EVERETT
WASHINGTON

December 30, 2020

Sunny Becker, Site Manager
Washington State Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008-5452

RE: Everett Landfill – 2020 Groundwater Performance Monitoring Report

Dear Sunny:

HWA Geosciences, Inc. has completed the Groundwater Performance Monitoring annual report for the Everett Landfill site. This report satisfies this year's groundwater reporting requirements outlined in Section 4.5.3 of the Compliance Monitoring and Contingency Plan.

The attached letter report presents data and results from the two Groundwater Monitoring events for 2020. As the report describes, sampling was performed in February 2020 and July 2020.

Please note that additional deep aquifer sampling and analysis was performed to establish a predevelopment baseline prior to pile installation throughout the site. This information was submitted in a separate report earlier this month.

If you have any comments or questions on the attached, please don't hesitate to contact me. Alternatively, you can contact Megan King at Floyd & Snider, Inc.

Sincerely,

Randy Loveless, P.E.
Landfill Site Manager

Enclosure

Public Works

3200 Cedar Street
Everett, WA 98201

425.257.8800
425.257.8882 fax

everettpw@everettwa.gov
everettwa.gov/pw

HWA GEOSCIENCES INC.
DBE/MWBE

December 21, 2020
HWA Project No. 98165-660

City of Everett Public Works Department
3200 Cedar Street
Everett, WA 98201

Attention: Mark Sadler

Subject: **Performance Monitoring Annual Report 2020**
Everett Landfill/Tire Fire Site
Everett, Washington

Dear Mark,

This letter presents the annual report for 2020, for ground water monitoring at the Everett Landfill/Tire Fire Site (herein referred to as Landfill), per the Compliance Monitoring and Contingency Plan (CMCP).

GROUND WATER MONITORING

HWA collected ground water samples semi-annually, in February and July 2020. Figure 1 shows the location of the ground water sampling locations. Sampling locations included:

- Five deep aquifer network monitoring wells: MW-11R, MW-21R (upgradient), and MW-29R, MW-30, MW-31 (downgradient).
- Three deep point-of-compliance monitoring wells: MW-36, MW-38, and MW-39R.
- Well MW-37 was formerly a point-of-compliance monitoring well, but monitoring was discontinued from 2006 to 2015, due to the influence of saline water from the river on ground water sample quality. Sampling was resumed in July 2015 at the request of Department of Ecology (Ecology).

During the July sampling event, additional wells were sampled, and additional analytes were tested for, as requested by Ecology to establish a baseline prior to pile installation. Results of this one-time sampling/analysis are described separately in the HWA *Ground Water Sampling Report, One-time Additional Wells and Parameters, July 2020, Everett Landfill/Tire Fire Site, Everett, Washington,* Dated October 19, 2020. The October 19, 2020 report contains some results that extend beyond CMCP requirements and are therefore not indicated in this annual report.

ANALYSIS

Samples collected in February and July were submitted to ALS Environmental (ALS, formerly CCI Analytical Laboratories) in Everett, Washington and the City of Everett Environmental Laboratory (EEL) for the following analyses:

- Semi-volatile organic compounds (SVOCs), including: bis(2-ethylhexyl)phthalate (submitted to ALS);
- Dissolved metals, including: arsenic, iron, manganese, nickel, and zinc (submitted to EEL); and
- Chloride (submitted to EEL).

RESULTS

Table 1 summarizes the ground water analytical results. Appendix A contains copies of the ALS and EEL laboratory reports and HWA's data verification quality control/quality assurance report.

Referring to Table 1, in the 2020 monitoring period, site-specific ground water cleanup levels were exceeded in point of compliance wells as follows:

- MW-37, 2/4/2020 and 7/23/2020, Chloride = 480 and 995 mg/L, respectively. Monitoring at this well was discontinued from 2006 to 2015, due to the influence of saline water from the river on ground water sample quality. Sampling was resumed in July 2015 at the request of Ecology. This well has consistently had chloride detections exceeding the cleanup level, and has exhibited variation in chloride concentration, likely in response to tidal, seasonal and river stage effects.

Cleanup levels were exceeded in deep aquifer network monitoring wells as follows:

- 2020 ground water samples analyzed from deep aquifer network monitoring well MW-31 exceeded cleanup levels for iron (concentrations between 40 and 50 mg/L), which is consistent with all previous results from this well.

All other analytes monitored in the ground water samples collected during the 2020 monitoring period were either below the cleanup levels or not detected above laboratory detection limits.

GROUND WATER GRADIENT / HYDRAULIC CONTROL

Table 2 lists ground water depths and elevations. Based on numerous past studies, ground water in the deep aquifer flows to the east, towards the Snohomish River, with gradients ranging from 0.01 to 0.02 ft/ft. Although ground water levels are still being measured in all wells sampled, ground water gradients are no longer mapped and interpreted, per the 2015 SAP. Shallow and deep ground water gradients have already been established over many years of monitoring, and most of the remaining wells are located in a line parallel to the river, complicating estimation of the gradient direction and magnitude.

During the 2020 monitoring year, ground water levels at and near the Everett Landfill leachate collection system were monitored to evaluate hydraulic control of the shallow aquifer as ground water moves east from the Everett Landfill towards the Snohomish River. Using a datalogging

level sensor installed inside wet well LS 21 and a datalogging pressure transducer installed in the nearby piezometer MW-46, located just west of the leachate collection system (see Figure 1), water level readings have been collected every hour from December 11, 2017 to November 30, 2020.

Results showed that during 2020 wet well water elevations generally occurred between 0.50 feet and -1.70 feet, corresponding to the high and low pump level settings (Figure 2). Some brief excursions extended outside this range and were likely due to pumps being shut down for general operation and maintenance activities. 2020 Ground water elevations in MW-46, screened within the shallow aquifer, ranged from 4.3 feet to 12.6 feet. Water levels inside the wet well therefore ranged from approximately 3.8 to 12.1 feet lower than ground water levels monitored in MW-46, which is similar to the previous two years of monitoring, and demonstrates overall hydraulic control of the shallow (leachate) aquifer and that shallow aquifer discharge into the Snohomish River is not occurring.

We appreciate the opportunity to provide our services. Please feel free to call if you have any questions or need more information.

Sincerely,

HWA GEOSCIENCES INC.

Austin York, LG
Environmental Geologist

Arnie Sugar, LG, LHG
Principal Hydrogeologist

Attachments:
Table 1, Performance Monitoring Ground Water Analytical Results
Table 2, Ground Water Elevations

Figure 1, Everett Landfill Ground Water Monitoring Wells
Figure 2, LS-21 vs PZ-46 Water Elevation Data: January 2016 to November 2020

Appendix A - Laboratory Reports and QA/QC Report

Table 1
Performance Monitoring
Ground Water Analytical Results
Everett Landfill

			Dissolved Metals					Conventional	SVOC
	Chemical Name		Arsenic	Iron	Manganese	Nickel	Zinc	Chloride	bis (2-Ethylhexyl) phthalate
	Unit		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)
Sample Location	Sample Type	C.L. / Date	25	23687	4040	10	76.6	230	10
MW-11R	NET	7/9/2001	6 U	**9223**	**1430**	5 U	8 U	**11.8**	1 U
MW-11R		10/3/2001	6 U	**7945**	**1553**	2 U	8 U	**18.0**	1 U
MW-11R		1/18/2002	6 U	**9439**	**1910**	2 U	**10.45**	**11.6**	4 U
MW-11R		4/10/2002	6 U	**8742**	**2025**	4 U	8 U	**13.8**	4 U
MW-11R		7/11/2002	4 U	**32**	**440**	4 U	8 U	**13.3**	4 U
MW-11R		10/9/2002	**4**	**12400**	**2210**	4 U	8 U	**19.8**	4 U
MW-11R		1/13/2003	4 U	**3970**	**97**	**4.6**	**8**	**40.3**	1 U
MW-11R		4/23/2003	4 U	**11000**	**1810**	4 U	8 U	**20.2**	1 U
MW-11R		10/9/2003	4 U	**12800**	**1860**	4 U	8 U	**38.4**	2.8 B
MW-11R		4/6/2004	2 U	**10200**	**1260**	2 U	8 U	**8.8**	1 U
MW-11R		7/15/2005	2 U	**12500**	**1260**	2 U	8 U	**8.0**	10 U
MW-11R		2/1/2006	4 U	**11800**	**1240**	2 U	8 U	**14.0**	10 U
MW-11R		7/10/2006	4 U	**13500**	**1700**	2 U	8 U	**13.0**	2 U
MW-11R		1/10/2007	4 U	**12400**	**1560**	4 U	8 U	**18.3**	2 U
MW-11RD		1/10/2007	4 U	**12700**	**1600**	4 U	8 U	**18.3**	2 U
MW-11R		7/17/2007	4 U	**11800**	**1600**	4 U	8 U	**15.6**	2 U
MW-11R		1/24/2008	2 U	**11500**	**1490**	4 U	8 U	**12.6**	10 U
MW-11R		6/18/2008	1.4 U	**12300**	**1410**	0.5 U	5 U	**11.5**	2 U
MW-11RD		6/18/2008	1.4 U	**12400**	**1420**	0.5 U	5 U	**11.4**	2 U
MW-11R		1/21/2009	1.7 U	**12200**	**1430**	0.5 U	5 U	**10.7**	2 U
MW-11R		7/10/2009	**1.2**	**14100**	**1410**	1 U	10 U	**14.5**	2 U
MW-11R		1/29/2010	**1.9**	**10800**	**1300**	1 U	10 U	**12.9**	2 U
MW-11R		7/28/2010	0.6 U	**9860**	**992**	0.5 U	5 U	**7.4**	2 U
MW-11R		1/20/2011	1.4 J	**11300**	**1250**	1 U	10 U	**10.8**	2 U
MW-11R		7/19/2011	1 U	**7960**	**716**	1 U	10 U	**8.8**	2 U
MW-11RD		7/19/2011	1 U	**7980**	**720**	1 U	10 U	**8.8**	2 U
MW-11R		1/23/2012	NS	NS	NS	NS	NS	NS	NS
MW-11R		7/11/2012	2.3	**7600**	**535**	0.5 U	5 U	**4.1**	2 U
MW-11R		1/22/2013	1.5 J	**3320**	**294**	1 U	10 U	**3.5**	2 U
MW-11R		7/18/2013	0.6 J	**5800**	**444**	0.5 U	5 U	**3.9**	**2.6**
MW-11R		1/31/2014	0.8 J	**6260**	**446**	0.5 U	5 U	**8.3**	2 U
MW-11R		7/25/2014	0.6 J	**5920**	**400**	0.5 U	5 U	**4.9**	2 U
MW-11R		2/9/2015	1 U	**5630**	**433**	1 U	10 U	**3.1**	2 U
MW-11R		7/29/2015	1 U	**5600**	**509**	1 U	10 U	**3.4**	2 U
MW-11R		1/19/2016	1 U	**159000**	**20700**	2.3 J	10 U	**2320**	2 U
MW-11R		7/18/2016	1 U	**5880**	**640**	1 U	10 U	**18.2**	2 U
MW-11R		1/26/2017	1 U	**8250**	**1060**	1 U	10 U	**14.3**	2 U
MW-11R		7/19/2017	1 U	**180**	**131**	1 U	10 U	**4.6**	2 U
MW-11R		2/9/2018	1 U	**4430**	**877**	1 U	10 U	**7.6**	2 U
MW-11R		7/31/2018	1 U	**780**	**768**	1 U	10.3 U	**7.6**	2 U
MW-11R		1/15/2019	1 U	**3330**	**727**	1 U	10 U	**10.7**	2 U
MW-11R		7/10/2019	1 U	**320**	**559**	1 U	10 U	**8.5**	2 U
MW-11R		2/3/2020	1 U	**2500**	**631**	1 U	10 U	**7.1**	2 U
MW-11R		7/21/2020	1 U	**5200**	**428**	1 U	10 U	**7.7**	2 U
MW-21	NET	7/3/2001	6 U	**15**	**234**	5 U	8 U	**18.1**	1 U
MW-21		10/2/2001	6 U	**25**	**147**	**7.8**	8 U	**19.7**	1 U
MW-21		1/18/2002	6 U	**49**	**199**	**9.06**	8 U	**20.0**	4 U
MW-21		4/9/2002	6 U	**37**	**222**	**8.82**	8 U	**18.2**	4 U
MW-21		7/9/2002	4 U	**17**	**166**	**7.6**	8 U	**21.1**	4 U
MW-21		10/9/2002	4 U	**15**	**241**	**8.2**	8 U	**16.3**	4 U
MW-21		1/14/2003	4 U	**22**	**205**	**8.3**	8 U	**19.7**	1 U
MW-21		4/22/2003	4 U	**25**	**159**	**8.4**	8 U	**20.2**	1 U
MW-21		10/9/2003	4 U	**17**	**245**	**9.1**	8 U	**16.0**	1 U
MW-21		4/5/2004	2 U	**36**	**293**	**9.9**	8 U	**17.9**	1 U
MW-21		7/14/2005	2 U	**22**	**189**	**8.6**	8 U	**18.0**	10 U
MW-21		1/31/2006	4 U	**49**	**132**	**7.9**	**9**	**18.0**	10 U
MW-21R	NET	1/21/2009	**22.3**	**2470**	**1210**	**2.3**	8 U	**13.7**	2 U
MW-21R		7/9/2009	**31**	**7950**	**1970**	1 U	10 U	**9.1**	2 U
MW-21RD		7/9/2009	**30.4**	**7910**	**1940**	1 U	10 U	**9.4**	2 U
MW-21R		1/28/2010	**16.9**	**7510**	**1410**	1 U	10 U	**12.6**	2 U
MW-21R		7/28/2010	**23.7**	**8580**	**1660**	0.5 U	5 U	**9.1**	2 U
MW-21R		1/20/2011	**24.2**	**11400**	**1720**	1 U	10 U	**10.0**	2 U
MW-21R		7/19/2011	**25**	**11700**	**1830**	1 U	10 U	**8.5**	2 U
MW-21R		1/23/2012	**24.6**	**11400**	**2080**	1 U	10 U	**8.4**	2 U
MW-21R		7/18/2012	**6.8**	**8820**	**1600**	0.6 J	5 U	**11.1**	2 U
MW-21R		1/22/2013	1.0 J	**290**	**50**	1 U	10 U	**10.4**	2 U
MW-21R		7/18/2013	0.7 J	**98**	**121**	0.7 J	5 U	**12.2**	2 U
MW-21R		2/1/2014	**20.6**	**10300**	**1860**	0.5 U	5 U	**7.4**	2 U
MW-21R		7/25/2014	**15.0**	**9220**	**1280**	0.5 U	5 U	**9.6**	2 U
MW-21R		2/10/2015	**21**	**13700**	**1720**	1 U	10 U	**10.2**	2 U
MW-21RD		2/10/2015	**24.2**	**14000**	**1730**	1 U	10 U	**10.5**	**16**
MW-21R		7/30/2015	1.8 J	42 J	3 J	1 U	10 U	**10.9**	2 U
MW-21R		1/19/2016	**15.1**	**13500**	**1330**	1 U	10 U	**16.2**	2 U
MW-21R		7/18/2016	**1.5** J	**100** J	**19.3**	1 U	10 U	**13.3**	2 U
MW-21R		1/26/2017	**14.8**	**13900**	**1760**	1 U	10 U	**16.3**	2 U
MW-21R		7/19/2017	**1.5** J	**48** J	**4.5**	1 U	10 U	**14.0**	2 U
MW-21R		2/9/2018	**15.7**	**12100**	**1670**	1 U	10 U	**18.9**	**2.1**
MW-21RD		2/9/2018	**17.3**	**13600**	**1770**	1 U	10 U	**18.6**	**2.2**
MW-21R		7/31/2018	**1.4** J	**50** J	**13.1**	1 U	10.3 U	**17.0**	2 U
MW-21R		1/15/2019	**1.0** J	**1950**	**1440**	1 U	10 U	**16.0**	2 U
MW-21R		7/10/2019	1 U	**67** J	**9**	1 U	10 U	**12.2**	2 U
MW-21R		2/3/2020	**9.6**	**10800**	**1780**	1 U	10 U	**9.6**	2 U
MW-21R		7/21/2020	1 U	40 U	**319**	1 U	10 U	**11.2**	2 U
MW-28	NET	7/6/2001	**8**	**7972**	**247**	5 U	8 U	**4.5**	1 U
MW-28		10/5/2001	**8**	**5414**	**161**	2 U	8 U	**4.8**	1 U
MW-28		1/23/2002	**8.52**	**9332**	**273**	2 U	8 U	**4.8**	4 U
MW-28		4/15/2002	**8.18**	**7644**	**239**	4 U	8 U	**4.7**	4 U
MW-28		7/9/2002	**13**	**8220**	**231**	4 U	8 U	**5.3**	4 U
MW-28D		7/9/2002	**12**	**8260**	**233**	4 U	8 U	**5.3**	4 U
MW-28		10/14/2002	**8**	**7490**	**217**	4 U	8 U	**5.1**	4 U
MW-28		1/16/2003	**8**	**9190**	**257**	4 U	8 U	**5.4**	1 U
MW-28		4/24/2003	**8**	**7350**	**239**	4 U	8 U	**5.0**	1 U
MW-28		10/14/2003	**8**	**8020**	**225**	4 U	8 U	**5.2**	**5.6**
MW-28		4/12/2004	**7**	**7450**	**248**	2 U	8 U	**4.9**	1 U
MW-28		7/19/2005	**8**	**8750**	**265**	2 U	8 U	**5.0**	10 U
MW-28		2/3/2006	**8**	**8950**	**244**	2 U	8 U	**5.0**	10 U
MW-28		7/11/2006	**8**	**6440**	**200**	2 U	**10**	**5.2**	2 U
MW-28		1/10/2007	**8**	**8960**	**250**	4 U	8 U	**5.3**	2 U
MW-28		7/18/2007	**7**	**6110**	**240**	4 U	8 U	**5.6**	2 U
MW-28		1/29/2008	**9**	**7300**	**230**	4 U	8 U	**5.2**	10 U
MW-28D		1/29/2008	**7**	**6420**	**220**	4 U	8 U	**5.1**	10 U
MW-28		6/19/2008	**10.2**	**9000**	**236**	0.5 U	5 U	**4.9**	2 U

Table 1
Performance Monitoring
Ground Water Analytical Results
Everett Landfill

			Dissolved Metals					Conventional	SVOC
	Chemical Name		Arsenic	Iron	Manganese	Nickel	Zinc	Chloride	bis (2-Ethylhexyl) phthalate
	Unit		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)
Sample Location	Sample Type	C.L. / Date	25	23687	4040	10	76.6	230	10
MW-29	NET	7/10/2001	6 U	**3930**	**378**	5 U	8 U	**9.8**	1 U
MW-29		10/3/2001	6 U	**288**	**186**	2 U	8 U	**10.1**	1 U
MW-29		1/24/2002	6 U	**4472**	**376**	2 U	8 U	**10.1**	4 U
MW-29		4/12/2002	6 U	**4593**	**372**	4 U	8 U	**9.7**	4 U
MW-29		7/10/2002	4 U	**5240**	**361**	4 U	8 U	**10.4**	4 U
MW-29		10/11/2002	4 U	**4580**	**367**	4 U	8 U	**10.7**	4 U
MW-29		1/17/2003	4 U	**4480**	**346**	4 U	8 U	**11.3**	**1.1**
MW-29		4/30/2003	4 U	**4800**	**356**	4 U	8 U	**10.4**	**2**
MW-29		10/13/2003	4 U	**4670**	**373**	4 U	8 U	**10.4**	1 U
MW-29		4/9/2004	2 U	**5180**	**400**	2 U	8 U	**11.6**	1 U
MW-29		7/18/2005	2 U	**4310**	**394**	2 U	8 U	**10.0**	10 U
MW-29		2/3/2006	**5**	**4030**	**319**	2 U	8 U	**11.0**	10 U
MW-29		7/11/2006	4 U	**3320**	**360**	2 U	**8**	**10.4**	2 U
MW-29		1/12/2007	4 U	**4040**	**350**	4 U	8 U	**11.0**	2 U
MW-29		7/18/2007	4 U	**4270**	**380**	4 U	8 U	**11.4**	2 U
MW-29		1/29/2008	2 U	**4140**	**370**	4 U	8 U	**10.5**	10 U
MW-29		6/18/2008	0.5 U	**4650**	**352**	0.5 U	5 U	**10.7**	2 U
MW-29		1/22/2009	0.5 U	**7210**	**361**	0.5 U	5 U	**11.4**	2 U
MW-29		7/10/2009	1 U	**7010**	**380**	**1.3**	10 U	**10.7**	2 U
MW-29		1/28/2010	1 U	**4550**	**355**	1 U	10 U	**9.7**	2 U
MW-29		7/30/2010	0.6 J	**4270**	**326**	0.5 U	5 U	**9.1**	2 U
MW-29		1/21/2011	1 U	**5520**	**358**	1 U	10 U	**10.0**	2 U
MW-29		7/18/2011	1 U	**4420**	**341**	1 U	10 U	**9.3**	**2.4**
MW-29		1/23/2012	NS	NS	NS	NS	NS	NS	NS
MW-29		7/18/2012	NS	NS	NS	NS	NS	NS	NS
MW-29		1/22/2013	NS	NS	NS	NS	NS	NS	NS
MW-29R		7/29/2015	2.6 J	**1800**	**473**	3.6 J	10 U	**108**	**7.7**
MW-29R		1/19/2016	1 U	**9360**	**604**	1 U	10 U	**11.7**	2 U
MW-29R		7/14/2016	1 U	**7500**	**493**	1 U	10 U	**28.4**	2 U
MW-29R		1/26/2017	1 U	**10200**	**675**	1 U	10 U	**13.4**	2 U
MW-29R		7/20/2017	1 U	**9630**	**643**	1 U	10 U	**13.7**	2 U
MW-29R		2/9/2018	1 U	**9210**	**604**	1 U	10 U	**14.1**	2 U
MW-29R		8/1/2018	1 U	**6450**	**557**	1 U	10.3 U	**14.9**	2 U
MW-29R		1/29/2019	1 U	**160**	**500**	1 U	10 U	**15.8**	2 U
MW-29R		7/10/2019	1 U	**4110**	**527**	1 U	10 U	**13.3**	2 U
MW-29R		2/3/2020	1 U	**7790**	**424**	1 U	10 U	**11.4**	2 U
MW-29RD		2/3/2020	1 U	**7480**	**430**	1 U	10 U	**11.3**	2 U
MW-29R		7/22/2020	1 U	**2650**	**283**	1 U	10 U	**10.6**	2 U
MW-30	NET	7/5/2001	**8**	**4653**	**573.75**	5 U	8 U	**27.1**	1 U
MW-30		10/3/2001	6 U	**254**	**186**	2 U	8 U	**26.5**	1 U
MW-30		1/25/2002	**9.34**	**6578**	**548.08**	2 U	8 U	**23.7**	4 U
MW-30		4/11/2002	**11.14**	**6253**	**506.64**	4 U	8 U	**23.1**	4 U
MW-30		7/10/2002	4 U	**222**	**324**	4 U	8 U	**23.9**	4 U
MW-30		10/10/2002	**11**	**5810**	**484**	4 U	8 U	**19.4**	4 U
MW-30		1/16/2003	**11**	**6240**	**505**	4 U	8 U	**19.6**	1 U
MW-30		4/29/2003	**9**	**5850**	**500**	4 U	8 U	**19.7**	1 U
MW-30		10/13/2003	**10**	**5380**	**478**	4 U	8 U	**17.0**	1 U
MW-30		4/8/2004	**11**	**5160**	**495**	2 U	8 U	**18.4**	1 U
MW-30		7/14/2005	**9**	**5070**	**480**	2 U	8 U	**21.0**	10 U
MW-30		2/3/2006	**13**	**5290**	**460**	2 U	8 U	**20.0**	10 U
MW-30		7/11/2006	4 U	**4070**	**450**	2 U	8 U	**17.4**	2 U
MW-30		1/12/2007	**7**	**5780**	**490**	4 U	8 U	**16.8**	2 U
MW-30		7/18/2007	**5**	**3690**	**400**	4 U	8 U	**14.6**	2 U
MW-30		1/29/2008	**9**	**5240**	**480**	4 U	8 U	**13.2**	10 U
MW-30		6/18/2008	0.7 U	47 J	**116**	0.5 U	5 U	**16.8**	2 U
MW-30		1/22/2009	**5.6**	**4130**	**475**	0.5 U	5 U	**23.5**	2 U
MW-30		7/10/2009	**6.6**	**3630**	**346**	1 U	10 U	**12.9**	2 U
MW-30		1/28/2010	**7.2**	**4310**	**421**	1 U	10 U	**15.3**	2 U
MW-30		7/30/2010	**7**	**5250**	**406**	0.5 U	5 U	**15.7**	2 U
MW-30		1/21/2011	**8.5**	**5420**	**428**	1 U	10 U	**11.9**	2 U
MW-30		7/18/2011	**8.2**	**4940**	**417**	1 U	10 U	**12.3**	2 U
MW-30		1/24/2012	**7.2**	**5000**	**445**	1 U	10 U	**12.8**	2 U
MW-30		7/18/2012	1.7 J	**2340**	**691**	0.5 U	5 U	**13.5**	2 U
MW-30D		7/18/2012	1.8 J	**2380**	**688**	0.5 U	5 U	**13.0**	2 U
MW-30		1/22/2013	**6.7**	**4730**	**424**	1 U	10 U	**13.8**	2 U
MW-30D		1/22/2013	**6.8**	**4710**	**423**	1 U	10 U	**12.9**	2 U
MW-30		7/18/2013	**4.3**	**3530**	**386**	0.5 U	5 U	**14.7**	**2.4**
MW-30D		7/18/2013	**4.8**	**3820**	**394**	0.5 U	5 U	**14.9**	2 U
MW-30		1/31/2014	**8.2**	**6300**	**428**	0.5 U	5 U	**11.1**	2 U
MW-30		7/28/2014	1.2 J	**790**	**116**	0.5 U	5 U	**11.0**	2 U
MW-30		2/9/2015	b	**7110**	**447**	1 U	10 U	**10.7**	2 U
MW-30		7/29/2015	1 U	**320**	**25**	1 U	10 U	**9.8**	2 U
MW-30		1/19/2016	**4.3**	**6780**	**465**	1 U	10 U	**33.6**	2 U
MW-30		7/14/2016	**8**	**8320**	**559**	1 U	10 U	**142**	2 U
MW-30		1/26/2017	**8.6**	**7290**	**446**	1 U	**72**	**11.2**	2 U
MW-30		7/20/2017	1 U	**150** J	**14.4**	1 U	10 U	**11.2**	2 U
MW-30		2/9/2018	**9**	**8830**	**509**	1 U	10 U	**11.1**	2 U
MW-30		8/1/2018	**7.6**	**8690**	**482**	1 U	10.3 U	**12.8**	2 U
MW-30		1/15/2019	**7.2**	**8490**	**495**	1 U	10 U	**13.1**	2 U
MW-30		7/10/2019	**1.8** J	**1780**	**174**	1 U	10 U	**9.0**	2 U
MW-30		2/3/2020	**2.5** J	**6420**	**428**	1 U	10 U	**11.3**	2 U
MW-30		7/22/2020	1 U	**970**	**84**	1 U	10 U	**10.3**	2 U

