

APPENDIX C

Grain Size and Hydrogeological Properties

TABLE 3: Soil Sample Composition and Hydrogeological Properties

APEC	Sample Name	Depth	Description	Composition (%)			Calculated Hydraulic Properties												Porosity %
				CLAY & SILT	SAND	GRAVEL	Hazen (m/s)	Terzaghi (m/s)	Sauerbrey (m/s)	Kozeny (m/s)	Zamarinu (m/s)	Slichter (m/s)	Beyer (m/s)	Krueger (m/s)	Zunker (m/s)	USBR (m/s)	Geometric Mean of K (m/s) ^A		
1	MW02-1-8	3.05 - 3.8	SAND & GRAVEL	2	50	48	2E-03	5E-04	7E-04	3E-05	1E-03	3E-04	2E-03	4E-03	9E-05	2E-03	1E-03	28.2	
	MW02-1-13	3.8 - 4.6	SAND, some gravel	4	85	11	3E-04	2E-04	2E-04	5E-04	9E-05	2E-04	2E-04	6E-04	3E-04	1E-04	3E-04	38	
	TP1F1	0.8 - 0.9	SAND, some gravel	1	83	17	7.6E-04	4.5E-04	4.4E-04	1.7E-03	1.3E-03	2.6E-04	6.1E-04	1.2E-03	1.0E-03	2.3E-04	8E-04	39.5	
4	TP4A-4	0.0 - 0.1	SILT, some sand & gravel	3	54	16	7.0E-07	2.5E-07	4.4E-07	2.4E-07	1.2E-06	1.6E-07	7.6E-07	2.2E-06	3.6E-07	4.5E-07	5E-07	29.5	
	MW02-6-3	4.0 - 4.4	SAND, some gravel	2	80	19	9E-04	4E-04	6E-04	2E-03	2E-03	3E-04	8E-04	2E-03	1E-03	7E-04	1E-03	35.5	
6	MW02-6-6	5.9 - 6.1	SAND, some gravel	5	74	61	5E-04	2E-04	3E-04	4E-05	5E-04	1E-04	5E-04	1E-03	8E-05	5E-04	4E-04	31.2	
	MW02-7-2	2.9 - 3.1	SAND, some gravel and silt, trace of clay	7.3	17	22	5E-07	1E-07	9E-07	5E-07	2E-06	1E-07	2E-07	4E-06	7E-07	4E-06	7E-07	25.5	
7	MW02-7-2	4.3 - 4.6	SAND, gravelly	9	71	21	3E-05	8E-06	6E-05	2E-05	8E-05	6E-06	3E-05	2E-04	2E-05	5E-04	5E-05	25.7	
	MW02-7-5	3.7 - 4.3	SAND, gravelly	3	71	26	7E-04	3E-04	4E-04	4E-05	7E-04	2E-04	7E-04	2E-03	9E-05	7E-04	5E-04	31.6	
10	MW02-10-3	6.8 - 8.3	SAND, some gravel	1	84	14	3E-04	1E-04	1E-04	6E-04	7E-04	6E-05	3E-04	8E-04	5E-04	2E-04	4E-04	29.5	
	MW02-10-6	3.8 - 5.2	SAND, gravelly	2	67	31	1E-03	7E-04	1E-03	2E-03	2E-03	4E-04	9E-04	2E-03	1E-03	7E-04	2E-03	40.1	
	TP10J-1	2.95 - 3.05	SAND (Fill)	1	95	5	8E-04	4E-04	4E-04	2E-03	1E-03	3E-04	6E-04	1E-03	1E-03	2E-04	9E-04	39.5	

Notes:

A) Hydraulic conductivity (k) values were calculated using the methods considered to be the most appropriate for each soil type (indicated by shading). Methods were chosen from Hazen, Terzaghi, Sauerbrey, Kozeny, Zamarinu, Slichter, Beyer, Krueger, Zunker, USBR. The geometric mean of the K values for those methods considered appropriate are indicated.

B) Average porosity is 33%

