HWA GeoSciences Inc.
Geotechnical Engineering • Hydrogeology • Geoenvironmental Services • Inspection and Testing

February 3, 2017
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 2016**
Everett Landfill/Tire Fire Site
Everett, Washington

Dear Mark,

This letter presents the annual report for the period of August 1, 2015 to July 31, 2016, for ground water monitoring at the Everett Landfill/Tire Fire Site (herein referred to as Landfill), per the Compliance Monitoring and Contingency Plan.

GROUND WATER MONITORING

HWA collected ground water samples semi-annually, in mid-January and in mid-July 2016. 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). Well MW-29 was damaged some time prior to January 2012 and the replacement monitoring well, MW-29R, was installed in July 2015.
- Three deep point-of-compliance monitoring wells: MW-36, MW-38, and MW-39R. Well MW-39 was covered by installation of a new trail some time after January 2013 and the replacement monitoring well, MW-39R, was installed in July 2015.
- 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 Ecology.

ANALYSIS

Samples 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:

21312 30th Drive SE
Suite 110
Bothell, WA 98021-7010
Tel: 425.774.0106
Fax: 425.774.2714
www.hwageo.com

- 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 2016 monitoring period, site-specific ground water cleanup levels were exceeded in point of compliance wells as follows:

- MW-36, 1/22/16, Iron = 24,900 mg/L (cleanup level = 23687). This well is generally below cleanup level for iron, with one other exceedance detected in 2002. Iron concentration in the subsequent (July 2016) round was back down to 580 mg/L.
- MW-36, 1/22/16, Chloride = 253 mg/L (cleanup level =230). This well has never had chloride exceeding the cleanup level, and the subsequent (July 2016) round had chloride back down to 86.4 mg/L.
- MW-37, 7/14/16, Chloride = 251 mg/L. 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 had multiple chloride detections exceeding the cleanup level, and has exhibited variation in chloride concentration, likely in response to tidal, seasonal and river stage effects.
- MW-37, 1/22/16 and 7/14/16, Iron = 33,300 and 28,200 mg/L, respectively. These values are consistent with past results, as this well has exhibited iron exceedances in over half of the monitoring events conducted since 2001.

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

- Elevated detections of iron, manganese, and chloride in deep aquifer network monitoring well MW-11R during the January 2016 sampling event may have been due to excavation of a large pump station adjacent to this well at the time. This well has not historically exhibited elevated levels of compounds of concern (COCs) and no COCs exceeded cleanup levels from samples collected from this well during the July 2016 sampling event.
- 2016 ground water samples analyzed from deep aquifer network monitoring well MW-31 exceeded cleanup levels for iron, which is consistent with all previous results from this well.

NEW ACTIVITY

New activity for 2016 included the following:

- During the July 2016 monitoring event, it was discovered that monitoring well MW-11R had been compromised due to construction activities occurring in the vicinity of the well. The monument of the well had been removed and the well casing was being protected by a 5-gallon bucket placed over the well. The J-plug for the well was still intact and upon inspection, it did not appear that soil or other debris had entered the well casing. By January 2017, the monument for this well had been replaced with a new monument.

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, making estimation of the gradient direction and magnitude difficult.

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 piezometer MW-46, located just west of the leachate collection system (see Figure 1), water level readings were collected every 10 minutes from February 22, 2016 to December 28, 2016.

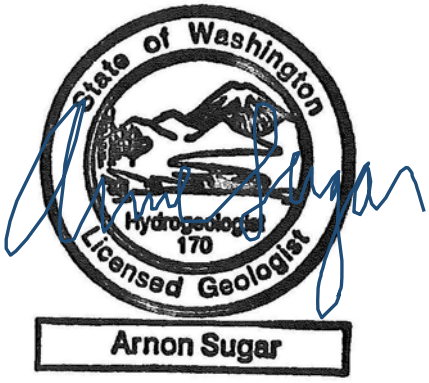
Results show that wet well water elevations generally occurred between 0.50 feet and -1.70 feet, corresponding to the high and low pump level settings (Figure 2). Some brief excursions extended above this range and were likely due to pumps being shut down for general operation and maintenance activities. Ground water elevations in MW-46, screened within the shallow aquifer, ranged from 3.8 feet to 11.5 feet. Water levels inside the wet well therefore ranged from 3 to 10 feet lower than ground water levels monitored in MW-46, demonstrating overall hydraulic control of the shallow (leachate) aquifer and that shallow aquifer discharge into the Snohomish River is not occurring.

February 3, 2017
HWA Project No. 98165-660

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.