Table 1
Performance Monitoring
Ground Water Analytical Results
Everett Landfill

			Dissolved Metals					Conventional	SVOC
	Chemical Name		Arsenic	Iron	Manganese	Nickel	Zinc	Chloride	bis (2-Ethylhexyl) phthalate
	Unit		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)
Sample Location	Sample Type	C.L. / Date	25	23687	4040	10	76.6	230	10
MW-31	NET	7/5/2001	6 U	43672	1261.8	5 U	8 U	149.8	1 U
MW-31		10/3/2001	6 U	29424	866.99	3.9	8 U	150.0	1 U
MW-31		1/22/2002	6 U	39542	1206.2	5.83	8 U	137.5	6
MW-31		4/10/2002	6 U	38227	1178	4 U	8 U	136.9	4 U
MW-31		7/11/2002	4 U	41700	1190	4 U	8 U	132.0	4 U
MW-31		10/10/2002	4 U	42000	1190	4.4	8 U	150.0	4 U
MW-31D		10/10/2002	4 U	41800	1180	4 U	8 U	151.0	4 U
MW-31		1/16/2003	4 U	38400	1150	4.5	8 U	13.5	1 U
MW-31		4/29/2003	4 U	38800	1130	4 U	8 U	131.0	320
MW-31		10/13/2003	4 U	41300	1230	4.4	8 U	147.0	1 U
MW-31		4/8/2004	3	35600	1220	4.7	8 U	120.0	1.5 B
MW-31		7/14/2005	2 U	33400	1150	3.9	8 U	127.0	10 U
MW-31		2/3/2006	4 U	31800	1150	2.9	8 U	130.0	10 U
MW-31		7/12/2006	4 U	36100	1160	3	8 U	132.0	2 U
MW-31		1/12/2007	4 U	34300	1170	4	16	134.0	2 U
MW-31		7/17/2007	4 U	37100	1180	7	8 U	149.0	2 U
MW-31		1/29/2008	2 U	32200	1160	4 U	8 U	138.0	10 U
MW-31		6/18/2008	1.8 U	39500	1160	3.2	5 U	132.0	2 U
MW-31		1/22/2009	1.5 U	32400	1080	3	5 U	149.7	2 U
MW-31		7/10/2009	1.3	40300	1170	3.2	10 U	148.0	2 U
MW-31		1/28/2010	1.3	31200	1130	3.2	10 U	147.0	2 U
MW-31		7/30/2010	1.4 J	38600	1150	3	5 U	143.0	2 U
MW-31D		7/30/2010	1.3 J	37600	1110	3.2	5 U	144.0	2 U
MW-31		1/21/2011	1.4 J	36500	1160	3 J	10 U	157.0	2 U
MW-31D		1/21/2011	1.4 J	36300	1160	3 J	10 U	161.0	2 U
MW-31		7/18/2011	1.5 J	39600	1210	3.9 J	10 U	132.0	2 U
MW-31		1/24/2012	1.4 J	34500	1190	3.4 J	10 U	143.0	2 U
MW-31		7/18/2012	1.5 J	39700	1150	3.2	5 U	138.0	2 U
MW-31		1/22/2013	1.6 J	42100	1210	3.5 J	10 U	134.0	2.7
MW-31		7/19/2013	1.5 J	39900	1180	3.1	7 J	149.0	3
MW-31		1/31/2014	1.5 J	44300	1220	3.3	5 U	139.0	2 U
MW-31		7/28/2014	1.6 J	48100	1170	3.3	5 U	150.0	2 U
MW-31		2/9/2015	2.5 J	70400	1180	3.8 J	10 U	144.0	2 U
MW-31		7/29/2015	2 J	59600	1220	3.1 J	10 U	148.0	2 U
MW-31D		7/29/2015	2 J	58800	1220	3.7 J	10 U	149.0	2 U
MW-31		1/19/2016	1.4 J	40400	1010	2.7 J	10 U	148.0	2 U
MW-31D		1/19/2016	1.5 J	40600	1010	2.6 J	10 U	148.0	2 U
MW-31		7/14/2016	1.9 J	58300	1250	3.6 J	10 U	36.8	2 U
MW-31D		7/14/2016	2 J	58500	1260	3.4 J	10 U	142.0	2 U
MW-31		1/26/2017	1.7 J	48300	1190	3.4 J	10 U	141.0	2 U
MW-31		7/20/2017	1.9 J	47500	1240	3.5 J	10 U	140.0	2 U
MW-31D		7/20/2017	1.9 J	48300	1250	3.5 J	10 U	130.0	2 U
MW-31		2/9/2018	2.3 J	52700	1260	3.6 J	10 U	137.0	2.8
MW-31		8/1/2018	1.5 J	42400	1170	3.1 J	10.3 U	133.0	2 U
MW-31		1/15/2019	1.9 J	45900	1140	3.3 J	10 U	133.0	2 U
MW-31		7/10/2019	1.6 J	42200	1210	3.1 J	10 U	136.0	2 U
MW-31		2/3/2020	1.6 J	43600	1190	2.8 J	10 U	136.0	2 U
MW-31		7/22/2020	1.7 J	46400	1250	3.1 J	10 U	144.0	2 U
MW-31D		7/22/2020	1.6 J	45200	1240	3.1 J	10 U	143.0	2 U
MW-33	BG	7/5/2001	6 U	14 U	54	5 U	8 U	20.4	1 U
MW-33		10/2/2001	NS	NS	NS	NS	NS	NS	NS
MW-33		1/17/2002	6 U	14 U	27	3.67	42.2	8.7	4 U
MW-33		4/9/2002	6 U	14 U	20	4.36	32.12	8.3	4 U
MW-33		7/8/2002	4 U	14 U	16	4 U	462.6	5.3	4 U
MW-33		10/8/2002	4 U	14 U	3	4 U	23	7.9	4 U
MW-33		1/21/2003	4 U	14 U	1	4 U	26	7.8	1.1
MW-33		4/22/2003	4 U	14 U	1 U	4 U	48	7.2	1 U
MW-33		10/7/2003	4 U	14 U	1 U	4 U	19	8.5	1 U
MW-33		4/5/2004	2 U	14 U	1 U	3	15	8.3	1 U
MW-33		7/18/2005	2 U	14 U	1 U	3	19	12.0	10 U
MW-33		1/31/2006	4 U	14 U	1 U	2.7	18	8.0	10 U
MW-33		7/10/2006	4 U	14 U	1 U	3	11	6.6	2 U
MW-33		1/12/2007	4 U	14 U b		6	33	7.2	2 U
MW-33		7/20/2007	4 U	14 U	1	4 U	70	6.2	2 U
MW-33		1/30/2008	2 U	14 U	1 U	4 U	68	5.3	10 U
MW-33		6/19/2008	0.6 U	30 U	2 U	3.2 U	29	5.1	2 U
MW-35	BG	7/5/2001	6 U	14 U	109	5 U	8 U	46.3	1 U
MW-35		10/2/2001	6 U	14 U	19	2.3	48.85	47.1	1 U
MW-35		1/17/2002	6 U	14 U	6	2.97	8 U	43.1	4 U
MW-35		4/9/2002	6 U	47	2	4 U	8 U	42.5	4 U
MW-35		7/8/2002	4 U	14 U	1 U	4 U	8 U	42.5	4 U
MW-35		10/8/2002	4 U	14 U	1 U	4 U	8 U	43.8	4 U
MW-35		1/14/2003	4 U	14 U	1 U	4 U	8 U	48.6	1 U
MW-35		4/22/2003	4 U	14 U	1 U	4 U	8 U	44.2	1 U
MW-35		10/7/2003	4 U	25	1 U	4 U	8 U	45.0	1 U
MW-35		4/5/2004	2 U	14 U	1 U	2 U	8 U	45.0	1 U
MW-35		7/18/2005	2 U	14 U	1 U	2 U	8 U	44.0	10 U
MW-35		2/1/2006	4 U	14 U	1 U	2 U	8 U	42.0	10 U
MW-36	POC	7/6/2001	14.7	12552	728	5 U	8 U	69.3	1 U
MW-36		10/8/2001	9	12067	543	2 U	8 U	59.1	1 U
MW-36		1/22/2002	8.46	15896	648	2.85	8 U	41.6	4 U
MW-36		4/10/2002	6 U	24681	663	4 U	8 U	96.5	4 U
MW-36		7/11/2002	10	15300	670	4 U	8 U	44.5	4 U
MW-36		10/9/2002	9	16500	687	4 U	8 U	44.0	4 U
MW-36		1/15/2003	8	17300	705	4 U	8 U	40.4	1 U
MW-36		4/23/2003	6	14700	693	4 U	8 U	41.0	1 U
MW-36		10/9/2003	7	16400	728	4 U	8 U	36.8	2.9 B
MW-36		4/6/2004	9	17100	778	2 U	8 U	52.5	1 U
MW-36		7/15/2005	8	18000	852	2 U	8 U	38.9	10 U
MW-36		2/1/2006	4 U	255	26.1	2 U	43	2.2	10 U
MW-36		7/13/2006	14	18200	850	2	9	35.5	2 U
MW-36		1/12/2007	9	17600	850	4 U	8 U	29.1	2 U
MW-36		7/20/2007	9	18300	870	4 U	8 U	34.4	2 U
MW-36		1/25/2008	6	11600	890	4 U	26	28.3	10 U
MW-36		6/19/2008	5	15000	690	1.1 U	9 U	28.6	2 U
MW-36		1/22/2009	1.7 U	1000	390	2.7	29	8.8	2 U
MW-36D		1/22/2009	0.9 U	420	300	2.4	28	12.0	2 U
MW-36		7/9/2009	3.1	18100	742	1 U	10 U	29.8	2 U

Table 1
Performance Monitoring
Ground Water Analytical Results
Everett Landfill

			Dissolved Metals					Conventional	SVOC
	Chemical Name		Arsenic	Iron	Manganese	Nickel	Zinc	Chloride	bis (2-Ethylhexyl) phthalate
	Unit		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)
Sample Location	Sample Type	C.L. / Date	25	23687	4040	10	76.6	230	10
MW-36		1/29/2010	**3.8**	**6820**	**759**	**2.3**	36	**23.2**	2 U
MW-36		7/29/2010	**4.1**	**15800**	**685**	0.9 J	5 U	**40.3**	2 U
MW-36		1/20/2011	**4.5**	**16400**	**685**	1 U	10 U	**32.3**	2 U
MW-36		7/19/2011	**4.7**	**16100**	**698**	1.1 J	10 U	**32.6**	2 U
MW-36		1/23/2012	**5.6**	**16000**	**724**	1 U	10 U	**27.5**	2 U
MW-36D		1/23/2012	**5.6**	**16000**	**728**	1 U	10 U	**28.5**	2 U
MW-36		7/18/2012	**4.8**	**14800**	**677**	0.8 J	5 U	**29.4**	2 U
MW-36		1/22/2013	**4.4**	**14200**	**850**	2.5 J	22 J	**25.7**	2 U
MW-36		7/18/2013	**6.3**	**15800**	**745**	0.9 J	6 J	**26.0**	2 U
MW-36		1/31/2014	**5.6**	**14800**	**757**	0.8 J	5 U	**22.4**	2 U
MW-36		7/25/2014	**5.4**	**12300**	**650**	0.9 J	5 U	**33.0**	2 U
MW-36		2/10/2015	**6.6**	**18700**	**765**	1 U	10 U	**27.0**	2 U
MW-36		7/29/2015	1 U	40 U	1 U	1 U	10 U	**210.0**	2 U
MW-36		1/22/2016	**4.6**	**24900**	**1350**	2.7 J	10 U	**253.0**	2 U
MW-36		7/14/2016	**5.1**	**580**	**131**	3.3 J	10 U	**86.4**	2 U
MW-36		2/1/2017	1 U	**240**	**94.2**	2.2 J	10 U	**111**	2 U, H
MW-36		7/20/2017	2.2 J	**680**	**351**	2 J	10 U	**69.8**	2 U
MW-36		2/9/2018	2.2 J	**10500**	**640**	1 U	10 U	**131**	2 U
MW-36		8/1/2018	1.4 J	**3960**	**427**	1.3 J	10.3 U	**91.4**	2 U
MW-36		1/29/2019	1.1 J	**4740**	**277**	1 U	10 U	**81**	2 U
MW-36		7/11/2019	3.6 J	**7450**	**334**	1 U	10 U	**49.7**	2 U
MW-36		2/4/2020	2.1 J	**190**	**170**	2.2 J	10 U	**21.6**	2 U
MW-36		7/23/2020	**7.1**	**4350**	**378**	2 J	10 U	**35.7**	2 U
MW-37	POC	7/6/2001	6 U	**22907**	**700**	5 U	8 U		1 U
MW-37		10/8/2001	6 U	**20327**	**599**	2 U	8 U	**87.0**	1 U
MW-37		1/22/2002	6 U	**22525**	**678**	**2.87**	**8.1**	**92.3**	4 U
MW-37		4/10/2002	**9.4**	**16182**	**665**	4 U	8 U	**48.3**	4 U
MW-37		7/11/2002	4 U	**25400**	**688**	4 U	8 U	**92.3**	4 U
MW-37	not	10/9/2002	4 U	**25500**	**664**	4 U	**11**	**112.0**	4 U
MW-37	sampled	1/15/2003	4 U	**26800**	**694**	4 U	8 U	**114.0**	1 U
MW-37	2006-2015	4/23/2003	4 U	**23100**	**598**	4 U	8 U	**117.0**	1 U
MW-37	due to	10/8/2003	4 U	**22700**	**651**	4 U	8 U	**190.0**	1 U
MW-37	saline river	4/6/2004	**3**	**25100**	**724**	2 U	8 U	**157.0**	1 U
MW-37	water	7/15/2005	2 U	**26500**	**807**	2 U	8 U	**248.0**	10 U
MW-37	biasing	2/1/2006	4 U	**29900**	**956**	2 U	8 U	**461.0**	10 U
MW-37	results	7/13/2006	4 U	**26500**	**840**	2 U	**61**	**257.0**	2 U
MW-37D		7/13/2006	4 U	**26800**	**840**	2 U	8 U	**298.0**	2 U
MW-37		7/29/2015	1.2 J	**2710**	**491**	1.3 J	10 U	**31.0**	2 U
MW-37		1/22/2016	1 U	**33300**	**894**	1.4 J	23 J	**155.0**	2 U
MW-37		7/14/2016	1 U	**28200**	**720**	1 U	10 U	**251.0**	2 U
MW-37		2/1/2017	1 U	**35100**	**1230**	1 U	10 U	**1690**	2 U, H
MW-37D		2/1/2017	1 U	**34400**	**1200**	1 U	10 U	**1680**	2 U, H
MW-37	resample	4/5/2017						**840**	
MW-37		7/20/2017	1 U	**18900**	**830**	1 U	10 U	**1790**	2 U
MW-37		2/9/2018	1 U	**9180**	**494**	1 U	10 U	**1590**	**2.5**
MW-37		8/2/2018	1 U	**11100**	**509**	1 U	10.3 U	**1360**	2 U
MW-37		1/29/2019	1 U	**12800**	**419**	1 U	10 U	**465**	2 U
MW-37		7/11/2019	1 U	**20600**	**873**	1 U	10 U	**884**	2 U
MW-37D		7/11/2019	1 U	**20600**	**870**	1 U	10 U	**880**	2 U
MW-37		2/4/2020	1 U	**15100**	**733**	1 U	10 U	**480**	2 U
MW-37		7/23/2020	1 U	**17900**	**1350**	1 U	10 U	**995**	2 U
MW-38	POC	7/6/2001	6 U	**3022**	**384**	5 U	8 U	**17.1**	1 U
MW-38		10/8/2001	6 U	**4066**	**287**	2 U	8 U	**20.6**	1 U
MW-38		1/23/2002	6 U	**3653**	**272**	2 U	**8.3**	**15.4**	4 U
MW-38		4/12/2002	6 U	**3665**	**263**	4 U	8 U	**15.4**	**5.4**
MW-38		7/11/2002	4 U	**3480**	**262**	4 U	8 U	**19.4**	4 U
MW-38		10/15/2002	4 U	**2290**	**234**	4 U	8 U	**19.2**	4 U
MW-38		1/15/2003	4 U	**4200**	**284**	4 U	8 U	**20.9**	1 U
MW-38		4/23/2003	4 U	**1560**	**219**	4 U	8 U	**16.2**	1 U
MW-38		10/8/2003	4 U	**4070**	**296**	4 U	8 U	**23.8**	1 U
MW-38		4/6/2004	2 U	**3690**	**279**	2 U	8 U	**22.1**	1 U
MW-38		7/15/2005	2 U	**4850**	**331**	2 U	8 U	**27.0**	10 U
MW-38		2/2/2006	4 U	**4130**	**289**	2 U	8 U	**24.0**	10 U
MW-38		7/10/2006	4 U	**4230**	**290**	2 U	8 U	**24.4**	2 U
MW-38		1/10/2007	4 U	**4120**	**300**	4 U	8 U	**26.4**	2 U
MW-38		7/20/2007	4 U	**1680**	**260**	4 U	8 U	**22.5**	2 U
MW-38		1/25/2008	2 U	**2470**	**230**	4 U	**31**	**16.5**	10 U
MW-38		6/19/2008	0.5 U	**6240**	**325**	0.5 U	5 U	**39.2**	2 U
MW-38		1/22/2009	0.5 U	**420**	**39**	1.2 U	**600**	**8.9**	2 U
MW-38		2/26/2009					**36**		
MW-38		7/9/2009	1 U	**3220**	**259**	1 U	**52**	**22.4**	2 U
MW-38		1/29/2010	1 U	**3300**	**267**	1 U	10 U	**16.2**	2 U
MW-38		7/29/2010	0.5 U	**3480**	**253**	0.5 U	5 U	**17.1**	2 U
MW-38		1/20/2011	1 U	**3610**	**265**	1 U	10 U	**13.9**	2 U
MW-38		7/18/2011	1 U	**4020**	**272**	1 U	10 U	**22.4**	2 U
MW-38		1/24/2012	1 U	**4000**	**301**	1 U	10 U	**17.1**	2 U
MW-38		7/18/2012	0.5 U	71 J	**107**	0.5 U	17 J	**16.2**	2 U
MW-38		1/22/2013	1 U	**3530**	**287**	1 U	10 U	**12.8**	2 U
MW-38		7/192013	0.5 U	**4190**	**288**	0.5 U	7 J	**30.4**	**2.1**
MW-38		2/6/2014	0.5 U	**3420**	**264**	0.5 U	5 U	**12.8**	2 U
MW-38		7/28/2014	0.5 U	**550**	**136**	0.5 U	7 J	**15.0**	2 U
MW-38		2/9/2015	1 U	**2720**	**236**	2 J	11 J	**10.5**	2 U
MW-38		7/29/2015	1 U	40 U	**213**	1 U	14 J	**11.1**	2 U
MW-38		1/22/2016	1 U	**3400**	**275**	1 U	10 U	**9.1**	2 U
MW-38		7/14/2016	1 U	**5460**	**502**	1 U	10 U	**86.4**	2 U
MW-38		2/1/2017	1 U	**3490**	**306**	1 U	10 U	**17.0**	**2** H
MW-38		7/20/2017	1 U	**3580**	**300**	1 U	10 U	**17.7**	2 U
MW-38		2/9/2018	1 U	**2810**	**295**	1 U	10 U	**11.0**	2 U
MW-38		8/2/2018	1 U	**1230**	**210**	1 U	10.3 U	**12.8**	2 U
MW-38D		8/2/2018	1 U	**970**	**202**	1 U	10.3 U	**12.9**	2 U
MW-38		1/29/2019	1 U	**2430**	**271**	1 U	10 U	**12.4**	2 U
MW-38D		1/29/2019	1 U	**2400**	**274**	1 U	10 U	**12.2**	2 U
MW-38		7/11/2019	1 U	**800**	**169**	1 U	10 U	**12.1**	2 U
MW-38		2/5/2020	1 U	40 U	**27.5**	1 U	10 U	**10.5**	2 U
MW-38		7/23/2020	1 U	**160**	**257**	1 U	10 U	**6.3**	2 U

