

December 19, 2002

Dr. Alan Maki
ExxonMobil Production Company
3301 C Street
Suite 400
Anchorage, AK 99519-6601

Reference: Point Thomson Gas Cycling Project
Particle Size Technical Memorandum

Dear Dr. Maki:

This technical memorandum has been prepared as a supplement to the *Point Thomson Gas Cycling Project Sediment Quality Results, Summer 2002*. Sediment samples that were submitted to the laboratory were initially analyzed for particle size using the American Society for Testing and Materials (ASTM) modified method D422. According to the U.S. Army Corps of Engineers' 1998 guidance document, *Dredged Material Evaluation Framework, Lower Columbia River Management Area*, slightly different sieve sizes should have been used. In order to determine the significance of the test procedure variation, URS requested that the laboratory re-analyze one sample from each location using the Puget Sound Estuary Program Protocol outlined in the Corps document. Table 1 compares sieve sizes for the two methods.

Table 1. Particle Size Method Comparison

American Society for Testing and Materials (ASTM) Method D422 (Modified)			Puget Sound Estuary Program Protocol Particle Size Determination		
Grain Size	Sieve/Particle Size (mm)	Sieve Number	Grain Size	Sieve/Particle Size (mm)	Sieve Number
Gravel, Medium	4.75	4	Gravel, Coarse	4.00	5
Gravel, Fine	2.00	10	Gravel	2.00	10
Sand, Very Coarse	0.85	20	Sand, Very Coarse	1.00	18
Sand, Coarse	0.425	40	Sand, Coarse	0.500	35
Sand, Medium	0.250	60	Sand, Medium	0.250	60
Sand, Fine	0.106	140	Sand, Fine	0.125	120
Sand, Very Fine	0.075	200	Sand, Very Fine	0.0625	230
Silt	0.0039 - 0.075	NA	Silt	0.0039 - 0.0625	NA
Clay	<0.0039	NA	Clay	<0.0039	NA

mm – Millimeters

NA – Not applicable

According to the *Dredged Material Evaluation Framework*, sediment that is composed of less than 20% fines (material passing the 230 sieve, the sum of silt and clay) does not require further chemical or biological analysis, provided total volatile solids content is also low (less than 5%). This is primarily because coarse sediment material (sand and gravel) is less capable of containing high concentrations of contaminants than fine-grained material. For characterizing dredged material, the principal purpose of the particle analysis is to distinguish between coarse- and fine-grained materials; therefore, discussion contained in this memorandum will focus primarily on comparing the reported percent fines for the original analysis and the re-analysis. Percent fines for each analysis are presented in Table 2.

Table 2. Combined Silt and Clay (Fines) Results for Re-analyzed Samples

Station ID	Sample ID	Original Analysis (Percent Fines)	Re-analysis (Percent Fines)
Proposed Excavation Site (Dredge Material)			
PTCE-SB02	PTCE-SB02-A1	27.5	21.2
Adjacent to Proposed Excavation Site			
PTCE-SG01	PTCE-SG01-A1	33.0	33.0
PTCE-SG02	PTCE-SG02-A1	18.1	7.6
Flaxman Island Area			
PTFI-SG01	PTFI-SG01-A1	3.7	2.4
PTFI-SG02	PTFI-SG02-A1	0.5	0.2
PTFI-SG03	PTFI-SG03-A1	59.2	35.3
PTFI-SG04	PTFI-SG04-A1	84.6	67.9
PTFI-SG05	PTFI-SG05-A1	87.9	80.4
PTFI-SG06	PTFI-SG06-A1	50.0	42.5
Proposed Dumping Zones			
PTLA-SG01	PTLA-SG01-A1	1.3	2.0
PTLA-SG02	PTLA-SG02-A1	84.5	79.8
PTLA-SG03	PTLA-SG03-A1	81.7	77.1
PTLA-SG04	PTLA-SG04-A1	9.4	6.2
PTLA-SG05	PTLA-SG05-A1	4.4	2.9
PTLA-SG06	PTLA-SG06-A1	49.3	46.3
PTLA-SG07	PTLA-SG07-A1	20.9	14.2
PTLA-SG08	PTLA-SG08-A1	20.6	16.6
PTLA-SG09	PTLA-SG09-A1	54.7	52.5
PTLA-SG10	PTLA-SG10-A1	1.9	1.2
PTLA-SG11	PTLA-SG11-A1	0.4	0.3
PTLA-SG12	PTLA-SG12-A1	2.0	1.5
PTLA-SG13	PTLA-SG13-A1	20.6	5.5
PTLA-SG14	PTLA-SG14-A1	41.1	56.3
PTLA-SG15	PTLA-SG15-A1	47.2	47.3
PTLA-SG16	PTLA-SG16-A1	1.8	1.1
PTLA-SG17	PTLA-SG17-A1	0.9	0.8
PTME-SG01	PTME-SG01-A1	10.3	8.6
PTME-SG02	PTME-SG02-A1	41.0	29.2
PTME-SG03	PTME-SG03-A1	5.3	4.3
PTME-SG04	PTME-SG04-A1	49.0	44.8
PTME-SG05	PTME-SG05-A1	3.4	2.3

