

**APPENDIX J**

**ANALYTICAL DATA FOR SOIL**



**Table J-1  
Summary of Soil Data from ECC 1989 Subsurface Soil Sampling  
Page-Trowbridge Ranch Landfill, Pinal County, Arizona**

Location and Sample Id	Sampling Location	Sampling Depth Interval (fbgs)	Chloroform (mg/Kg)	Toluene (mg/Kg)	Carbon Tetrachloride (mg/Kg)	1,1-DCE (mg/Kg)	Cis 1,2-DCE (mg/Kg)	Methylene Chloride (mg/Kg)
<b>Unit A</b>								
C1/ C40(dup)	Unit A West perimeter	15	<b>0.058/</b> < 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
		25	< 0.0005	< 0.017	<b>0.05/</b> <0.0012	<0.0013	<b>0.008/</b> ND	<0.0025
		35	< 0.0005	< 0.017	<b>0.066/</b> <b>0.033</b>	<0.0013/ <b>0.012</b>	<b>0.011/</b> ND	<b>0.016/</b> <b>0.022</b>
C2	Unit A North perimeter	15	<b>0.011</b>	< 0.017	<0.0012	<0.0013	ND	<0.0025
		25	< 0.0005	< 0.017	<0.0012	<b>0.02</b>	ND	<b>0.008</b>
		35	< 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
C3/ C50 (dup) C 10 C 11	Unit A East perimeter	15	<b>0.003/</b> <0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
	Unit A SW 100 feet	15	< 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
	Unit A West 100 feet	15	< 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
<b>Unit B</b>								
C4	Unit B NW perimeter	15	<b>0.04</b>	<b>0.03</b>	<0.0012	<0.0013	ND	<0.0025
C5	Unit B North perimeter	15	<b>0.003</b>	< 0.017	<0.0012	<0.0013	ND	<0.0025
		25	<0.0005	< 0.017	<b>0.018</b>	<0.0013	<b>0.012</b>	<0.0025
		35	<0.0005	< 0.017	<b>0.001</b>	<0.0013	<b>0.007</b>	<0.0025
C6	Unit B East perimeter	15	< 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
C7	Unit B South perimeter	15	< 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
C8	Unit B SW perimeter	15	<b>0.025</b>	< 0.017	<0.0012	<0.0013	ND	<0.0025
		25	< 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
		35	< 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
C9/ C30 (dup)	Unit B W perimeter	15	<b>0.08/</b> <b>0.02</b>	< 0.017	<0.0012	<0.0013	ND	<0.0025
		C12	Unit B NE corner perimeter	15	<b>0.003</b>	< 0.017	<0.0012	<0.0013
C13	Unit B NE corner 100 feet	15	< 0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
C14	Unit B SW 100 feet	15	<b>0.01</b>	< 0.017	<0.0012	<0.0013	ND	<0.0025
Background Sample		15	<0.0005	< 0.017	<0.0012	<0.0013	ND	<0.0025
<b>R-SRL</b>			<b>0.94</b>	<b>650</b>	<b>0.25</b>	<b>120</b>	<b>43</b>	<b>9.3</b>

Analytical detection limits were provide in ECC Table 3 (ECC, 1989). Values could not be verified in laboratory analytical reports presented as ECC Appendix B (ECC, 1989). No value was provided for cis-1,2-DCE but reported as Not Detected (ND).

R-SRL = Residential Soil Remediation Level (A.A.C. Title 18, Chapter 7, Article 2)

Note: Reproduced from Table 1 in AMEC, 2009, Human Health Risk Assessment

**Table J-1 (continued)  
Summary of Soil Data from ECC 1989 Subsurface Soil Investigation  
Page-Trowbridge Ranch Landfill, Pinal County, Arizona**