Table 1
Performance Monitoring
Ground Water Analytical Results
Everett Landfill

			Dissolved Metals					Conventional	SVOC
	Chemical Name		Arsenic	Iron	Manganese	Nickel	Zinc	Chloride	bis (2-Ethylhexyl) phthalate
	Unit		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)
Sample Location	Sample Type	C.L. / Date	25	23687	4040	10	76.6	230	10
MW-39	POC	7/6/2001	6 U	**420**	**206**	5 U	30	**49.8**	1 U
MW-39		10/8/2001	6 U	**916**	**236**	2 U	8 U	**45.7**	1 U
MW-39		1/23/2002	6 U	**1365**	**398**	2 U	8 U	**7.9**	**6.5**
MW-39		4/12/2002	6 U	**1638**	**384**	4 U	8 U	**6.8**	**7.2**
MW-39		7/9/2002	**8**	**2520**	**430**	4 U	**12**	**6.2**	**4.8**
MW-39		10/15/2002	**4**	**2740**	**398**	4 U	8 U	**5.6**	4 U
MW-39		1/15/2003	4 U	**2870**	**353**	4 U	8 U	**6.5**	1 U
MW-39		4/24/2003	4 U	**2080**	**363**	4 U	8 U	**5.1**	**74**
MW-39		10/8/2003	4 U	**3690**	**366**	4 U	8 U	**5.6**	1 U
MW-39		4/6/2004	**4**	**3730**	**323**	2 U	8 U	**5.3**	1 U
MW-39		7/15/2005	2 U	**18.2**	**300**	2 U	**16**	**6.0**	10 U
MW-39		2/2/2006	**6**	**3780**	**269**	2 U	8 U	**5.0**	10 U
MW-39		7/10/2006	4 U	**990**	**220**	2 U	**17**	**4.3**	2 U
MW-39		1/10/2007	4 U	**6980**	**280**	4 U	8 U	**5.4**	2 U
MW-39		7/19/2007	4 U	**5310**	**270**	4 U	8 U	**5.7**	2 U
MW-39D		7/19/2007	4 U	**5490**	**280**	4 U	8 U	**5.9**	2 U
MW-39		1/24/2008	**3**	**5560**	**260**	4 U	8 U	**5.8**	10 U
MW-39		6/18/2008	b	**4320**	**282**	0.5 U	5 U	**5.3**	2 U
MW-39		1/22/2009	1.5 U	**1950**	**252**	0.5 U	9 U	**6.1**	2 U
MW-39		7/9/2009	**1.1**	**1960**	**154**	1 U	10 U	**5.9**	2 U
MW-39		1/29/2010	**2.1**	**4930**	**239**	1 U	10 U	**6.3**	2 U
MW-39D		1/29/2010	**2.2**	**5030**	**240**	1 U	10 U	**6.2**	2 U
MW-39		7/29/2010	1.5 J	**2990**	**224**	0.5 U	5 U	**6.1**	2 U
MW-39		1/20/2011	2.5 J	**5750**	**249**	1 U	10 U	**6.3**	2 U
MW-39		7/18/2011	1.6 J	**3210**	**212**	1 U	10 U	**5.6**	2 U
MW-39		1/24/2012	2.6 J	**6150**	**246**	1 U	10 U	**5.4**	2 U
MW-39		7/18/2012	**2.1**	**5430**	**234**	0.5 U	5 U	**5.9**	2 U
MW-39		1/22/2013	NS	NS	NS	NS	NS	NS	NS
MW-39R		7/29/2015	2 J	130 J	229	2 J	10 U	5.0	8.1
MW-39R		1/19/2016	2.4 J	**650**	**255**	2.1 J	30 J	**5.5**	2 U
MW-39R		7/15/2016	1 U	**4040**	**231**	1 U	10 U	**7.1**	2 U
MW-39R		1/26/2017	1 U	**4270**	**272**	1 U	10 U	**7.6**	2 U
MW-39R		7/20/2017	1 U	40 U	**10.1**	1.4 J	10 U	**1.4**	2 U
MW-39R		2/9/2018	1 U	**4460**	**249**	1 U	10 U	**7.9**	2 U
MW-39R		7/31/2018	1 U	**4600**	**239**	1 U	10.3 U	**7.6**	2 U
MW-39R		1/29/2019	1 U	40 U	**8.2**	1.0 J	10 U	**3.0**	2 U
MW-39R		7/10/2019	1 U	**2700**	**227**	1 U	10 U	**4.5**	2 U
MW-39R		2/3/2020	1 U	**190**	**170**	2.2 J	10 U	**21.6**	2 U
MW-39R		7/22/2020	1 U	40 U	**130**	1 U	10 U	**6.3**	2 U
MW-40		7/10/2006	4 U	**20100**	**450**	2 U	8 U		
MW-40		1/9/2007	4 U	**6060**	**940**	4 U	8 U	**225.0**	2 U
MW-40		7/19/2007	4 U	**4080**	**730**	4 U	8 U	**24.1**	2 U
MW-40		1/30/2008	2 U	**12200**	**1190**	4 U	8 U	**166.0**	10 U
MW-41		7/10/2006	4 U	**5360**	**970**	2 U	8 U		
MW-41		1/9/2007	4 U	**5780**	**1030**	4 U	8 U	**1610.0**	2 U
MW-41		7/19/2007	4 U	**4710**	**990**	4 U	8 U	**1880.0**	2 U
MW-41		1/30/2008	2 U	**1090**	**2710**	4 U	40 U	**6120.0**	10 U
MW-42		7/10/2006	**24**	**7290**	**430**	2 U	8 U	**8.4**	2 U
MW-42D		7/15/2006	**23**	**7280.0**	**420**	0 U	8 U	**4.0**	2 U
MW-42		1/9/2007	**22**	**7300.0**	**410**	4 U	8 U	**3.8**	2 U
MW-42		7/19/2007	**21**	**7040.0**	**390**	4 U	8 U	**4.5**	2 U
MW-42		1/30/2008	**22**	**7090.0**	**390**	4 U	8 U	**3.9**	10 U

NOTES:
Bold Analyte detected
Highlighted Analyte exceeds cleanup level
NET = network well for Performance and Confirmational Monitoring
BG = upgradient background well
POC = deep aquifer point of compliance monitoring well
C.L. = cleanup level
ug/L = micrograms per liter
mg/L = milligrams per liter
U = not detected at reporting limit shown
J = estimated concentration
NS = Not sampled
BKG = background (established after 3 year evaluation monitoring period)
B = likely laboratory contamination, analyte detected in field blank
D = duplicate sample collected
H = Sample analyzed outside of holding time

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-05	S, INT	7/2/2001	13.57	11.71
MW-05		10/1/2001	12.44	12.84
MW-05		1/16/2002	10.75	14.53
MW-05		4/8/2002	10.97	14.31
MW-05		7/3/2002	14.15	11.13
MW-05		10/7/2002	14.63	10.65
MW-05		1/16/2003	13.32	11.96
MW-05		4/21/2003	10.97	14.31
MW-05		10/6/2003	15.12	10.16
MW-05		4/2/2004	14.17	11.11
		Decommissioned 1/05		
MW-08	INT	7/2/2001	19.42	7.59
MW-08		10/1/2001	22.43	4.58
MW-08		1/16/2002	19.57	7.44
MW-08		4/8/2002	19.74	7.27
MW-08		7/3/2002	21.82	5.19
MW-08		10/7/2002	22.99	4.02
MW-08		1/16/2003	17.24	9.77
MW-08		4/21/2003	20.50	6.51
MW-08		10/6/2003	23.88	3.13
MW-08		4/2/2004	21.45	5.56
		Decommissioned 1/05		
MW-11R	NET	1/16/2002	6.25	6.47
MW-11R		4/8/2002	6.60	6.12
MW-11R		4/8/2002	6.60	6.12
MW-11R		7/3/2002	8.68	4.04
MW-11R		10/7/2002	10.56	2.16
MW-11R		1/16/2003	3.12	9.60
MW-11R		4/21/2003	5.77	6.95
MW-11R		10/6/2003	3.61	9.11
MW-11R		4/2/2004	8.62	4.10
MW-11R		7/13/2005	8.10	4.62
MW-11R		2/7/2006	4.34	8.38
MW-11R		7/10/2006	7.84	4.88
MW-11R		1/8/2007	2.89	9.83
MW-11R		7/16/2007	11.76	0.96
MW-11R		1/23/2008	4.48	8.24
MW-11R		6/17/2008	9.45	3.27
MW-11R		1/13/2009	5.53	7.19
MW-11R		7/8/2009	NR	----
MW-11R		1/26/2010	4.88	7.84
MW-11R		7/28/2010	7.05	5.67
MW-11R		1/21/2011	4.73	7.99
MW-11R		7/15/2011	9.27	3.45
MW-11R		1/23/2012	NR	----
MW-11R		7/19/2012	14.65	0.42
MW-11R		1/23/2013	11.52	2.68
MW-11R		7/18/2013	11.00	3.20
MW-11R		1/31/2014	9.08	3.20
MW-11R		7/25/2014	16.82	-2.62
MW-11R		7/28/2015	11.59	2.61
MW-11R		1/19/2016	14.11	0.09
MW-11R		7/18/2016	17.19	-2.99
MW-11R		1/26/2017	12.05	2.15
MW-11R		7/20/2017	16.11	-1.91
MW-11R		2/9/2018	10.87	3.33
MW-11R		7/31/2018	16.12	-1.92
MW-11R		1/15/2019	9.17	5.03
MW-11R		7/10/2019	15.62	-1.42
MW-11R		2/3/2020	7.88	6.32
MW-11R		7/21/2020	17.94	-3.74

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-14	S, INT	7/2/2001	17.85	8.40
MW-14		10/1/2001	20.38	5.87
MW-14		1/16/2002	18.20	8.05
MW-14		4/8/2002	18.45	7.80
MW-14		7/3/2002	20.36	5.89
MW-14		10/7/2002	20.35	5.90
MW-14		1/16/2003	19.52	6.73
MW-14		4/21/2003	18.16	8.09
MW-14		10/6/2003	20.39	5.86
		Decommissioned 1/05		
MW-17	S, INT	7/2/2001	11.32	13.89
MW-17		10/1/2001	2.91	22.30
MW-17		1/16/2002	NR	----
MW-17		4/8/2002	NR	----
MW-17		7/3/2002	NR	----
MW-17		10/7/2002	NR	----
MW-17		1/16/2003	NR	----
MW-17		4/21/2003	13.91	12.44
MW-17		10/6/2003	17.40	7.76
MW-17		4/2/2004	16.95	9.40
		Decommissioned 1/05		
MW-21	NET	7/2/2001	17.19	25.33
MW-21		10/1/2001	17.23	24.96
MW-21		1/16/2002	16.51	25.68
MW-21		4/8/2002	16.39	25.80
MW-21		7/3/2002	16.72	25.47
MW-21		10/7/2002	17.19	25.00
MW-21		1/16/2003	17.10	25.09
MW-21		4/21/2003	16.93	25.26
MW-21		10/6/2003	17.78	24.41
MW-21		4/2/2004	17.52	24.67
MW-21		7/13/2005	17.79	24.40
MW-21		2/7/2006	17.00	25.19
		Abandoned, 2006		
MW-21R	NET	1/13/2009	13.78	25.58
MW-21R		7/8/2009	14.26	25.10
MW-21R		1/26/2010	13.94	25.42
MW-21R		7/28/2010	13.06	26.30
MW-21R		1/21/2011	13.08	26.28
MW-21R		7/15/2011	12.66	26.70
MW-21R		1/23/2012	13.05	26.31
MW-21R		7/19/2012	12.55	26.81
MW-21R		1/23/2013	11.78	27.58
MW-21R		7/18/2013	12.19	27.17
MW-21R		2/1/2014	12.32	27.04
MW-21R		7/25/2014	12.36	27.00
MW-21R		2/10/2015	11.95	27.41
MW-21R		7/30/2015	12.61	26.75
MW-21R		1/19/2016	12.78	26.58
MW-21R		7/18/2016	12.72	26.64
MW-21R		1/26/2017	12.41	26.95
MW-21R		7/20/2017	12.92	26.44
MW-21R		2/9/2018	11.42	27.94
MW-21R		7/31/2018	11.91	27.45
MW-21R		1/15/2019	11.86	27.50
MW-21R		7/10/2019	12.45	26.91
MW-21R		2/3/2020	12.45	26.91
MW-21R		7/21/2020	12.55	26.81

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-22	S, NET	7/2/2001	10.98	16.79
MW-22		10/1/2001	10.93	16.84
MW-22		1/16/2002	11.04	16.73
MW-22		4/8/2002	10.94	16.83
MW-22		7/3/2002	11.01	16.76
MW-22		10/7/2002	11.05	16.72
MW-22		1/16/2003	10.99	16.78
MW-22		4/21/2003	10.94	16.83
MW-22		10/6/2003	11.01	16.76
MW-22		4/2/2004	10.95	16.82
MW-22		7/13/2005	10.99	16.78
MW-22		2/7/2006	10.87	16.90
MW-22		7/10/2006	10.84	16.93
MW-22		1/8/2007	10.79	16.98
MW-22		7/16/2007	8.43	19.34
MW-22		1/23/2008	10.68	17.09
MW-22		6/17/2008	10.78	16.99
MW-22		1/13/2009	10.63	17.14
MW-22		7/8/2009	NR	----
MW-22		1/26/2010	NR	----
MW-22		7/28/2010	NR	----
MW-22		1/21/2011	NR	----
MW-22		7/15/2011	10.50	17.27
MW-22		1/23/2012	13.13	14.64
MW-22		7/19/2012	NR	----
MW-22		1/23/2013	15.56	12.21
MW-22		7/18/2013	15.78	11.99
MW-22		2/1/2014	15.81	11.96
MW-22		7/28/2014	21.65	6.12
MW-22		2/10/2015	15.43	12.34
MW-23	S, INT	7/2/2001	19.44	12.05
MW-23		10/1/2001	19.70	11.79
MW-23		1/16/2002	18.71	12.78
MW-23		4/8/2002	18.69	12.80
MW-23		7/3/2002	19.58	11.91
MW-23		10/7/2002	19.74	11.75
MW-23		1/16/2003	18.90	12.59
MW-23		4/21/2003	18.42	13.07
MW-23		10/6/2003	19.72	11.77
MW-23		4/2/2004	18.93	12.56
		Decommissioned 1/05		
MW-24	S, NET	7/2/2001	8.14	9.76
MW-24		10/1/2001	9.52	8.38
MW-24		1/16/2002	6.66	11.24
MW-24		4/8/2002	7.33	10.57
MW-24		7/3/2002	8.68	9.22
MW-24		10/7/2002	16.73	1.17
MW-24		1/16/2003	7.29	10.61
MW-24		4/21/2003	6.95	10.95
MW-24		10/6/2003	11.14	6.76
MW-24		4/2/2004	7.61	10.29
MW-24		7/13/2005	8.68	9.22
MW-24		2/7/2006	6.97	10.93
MW-24		7/10/2006	8.26	9.64
MW-24		1/8/2007	7.71	10.19
MW-24		7/16/2007	6.66	11.24
MW-24		1/23/2008	7.36	10.54
MW-24		6/17/2008	7.57	10.33
MW-24		1/13/2009	7.04	10.86
MW-24		7/8/2009	8.65	9.25
MW-24		1/26/2010	6.90	11.00
MW-24		7/28/2010	8.26	9.64
MW-24		1/21/2011	5.90	12.00
MW-24		7/15/2011	7.82	10.08
MW-24		1/24/2012	7.50	10.40
MW-24		7/19/2012	7.66	10.24
MW-24		1/23/2013	7.35	10.55
MW-24		7/18/2013	4.12	New TOC
MW-24		1/31/2014	2.58	New TOC
MW-24		7/28/2014	3.15	New TOC
MW-24		2/9/2015	2.55	New TOC
MW-24		7/22/2020	4.21	New TOC

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-25	S, NET	7/2/2001	8.46	7.92
MW-25		10/1/2001	8.65	7.73
MW-25		1/16/2002	6.76	9.62
MW-25		4/8/2002	7.57	8.81
MW-25		7/3/2002	8.22	8.16
MW-25		10/7/2002	9.05	7.33
MW-25		1/16/2003	6.98	9.40
MW-25		4/21/2003	7.00	9.38
MW-25		10/6/2003	9.17	7.21
MW-25		4/2/2004	7.94	8.44
MW-25		7/13/2005	8.19	8.19
MW-25		2/7/2006	6.78	9.60
MW-25		7/10/2006	8.13	8.25
MW-25		1/8/2007	5.78	10.60
MW-25		7/16/2007	7.02	9.36
MW-25		1/23/2008	6.30	10.08
MW-25		6/17/2008	6.66	9.72
MW-25		1/13/2009	6.27	10.11
MW-25		7/8/2009	8.06	8.32
MW-25		1/26/2010	5.86	10.52
MW-25		7/28/2010	7.99	8.39
MW-25		1/21/2011	4.90	11.48
MW-25		7/15/2011	7.54	8.84
MW-25		1/24/2012	5.33	11.05
MW-25		7/19/2012	6.90	9.48
MW-25		1/23/2013	6.20	10.18
MW-25		7/18/2013	3.70	NEW TOC
MW-25		1/31/2014	1.32	NEW TOC
MW-25		7/28/2014	3.54	NEW TOC
MW-25		2/9/2015	2.02	NEW TOC
MW-25		7/22/2020	4.12	NEW TOC
MW-26	S, NET	7/2/2001	10.31	6.13
MW-26		10/1/2001	10.20	6.24
MW-26		1/16/2002	6.11	10.33
MW-26		4/8/2002	6.35	10.09
MW-26		7/3/2002	10.29	6.15
MW-26		10/7/2002	10.43	6.01
MW-26		1/16/2003	6.55	9.89
MW-26		4/21/2003	6.42	10.02
MW-26		10/6/2003	10.47	5.97
MW-26		4/2/2004	9.81	6.63
MW-26		7/13/2005	10.07	6.37
MW-26		2/7/2006	9.27	7.17
MW-26		7/10/2006	11.02	5.42
MW-26		1/8/2007	7.94	8.50
MW-26		7/16/2007	9.16	7.28
MW-26		1/23/2008	9.60	6.84
MW-26		6/17/2008	9.85	6.59
MW-26		1/13/2009	8.43	8.01
MW-26		7/8/2009	9.64	6.80
MW-26		1/26/2010	8.85	7.59
MW-26		7/28/2010	9.05	7.39
MW-26		1/21/2011	4.10	12.34
MW-26		7/15/2011	8.08	8.36
MW-26		1/23/2012	5.52	10.92
MW-26		1/23/2013	4.90	11.54
MW-26		7/18/2013	4.17	NEW TOC
MW-27	S, NET	7/2/2001	8.30	8.11
MW-27		10/1/2001	7.77	8.64
MW-27		1/17/2002	9.20	7.21
MW-27		4/8/2002	6.62	9.79
MW-27		7/3/2002	6.81	9.60
MW-27		10/7/2002	6.00	10.41
MW-27		1/16/2003	6.46	9.95
MW-27		4/21/2003	6.75	9.66
MW-27		10/6/2003	7.87	8.54
MW-27		4/2/2004	5.49	10.92
MW-27		7/13/2005	5.94	10.47
MW-27		2/7/2006	6.90	9.51
MW-27		7/10/2006	6.96	9.45
MW-27		1/8/2007	6.09	10.32
MW-27		7/16/2007	6.02	10.39
MW-27		1/23/2008	6.84	9.57
MW-27		6/17/2008	7.03	9.38
MW-27		Decommissioned 11/08		

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-28	NET	7/2/2001	9.98	6.65
MW-28		10/1/2001	10.35	6.28
MW-28		1/17/2002	8.67	7.96
MW-28		4/8/2002	9.01	7.62
MW-28		7/3/2002	10.52	6.11
MW-28		10/7/2002	11.72	4.91
MW-28		1/16/2003	6.46	10.17
MW-28		4/21/2003	9.45	7.18
MW-28		10/6/2003	9.62	7.01
MW-28		4/2/2004	10.15	6.48
MW-28		7/13/2005	10.25	6.38
MW-28		2/7/2006	7.61	9.02
MW-28		7/10/2006	12.71	3.92
MW-28		1/8/2007	6.78	9.85
MW-28		7/16/2007	10.51	6.12
MW-28		1/23/2008	9.12	7.51
MW-28		6/17/2008	10.00	6.63
		Decommissioned 11/08		
MW-29	NET	7/2/2001	8.44	7.52
MW-29		10/1/2001	8.75	7.21
MW-29		1/16/2002	7.36	8.6
MW-29		4/8/2002	7.75	8.21
MW-29		7/3/2002	9.06	6.90
MW-29		10/7/2002	10.21	5.75
MW-29		1/16/2003	5.92	10.04
MW-29		4/21/2003	7.05	8.91
MW-29		10/6/2003	7.60	8.36
MW-29		4/2/2004	8.60	7.36
MW-29		7/13/2005	8.56	7.40
MW-29		2/7/2006	5.94	10.02
MW-29		7/10/2006	11.27	4.69
MW-29		1/8/2007	5.08	10.88
MW-29		7/16/2007	8.54	7.42
MW-29		1/23/2008	7.41	8.55
MW-29		6/17/2008	8.50	7.46
MW-29		1/13/2009	6.03	9.93
MW-29		7/8/2009	9.64	6.32
MW-29		1/26/2010	5.12	10.84
MW-29		7/28/2010	10.05	5.91
MW-29		1/21/2011	3.84	12.12
MW-29		7/15/2011	5.63	10.33
MW-29		1/23/2012	NR	----
		Well damaged		
MW-29R		7/28/2015	7.64	No TOC Survey
MW-29R		1/19/2016	11.50	No TOC Survey
MW-29R		7/14/2016	4.92	No TOC Survey
MW-29R		1/26/2017	3.18	No TOC Survey
MW-29R		7/20/2017	5.65	No TOC Survey
MW-29R		2/8/2018	1.92	No TOC Survey
MW-29R		8/1/2018	3.90	No TOC Survey
MW-29R		1/29/2019	3.61	No TOC Survey
MW-29R		7/10/2019	5.87	No TOC Survey
MW-29R		2/3/2020	3.06	No TOC Survey
MW-29R		7/22/2020	3.15	No TOC Survey
MW-30	NET	7/2/2001	7.95	7.95
MW-30		10/1/2001	13.29	2.61
MW-30		1/16/2002	9.06	6.84
MW-30		4/8/2002	9.09	6.81
MW-30		7/3/2002	11.70	4.20
MW-30		10/7/2002	12.87	3.03
MW-30		1/16/2003	5.92	9.98
MW-30		4/21/2003	11.07	4.83
MW-30		10/6/2003	6.08	9.82
MW-30		4/2/2004	11.38	4.52
MW-30		7/13/2005	11.51	4.39
MW-30		2/7/2006	7.25	8.65
MW-30		7/10/2006	15.37	0.53
MW-30		1/8/2007	6.37	9.53
MW-30		7/16/2007	13.18	2.72
MW-30		1/23/2008	7.21	8.69
MW-30		6/17/2008	13.11	2.79
MW-30		1/13/2009	8.40	7.50
MW-30		7/8/2009	NR	----
MW-30		1/26/2010	8.37	7.53
MW-30		7/28/2010	10.17	5.73
MW-30		1/21/2011	6.12	9.78
MW-30		7/15/2011	11.28	4.62
MW-30		1/24/2012	8.00	7.90
MW-30		7/19/2012	13.90	2.00
MW-30		1/23/2013	8.85	7.05
MW-30		7/18/2013	6.65	NEW TOC
MW-30		1/31/2014	5.22	NEW TOC
MW-30		7/28/2014	11.87	NEW TOC
MW-30		2/9/2015	4.66	NEW TOC

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-30		7/28/2015	13.31	NEW TOC
MW-30		1/19/2016	3.41	NEW TOC
MW-30		7/14/2016	6.79	NEW TOC
MW-30		1/26/2017	6.97	NEW TOC
MW-30		7/20/2017	7.24	NEW TOC
MW-30		2/8/2018	3.63	NEW TOC
MW-30		8/1/2018	5.37	NEW TOC
MW-30		2/8/2018	3.63	NEW TOC
MW-30		8/1/2018	5.37	NEW TOC
MW-30		1/15/2019	2.81	NEW TOC
MW-30		7/10/2019	8.33	NEW TOC
MW-30		2/3/2020	1.50	NEW TOC
MW-30		7/22/2020	8.90	NEW TOC
MW-31	NET	7/2/2001	11.45	6.96
MW-31		10/1/2001	15.77	2.64
MW-31		1/16/2002	12.32	6.09
MW-31		4/8/2002	12.36	6.05
MW-31		7/3/2002	15.00	3.41
MW-31		10/7/2002	16.61	1.80
MW-31		1/16/2003	8.61	9.80
MW-31		4/21/2003	13.16	5.25
MW-31		10/6/2003	9.08	9.33
MW-31		4/2/2004	14.63	3.78
MW-31		7/13/2005	14.20	4.21
MW-31		2/7/2006	10.20	8.21
MW-31		7/10/2006	18.57	-0.16
MW-31		1/8/2007	9.06	9.35
MW-31		7/16/2007	18.76	-0.35
MW-31		1/23/2008	12.58	5.83
MW-31		6/17/2008	16.24	2.17
MW-31		1/13/2009	11.34	7.07
MW-31		7/8/2009	18.93	-0.52
MW-31		1/26/2010	10.97	7.44
MW-31		7/28/2010	13.10	5.31
MW-31		1/21/2011	9.69	8.72
MW-31		7/15/2011	14.31	4.10
MW-31		1/24/2012	11.95	6.46
MW-31		7/19/2012	17.55	0.86
MW-31		1/23/2013	12.05	6.36
MW-31		7/18/2013	14.72	NEW TOC
MW-31		1/31/2014	9.35	NEW TOC
MW-31		7/28/2014	11.86	NEW TOC
MW-31		2/9/2015	7.38	NEW TOC
MW-31		7/28/2015	14.47	NEW TOC
MW-31		1/19/2016	5.29	NEW TOC
MW-31		7/14/2016	10.30	NEW TOC
MW-31		1/26/2017	8.31	NEW TOC
MW-31		7/20/2017	11.80	NEW TOC
MW-31		2/8/2018	5.80	NEW TOC
MW-31		8/1/2018	7.60	NEW TOC
MW-31		1/15/2019	3.96	NEW TOC
MW-31		7/10/2019	11.13	NEW TOC
MW-31		2/3/2020	2.94	NEW TOC
MW-31		7/22/2020	12.35	NEW TOC
MW-32	INT	7/2/2001	4.62	17.55
MW-32		10/1/2001	5.55	16.62
MW-32		1/17/2002	2.69	19.48
MW-32		4/8/2002	2.80	19.37
MW-32		7/3/2002	4.54	17.63
MW-32		10/7/2002	4.85	17.32
MW-32		1/16/2003	3.72	18.45
MW-32		4/21/2003	2.54	19.63
MW-32		10/6/2003	4.52	17.65
MW-32		4/2/2004	5.10	17.07
		Decommissioned 1/05		