Nicole Kapise
Senior 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

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	**10.453**	**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-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-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**

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-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
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-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-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

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		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-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**	**42.197**	**8.7**	4 U
MW-33		4/9/2002	6 U	14 U	**20**	**4.36**	**32.115**	**8.3**	4 U
MW-33		7/8/2002	4 U	14 U	**16**	4 U	**462.59**	**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**	**48.845**	**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

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		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
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-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-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

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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-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

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		2/9/2015	11.63	2.57
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-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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-14		4/21/2003	18.16	8.09
MW-14		10/6/2003	20.39	5.86
MW-14		4/2/2004	20.15	6.10
		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-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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
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-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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
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-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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
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		
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-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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
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
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-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-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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
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		
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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
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		
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-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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
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-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-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

Table 2
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
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-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
MW-42		6/17/2008	1.72	15.57
		Decommissioned 2/08		

NOTES:

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

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

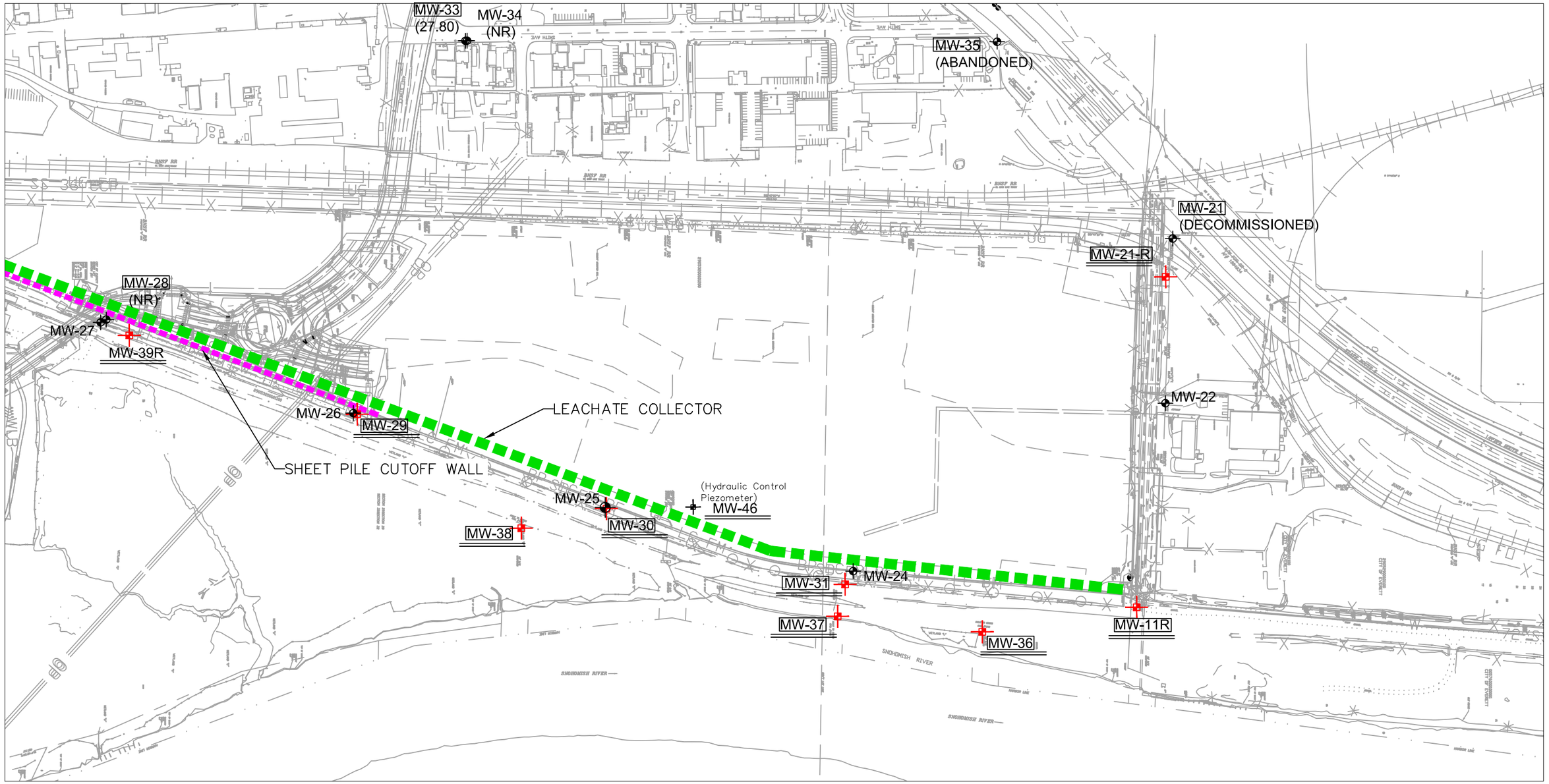
INT = Interior, well located in interior of site; will be abandoned after Evaluation Monitoring

NET = Network well for Performance and Confirmational Monitoring

BG =Upgradient background well

BGM= background metals well

POC = deep aquifer point of compliance monitoring well



LEGEND

MW–12 ⌖ SHALLOW MONITORING WELLS

[MW–12] ⌖ DEEP MONITORING WELLS

MW–12 ⌖ WELLS TO BE MONITORED

0’ 100’ 200’ 300’ 600’

SCALE: 1”=300’

BASE MAP PROVIDED BY:

HWA GeoSciences Inc.