Landfill Unit	Unit A perimeter				Unit A 100 ft		Unit B Perimeter						Unit B 100 ft			Back-ground Sample	Detection Limit	R-SRL (mg/Kg)	
	Soil Sample Id	C1	C2	C3	C50 (C3 Dup)	C10	C11	C4	C5	C6	C7	C8	C9	C30 (C9 Dup)	C12				C13
Sample depth interval (fbgs)	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
Analyte (1)																			
Arsenic	0.011	0.012	0.006	0.009	0.012	0.019	0.007	0.007	0.005	0.007	0.006	0.012	0.015	0.026	0.012	0.007	0.007	0.005	10
Barium	1.15	0.936	1.65	1.19	1.54	1.05	1.89	0.954	0.642	1.83	0.586	0.093	0.551	0.712	0.654	0.929	0.629	0.06	15,000
Cadmium	0.013	0.015	0.017			0.007		0.008	0.007	0.011	0.033		0.007	0.007		0.011		0.007	39
Chromium	0.118	0.151	0.077		0.044	0.084	0.124		0.061	0.098	0.122	0.046	0.115			0.09		0.027	30
Lead	0.201	0.277	0.113						0.091	0.235	0.366		0.151			0.277		0.08	400

**Notes**

(1) Represents analytes that were detected in at least one soil sample analyzed. Concentration units are in mg/Kg

Blank cells indicate analyte not detected at concentration above laboratory reporting limit.

fbgs = feet below ground surface

ft = feet

R-SRL = Residential Soil Remediation Level (A.A.C. Title 18, Chapter 7, Article 2)

*Note: Reproduced from Table 1 in AMEC, 2009, Human Health Risk Assessment*

Table J-2  
Summary of Subsurface Soil Data from Weston 2003 (mg/Kg) (1)  
Page-Trowbridge Ranch Landfill, Pinal County, Arizona

