874/6	Method Blank	Total/NA	Water	8260B	
LCS 500-606874/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 606957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-13	Trip Blank	Total/NA	Water	8260B	
MB 500-606957/6	Method Blank	Total/NA	Water	8260B	
LCS 500-606957/8	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 607193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-5	MW-11	Total/NA	Water	8260B	
500-201166-6	MW-13	Total/NA	Water	8260B	
500-201166-7	MW-14	Total/NA	Water	8260B	
500-201166-8	MW-15A	Total/NA	Water	8260B	
500-201166-9	MW-15B	Total/NA	Water	8260B	
500-201166-10	MW-15C	Total/NA	Water	8260B	
500-201166-11	MW-16	Total/NA	Water	8260B	
500-201166-12	MW-116	Total/NA	Water	8260B	
MB 500-607193/6	Method Blank	Total/NA	Water	8260B	
LCS 500-607193/4	Lab Control Sample	Total/NA	Water	8260B	
500-201166-12 MS	MW-116	Total/NA	Water	8260B	
500-201166-12 MSD	MW-116	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 605165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-6	MW-13	Total/NA	Water	3510C	
MB 500-605165/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-605165/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 605213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-605165/1-A	Method Blank	Total/NA	Water	8270D	605165
LCS 500-605165/2-A	Lab Control Sample	Total/NA	Water	8270D	605165

Analysis Batch: 605296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-6	MW-13	Total/NA	Water	8270D	605165

Metals

Prep Batch: 606188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Dissolved	Water	3010A	
500-201166-2	MW-8	Dissolved	Water	3010A	
500-201166-3	MW-9	Dissolved	Water	3010A	

Metals (Continued)

Prep Batch: 606188 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-4	MW-10	Dissolved	Water	3010A	
500-201166-5	MW-11	Dissolved	Water	3010A	
500-201166-6	MW-13	Dissolved	Water	3010A	
500-201166-7	MW-14	Dissolved	Water	3010A	
500-201166-8	MW-15A	Dissolved	Water	3010A	
500-201166-9	MW-15B	Dissolved	Water	3010A	
500-201166-10	MW-15C	Dissolved	Water	3010A	
500-201166-11	MW-16	Dissolved	Water	3010A	
MB 500-606188/1-A	Method Blank	Total/NA	Water	3010A	
LCS 500-606188/2-A	Lab Control Sample	Total/NA	Water	3010A	
500-201166-1 MS	MW-6	Dissolved	Water	3010A	
500-201166-1 MSD	MW-6	Dissolved	Water	3010A	
500-201166-1 DU	MW-6	Dissolved	Water	3010A	

Analysis Batch: 606407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Dissolved	Water	6010B	606188
500-201166-2	MW-8	Dissolved	Water	6010B	606188
500-201166-3	MW-9	Dissolved	Water	6010B	606188
500-201166-4	MW-10	Dissolved	Water	6010B	606188
500-201166-5	MW-11	Dissolved	Water	6010B	606188
MB 500-606188/1-A	Method Blank	Total/NA	Water	6010B	606188
LCS 500-606188/2-A	Lab Control Sample	Total/NA	Water	6010B	606188
500-201166-1 MS	MW-6	Dissolved	Water	6010B	606188
500-201166-1 MSD	MW-6	Dissolved	Water	6010B	606188
500-201166-1 DU	MW-6	Dissolved	Water	6010B	606188

Analysis Batch: 606472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Dissolved	Water	SM 2340B	606188
500-201166-2	MW-8	Dissolved	Water	SM 2340B	606188
500-201166-3	MW-9	Dissolved	Water	SM 2340B	606188
500-201166-4	MW-10	Dissolved	Water	SM 2340B	606188
500-201166-5	MW-11	Dissolved	Water	SM 2340B	606188

Analysis Batch: 606889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-6	MW-13	Dissolved	Water	6010B	606188
500-201166-7	MW-14	Dissolved	Water	6010B	606188
500-201166-8	MW-15A	Dissolved	Water	6010B	606188
500-201166-9	MW-15B	Dissolved	Water	6010B	606188
500-201166-10	MW-15C	Dissolved	Water	6010B	606188
500-201166-11	MW-16	Dissolved	Water	6010B	606188

Analysis Batch: 606952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-6	MW-13	Dissolved	Water	SM 2340B	606188
500-201166-7	MW-14	Dissolved	Water	SM 2340B	606188
500-201166-8	MW-15A	Dissolved	Water	SM 2340B	606188
500-201166-9	MW-15B	Dissolved	Water	SM 2340B	606188
500-201166-10	MW-15C	Dissolved	Water	SM 2340B	606188

Metals (Continued)

Analysis Batch: 606952 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-11	MW-16	Dissolved	Water	SM 2340B	606188

General Chemistry

Analysis Batch: 607165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Dissolved	Water	SM 2320B	
500-201166-2	MW-8	Dissolved	Water	SM 2320B	
500-201166-3	MW-9	Dissolved	Water	SM 2320B	
500-201166-4	MW-10	Dissolved	Water	SM 2320B	
500-201166-5	MW-11	Dissolved	Water	SM 2320B	
500-201166-6	MW-13	Dissolved	Water	SM 2320B	
500-201166-7	MW-14	Dissolved	Water	SM 2320B	
500-201166-8	MW-15A	Dissolved	Water	SM 2320B	
500-201166-9	MW-15B	Dissolved	Water	SM 2320B	
500-201166-10	MW-15C	Dissolved	Water	SM 2320B	
500-201166-11	MW-16	Dissolved	Water	SM 2320B	
MB 500-607165/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-607165/3	Lab Control Sample	Total/NA	Water	SM 2320B	
500-201166-4 DU	MW-10	Dissolved	Water	SM 2320B	

Prep Batch: 607399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Dissolved	Water	SM 5220	
500-201166-2	MW-8	Dissolved	Water	SM 5220	
500-201166-3	MW-9	Dissolved	Water	SM 5220	
500-201166-4	MW-10	Dissolved	Water	SM 5220	
500-201166-5	MW-11	Dissolved	Water	SM 5220	
500-201166-6	MW-13	Dissolved	Water	SM 5220	
500-201166-7	MW-14	Dissolved	Water	SM 5220	
500-201166-8	MW-15A	Dissolved	Water	SM 5220	
500-201166-9	MW-15B	Dissolved	Water	SM 5220	
500-201166-10	MW-15C	Dissolved	Water	SM 5220	
500-201166-11	MW-16	Dissolved	Water	SM 5220	
MB 500-607399/1-A	Method Blank	Total/NA	Water	SM 5220	
LCS 500-607399/2-A	Lab Control Sample	Total/NA	Water	SM 5220	
500-201166-4 MS	MW-10	Dissolved	Water	SM 5220	
500-201166-4 MSD	MW-10	Dissolved	Water	SM 5220	

Analysis Batch: 607527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Dissolved	Water	SM 5220C	607399
500-201166-2	MW-8	Dissolved	Water	SM 5220C	607399
500-201166-3	MW-9	Dissolved	Water	SM 5220C	607399
500-201166-4	MW-10	Dissolved	Water	SM 5220C	607399
500-201166-5	MW-11	Dissolved	Water	SM 5220C	607399
500-201166-6	MW-13	Dissolved	Water	SM 5220C	607399
500-201166-7	MW-14	Dissolved	Water	SM 5220C	607399
500-201166-8	MW-15A	Dissolved	Water	SM 5220C	607399
500-201166-9	MW-15B	Dissolved	Water	SM 5220C	607399
500-201166-10	MW-15C	Dissolved	Water	SM 5220C	607399

General Chemistry (Continued)

Analysis Batch: 607527 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-11	MW-16	Dissolved	Water	SM 5220C	607399
MB 500-607399/1-A	Method Blank	Total/NA	Water	SM 5220C	607399
LCS 500-607399/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	607399
500-201166-4 MS	MW-10	Dissolved	Water	SM 5220C	607399
500-201166-4 MSD	MW-10	Dissolved	Water	SM 5220C	607399

Analysis Batch: 607925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Dissolved	Water	SM 4500 Cl- E	
500-201166-2	MW-8	Dissolved	Water	SM 4500 Cl- E	
500-201166-3	MW-9	Dissolved	Water	SM 4500 Cl- E	
500-201166-4	MW-10	Dissolved	Water	SM 4500 Cl- E	
500-201166-5	MW-11	Dissolved	Water	SM 4500 Cl- E	
500-201166-6	MW-13	Dissolved	Water	SM 4500 Cl- E	
500-201166-7	MW-14	Dissolved	Water	SM 4500 Cl- E	
500-201166-8	MW-15A	Dissolved	Water	SM 4500 Cl- E	
500-201166-9	MW-15B	Dissolved	Water	SM 4500 Cl- E	
500-201166-10	MW-15C	Dissolved	Water	SM 4500 Cl- E	
500-201166-11	MW-16	Dissolved	Water	SM 4500 Cl- E	
MB 500-607925/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 500-607925/39	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-607925/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 500-607925/40	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-201166-1 MS	MW-6	Dissolved	Water	SM 4500 Cl- E	
500-201166-1 MSD	MW-6	Dissolved	Water	SM 4500 Cl- E	