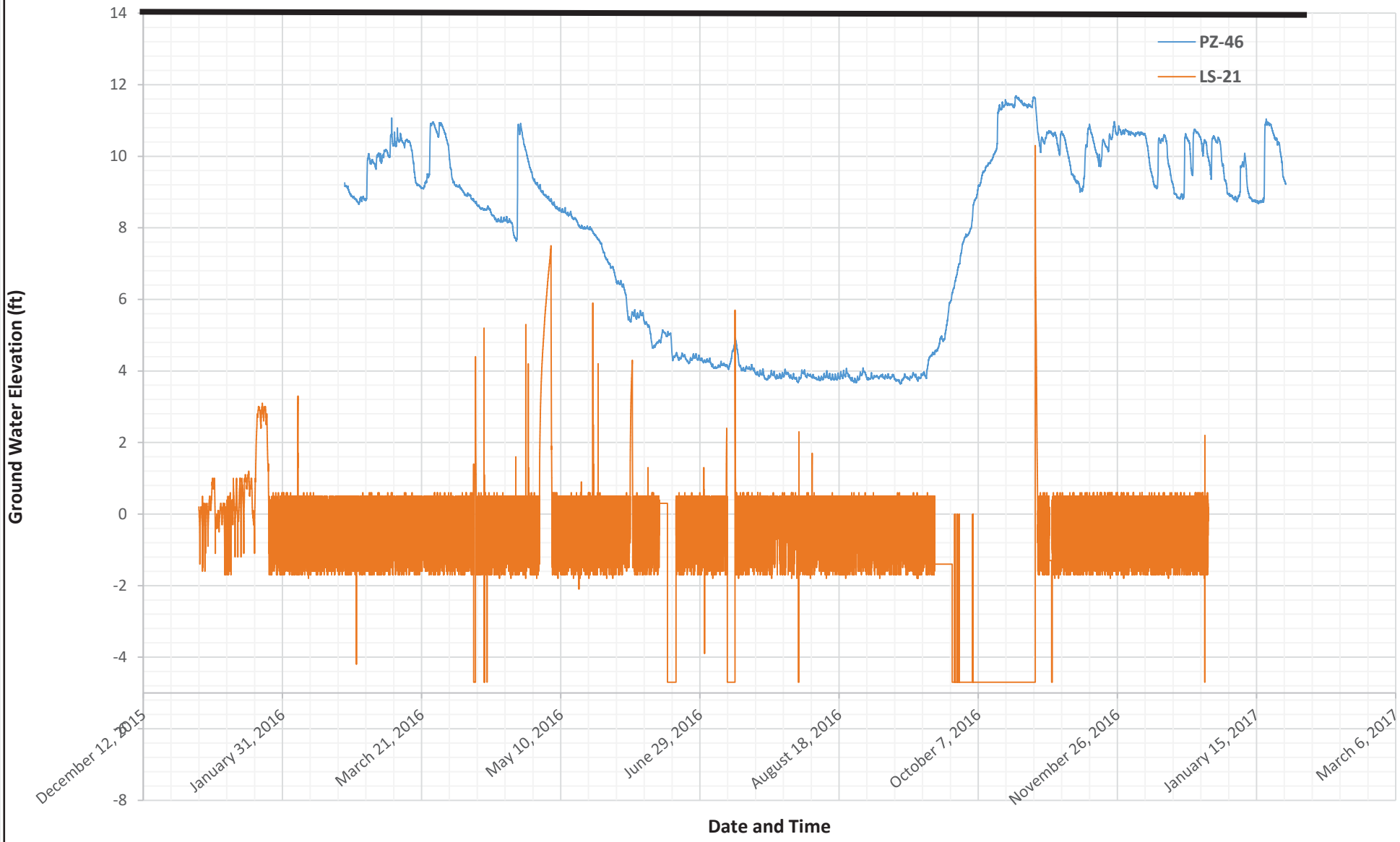
EVERETT LANDFILL
EVERETT, WASHINGTON

GROUNDWATER MONITORING WELLS

DRAWN BY	FIGURE #
EFK	1
CHECK BY	PROJECT #
AG	98165-660
DATE:	
2.3.17	

S:\1998 PROJECTS\98165 EVERETT LANDFILL\CAD\NBB GW.DWG <FIG 1 GW Monitoring Well 1-11-16> Plotted: 1/13/2016 3:38 PM

LS-21 vs PZ-46, Water Elevation from January 1 to December 28th, 2016



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

January 26, 2016

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

Dear Mr. Sugar,

On January 20th, 7 samples were received by our laboratory and assigned our laboratory project number EV16010107. The project was identified as your 1998-98165-660 Everett Landfill. 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 98208 | 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:	1/26/2016
		ALS JOB#:	EV16010107
		ALS SAMPLE#:	EV16010107-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/20/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	1/19/2016 10:57:00 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	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**20.6**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**65.9**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**89.7**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	1/26/2016
		ALS JOB#:	EV16010107
		ALS SAMPLE#:	EV16010107-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/20/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	1/19/2016 12:17:00 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-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**20.6**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**70.0**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**92.2**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	1/26/2016
		ALS JOB#:	EV16010107
		ALS SAMPLE#:	EV16010107-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/20/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	1/19/2016 1:17:00 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	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**16.2**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**53.9**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**72.7**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	1/26/2016
		ALS JOB#:	EV16010107
		ALS SAMPLE#:	EV16010107-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/20/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	1/19/2016 2:02:00 PM
CLIENT SAMPLE ID	MW-29R	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	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**20.9**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**68.7**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**87.3**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	1/26/2016
		ALS JOB#:	EV16010107
		ALS SAMPLE#:	EV16010107-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/20/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	1/19/2016 2:47:00 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	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**19.8**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**69.0**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**88.2**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	1/26/2016
		ALS JOB#:	EV16010107
		ALS SAMPLE#:	EV16010107-06
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/20/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	1/19/2016 3:40:00 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	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**22.1**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**75.2**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**97.6**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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#:	1/26/2016 EV16010107 EV16010107-07
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/20/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	1/19/2016
CLIENT SAMPLE ID	DUP-011916	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	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**21.1**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**71.6**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**91.1**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	1/26/2016
		ALS SDG#:	EV16010107
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	1998-98165-660 Everett Landfill		

