

Table 1
Summary of Soil Laboratory Testing
Former ASARCO Smelter Site
El Paso, Texas

Sample ID	Date Sampled	Particle Size Summary			Atterberg Limits			Modified Proctor Test Results		Unified Soil Classification	Soil Description	Notes
		Gravel (%)	Sand (%)	Fines (%)	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Dry Density (pcf)	Optimum Moisture Content (%)			
Cell 3, Subgrade (foundation layer)	11/22/2013	1	66	33	24	17	7	120.5	12.0	SC-SM	Silty, Clayey SAND	East Borrow Source Material
Cell 3 Foundation Layer	4/3/2014	5	50	45	25	16	9	121.5	11.5	SC	Clayey SAND with Gravel	East Borrow Source Material mixed with former Cell 3 cover material
Cell 3 Anchor Trench Backfill	4/11/2014	4	32	64	37	14	23	119.5	13.0	CL	Sandy Lean CLAY	Former Anchor Trench Backfill
Cell 3 - 3/8" Cover	4/16/2014	3	85	12	--	--	--	--	--	SP-SM	Poorly Graded Sand with Silt	Jobe Import
Cell 3 - 3/8" Cover	5/9/2014	5	84	11	--	--	--	--	--	SP-SM	Poorly Graded Sand with Silt	Jobe Import

Notes:
pcf = pounds per cubic foot

Table 2
Summary of Field Density Test Results
Former ASARCO Smelter Site
El Paso, Texas

Test #	Date	Lift	Location	Lift Thickness (in.)	$\gamma_{\text{moist, Troxler}}$ (pcf)	$w_{\text{c, Troxler}}$ (%)	$\gamma_{\text{dry, Troxler}}$ (pcf)	Percent Compaction (%)	Modified Proctor	
									$\gamma_{\text{dry, max}}$ (pcf)	Optimum Moisture (%)
Foundation Layer										
1	4/5/2014	Lower	55'S, 120'E from NW corner	12	104.7	10.0	114.7	95.2	120.5	12.0
2	4/5/2014	Lower	30'N, 3'W from SE corner	12	99.3	10.2	108.6	90.1	120.5	12.0
3	4/5/2014	Upper	30'N, 3'W from SE corner	12	103.9	11.8	111.9	92.9	120.5	12.0
4	4/5/2014	Upper	30'N, 15'W from SE corner	12	102.4	11.7	110.5	91.7	120.5	12.0
5	4/5/2014	Upper	30'N, 20'W from SE corner	12	102.6	11.6	110.7	91.9	120.5	12.0
6	4/5/2014	Lower	75'S, 125'E from NW corner	12	107.7	11.3	116.6	96.8	120.5	12.0
7	4/5/2014	Upper	75'S, 125'E from NW corner	12	108.4	12.0	116.6	96.8	120.5	12.0
8	4/5/2014	Lower	65'S, 125'E from NW corner	12	105.5	13.9	111.6	92.6	120.5	12.0
9	4/5/2014	Upper	65'S, 125'E from NW corner	12	107.3	13.3	114.1	94.7	120.5	12.0
10	4/5/2014	Lower	75'S, 55'E from NW corner	12	107.0	13.0	114.1	94.7	120.5	12.0
11	4/5/2014	Upper	75'S, 55'E from NW corner	12	107.9	13.0	115.1	95.5	120.5	12.0
12	4/5/2014	Lower	75'S, 75'E from NW corner	12	103.0	11.3	112.4	92.5	121.5	11.5
13	4/5/2014	Upper	75'S, 75'E from NW corner	12	108.8	9.8	120.4	99.1	121.5	11.5
14	4/5/2014	Lower	40'S, 70'E from NW corner	12	108.3	12.1	117.4	96.6	121.5	11.5
15	4/5/2014	Upper	40'S, 70'E from NW corner	12	110.6	12.3	119.7	98.5	121.5	11.5
Anchor Trench Backfill										
16	4/11/2014	--	SE portion of Cell 3	12	122.8	13.1	108.6	90	120.5	12.0
17	4/11/2014	--	NW portion of Cell 3	12	128.0	12.4	113.9	95	120.5	12.0
18	4/11/2014	--	SW portion of Cell 3	12	123.9	14.2	108.5	90	120.5	12.0
19	4/14/2014	--	SW portion of Cell 3	12	118.2	10.5	107.0	90	119.5	13.0
20	4/14/2014	--	SE portion of Cell 3	12	118.6	9.2	108.6	91	119.5	13.0
21	4/14/2014	--	Center of N side of Cell 3	12	126.1	12.6	112.0	94	119.5	13.0

Notes:

$\gamma_{\text{dry, Troxler}}$ = Dry density obtained at the field using a nuclear density gauge

$\gamma_{\text{moist, Troxler}}$ = Wet density obtained at the field using a nuclear density gauge

$w_{\text{c, Troxler}}$ = Moisture content obtained at the field using a nuclear density gauge

$\gamma_{\text{dry, max}}$ = Maximum dry density obtainable when the compaction is carried out on the material at optimum moisture content

in. = inches

pcf = pounds per cubic foot

"--" = Not Applicable