Field Service / Mobile Lab

Analysis Batch: 607488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-201166-1	MW-6	Total/NA	Water	Field Sampling	
500-201166-2	MW-8	Total/NA	Water	Field Sampling	
500-201166-3	MW-9	Total/NA	Water	Field Sampling	
500-201166-4	MW-10	Total/NA	Water	Field Sampling	
500-201166-5	MW-11	Total/NA	Water	Field Sampling	
500-201166-6	MW-13	Total/NA	Water	Field Sampling	
500-201166-7	MW-14	Total/NA	Water	Field Sampling	
500-201166-8	MW-15A	Total/NA	Water	Field Sampling	
500-201166-9	MW-15B	Total/NA	Water	Field Sampling	
500-201166-10	MW-15C	Total/NA	Water	Field Sampling	
500-201166-11	MW-16	Total/NA	Water	Field Sampling	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-201166-1	MW-6	100	97	118	94
500-201166-2	MW-8	99	97	116	95
500-201166-3	MW-9	99	97	119	94
500-201166-4	MW-10	99	97	119	93
500-201166-5	MW-11	87	111	116	96
500-201166-6	MW-13	89	114	118	95
500-201166-7	MW-14	88	112	117	95
500-201166-8	MW-15A	90	114	119	97
500-201166-9	MW-15B	89	110	118	96
500-201166-10	MW-15C	90	113	119	95
500-201166-11	MW-16	90	113	121	95
500-201166-12	MW-116	89	114	118	95
500-201166-12 MS	MW-116	87	110	114	97
500-201166-12 MSD	MW-116	90	109	114	97
500-201166-13	Trip Blank	89	112	118	97
LCS 500-606874/4	Lab Control Sample	93	95	107	100
LCS 500-606957/8	Lab Control Sample	82	108	114	96
LCS 500-607193/4	Lab Control Sample	84	110	114	96
MB 500-606874/6	Method Blank	100	95	112	94
MB 500-606957/6	Method Blank	85	110	116	96
MB 500-607193/6	Method Blank	86	109	116	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(40-145)	(34-110)	(27-110)	(36-120)	(20-110)	(40-145)
500-201166-6	MW-13	62 ^c	91	56	89	40	134
LCS 500-605165/2-A	Lab Control Sample	103	74	54	89	52	106
MB 500-605165/1-A	Method Blank	89	64	46	73	35	96

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-606874/6
Matrix: Water
Analysis Batch: 606874

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			06/30/21 11:51	1
Benzene	<0.15		0.50	0.15	ug/L			06/30/21 11:51	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 11:51	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 11:51	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 11:51	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 11:51	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 11:51	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/30/21 11:51	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 11:51	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 11:51	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 11:51	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 11:51	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 11:51	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 11:51	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 11:51	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			06/30/21 11:51	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/30/21 11:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 11:51	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/30/21 11:51	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 11:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/30/21 11:51	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 11:51	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 11:51	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 11:51	1
Methyl bromide	<0.80		3.0	0.80	ug/L			06/30/21 11:51	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 11:51	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 11:51	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/30/21 11:51	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 11:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/30/21 11:51	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 11:51	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 11:51	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 11:51	1
Styrene	<0.39		1.0	0.39	ug/L			06/30/21 11:51	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 11:51	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 11:51	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 11:51	1

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

Lab Sample ID: MB 500-606874/6
Matrix: Water
Analysis Batch: 606874

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			06/30/21 11:51	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			06/30/21 11:51	1
Toluene	<0.15		0.50	0.15	ug/L			06/30/21 11:51	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 11:51	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 11:51	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 11:51	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 11:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 11:51	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			06/30/21 11:51	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/30/21 11:51	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 11:51	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 11:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/30/21 11:51	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 11:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/30/21 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*06/30/21 11:51*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*06/30/21 11:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*		*06/30/21 11:51*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*06/30/21 11:51*	*1*

Lab Sample ID: LCS 500-606874/4
Matrix: Water
Analysis Batch: 606874

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	48.2		ug/L		96	40 - 143
Benzene	50.0	47.9		ug/L		96	70 - 120
Bromobenzene	50.0	38.2		ug/L		76	70 - 122
Bromochloromethane	50.0	43.9		ug/L		88	65 - 122
Bromodichloromethane	50.0	41.8		ug/L		84	69 - 120
Bromoform	50.0	29.5		ug/L		59	56 - 132
Carbon disulfide	50.0	50.2		ug/L		100	66 - 120
Carbon tetrachloride	50.0	52.4		ug/L		105	59 - 133
Chlorobenzene	50.0	46.6		ug/L		93	70 - 120
Chloroethane	50.0	66.2		ug/L		132	48 - 136
Chloroform	50.0	48.9		ug/L		98	70 - 120
2-Chlorotoluene	50.0	47.9		ug/L		96	70 - 125
4-Chlorotoluene	50.0	48.0		ug/L		96	68 - 124
cis-1,2-Dichloroethylene	50.0	46.4		ug/L		93	70 - 125
cis-1,3-Dichloropropene	50.0	41.0		ug/L		82	64 - 127
Dibromochloromethane	50.0	34.2		ug/L		68	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	31.9		ug/L		64	56 - 123
1,2-Dibromoethane	50.0	38.2		ug/L		76	70 - 125
Dichlorodifluoromethane	50.0	67.3		ug/L		135	40 - 159
1,1-Dichloroethane	50.0	50.8		ug/L		102	70 - 125

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

Lab Sample ID: LCS 500-606874/4
Matrix: Water
Analysis Batch: 606874

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	51.0		ug/L		102	68 - 127
1,1-Dichloroethylene	50.0	52.2		ug/L		104	67 - 122
1,2-Dichloropropane	50.0	48.6		ug/L		97	67 - 130
1,3-Dichloropropane	50.0	42.6		ug/L		85	62 - 136
2,2-Dichloropropane	50.0	50.5		ug/L		101	58 - 139
1,1-Dichloropropene	50.0	52.8		ug/L		106	70 - 121
Ethylbenzene	50.0	50.0		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	60.6		ug/L		121	51 - 150
Isopropylbenzene	50.0	48.5		ug/L		97	70 - 126
1,3-Dichlorobenzene	50.0	44.6		ug/L		89	70 - 125
Methyl bromide	50.0	59.4		ug/L		119	40 - 152
Methyl chloride	50.0	61.3		ug/L		123	56 - 152
Methylene bromide	50.0	44.3		ug/L		89	70 - 120
Methylene Chloride	50.0	46.0		ug/L		92	69 - 125
Methyl ethyl ketone (MEK)	50.0	44.2		ug/L		88	46 - 144
Methyl tert-butyl ether	50.0	54.7		ug/L		109	55 - 123
Naphthalene	50.0	41.3		ug/L		83	53 - 144
n-Butylbenzene	50.0	58.6		ug/L		117	68 - 125
N-Propylbenzene	50.0	50.3		ug/L		101	69 - 127
1,2-Dichlorobenzene	50.0	42.8		ug/L		86	70 - 125
1,4-Dichlorobenzene	50.0	44.0		ug/L		88	70 - 120
p-Isopropyltoluene	50.0	55.2		ug/L		110	70 - 125
sec-Butylbenzene	50.0	53.3		ug/L		107	70 - 123
Styrene	50.0	46.1		ug/L		92	70 - 120
tert-Butylbenzene	50.0	51.5		ug/L		103	70 - 121
1,1,1,2-Tetrachloroethane	50.0	45.6		ug/L		91	70 - 125
1,1,2,2-Tetrachloroethane	50.0	34.8		ug/L		70	62 - 140
Tetrachloroethylene	50.0	47.0		ug/L		94	70 - 128
Tetrahydrofuran	100	101		ug/L		101	59 - 139
Toluene	50.0	47.6		ug/L		95	70 - 125
1,2-trans-Dichloroethylene	50.0	49.7		ug/L		99	70 - 125
trans-1,3-Dichloropropene	50.0	39.1		ug/L		78	62 - 128
1,2,3-Trichlorobenzene	50.0	48.6		ug/L		97	51 - 145
1,2,4-Trichlorobenzene	50.0	47.8		ug/L		96	57 - 137
1,1,1-Trichloroethane	50.0	54.9		ug/L		110	70 - 125
1,1,2-Trichloroethane	50.0	39.6		ug/L		79	71 - 130
Trichloroethylene	50.0	46.0		ug/L		92	70 - 125
Trichlorofluoromethane	50.0	52.7		ug/L		105	55 - 128
1,2,3-Trichloropropane	50.0	36.8		ug/L		74	50 - 133
1,2,4-Trimethylbenzene	50.0	49.2		ug/L		98	70 - 123
1,3,5-Trimethylbenzene	50.0	50.1		ug/L		100	70 - 123
Vinyl chloride	50.0	54.6		ug/L		109	64 - 126
Xylenes, Total	100	108		ug/L		108	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*72 - 124*
Dibromofluoromethane	*95*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 126*

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

Lab Sample ID: LCS 500-606874/4
Matrix: Water
Analysis Batch: 606874

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		75 - 120

Lab Sample ID: MB 500-606957/6
Matrix: Water
Analysis Batch: 606957

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			06/30/21 13:17	1
Benzene	<0.15		0.50	0.15	ug/L			06/30/21 13:17	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/30/21 13:17	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/30/21 13:17	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/30/21 13:17	1
Bromoform	<0.48		1.0	0.48	ug/L			06/30/21 13:17	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			06/30/21 13:17	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/30/21 13:17	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/30/21 13:17	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/30/21 13:17	1
Chloroform	<0.37		2.0	0.37	ug/L			06/30/21 13:17	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/30/21 13:17	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/30/21 13:17	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			06/30/21 13:17	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/30/21 13:17	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/30/21 13:17	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/30/21 13:17	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/30/21 13:17	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			06/30/21 13:17	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/30/21 13:17	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/30/21 13:17	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			06/30/21 13:17	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/30/21 13:17	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/30/21 13:17	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/30/21 13:17	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/30/21 13:17	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/30/21 13:17	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/30/21 13:17	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 13:17	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/30/21 13:17	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/30/21 13:17	1
Methyl bromide	<0.80		3.0	0.80	ug/L			06/30/21 13:17	1
Methyl chloride	<0.32		1.0	0.32	ug/L			06/30/21 13:17	1
Methylene bromide	<0.27		1.0	0.27	ug/L			06/30/21 13:17	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/30/21 13:17	1
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			06/30/21 13:17	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/30/21 13:17	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/30/21 13:17	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/30/21 13:17	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/30/21 13:17	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/30/21 13:17	1