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-33	BG	7/2/2001	48.54	25.76
MW-33		10/1/2001	NR	NR
MW-33		1/16/2002	48.34	25.96
MW-33		4/8/2002	48.16	26.14
MW-33		7/3/2002	48.43	25.87
MW-33		10/7/2002	NR	----
MW-33		1/17/2003	49.06	25.24
MW-33		4/21/2003	48.67	25.63
MW-33		10/6/2003	47.20	27.10
MW-33		4/2/2004	49.25	25.05
MW-33		7/13/2005	NR	----
MW-33		2/7/2006	NR	----
MW-33		7/10/2006	NR	----
MW-33		1/8/2007	NR	----
MW-33		7/16/2007	NR	----
MW-33		1/23/2008	47.97	26.33
MW-33		6/17/2008	NR	----
MW-33		1/13/2009	48.15	26.15
MW-33		7/8/2009	NR	----
MW-33		1/26/2010	48.37	25.93
MW-33		7/28/2010	48.02	26.28
MW-33		1/21/2011	NR	----
MW-33		7/15/2011	46.92	27.38
MW-33		1/23/2012	47.56	26.74
MW-33		7/19/2012	46.84	27.46
MW-33		1/23/2013	46.05	28.25
MW-33		7/18/2013	46.50	27.80
MW-33		2/1/2014	NR	----
MW-33		7/25/2014	46.60	27.70
MW-33		2/10/2015	46.33	27.97
MW-34	S, BG	7/2/2001	17.18	57.19
MW-34		10/1/2001	17.59	56.78
MW-34		1/16/2002	16.78	57.59
MW-34		4/8/2002	16.46	57.91
MW-34		7/3/2002	16.74	57.63
MW-34		10/7/2002	17.17	57.20
MW-34		1/16/2003	17.04	57.33
MW-34		4/21/2003	16.92	57.45
MW-34		10/6/2003	17.76	56.61
MW-34		4/2/2004	16.97	57.40
MW-34		7/13/2005	17.31	57.06
MW-34		2/7/2006	17.04	57.33
MW-34		7/10/2006	17.28	57.09
MW-34		1/8/2007	16.84	57.53
MW-34		7/16/2007	16.63	57.74
MW-34		1/23/2008	16.42	57.95
MW-34		6/17/2008	NR	----
MW-34		1/13/2009	16.50	57.87
MW-34		7/8/2009	NR	----
MW-34		1/26/2010	16.82	57.48
MW-34		7/28/2010	16.71	57.59
MW-34		1/21/2011	NR	----
MW-34		7/15/2011	16.15	58.15
MW-34		1/23/2012	16.61	57.69
MW-34		7/19/2012	16.24	58.06
MW-34		1/23/2013	15.85	58.45
MW-34		7/18/2013	16.15	58.15
MW-34		2/1/2014	16.45	57.85
MW-34		7/25/2014	16.60	57.70
MW-34		2/10/2015	16.17	58.13
MW-35	BG	7/2/2001	48.43	24.82
MW-35		10/1/2001	48.89	24.36
MW-35		1/16/2002	48.32	24.93
MW-35		4/8/2002	48.11	25.14
MW-35		7/3/2002	48.46	24.79
MW-35		10/7/2002	48.85	24.40
MW-35		1/16/2003	48.89	24.36
MW-35		4/21/2003	48.77	24.48
MW-35		10/6/2003	49.38	23.87
MW-35		4/2/2004	49.24	24.01
MW-35		7/13/2005	49.53	23.72
MW-35		2/7/2006	49.06	24.19
MW-35		7/10/2006	49.02	24.23
		Abandoned, 2006		

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-36	POC	7/2/2001	9.79	1.13
MW-36		10/1/2001	9.98	0.94
MW-36		1/16/2002	5.10	5.82
MW-36		4/8/2002	4.92	6.00
MW-36		7/3/2002	6.95	3.97
MW-36		10/7/2002	9.11	1.81
MW-36		1/16/2003	1.78	9.14
MW-36		4/21/2003	8.10	2.82
MW-36		10/6/2003	9.97	0.95
MW-36		4/2/2004	7.46	3.46
MW-36		7/13/2005	5.89	5.03
MW-36		2/7/2006	2.68	8.24
MW-36		7/10/2006	12.40	-1.48
MW-36		1/8/2007	1.07	9.85
MW-36		7/16/2007	6.82	4.10
MW-36		1/23/2008	3.53	7.39
MW-36		6/17/2008	7.98	2.94
MW-36		1/13/2009	3.34	7.58
MW-36		7/8/2009	11.44	-0.52
MW-36		1/26/2010	3.14	7.78
MW-36		7/28/2010	5.65	5.27
MW-36		1/21/2011	3.75	7.17
MW-36		7/15/2011	7.86	3.06
MW-36		1/23/2012	4.26	6.66
MW-36		7/19/2012	7.33	3.59
MW-36		1/23/2013	4.62	6.30
MW-36		7/18/2013	3.45	7.47
MW-36		1/31/2014	4.03	6.89
MW-36		7/28/2014	8.00	2.92
MW-36		2/10/2015	0.70	10.22
MW-36		7/29/2015	5.83	5.09
MW-36		1/22/2016	3.01	7.91
MW-36		7/14/2016	10.39	0.53
MW-36		2/1/2017	4.71	6.21
MW-36		7/20/2017	10.05	0.87
MW-36		2/9/2018	3.40	7.52
MW-36		8/1/2018	9.04	1.88
MW-36		1/29/2019	1.70	9.22
MW-36		7/10/2019	9.11	1.81
MW-36		2/4/2020	1.94	8.98
MW-36		7/23/2020	10.01	0.91
MW-37	POC	7/2/2001	12.41	1.87
MW-37		10/1/2001	13.77	0.51
MW-37		1/16/2002	8.30	5.98
MW-37		4/8/2002	7.99	6.29
MW-37		7/3/2002	10.12	4.16
MW-37		10/7/2002	12.55	1.73
MW-37		1/16/2003	5.27	9.01
MW-37		4/21/2003	12.10	2.18
MW-37		10/6/2003	12.89	1.39
MW-37		4/2/2004	10.82	3.46
MW-37		7/13/2005	9.02	5.26
MW-37		2/7/2006	5.79	8.49
MW-37		7/10/2006	16.15	-1.87
MW-37		1/8/2007	4.50	9.78
MW-37		7/16/2007	10.32	3.96
MW-37		1/23/2008	5.90	8.38
MW-37		6/17/2008	12.38	1.90
MW-37		1/13/2009	5.55	8.73
MW-37		7/8/2009	15.27	-0.99
MW-37		1/26/2010	6.77	7.51
MW-37		7/28/2010	8.82	5.46
MW-37		1/21/2011	7.13	7.15
MW-37		7/15/2011	11.94	2.34
MW-37		1/23/2012	NR	----
MW-37		7/29/2015	2.56	11.72
MW-37		1/22/2016	6.08	8.20
MW-37		7/14/2016	14.05	0.23
MW-37		2/1/2017	10.38	3.90
MW-37		7/20/2017	13.13	1.15
MW-37		2/8/2018	7.25	7.03
MW-37		8/2/2018	11.55	2.73
MW-37		1/29/2019	4.50	9.78
MW-37		7/10/2019	11.52	2.76
MW-37		2/4/2020	5.72	8.56
MW-37		7/23/2020	10.44	3.84

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-38	POC	7/2/2001	10.16	3.46
MW-38		10/1/2001	12.49	1.13
MW-38		1/16/2002	7.91	5.71
MW-38		4/8/2002	7.18	6.44
MW-38		7/3/2002	9.71	3.91
MW-38		10/7/2002	9.34	4.28
MW-38		1/16/2003	5.00	8.62
MW-38		4/21/2003	11.25	2.37
MW-38		10/6/2003	5.55	8.07
MW-38		4/2/2004	10.19	3.43
MW-38		7/13/2005	8.47	5.15
MW-38		2/7/2006	5.59	8.03
MW-38		7/10/2006	15.25	-1.63
MW-38		1/8/2007	4.17	9.45
MW-38		7/16/2007	9.12	4.50
MW-38		1/23/2008	6.75	6.87
MW-38		6/17/2008	12.82	0.80
MW-38		1/13/2009	8.06	5.56
MW-38		7/8/2009	14.34	-0.72
MW-38		1/26/2010	6.27	7.35
MW-38		7/28/2010	8.43	5.19
MW-38		1/21/2011	6.53	7.09
MW-38		7/15/2011	10.85	2.77
MW-38		1/24/2012	5.53	8.09
MW-38		7/19/2012	10.58	3.04
MW-38		1/23/2013	6.85	6.77
MW-38		7/18/2013	13.00	0.62
MW-38		1/31/2014	9.33	4.29
MW-38		7/28/2014	13.86	-0.24
MW-38		2/9/2015	2.82	10.80
MW-38		7/28/2015	13.26	0.36
MW-38		1/22/2016	5.78	7.84
MW-38		7/14/2016	12.23	1.39
MW-38		2/1/2017	11.13	2.49
MW-38		7/20/2017	13.02	0.60
MW-38		2/9/2018	5.99	7.63
MW-38		7/20/2017	13.02	0.60
MW-38		2/9/2018	5.99	7.63
MW-38		8/2/2018	12.06	1.56
MW-38		1/29/2019	5.30	8.32
MW-38		7/10/2019	8.33	5.29
MW-38		2/5/2020	5.33	8.29
MW-38		7/23/2020	12.75	0.87
MW-39	POC	7/2/2001	6.91	6.99
MW-39		10/1/2001	9.02	4.88
MW-39		1/16/2002	6.69	7.21
MW-39		4/8/2002	7.48	6.42
MW-39		7/3/2002	8.72	5.18
MW-39		10/7/2002	9.90	4.00
MW-39		1/16/2003	6.31	7.59
MW-39		4/21/2003	7.85	6.05
MW-39		10/6/2003	10.44	3.46
MW-39		4/2/2004	8.34	5.56
MW-39		7/13/2005	8.46	5.44
MW-39		2/7/2006	5.91	7.99
MW-39		7/10/2006	9.67	4.23
MW-39		1/8/2007	5.02	8.88
MW-39		7/16/2007	7.49	6.41
MW-39		1/23/2008	7.47	6.43
MW-39		6/17/2008	8.63	5.27
MW-39		1/13/2009	6.08	7.82
MW-39		7/8/2009	10.35	3.55
MW-39		1/26/2010	5.13	8.77
MW-39		7/28/2010	8.05	5.85
MW-39		1/21/2011	5.00	8.90
MW-39		7/15/2011	7.43	6.47
MW-39		1/24/2012	5.23	8.67
MW-39		7/19/2012	10.28	3.62
MW-39		1/23/2013	6.85	7.05
MW-39		7/18/2013	NR	--
MW-39		1/31/2014	NR	--
MW-39		7/25/2014	NR	--
MW-39R		7/28/2015	12.68	No TOC Survey
MW-39R		1/19/2016	9.23	No TOC Survey
MW-39R		7/15/2016	11.79	No TOC Survey
MW-39R		2/1/2017	8.44	No TOC Survey
MW-39R		7/20/2017	12.41	No TOC Survey
MW-39R		2/8/2018	7.68	No TOC Survey
MW-39R		7/31/2018	10.60	No TOC Survey
MW-39R		1/29/2019	5.90	No TOC Survey
MW-39R		7/10/2019	10.28	No TOC Survey
MW-39R		2/3/2020	3.84	No TOC Survey
MW-39R		7/22/2020	7.53	No TOC Survey

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-40	BGM	7/19/2005	14.86	-0.65
MW-40		2/7/2006	7.75	6.46
MW-40		7/10/2006	9.84	4.37
MW-40		1/8/2007	6.38	7.83
MW-40		7/16/2007	15.23	-1.02
MW-40		1/23/2008	8.01	6.20
		Decommissioned 2/08		
MW-41	BGM	7/19/2005	16.40	-2.01
MW-41		2/7/2006	7.98	6.42
MW-41		7/10/2006	9.68	4.72
MW-41		1/8/2007	6.83	7.57
MW-41		7/16/2007	14.71	-0.32
		Decommissioned 2/08		
MW-42	BGM	7/19/2005	1.25	16.04
MW-42		2/7/2006	1.84	15.45
MW-42		7/10/2006	3.80	13.49
MW-42		1/8/2007	1.52	15.77
MW-42		7/16/2007	3.24	14.49
MW-42		1/23/2008	1.40	15.89
		Decommissioned 2/08		

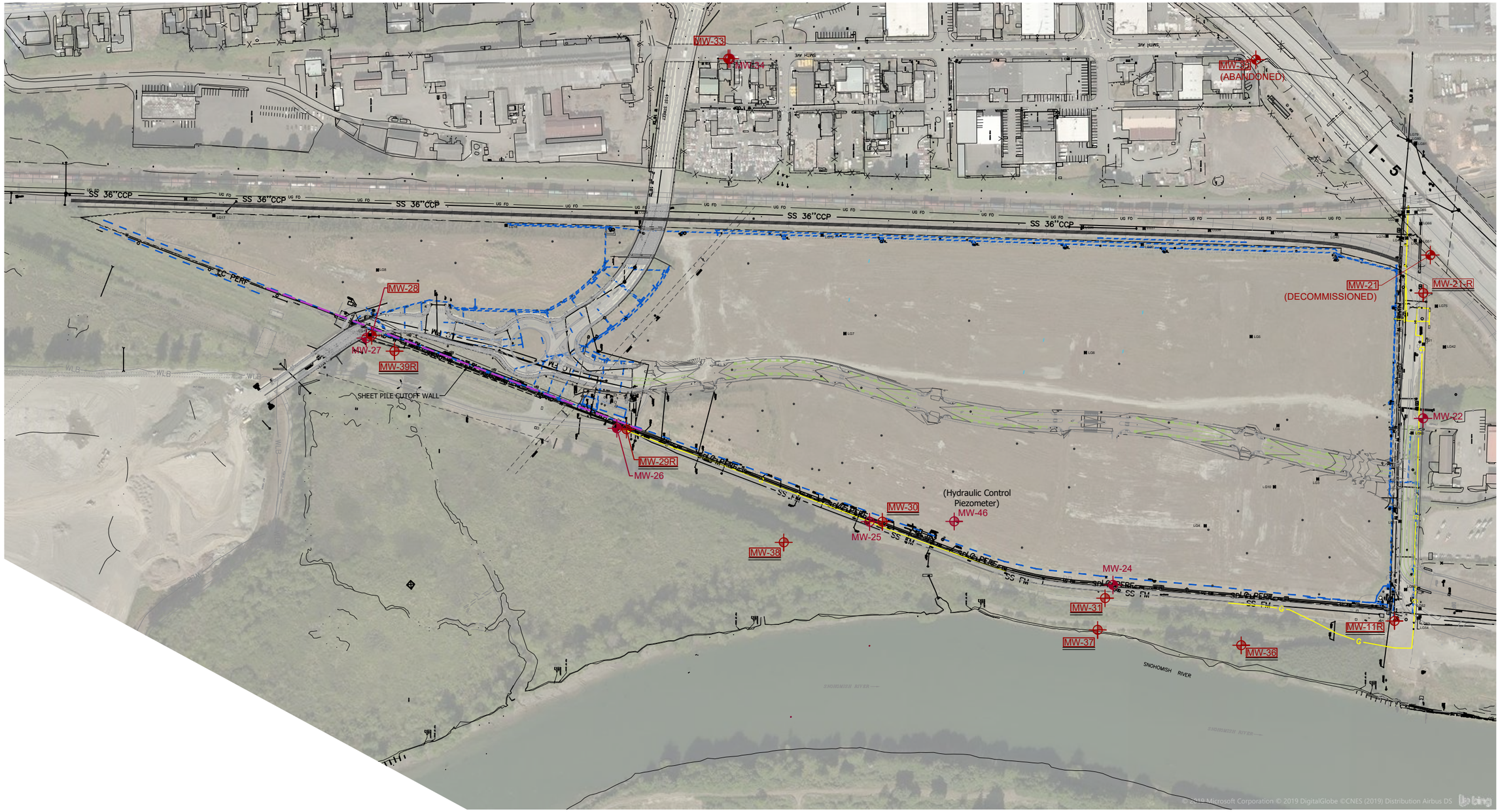
NOTES:

NR = no reading, well decommissioned, damaged, or not located

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site

BG =Upgradient background well
BGM= background metals well
POC = deep aquifer point of compliance monitoring well



EXPLORATION LEGEND

- MW-12 — SHALLOW MONITORING WELLS
- MW-12 — DEEP MONITORING WELLS
- MW-12 — WELLS TO BE MONITORED

0 150 300 450 600

SCALE: 1" = 300'

BASE MAP PROVIDED BY: BING AND SURVEYOR

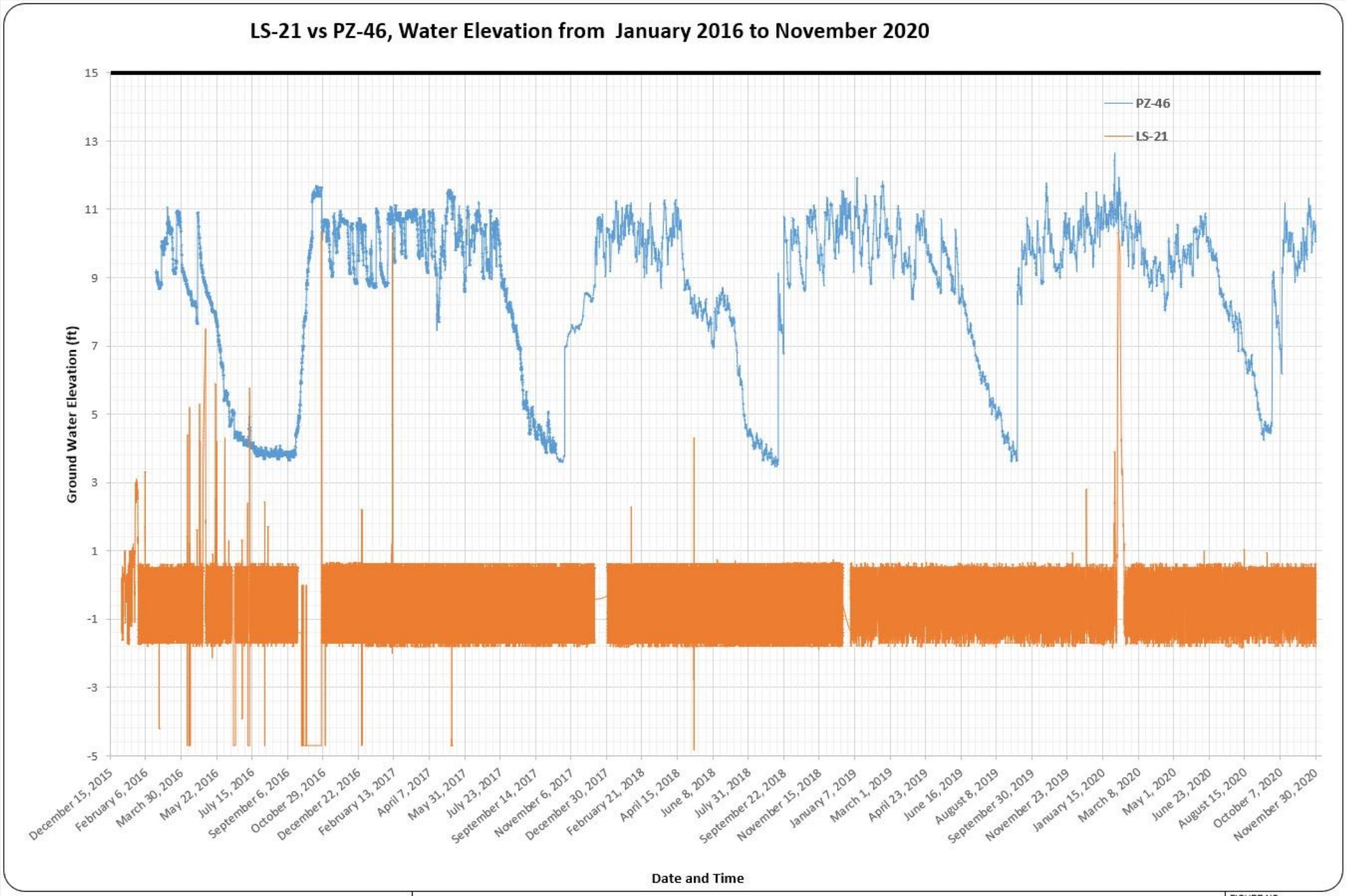
GeoSciences Inc. DBE/MWBE

EVERETT LANDFILL
EVERETT, WASHINGTON

GROUNDWATER MONITORING WELLS

DRAWN BY:	FIGURE NO.:
CF / BFM	1
CHECK BY:	PROJECT NO.:
AS	2015-061-21 TASK 600

S:\2015 PROJECTS\2015-061-21 EVERETT RIVERFRONT SETTLEMENT CALCULATIONS\CAD 2015-061\TASK 600\HAZMAT\2015-061 EVERETT RIVERFRONT - HAZMAT 10.18.2019.DWG <1> Plotted: 12/22/2020 2:09 PM



HWA GeoSciences Inc.

LS-21 vs PZ-46 WATER ELEVATION DATA

EVERETT LANDFILL
EVERETT, WASHINGTON

FIGURE NO.
2

PROJECT NO.
1998-98165

APPENDIX A

LABORATORY REPORTS AND QA/QC REPORT

QUALITY CONTROL REVIEW OF ANALYTICAL DATA

Sampling Location: Everett Landfill/Tire Fire Site, Everett, Washington
Samples collected by HWA GeoSciences, Inc. (HWA)
Sample Dates: February 3, 4, and 5, 2020 and July 21, 22, 23, and 24, 2020

Ground Water Sample Locations:

- Monitoring wells MW-11R, MW-21R, MW-24, MW-25, MW-29R, MW-30, MW-31, MW-36, MW-37, MW-38, MW-39R, and wet well LS-21.

Analyses Performed:

- City of Everett Environmental Laboratory (EEL): dissolved metals by EPA Method 200.8; chloride by Standard Method 4500-CL-E
- ALS Environmental Laboratory Everett (ALS): Semivolatile Organic Compounds by EPA Method 8270 and Volatile Organic Compounds by EPA Method 8260.

Field QA/QC:

- Field sampling data sheets for all of the 2020 sampling events indicate that proper well micro-purging techniques were employed and sample bottles utilized
- A ground water field duplicate was collected on February 3, 2020 from monitoring well MW-29R and July 22, 2020 from monitoring well MW-31. All analytes were within an approximately 6 percent relative percent difference (RPD) between the two samples. The duplicate data is summarized in the table below:

Sample ID	bis(2-ethylhexyl) phthalate (µg/L)	DISS Arsenic (µg/L)	DISS Iron (µg/L)	DISS Manganese (µg/L)	DISS Nickel (µg/L)	DISS Zinc (µg/L)	Chloride (mg/L)
MW-29R	<2.0	<1	**7790**	**424**	<1	<10	**11.4**
Dup-0203	<2.0	<1	**7480**	**430**	<1	<10	**11.3**
RPD	-	-	**4.06**	**1.41**	-	-	**0.88**
MW31	<2.0	**1.7**	**46400**	**1250**	**3.1**	<10	**144**
Dup - 0722	<2.0	**1.6**	**45200**	**1240**	**3.1**	<10	**143**
RPD	-	**6.06**	**2.62**	**0.80**	**0.0**	-	**0.70**

- One set of trip blanks were submitted during the July 2020 sampling event, none of which detected any analytes.
- No field blanks were collected during the July 2020 sampling event, as all sampling equipment used was disposable.
- No other internal QA/QC issues were noted

Laboratory QA/QC:

- The City of Everett Environmental Laboratory did not provide any QA/QC data with their analytical data; thus HWA cannot evaluate the validity of the reported data

- ALS used laboratory method blanks, surrogate spikes in field samples, spike blank/ spike blank duplicates (SB/SBD), method blanks, and relative percent difference (RPD) calculations between SB/SBDs to maintain quality control during analyses

Holding Times:

- All samples were submitted to the EEL and ALS laboratories within 48 hours of sample collection. All samples were analyzed within standard holding times.

SVOCs by GC/MS:

- No SVOCs were detected in the laboratory method blanks above the laboratory reporting limit
- Surrogate, SB and SBD recoveries were generally all within control limits.
    - Acetone flagged as outside of control limits with a high bias; however, associated compounds were found to be non-detect
- SB/SBD RPDs were all within control limits

Laboratory Flags:

- The only data flags noted were for estimated concentrations (J flags) of dissolved arsenic, iron, and nickel, which reported a concentration close to the City of Everett Environmental Laboratory's reporting limits

Summary:

HWA's review of the analytical data determined them to be acceptable for their intended use; a caveat to HWA's review is the lack of laboratory QC data for the analyses performed by the City of Everett Environmental Laboratory.

