

Table 1. Summary of Laboratory Analyses for Ordot Dump Q1-Q2-Q3 Leachate Sampling Events

Methods	Constituent	Units	Sample Event	Sample Locations			
				Lea Seep-E	Lea Seep-SE	Lea Seep-S	Lea Seep-W
Subpart E Appendix I Metals EPA Method 200.7	Aluminum	mg/L	Jun 2012 Q1	1.7	0.17	2.1	0.22
			Aug 2012 Q2	0.7	ND	9.1	5
			Nov 2012 Q3	1.2	0.35	0.29	13
	Antimony	mg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	0.06	0.0087 J	0.0099 J
			Nov 2012 Q3	ND	ND	ND	ND
	Arsenic	mg/l	Jun 2012 Q1	0.024	0.01	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	0.016	ND	ND	0.018
	Barium	mg/l	Jun 2012 Q1	0.092	0.27	0.46	0.25
			Aug 2012 Q2	0.062	0.19	0.36	0.19
			Nov 2012 Q3	0.082	0.16	0.25	0.31
	Calcium	mg/L	Jun 2012 Q1	73 B	98 B	110 B	91 B
			Aug 2012 Q2	96	100 B	100	150
			Nov 2012 Q3	78	74 B	78 B	140
	Cobalt	mg/L	Jun 2012 Q1	0.032	0.031	0.01	0.0097 J
			Aug 2012 Q2	0.011 J	0.018 J	0.019	0.0082 J
			Nov 2012 Q3	0.018	0.012	0.0092 J	0.014
	Chromium	mg/L	Jun 2012 Q1	0.055	0.034	0.0078	0.0072
			Aug 2012 Q2	0.022	0.014 J	0.026	0.02
			Nov 2012 Q3	0.032	0.0099	0.0022 J	0.037
	Copper	mg/L	Jun 2012 Q1	0.065	0.054	0.031	0.0046 J
			Aug 2012 Q2	0.021	0.049 J	0.13	0.058
			Nov 2012 Q3	0.019	0.028	0.056	0.089
	Iron	mg/L	Jun 2012 Q1	2.1	1.4	5.7	1.6
			Aug 2012 Q2	0.88	1.1	16	5.3
			Nov 2012 Q3	2.1	1.4	3.1	29
	Lead	mg/L	Jun 2012 Q1	0.0043 J	ND	ND	ND
			Aug 2012 Q2	ND	ND	0.045	0.028
			Nov 2012 Q3	0.0083	ND	ND	0.06
	Magnesium	mg/L	Jun 2012 Q1	23	66	54	32
			Aug 2012 Q2	18	40	38	38
			Nov 2012 Q3	20	35	31	35
	Nickel	mg/L	Jun 2012 Q1	0.097	0.1	0.047	0.017
			Aug 2012 Q2	0.044	0.06	0.063	0.031
			Nov 2012 Q3	0.053	0.051	0.033	0.039
	Potassium	mg/L	Jun 2012 Q1	270	210	120	150
			Aug 2012 Q2	130	140	100	90
			Nov 2012 Q3	150	110	94	89
	Selenium	mg/L	Jun 2012 Q1	ND	0.016	ND	0.0098 J
			Aug 2012 Q2	ND	ND	0.0084 J	0.016
			Nov 2012 Q3	0.011	ND	ND	0.013
	Sodium	mg/L	Jun 2012 Q1	690	720	480	450
			Aug 2012 Q2	380	480 B	370	260
			Nov 2012 Q3	490	350	300	280
	Vanadium	mg/L	Jun 2012 Q1	0.0059 J	ND	ND	ND
			Aug 2012 Q2	ND	ND	0.014	ND
			Nov 2012 Q3	0.019	0.0066	0.0043 J	0.046
Zinc	mg/L	Jun 2012 Q1	0.076	0.056	0.028	0.022	
		Aug 2012 Q2	0.057	0.081 J	0.16	0.16	
		Nov 2012 Q3	0.06	0.043	0.031	0.36	

Table 1. Summary of Laboratory Analyses for Ordot Dump Q1-Q2-Q3 Leachate Sampling Events