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

Lab Sample ID: MB 500-606957/6
Matrix: Water
Analysis Batch: 606957

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/30/21 13:17	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/30/21 13:17	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 13:17	1
Styrene	<0.39		1.0	0.39	ug/L			06/30/21 13:17	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/30/21 13:17	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/30/21 13:17	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/30/21 13:17	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			06/30/21 13:17	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			06/30/21 13:17	1
Toluene	<0.15		0.50	0.15	ug/L			06/30/21 13:17	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			06/30/21 13:17	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/30/21 13:17	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/30/21 13:17	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/30/21 13:17	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/30/21 13:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/30/21 13:17	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			06/30/21 13:17	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/30/21 13:17	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/30/21 13:17	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/30/21 13:17	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/30/21 13:17	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/30/21 13:17	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/30/21 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*72 - 124*		*06/30/21 13:17*	*1*
Dibromofluoromethane	*110*		*75 - 120*		*06/30/21 13:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*		*06/30/21 13:17*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*06/30/21 13:17*	*1*

Lab Sample ID: LCS 500-606957/8
Matrix: Water
Analysis Batch: 606957

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	54.4		ug/L		109	40 - 143
Benzene	50.0	53.2		ug/L		106	70 - 120
Bromobenzene	50.0	46.8		ug/L		94	70 - 122
Bromochloromethane	50.0	55.0		ug/L		110	65 - 122
Bromodichloromethane	50.0	54.6		ug/L		109	69 - 120
Bromoform	50.0	60.1		ug/L		120	56 - 132
Carbon disulfide	50.0	52.8		ug/L		106	66 - 120
Carbon tetrachloride	50.0	65.6		ug/L		131	59 - 133
Chlorobenzene	50.0	49.8		ug/L		100	70 - 120
Chloroethane	50.0	42.8		ug/L		86	48 - 136
Chloroform	50.0	53.5		ug/L		107	70 - 120
2-Chlorotoluene	50.0	45.6		ug/L		91	70 - 125
4-Chlorotoluene	50.0	46.7		ug/L		93	68 - 124

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

Lab Sample ID: LCS 500-606957/8
Matrix: Water
Analysis Batch: 606957

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethylene	50.0	51.3		ug/L		103	70 - 125
cis-1,3-Dichloropropene	50.0	50.1		ug/L		100	64 - 127
Dibromochloromethane	50.0	54.4		ug/L		109	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	49.3		ug/L		99	56 - 123
1,2-Dibromoethane	50.0	50.9		ug/L		102	70 - 125
Dichlorodifluoromethane	50.0	51.2		ug/L		102	40 - 159
1,1-Dichloroethane	50.0	46.1		ug/L		92	70 - 125
1,2-Dichloroethane	50.0	54.7		ug/L		109	68 - 127
1,1-Dichloroethylene	50.0	53.6		ug/L		107	67 - 122
1,2-Dichloropropane	50.0	43.2		ug/L		86	67 - 130
1,3-Dichloropropane	50.0	53.1		ug/L		106	62 - 136
2,2-Dichloropropane	50.0	55.1		ug/L		110	58 - 139
1,1-Dichloropropene	50.0	59.0		ug/L		118	70 - 121
Ethylbenzene	50.0	50.7		ug/L		101	70 - 123
Hexachlorobutadiene	50.0	47.4		ug/L		95	51 - 150
Isopropylbenzene	50.0	47.8		ug/L		96	70 - 126
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	70 - 125
Methyl bromide	50.0	75.6		ug/L		151	40 - 152
Methyl chloride	50.0	35.0		ug/L		70	56 - 152
Methylene bromide	50.0	58.6		ug/L		117	70 - 120
Methylene Chloride	50.0	49.2		ug/L		98	69 - 125
Methyl ethyl ketone (MEK)	50.0	48.5		ug/L		97	46 - 144
Methyl tert-butyl ether	50.0	51.8		ug/L		104	55 - 123
Naphthalene	50.0	38.8		ug/L		78	53 - 144
n-Butylbenzene	50.0	48.5		ug/L		97	68 - 125
N-Propylbenzene	50.0	47.1		ug/L		94	69 - 127
1,2-Dichlorobenzene	50.0	47.6		ug/L		95	70 - 125
1,4-Dichlorobenzene	50.0	48.8		ug/L		98	70 - 120
p-Isopropyltoluene	50.0	47.8		ug/L		96	70 - 125
sec-Butylbenzene	50.0	47.8		ug/L		96	70 - 123
Styrene	50.0	53.7		ug/L		107	70 - 120
tert-Butylbenzene	50.0	45.8		ug/L		92	70 - 121
1,1,1,2-Tetrachloroethane	50.0	54.7		ug/L		109	70 - 125
1,1,2,2-Tetrachloroethane	50.0	44.7		ug/L		89	62 - 140
Tetrachloroethylene	50.0	56.7		ug/L		113	70 - 128
Tetrahydrofuran	100	82.1		ug/L		82	59 - 139
Toluene	50.0	50.3		ug/L		101	70 - 125
1,2-trans-Dichloroethylene	50.0	52.4		ug/L		105	70 - 125
trans-1,3-Dichloropropene	50.0	51.9		ug/L		104	62 - 128
1,2,3-Trichlorobenzene	50.0	39.7		ug/L		79	51 - 145
1,2,4-Trichlorobenzene	50.0	42.3		ug/L		85	57 - 137
1,1,1-Trichloroethane	50.0	60.0		ug/L		120	70 - 125
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	71 - 130
Trichloroethylene	50.0	57.5		ug/L		115	70 - 125
Trichlorofluoromethane	50.0	57.8		ug/L		116	55 - 128
1,2,3-Trichloropropane	50.0	49.2		ug/L		98	50 - 133
1,2,4-Trimethylbenzene	50.0	47.9		ug/L		96	70 - 123
1,3,5-Trimethylbenzene	50.0	48.0		ug/L		96	70 - 123
Vinyl chloride	50.0	40.7		ug/L		81	64 - 126

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

Lab Sample ID: LCS 500-606957/8
Matrix: Water
Analysis Batch: 606957

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total			100	103		ug/L		103	70 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*72 - 124*
Dibromofluoromethane	*108*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*
Toluene-d8 (Surr)	*96*		*75 - 120*

Lab Sample ID: MB 500-607193/6
Matrix: Water
Analysis Batch: 607193

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1.7		10	1.7	ug/L			07/01/21 12:37	1
Benzene	<0.15		0.50	0.15	ug/L			07/01/21 12:37	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/01/21 12:37	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/01/21 12:37	1
Bromoform	<0.48		1.0	0.48	ug/L			07/01/21 12:37	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			07/01/21 12:37	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/01/21 12:37	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/01/21 12:37	1
Chloroform	<0.37		2.0	0.37	ug/L			07/01/21 12:37	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/01/21 12:37	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/01/21 12:37	1
cis-1,2-Dichloroethylene	<0.41		1.0	0.41	ug/L			07/01/21 12:37	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/01/21 12:37	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/01/21 12:37	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/01/21 12:37	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/01/21 12:37	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/01/21 12:37	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
1,1-Dichloroethylene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/01/21 12:37	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/01/21 12:37	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/01/21 12:37	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/01/21 12:37	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/01/21 12:37	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/01/21 12:37	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/01/21 12:37	1
Methyl bromide	<0.80		3.0	0.80	ug/L			07/01/21 12:37	1
Methyl chloride	<0.32		1.0	0.32	ug/L			07/01/21 12:37	1
Methylene bromide	<0.27		1.0	0.27	ug/L			07/01/21 12:37	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/01/21 12:37	1

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

Lab Sample ID: MB 500-607193/6
Matrix: Water
Analysis Batch: 607193

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Methyl ethyl ketone (MEK)	<2.1		5.0	2.1	ug/L			07/01/21 12:37	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/01/21 12:37	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/01/21 12:37	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/01/21 12:37	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 12:37	1
Styrene	<0.39		1.0	0.39	ug/L			07/01/21 12:37	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/01/21 12:37	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/01/21 12:37	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/01/21 12:37	1
Tetrachloroethylene	<0.37		1.0	0.37	ug/L			07/01/21 12:37	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			07/01/21 12:37	1
Toluene	<0.15		0.50	0.15	ug/L			07/01/21 12:37	1
1,2-trans-Dichloroethylene	<0.35		1.0	0.35	ug/L			07/01/21 12:37	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/01/21 12:37	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/01/21 12:37	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/01/21 12:37	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/01/21 12:37	1
Trichloroethylene	<0.16		0.50	0.16	ug/L			07/01/21 12:37	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/01/21 12:37	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/01/21 12:37	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/01/21 12:37	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/01/21 12:37	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/21 12:37	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/01/21 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*72 - 124*		*07/01/21 12:37*	*1*
Dibromofluoromethane	*109*		*75 - 120*		*07/01/21 12:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*		*07/01/21 12:37*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*07/01/21 12:37*	*1*

Lab Sample ID: LCS 500-607193/4
Matrix: Water
Analysis Batch: 607193

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	50.0		ug/L		100	40 - 143
Benzene	50.0	53.9		ug/L		108	70 - 120
Bromobenzene	50.0	50.1		ug/L		100	70 - 122
Bromochloromethane	50.0	59.3		ug/L		119	65 - 122
Bromodichloromethane	50.0	57.7		ug/L		115	69 - 120
Bromoform	50.0	62.5		ug/L		125	56 - 132
Carbon disulfide	50.0	52.0		ug/L		104	66 - 120