Soil Boring Location	Field Sample Identification	Sample Date	Soil Sampling Depth Interval (fbgs)	Tetrachloroethene (mg/kg)	Bis(2-ethylhexyl) phthalate (mg/kg)	Chloroform (mg/kg)
SB-1	SB-SS-001-011	8/5/2002	0-10	<0.050	<0.33	<0.050
	SB-SS-001-021	8/5/2002	10-20	<0.050	<0.33	<0.050
	SB-SS-001-031	8/5/2002	20-30	<0.050	<0.33	<0.050
	SB-SS-001-041	8/5/2002	30-40	<0.050	<0.33	<0.050
	SB-SS-001-051	8/5/2002	40-50	<0.050	<0.33	<0.050
	SB-SS-001-061	8/5/2002	50-60	<0.050	<0.33	<0.050
	SB-SS-001-071	8/5/2002	60-70	<0.050	<0.33	<0.050
	SB-SS-001-081	8/5/2002	70-80	<0.050	<0.33	<0.050
	SB-SS-001-091	8/6/2002	80-90	<0.050	<0.33	<0.050
	SB-SS-001-101	8/6/2002	90-100	<0.050	<0.33	0.27
	SB-SS-101-101 (du)	8/6/2002	90-100	<0.050	<0.33	0.24
	SB-SS-001-111	8/6/2002	100-110	<0.050	<0.33	<0.050
	SB-SS-001-121	8/7/2002	110-120	<0.050	<0.33	<0.050
	SB-SS-001-131	8/7/2002	120-130	<0.050	<0.33	<0.050
	SB-SS-001-141	8/7/2002	130-140	<0.050	<0.33	0.12
	SB-SS-001-151	8/7/2002	140-150	<0.050	<0.33	<0.050
	SB-SS-101-161	8/7/2002	150-160	<0.050	0.50	<0.050
	SB-SS-001-171	8/8/2002	160-170	<0.050	3.90	<0.050
	SB-SS-001-191	8/8/2002	180-190	<0.050	0.80	<0.050
SB-2	SB-SS-002-011	8/12/2002	0-10	0.09	<0.33	<0.050
	SB-SS-002-021	8/12/2002	10-20	<0.050	<0.33	<0.050
	SB-SS-002-031	8/12/2002	20-30	<0.050	<0.33	<0.050
	SB-SS-002-041	8/12/2002	30-40	<0.050	<0.33	<0.050
	SB-SS-002-051	8/12/2002	40-50	<0.050	<0.33	<0.050
	SB-SS-002-061	8/12/2002	50-60	<0.050	<0.33	<0.050
	SB-SS-002-071	8/12/2002	60-70	<0.050	<0.33	<0.050
	SB-SS-002-081	8/13/2002	70-80	<0.050	<0.33	<0.050
	SB-SS-002-091	8/13/2002	80-90	<0.050	<0.33	<0.050
	SB-SS-002-101	8/13/2002	90-100	<0.050	<0.33	0.09
	SB-SS-002-111	8/13/2002	100-110	<0.050	<0.33	<0.050
	SB-SS-002-121	8/13/2002	110-120	<0.050	<0.33	<0.050
	SB-SS-002-131	8/13/2002	120-130	<0.050	<0.91	<0.050
	SB-SS-002-141	8/13/2002	130-140	<0.050	<0.33	0.25
	SB-SS-002-151	8/14/2002	140-150	<0.050	<0.33	<0.050
	SB-SS-002-161	8/14/2002	150-160	<0.050	<0.33	<0.050
	SB-SS-002-171	8/14/2002	160-170	<0.050	<0.33	<0.050
	SB-SS-002-181	8/14/2002	170-180	<0.050	<0.33	<0.050
	SB-SS-002-191	8/14/2002	180-190	<0.050	<0.33	<0.050
SB-SS-002-201	8/14/2002	190-200	<0.050	<0.33	<0.050	
SB-3	SB-SS-003-011	8/6/2002	0-10	<0.050	<0.33	<0.050
	SB-SS-003-021	8/6/2002	10-20	<0.050	<0.33	<0.050
	SB-SS-003-031	8/6/2002	20-30	<0.050	NA	0.06
	SB-SS-003-041	8/6/2002	30-40	<0.050	<0.33	<0.050
	SB-SS-003-051	8/9/2002	40-50	<0.050	<0.33	<0.050
	SB-SS-003-061	8/9/2002	50-60	<0.050	<0.33	<0.050
	SB-SS-003-071	8/9/2002	60-70	NA	NA	NA
	SB-SS-003-081	8/9/2002	70-80	<0.050	NA	0.07
	SB-SS-003-091	8/9/2002	80-90	<0.050	<0.33	<0.050
	SB-SS-003-101	8/9/2002	90-100	<0.050	<0.33	<0.050
	SB-SS-003-111	8/9/2002	100-110	<0.050	<0.33	<0.050
SB-4	SB-SS-004-121	8/15/2002	110-120	<0.050	<0.33	<0.050
	SB-SS-004-131	8/15/2002	120-130	<0.050	<0.33	<0.050
	SB-SS-004-141 <sup>(4)</sup>	8/15/2002	130-140	<0.050	<0.33	<0.050
	SB-SS-004-151	8/15/2002	140-150	<0.050	<0.33	<0.050
	SB-SS-004-161	8/15/2002	150-160	<0.050	<0.33	<0.050
	SB-SS-004-171	8/16/2002	160-170	NA	NA	NA
	SB-SS-004-181	8/16/2002	170-180	<0.050	<0.33	<0.050
	SB-SS-004-191	8/16/2002	180-190	NA	NA	NA
SB-SS-004-201	8/16/2002	190-200	<0.050	<0.33	<0.050	
		<b>Risk - Based Criteria</b>	<b>Residential SRL</b>	<b>5.1</b>	<b>390</b>	<b>9.4</b>
			<b>Non-Residential SRL</b>	<b>13<sup>(2)</sup></b>	<b>1200 mg/kg<sup>(2)</sup></b>	<b>20<sup>(2)</sup></b>
			<b>Migration to Groundwater</b>	<b>GPL = 1.3<sup>(3)</sup></b>	<b>NA</b>	<b>NA</b>

From Table 5 in Weston 2003. *Technical Memorandum Interim Measures Task 1 Soil and Soil Gas Sampling Investigation*

(1) Table presents soil samples with contaminants detected above the practical quantitation limit only. Appendix C in Weston 2003 contains all analytical laboratory data.

"<" indicates contaminant not detected above the practical quantitation limit.

(2) Soil Remediation Level for Non-Residential Soils, Arizona Administrative Code, Title 18, Chapter 7.

(3) Minimum Groundwater Protection Limit

(4) Assumed this sample is represents sample from SB-3/SB-4 from 140 fbgs (see Appendix B)

NA = Not available

Note: Reproduced from Table 2 in AMEC, 2009, *Human Health Risk Assessment*