LABORATORY BLANK RESULTS

MB-011816W - Batch 100717 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Phenol	EPA-8270	U	UG/L	2.0	01/20/2016	GAP
Pyrene	EPA-8270	U	UG/L	2.0	01/20/2016	GAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	UG/L	2.0	01/20/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	1/26/2016 EV16010107 C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	1998-98165-660 Everett Landfill		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 100717 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**25.3**			01/20/2016	GAP
Phenol - BSD	EPA-8270	**26.2**	**3**		01/20/2016	GAP
Pyrene - BS	EPA-8270	**94.6**			01/20/2016	GAP
Pyrene - BSD	EPA-8270	**108**	**13**		01/20/2016	GAP

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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): EV1601010 7

Date 1-20-16 Page 1 Of 1

PROJECT ID: 1998-98165-680 Everett Landfill
REPORT TO COMPANY: HWA Geosciences
PROJECT MANAGER: Arnie Sugar
ADDRESS: 21312 30th Dr SE
Bothell, WA
PHONE: ~~206-794-3145~~ 425-774-0106 FAX:
P.O. #: E-MAIL: Asugar@hwageo.com
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ 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 (bis (2-ethylhexyl) phthalate)	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	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-21R	1-19-16	1057	water	1										X								
2. MW-11R	"	1217	"	2										"								
3. MW-39R	"	1317	"	3										"								
4. MW-29R	"	1402	"	4										"								
5. MW-30	"	1447	"	5										"								
6. MW-31	↓	1540	↓	6										"								
7. DUP-011911	1-19-16	—	water	7										X								
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS SVOCs: bis(2-ethylhexyl) phthalate

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Aubrey York, HWA Geo, 1-20-16, 1105
   Received By: [signature] ALS 1-20-16 11:05
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

January 26, 2016

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

Dear Mr. Sugar,

On January 22nd, 3 samples were received by our laboratory and assigned our laboratory project number EV16010142. The project was identified as your 1998-98165-660. 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 98208 | 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:	1/26/2016
		ALS JOB#:	EV16010142
		ALS SAMPLE#:	EV16010142-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/22/2016
CLIENT PROJECT:	1998-98165-660	COLLECTION DATE:	1/22/2016 10:18:00 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	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**26.8**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**79.3**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**103**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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:	1/26/2016
		ALS JOB#:	EV16010142
		ALS SAMPLE#:	EV16010142-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/22/2016
CLIENT PROJECT:	1998-98165-660	COLLECTION DATE:	1/22/2016 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	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**20.2**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**63.1**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**77.4**	01/25/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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#:	1/26/2016 EV16010142 EV16010142-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	01/22/2016
CLIENT PROJECT:	1998-98165-660	COLLECTION DATE:	1/22/2016 12:44:00 PM
CLIENT SAMPLE ID	MW-38	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	01/25/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**19.4**	01/25/2016	GAP
Nitrobenzene-d5	EPA-8270	**63.6**	01/25/2016	GAP
Terphenyl-d14	EPA-8270	**76.2**	01/25/2016	GAP

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:	1/26/2016
		ALS SDG#:	EV16010142
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	1998-98165-660		

LABORATORY BLANK RESULTS

MB-011816W - Batch 100717 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Phenol	EPA-8270	U	UG/L	2.0	01/20/2016	GAP
Pyrene	EPA-8270	U	UG/L	2.0	01/20/2016	GAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	UG/L	2.0	01/20/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	1/26/2016
		ALS SDG#:	EV16010142
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	1998-98165-660		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 100717 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**25.3**			01/20/2016	GAP
Phenol - BSD	EPA-8270	**26.2**	**3**		01/20/2016	GAP
Pyrene - BS	EPA-8270	**94.6**			01/20/2016	GAP
Pyrene - BSD	EPA-8270	**108**	**13**		01/20/2016	GAP

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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)

EV1601014

Date 1-22-16 Page 1 Of 1

PROJECT ID: 1998-98165-660
REPORT TO COMPANY: HWA Geosciences
PROJECT MANAGER: Arnie Sugar
ADDRESS: 21312 30th Dr. SE
Bothell, WA
PHONE: 425-774-0106 FAX:
P.O. #: E-MAIL: Asugar@hwageo.com
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ 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 ☐ Pesticides ☐ by EPA 8081/8082	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	1-22-16	1018	Grab/water	1										X							
2. MW-37	↓	1120	↓	2										X							
3. MW-38	1-22-16	1244	↓	3										X							
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