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

Lab Sample ID: LCS 500-607193/4
Matrix: Water
Analysis Batch: 607193

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	50.0	65.9		ug/L		132	59 - 133
Chlorobenzene	50.0	51.1		ug/L		102	70 - 120
Chloroethane	50.0	48.8		ug/L		98	48 - 136
Chloroform	50.0	55.1		ug/L		110	70 - 120
2-Chlorotoluene	50.0	47.8		ug/L		96	70 - 125
4-Chlorotoluene	50.0	48.4		ug/L		97	68 - 124
cis-1,2-Dichloroethylene	50.0	52.5		ug/L		105	70 - 125
cis-1,3-Dichloropropene	50.0	52.8		ug/L		106	64 - 127
Dibromochloromethane	50.0	56.4		ug/L		113	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	50.8		ug/L		102	56 - 123
1,2-Dibromoethane	50.0	52.2		ug/L		104	70 - 125
Dichlorodifluoromethane	50.0	59.1		ug/L		118	40 - 159
1,1-Dichloroethane	50.0	47.4		ug/L		95	70 - 125
1,2-Dichloroethane	50.0	56.6		ug/L		113	68 - 127
1,1-Dichloroethylene	50.0	53.0		ug/L		106	67 - 122
1,2-Dichloropropane	50.0	44.7		ug/L		89	67 - 130
1,3-Dichloropropane	50.0	55.3		ug/L		111	62 - 136
2,2-Dichloropropane	50.0	56.4		ug/L		113	58 - 139
1,1-Dichloropropene	50.0	59.2		ug/L		118	70 - 121
Ethylbenzene	50.0	52.0		ug/L		104	70 - 123
Hexachlorobutadiene	50.0	48.2		ug/L		96	51 - 150
Isopropylbenzene	50.0	49.4		ug/L		99	70 - 126
1,3-Dichlorobenzene	50.0	50.9		ug/L		102	70 - 125
Methyl bromide	50.0	88.6	*	ug/L		177	40 - 152
Methyl chloride	50.0	38.7		ug/L		77	56 - 152
Methylene bromide	50.0	60.4	*	ug/L		121	70 - 120
Methylene Chloride	50.0	50.7		ug/L		101	69 - 125
Methyl ethyl ketone (MEK)	50.0	44.4		ug/L		89	46 - 144
Methyl tert-butyl ether	50.0	53.7		ug/L		107	55 - 123
Naphthalene	50.0	41.3		ug/L		83	53 - 144
n-Butylbenzene	50.0	48.9		ug/L		98	68 - 125
N-Propylbenzene	50.0	48.7		ug/L		97	69 - 127
1,2-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 125
1,4-Dichlorobenzene	50.0	51.4		ug/L		103	70 - 120
p-Isopropyltoluene	50.0	49.0		ug/L		98	70 - 125
sec-Butylbenzene	50.0	48.7		ug/L		97	70 - 123
Styrene	50.0	55.2		ug/L		110	70 - 120
tert-Butylbenzene	50.0	47.0		ug/L		94	70 - 121
1,1,1,2-Tetrachloroethane	50.0	56.5		ug/L		113	70 - 125
1,1,2,2-Tetrachloroethane	50.0	46.0		ug/L		92	62 - 140
Tetrachloroethylene	50.0	57.0		ug/L		114	70 - 128
Tetrahydrofuran	100	81.8		ug/L		82	59 - 139
Toluene	50.0	51.4		ug/L		103	70 - 125
1,2-trans-Dichloroethylene	50.0	52.5		ug/L		105	70 - 125
trans-1,3-Dichloropropene	50.0	54.7		ug/L		109	62 - 128
1,2,3-Trichlorobenzene	50.0	42.5		ug/L		85	51 - 145
1,2,4-Trichlorobenzene	50.0	45.4		ug/L		91	57 - 137
1,1,1-Trichloroethane	50.0	61.1		ug/L		122	70 - 125
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	71 - 130

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

Lab Sample ID: LCS 500-607193/4
Matrix: Water
Analysis Batch: 607193

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethylene	50.0	58.2		ug/L		116	70 - 125
Trichlorofluoromethane	50.0	65.4	*	ug/L		131	55 - 128
1,2,3-Trichloropropane	50.0	51.7		ug/L		103	50 - 133
1,2,4-Trimethylbenzene	50.0	50.3		ug/L		101	70 - 123
1,3,5-Trimethylbenzene	50.0	49.7		ug/L		99	70 - 123
Vinyl chloride	50.0	46.2		ug/L		92	64 - 126
Xylenes, Total	100	106		ug/L		106	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*
Dibromofluoromethane	*110*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*
Toluene-d8 (Surr)	*96*		*75 - 120*

Lab Sample ID: 500-201166-12 MS
Matrix: Water
Analysis Batch: 607193

Client Sample ID: MW-116
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	<1.7		50.0	39.7		ug/L		79	40 - 143
Benzene	<0.15		50.0	55.4		ug/L		111	70 - 120
Bromobenzene	<0.36		50.0	52.2		ug/L		104	70 - 122
Bromochloromethane	<0.43		50.0	57.3		ug/L		115	65 - 122
Bromodichloromethane	<0.37		50.0	56.9		ug/L		114	69 - 120
Bromoform	<0.48		50.0	58.6		ug/L		117	56 - 132
Carbon disulfide	<0.45		50.0	53.0		ug/L		106	66 - 120
Carbon tetrachloride	<0.38		50.0	67.4	F1	ug/L		135	59 - 133
Chlorobenzene	<0.39		50.0	51.6		ug/L		103	70 - 120
Chloroethane	<0.51		50.0	44.3		ug/L		89	48 - 136
Chloroform	<0.37		50.0	56.4		ug/L		113	70 - 120
2-Chlorotoluene	<0.31		50.0	50.0		ug/L		100	70 - 125
4-Chlorotoluene	<0.35		50.0	49.5		ug/L		99	68 - 124
cis-1,2-Dichloroethylene	<0.41		50.0	53.5		ug/L		107	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	49.8		ug/L		100	64 - 127
Dibromochloromethane	<0.49		50.0	55.3		ug/L		111	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	49.7		ug/L		99	56 - 123
1,2-Dibromoethane	<0.39		50.0	50.0		ug/L		100	70 - 125
Dichlorodifluoromethane	<0.67		50.0	52.5		ug/L		105	40 - 159
1,1-Dichloroethane	<0.41		50.0	48.2		ug/L		96	70 - 125
1,2-Dichloroethane	<0.39		50.0	56.3		ug/L		113	68 - 127
1,1-Dichloroethylene	<0.39		50.0	53.8		ug/L		108	67 - 122
1,2-Dichloropropane	<0.43		50.0	45.1		ug/L		90	67 - 130
1,3-Dichloropropane	<0.36		50.0	53.0		ug/L		106	62 - 136
2,2-Dichloropropane	<0.44		50.0	53.2		ug/L		106	58 - 139
1,1-Dichloropropene	<0.30		50.0	59.7		ug/L		119	70 - 121
Ethylbenzene	<0.18		50.0	52.5		ug/L		105	70 - 123
Hexachlorobutadiene	<0.45		50.0	47.2		ug/L		94	51 - 150
Isopropylbenzene	<0.39		50.0	53.1		ug/L		106	70 - 126

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

Lab Sample ID: 500-201166-12 MS
Matrix: Water
Analysis Batch: 607193

Client Sample ID: MW-116
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	<0.40		50.0	51.2		ug/L		102	70 - 125
Methyl bromide	<0.80	^c *	50.0	81.1	F1	ug/L		162	40 - 152
Methyl chloride	<0.32		50.0	34.6		ug/L		69	56 - 152
Methylene bromide	<0.27	*	50.0	58.0		ug/L		116	70 - 120
Methylene Chloride	<1.6		50.0	50.8		ug/L		102	69 - 125
Methyl ethyl ketone (MEK)	<2.1		50.0	39.4		ug/L		79	46 - 144
Methyl tert-butyl ether	<0.39		50.0	49.6		ug/L		99	55 - 123
Naphthalene	<0.34		50.0	35.6		ug/L		71	53 - 144
n-Butylbenzene	<0.39		50.0	46.3		ug/L		93	68 - 125
N-Propylbenzene	<0.41		50.0	50.6		ug/L		101	69 - 127
1,2-Dichlorobenzene	<0.33		50.0	50.7		ug/L		101	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	50.8		ug/L		102	70 - 120
p-Isopropyltoluene	<0.36		50.0	49.3		ug/L		99	70 - 125
sec-Butylbenzene	<0.40		50.0	51.2		ug/L		102	70 - 123
Styrene	<0.39		50.0	53.8		ug/L		108	70 - 120
tert-Butylbenzene	<0.40		50.0	51.2		ug/L		102	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	57.3		ug/L		115	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	46.0		ug/L		92	62 - 140
Tetrachloroethylene	<0.37		50.0	56.0		ug/L		112	70 - 128
Tetrahydrofuran	<1.9		100	73.9		ug/L		74	59 - 139
Toluene	<0.15		50.0	52.6		ug/L		105	70 - 125
1,2-trans-Dichloroethylene	<0.35		50.0	52.9		ug/L		106	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	51.0		ug/L		102	62 - 128
1,2,3-Trichlorobenzene	<0.46		50.0	35.5		ug/L		71	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	36.4		ug/L		73	57 - 137
1,1,1-Trichloroethane	<0.38		50.0	61.6		ug/L		123	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	50.7		ug/L		101	71 - 130
Trichloroethylene	<0.16		50.0	58.2		ug/L		116	70 - 125
Trichlorofluoromethane	<0.43	*	50.0	60.3		ug/L		121	55 - 128
1,2,3-Trichloropropane	<0.41		50.0	52.3		ug/L		105	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	50.9		ug/L		102	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	51.8		ug/L		104	70 - 123
Vinyl chloride	<0.20		50.0	41.4		ug/L		83	64 - 126
Xylenes, Total	<0.22		100	106		ug/L		106	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*
Dibromofluoromethane	*110*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*
Toluene-d8 (Surr)	*97*		*75 - 120*

Lab Sample ID: 500-201166-12 MSD
Matrix: Water
Analysis Batch: 607193

Client Sample ID: MW-116
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	<1.7		50.0	36.9		ug/L		74	40 - 143	7	20
Benzene	<0.15		50.0	53.5		ug/L		107	70 - 120	3	20