Methods	Constituent	Units	Sample Event	Sample Locations			
				Lea Seep-E	Lea Seep-SE	Lea Seep-S	Lea Seep-W
Anions EPA Method 300.0	Chloride	mg/L	Jun 2012 Q1	660	840	640	400
			Aug 2012 Q2	160	230	380	250
			Nov 2012 Q3	480	410	310	200
	Sulfate	mg/L	Jun 2012 Q1	120	13	24	6.2
			Aug 2012 Q2	48	33	34	3.8
			Nov 2012 Q3	24	8.5	9.6	1.8
Subpart E Appendix I VOCs EPA Method 8260B	Acetone	µg/L	Jun 2012 Q1	29	7.8	4.6 J	ND
			Aug 2012 Q2	25	23	6.6	ND
			Nov 2012 Q3	19 B	11 B	ND	10 B
	Benzene	µg/L	Jun 2012 Q1	ND	ND	ND	0.33 J
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	0.45 J	ND	ND	ND
	Chlorobenzene	µg/L	Jun 2012 Q1	ND	ND	0.52	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND	ND	ND	ND
	Chloromethane	µg/L	Jun 2012 Q1	0.64	ND	ND	ND
			Aug 2012 Q2	0.47 J	ND	ND	ND
			Nov 2012 Q3	0.48 J	ND	ND	ND
	1,4-Dichlorobenzene	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	0.85	ND	ND	ND
	Ethylbenzene	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	0.51	ND	ND	ND
	Toluene	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	1.0	ND	ND	ND
	Trichlorofluoromethane	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	0.66
			Nov 2012 Q3	ND	ND	ND	ND
Semi-volatile Organic Compounds (SVOCs) EPA Method 8270C	Full Analysis	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2		ND		
			Nov 2012 Q3	ND H	ND H	ND H	ND H
	Bis(2-ethylhexyl) phthalate	µg/L	August 2012 Q2	1.8 J		ND	1.9 J
	Butyl benzyl phthalate	µg/L	August 2012 Q2	0.77 J		ND	ND
	Di-n-butyl phthalate	µg/L	August 2012 Q2	0.38 J		0.31 J	ND
	3-Methylphenol + 4-Methylphenol	µg/L	August 2012 Q2	ND		0.28 J	ND
Polynuclear Aromatic Hydrocarbons (PAHs) EPA Method 8270C	Acenaphthene	µg/L	Jun 2012 Q1	ND	ND	0.53	1.7
			Aug 2012 Q2	ND	0.2 J	0.25 J	ND
			Nov 2012 Q3	ND H	0.16 JH	0.13 JH	0.21 JH
	Acenaphthylene	µg/L	Jun 2012 Q1	0.29 J	ND	ND	ND
			Aug 2012 Q2	0.095 JB	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	ND H
	Anthracene	µg/L	Jun 2012 Q1	ND	ND	ND	0.31 J
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	ND H
	Benzo[b]fluoranthene	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	0.22 JH

Table 1. Summary of Laboratory Analyses for Ordot Dump Q1-Q2-Q3 Leachate Sampling Events

Methods	Constituent	Units	Sample Event	Sample Locations			
				Lea Seep-E	Lea Seep-SE	Lea Seep-S	Lea Seep-W
	Chrysene	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	0.14 JH
	Fluorene	µg/L	Jun 2012 Q1	ND	ND	0.17 J	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	ND H
	Fluoranthene	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	0.26 JH
	Naphthalene	µg/L	Jun 2012 Q1	ND	ND	0.77	ND
			Aug 2012 Q2	0.26 JB	ND	0.36 JB	ND
			Nov 2012 Q3	ND H	0.12 JH	0.10 JH	ND H
	Phenanthrene	µg/L	Jun 2012 Q1	ND	0.37 J	0.14 J	0.6
			Aug 2012 Q2	0.37 J	0.22 J	ND	ND
			Nov 2012 Q3	0.13 JH	ND H	ND H	ND H
Pyrene	µg/L	Jun 2012 Q1	ND	ND	ND	ND	
		Aug 2012 Q2	ND	ND	ND	ND	
		Nov 2012 Q3	ND H	ND H	ND H	0.27 JH	
Total Cyanide EPA Method SM 4500-CN-E		mg/L	Jun 2012 Q1	0.052	0.027	0.0082	0.016
			Aug 2012 Q2	0.042	0.033	0.0093	0.013
			Nov 2012 Q3	0.0054	0.0039 J	ND	ND
Amenable (Available) Cyanide EPA Method SM 4500-CN-G		mg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND	NR	NR	NR
Phosphate as P EPA Method SM 4500 P-B 5	Ortho-PO4	mg/L	Jun 2012 Q1	0.472	0.61	0.709	0.243
			Aug 2012 Q2	ND	0.149	ND	ND
			Nov 2012 Q3	0.469	0.136	0.219	0.298
Alkalinity EPA Method SM 2320B	Alkalinity	mg/L	Jun 2012 Q1	1,280	1,190	723	1,280
			Aug 2012 Q2	753	1,010	675	831
			Nov 2012 Q3	1,190	688	584	813
Ammonia as N EPA Method SM 4500-NH3 D	Ammonia-N	mg/L	Jun 2012 Q1	160	95 J	34	150
			Aug 2012 Q2	48	76	13	51
			Nov 2012 Q3	160	3.4	14	6.8
	Ammonia as NH3	mg/L	Jun 2012 Q1	NR	NR	NR	NR
			Aug 2012 Q2	58	92	16	63
			Nov 2012 Q3	190	4.2	17	
MEC EPA Method 8330/8330A	HMX	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	ND H
	RDX	µg/L	Jun 2012 Q1	ND	ND	ND	ND
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	ND H
	2,4,6-Trinitrotoluene	µg/L	Jun 2012 Q1	ND	ND	ND	1.1
			Aug 2012 Q2	ND	ND	ND	ND
			Nov 2012 Q3	ND H	ND H	ND H	ND H