SPECIAL INSTRUCTIONS SVOCs: bis (2-ethylhexyl) phthalate

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Austin York 1-22-16, 1340
Received By: ALS 1/22/16 1340
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 #
00045947

Client:	HWA GEOSCIENCES	Date Received:	01/20/16
Program:	Contract - HWA - Landfill	Data Release:	CK
Contact:	ARNIE SUGAR	Date Reported:	3/14/2016

Department	Analysis	Units	DL	Method	PQL	BH67615 MW-21R 1/19/2016	BH67616 MW-11R 1/19/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	**15.1**	**<1.0**
	Dis. Iron	µg/L	40	200.8	160	**13500**	**159000**
	Dis. Manganese	µg/L	1.0	200.8	4.0	**1330**	**20700**
	Dis. Nickel	µg/L	1.0	200.8	4.0	**<1.0**	**2.3 J**
	Dis. Zinc	µg/L	10	200.8	40	**<10**	**<10**
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	**16.2**	**2320**

Department	Analysis	Units	DL	Method	PQL	BH67617 MW-39R 1/19/2016	BH67618 MW-29R 1/19/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	**2.4 J**	**<1.0**
	Dis. Iron	µg/L	40	200.8	160	**650**	**9360**
	Dis. Manganese	µg/L	1.0	200.8	4.0	**255**	**604**
	Dis. Nickel	µg/L	1.0	200.8	4.0	**2.1 J**	**<1.0**
	Dis. Zinc	µg/L	10	200.8	40	**30 J**	**<10**
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	**5.5**	**11.7**

Department	Analysis	Units	DL	Method	PQL	BH67619 MW-30 1/19/2016	BH67620 MW-31 1/19/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	**4.3**	**1.4 J**
	Dis. Iron	µg/L	40	200.8	160	**6780**	**40400**
	Dis. Manganese	µg/L	1.0	200.8	4.0	**465**	**1010**
	Dis. Nickel	µg/L	1.0	200.8	4.0	**<1.0**	**2.7 J**
	Dis. Zinc	µg/L	10	200.8	40	**<10**	**<10**
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	**33.6**	**148**

Department	Analysis	Units	DL	Method	PQL	BH67621 DUP-011916 1/19/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	**1.5 J**
	Dis. Iron	µg/L	40	200.8	160	**40600**
	Dis. Manganese	µg/L	1.0	200.8	4.0	**1010**
	Dis. Nickel	µg/L	1.0	200.8	4.0	**2.6 J**
	Dis. Zinc	µg/L	10	200.8	40	**<10**
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	**148**

DATA REPORTING QUALIFIERS

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

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
3200 CEDAR STREET; EVERETT WA 98201
Phone: (425)257-8230 Fax: (425)257-8228

PROJECT # 45947

ANALYSIS REQUEST
CHAIN OF CUSTODY

Date: 1-20-16

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: Arnre 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-21R	BH-67615	1-19-16	1057	Grab	water	X	X
MW-11R	16	"	1217	"	"	"	"
MW-39R	17	"	1317	"	"	"	"
MW-29R	18	"	1402	"	"	"	"
MW-30	19	"	1447	"	"	"	"
MW-31	20	↓	1540	↓	↓	"	"
Dup-011916	21	1-19-16	—	Grab	water	X	X

Cooler? Y / N Cooler Temp: °C --INDICATE: LAB PERFORMING ANALYSIS / # OF CONTAINERS--

CHAIN OF CUSTODY

*Relinquished: Austin York	Received:	Date: 1-20-16	Time: 1025
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:

COMMENTS:
Dissolved Metals: Nickel, Zinc, Iron, Manganese, Arsenic
* All dissolved metal samples field filtered.

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 #
00045967

Client:	HWA GEOSCIENCES	Date Received:	01/22/16
Program:	Contract - HWA - Landfill	Data Release:	CK
Contact:	ARNIE SUGAR	Date Reported:	03/29/16

Department	Analysis	Units	DL	Method	PQL	BH67787 MW-36 01/22/16	BH67788 MW-37 01/22/16
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	**4.6**	**<1.0**
	Dis. Iron	µg/L	40	200.8	160	**24900**	**33300**
	Dis. Manganese	µg/L	1.0	200.8	4.0	**1350**	**894**
	Dis. Nickel	µg/L	1.0	200.8	4.0	**2.7 J**	**1.4 J**
	Dis. Zinc	µg/L	10	200.8	40	**<10**	**23 J**
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	**253**	**155**

Department	Analysis	Units	DL	Method	PQL	BH67789 MW-38 01/22/16
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	**<1.0**
	Dis. Iron	µg/L	40	200.8	160	**3400**
	Dis. Manganese	µg/L	1.0	200.8	4.0	**275**
	Dis. Nickel	µg/L	1.0	200.8	4.0	**<1.0**
	Dis. Zinc	µg/L	10	200.8	40	**<10**
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	**9.1**

DATA REPORTING QUALIFIERS

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

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
3200 CEDAR STREET; EVERETT WA 98201
Phone: (425)257-8230 Fax: (425)257-8228