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

Lab Sample ID: 500-201166-12 MSD
Matrix: Water
Analysis Batch: 607193

Client Sample ID: MW-116
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	<0.36		50.0	52.2		ug/L		104	70 - 122	0	20
Bromochloromethane	<0.43		50.0	55.3		ug/L		111	65 - 122	4	20
Bromodichloromethane	<0.37		50.0	54.7		ug/L		109	69 - 120	4	20
Bromoform	<0.48		50.0	57.5		ug/L		115	56 - 132	2	20
Carbon disulfide	<0.45		50.0	50.1		ug/L		100	66 - 120	6	20
Carbon tetrachloride	<0.38		50.0	65.4		ug/L		131	59 - 133	3	20
Chlorobenzene	<0.39		50.0	49.4		ug/L		99	70 - 120	4	20
Chloroethane	<0.51		50.0	46.0		ug/L		92	48 - 136	4	20
Chloroform	<0.37		50.0	54.6		ug/L		109	70 - 120	3	20
2-Chlorotoluene	<0.31		50.0	50.3		ug/L		101	70 - 125	1	20
4-Chlorotoluene	<0.35		50.0	48.8		ug/L		98	68 - 124	2	20
cis-1,2-Dichloroethylene	<0.41		50.0	50.8		ug/L		102	70 - 125	5	20
cis-1,3-Dichloropropene	<0.42		50.0	47.9		ug/L		96	64 - 127	4	20
Dibromochloromethane	<0.49		50.0	53.6		ug/L		107	68 - 125	3	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	49.9		ug/L		100	56 - 123	0	20
1,2-Dibromoethane	<0.39		50.0	48.7		ug/L		97	70 - 125	3	20
Dichlorodifluoromethane	<0.67		50.0	53.9		ug/L		108	40 - 159	3	20
1,1-Dichloroethane	<0.41		50.0	46.6		ug/L		93	70 - 125	3	20
1,2-Dichloroethane	<0.39		50.0	53.8		ug/L		108	68 - 127	5	20
1,1-Dichloroethylene	<0.39		50.0	52.6		ug/L		105	67 - 122	2	20
1,2-Dichloropropane	<0.43		50.0	43.8		ug/L		88	67 - 130	3	20
1,3-Dichloropropane	<0.36		50.0	51.6		ug/L		103	62 - 136	3	20
2,2-Dichloropropane	<0.44		50.0	51.9		ug/L		104	58 - 139	2	20
1,1-Dichloropropene	<0.30		50.0	56.8		ug/L		114	70 - 121	5	20
Ethylbenzene	<0.18		50.0	50.2		ug/L		100	70 - 123	5	20
Hexachlorobutadiene	<0.45		50.0	49.0		ug/L		98	51 - 150	4	20
Isopropylbenzene	<0.39		50.0	53.3		ug/L		107	70 - 126	0	20
1,3-Dichlorobenzene	<0.40		50.0	50.1		ug/L		100	70 - 125	2	20
Methyl bromide	<0.80	^c *	50.0	84.2	F1	ug/L		168	40 - 152	4	20
Methyl chloride	<0.32		50.0	35.9		ug/L		72	56 - 152	4	20
Methylene bromide	<0.27	*	50.0	57.1		ug/L		114	70 - 120	2	20
Methylene Chloride	<1.6		50.0	48.7		ug/L		97	69 - 125	4	20
Methyl ethyl ketone (MEK)	<2.1		50.0	40.2		ug/L		80	46 - 144	2	20
Methyl tert-butyl ether	<0.39		50.0	48.4		ug/L		97	55 - 123	2	20
Naphthalene	<0.34		50.0	36.9		ug/L		74	53 - 144	4	20
n-Butylbenzene	<0.39		50.0	44.3		ug/L		89	68 - 125	4	20
N-Propylbenzene	<0.41		50.0	50.1		ug/L		100	69 - 127	1	20
1,2-Dichlorobenzene	<0.33		50.0	51.3		ug/L		103	70 - 125	1	20
1,4-Dichlorobenzene	<0.36		50.0	49.5		ug/L		99	70 - 120	3	20
p-Isopropyltoluene	<0.36		50.0	48.7		ug/L		97	70 - 125	1	20
sec-Butylbenzene	<0.40		50.0	51.6		ug/L		103	70 - 123	1	20
Styrene	<0.39		50.0	51.8		ug/L		104	70 - 120	4	20
tert-Butylbenzene	<0.40		50.0	52.3		ug/L		105	70 - 121	2	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	55.4		ug/L		111	70 - 125	3	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	46.5		ug/L		93	62 - 140	1	20
Tetrachloroethylene	<0.37		50.0	53.9		ug/L		108	70 - 128	4	20
Tetrahydrofuran	<1.9		100	71.3		ug/L		71	59 - 139	4	20
Toluene	<0.15		50.0	50.8		ug/L		102	70 - 125	4	20
1,2-trans-Dichloroethylene	<0.35		50.0	50.8		ug/L		102	70 - 125	4	20

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

Lab Sample ID: 500-201166-12 MSD
Matrix: Water
Analysis Batch: 607193

Client Sample ID: MW-116
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	<0.36		50.0	48.7		ug/L		97	62 - 128	5	20
1,2,3-Trichlorobenzene	<0.46		50.0	36.0		ug/L		72	51 - 145	1	20
1,2,4-Trichlorobenzene	<0.34		50.0	35.0		ug/L		70	57 - 137	4	20
1,1,1-Trichloroethane	<0.38		50.0	60.3		ug/L		121	70 - 125	2	20
1,1,2-Trichloroethane	<0.35		50.0	48.4		ug/L		97	71 - 130	5	20
Trichloroethylene	<0.16		50.0	55.7		ug/L		111	70 - 125	5	20
Trichlorofluoromethane	<0.43	*	50.0	61.6		ug/L		123	55 - 128	2	20
1,2,3-Trichloropropane	<0.41		50.0	53.2		ug/L		106	50 - 133	2	20
1,2,4-Trimethylbenzene	<0.36		50.0	50.5		ug/L		101	70 - 123	1	20
1,3,5-Trimethylbenzene	<0.25		50.0	51.7		ug/L		103	70 - 123	0	20
Vinyl chloride	<0.20		50.0	43.4		ug/L		87	64 - 126	5	20
Xylenes, Total	<0.22		100	101		ug/L		101	70 - 125	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*
Dibromofluoromethane	*109*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*
Toluene-d8 (Surr)	*97*		*75 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-605165/1-A
Matrix: Water
Analysis Batch: 605213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 605165

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		1.6	0.19	ug/L		06/21/21 07:12	06/21/21 15:30	1
1,2-Dichlorobenzene	<0.20		1.6	0.20	ug/L		06/21/21 07:12	06/21/21 15:30	1
1,3-Dichlorobenzene	<0.17		1.6	0.17	ug/L		06/21/21 07:12	06/21/21 15:30	1
1,4-Dichlorobenzene	<0.17		1.6	0.17	ug/L		06/21/21 07:12	06/21/21 15:30	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		06/21/21 07:12	06/21/21 15:30	1
2,2'-oxybis[1-chloropropane]	<0.30		1.6	0.30	ug/L		06/21/21 07:12	06/21/21 15:30	1
2,4,5-Trichlorophenol	<2.1		8.0	2.1	ug/L		06/21/21 07:12	06/21/21 15:30	1
2,4,6-Trichlorophenol	<0.57		4.0	0.57	ug/L		06/21/21 07:12	06/21/21 15:30	1
2,4-Dichlorophenol	<2.1		8.0	2.1	ug/L		06/21/21 07:12	06/21/21 15:30	1
2,4-Dimethylphenol	<1.4		8.0	1.4	ug/L		06/21/21 07:12	06/21/21 15:30	1
2,4-Dinitrophenol	<6.9		16	6.9	ug/L		06/21/21 07:12	06/21/21 15:30	1
2,4-Dinitrotoluene	<0.20		0.80	0.20	ug/L		06/21/21 07:12	06/21/21 15:30	1
2,6-Dinitrotoluene	<0.059		0.80	0.059	ug/L		06/21/21 07:12	06/21/21 15:30	1
2-Chloronaphthalene	<0.19		1.6	0.19	ug/L		06/21/21 07:12	06/21/21 15:30	1
2-Chlorophenol	<0.45		4.0	0.45	ug/L		06/21/21 07:12	06/21/21 15:30	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		06/21/21 07:12	06/21/21 15:30	1
2-Methylphenol	<0.24		1.6	0.24	ug/L		06/21/21 07:12	06/21/21 15:30	1
2-Nitroaniline	<1.0		4.0	1.0	ug/L		06/21/21 07:12	06/21/21 15:30	1
2-Nitrophenol	<2.0		8.0	2.0	ug/L		06/21/21 07:12	06/21/21 15:30	1
3 & 4 Methylphenol	<0.36		1.6	0.36	ug/L		06/21/21 07:12	06/21/21 15:30	1
3,3'-Dichlorobenzidine	<1.4		4.0	1.4	ug/L		06/21/21 07:12	06/21/21 15:30	1
3-Nitroaniline	<1.4		8.0	1.4	ug/L		06/21/21 07:12	06/21/21 15:30	1
4,6-Dinitro-2-methylphenol	<4.7		16	4.7	ug/L		06/21/21 07:12	06/21/21 15:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-605165/1-A
Matrix: Water
Analysis Batch: 605213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 605165

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.43		4.0	0.43	ug/L		06/21/21 07:12	06/21/21 15:30	1
4-Chloro-3-methylphenol	<1.8		8.0	1.8	ug/L		06/21/21 07:12	06/21/21 15:30	1
4-Chloroaniline	<1.6		8.0	1.6	ug/L		06/21/21 07:12	06/21/21 15:30	1
4-Chlorophenyl phenyl ether	<0.51		4.0	0.51	ug/L		06/21/21 07:12	06/21/21 15:30	1
4-Nitroaniline	<1.3		8.0	1.3	ug/L		06/21/21 07:12	06/21/21 15:30	1
4-Nitrophenol	<5.9		16	5.9	ug/L		06/21/21 07:12	06/21/21 15:30	1
Acenaphthene	<0.25		0.80	0.25	ug/L		06/21/21 07:12	06/21/21 15:30	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		06/21/21 07:12	06/21/21 15:30	1
Anthracene	<0.27		0.80	0.27	ug/L		06/21/21 07:12	06/21/21 15:30	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		06/21/21 07:12	06/21/21 15:30	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		06/21/21 07:12	06/21/21 15:30	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		06/21/21 07:12	06/21/21 15:30	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		06/21/21 07:12	06/21/21 15:30	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		06/21/21 07:12	06/21/21 15:30	1
Benzoic acid	<4.6		16	4.6	ug/L		06/21/21 07:12	06/21/21 15:30	1
Benzyl alcohol	<4.8		16	4.8	ug/L		06/21/21 07:12	06/21/21 15:30	1
Bis(2-chloroethoxy)methane	<0.23		1.6	0.23	ug/L		06/21/21 07:12	06/21/21 15:30	1
Bis(2-chloroethyl)ether	<0.23		1.6	0.23	ug/L		06/21/21 07:12	06/21/21 15:30	1
Bis(2-ethylhexyl) phthalate	<1.4		8.0	1.4	ug/L		06/21/21 07:12	06/21/21 15:30	1
Butyl benzyl phthalate	<0.38		1.6	0.38	ug/L		06/21/21 07:12	06/21/21 15:30	1
Carbazole	<0.28		4.0	0.28	ug/L		06/21/21 07:12	06/21/21 15:30	1
Chrysene	<0.055		0.16	0.055	ug/L		06/21/21 07:12	06/21/21 15:30	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		06/21/21 07:12	06/21/21 15:30	1
Dibenzofuran	<0.21		1.6	0.21	ug/L		06/21/21 07:12	06/21/21 15:30	1
Diethyl phthalate	<0.29		4.0	0.29	ug/L		06/21/21 07:12	06/21/21 15:30	1
Dimethyl phthalate	<0.25		4.0	0.25	ug/L		06/21/21 07:12	06/21/21 15:30	1
Di-n-butyl phthalate	<0.58		4.0	0.58	ug/L		06/21/21 07:12	06/21/21 15:30	1
Di-n-octyl phthalate	<0.84		8.0	0.84	ug/L		06/21/21 07:12	06/21/21 15:30	1
Fluoranthene	<0.36		0.80	0.36	ug/L		06/21/21 07:12	06/21/21 15:30	1
Fluorene	<0.20		0.80	0.20	ug/L		06/21/21 07:12	06/21/21 15:30	1
Hexachlorobenzene	<0.064		0.40	0.064	ug/L		06/21/21 07:12	06/21/21 15:30	1
Hexachlorobutadiene	<0.41		4.0	0.41	ug/L		06/21/21 07:12	06/21/21 15:30	1
Hexachlorocyclopentadiene	<5.1		16	5.1	ug/L		06/21/21 07:12	06/21/21 15:30	1
Hexachloroethane	<0.48		4.0	0.48	ug/L		06/21/21 07:12	06/21/21 15:30	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		06/21/21 07:12	06/21/21 15:30	1
Isophorone	<0.30		1.6	0.30	ug/L		06/21/21 07:12	06/21/21 15:30	1
Naphthalene	<0.25		0.80	0.25	ug/L		06/21/21 07:12	06/21/21 15:30	1
Nitrobenzene	<0.36		0.80	0.36	ug/L		06/21/21 07:12	06/21/21 15:30	1
N-Nitrosodi-n-propylamine	<0.12		0.40	0.12	ug/L		06/21/21 07:12	06/21/21 15:30	1
N-Nitrosodiphenylamine	<0.30		1.6	0.30	ug/L		06/21/21 07:12	06/21/21 15:30	1
Pentachlorophenol	<3.2		16	3.2	ug/L		06/21/21 07:12	06/21/21 15:30	1
Phenanthrene	<0.24		0.80	0.24	ug/L		06/21/21 07:12	06/21/21 15:30	1
Phenol	<0.54		4.0	0.54	ug/L		06/21/21 07:12	06/21/21 15:30	1
Pyrene	<0.34		0.80	0.34	ug/L		06/21/21 07:12	06/21/21 15:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*89*		*40 - 145*	*06/21/21 07:12*	*06/21/21 15:30*	*1*
2-Fluorobiphenyl	*64*		*34 - 110*	*06/21/21 07:12*	*06/21/21 15:30*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-605165/1-A
Matrix: Water
Analysis Batch: 605213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 605165

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	46		27 - 110	06/21/21 07:12	06/21/21 15:30	1
Nitrobenzene-d5 (Surr)	73		36 - 120	06/21/21 07:12	06/21/21 15:30	1
Phenol-d5 (Surr)	35		20 - 110	06/21/21 07:12	06/21/21 15:30	1
Terphenyl-d14 (Surr)	96		40 - 145	06/21/21 07:12	06/21/21 15:30	1

Lab Sample ID: LCS 500-605165/2-A
Matrix: Water
Analysis Batch: 605213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 605165

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	32.0	14.8		ug/L		46	26 - 110
1,2-Dichlorobenzene	32.0	15.0		ug/L		47	26 - 110
1,3-Dichlorobenzene	32.0	13.3		ug/L		42	22 - 110
1,4-Dichlorobenzene	32.0	13.9		ug/L		43	23 - 110
1-Methylnaphthalene	32.0	20.7		ug/L		65	38 - 110
2,2'-oxybis[1-chloropropane]	32.0	24.2		ug/L		76	38 - 140
2,4,5-Trichlorophenol	32.0	32.4		ug/L		101	63 - 124
2,4,6-Trichlorophenol	32.0	28.8		ug/L		90	62 - 121
2,4-Dichlorophenol	32.0	27.3		ug/L		85	58 - 120
2,4-Dimethylphenol	32.0	28.7		ug/L		90	51 - 115
2,4-Dinitrophenol	64.0	59.0		ug/L		92	37 - 130
2,4-Dinitrotoluene	32.0	34.3		ug/L		107	63 - 129
2,6-Dinitrotoluene	32.0	32.2		ug/L		101	63 - 129
2-Chloronaphthalene	32.0	19.7		ug/L		62	39 - 110
2-Chlorophenol	32.0	25.0		ug/L		78	59 - 110
2-Methylnaphthalene	32.0	19.4		ug/L		61	34 - 110
2-Methylphenol	32.0	25.7		ug/L		80	53 - 115
2-Nitroaniline	32.0	33.6		ug/L		105	59 - 138
2-Nitrophenol	32.0	28.2		ug/L		88	59 - 115
3 & 4 Methylphenol	32.0	23.9		ug/L		75	50 - 116
3,3'-Dichlorobenzidine	32.0	30.7		ug/L		96	60 - 132
3-Nitroaniline	32.0	24.2		ug/L		76	47 - 123
4,6-Dinitro-2-methylphenol	64.0	63.0		ug/L		98	50 - 129
4-Bromophenyl phenyl ether	32.0	21.7		ug/L		68	58 - 120
4-Chloro-3-methylphenol	32.0	32.7		ug/L		102	64 - 128
4-Chloroaniline	32.0	23.1		ug/L		72	35 - 128
4-Chlorophenyl phenyl ether	32.0	19.6		ug/L		61	48 - 116
4-Nitroaniline	32.0	17.2		ug/L		54	35 - 110
4-Nitrophenol	64.0	66.0		ug/L		103	20 - 110
Acenaphthene	32.0	20.6		ug/L		64	46 - 110
Acenaphthylene	32.0	23.4		ug/L		73	47 - 113
Anthracene	32.0	29.2		ug/L		91	67 - 118
Benzo[a]anthracene	32.0	30.3		ug/L		95	70 - 126
Benzo[a]pyrene	32.0	36.2		ug/L		113	70 - 135
Benzo[b]fluoranthene	32.0	31.6		ug/L		99	69 - 136
Benzo[g,h,i]perylene	32.0	32.1		ug/L		100	70 - 135
Benzo[k]fluoranthene	32.0	33.2		ug/L		104	70 - 133
Benzoic acid	64.0	44.6		ug/L		70	10 - 112

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-605165/2-A
Matrix: Water
Analysis Batch: 605213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 605165

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzyl alcohol	32.0	28.1		ug/L		88	46 - 132
Bis(2-chloroethoxy)methane	32.0	29.8		ug/L		93	59 - 118
Bis(2-chloroethyl)ether	32.0	20.7		ug/L		65	54 - 112
Bis(2-ethylhexyl) phthalate	32.0	41.7		ug/L		130	69 - 136
Butyl benzyl phthalate	32.0	39.3		ug/L		123	68 - 135
Carbazole	32.0	31.0		ug/L		97	61 - 145
Chrysene	32.0	31.7		ug/L		99	68 - 129
Dibenz(a,h)anthracene	32.0	34.8		ug/L		109	70 - 134
Dibenzofuran	32.0	22.1		ug/L		69	51 - 110
Diethyl phthalate	32.0	37.0		ug/L		116	62 - 123
Dimethyl phthalate	32.0	32.0		ug/L		100	63 - 122
Di-n-butyl phthalate	32.0	36.9		ug/L		115	69 - 129
Di-n-octyl phthalate	32.0	35.0		ug/L		109	68 - 137
Fluoranthene	32.0	29.8		ug/L		93	68 - 126
Fluorene	32.0	21.4		ug/L		67	53 - 120
Hexachlorobenzene	32.0	27.6		ug/L		86	61 - 126
Hexachlorobutadiene	32.0	12.1		ug/L		38	20 - 100
Hexachlorocyclopentadiene	32.0	10.9	J	ug/L		34	10 - 105
Hexachloroethane	32.0	13.3		ug/L		42	20 - 100
Indeno[1,2,3-cd]pyrene	32.0	33.2		ug/L		104	65 - 133
Isophorone	32.0	29.2		ug/L		91	54 - 127
Naphthalene	32.0	20.5		ug/L		64	36 - 110
Nitrobenzene	32.0	29.0		ug/L		91	54 - 121
N-Nitrosodi-n-propylamine	32.0	27.8		ug/L		87	47 - 131
N-Nitrosodiphenylamine	32.0	28.6		ug/L		89	66 - 120
Pentachlorophenol	64.0	64.3		ug/L		100	42 - 148
Phenanthrene	32.0	28.4		ug/L		89	65 - 120
Phenol	32.0	16.8		ug/L		52	33 - 100
Pyrene	32.0	32.7		ug/L		102	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*103*		*40 - 145*
2-Fluorobiphenyl	*74*		*34 - 110*
2-Fluorophenol (Surr)	*54*		*27 - 110*
Nitrobenzene-d5 (Surr)	*89*		*36 - 120*
Phenol-d5 (Surr)	*52*		*20 - 110*
Terphenyl-d14 (Surr)	*106*		*40 - 145*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-606188/1-A
Matrix: Water
Analysis Batch: 606407

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 606188

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.120	J	0.20	0.082	mg/L		06/25/21 08:23	06/25/21 21:26	1
Manganese	<0.0023		0.010	0.0023	mg/L		06/25/21 08:23	06/25/21 21:26	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-606188/2-A
Matrix: Water
Analysis Batch: 606407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 606188

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			1.00	0.950		mg/L		95	80 - 120		
Manganese			0.500	0.494		mg/L		99	80 - 120		

Lab Sample ID: 500-201166-1 MS
Matrix: Water
Analysis Batch: 606407

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 606188

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron	<0.082		1.00	1.01		mg/L		101	75 - 125		
Manganese	0.0029	J	0.500	0.495		mg/L		98	75 - 125		

Lab Sample ID: 500-201166-1 MSD
Matrix: Water
Analysis Batch: 606407

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 606188

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	<0.082		1.00	1.14		mg/L		114	75 - 125	12	20
Manganese	0.0029	J	0.500	0.503		mg/L		100	75 - 125	2	20

Lab Sample ID: 500-201166-1 DU
Matrix: Water
Analysis Batch: 606407

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 606188

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Iron	<0.082			1.42		mg/L				NC	20
Manganese	0.0029	J		0.00339	J	mg/L				17	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-607165/2
Matrix: Water
Analysis Batch: 607165

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			06/30/21 18:15	1

Lab Sample ID: LCS 500-607165/3
Matrix: Water
Analysis Batch: 607165

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			100	102.7		mg/L		103	90 - 110		

Lab Sample ID: 500-201166-4 DU
Matrix: Water
Analysis Batch: 607165

Client Sample ID: MW-10
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	208			204.6		mg/L				2	20

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-607925/16
Matrix: Water
Analysis Batch: 607925

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		2.0	1.0	mg/L			07/05/21 16:10	1

Lab Sample ID: MB 500-607925/39
Matrix: Water
Analysis Batch: 607925

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		2.0	1.0	mg/L			07/05/21 16:14	1

Lab Sample ID: LCS 500-607925/17
Matrix: Water
Analysis Batch: 607925

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	20.73		mg/L		104	85 - 115

Lab Sample ID: LCS 500-607925/40
Matrix: Water
Analysis Batch: 607925

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	20.61		mg/L		103	85 - 115

Lab Sample ID: 500-201166-1 MS
Matrix: Water
Analysis Batch: 607925

Client Sample ID: MW-6
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.9		20.0	53.48		mg/L		113	75 - 125

Lab Sample ID: 500-201166-1 MSD
Matrix: Water
Analysis Batch: 607925

Client Sample ID: MW-6
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30.9		20.0	53.47		mg/L		113	75 - 125	0	20

Method: SM 5220C - COD

Lab Sample ID: MB 500-607399/1-A
Matrix: Water
Analysis Batch: 607527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 607399

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<6.0		10.0	6.0	mg/L		07/02/21 06:57	07/02/21 11:00	1

Method: SM 5220C - COD (Continued)

Lab Sample ID: LCS 500-607399/2-A
Matrix: Water
Analysis Batch: 607527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 607399

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand			50.0	48.48		mg/L		97	85 - 115		

Lab Sample ID: 500-201166-4 MS
Matrix: Water
Analysis Batch: 607527

Client Sample ID: MW-10
Prep Type: Dissolved
Prep Batch: 607399

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand	18.7		50.0	68.18		mg/L		99	75 - 125		

Lab Sample ID: 500-201166-4 MSD
Matrix: Water
Analysis Batch: 607527

Client Sample ID: MW-10
Prep Type: Dissolved
Prep Batch: 607399

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	18.7		50.0	67.68		mg/L		98	75 - 125	1	20

Lab Chronicle

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-6
Date Collected: 06/17/21 13:30
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	606874	06/30/21 19:19	JMP	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606407	06/25/21 21:33	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606472	06/28/21 08:03	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 18:39	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:10	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:05	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 13:30	JVB	TAL CHI

Client Sample ID: MW-8
Date Collected: 06/17/21 13:10
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	606874	06/30/21 19:47	JMP	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606407	06/25/21 22:18	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606472	06/28/21 08:03	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 18:46	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:10	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:06	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 13:10	JVB	TAL CHI

Client Sample ID: MW-9
Date Collected: 06/17/21 13:40
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	606874	06/30/21 20:14	JMP	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606407	06/25/21 22:21	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606472	06/28/21 08:03	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 18:53	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:11	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:07	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 13:40	JVB	TAL CHI

Client Sample ID: MW-10

Lab Sample ID: 500-201166-4

Date Collected: 06/17/21 14:10

Matrix: Water

Date Received: 06/19/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	606874	06/30/21 20:43	JMP	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606407	06/25/21 22:24	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606472	06/28/21 08:03	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 19:01	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:11	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:02	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 14:10	JVB	TAL CHI

Client Sample ID: MW-11

Lab Sample ID: 500-201166-5

Date Collected: 06/17/21 10:00

Matrix: Water

Date Received: 06/19/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 13:05	JDD	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606407	06/25/21 22:28	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606472	06/28/21 08:03	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 19:15	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:11	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:09	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 10:00	JVB	TAL CHI

Client Sample ID: MW-13

Lab Sample ID: 500-201166-6

Date Collected: 06/17/21 09:15

Matrix: Water

Date Received: 06/19/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 13:33	JDD	TAL CHI
Total/NA	Prep	3510C			605165	06/21/21 07:12	SB	TAL CHI
Total/NA	Analysis	8270D		1	605296	06/21/21 21:28	SS	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606889	06/29/21 15:23	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606952	06/30/21 08:54	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 19:26	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:11	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:10	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 09:15	JVB	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-14

Lab Sample ID: 500-201166-7

Date Collected: 06/17/21 11:00
Matrix: Water
Date Received: 06/19/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 14:01	JDD	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606889	06/29/21 15:26	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606952	06/30/21 08:54	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 19:33	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:12	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:11	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 11:00	JVB	TAL CHI

Client Sample ID: MW-15A

Lab Sample ID: 500-201166-8

Date Collected: 06/17/21 11:30
Matrix: Water
Date Received: 06/19/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 14:29	JDD	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606889	06/29/21 15:30	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606952	06/30/21 08:54	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 19:41	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:12	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:12	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 11:30	JVB	TAL CHI

Client Sample ID: MW-15B

Lab Sample ID: 500-201166-9

Date Collected: 06/17/21 12:00
Matrix: Water
Date Received: 06/19/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 14:57	JDD	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606889	06/29/21 15:43	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606952	06/30/21 08:54	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 19:49	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:12	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:13	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 12:00	JVB	TAL CHI

Lab Chronicle

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Client Sample ID: MW-15C
Date Collected: 06/17/21 11:45
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 15:25	JDD	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606889	06/29/21 15:46	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606952	06/30/21 08:54	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 19:56	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:12	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:14	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 11:45	JVB	TAL CHI

Client Sample ID: MW-16
Date Collected: 06/17/21 12:40
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 15:53	JDD	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	6010B		1	606889	06/29/21 15:49	EEN	TAL CHI
Dissolved	Prep	3010A			606188	06/25/21 08:23	BDE	TAL CHI
Dissolved	Analysis	SM 2340B		1	606952	06/30/21 08:54	EEN	TAL CHI
Dissolved	Analysis	SM 2320B		1	607165	06/30/21 20:03	SMO	TAL CHI
Dissolved	Analysis	SM 4500 Cl- E		1	607925	07/05/21 16:12	MS	TAL CHI
Dissolved	Prep	SM 5220			607399	07/02/21 06:57	JGM	TAL CHI
Dissolved	Analysis	SM 5220C		1	607527	07/02/21 11:15	JGM	TAL CHI
Total/NA	Analysis	Field Sampling		1	607488	06/17/21 12:40	JVB	TAL CHI

Client Sample ID: MW-116
Date Collected: 06/17/21 00:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	607193	07/01/21 16:20	JDD	TAL CHI

Client Sample ID: Trip Blank
Date Collected: 06/17/21 00:00
Date Received: 06/19/21 10:30

Lab Sample ID: 500-201166-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	606957	06/30/21 17:56	JDD	TAL CHI

Laboratory References:
TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Junker Landfill

Job ID: 500-201166-1

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: KAL/BJI	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-92191-30169 1
Client Contact: Kirsten Lee	Phone	E-Mail: sandra.fredrick@eurofinset.com	State of Origin	Page: Page 1 of 2
Company: Cedar Corporation	PWSID	Analysis Requested		Job #: 500-201166

Address: 604 Wilson Avenue	Due Date Requested	Preservation Codes: A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
City: Menomonie	TAT Requested (days)	
State, Zip: WI 54751	Compliance Project: Δ Yes Δ No	
Phone: 715-235-9081(Tel)	PO #: Purchase Order not required	
Email: kirsten.lee@cedarcorp.com	WO #:	
Project Name: Junker Landfill	Project #: 50006557	
Site	SSOW#:	Other:

500-201166 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Alk, chloride, COD	Total Hardness (Filtered)	Diss Fe, Diss Mn (Filtered)	VOCs	SVOCs	Total Number of containers	Special Instructions/Note
			Preservation Code:										
1 MW-6	6/17/21	1330		Water			X	X	X	X		6	
2 MW-8		1310		Water									
3 MW-9		1340		Water									
4 MW-10		1410		Water									
5 MW-11		1000		Water									
6 MW-13		0915		Water						X		8	
7 MW-14		1100		Water								6	
8 MW-15A		1130		Water									
9 MW-15B		1200		Water									
10 MW-15C		1145		Water									
11 MW-16		1240		Water									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements: EDDs, field notes emailed to Sandie

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Kirsten Lee	6/18/21 1000	CedarCorp	Stephanie Hernandez	6/19/21 1030	ETA-CHI

Custody Seals Intact:	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
☐ Yes Δ No		-0.1, 1.2

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: KAL/BJI	Lab PM: Fredrick Sandie	Carrier Tracking No(s)	COC No: 500-92191-30169 2
Client Contact: Kirsten Lee	Phone	E-Mail: sandra fredrick@eurofinset.com	State of Origin	Page: Page 2 of ~~2~~ 3
Company: Cedar Corporation	PWSID			Job #: 500-201166
Address: 604 Wilson Avenue	Due Date Requested			
City: Menomonie	TAT Requested (days):			
State, Zip: WI 54751	Compliance Project: Δ Yes Δ No			
Phone: 715-235-9081(Tel)	PO #: Purchase Order not required			
Email: kirsten.lee@cedarcorp.com	WO #:			
Project Name: Junker Landfill	Project #: 50006557			
Site	SSOW#			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs	Total Number of containers	Special Instructions/Note
				Preservation Code:						
12	MW-116	6/17/21	—		Water			X	3	
13	Trip Blank				Water			↓	1	
					Water					
					Water					
					Water					
					Water					
					Water					
					Water					
					Water					
					Water					
					Water					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

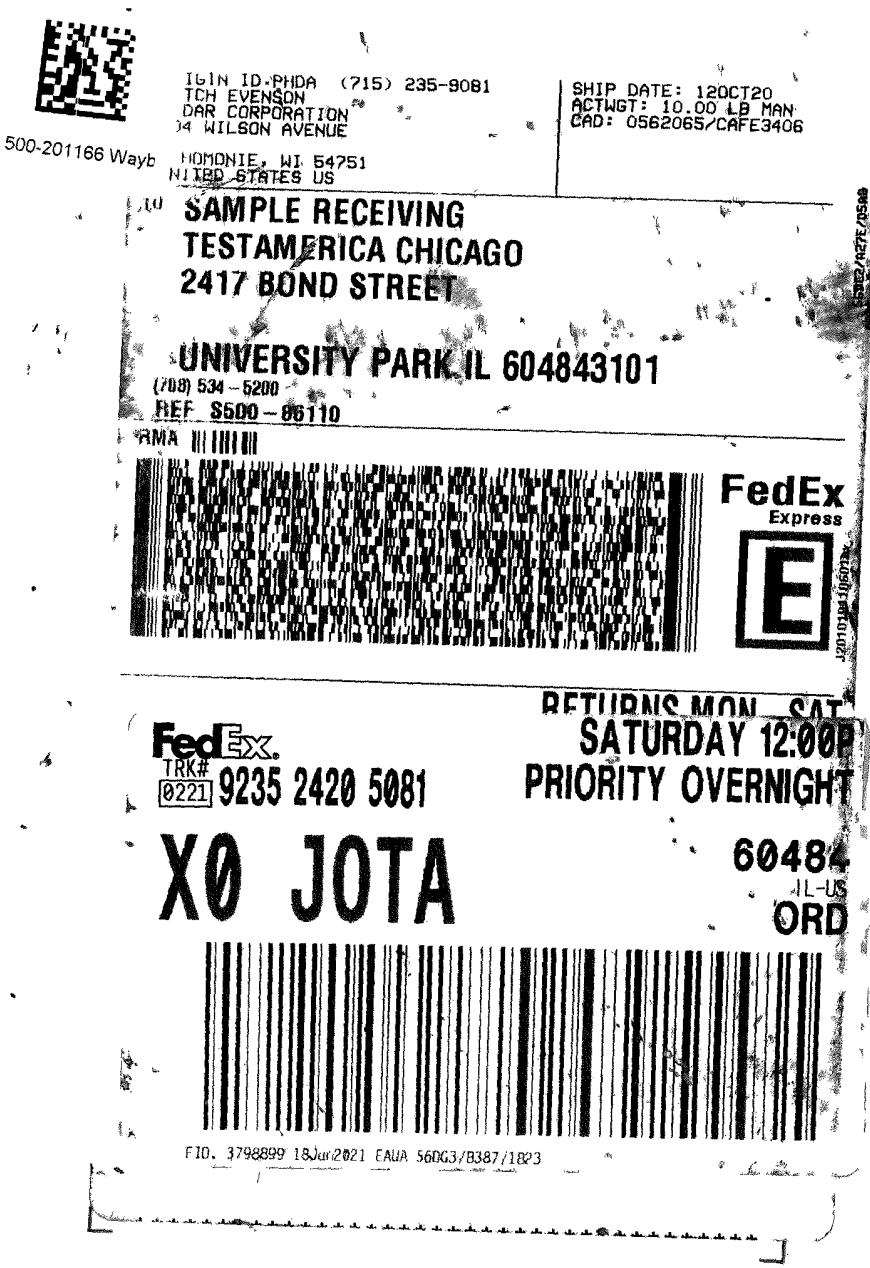
Special Instructions/QC Requirements: EDDs, field notes emailed to Sandie

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Kirsten Lee	6/18/21 1000	CedarCorp	Stephanie Hernandez	6/19/21 1030	E7A-CH1
2						
3						

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks


ORIGIN ID:PHDA (715) 235-9081
MITCH EVENSON
CEDAR CORPORATION
WILSON AVENUE
MENOMONIE, WI 54751
UNITED STATES US
SHIP DATE: 12OCT20
ACTWGT: 10.00 LB MAN
CAD: 0562065/CAFE3406
SAMPLE RECEIVING
TESTAMERICA CHICAGO
2417 BOND STREET
UNIVERSITY PARK IL 604843101
(708) 534-5200
REF S500-86110
RMA
FedEx Express
RETURNS MON-SAT
SATURDAY 12:00P
PRIORITY OVERNIGHT
FedEx
TRK# 0221 9235 2420 5092
XO JOTA
60484
IL-US
ORD
FID 3798899 18Jun2021 EAUA 560G3 B387 1B23


500-201166 Wayb
ORIGIN ID:PHDA (715) 235-9081
MITCH EVENSON
CEDAR CORPORATION
WILSON AVENUE
MENOMONIE, WI 54751
UNITED STATES US
SHIP DATE: 12OCT20
ACTWGT: 10.00 LB MAN
CAD: 0562065/CAFE3406
SAMPLE RECEIVING
TESTAMERICA CHICAGO
2417 BOND STREET
UNIVERSITY PARK IL 604843101
(708) 534-5200
REF S500-86110
RMA
FedEx Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
FedEx
TRK# 0221 9235 2420 5081
XO JOTA
60484
IL-US
ORD
FID 3798899 18Jun2021 EAUA 560G3 B387 1B23

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-201166-1

Login Number: 201166
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.1,1.2, Samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

6/17/21 & 6/18/21 KAL/BJI 75F Cloudy

MW#	DTW	TOC	GWE	Time	Date
3	~~broken~~ 89.74	986.92	~~900.18~~	~~0830~~	6/~~18~~/21
4	116.86	1017.64	900.78	0930	6/18/21
6	109.44	needs to be resurveyed		1330	6/~~17~~/21
7	111.10	1013.01	901.91	~~10:30~~	6/~~18~~/21
8	102.34	needs to be resurveyed		1310	6/~~17~~/21
9	106.46	↓		1340	6/~~17~~/21
10	107.38			1410	6/~~17~~/21
11	130.21	1034.16	903.95	1000	6/~~17~~/21
12	154.85	1065.54	910.69	1315	6/18/21
* 13	110.06	1011.85	901.79	0915	6/~~17~~/21
14	69.49	970.75	901.26	1100	6/~~17~~/21
15A	70.33	924.29	853.96	1130	6/~~17~~/21
15B	70.55	924.52	853.97	~~1145~~ 1200	6/~~17~~/21
15C	70.30	924.66	854.36	~~1200~~ 1145	6/~~17~~/21
16	59.33	915.13	855.80	1240	6/~~17~~/21
116	—	—	—	—	6/~~17~~/21
Blower	—	—	—	1600	6/~~16~~/21
Leachate	—	—	—	1600	6/~~16~~/21

collected GPS coordinates

* SVOCs

Pinkys pumped 36" 1,680 gallons

T/C/O	pH	Temp °C	Cond µS	DNR#	
Mod/~~cl~~/N	7.63	17.5	417	~~3~~	
N/cl/N	7.50	16.8	501	4	
slt/tan/N	7.13	21.6	615	6	
~~slt~~/cl/N	7.52	19.8	500	7	
slt/tan/N	7.51	22.1	512	8	
N/cl/N	7.42	21.7	488	9	
N/cl/N	7.50	21.9	488	10	
N/cl/N	7.72	19.9	452	15	
slt/cl/N	7.23	23.1	632	17	
slt/cl/N	7.61	18.1	514	19	
slt/tan/N	7.24	19.5	608	21	
~~slt/cl~~/N	~~7.88~~	~~17.5~~	~~521~~	23	
N/cl/N	7.70	17.9	542	25	
N/cl/N	7.49	19.0	506	27	
N/cl/N	7.33	24.7	499	29	needs a lock
—	—	—	—	—	
—	—	—	—	—	
V/Brn/Y	7.03	22.1	4410	401	

Rite in the Rain