Bold entries indicate samples that had more than 20% fines in the original analysis, but less than 20% fines in the re-analysis.

By using a finer meshed sieve (number 230 sieve versus number 200 sieve), it is expected that the percent very fine sand would increase and the percent silt would decrease. This reduction in percent fines could be significant for projects where the dredged material is close to the 20% fines threshold since the dredging proponent may, by using the 200 sieve, bear the financial burden of unnecessary chemical and/or biological testing. For this project, the dredge material sample, PTCE-SB02-A1, contained more than 20% fines for both the original and re-analysis results (27.5 and 21.2 respectively).

With the exception of three of the samples, the percent fines was lower in the re-analysis than in the original analysis; additionally, the difference between original and re-analysis results varied considerably between samples (Table 2). This variability in sample results, including the three anomalous samples, is likely attributed to the fact that the exact same sediment material from the original analysis was not used in the re-analysis. An additional aliquot of sample material from the same container was used for the re-analysis; therefore, a considerable amount of variability, particularly for such heterogeneous samples, is expected. Variability can also be observed by comparing the results from both analyses of all material retained on the 10 or larger sieve or all material retained on the 60 or larger sieve (the 10 and 60 sieves are required for both test methods). In order to determine the statistical significance of the change in results, the mean, standard deviation, and range for very fine sand, silt, clay, and fines were determined. Table 3 shows these values for both analyses.

Table 3. Comparison of Mean, Standard Deviation, and Range of Values For Very Fine Sand, Silt, Clay, and Fines

Grain Size	Original Analysis			Re-analysis		
	Mean (Percent)	Standard Deviation	Range of Values (Percent)	Mean (Percent)	Standard Deviation	Range of Values (Percent)
Sand, Very Fine	5.3	5.9	0.04 - 26.9	16.8	18.7	0.06 - 54.8
Silt	26.8	23.8	0.16 - 71.9	23.8	25.0	0.09 - 62.9
Clay	7.3	6.1	0.23 - 18.8	7.1	6.1	0.08 - 19.1
Fines (Silt & Clay)	29.5	28.8	0.40 - 87.9	25.5	26.9	0.20 - 80.4

As expected, the mean and range of values for very fine sand increased, and the mean and range of values for silt decreased. The mean and range of values for clay did not change significantly, which is expected because the particle size did not change from the original analysis to the re-analysis (refer to Table 1). A paired Student's t-test performed on the combined silt and clay fractions (percent fines) indicated that as expected, the difference between the original and re-analysis results was not random; rather, the percent fines from the original analysis were higher than the re-analysis percent fines ($t[30] = 3.33$, $p < 0.002$).

Although overall the percent fines for each sample would have been lower had the 230 sieve been used instead of the 200 sieve, the change in percent fines would not have been enough to have altered the testing required for the proposed dredge material. In general, samples that had more than 20% fines in the original analysis still had more than 20% fines in the re-analysis. The three exceptions are PTLA-SG07-A1, PTLA-SG08-A1, and PTLA-SG13-A1. These three samples had only slightly more than 20% fines (20.9, 20.6, and 20.6%) in the original analysis, and the decrease in fines obtained in the re-analysis was enough to drop the samples below the 20% threshold.