ANALYSIS REQUEST
CHAIN OF CUSTODY

PROJECT # 45967

Date: 1-22-16

Client: HWA Geosciences		**Address:** 21312 30th Dr SE Bothell, WA
Program:	**Sample Site:** Everett Landfill	
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	BH-67757	1-22-16	1018	Grab	Water	X	X
MW-37	88	↓	1120	↓	↓	X	X
MW-38	89	↓	1244	↓	↓	X	X

Cooler? Y / N Cooler Temp: °C --INDICATE: LAB PERFORMING ANALYSIS / # OF CONTAINERS--

CHAIN OF CUSTODY

		Date:	Time:
*Relinquished: Austin York	Received:	1-22-16	1320
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:

COMMENTS:
Dissolved Metals: Nickel, Zinc, Iron, Manganese, Arsenic
* Dissolved Metals Field Filtered.
Ayork@hwageo.com
NKapise@HWAgeo.com

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.

July 25, 2016

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

Dear Mr. Sugar,

On July 15th, 8 samples were received by our laboratory and assigned our laboratory project number EV16070079. The project was identified as your 1998-98165-660 Everett Landfill. 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 98208 | 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#:	7/25/2016 EV16070079 EV16070079-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/15/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	7/14/2016 9:05:00 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	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**83.3**	07/21/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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#:	7/25/2016 EV16070079 EV16070079-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/15/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	7/14/2016 10:12:00 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	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**78.0**	07/21/2016	GAP

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

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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#:	7/25/2016 EV16070079 EV16070079-03
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/15/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	7/14/2016 12:10:00 PM
CLIENT SAMPLE ID	MW-38	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**70.6**	07/21/2016	GAP

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

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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#:	7/25/2016 EV16070079 EV16070079-04
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/15/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	7/14/2016 1:31:00 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	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**80.4**	07/21/2016	GAP

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

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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#:	7/25/2016 EV16070079 EV16070079-05
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/15/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	7/14/2016 2:55:00 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	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**77.6**	07/21/2016	GAP

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

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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#:	7/25/2016 EV16070079 EV16070079-06
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/15/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	7/14/2016 3:37:00 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	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**83.1**	07/21/2016	GAP

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

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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#:	7/25/2016 EV16070079 EV16070079-07
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/15/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	7/15/2016 12:35:00 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	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**86.2**	07/21/2016	GAP

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

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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#:	7/25/2016 EV16070079 EV16070079-08
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/15/2016
CLIENT PROJECT:	1998-98165-660 Everett Landfill	COLLECTION DATE:	7/14/2016
CLIENT SAMPLE ID	Dup-0714	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	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**88.0**	07/21/2016	GAP

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

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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:	7/25/2016
		ALS SDG#:	EV16070079
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	1998-98165-660 Everett Landfill		

LABORATORY BLANK RESULTS

MB-071916W - Batch 106486 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Phenol	EPA-8270	U	UG/L	2.0	07/21/2016	GAP
Pyrene	EPA-8270	U	UG/L	2.0	07/21/2016	GAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	UG/L	2.0	07/21/2016	GAP

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

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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:	7/25/2016 EV16070079 C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	1998-98165-660 Everett Landfill		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 106486 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**25.2**			5	84	07/21/2016	GAP
Phenol - BSD	EPA-8270	**28.4**	**12**		5	84	07/21/2016	GAP
Pyrene - BS	EPA-8270	**108**			18	136	07/21/2016	GAP
Pyrene - BSD	EPA-8270	**100**	**7**		18	136	07/21/2016	GAP

APPROVED BY

Laboratory Director

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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): EV1607007

Date _____ Page _____ Of _____

PROJECT ID: 1998-98165-660 Everett Landfill
REPORT TO COMPANY: HWA GeoSciences
PROJECT MANAGER: Arnie Sugar
ADDRESS: 21312 30th DR SE
Bothell, WA
PHONE: 425-774-0106 FAX:
P.O. #: E-MAIL: ASugar@hwageo.com
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

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 (bis (2-ethylhexyl) phthalate only)	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 ☐
1. MW-36	7/14/16	9:05	GW	1										X					
2. MW-37	"	10:12	"	2										X					
3. MW-38	"	12:10	"	3										X					
4. MW-31	"	13:31	"	4										X					
5. MW-30	"	14:55	"	5										X					
6. MW-29	"	15:37	"	6										X					
7. MW-39R	7/15/16	12:35	"	7										X					
8. Dup-0714	7/14/16	—	GW	8										X					
9.																			
10.																			

OTHER (Specify)

NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?