Table 1. Summary of Laboratory Analyses for Ordot Dump Q1-Q2-Q3 Leachate Sampling Events

Methods	Constituent	Units	Sample Event	Sample Locations			
				Lea Seep-E	Lea Seep-SE	Lea Seep-S	Lea Seep-W
Total Kjeldahl Nitrogen EPA Method SM 4500B & 4500 NH3 EPA Method 531.2	TKN	mg/L	Jun 2012 Q1	280	120	69	240
			Aug 2012 Q2	53	83	18	48
			Nov 2012 Q3	170	27	12	47
Total Organic Carbon EPA Method SM 5310B	TOC	mg/L	Jun 2012 Q1	150	140	52	82
			Aug 2012 Q2	74	110	39	36
			Nov 2012 Q3	240	230	32	240
Total Dissolved Solids EPA Method SM 2540C	TDS	mg/L	Jun 2012 Q1	2,828	2,992	2,042	1,806
			Aug 2012 Q2	2,092	2,357	1,843	1,660
			Nov 2012 Q3	2,034	1,484	1,283	1,152
Salinity EPA Method SM 2520B	Salinity	ppT	Jun 2012 Q1	2.1	3	2.1	2.1
			Aug 2012 Q2	<2	<2	<2	<2
			Nov 2012 Q3	2.6	<2	<2	<2
Total Suspended Solids EPA Method SM 2540D	TSS	mg/L	Jun 2012 Q1	45.8	18.4	22.4	14.3
			Aug 2012 Q2	70.8	3.9	322	124
			Nov 2012 Q3	33	76	25	372
Chemical Oxygen Demand EPA Method 410.2	COD	mg/L	Jun 2012 Q1	262	190	141	204
			Aug 2012 Q2	181	307	183	111
			Nov 2012 Q3	995	421	217	137
Biochemical Oxygen Demand EPA Method SM 5210B EPA Method 353.3	BOD	mg/L	Jun 2012 Q1	334	382	373	211
			Aug 2012 Q2	84	79	78	108
			Nov 2012 Q3	28	12	21	20
EPA Method 353.3	Nitrite	mg/L	Jun 2012 Q1	0.129	0.105	0.18	0.139
			Aug 2012 Q2	0.1	0.1	0.2	0.6
			Nov 2012 Q3	3.5	4.4	0.69	6
	Nitrate	mg/L	Jun 2012 Q1	0.091	0.257	0.361	0.051
			Aug 2012 Q2	31.8	32	18.9	22.7
			Nov 2012 Q3	6.4	8.4	6.9	14
Notes:							
Constituents listed are the only ones to have been detected in the EPA Method listed.							
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.							
H = Sample was prepped or analyzed beyond the specified holding time.							
B = Analyte was found in the blank and in the sample.							
ND denotes not detected.							
NR = Laboratory analysis was not run.							

Table 2. Projected Ordot Leachate Mass Loadings			
Constituent	Units	Mean Concentration*	Mass Loading in lb/day**
BOD5	mg/L	144	60
TSS	mg/L	94	39
NH3-N	mg/L	65	27

* Mean value of 12 samples collected to date.
** Calculated based upon mean concentration and projected peak flow of 50,000 gpd.