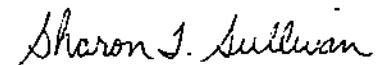
Although the percent fines retained on a 200 sieve were generally higher than percent fines retained on a 230 sieve, the results reported using the 200 sieve are useful to meet the objectives of this study. The samples collected within and adjacent to the proposed excavation site were collected to provide initial characterization of the sediment, in compliance with the *Dredged Material Evaluation Framework*. The dredge material sample, PTCE-SB02-A1, contained more than 20% fines for both the original and re-analysis results. The remaining samples were collected from the proposed ocean dumping zones and from the Flaxman Island area and were collected for baseline data only. Based on these usages for the

data and that the 200 sieve generally overestimated percent fines when compared to the 230 sieve, the original data are useable for the purposes of this study.

If you have any questions regarding the information presented in this letter, please contact me at (907) 261-6709.

Sincerely,

URS Corporation



Sharon T. Sullivan
Project Manager

cc: File 26218843

Attachments: Attachment 1 – Re-analysis Results

ATTACHMENT 1
RE-ANALYSIS RESULTS

Particle Size Re-analysis Results

Sample ID	Sample Description	Depth	Latitude	Longitude	Grain Size	Sieve/Particle Size (mm)	Sieve Number	Percent Retained
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Coarse Gravel	4.00	5	54.7
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Gravel	2.00	10	2.98
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Sand, Very Coarse	1.00	18	1.54
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Sand, Coarse	0.500	35	2.31
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Sand, Medium	0.250	60	7.44
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Sand, Fine	0.125	120	6.05
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Sand, Very Fine	0.0625	230	3.62
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Silt	0.0625-0.0039	NA	15.4
PTCE-SB02	PTCE-SB02-A1	0.0' - 0.5'	70.17717	146.25117	Clay	<0.0039	NA	5.76
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Coarse Gravel	4.00	5	22.4
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Gravel	2.00	10	5.17
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Sand, Very Coarse	1.00	18	1.47
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Sand, Coarse	0.500	35	2.74
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Sand, Medium	0.250	60	12.5
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Sand, Fine	0.125	120	13.2
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Sand, Very Fine	0.0625	230	6.47
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Silt	0.0625-0.0039	NA	23.5
PTCE-SG01	PTCE-SG01-A1	0.0' - 0.5'	70.17683	146.24833	Clay	<0.0039	NA	9.5
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Coarse Gravel	4.00	5	82.9
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Gravel	2.00	10	1.52
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Sand, Very Coarse	1.00	18	0.29
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Sand, Coarse	0.500	35	0.82
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Sand, Medium	0.250	60	5.18
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Sand, Fine	0.125	120	5.17
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Sand, Very Fine	0.0625	230	1.00
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Silt	0.0625-0.0039	NA	5.42
PTCE-SG02	PTCE-SG02-A1	0.0' - 0.5'	70.17800	146.25517	Clay	<0.0039	NA	2.22
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Coarse Gravel	4.00	5	0.16
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Gravel	2.00	10	0.57
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Sand, Very Coarse	1.00	18	0.14
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Sand, Coarse	0.500	35	0.88
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Sand, Medium	0.250	60	69.6
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Sand, Fine	0.125	120	24.7
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Sand, Very Fine	0.0625	230	1.33
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Silt	0.0625-0.0039	NA	1.49
PTFI-SG01	PTFI-SG01-A1	0.0' - 0.5'	70.20150	146.22333	Clay	<0.0039	NA	0.94

Particle Size Re-analysis Results

Station ID	Sample ID	Depth (m)	Latitude	Longitude	Grain Size	Sieve/Particle Size (mm)	Sieve Number	Percent Retained
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Coarse Gravel	4.00	5	65.2
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Gravel	2.00	10	9.73
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Sand, Very Coarse	1.00	18	6.87
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Sand, Coarse	0.500	35	8.47
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Sand, Medium	0.250	60	8.63
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Sand, Fine	0.125	120	0.95
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Sand, Very Fine	0.0625	230	0.06
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Silt	0.0625-0.0039	NA	0.09
PTFI-SG02	PTFI-SG02-A1	0.0' - 0.5'	70.19067	146.01850	Clay	<0.0039	NA	0.08
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Coarse Gravel	4.00	5	0.10
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Gravel	2.00	10	0.90
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Sand, Very Coarse	1.00	18	1.20
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Sand, Coarse	0.500	35	0.82
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Sand, Medium	0.250	60	0.79
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Sand, Fine	0.125	120	5.99
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Sand, Very Fine	0.0625	230	54.8
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Silt	0.0625-0.0039	NA	30.0
PTFI-SG03	PTFI-SG03-A1	0.0' - 0.5'	70.18667	146.01900	Clay	<0.0039	NA	5.25
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Coarse Gravel	4.00	5	0.00
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Gravel	2.00	10	0.08
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Sand, Very Coarse	1.00	18	0.33
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Sand, Coarse	0.500	35	0.42
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Sand, Medium	0.250	60	0.66
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Sand, Fine	0.125	120	1.07
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Sand, Very Fine	0.0625	230	26.7
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Silt	0.0625-0.0039	NA	54.1
PTFI-SG04	PTFI-SG04-A1	0.0' - 0.5'	70.17333	146.13667	Clay	<0.0039	NA	13.8
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Coarse Gravel	4.00	5	0.43
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Gravel	2.00	10	0.17
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Sand, Very Coarse	1.00	18	0.29
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Sand, Coarse	0.500	35	0.34
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Sand, Medium	0.250	60	0.42
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Sand, Fine	0.125	120	0.72
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Sand, Very Fine	0.0625	230	15.9
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Silt	0.0625-0.0039	NA	62.9
PTFI-SG05	PTFI-SG05-A1	0.0' - 0.5'	70.17783	146.13783	Clay	<0.0039	NA	17.5

Particle Size Re-analysis Results

Station ID	Sample ID	Dip	Latitude	Longitude	GrainSize	Sieve Particle Size Size (mm) Retained	Sieve Number	Percent Retained
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Coarse Gravel	4.00	5	16.9
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Gravel	2.00	10	1.26
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Sand, Very Coarse	1.00	18	1.10
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Sand, Coarse	0.500	35	2.50
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Sand, Medium	0.250	60	15.0
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Sand, Fine	0.125	120	18.2
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Sand, Very Fine	0.0625	230	4.88
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Silt	<0.0039	NA	24.4
PTFI-SG06	PTFI-SG06-A1	0.0° - 0.5°	70.18883	146.02050	Clay	<0.0039	NA	18.1
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Coarse Gravel	4.00	5	61.7
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Gravel	2.00	10	12.1
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Sand, Very Coarse	1.00	18	6.94
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Sand, Coarse	0.500	35	9.28
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Sand, Medium	0.250	60	9.12
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Sand, Fine	0.125	120	0.59
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Sand, Very Fine	0.0625	230	0.37
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Silt	<0.0039	NA	1.50
PTLA-SG01	PTLA-SG01-A1	0.0° - 0.5°	70.18617	146.61833	Clay	<0.0039	NA	0.45
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Coarse Gravel	4.00	5	0.00
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Gravel	2.00	10	0.12
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Sand, Very Coarse	1.00	18	0.29
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Sand, Coarse	0.500	35	0.23
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Sand, Medium	0.250	60	0.26
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Sand, Fine	0.125	120	0.70
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Sand, Very Fine	0.0625	230	18.6
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Silt	<0.0039	NA	60.7
PTLA-SG02	PTLA-SG02-A1	0.0° - 0.5°	70.20433	146.62800	Clay	<0.0039	NA	19.1
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Coarse Gravel	4.00	5	0.00
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Gravel	2.00	10	0.00
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Sand, Very Coarse	1.00	18	0.09
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Sand, Coarse	0.500	35	0.12
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Sand, Medium	0.250	60	0.30
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Sand, Fine	0.125	120	1.82
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Sand, Very Fine	0.0625	230	19.6
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Silt	<0.0039	NA	58.5
PTLA-SG03	PTLA-SG03-A1	0.0° - 0.5°	70.21867	146.57950	Clay	<0.0039	NA	18.6

Particle Size Re-analysis Results

Station ID	Sample ID	Depth (ft)	Test ID	Conductivity	Grain Size	Sieve Particle Size (mm)	Sieve Number	Percent Retained
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Coarse Gravel	4.00	5	0.00
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Gravel	2.00	10	0.12
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Sand, Very Coarse	1.00	18	0.27
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Sand, Coarse	0.500	35	1.37
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Sand, Medium	0.250	60	45.4
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Sand, Fine	0.125	120	41.2
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Sand, Very Fine	0.0625	230	5.73
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Silt	0.0625-0.0039	NA	4.43
PTLA-SG04	PTLA-SG04-A1	0.0' - 0.5'	70.22367	146.55483	Clay	<0.0039	NA	1.72
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Coarse Gravel	4.00	5	0.00
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Gravel	2.00	10	0.19
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Sand, Very Coarse	1.00	18	0.07
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Sand, Coarse	0.500	35	0.31
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Sand, Medium	0.250	60	2.97
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Sand, Fine	0.125	120	77.5
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Sand, Very Fine	0.0625	230	15.5
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Silt	0.0625-0.0039	NA	2.03
PTLA-SG05	PTLA-SG05-A1	0.0' - 0.5'	70.22633	146.47617	Clay	<0.0039	NA	0.85
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Coarse Gravel	4.00	5	0.00
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Gravel	2.00	10	0.14
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Sand, Very Coarse	1.00	18	0.15
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Sand, Coarse	0.500	35	0.25
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Sand, Medium	0.250	60	2.04
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Sand, Fine	0.125	120	28.5
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Sand, Very Fine	0.0625	230	23.8
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Silt	0.0625-0.0039	NA	33.1
PTLA-SG06	PTLA-SG06-A1	0.0' - 0.5'	70.20483	146.46033	Clay	<0.0039	NA	13.2
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Coarse Gravel	4.00	5	36.2
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Gravel	2.00	10	6.11
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Sand, Very Coarse	1.00	18	3.24
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Sand, Coarse	0.500	35	9.89
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Sand, Medium	0.250	60	21.5
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Sand, Fine	0.125	120	7.54
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Sand, Very Fine	0.0625	230	2.40
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Silt	0.0625-0.0039	NA	9.30
PTLA-SG07	PTLA-SG07-A1	0.0' - 0.5'	70.19017	146.44200	Clay	<0.0039	NA	4.94

Particle Size Re-analysis Results

Sieve ID	Sample ID	Depth	Latitude	Longitude	Grain Size	Sieve Particle Size (mm)	Sieve Number	Percent Retained
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Coarse Gravel	4.00	5	0.32
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Gravel	2.00	10	0.28
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Sand, Very Coarse	1.00	18	0.59
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Sand, Coarse	0.500	35	4.65
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Sand, Medium	0.250	60	45.9
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Sand, Fine	0.125	120	20.4
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Sand, Very Fine	0.0625	230	11.0
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Silt	0.0625-0.0039	NA	13.1
PTLA-SG08	PTLA-SG08-A1	0.0' - 0.5'	70.19683	146.38167	Clay	<0.0039	NA	3.51
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Coarse Gravel	4.00	5	0.01
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Gravel	2.00	10	0.12
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Sand, Very Coarse	1.00	18	0.23
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Sand, Coarse	0.500	35	0.16
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Sand, Medium	0.250	60	0.38
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Sand, Fine	0.125	120	17.5
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Sand, Very Fine	0.0625	230	29.5
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Silt	0.0625-0.0039	NA	40.2
PTLA-SG09	PTLA-SG09-A1	0.0' - 0.5'	70.21183	146.40317	Clay	<0.0039	NA	12.3
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Coarse Gravel	4.00	5	0.00
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Gravel	2.00	10	0.39
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Sand, Very Coarse	1.00	18	1.12
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Sand, Coarse	0.500	35	9.17
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Sand, Medium	0.250	60	57.6
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Sand, Fine	0.125	120	24.9
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Sand, Very Fine	0.0625	230	3.69
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Silt	0.0625-0.0039	NA	0.73
PTLA-SG10	PTLA-SG10-A1	0.0' - 0.5'	70.22733	146.39317	Clay	<0.0039	NA	0.47
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Coarse Gravel	4.00	5	48.5
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Gravel	2.00	10	5.48
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Sand, