

Sample ID	Approximate Location CQA Point	Date	Moisture Content (%)	Particle Size Summary				Atterberg Limits			Modified Proctor Test Results		Unified Soil Classification	Hydraulic Conductivity Samples Remolded to 90% Relative Compaction (cm/s)	Soil Description
				Gravel (%)	Sand (%)	Fines (%)		Liquid Limit	Plastic Limit	Plasticity Index	Max. Dry Density (pcf)	Optimum Moisture Content (%)			
						Silt	Clay								
EBS Clayey 070516	EBS Stockpile	7/5/2016	18.3	1	23.5	75.5	36	15	21	122.1	12.6	CL		Lean Clay with Sand	
Fines Pile Sand EBS 080916	EBS Stockpile	8/10/2016	8.6	3	75.3	21.7	non-plastic	non-plastic	non-plastic	116.4	13	SM	3.36E-05	Silty Sand	
Fines Pile Clay EBS 080916	EBS Stockpile	8/10/2016	15	1	40.9	58.1	33	14	19	122.9	11.7	CL	7.3E-08	Sandy Lean Clay	
Fines Pile Sand 081816	EBS Stockpile	8/18/2016	10.5	4	81.5	14.5	non-plastic	non-plastic	non-plastic	113.5	12.7	SM		Silty Sand	
Fines Pile Clay 082416	EBS Stockpile	8/24/2016	--	3	32.5	64.5	40	14	26	122.1	11.9	CL	4.5E-08	Sandy Lean Clay	
Fines Pile Clay 090916	EBS Stockpile	9/9/2016	--	2	28.9	69.1	52	17	35	120.5	11.7	CH		Sandy Fat Clay	
Fines Pile Sand 091216	EBS Stockpile	9/12/2016	9.0	4	76.4	19.6	non-plastic	non-plastic	non-plastic	121	11.9	SM		Silty Sand	

Notes:  
 % = percent  
 cm/s = centimeters per second  
 CQA = Construction Quality Assurance  
 EBS = East Borrow Source  
 pcf = pounds per cubic foot  
 Unified Soil Classification = CH: fat clay; CL: lean clay; GC: clayey gravel; GM: silty gravel; GP: poorly-graded gravel; GW: well-graded gravel; SC: clayey sand; SM: silty sand

Material Specification for Final Cover  
 - Unified Soil Classification: GW, GP (Desert Armor); GM, GC, SM, or SC (Surface Layer); SM, SC, or CL (Isolation Layer)  
 - Maximum Particle Size: 4 inches  
 - Percent Particles Coarser than 1.0 Inch (Desert Armor) = 25%  
 - Percent Particles Coarser than 1.0 Inch (Surface Layer) = 25%  
 - Remolded Hydraulic Conductivity:  $5.0 \times 10^{-4}$  cm/s (Surface Layer);  $5.0 \times 10^{-5}$  cm/s (Isolation Layer)