February 10, 2020

Mr. Arnie Sugar
HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

Dear Mr. Sugar,

On February 5th, 10 samples were received by our laboratory and assigned our laboratory project number EV20020025. The project was identified as your Everett Landfill (ELF). The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	2/10/2020
		ALS JOB#:	EV20020025
		ALS SAMPLE#:	EV20020025-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/3/2020 11:23:00 AM
CLIENT SAMPLE ID	MW-11R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**108**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	2/10/2020
		ALS JOB#:	EV20020025
		ALS SAMPLE#:	EV20020025-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/3/2020 10:20:00 AM
CLIENT SAMPLE ID	MW-21R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**109**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	2/10/2020 EV20020025 EV20020025-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/3/2020 1:57:00 PM
CLIENT SAMPLE ID	MW-29	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**109**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	2/10/2020 EV20020025 EV20020025-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/3/2020 1:02:00 PM
CLIENT SAMPLE ID	MW-30	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**110**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	2/10/2020 EV20020025 EV20020025-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/3/2020 12:20:00 PM
CLIENT SAMPLE ID	MW-31	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**109**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	2/10/2020 EV20020025 EV20020025-06
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/4/2020 9:55:00 AM
CLIENT SAMPLE ID	MW-36	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**106**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	2/10/2020 EV20020025 EV20020025-07
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/4/2020 11:20:00 AM
CLIENT SAMPLE ID	MW-37	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**107**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	2/10/2020 EV20020025 EV20020025-08
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/5/2020 11:00:00 AM
CLIENT SAMPLE ID	MW-38	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**107**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	2/10/2020 EV20020025 EV20020025-09
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/3/2020 2:53:00 PM
CLIENT SAMPLE ID	MW-39R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**93.9**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	2/10/2020 EV20020025 EV20020025-10
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	02/05/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	2/3/2020
CLIENT SAMPLE ID	DUP-0203	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/07/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**88.4**	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	2/10/2020
		ALS SDG#:	EV20020025
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	Everett Landfill (ELF)		

LABORATORY BLANK RESULTS

MB-020620W - Batch 150411 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Phenol	EPA-8270	U	UG/L	2.0	02/07/2020	JMK
Pyrene	EPA-8270	U	UG/L	2.0	02/07/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	UG/L	2.0	02/07/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS SDG#: WDOE ACCREDITATION:	2/10/2020 EV20020025 C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	Everett Landfill (ELF)		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 150411 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**29.4**			5	84	02/07/2020	JMK
Phenol - BSD	EPA-8270	**29.0**	**1**		5	84	02/07/2020	JMK
Pyrene - BS	EPA-8270	**98.4**			18	136	02/07/2020	JMK
Pyrene - BSD	EPA-8270	**95.4**	**3**		18	136	02/07/2020	JMK
Bis(2-Ethylhexyl)Phthalate - BS	EPA-8270	**90.4**			20	150	02/07/2020	JMK
Bis(2-Ethylhexyl)Phthalate - BSD	EPA-8270	**87.3**	**4**		20	150	02/07/2020	JMK

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV2002025

Date 2-5-20 Page 1 Of 1

PROJECT ID:	Everett Landfill (ELP)
REPORT TO COMPANY:	HWA Geosciences
PROJECT MANAGER:	Arnie Sugar
ADDRESS:	21312 30th Dr SE
	Bothell, WA 98021
PHONE:	206-794-3545 P.O. #:
E-MAIL:	Ayork@hwageo.com / Asugar@hwageo.com
INVOICE TO COMPANY:	
ATTENTION:	
ADDRESS:	

	SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1.	MW-11R	2-3-20	1123	water	1
2.	MW-21R	2-3-20	1020		2
3.	MW-29	2-3-20	1357		3
4.	MW-30	2-3-20	1302		4
5.	MW-31	2-3-20	1220		5
6.	MW-36	2-4-20	0955		6
7.	MW-37	2-4-20	1120		7
8.	MW-38	2-5-20	~~1453~~ 1100		8
9.	MW-39R	2-3-20	~~1100~~ 1453		9
10.	DUP-0203	2-3-20	—	water	10

ANALYSIS REQUESTED

NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270 *	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐
									X					
									X					

OTHER (Specify)

NUMBER OF CONTAINERS

RECEIVED IN GOOD CONDITION?

SPECIAL INSTRUCTIONS * Bis (2-ethylhexyl) phthalate

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Austin York, HWA, 2-5-20, 1200
   Received By: Shawn Rohan ALS 2/5/20 12:00
2. Relinquished By:
   Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: ~~10~~ Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify:

*Turnaround request less than standard may incur Rush Charges

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

PROJECT #
00055413

Client:	HWA GEOSCIENCES	Date Received:	02/04/20
Program:	Contract - HWA - Landfill	Data Release:	SF SF
Contact:	ARNIE SUGAR	Date Reported:	3/23/2020

Department	Analysis	Units	DL	Method	PQL	BM51997 MW-11R 2/3/2020	BM51998 MW-21R 2/3/2020
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	<1.0	9.6
	Dis. Iron	µg/L	120	6020B	480	2500	
			40	6020B	160		10800
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0		1780
			3.0	200.8/6020B	12.0	631	
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	<1.0	<1.0
	Dis. Zinc	µg/L	10	200.8/6020B	40	<10	<10
NUTRIENTS	Chloride	mg/L	0.2	SM4500-CL-E	0.8	7.1	9.6

Department	Analysis	Units	DL	Method	PQL	BM51999 MW-29 2/3/2020	BM52000 MW-30 2/3/2020
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	<1.0	2.5 J
	Dis. Iron	µg/L	40	6020B	160	7790	6420
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	424	428
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	<1.0	<1.0
	Dis. Zinc	µg/L	10	200.8/6020B	40	<10	<10
NUTRIENTS	Chloride	mg/L	0.2	SM4500-CL-E	0.8	11.4	11.3

Department	Analysis	Units	DL	Method	PQL	BM52001 MW-31 2/3/2020	BM52002 MW-39R 2/3/2020
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	1.6 J	<1.0
	Dis. Iron	µg/L	120	6020B	480	43600	
			40	6020B	160		4500
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	1190	242
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	2.8 J	<1.0
	Dis. Zinc	µg/L	10	200.8/6020B	40	<10	<10
NUTRIENTS	Chloride	mg/L	0.2	SM4500-CL-E	0.8	136	7.5

Department	Analysis	Units	DL	Method	PQL	BM52003 DUP-0203 2/3/2020	BM52004 MW-36 2/4/2020
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	<1.0	2.1 J
	Dis. Iron	µg/L	40	6020B	160	7480	190
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	430	170
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	<1.0	2.2 J
	Dis. Zinc	µg/L	10	200.8/6020B	40	<10	<10
NUTRIENTS	Chloride	mg/L	0.2	SM4500-CL-E	0.8	11.3	21.6

DATA REPORTING QUALIFIERS

DL = Detection Limit
PQL = Practical Quantitation Limit (= 4xDL)
J = Analyte concentration less than PQL
SA = See Attached
ND = No Data
TNTC = Too numerous to count

When Dissolved Metals > Total Metals note possible filtering process contamintion
P/A (used for Total Coliform results) P= Coliforms present, A = Coliforms absent
Y/N (used for E. Coli Results) Y= E. Coli present, N=E. Coli absent
E = Estimated Value. Count from plates not within ideal range.
R = Sample was re-analyzed after holding time.
CG = Confluent Growth

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

PROJECT #

00055413

Client:	HWA GEOSCIENCES	Date Received:	02/04/20
Program:	Contract - HWA - Landfill	Data Release:	SF
Contact:	ARNIE SUGAR	Date Reported:	3/23/2020

Department	Analysis	Units	DL	Method	PQL	BM52005 MW-37 2/4/2020
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**<1.0**
	Dis. Iron	µg/L	40	6020B	160	**15100**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**733**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**<1.0**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**
NUTRIENTS	Chloride	mg/L	0.2	SM4500-CL-E	0.8	**480**

DATA REPORTING QUALIFIERS

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When Dissolved Metals > Total Metals note possible filtering process contamintion
P/A (used for Total Coliform results) P= Coliforms present, A = Coliforms absent
Y/N (used for E. Coli Results) Y= E. Coli present, N=E. Coli absent
E = Estimated Value. Count from plates not within ideal range.
R = Sample was re-analyzed after holding time.
CG = Confluent Growth

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

Phone: (425)257-8230 Fax: (425)257-8228
Sample Dropoff: 4027 4th St SE, Everett WA 98201
Mailing Address: 3200 Cedar St, Everett WA 98201

PROJECT # 55413

ANALYSIS REQUEST
CHAIN OF CUSTODY

Date: 2-4-20

Client: HWA Geosciences | Address: 21312 30th Dr SE Bothell, WA 98021
Program: | Sample Site: Everett Landfill
Phone: 206-794-3145 | Collected By: Austin York | Requested By:

Requested sample report date (If less than 30 days):

Purpose: ___ In Lab Contract ___ Outside Lab Contract

Sample Description:	LIMS ID # (Lab Use Only)	Sample Date	Sample Time	Comp Grab	Sample Matrix	Chloride	*Diss. metals
MW-11R	BM 51997	2-3-20	1123	G	water	X	X
MW-21R	98		1020				
MW-29	99		1357				
MW-30	52000		1302				
MW-31	01		1220				
MW-39R	02		1453				
DUP-0203	03	2-3-20	—				
MW-36	04	2-4-20	0955				
MW-37	05	2-4-20	1120	G	water	X	X

Cooler w/Ice? Y / N | Rec Temp: °C | –INDICATE: LAB PERFORMING ANALYSIS / # OF CONTAINERS–

CHAIN OF CUSTODY

*Relinquished: Christopher HWA Geo	Received:	Date: 2-4-20	Time: 1150
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:

COMMENTS: * Dissolved Metals Field Filtered
Ni Zn Fe Mn As

**Because the City of Everett Environmental Laboratory is a public agency, data, test results, reports and other documents are public records and therefore subject to disclosure to third parties upon their request pursuant to RCW Chap. 42.17.*

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

PROJECT #
00055423

Client:	HWA GEOSCIENCES	Date Received:	02/05/20
Program:	Contract - HWA - Landfill	Data Release:	SF SF
Contact:	ARNIE SUGAR	Date Reported:	4/29/2020

Department	Analysis	Units	DL	Method	PQL	BM52113 MW-38 2/5/2020
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**<1.0**
	Dis. Iron	µg/L	40	6020B	160	**<40**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**27.5**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**<1.0**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**
NUTRIENTS	Chloride	mg/L	0.2	SM4500-CL-E	0.8	**10.5**

DATA REPORTING QUALIFIERS

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TNTC = Too numerous to count

When Dissolved Metals > Total Metals note possible filtering process contamintion
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Y/N (used for E. Coli Results) Y= E. Coli present, N=E. Coli absent
E = Estimated Value. Count from plates not within ideal range.
R = Sample was re-analyzed after holding time.
CG = Confluent Growth

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

Phone: (425)257-8230 Fax: (425)257-8228
Sample Dropoff: 4027 4th St SE, Everett WA 98201
Mailing Address: 3200 Cedar St, Everett WA 98201

PROJECT # 55423

ANALYSIS REQUEST
CHAIN OF CUSTODY

Date: 2-5-20

Client: HWA GeoSciences		Address: 2131 2 30th Dr SE Bothell, WA 98021
Program:	Sample Site: Everett Landfill (ELF)	
Phone: 206-743-3145	Collected By: Austin Yore	Requested By: Arnie Siger

Requested sample report date (If less than 30 days):

Purpose: ___ In Lab Contract ___ Outside Lab Contract

Sample Description:	LIMS ID # (Lab Use Only)	Sample Date	Sample Time	Comp Grab	Sample Matrix	Analyses Requested: Chloride	Dissolved Metals *							
MW-38	BM 52113	2-5-20	1100	G	water	X	X							

Cooler w/Ice? Y / (N) Rec Temp: 4.2 °C

–INDICATE: LAB PERFORMING ANALYSIS / # OF CONTAINERS–

CHAIN OF CUSTODY

*Relinquished: Austin Yore	Received:	Date: 2-5-20	Time: 1140
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:

COMMENTS: * Dissolved Metals Field Filtered

N, Zn Fe Mn As

**Because the City of Everett Environmental Laboratory is a public agency, data, test results, reports and other documents are public records and therefore subject to disclosure to third parties upon their request pursuant to RCW Chap. 42.17.*

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July 29, 2020

Mr. Arnie Sugar
HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

Dear Mr. Sugar,

On July 23rd, 9 samples were received by our laboratory and assigned our laboratory project number EV20070088. The project was identified as your Everett Landfill (ELF). The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/21/2020 3:55:00 PM
CLIENT SAMPLE ID	MW-11R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/21/2020 3:55:00 PM
CLIENT SAMPLE ID	MW-11R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/21/2020 3:55:00 PM
CLIENT SAMPLE ID	MW-11R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzidine	EPA-8270	U	50	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/21/2020 3:55:00 PM
CLIENT SAMPLE ID	MW-11R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**107**	07/23/2020	DLC
Toluene-d8	EPA-8260	**100**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**106**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**64.5**	07/27/2020	JMK
Phenol-d5	EPA-8270	**26.6**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**61.6**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**59.0**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**69.5**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**100**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/21/2020 3:05:00 PM
CLIENT SAMPLE ID	MW-21R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/21/2020 3:05:00 PM
CLIENT SAMPLE ID	MW-21R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/21/2020 3:05:00 PM
CLIENT SAMPLE ID	MW-21R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/21/2020 3:05:00 PM
CLIENT SAMPLE ID	MW-21R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**107**	07/23/2020	DLC
Toluene-d8	EPA-8260	**101**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**105**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**52.0**	07/27/2020	JMK
Phenol-d5	EPA-8270	**22.5**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**57.5**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**57.3**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**67.9**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**98.0**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 1:32:00 PM
CLIENT SAMPLE ID	MW-24	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 1:32:00 PM
CLIENT SAMPLE ID	MW-24	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 1:32:00 PM
CLIENT SAMPLE ID	MW-24	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 1:32:00 PM
CLIENT SAMPLE ID	MW-24	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**107**	07/23/2020	DLC
Toluene-d8	EPA-8260	**99.7**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**105**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**44.0**	07/27/2020	JMK
Phenol-d5	EPA-8270	**18.9**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**64.7**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**58.7**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**90.0**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**101**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 12:23:00 PM
CLIENT SAMPLE ID	MW-25	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 12:23:00 PM
CLIENT SAMPLE ID	MW-25	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	7/29/2020
		ALS JOB#:	EV20070088
		ALS SAMPLE#:	EV20070088-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 12:23:00 PM
CLIENT SAMPLE ID	MW-25	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	**7.1**	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	**3.2**	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 12:23:00 PM
CLIENT SAMPLE ID	MW-25	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**106**	07/23/2020	DLC
Toluene-d8	EPA-8260	**100**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**103**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**42.7**	07/27/2020	JMK
Phenol-d5	EPA-8270	**19.8**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**59.7**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**53.5**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**81.1**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**86.1**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 10:45:00 AM
CLIENT SAMPLE ID	MW-29R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 10:45:00 AM
CLIENT SAMPLE ID	MW-29R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 10:45:00 AM
CLIENT SAMPLE ID	MW-29R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 10:45:00 AM
CLIENT SAMPLE ID	MW-29R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**106**	07/23/2020	DLC
Toluene-d8	EPA-8260	**100**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**103**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**39.9**	07/27/2020	JMK
Phenol-d5	EPA-8270	**18.2**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**56.7**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**58.2**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**79.1**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**95.4**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-06
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 11:33:00 AM
CLIENT SAMPLE ID	MW-30	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-06
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 11:33:00 AM
CLIENT SAMPLE ID	MW-30	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-06
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 11:33:00 AM
CLIENT SAMPLE ID	MW-30	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-06
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 11:33:00 AM
CLIENT SAMPLE ID	MW-30	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**106**	07/23/2020	DLC
Toluene-d8	EPA-8260	**100**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**104**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**46.9**	07/27/2020	JMK
Phenol-d5	EPA-8270	**19.4**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**61.7**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**58.1**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**81.9**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**102**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-07
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 12:54:00 PM
CLIENT SAMPLE ID	MW-31	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-07
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 12:54:00 PM
CLIENT SAMPLE ID	MW-31	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	7/29/2020
		ALS JOB#:	EV20070088
		ALS SAMPLE#:	EV20070088-07
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 12:54:00 PM
CLIENT SAMPLE ID	MW-31	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-07
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 12:54:00 PM
CLIENT SAMPLE ID	MW-31	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**109**	07/23/2020	DLC
Toluene-d8	EPA-8260	**101**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**104**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**49.3**	07/27/2020	JMK
Phenol-d5	EPA-8270	**21.7**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**64.8**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**58.0**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**93.9**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**94.1**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-08
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 10:05:00 AM
CLIENT SAMPLE ID	MW-39R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-08
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 10:05:00 AM
CLIENT SAMPLE ID	MW-39R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 10:05:00 AM
CLIENT SAMPLE ID	MW-39R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020 10:05:00 AM
CLIENT SAMPLE ID	MW-39R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**107**	07/23/2020	DLC
Toluene-d8	EPA-8260	**100**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**106**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**45.4**	07/27/2020	JMK
Phenol-d5	EPA-8270	**20.4**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**60.1**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**62.6**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**76.4**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**101**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-09
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020
CLIENT SAMPLE ID	DUP-0722	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/23/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC

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CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020
CLIENT SAMPLE ID	DUP-0722	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	07/23/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/23/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-09
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020
CLIENT SAMPLE ID	DUP-0722	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	7/29/2020 EV20070088 EV20070088-09
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/23/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/22/2020
CLIENT SAMPLE ID	DUP-0722	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**109**	07/23/2020	DLC
Toluene-d8	EPA-8260	**99.9**	07/23/2020	DLC
4-Bromofluorobenzene	EPA-8260	**105**	07/23/2020	DLC
2-Fluorophenol	EPA-8270	**43.2**	07/27/2020	JMK
Phenol-d5	EPA-8270	**18.7**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**57.2**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**52.0**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**86.1**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**89.0**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

DATE: 7/29/2020
ALS SDG#: EV20070088
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-072320W - Batch 155811 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Chloromethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Vinyl Chloride	EPA-8260	U	UG/L	0.20	07/23/2020	DLC
Bromomethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Chloroethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Carbon Tetrachloride	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Trichlorofluoromethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Carbon Disulfide	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Acetone	EPA-8260	U	UG/L	25	07/23/2020	DLC
1,1-Dichloroethene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Methylene Chloride	EPA-8260	U	UG/L	5.0	07/23/2020	DLC
Acrylonitrile	EPA-8260	U	UG/L	10	07/23/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,1-Dichloroethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
2-Butanone	EPA-8260	U	UG/L	10	07/23/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
2,2-Dichloropropane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Bromochloromethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Chloroform	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,1-Dichloropropene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,2-Dichloroethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Benzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Trichloroethene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,2-Dichloropropane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Dibromomethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Bromodichloromethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	UG/L	10	07/23/2020	DLC
Toluene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
2-Hexanone	EPA-8260	U	UG/L	10	07/23/2020	DLC
1,3-Dichloropropane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Tetrachloroethylene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Dibromochloromethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,2-Dibromoethane	EPA-8260	U	UG/L	0.010	07/23/2020	DLC
Chlorobenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

DATE: 7/29/2020
ALS SDG#: EV20070088
WDOE ACCREDITATION: C601

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

LABORATORY BLANK RESULTS

MB-072320W - Batch 155811 - Water by EPA-8260

1,1,1,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Ethylbenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
m,p-Xylene	EPA-8260	U	UG/L	4.0	07/23/2020	DLC
Styrene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
o-Xylene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Bromoform	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Isopropylbenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Bromobenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
N-Propyl Benzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
2-Chlorotoluene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
4-Chlorotoluene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
T-Butyl Benzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
S-Butyl Benzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
P-Isopropyltoluene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
N-Butylbenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	UG/L	10	07/23/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Hexachlorobutadiene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
Naphthalene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	UG/L	2.0	07/23/2020	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-072720W - Batch 155845 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Pyridine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Phenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Aniline	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Chlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzyl Alcohol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	7/29/2020
		ALS SDG#:	EV20070088
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	Everett Landfill (ELF)		

LABORATORY BLANK RESULTS

MB-072720W - Batch 155845 - Water by EPA-8270

1,2-Dichlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Methylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
3&4-Methylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Hexachloroethane	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Nitrobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Isophorone	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Nitrophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzoic Acid	EPA-8270	U	UG/L	10	07/28/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Naphthalene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Chloroaniline	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Hexachlorobutadiene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Methylnaphthalene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
1-Methylnaphthalene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Chloronaphthalene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Nitroaniline	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Acenaphthylene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzidine	EPA-8270	U	UG/L	50	07/28/2020	JMK
Dimethylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Acenaphthene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
3-Nitroaniline	EPA-8270	U	UG/L	5.0	07/28/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	UG/L	10	07/28/2020	JMK
4-Nitrophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Dibenzofuran	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Diethylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Fluorene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Nitroaniline	EPA-8270	U	UG/L	2.0	07/28/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

DATE: 7/29/2020
ALS SDG#: EV20070088
WDOE ACCREDITATION: C601

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

LABORATORY BLANK RESULTS

MB-072720W - Batch 155845 - Water by EPA-8270

4,6-Dinitro-2-Methylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Azobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Hexachlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Pentachlorophenol	EPA-8270	U	UG/L	5.0	07/28/2020	JMK
Phenanthrene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Anthracene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Carbazole	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Fluoranthene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Pyrene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Butylbenzylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Chrysene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 155811 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane - BS	EPA-8260	**99.0**			50	150	07/23/2020	DLC
Dichlorodifluoromethane - BSD	EPA-8260	**90.9**	**8**		50	150	07/23/2020	DLC
Chloromethane - BS	EPA-8260	**127**			50	150	07/23/2020	DLC
Chloromethane - BSD	EPA-8260	**119**	**6**		50	150	07/23/2020	DLC
Vinyl Chloride - BS	EPA-8260	**116**			50	150	07/23/2020	DLC
Vinyl Chloride - BSD	EPA-8260	**109**	**7**		50	150	07/23/2020	DLC
Bromomethane - BS	EPA-8260	**97.9**			50	150	07/23/2020	DLC
Bromomethane - BSD	EPA-8260	**92.2**	**6**		50	150	07/23/2020	DLC
Chloroethane - BS	EPA-8260	**118**			50	150	07/23/2020	DLC
Chloroethane - BSD	EPA-8260	**112**	**6**		50	150	07/23/2020	DLC
Carbon Tetrachloride - BS	EPA-8260	**96.1**			50	150	07/23/2020	DLC
Carbon Tetrachloride - BSD	EPA-8260	**90.5**	**6**		50	150	07/23/2020	DLC
Trichlorofluoromethane - BS	EPA-8260	**107**			50	150	07/23/2020	DLC
Trichlorofluoromethane - BSD	EPA-8260	**99.5**	**7**		50	150	07/23/2020	DLC
Carbon Disulfide - BS	EPA-8260	**114**			50	150	07/23/2020	DLC
Carbon Disulfide - BSD	EPA-8260	**108**	**6**		50	150	07/23/2020	DLC
Acetone - BS	EPA-8260	**155**		SQ1	50	150	07/23/2020	DLC
Acetone - BSD	EPA-8260	**162**	**4**	SQ1	50	150	07/23/2020	DLC
1,1-Dichloroethene - BS	EPA-8260	**116**			72.5	136	07/23/2020	DLC
1,1-Dichloroethene - BSD	EPA-8260	**109**	**6**		72.5	136	07/23/2020	DLC
Methylene Chloride - BS	EPA-8260	**97.8**			50	150	07/23/2020	DLC
Methylene Chloride - BSD	EPA-8260	**95.9**	**2**		50	150	07/23/2020	DLC
Acrylonitrile - BS	EPA-8260	**101**			50	150	07/23/2020	DLC
Acrylonitrile - BSD	EPA-8260	**95.5**	**6**		50	150	07/23/2020	DLC
Methyl T-Butyl Ether - BS	EPA-8260	**95.4**			50	150	07/23/2020	DLC
Methyl T-Butyl Ether - BSD	EPA-8260	**94.1**	**1**		50	150	07/23/2020	DLC
Trans-1,2-Dichloroethene - BS	EPA-8260	**114**			50	150	07/23/2020	DLC
Trans-1,2-Dichloroethene - BSD	EPA-8260	**109**	**5**		50	150	07/23/2020	DLC
1,1-Dichloroethane - BS	EPA-8260	**119**			50	150	07/23/2020	DLC
1,1-Dichloroethane - BSD	EPA-8260	**114**	**4**		50	150	07/23/2020	DLC
2-Butanone - BS	EPA-8260	**130**			50	150	07/23/2020	DLC
2-Butanone - BSD	EPA-8260	**131**	**1**		50	150	07/23/2020	DLC
Cis-1,2-Dichloroethene - BS	EPA-8260	**113**			50	150	07/23/2020	DLC
Cis-1,2-Dichloroethene - BSD	EPA-8260	**109**	**3**		50	150	07/23/2020	DLC
2,2-Dichloropropane - BS	EPA-8260	**126**			50	150	07/23/2020	DLC
2,2-Dichloropropane - BSD	EPA-8260	**117**	**8**		50	150	07/23/2020	DLC
Bromochloromethane - BS	EPA-8260	**99.1**			50	150	07/23/2020	DLC
Bromochloromethane - BSD	EPA-8260	**96.5**	**3**		50	150	07/23/2020	DLC
Chloroform - BS	EPA-8260	**113**			50	150	07/23/2020	DLC

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DATE: 7/29/2020
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WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Chloroform - BSD	EPA-8260	**108**	**4**		50	150	07/23/2020	DLC
1,1,1-Trichloroethane - BS	EPA-8260	**100**			50	150	07/23/2020	DLC
1,1,1-Trichloroethane - BSD	EPA-8260	**94.2**	**6**		50	150	07/23/2020	DLC
1,1-Dichloropropene - BS	EPA-8260	**103**			50	150	07/23/2020	DLC
1,1-Dichloropropene - BSD	EPA-8260	**96.4**	**6**		50	150	07/23/2020	DLC
1,2-Dichloroethane - BS	EPA-8260	**109**			50	150	07/23/2020	DLC
1,2-Dichloroethane - BSD	EPA-8260	**106**	**3**		50	150	07/23/2020	DLC
Benzene - BS	EPA-8260	**114**			74.7	143	07/23/2020	DLC
Benzene - BSD	EPA-8260	**108**	**5**		74.7	143	07/23/2020	DLC
Trichloroethene - BS	EPA-8260	**113**			74.4	141	07/23/2020	DLC
Trichloroethene - BSD	EPA-8260	**107**	**5**		74.4	141	07/23/2020	DLC
1,2-Dichloropropane - BS	EPA-8260	**110**			50	150	07/23/2020	DLC
1,2-Dichloropropane - BSD	EPA-8260	**106**	**4**		50	150	07/23/2020	DLC
Dibromomethane - BS	EPA-8260	**93.5**			50	150	07/23/2020	DLC
Dibromomethane - BSD	EPA-8260	**91.1**	**3**		50	150	07/23/2020	DLC
Bromodichloromethane - BS	EPA-8260	**94.1**			50	150	07/23/2020	DLC
Bromodichloromethane - BSD	EPA-8260	**90.8**	**4**		50	150	07/23/2020	DLC
Trans-1,3-Dichloropropene - BS	EPA-8260	**91.3**			50	150	07/23/2020	DLC
Trans-1,3-Dichloropropene - BSD	EPA-8260	**88.6**	**3**		50	150	07/23/2020	DLC
4-Methyl-2-Pentanone - BS	EPA-8260	**92.1**			50	150	07/23/2020	DLC
4-Methyl-2-Pentanone - BSD	EPA-8260	**89.6**	**3**		50	150	07/23/2020	DLC
Toluene - BS	EPA-8260	**114**			71.7	139	07/23/2020	DLC
Toluene - BSD	EPA-8260	**108**	**5**		71.7	139	07/23/2020	DLC
Cis-1,3-Dichloropropene - BS	EPA-8260	**94.5**			50	150	07/23/2020	DLC
Cis-1,3-Dichloropropene - BSD	EPA-8260	**91.2**	**3**		50	150	07/23/2020	DLC
1,1,2-Trichloroethane - BS	EPA-8260	**91.9**			50	150	07/23/2020	DLC
1,1,2-Trichloroethane - BSD	EPA-8260	**89.5**	**3**		50	150	07/23/2020	DLC
2-Hexanone - BS	EPA-8260	**98.7**			50	150	07/23/2020	DLC
2-Hexanone - BSD	EPA-8260	**98.7**	**0**		50	150	07/23/2020	DLC
1,3-Dichloropropane - BS	EPA-8260	**107**			50	150	07/23/2020	DLC
1,3-Dichloropropane - BSD	EPA-8260	**104**	**2**		50	150	07/23/2020	DLC
Tetrachloroethylene - BS	EPA-8260	**91.5**			50	150	07/23/2020	DLC
Tetrachloroethylene - BSD	EPA-8260	**94.5**	**3**		50	150	07/23/2020	DLC
Dibromochloromethane - BS	EPA-8260	**93.8**			50	150	07/23/2020	DLC
Dibromochloromethane - BSD	EPA-8260	**91.4**	**3**		50	150	07/23/2020	DLC
1,2-Dibromoethane - BS	EPA-8260	**102**			50	150	07/23/2020	DLC
1,2-Dibromoethane - BSD	EPA-8260	**99.5**	**2**		50	150	07/23/2020	DLC
Chlorobenzene - BS	EPA-8260	**107**			73	131	07/23/2020	DLC
Chlorobenzene - BSD	EPA-8260	**102**	**4**		73	131	07/23/2020	DLC
1,1,1,2-Tetrachloroethane - BS	EPA-8260	**107**			50	150	07/23/2020	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane - BSD	EPA-8260	**104**	**4**		50	150	07/23/2020	DLC
Ethylbenzene - BS	EPA-8260	**94.2**			50	150	07/23/2020	DLC
Ethylbenzene - BSD	EPA-8260	**89.1**	**6**		50	150	07/23/2020	DLC
m,p-Xylene - BS	EPA-8260	**108**			50	150	07/23/2020	DLC
m,p-Xylene - BSD	EPA-8260	**103**	**5**		50	150	07/23/2020	DLC
Styrene - BS	EPA-8260	**88.6**			50	150	07/23/2020	DLC
Styrene - BSD	EPA-8260	**85.0**	**4**		50	150	07/23/2020	DLC
o-Xylene - BS	EPA-8260	**108**			50	150	07/23/2020	DLC
o-Xylene - BSD	EPA-8260	**103**	**5**		50	150	07/23/2020	DLC
Bromoform - BS	EPA-8260	**92.6**			50	150	07/23/2020	DLC
Bromoform - BSD	EPA-8260	**90.0**	**3**		50	150	07/23/2020	DLC
Isopropylbenzene - BS	EPA-8260	**93.8**			50	150	07/23/2020	DLC
Isopropylbenzene - BSD	EPA-8260	**88.3**	**6**		50	150	07/23/2020	DLC
1,1,2,2-Tetrachloroethane - BS	EPA-8260	**112**			50	150	07/23/2020	DLC
1,1,2,2-Tetrachloroethane - BSD	EPA-8260	**108**	**4**		50	150	07/23/2020	DLC
1,2,3-Trichloropropane - BS	EPA-8260	**111**			50	150	07/23/2020	DLC
1,2,3-Trichloropropane - BSD	EPA-8260	**108**	**3**		50	150	07/23/2020	DLC
Bromobenzene - BS	EPA-8260	**96.9**			50	150	07/23/2020	DLC
Bromobenzene - BSD	EPA-8260	**93.0**	**4**		50	150	07/23/2020	DLC
N-Propyl Benzene - BS	EPA-8260	**99.2**			50	150	07/23/2020	DLC
N-Propyl Benzene - BSD	EPA-8260	**93.3**	**6**		50	150	07/23/2020	DLC
2-Chlorotoluene - BS	EPA-8260	**99.4**			50	150	07/23/2020	DLC
2-Chlorotoluene - BSD	EPA-8260	**94.0**	**6**		50	150	07/23/2020	DLC
1,3,5-Trimethylbenzene - BS	EPA-8260	**101**			50	150	07/23/2020	DLC
1,3,5-Trimethylbenzene - BSD	EPA-8260	**94.7**	**6**		50	150	07/23/2020	DLC
4-Chlorotoluene - BS	EPA-8260	**96.7**			50	150	07/23/2020	DLC
4-Chlorotoluene - BSD	EPA-8260	**92.2**	**5**		50	150	07/23/2020	DLC
T-Butyl Benzene - BS	EPA-8260	**105**			50	150	07/23/2020	DLC
T-Butyl Benzene - BSD	EPA-8260	**91.7**	**14**		50	150	07/23/2020	DLC
1,2,4-Trimethylbenzene - BS	EPA-8260	**97.6**			50	150	07/23/2020	DLC
1,2,4-Trimethylbenzene - BSD	EPA-8260	**92.4**	**6**		50	150	07/23/2020	DLC
S-Butyl Benzene - BS	EPA-8260	**99.8**			50	150	07/23/2020	DLC
S-Butyl Benzene - BSD	EPA-8260	**93.1**	**7**		50	150	07/23/2020	DLC
P-Isopropyltoluene - BS	EPA-8260	**97.8**			50	150	07/23/2020	DLC
P-Isopropyltoluene - BSD	EPA-8260	**91.6**	**7**		50	150	07/23/2020	DLC
1,3-Dichlorobenzene - BS	EPA-8260	**95.4**			50	150	07/23/2020	DLC
1,3-Dichlorobenzene - BSD	EPA-8260	**91.5**	**4**		50	150	07/23/2020	DLC
1,4-Dichlorobenzene - BS	EPA-8260	**107**			50	150	07/23/2020	DLC
1,4-Dichlorobenzene - BSD	EPA-8260	**102**	**5**		50	150	07/23/2020	DLC
N-Butylbenzene - BS	EPA-8260	**110**			50	150	07/23/2020	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
N-Butylbenzene - BSD	EPA-8260	**103**	**7**		50	150	07/23/2020	DLC
1,2-Dichlorobenzene - BS	EPA-8260	**94.6**			50	150	07/23/2020	DLC
1,2-Dichlorobenzene - BSD	EPA-8260	**90.8**	**4**		50	150	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane - BS	EPA-8260	**83.5**			50	150	07/23/2020	DLC
1,2-Dibromo 3-Chloropropane - BSD	EPA-8260	**80.8**	**3**		50	150	07/23/2020	DLC
1,2,4-Trichlorobenzene - BS	EPA-8260	**85.9**			50	150	07/23/2020	DLC
1,2,4-Trichlorobenzene - BSD	EPA-8260	**83.8**	**2**		50	150	07/23/2020	DLC
Hexachlorobutadiene - BS	EPA-8260	**99.1**			50	150	07/23/2020	DLC
Hexachlorobutadiene - BSD	EPA-8260	**91.9**	**8**		50	150	07/23/2020	DLC
Naphthalene - BS	EPA-8260	**75.2**			50	150	07/23/2020	DLC
Naphthalene - BSD	EPA-8260	**77.3**	**3**		50	150	07/23/2020	DLC
1,2,3-Trichlorobenzene - BS	EPA-8260	**84.1**			50	150	07/23/2020	DLC
1,2,3-Trichlorobenzene - BSD	EPA-8260	**82.2**	**2**		50	150	07/23/2020	DLC

SQ1 - Spike outside of control limits with a high bias. Associated compounds non-detect. No corrective action taken.

ALS Test Batch ID: 155845 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Pyridine - BS	EPA-8270	**32.8**			20	150	07/28/2020	JMK
Pyridine - BSD	EPA-8270	**33.8**	**3**		20	150	07/28/2020	JMK
N-Nitrosodimethylamine - BS	EPA-8270	**22.0**			20	150	07/28/2020	JMK
N-Nitrosodimethylamine - BSD	EPA-8270	**23.8**	**8**		20	150	07/28/2020	JMK
Phenol - BS	EPA-8270	**31.3**			5	84	07/28/2020	JMK
Phenol - BSD	EPA-8270	**32.9**	**5**		5	84	07/28/2020	JMK
Aniline - BS	EPA-8270	**41.5**			20	150	07/28/2020	JMK
Aniline - BSD	EPA-8270	**48.4**	**15**		20	150	07/28/2020	JMK
Bis(2-Chloroethyl)Ether - BS	EPA-8270	**80.7**			20	150	07/28/2020	JMK
Bis(2-Chloroethyl)Ether - BSD	EPA-8270	**85.7**	**6**		20	150	07/28/2020	JMK
2-Chlorophenol - BS	EPA-8270	**68.4**			45	111	07/28/2020	JMK
2-Chlorophenol - BSD	EPA-8270	**73.8**	**8**		45	111	07/28/2020	JMK
1,3-Dichlorobenzene - BS	EPA-8270	**48.6**			20	150	07/28/2020	JMK
1,3-Dichlorobenzene - BSD	EPA-8270	**57.4**	**17**		20	150	07/28/2020	JMK
1,4-Dichlorobenzene - BS	EPA-8270	**62.0**			27.1	114	07/28/2020	JMK
1,4-Dichlorobenzene - BSD	EPA-8270	**63.3**	**2**		27.1	114	07/28/2020	JMK
Benzyl Alcohol - BS	EPA-8270	**54.5**			20	150	07/28/2020	JMK
Benzyl Alcohol - BSD	EPA-8270	**58.6**	**7**		20	150	07/28/2020	JMK
1,2-Dichlorobenzene - BS	EPA-8270	**57.3**			20	150	07/28/2020	JMK
1,2-Dichlorobenzene - BSD	EPA-8270	**61.5**	**7**		20	150	07/28/2020	JMK
2-Methylphenol - BS	EPA-8270	**57.1**			20	150	07/28/2020	JMK
2-Methylphenol - BSD	EPA-8270	**60.4**	**6**		20	150	07/28/2020	JMK

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroisopropyl)Ether - BS	EPA-8270	**49.7**			20	150	07/28/2020	JMK
Bis(2-Chloroisopropyl)Ether - BSD	EPA-8270	**55.3**	**11**		20	150	07/28/2020	JMK
3&4-Methylphenol - BS	EPA-8270	**54.9**			20	150	07/28/2020	JMK
3&4-Methylphenol - BSD	EPA-8270	**57.7**	**5**		20	150	07/28/2020	JMK
N-Nitroso-Di-N-Propylamine - BS	EPA-8270	**59.3**			42.2	119	07/28/2020	JMK
N-Nitroso-Di-N-Propylamine - BSD	EPA-8270	**64.6**	**9**		42.2	119	07/28/2020	JMK
Hexachloroethane - BS	EPA-8270	**48.3**			20	150	07/28/2020	JMK
Hexachloroethane - BSD	EPA-8270	**52.8**	**9**		20	150	07/28/2020	JMK
Nitrobenzene - BS	EPA-8270	**71.3**			20	150	07/28/2020	JMK
Nitrobenzene - BSD	EPA-8270	**78.5**	**10**		20	150	07/28/2020	JMK
Isophorone - BS	EPA-8270	**71.3**			20	150	07/28/2020	JMK
Isophorone - BSD	EPA-8270	**76.7**	**7**		20	150	07/28/2020	JMK
2-Nitrophenol - BS	EPA-8270	**75.5**			20	150	07/28/2020	JMK
2-Nitrophenol - BSD	EPA-8270	**79.2**	**5**		20	150	07/28/2020	JMK
2,4-Dimethylphenol - BS	EPA-8270	**60.3**			20	150	07/28/2020	JMK
2,4-Dimethylphenol - BSD	EPA-8270	**57.5**	**5**		20	150	07/28/2020	JMK
Bis(2-Chloroethoxy)Methane - BS	EPA-8270	**78.1**			20	150	07/28/2020	JMK
Bis(2-Chloroethoxy)Methane - BSD	EPA-8270	**86.0**	**10**		20	150	07/28/2020	JMK
2,4-Dichlorophenol - BS	EPA-8270	**83.5**			20	150	07/28/2020	JMK
2,4-Dichlorophenol - BSD	EPA-8270	**90.8**	**8**		20	150	07/28/2020	JMK
1,2,4-Trichlorobenzene - BS	EPA-8270	**64.1**			29.4	120	07/28/2020	JMK
1,2,4-Trichlorobenzene - BSD	EPA-8270	**68.7**	**7**		29.4	120	07/28/2020	JMK
Naphthalene - BS	EPA-8270	**65.9**			20	150	07/28/2020	JMK
Naphthalene - BSD	EPA-8270	**71.4**	**8**		20	150	07/28/2020	JMK
4-Chloroaniline - BS	EPA-8270	**76.9**			20	150	07/28/2020	JMK
4-Chloroaniline - BSD	EPA-8270	**85.3**	**10**		20	150	07/28/2020	JMK
Hexachlorobutadiene - BS	EPA-8270	**58.7**			20	150	07/28/2020	JMK
Hexachlorobutadiene - BSD	EPA-8270	**63.6**	**8**		20	150	07/28/2020	JMK
4-Chloro-3-Methylphenol - BS	EPA-8270	**73.7**			44	113	07/28/2020	JMK
4-Chloro-3-Methylphenol - BSD	EPA-8270	**78.5**	**6**		44	113	07/28/2020	JMK
2-Methylnaphthalene - BS	EPA-8270	**69.8**			20	150	07/28/2020	JMK
2-Methylnaphthalene - BSD	EPA-8270	**76.8**	**10**		20	150	07/28/2020	JMK
1-Methylnaphthalene - BS	EPA-8270	**68.9**			20	150	07/28/2020	JMK
1-Methylnaphthalene - BSD	EPA-8270	**74.7**	**8**		20	150	07/28/2020	JMK
Hexachlorocyclopentadiene - BS	EPA-8270	**44.7**			20	150	07/28/2020	JMK
Hexachlorocyclopentadiene - BSD	EPA-8270	**47.3**	**6**		20	150	07/28/2020	JMK
2,4,6-Trichlorophenol - BS	EPA-8270	**74.0**			20	150	07/28/2020	JMK
2,4,6-Trichlorophenol - BSD	EPA-8270	**81.9**	**10**		20	150	07/28/2020	JMK
2,4,5-Trichlorophenol - BS	EPA-8270	**75.9**			20	150	07/28/2020	JMK
2,4,5-Trichlorophenol - BSD	EPA-8270	**84.0**	**10**		20	150	07/28/2020	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

DATE: 7/29/2020
ALS SDG#: EV20070088
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
2-Chloronaphthalene - BS	EPA-8270	**75.7**			20	150	07/28/2020	JMK
2-Chloronaphthalene - BSD	EPA-8270	**83.1**	**9**		20	150	07/28/2020	JMK
2-Nitroaniline - BS	EPA-8270	**64.7**			20	150	07/28/2020	JMK
2-Nitroaniline - BSD	EPA-8270	**69.8**	**8**		20	150	07/28/2020	JMK
Acenaphthylene - BS	EPA-8270	**76.9**			20	150	07/28/2020	JMK
Acenaphthylene - BSD	EPA-8270	**85.1**	**10**		20	150	07/28/2020	JMK
Dimethylphthalate - BS	EPA-8270	**82.5**			20	150	07/28/2020	JMK
Dimethylphthalate - BSD	EPA-8270	**89.5**	**8**		20	150	07/28/2020	JMK
2,6-Dinitrotoluene - BS	EPA-8270	**73.5**			20	150	07/28/2020	JMK
2,6-Dinitrotoluene - BSD	EPA-8270	**81.8**	**11**		20	150	07/28/2020	JMK
Acenaphthene - BS	EPA-8270	**74.2**			41	107	07/28/2020	JMK
Acenaphthene - BSD	EPA-8270	**81.7**	**10**		41	107	07/28/2020	JMK
3-Nitroaniline - BS	EPA-8270	**63.6**			20	150	07/28/2020	JMK
3-Nitroaniline - BSD	EPA-8270	**79.4**	**22**		20	150	07/28/2020	JMK
2,4-Dinitrophenol - BS	EPA-8270	**74.5**			20	150	07/28/2020	JMK
2,4-Dinitrophenol - BSD	EPA-8270	**85.6**	**14**		20	150	07/28/2020	JMK
4-Nitrophenol - BS	EPA-8270	**34.3**			5	63	07/28/2020	JMK
4-Nitrophenol - BSD	EPA-8270	**34.2**	**0**		5	63	07/28/2020	JMK
Dibenzofuran - BS	EPA-8270	**79.8**			20	150	07/28/2020	JMK
Dibenzofuran - BSD	EPA-8270	**87.7**	**9**		20	150	07/28/2020	JMK
2,4-Dinitrotoluene - BS	EPA-8270	**71.9**			53.1	136	07/28/2020	JMK
2,4-Dinitrotoluene - BSD	EPA-8270	**79.2**	**10**		53.1	136	07/28/2020	JMK
2,3,4,6-Tetrachlorophenol - BS	EPA-8270	**74.1**			20	150	07/28/2020	JMK
2,3,4,6-Tetrachlorophenol - BSD	EPA-8270	**81.5**	**10**		20	150	07/28/2020	JMK
Diethylphthalate - BS	EPA-8270	**77.8**			20	150	07/28/2020	JMK
Diethylphthalate - BSD	EPA-8270	**86.1**	**10**		20	150	07/28/2020	JMK
Fluorene - BS	EPA-8270	**78.6**			20	150	07/28/2020	JMK
Fluorene - BSD	EPA-8270	**86.1**	**9**		20	150	07/28/2020	JMK
4-Chlorophenyl-Phenylether - BS	EPA-8270	**79.7**			20	150	07/28/2020	JMK
4-Chlorophenyl-Phenylether - BSD	EPA-8270	**87.0**	**9**		20	150	07/28/2020	JMK
4-Nitroaniline - BS	EPA-8270	**66.5**			20	150	07/28/2020	JMK
4-Nitroaniline - BSD	EPA-8270	**75.8**	**13**		20	150	07/28/2020	JMK
4,6-Dinitro-2-Methylphenol - BS	EPA-8270	**60.3**			20	150	07/28/2020	JMK
4,6-Dinitro-2-Methylphenol - BSD	EPA-8270	**73.4**	**20**		20	150	07/28/2020	JMK
Azobenzene - BS	EPA-8270	**71.8**			20	150	07/28/2020	JMK
Azobenzene - BSD	EPA-8270	**78.6**	**9**		20	150	07/28/2020	JMK
4-Bromophenyl-Phenylether - BS	EPA-8270	**86.8**			20	150	07/28/2020	JMK
4-Bromophenyl-Phenylether - BSD	EPA-8270	**96.5**	**11**		20	150	07/28/2020	JMK
Hexachlorobenzene - BS	EPA-8270	**84.6**			20	150	07/28/2020	JMK
Hexachlorobenzene - BSD	EPA-8270	**93.0**	**9**		20	150	07/28/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

DATE: 7/29/2020
ALS SDG#: EV20070088
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Pentachlorophenol - BS	EPA-8270	**73.7**			33	124	07/28/2020	JMK
Pentachlorophenol - BSD	EPA-8270	**81.2**	**10**		33	124	07/28/2020	JMK
Phenanthrene - BS	EPA-8270	**78.9**			20	150	07/28/2020	JMK
Phenanthrene - BSD	EPA-8270	**85.7**	**8**		20	150	07/28/2020	JMK
Anthracene - BS	EPA-8270	**80.2**			20	150	07/28/2020	JMK
Anthracene - BSD	EPA-8270	**86.8**	**8**		20	150	07/28/2020	JMK
Carbazole - BS	EPA-8270	**83.0**			20	150	07/28/2020	JMK
Carbazole - BSD	EPA-8270	**84.2**	**1**		20	150	07/28/2020	JMK
Di-N-Butylphthalate - BS	EPA-8270	**71.1**			20	150	07/28/2020	JMK
Di-N-Butylphthalate - BSD	EPA-8270	**77.0**	**8**		20	150	07/28/2020	JMK
Fluoranthene - BS	EPA-8270	**83.7**			20	150	07/28/2020	JMK
Fluoranthene - BSD	EPA-8270	**90.8**	**8**		20	150	07/28/2020	JMK
Pyrene - BS	EPA-8270	**70.1**			18	136	07/28/2020	JMK
Pyrene - BSD	EPA-8270	**78.8**	**12**		18	136	07/28/2020	JMK
Butylbenzylphthalate - BS	EPA-8270	**66.6**			20	150	07/28/2020	JMK
Butylbenzylphthalate - BSD	EPA-8270	**75.2**	**12**		20	150	07/28/2020	JMK
Benzo[A]Anthracene - BS	EPA-8270	**74.1**			20	150	07/28/2020	JMK
Benzo[A]Anthracene - BSD	EPA-8270	**82.3**	**10**		20	150	07/28/2020	JMK
Chrysene - BS	EPA-8270	**72.6**			20	150	07/28/2020	JMK
Chrysene - BSD	EPA-8270	**80.6**	**10**		20	150	07/28/2020	JMK
Bis(2-Ethylhexyl)Phthalate - BS	EPA-8270	**68.8**			20	150	07/28/2020	JMK
Bis(2-Ethylhexyl)Phthalate - BSD	EPA-8270	**75.9**	**10**		20	150	07/28/2020	JMK
Di-N-Octylphthalate - BS	EPA-8270	**69.8**			20	150	07/28/2020	JMK
Di-N-Octylphthalate - BSD	EPA-8270	**76.1**	**9**		20	150	07/28/2020	JMK
Benzo[B]Fluoranthene - BS	EPA-8270	**81.8**			20	150	07/28/2020	JMK
Benzo[B]Fluoranthene - BSD	EPA-8270	**89.4**	**9**		20	150	07/28/2020	JMK
Benzo[K]Fluoranthene - BS	EPA-8270	**80.7**			20	150	07/28/2020	JMK
Benzo[K]Fluoranthene - BSD	EPA-8270	**88.3**	**9**		20	150	07/28/2020	JMK
Benzo[A]Pyrene - BS	EPA-8270	**69.9**			20	150	07/28/2020	JMK
Benzo[A]Pyrene - BSD	EPA-8270	**75.9**	**8**		20	150	07/28/2020	JMK
Indeno[1,2,3-Cd]Pyrene - BS	EPA-8270	**77.2**			20	150	07/28/2020	JMK
Indeno[1,2,3-Cd]Pyrene - BSD	EPA-8270	**81.7**	**6**		20	150	07/28/2020	JMK
Dibenz[A,H]Anthracene - BS	EPA-8270	**76.3**			20	150	07/28/2020	JMK
Dibenz[A,H]Anthracene - BSD	EPA-8270	**80.3**	**5**		20	150	07/28/2020	JMK
Benzo[G,H,I]Perylene - BS	EPA-8270	**83.9**			20	150	07/28/2020	JMK
Benzo[G,H,I]Perylene - BSD	EPA-8270	**88.3**	**5**		20	150	07/28/2020	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV2007 0088

Date 7-23-20 Page 1 Of 1

PROJECT ID: Everett Landfill (ELF)
REPORT TO COMPANY: HWA Geosciences
PROJECT MANAGER: Amie Sugar
ADDRESS: 21312 30th Drive SE
Bothell, WA 98021
PHONE: 206-794-3145 P.O. #:
E-MAIL: Asugar@hwageo.com Ayork@hwageo.com
INVOICE TO COMPANY: Same ↑
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. MW-11R	7-21-20	1555	water	1							X			X							
2. MW-21R	7-21-20	1505		2																	
3. MW-24	7-22-20	1332		3																	
4. MW-25		1223		4																	
5. MW-29R		1045		5																	
6. MW-30		1133		6																	
7. MW-31		1254		7																	
8. MW-39R		1005		8																	
9. DUP-0722	7-22-20	—	water	9							X			X							
10.																					

OTHER (Specify)

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Austin York, HWA Geosciences, 7-23-20, 0945
   Received By: Shawn Robinson ALS 7/23/20 0945
2. Relinquished By: _____
   Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: ☒ 10 Standard ☐ 5 ☐ 3 ☐ 2 ☐ 1 ☐ SAME DAY

Fuels & Hydrocarbon Analysis: ☐ 5 Standard ☐ 3 ☐ 1 ☐ SAME DAY

OTHER: Specify: _____

*Turnaround request less than standard may incur Rush Charges

August 7, 2020

Mr. Arnie Sugar
HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

Dear Mr. Sugar,

On July 24th, 5 samples were received by our laboratory and assigned our laboratory project number EV20070102. The project was identified as your Everett Landfill (ELF). The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 11:04:00 AM
CLIENT SAMPLE ID	MW-36	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/03/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/03/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/03/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/03/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	8/7/2020
		ALS JOB#:	EV20070102
		ALS SAMPLE#:	EV20070102-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 11:04:00 AM
CLIENT SAMPLE ID	MW-36	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/03/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 11:04:00 AM
CLIENT SAMPLE ID	MW-36	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 11:04:00 AM
CLIENT SAMPLE ID	MW-36	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**100**	08/03/2020	DLC
Toluene-d8	EPA-8260	**100**	08/03/2020	DLC
4-Bromofluorobenzene	EPA-8260	**98.1**	08/03/2020	DLC
2-Fluorophenol	EPA-8270	**36.6**	07/27/2020	JMK
Phenol-d5	EPA-8270	**15.4**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**59.0**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**59.7**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**88.5**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**92.5**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 11:48:00 AM
CLIENT SAMPLE ID	MW-37	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/03/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/03/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/03/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/03/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC

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CLIENT SAMPLE ID	MW-37	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/03/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 11:48:00 AM
CLIENT SAMPLE ID	MW-37	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**100**	08/03/2020	DLC
Toluene-d8	EPA-8260	**101**	08/03/2020	DLC
4-Bromofluorobenzene	EPA-8260	**96.6**	08/03/2020	DLC
2-Fluorophenol	EPA-8270	**42.2**	07/27/2020	JMK
Phenol-d5	EPA-8270	**17.8**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**60.3**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**58.9**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**82.5**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**95.7**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 12:54:00 PM
CLIENT SAMPLE ID	MW-38	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/03/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/03/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/03/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/03/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	8/7/2020
		ALS JOB#:	EV20070102
		ALS SAMPLE#:	EV20070102-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 12:54:00 PM
CLIENT SAMPLE ID	MW-38	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/03/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 12:54:00 PM
CLIENT SAMPLE ID	MW-38	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/27/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020 12:54:00 PM
CLIENT SAMPLE ID	MW-38	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/27/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/27/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**100**	08/03/2020	DLC
Toluene-d8	EPA-8260	**101**	08/03/2020	DLC
4-Bromofluorobenzene	EPA-8260	**97.7**	08/03/2020	DLC
2-Fluorophenol	EPA-8270	**37.5**	07/27/2020	JMK
Phenol-d5	EPA-8270	**17.5**	07/27/2020	JMK
Nitrobenzene-d5	EPA-8270	**63.7**	07/27/2020	JMK
2-Fluorobiphenyl	EPA-8270	**66.9**	07/27/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**86.7**	07/27/2020	JMK
Terphenyl-d14	EPA-8270	**94.8**	07/27/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/24/2020 9:35:00 AM
CLIENT SAMPLE ID	LS-21	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/03/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/03/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/03/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/03/2020	DLC
Chlorobenzene	EPA-8260	**2.2**	2.0	1	UG/L	08/03/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	8/7/2020
		ALS JOB#:	EV20070102
		ALS SAMPLE#:	EV20070102-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/24/2020 9:35:00 AM
CLIENT SAMPLE ID	LS-21	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/03/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Pyridine	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Phenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Aniline	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/24/2020 9:35:00 AM
CLIENT SAMPLE ID	LS-21	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Isophorone	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Benzoic Acid	EPA-8270	U	10	1	UG/L	07/28/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Naphthalene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
1-Methylnaphthalene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Acenaphthylene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Acenaphthene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	07/28/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	07/28/2020	JMK
4-Nitrophenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Fluorene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
4-Nitroaniline	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/24/2020 9:35:00 AM
CLIENT SAMPLE ID	LS-21	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Azobenzene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Hexachlorobenzene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	07/28/2020	JMK
Phenanthrene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Anthracene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Carbazole	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Pyrene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Butylbenzylphthalate	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Chrysene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	2.0	1	UG/L	07/28/2020	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/03/2020	DLC
Toluene-d8	EPA-8260	**99.5**	08/03/2020	DLC
4-Bromofluorobenzene	EPA-8260	**99.1**	08/03/2020	DLC
2-Fluorophenol	EPA-8270	**41.9**	07/28/2020	JMK
Phenol-d5	EPA-8270	**18.9**	07/28/2020	JMK
Nitrobenzene-d5	EPA-8270	**64.2**	07/28/2020	JMK
2-Fluorobiphenyl	EPA-8270	**65.5**	07/28/2020	JMK
2,4,6-Tribromophenol	EPA-8270	**91.3**	07/28/2020	JMK
Terphenyl-d14	EPA-8270	**94.9**	07/28/2020	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020
CLIENT SAMPLE ID	TB-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	08/03/2020	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Acetone	EPA-8260	U	25	1	UG/L	08/03/2020	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	08/03/2020	DLC
Acrylonitrile	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Butanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
Toluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Hexanone	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	08/03/2020	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS JOB#: ALS SAMPLE#:	8/7/2020 EV20070102 EV20070102-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/24/2020
CLIENT PROJECT:	Everett Landfill (ELF)	COLLECTION DATE:	7/23/2020
CLIENT SAMPLE ID	TB-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	08/03/2020	DLC
Styrene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
o-Xylene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	08/03/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
Naphthalene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	08/03/2020	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**101**	08/03/2020	DLC
Toluene-d8	EPA-8260	**101**	08/03/2020	DLC
4-Bromofluorobenzene	EPA-8260	**97.9**	08/03/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

DATE: 8/7/2020
ALS SDG#: EV20070102
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-080320W - Batch 156040 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Chloromethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Vinyl Chloride	EPA-8260	U	UG/L	0.20	08/03/2020	DLC
Bromomethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Chloroethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Carbon Tetrachloride	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Trichlorofluoromethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Carbon Disulfide	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Acetone	EPA-8260	U	UG/L	25	08/03/2020	DLC
1,1-Dichloroethene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Methylene Chloride	EPA-8260	U	UG/L	5.0	08/03/2020	DLC
Acrylonitrile	EPA-8260	U	UG/L	10	08/03/2020	DLC
Methyl T-Butyl Ether	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,1-Dichloroethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
2-Butanone	EPA-8260	U	UG/L	10	08/03/2020	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
2,2-Dichloropropane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Bromochloromethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Chloroform	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,1,1-Trichloroethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,1-Dichloropropene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,2-Dichloroethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Benzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Trichloroethene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,2-Dichloropropane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Dibromomethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Bromodichloromethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
4-Methyl-2-Pentanone	EPA-8260	U	UG/L	10	08/03/2020	DLC
Toluene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,1,2-Trichloroethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
2-Hexanone	EPA-8260	U	UG/L	10	08/03/2020	DLC
1,3-Dichloropropane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Tetrachloroethylene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Dibromochloromethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,2-Dibromoethane	EPA-8260	U	UG/L	0.010	08/03/2020	DLC
Chlorobenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC

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CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

DATE: 8/7/2020
ALS SDG#: EV20070102
WDOE ACCREDITATION: C601

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

LABORATORY BLANK RESULTS

MB-080320W - Batch 156040 - Water by EPA-8260

1,1,1,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Ethylbenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
m,p-Xylene	EPA-8260	U	UG/L	4.0	08/03/2020	DLC
Styrene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
o-Xylene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Bromoform	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Isopropylbenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,2,3-Trichloropropane	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Bromobenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
N-Propyl Benzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
2-Chlorotoluene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
4-Chlorotoluene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
T-Butyl Benzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
S-Butyl Benzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
P-Isopropyltoluene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,3-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,4-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
N-Butylbenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,2-Dichlorobenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	UG/L	10	08/03/2020	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Hexachlorobutadiene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
Naphthalene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	UG/L	2.0	08/03/2020	DLC

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MB-072720W - Batch 155845 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Pyridine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
N-Nitrosodimethylamine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Phenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Aniline	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Bis(2-Chloroethyl)Ether	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Chlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
1,3-Dichlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
1,4-Dichlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzyl Alcohol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK

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CERTIFICATE OF ANALYSIS

CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE:	8/7/2020
		ALS SDG#:	EV20070102
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	Everett Landfill (ELF)		

LABORATORY BLANK RESULTS

MB-072720W - Batch 155845 - Water by EPA-8270

1,2-Dichlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Methylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
3&4-Methylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
N-Nitroso-Di-N-Propylamine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Hexachloroethane	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Nitrobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Isophorone	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Nitrophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4-Dimethylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzoic Acid	EPA-8270	U	UG/L	10	07/28/2020	JMK
Bis(2-Chloroethoxy)Methane	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4-Dichlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
1,2,4-Trichlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Naphthalene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Chloroaniline	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,6-Dichlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Hexachlorobutadiene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Chloro-3-Methylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Methylnaphthalene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
1-Methylnaphthalene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Hexachlorocyclopentadiene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4,6-Trichlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4,5-Trichlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Chloronaphthalene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2-Nitroaniline	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Acenaphthylene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Dimethylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,6-Dinitrotoluene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Acenaphthene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
3-Nitroaniline	EPA-8270	U	UG/L	5.0	07/28/2020	JMK
2,4-Dinitrophenol	EPA-8270	U	UG/L	10	07/28/2020	JMK
4-Nitrophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Dibenzofuran	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,4-Dinitrotoluene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
2,3,4,6-Tetrachlorophenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Diethylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Fluorene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Chlorophenyl-Phenylether	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Nitroaniline	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4,6-Dinitro-2-Methylphenol	EPA-8270	U	UG/L	2.0	07/28/2020	JMK

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CLIENT:	HWA Geosciences Inc. 21312 - 30th Drive SE, Suite 110 Bothell, WA 98021-7010	DATE: ALS SDG#: WDOE ACCREDITATION:	8/7/2020 EV20070102 C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	Everett Landfill (ELF)		

LABORATORY BLANK RESULTS

MB-072720W - Batch 155845 - Water by EPA-8270

N-Nitrosodiphenylamine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Azobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
4-Bromophenyl-Phenylether	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Hexachlorobenzene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Pentachlorophenol	EPA-8270	U	UG/L	5.0	07/28/2020	JMK
Phenanthrene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Anthracene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Carbazole	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Di-N-Butylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Fluoranthene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Pyrene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Butylbenzylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
3,3-Dichlorobenzidine	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[A]Anthracene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Chrysene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Di-N-Octylphthalate	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[B]Fluoranthene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[K]Fluoranthene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[A]Pyrene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Dibenz[A,H]Anthracene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK
Benzo[G,H,I]Perylene	EPA-8270	U	UG/L	2.0	07/28/2020	JMK

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

DATE: 8/7/2020
ALS SDG#: EV20070102
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 156040 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane - BS	EPA-8260	**111**			50	150	08/03/2020	DLC
Dichlorodifluoromethane - BSD	EPA-8260	**110**	**1**		50	150	08/03/2020	DLC
Chloromethane - BS	EPA-8260	**133**			50	150	08/03/2020	DLC
Chloromethane - BSD	EPA-8260	**129**	**3**		50	150	08/03/2020	DLC
Vinyl Chloride - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
Vinyl Chloride - BSD	EPA-8260	**98.4**	**3**		50	150	08/03/2020	DLC
Bromomethane - BS	EPA-8260	**82.9**			50	150	08/03/2020	DLC
Bromomethane - BSD	EPA-8260	**76.3**	**8**		50	150	08/03/2020	DLC
Chloroethane - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
Chloroethane - BSD	EPA-8260	**98.8**	**4**		50	150	08/03/2020	DLC
Carbon Tetrachloride - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
Carbon Tetrachloride - BSD	EPA-8260	**100**	**2**		50	150	08/03/2020	DLC
Trichlorofluoromethane - BS	EPA-8260	**111**			50	150	08/03/2020	DLC
Trichlorofluoromethane - BSD	EPA-8260	**109**	**1**		50	150	08/03/2020	DLC
Carbon Disulfide - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
Carbon Disulfide - BSD	EPA-8260	**98.9**	**3**		50	150	08/03/2020	DLC
Acetone - BS	EPA-8260	**91.3**			50	150	08/03/2020	DLC
Acetone - BSD	EPA-8260	**77.8**	**16**		50	150	08/03/2020	DLC
1,1-Dichloroethene - BS	EPA-8260	**98.3**			72.5	136	08/03/2020	DLC
1,1-Dichloroethene - BSD	EPA-8260	**95.6**	**3**		72.5	136	08/03/2020	DLC
Methylene Chloride - BS	EPA-8260	**80.8**			50	150	08/03/2020	DLC
Methylene Chloride - BSD	EPA-8260	**78.0**	**3**		50	150	08/03/2020	DLC
Acrylonitrile - BS	EPA-8260	**104**			50	150	08/03/2020	DLC
Acrylonitrile - BSD	EPA-8260	**101**	**3**		50	150	08/03/2020	DLC
Methyl T-Butyl Ether - BS	EPA-8260	**93.8**			50	150	08/03/2020	DLC
Methyl T-Butyl Ether - BSD	EPA-8260	**90.9**	**3**		50	150	08/03/2020	DLC
Trans-1,2-Dichloroethene - BS	EPA-8260	**101**			50	150	08/03/2020	DLC
Trans-1,2-Dichloroethene - BSD	EPA-8260	**96.8**	**4**		50	150	08/03/2020	DLC
1,1-Dichloroethane - BS	EPA-8260	**101**			50	150	08/03/2020	DLC
1,1-Dichloroethane - BSD	EPA-8260	**96.1**	**5**		50	150	08/03/2020	DLC
2-Butanone - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
2-Butanone - BSD	EPA-8260	**88.8**	**14**		50	150	08/03/2020	DLC
Cis-1,2-Dichloroethene - BS	EPA-8260	**99.0**			50	150	08/03/2020	DLC
Cis-1,2-Dichloroethene - BSD	EPA-8260	**94.9**	**4**		50	150	08/03/2020	DLC
2,2-Dichloropropane - BS	EPA-8260	**113**			50	150	08/03/2020	DLC
2,2-Dichloropropane - BSD	EPA-8260	**107**	**5**		50	150	08/03/2020	DLC
Bromochloromethane - BS	EPA-8260	**94.2**			50	150	08/03/2020	DLC
Bromochloromethane - BSD	EPA-8260	**90.1**	**4**		50	150	08/03/2020	DLC
Chloroform - BS	EPA-8260	**102**			50	150	08/03/2020	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Chloroform - BSD	EPA-8260	**97.6**	**4**		50	150	08/03/2020	DLC
1,1,1-Trichloroethane - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
1,1,1-Trichloroethane - BSD	EPA-8260	**98.2**	**3**		50	150	08/03/2020	DLC
1,1-Dichloropropene - BS	EPA-8260	**104**			50	150	08/03/2020	DLC
1,1-Dichloropropene - BSD	EPA-8260	**101**	**3**		50	150	08/03/2020	DLC
1,2-Dichloroethane - BS	EPA-8260	**92.6**			50	150	08/03/2020	DLC
1,2-Dichloroethane - BSD	EPA-8260	**88.8**	**4**		50	150	08/03/2020	DLC
Benzene - BS	EPA-8260	**107**			74.7	143	08/03/2020	DLC
Benzene - BSD	EPA-8260	**102**	**5**		74.7	143	08/03/2020	DLC
Trichloroethene - BS	EPA-8260	**96.5**			74.4	141	08/03/2020	DLC
Trichloroethene - BSD	EPA-8260	**92.7**	**4**		74.4	141	08/03/2020	DLC
1,2-Dichloropropane - BS	EPA-8260	**99.8**			50	150	08/03/2020	DLC
1,2-Dichloropropane - BSD	EPA-8260	**95.1**	**5**		50	150	08/03/2020	DLC
Dibromomethane - BS	EPA-8260	**98.3**			50	150	08/03/2020	DLC
Dibromomethane - BSD	EPA-8260	**94.5**	**4**		50	150	08/03/2020	DLC
Bromodichloromethane - BS	EPA-8260	**98.9**			50	150	08/03/2020	DLC
Bromodichloromethane - BSD	EPA-8260	**94.3**	**5**		50	150	08/03/2020	DLC
Trans-1,3-Dichloropropene - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
Trans-1,3-Dichloropropene - BSD	EPA-8260	**98.8**	**4**		50	150	08/03/2020	DLC
4-Methyl-2-Pentanone - BS	EPA-8260	**99.6**			50	150	08/03/2020	DLC
4-Methyl-2-Pentanone - BSD	EPA-8260	**95.8**	**4**		50	150	08/03/2020	DLC
Toluene - BS	EPA-8260	**101**			71.7	139	08/03/2020	DLC
Toluene - BSD	EPA-8260	**97.1**	**4**		71.7	139	08/03/2020	DLC
Cis-1,3-Dichloropropene - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
Cis-1,3-Dichloropropene - BSD	EPA-8260	**97.8**	**5**		50	150	08/03/2020	DLC
1,1,2-Trichloroethane - BS	EPA-8260	**98.3**			50	150	08/03/2020	DLC
1,1,2-Trichloroethane - BSD	EPA-8260	**94.5**	**4**		50	150	08/03/2020	DLC
2-Hexanone - BS	EPA-8260	**107**			50	150	08/03/2020	DLC
2-Hexanone - BSD	EPA-8260	**94.5**	**12**		50	150	08/03/2020	DLC
1,3-Dichloropropane - BS	EPA-8260	**98.4**			50	150	08/03/2020	DLC
1,3-Dichloropropane - BSD	EPA-8260	**94.7**	**4**		50	150	08/03/2020	DLC
Tetrachloroethylene - BS	EPA-8260	**77.0**			50	150	08/03/2020	DLC
Tetrachloroethylene - BSD	EPA-8260	**69.9**	**10**		50	150	08/03/2020	DLC
Dibromochloromethane - BS	EPA-8260	**101**			50	150	08/03/2020	DLC
Dibromochloromethane - BSD	EPA-8260	**96.3**	**4**		50	150	08/03/2020	DLC
1,2-Dibromoethane - BS	EPA-8260	**94.9**			50	150	08/03/2020	DLC
1,2-Dibromoethane - BSD	EPA-8260	**90.7**	**5**		50	150	08/03/2020	DLC
Chlorobenzene - BS	EPA-8260	**101**			73	131	08/03/2020	DLC
Chlorobenzene - BSD	EPA-8260	**97.1**	**4**		73	131	08/03/2020	DLC
1,1,1,2-Tetrachloroethane - BS	EPA-8260	**98.0**			50	150	08/03/2020	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane - BSD	EPA-8260	**93.8**	**4**		50	150	08/03/2020	DLC
Ethylbenzene - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
Ethylbenzene - BSD	EPA-8260	**98.9**	**4**		50	150	08/03/2020	DLC
m,p-Xylene - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
m,p-Xylene - BSD	EPA-8260	**98.8**	**4**		50	150	08/03/2020	DLC
Styrene - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
Styrene - BSD	EPA-8260	**98.3**	**4**		50	150	08/03/2020	DLC
o-Xylene - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
o-Xylene - BSD	EPA-8260	**97.6**	**4**		50	150	08/03/2020	DLC
Bromoform - BS	EPA-8260	**98.0**			50	150	08/03/2020	DLC
Bromoform - BSD	EPA-8260	**94.8**	**3**		50	150	08/03/2020	DLC
Isopropylbenzene - BS	EPA-8260	**104**			50	150	08/03/2020	DLC
Isopropylbenzene - BSD	EPA-8260	**100**	**4**		50	150	08/03/2020	DLC
1,1,2,2-Tetrachloroethane - BS	EPA-8260	**104**			50	150	08/03/2020	DLC
1,1,2,2-Tetrachloroethane - BSD	EPA-8260	**98.4**	**6**		50	150	08/03/2020	DLC
1,2,3-Trichloropropane - BS	EPA-8260	**95.3**			50	150	08/03/2020	DLC
1,2,3-Trichloropropane - BSD	EPA-8260	**90.0**	**6**		50	150	08/03/2020	DLC
Bromobenzene - BS	EPA-8260	**101**			50	150	08/03/2020	DLC
Bromobenzene - BSD	EPA-8260	**95.1**	**6**		50	150	08/03/2020	DLC
N-Propyl Benzene - BS	EPA-8260	**105**			50	150	08/03/2020	DLC
N-Propyl Benzene - BSD	EPA-8260	**99.1**	**6**		50	150	08/03/2020	DLC
2-Chlorotoluene - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
2-Chlorotoluene - BSD	EPA-8260	**96.4**	**6**		50	150	08/03/2020	DLC
1,3,5-Trimethylbenzene - BS	EPA-8260	**104**			50	150	08/03/2020	DLC
1,3,5-Trimethylbenzene - BSD	EPA-8260	**98.6**	**6**		50	150	08/03/2020	DLC
4-Chlorotoluene - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
4-Chlorotoluene - BSD	EPA-8260	**96.8**	**6**		50	150	08/03/2020	DLC
T-Butyl Benzene - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
T-Butyl Benzene - BSD	EPA-8260	**96.6**	**5**		50	150	08/03/2020	DLC
1,2,4-Trimethylbenzene - BS	EPA-8260	**105**			50	150	08/03/2020	DLC
1,2,4-Trimethylbenzene - BSD	EPA-8260	**98.6**	**6**		50	150	08/03/2020	DLC
S-Butyl Benzene - BS	EPA-8260	**105**			50	150	08/03/2020	DLC
S-Butyl Benzene - BSD	EPA-8260	**100**	**5**		50	150	08/03/2020	DLC
P-Isopropyltoluene - BS	EPA-8260	**105**			50	150	08/03/2020	DLC
P-Isopropyltoluene - BSD	EPA-8260	**99.8**	**5**		50	150	08/03/2020	DLC
1,3-Dichlorobenzene - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
1,3-Dichlorobenzene - BSD	EPA-8260	**96.8**	**6**		50	150	08/03/2020	DLC
1,4-Dichlorobenzene - BS	EPA-8260	**103**			50	150	08/03/2020	DLC
1,4-Dichlorobenzene - BSD	EPA-8260	**97.1**	**6**		50	150	08/03/2020	DLC
N-Butylbenzene - BS	EPA-8260	**107**			50	150	08/03/2020	DLC

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LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
N-Butylbenzene - BSD	EPA-8260	**102**	**4**		50	150	08/03/2020	DLC
1,2-Dichlorobenzene - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
1,2-Dichlorobenzene - BSD	EPA-8260	**96.6**	**6**		50	150	08/03/2020	DLC
1,2-Dibromo 3-Chloropropane - BS	EPA-8260	**97.3**			50	150	08/03/2020	DLC
1,2-Dibromo 3-Chloropropane - BSD	EPA-8260	**91.3**	**6**		50	150	08/03/2020	DLC
1,2,4-Trichlorobenzene - BS	EPA-8260	**102**			50	150	08/03/2020	DLC
1,2,4-Trichlorobenzene - BSD	EPA-8260	**97.3**	**4**		50	150	08/03/2020	DLC
Hexachlorobutadiene - BS	EPA-8260	**106**			50	150	08/03/2020	DLC
Hexachlorobutadiene - BSD	EPA-8260	**102**	**4**		50	150	08/03/2020	DLC
Naphthalene - BS	EPA-8260	**106**			50	150	08/03/2020	DLC
Naphthalene - BSD	EPA-8260	**105**	**1**		50	150	08/03/2020	DLC
1,2,3-Trichlorobenzene - BS	EPA-8260	**99.1**			50	150	08/03/2020	DLC
1,2,3-Trichlorobenzene - BSD	EPA-8260	**95.4**	**4**		50	150	08/03/2020	DLC

ALS Test Batch ID: 155845 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Pyridine - BS	EPA-8270	**32.8**			20	150	07/28/2020	JMK
Pyridine - BSD	EPA-8270	**33.8**	**3**		20	150	07/28/2020	JMK
N-Nitrosodimethylamine - BS	EPA-8270	**22.0**			20	150	07/28/2020	JMK
N-Nitrosodimethylamine - BSD	EPA-8270	**23.8**	**8**		20	150	07/28/2020	JMK
Phenol - BS	EPA-8270	**31.3**			5	84	07/28/2020	JMK
Phenol - BSD	EPA-8270	**32.9**	**5**		5	84	07/28/2020	JMK
Aniline - BS	EPA-8270	**41.5**			20	150	07/28/2020	JMK
Aniline - BSD	EPA-8270	**48.4**	**15**		20	150	07/28/2020	JMK
Bis(2-Chloroethyl)Ether - BS	EPA-8270	**80.7**			20	150	07/28/2020	JMK
Bis(2-Chloroethyl)Ether - BSD	EPA-8270	**85.7**	**6**		20	150	07/28/2020	JMK
2-Chlorophenol - BS	EPA-8270	**68.4**			45	111	07/28/2020	JMK
2-Chlorophenol - BSD	EPA-8270	**73.8**	**8**		45	111	07/28/2020	JMK
1,3-Dichlorobenzene - BS	EPA-8270	**48.6**			20	150	07/28/2020	JMK
1,3-Dichlorobenzene - BSD	EPA-8270	**57.4**	**17**		20	150	07/28/2020	JMK
1,4-Dichlorobenzene - BS	EPA-8270	**62.0**			27.1	114	07/28/2020	JMK
1,4-Dichlorobenzene - BSD	EPA-8270	**63.3**	**2**		27.1	114	07/28/2020	JMK
Benzyl Alcohol - BS	EPA-8270	**54.5**			20	150	07/28/2020	JMK
Benzyl Alcohol - BSD	EPA-8270	**58.6**	**7**		20	150	07/28/2020	JMK
1,2-Dichlorobenzene - BS	EPA-8270	**57.3**			20	150	07/28/2020	JMK
1,2-Dichlorobenzene - BSD	EPA-8270	**61.5**	**7**		20	150	07/28/2020	JMK
2-Methylphenol - BS	EPA-8270	**57.1**			20	150	07/28/2020	JMK
2-Methylphenol - BSD	EPA-8270	**60.4**	**6**		20	150	07/28/2020	JMK
Bis(2-Chloroisopropyl)Ether - BS	EPA-8270	**49.7**			20	150	07/28/2020	JMK

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Bis(2-Chloroisopropyl)Ether - BSD	EPA-8270	**55.3**	**11**		20	150	07/28/2020	JMK
3&4-Methylphenol - BS	EPA-8270	**54.9**			20	150	07/28/2020	JMK
3&4-Methylphenol - BSD	EPA-8270	**57.7**	**5**		20	150	07/28/2020	JMK
N-Nitroso-Di-N-Propylamine - BS	EPA-8270	**59.3**			42.2	119	07/28/2020	JMK
N-Nitroso-Di-N-Propylamine - BSD	EPA-8270	**64.6**	**9**		42.2	119	07/28/2020	JMK
Hexachloroethane - BS	EPA-8270	**48.3**			20	150	07/28/2020	JMK
Hexachloroethane - BSD	EPA-8270	**52.8**	**9**		20	150	07/28/2020	JMK
Nitrobenzene - BS	EPA-8270	**71.3**			20	150	07/28/2020	JMK
Nitrobenzene - BSD	EPA-8270	**78.5**	**10**		20	150	07/28/2020	JMK
Isophorone - BS	EPA-8270	**71.3**			20	150	07/28/2020	JMK
Isophorone - BSD	EPA-8270	**76.7**	**7**		20	150	07/28/2020	JMK
2-Nitrophenol - BS	EPA-8270	**75.5**			20	150	07/28/2020	JMK
2-Nitrophenol - BSD	EPA-8270	**79.2**	**5**		20	150	07/28/2020	JMK
2,4-Dimethylphenol - BS	EPA-8270	**60.3**			20	150	07/28/2020	JMK
2,4-Dimethylphenol - BSD	EPA-8270	**57.5**	**5**		20	150	07/28/2020	JMK
Bis(2-Chloroethoxy)Methane - BS	EPA-8270	**78.1**			20	150	07/28/2020	JMK
Bis(2-Chloroethoxy)Methane - BSD	EPA-8270	**86.0**	**10**		20	150	07/28/2020	JMK
2,4-Dichlorophenol - BS	EPA-8270	**83.5**			20	150	07/28/2020	JMK
2,4-Dichlorophenol - BSD	EPA-8270	**90.8**	**8**		20	150	07/28/2020	JMK
1,2,4-Trichlorobenzene - BS	EPA-8270	**64.1**			29.4	120	07/28/2020	JMK
1,2,4-Trichlorobenzene - BSD	EPA-8270	**68.7**	**7**		29.4	120	07/28/2020	JMK
Naphthalene - BS	EPA-8270	**65.9**			20	150	07/28/2020	JMK
Naphthalene - BSD	EPA-8270	**71.4**	**8**		20	150	07/28/2020	JMK
4-Chloroaniline - BS	EPA-8270	**76.9**			20	150	07/28/2020	JMK
4-Chloroaniline - BSD	EPA-8270	**85.3**	**10**		20	150	07/28/2020	JMK
Hexachlorobutadiene - BS	EPA-8270	**58.7**			20	150	07/28/2020	JMK
Hexachlorobutadiene - BSD	EPA-8270	**63.6**	**8**		20	150	07/28/2020	JMK
4-Chloro-3-Methylphenol - BS	EPA-8270	**73.7**			44	113	07/28/2020	JMK
4-Chloro-3-Methylphenol - BSD	EPA-8270	**78.5**	**6**		44	113	07/28/2020	JMK
2-Methylnaphthalene - BS	EPA-8270	**69.8**			20	150	07/28/2020	JMK
2-Methylnaphthalene - BSD	EPA-8270	**76.8**	**10**		20	150	07/28/2020	JMK
1-Methylnaphthalene - BS	EPA-8270	**68.9**			20	150	07/28/2020	JMK
1-Methylnaphthalene - BSD	EPA-8270	**74.7**	**8**		20	150	07/28/2020	JMK
Hexachlorocyclopentadiene - BS	EPA-8270	**44.7**			20	150	07/28/2020	JMK
Hexachlorocyclopentadiene - BSD	EPA-8270	**47.3**	**6**		20	150	07/28/2020	JMK
2,4,6-Trichlorophenol - BS	EPA-8270	**74.0**			20	150	07/28/2020	JMK
2,4,6-Trichlorophenol - BSD	EPA-8270	**81.9**	**10**		20	150	07/28/2020	JMK
2,4,5-Trichlorophenol - BS	EPA-8270	**75.9**			20	150	07/28/2020	JMK
2,4,5-Trichlorophenol - BSD	EPA-8270	**84.0**	**10**		20	150	07/28/2020	JMK
2-Chloronaphthalene - BS	EPA-8270	**75.7**			20	150	07/28/2020	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

DATE: 8/7/2020
ALS SDG#: EV20070102
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
2-Chloronaphthalene - BSD	EPA-8270	**83.1**	**9**		20	150	07/28/2020	JMK
2-Nitroaniline - BS	EPA-8270	**64.7**			20	150	07/28/2020	JMK
2-Nitroaniline - BSD	EPA-8270	**69.8**	**8**		20	150	07/28/2020	JMK
Acenaphthylene - BS	EPA-8270	**76.9**			20	150	07/28/2020	JMK
Acenaphthylene - BSD	EPA-8270	**85.1**	**10**		20	150	07/28/2020	JMK
Dimethylphthalate - BS	EPA-8270	**82.5**			20	150	07/28/2020	JMK
Dimethylphthalate - BSD	EPA-8270	**89.5**	**8**		20	150	07/28/2020	JMK
2,6-Dinitrotoluene - BS	EPA-8270	**73.5**			20	150	07/28/2020	JMK
2,6-Dinitrotoluene - BSD	EPA-8270	**81.8**	**11**		20	150	07/28/2020	JMK
Acenaphthene - BS	EPA-8270	**74.2**			41	107	07/28/2020	JMK
Acenaphthene - BSD	EPA-8270	**81.7**	**10**		41	107	07/28/2020	JMK
3-Nitroaniline - BS	EPA-8270	**63.6**			20	150	07/28/2020	JMK
3-Nitroaniline - BSD	EPA-8270	**79.4**	**22**		20	150	07/28/2020	JMK
2,4-Dinitrophenol - BS	EPA-8270	**74.5**			20	150	07/28/2020	JMK
2,4-Dinitrophenol - BSD	EPA-8270	**85.6**	**14**		20	150	07/28/2020	JMK
4-Nitrophenol - BS	EPA-8270	**34.3**			5	63	07/28/2020	JMK
4-Nitrophenol - BSD	EPA-8270	**34.2**	**0**		5	63	07/28/2020	JMK
Dibenzofuran - BS	EPA-8270	**79.8**			20	150	07/28/2020	JMK
Dibenzofuran - BSD	EPA-8270	**87.7**	**9**		20	150	07/28/2020	JMK
2,4-Dinitrotoluene - BS	EPA-8270	**71.9**			53.1	136	07/28/2020	JMK
2,4-Dinitrotoluene - BSD	EPA-8270	**79.2**	**10**		53.1	136	07/28/2020	JMK
2,3,4,6-Tetrachlorophenol - BS	EPA-8270	**74.1**			20	150	07/28/2020	JMK
2,3,4,6-Tetrachlorophenol - BSD	EPA-8270	**81.5**	**10**		20	150	07/28/2020	JMK
Diethylphthalate - BS	EPA-8270	**77.8**			20	150	07/28/2020	JMK
Diethylphthalate - BSD	EPA-8270	**86.1**	**10**		20	150	07/28/2020	JMK
Fluorene - BS	EPA-8270	**78.6**			20	150	07/28/2020	JMK
Fluorene - BSD	EPA-8270	**86.1**	**9**		20	150	07/28/2020	JMK
4-Chlorophenyl-Phenylether - BS	EPA-8270	**79.7**			20	150	07/28/2020	JMK
4-Chlorophenyl-Phenylether - BSD	EPA-8270	**87.0**	**9**		20	150	07/28/2020	JMK
4-Nitroaniline - BS	EPA-8270	**66.5**			20	150	07/28/2020	JMK
4-Nitroaniline - BSD	EPA-8270	**75.8**	**13**		20	150	07/28/2020	JMK
4,6-Dinitro-2-Methylphenol - BS	EPA-8270	**60.3**			20	150	07/28/2020	JMK
4,6-Dinitro-2-Methylphenol - BSD	EPA-8270	**73.4**	**20**		20	150	07/28/2020	JMK
Azobenzene - BS	EPA-8270	**71.8**			20	150	07/28/2020	JMK
Azobenzene - BSD	EPA-8270	**78.6**	**9**		20	150	07/28/2020	JMK
4-Bromophenyl-Phenylether - BS	EPA-8270	**86.8**			20	150	07/28/2020	JMK
4-Bromophenyl-Phenylether - BSD	EPA-8270	**96.5**	**11**		20	150	07/28/2020	JMK
Hexachlorobenzene - BS	EPA-8270	**84.6**			20	150	07/28/2020	JMK
Hexachlorobenzene - BSD	EPA-8270	**93.0**	**9**		20	150	07/28/2020	JMK
Pentachlorophenol - BS	EPA-8270	**73.7**			33	124	07/28/2020	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: HWA Geosciences Inc.
21312 - 30th Drive SE, Suite 110
Bothell, WA 98021-7010

CLIENT CONTACT: Arnie Sugar
CLIENT PROJECT: Everett Landfill (ELF)

DATE: 8/7/2020
ALS SDG#: EV20070102
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Pentachlorophenol - BSD	EPA-8270	**81.2**	**10**		33	124	07/28/2020	JMK
Phenanthrene - BS	EPA-8270	**78.9**			20	150	07/28/2020	JMK
Phenanthrene - BSD	EPA-8270	**85.7**	**8**		20	150	07/28/2020	JMK
Anthracene - BS	EPA-8270	**80.2**			20	150	07/28/2020	JMK
Anthracene - BSD	EPA-8270	**86.8**	**8**		20	150	07/28/2020	JMK
Carbazole - BS	EPA-8270	**83.0**			20	150	07/28/2020	JMK
Carbazole - BSD	EPA-8270	**84.2**	**1**		20	150	07/28/2020	JMK
Di-N-Butylphthalate - BS	EPA-8270	**71.1**			20	150	07/28/2020	JMK
Di-N-Butylphthalate - BSD	EPA-8270	**77.0**	**8**		20	150	07/28/2020	JMK
Fluoranthene - BS	EPA-8270	**83.7**			20	150	07/28/2020	JMK
Fluoranthene - BSD	EPA-8270	**90.8**	**8**		20	150	07/28/2020	JMK
Pyrene - BS	EPA-8270	**70.1**			18	136	07/28/2020	JMK
Pyrene - BSD	EPA-8270	**78.8**	**12**		18	136	07/28/2020	JMK
Butylbenzylphthalate - BS	EPA-8270	**66.6**			20	150	07/28/2020	JMK
Butylbenzylphthalate - BSD	EPA-8270	**75.2**	**12**		20	150	07/28/2020	JMK
Benzo[A]Anthracene - BS	EPA-8270	**74.1**			20	150	07/28/2020	JMK
Benzo[A]Anthracene - BSD	EPA-8270	**82.3**	**10**		20	150	07/28/2020	JMK
Chrysene - BS	EPA-8270	**72.6**			20	150	07/28/2020	JMK
Chrysene - BSD	EPA-8270	**80.6**	**10**		20	150	07/28/2020	JMK
Bis(2-Ethylhexyl)Phthalate - BS	EPA-8270	**68.8**			20	150	07/28/2020	JMK
Bis(2-Ethylhexyl)Phthalate - BSD	EPA-8270	**75.9**	**10**		20	150	07/28/2020	JMK
Di-N-Octylphthalate - BS	EPA-8270	**69.8**			20	150	07/28/2020	JMK
Di-N-Octylphthalate - BSD	EPA-8270	**76.1**	**9**		20	150	07/28/2020	JMK
Benzo[B]Fluoranthene - BS	EPA-8270	**81.8**			20	150	07/28/2020	JMK
Benzo[B]Fluoranthene - BSD	EPA-8270	**89.4**	**9**		20	150	07/28/2020	JMK
Benzo[K]Fluoranthene - BS	EPA-8270	**80.7**			20	150	07/28/2020	JMK
Benzo[K]Fluoranthene - BSD	EPA-8270	**88.3**	**9**		20	150	07/28/2020	JMK
Benzo[A]Pyrene - BS	EPA-8270	**69.9**			20	150	07/28/2020	JMK
Benzo[A]Pyrene - BSD	EPA-8270	**75.9**	**8**		20	150	07/28/2020	JMK
Indeno[1,2,3-Cd]Pyrene - BS	EPA-8270	**77.2**			20	150	07/28/2020	JMK
Indeno[1,2,3-Cd]Pyrene - BSD	EPA-8270	**81.7**	**6**		20	150	07/28/2020	JMK
Dibenz[A,H]Anthracene - BS	EPA-8270	**76.3**			20	150	07/28/2020	JMK
Dibenz[A,H]Anthracene - BSD	EPA-8270	**80.3**	**5**		20	150	07/28/2020	JMK
Benzo[G,H,I]Perylene - BS	EPA-8270	**83.9**			20	150	07/28/2020	JMK
Benzo[G,H,I]Perylene - BSD	EPA-8270	**88.3**	**5**		20	150	07/28/2020	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV20070102

Date 7-24-20 Page 1 Of 1

PROJECT ID: Everett Landfill (ELF)
REPORT TO COMPANY: HWA Geosciences
PROJECT MANAGER: Arnie Sugar
ADDRESS: 21312 30th Drive SE
Bothell, WA 98021
PHONE: 206-794-3145 P.O. #:
E-MAIL: Asugar@hwageo.com / Ayork@hwageo.com
INVOICE TO COMPANY: Same ↑
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. MW-36	7-23-20	1104	water	1							X			X								
2. MW-37	7-23-20	1148		2							X			X								
3. MW-38	7-23-20	1254		3							X			X								
4. LS-21	7-24-20	0935	↓	4							X			X								
5. TB-1	7-23-20	—	water	5							X											
6.																						
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Austin York, HWA Geosciences 7/24/20 1100
   Received By: ALS 7/24/20 11:00
2. Relinquished By:
   Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: ~~10~~ Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify:

*Turnaround request less than standard may incur Rush Charges

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

PROJECT #

00056545

Client:	HWA GEOSCIENCES	Date Received:	07/22/20
Program:	Contract - HWA - Landfill	Data Release:	SF
Contact:	ARNIE SUGAR	Date Reported:	10/08/20

Department	Analysis	Units	DL	Method	PQL	BM83984 MW-11R 07/21/20	BM83985 MW-21R 07/21/20
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**<1.0**	**<1.0**
	Dis. Iron	µg/L	40	6020B	160	**5200**	**<40**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**428**	**319**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**<1.0**	**<1.0**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**	**<10**
NUTRIENTS	Chloride	mg/L	0.3	SM4500-CL-E	1.2	**7.7**	**11.2**

Department	Analysis	Units	DL	Method	PQL	BM83986 MW-24 07/22/20	BM83987 MW-25 07/22/20
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**6.2**	**1.7 J**
	Dis. Iron	µg/L	40	6020B	160	**49000**	**54200**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**2090**	**1940**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**2.3 J**	**<1.0**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**	**130**
NUTRIENTS	Chloride	mg/L	0.3	SM4500-CL-E	1.2	**4.4**	**2.9**

Department	Analysis	Units	DL	Method	PQL	BM83988 MW-29R 07/22/20	BM83989 MW-30 07/22/20
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**<1.0**	**<1.0**
	Dis. Iron	µg/L	40	6020B	160	**2650**	**970**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**283**	**84.1**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**<1.0**	**<1.0**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**	**<10**
NUTRIENTS	Chloride	mg/L	0.3	SM4500-CL-E	1.2	**10.6**	**10.3**

Department	Analysis	Units	DL	Method	PQL	BM83990 MW-31 07/22/20	BM83991 MW-39R 07/22/20
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**1.7 J**	**<1.0**
	Dis. Iron	µg/L	40	6020B	160	**46400**	**<40**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**1250**	**130**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**3.1 J**	**<1.0**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**	**<10**
NUTRIENTS	Chloride	mg/L	0.3	SM4500-CL-E	1.2	**144**	**6.3**

Department	Analysis	Units	DL	Method	PQL	BM83992 DUP-0722 07/22/20
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**1.6 J**
	Dis. Iron	µg/L	40	6020B	160	**45200**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**1240**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**3.1 J**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**
NUTRIENTS	Chloride	mg/L	0.3	SM4500-CL-E	1.2	**143**

DATA REPORTING QUALIFIERS

DL = Detection Limit
PQL = Practical Quantitation Limit (= 4xDL)
J = Analyte concentration less than PQL
SA = See Attached
ND = No Data
TNTC = Too numerous to count

When Dissolved Metals > Total Metals note possible filtering process contamintion
P/A (used for Total Coliform results) P= Coliforms present, A = Coliforms absent
Y/N (used for E. Coli Results) Y= E. Coli present, N=E. Coli absent
E = Estimated Value. Count from plates not within ideal range.
R = Sample was re-analyzed after holding time.
CG = Confluent Growth

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

Phone: (425)257-8230 Fax: (425)257-8228

Sample Dropoff: 4027 4th St SE, Everett WA 98201

Mailing Address: 3200 Cedar St, Everett WA 98201

ANALYSIS REQUEST
CHAIN OF CUSTODY

PROJECT # 56545

Date: 7-22-20

Client: HWA Geosciences

Address: 21312 30th Dr SE, Bothell, WA 98021

Program:

Sample Site: Everett Landfill (ELF)

Phone: 206-794-3145

Collected By: Austin York

Requested By: Arnie Sugar

Requested sample report date (If less than 30 days):

Purpose: ___ In Lab Contract ___ Outside Lab Contract

Sample Description:	LIMS ID # (Lab Use Only)	Sample Date	Sample Time	Comp Grab	Sample Matrix	Chloride	Dissolved Metals*								
MW-11R	BM 83984	7-21-20	1555	G	water	X	X								
MW-22R	85	7-21-20	1505	G	↓	↓	↓								
MW-24	86	7-22-20	1332	↓	↓	↓	↓								
MW-25	87	↓	1223	↓	↓	↓	↓								
MW-29R	88	↓	1045	↓	↓	↓	↓								
MW-30	89	↓	1133	↓	↓	↓	↓								
MW-31	90	↓	1254	↓	↓	↓	↓								
MW-39R	91	↓	1005	↓	↓	↓	↓								
DUP-0722	92	7-22-20	—	G	Water	X	X								

Cooler w/Ice? Y / N   Rec Temp: °C   –INDICATE: LAB PERFORMING ANALYSIS / # OF CONTAINERS–

CHAIN OF CUSTODY

*Relinquished: Austin York	Austin York	Received: Tyler Cotts	Date: 7-22-20	Time: 1405
*Relinquished:		Received:	Date:	Time:
*Relinquished:		Received:	Date:	Time:

COMMENTS:
* Field Filtered
Arsenic, Nickel, Zinc, Iron, Manganese

**Because the City of Everett Environmental Laboratory is a public agency, data, test results, reports and other documents are public records and therefore subject to disclosure to third parties upon their request pursuant to RCW Chap. 42.17.*

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

PROJECT #

00056568

Client:	HWA GEOSCIENCES	Date Received:	07/24/20
Program:	Contract - HWA - Landfill	Data Release:	SF
Contact:	ARNIE SUGAR	Date Reported:	10/08/20

Department	Analysis	Units	DL	Method	PQL	BM84129 MW-36 07/23/20	BM84130 MW-37 07/23/20
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**7.1**	**<1.0**
	Dis. Iron	µg/L	40	6020B	160	**4350**	**17900**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**378**	**1350**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**2.0 J**	**<1.0**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**	**<10**
NUTRIENTS	Chloride	mg/L	0.3	SM4500-CL-E	1.2	**35.7**	**995**

Department	Analysis	Units	DL	Method	PQL	BM84131 MW-38 07/23/20	BM84132 LS-21 07/24/20
METALS(D)	Dis. Arsenic	µg/L	1.0	200.8/6020B	4.0	**<1.0**	**3.4 J**
	Dis. Iron	µg/L	40	6020B	160	**160**	**13600**
	Dis. Manganese	µg/L	1.0	200.8/6020B	4.0	**257**	**1220**
	Dis. Nickel	µg/L	1.0	200.8/6020B	4.0	**<1.0**	**1.8 J**
	Dis. Zinc	µg/L	10	200.8/6020B	40	**<10**	**<10**
NUTRIENTS	Chloride	mg/L	0.3	SM4500-CL-E	1.2	**11.8**	**26.6**

DATA REPORTING QUALIFIERS

DL = Detection Limit
PQL = Practical Quantitation Limit (= 4xDL)
J = Analyte concentration less than PQL
SA = See Attached
ND = No Data
TNTC = Too numerous to count

When Dissolved Metals > Total Metals note possible filtering process contamintion
P/A (used for Total Coliform results) P= Coliforms present, A = Coliforms absent
Y/N (used for E. Coli Results) Y= E. Coli present, N=E. Coli absent
E = Estimated Value. Count from plates not within ideal range.
R = Sample was re-analyzed after holding time.
CG = Confluent Growth

CITY OF EVERETT
ENVIRONMENTAL LABORATORY

Phone: (425)257-8230 Fax: (425)257-8228
Sample Dropoff: 4027 4th St SE, Everett WA 98201
Mailing Address: 3200 Cedar St, Everett WA 98201

PROJECT # 96568

ANALYSIS REQUEST
CHAIN OF CUSTODY

Date: 7-24-20

Client: HWA Geosciences		Address: 21312 30th Drive SE Bothell, WA 98021
Program: ~~Everett~~	Sample Site: Everett Landfill (ELF)	
Phone: 206-794-3145	Collected By: Austin York	Requested By: Arnie Sugar

Requested sample report date (If less than 30 days): _____

Purpose: ___ In Lab Contract ___ Outside Lab Contract

Sample Description:	LIMS ID # (Lab Use Only)	Sample Date	Sample Time	Comp Grab	Sample Matrix	Analyses Requested: Chloride	Dissolved * Metals
MW-36	BM 84129	7-23-20	1104	G	water	X	X
MW-37	30	7-23-20	1148	↓	↓	X	X
MW-38	31	7-23-20	1254	↓	↓	X	X
LS-21	32	7-24-20	0935	G	water	X	X

Cooler w/Ice? Y / N Rec Temp: °C –INDICATE: LAB PERFORMING ANALYSIS / # OF CONTAINERS–

CHAIN OF CUSTODY

*Relinquished: Austin York	Received: Tyler Cutts	Date: 7-24-20	Time: 1030
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:

COMMENTS:
* Sampled Field Filtered
Analysis: Arsenic, iron, manganese, nickel, and zinc

**Because the City of Everett Environmental Laboratory is a public agency, data, test results, reports and other documents are public records and therefore subject to disclosure to third parties upon their request pursuant to RCW Chap. 42.17.*