SPECIAL INSTRUCTIONS: SVOCs: bis(2-ethylhexyl) phthalate

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Dean Pagni, HWA, 7/15/16, 16:25
   Received By: Shawn Robinson ACS 7/15/16 16:25
2. Relinquished By: _____
   Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard (X) | 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

July 25, 2016

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

Dear Mr. Sugar,

On July 18th, 2 samples were received by our laboratory and assigned our laboratory project number EV16070082. The project was identified as your Everett Landfill. 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 98208 | 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:	7/25/2016
		ALS JOB#:	EV16070082
		ALS SAMPLE#:	EV16070082-01
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/18/2016
CLIENT PROJECT:	Everett Landfill	COLLECTION DATE:	7/18/2016 2:45:00 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-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**81.9**	07/21/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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#:	7/25/2016 EV16070082 EV16070082-02
CLIENT CONTACT:	Arnie Sugar	DATE RECEIVED:	07/18/2016
CLIENT PROJECT:	Everett Landfill	COLLECTION DATE:	7/18/2016 3:23:00 PM
CLIENT SAMPLE ID	MW-21R	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	07/21/2016	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270	**84.0**	07/21/2016	GAP

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

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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:	7/25/2016
		ALS SDG#:	EV16070082
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	Everett Landfill		

LABORATORY BLANK RESULTS

MB-071916W - Batch 106486 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Phenol	EPA-8270	U	UG/L	2.0	07/21/2016	GAP
Pyrene	EPA-8270	U	UG/L	2.0	07/21/2016	GAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	UG/L	2.0	07/21/2016	GAP

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

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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:	7/25/2016
		ALS SDG#:	EV16070082
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Arnie Sugar		
CLIENT PROJECT:	Everett Landfill		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 106486 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**25.2**			5	84	07/21/2016	GAP
Phenol - BSD	EPA-8270	**28.4**	**12**		5	84	07/21/2016	GAP
Pyrene - BS	EPA-8270	**108**			18	136	07/21/2016	GAP
Pyrene - BSD	EPA-8270	**100**	**7**		18	136	07/21/2016	GAP

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | 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): EV1607008 2

Date 7-18-16 Page 1 Of 1

PROJECT ID: Everett Landfill
REPORT TO COMPANY: HWA Geosciences
PROJECT MANAGER: Arnie Sugar
ADDRESS: 21312 30th Dr SE
Bothell, WA
PHONE: 206-794-3145 FAX:
P.O. #: 1998-98165 E-MAIL: Asugar@HWAgeo.com
INVOICE TO COMPANY: Same NKapise@HWAgeo.com
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 (Bis(2-Ethylhexyl) Phthalate)	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-11R	7-18-16	1445	water	1										X								
2. MW-21R	7-18-16	1523	water	2										X								
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Austin York, HWA Geosciences, 7-18-16, 1630
   Received By: Shawn Roberson ALS 7/18/16 1630
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 #
00047065

Client:	HWA GEOSCIENCES	Date Received:	07/15/16
Program:	Contract - HWA - Landfill	Data Release:	CK
Contact:	ARNIE SUGAR	Date Reported:	8/18/2016

Department	Analysis	Units	DL	Method	PQL	BH94847 MW-36 7/14/2016	BH94848 MW-37 7/14/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	5.1	<1.0
	Dis. Iron	µg/L	40	200.8	160	580	28200
	Dis. Manganese	µg/L	1.0	200.8	4.0	131	720
	Dis. Nickel	µg/L	1.0	200.8	4.0	3.3 J	<1.0
	Dis. Zinc	µg/L	10	200.8	40	<10	<10
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	9.8	251

Department	Analysis	Units	DL	Method	PQL	BH94849 MW-38 7/14/2016	BH94850 MW-31 7/14/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	<1.0	1.9 J
	Dis. Iron	µg/L	40	200.8	160	5460	58300
	Dis. Manganese	µg/L	1.0	200.8	4.0	502	1250
	Dis. Nickel	µg/L	1.0	200.8	4.0	<1.0	3.6 J
	Dis. Zinc	µg/L	10	200.8	40	<10	<10
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	86.4	36.8

Department	Analysis	Units	DL	Method	PQL	BH94851 MW-30 7/14/2016	BH94852 MW-29 7/14/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	8.0	<1.0
	Dis. Iron	µg/L	40	200.8	160	8320	7500
	Dis. Manganese	µg/L	1.0	200.8	4.0	559	493
	Dis. Nickel	µg/L	1.0	200.8	4.0	<1.0	<1.0
	Dis. Zinc	µg/L	10	200.8	40	<10	<10
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	142	28.4

Department	Analysis	Units	DL	Method	PQL	BH94853 MW-39R 7/15/2016	BH94996 DUP-0714 7/15/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	<1.0	2.0 J
	Dis. Iron	µg/L	40	200.8	160	4040	58500
	Dis. Manganese	µg/L	1.0	200.8	4.0	231	1260
	Dis. Nickel	µg/L	1.0	200.8	4.0	<1.0	3.4 J
	Dis. Zinc	µg/L	10	200.8	40	<10	<10
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	7.1	142

DATA REPORTING QUALIFIERS

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

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
3200 CEDAR STREET; EVERETT WA 98201
Phone: (425)257-8230 Fax: (425)257-8228

ANALYSIS REQUEST
CHAIN OF CUSTODY

PROJECT # 47065

Date: 7/15/16

Client: HWA GeoSciences		Address: 21312 30th DR SE Bothell, WA	
Program:	Sample Site: Everett Landfill		
Phone: 425-774-0106	Collected By: Austin York + Nicole Kapise	Requested By: Annie 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-36~~ NK	~~7H4776~~			~~Grab~~	~~GW~~									
MW-36	BH-94847	7/14/16	9:05	Grab	GW	X	X							
MW-37	48		10:12			X	X							
MW-38	49		12:10			X	X							
MW-31	50		13:31			X	X							
MW-30	51		14:55			X	X							
MW-29	52	↓	15:37			X	X							
MW-39R	53	7/15/16	12:35	↓	↓	X	X							
Dup-0714	BH94996	7/14/16	—	↓	↓	X	X							

*Dissolved Metals Field Filtered

Cooler? Y / N Cooler Temp: °C --INDICATE: LAB PERFORMING ANALYSIS / # OF CONTAINERS--

CHAIN OF CUSTODY

*Relinquished: Dzeh Kapise	Received:	Date: 7/15/16	Time: 1530
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:

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

NKapise@HWAGeo.com AYork@HWAGeo.com

**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 #
00047089

Client:	HWA GEOSCIENCES	Date Received:	07/19/16
Program:	Contract - HWA - Landfill	Data Release:	CK
Contact:	ARNIE SUGAR	Date Reported:	8/19/2016

Department	Analysis	Units	DL	Method	PQL	BH95131 MW-11R 7/19/2016	BH95132 MW-21R 7/19/2016
METALS	Dis. Arsenic	µg/L	1.0	200.8	4.0	**<1.0**	**1.5 J**
	Dis. Iron	µg/L	40	200.8	160	**5880**	**100 J**
	Dis. Manganese	µg/L	1.0	200.8	4.0	**640**	**19.3**
	Dis. Nickel	µg/L	1.0	200.8	4.0	**<1.0**	**<1.0**
	Dis. Zinc	µg/L	10	200.8	40	**<10**	**<10**
NUTRIENTS	Chloride	mg/L	0.2	4500-CL-E	0.8	**18.2**	**13.3**

DATA REPORTING QUALIFIERS

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

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
3200 CEDAR STREET; EVERETT WA 98201
Phone: (425)257-8230 Fax: (425)257-8228

PROJECT # 47089

ANALYSIS REQUEST
CHAIN OF CUSTODY

Date: 7/18/16

Client: HWA Geosciences		Address: 21312 30th Dr SE Bothell, WA
Program:	Sample Site: Everett Landfill	
Phone: 206-794-3145	Collected By: Austin York	Requested By: Annie 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-11R	BH 95131	7-18-16	1445	G	Water	X	X
MW-21R	BH 95132	7-18-16	1523	G	Water	X	X

Cooler? Y / N Cooler Temp: °C --INDICATE: LAB PERFORMING ANALYSIS / # OF CONTAINERS--

CHAIN OF CUSTODY

*Relinquished: Austin York	Received	Date: 7-18-16	Time: 1600
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:
*Relinquished:	Received:	Date:	Time:

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

NKapisk@HWAgeo.com Ayork@HWAgeo.com

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QUALITY CONTROL REVIEW OF ANALYTICAL DATA

Sampling Location: Everett Landfill/Tire Fire Site, Everett, Washington
Samples collected by HWA GeoSciences, Inc. (HWA)
Sample Dates: January 19 and 22, 2016, and July 14, 15, and 18, 2016

Ground Water Sample Locations:

- Monitoring wells MW-11R, MW-21R, MW-29R, MW-30, MW-31, MW-36, MW-37, MW-38, MW-39R

Analyses Performed:

- City of Everett Environmental Laboratory: dissolved metals by EPA Method 200.8; chloride by Standard Method 4500-CL-E
- ALS Environmental Laboratory Everett: Bis(2-Ethylhexyl)Phthalate by EPA Method 8270

Field QA/QC:

- Field sampling data sheets for both of the 2016 sampling events indicate that proper well micro-purging techniques were employed and sample bottles utilized
- A ground water field duplicate was collected on both January 19 and July 14, 2016 at well MW-31. All analytes were within a 7 percent relative percent difference (RPD) between the two samples, except for the chloride results from the July 2016 sample, which was detected at 36.8 milligrams per liter (mg/L) in the primary sample and was detected at a concentration of 142 mg/L in the duplicate sample on July 14, 2016 (RPD = 117.5%). This RPD suggests some (unresolved) problem with the duplicate sample, either in the lab or in the field. Based on this anomaly, and the fact that both of the chloride concentrations from the July 2016 MW-31 ground water sample are below the regulatory cleanup level, no action was taken based on this result.

  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-31	<2.0	1.4J	40400	1010	2.7J	<10	148.0
Dup - 011916	<2.0	1.5J	40600	1010	2.6J	<10	148.0
RPD	**0**	**6.9**	**0.5**	**0**	**3.8**	**0**	**0**
MW-31	<2.0	1.9J	58300	1250	3.6J	<10	36.8
Dup - 0714	<2.0	2.0J	58500	1260	3.4J	<10	142
RPD	**0**	**5.1**	**0.3**	**-0.8**	**5.7**	**0**	**117.5**

  No trip blanks were submitted during the 2016 sampling events.

- No field blanks were collected during the 2016 sampling events, 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 two laboratories and were analyzed within standard holding times

SVOCs by GC/MS:

- No bis(2-ethylhexyl)phthalate was detected in the laboratory method blank above the laboratory reporting limit
- Surrogate, SB and SBD recoveries were all within control limits
- 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, nickel, and zinc 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.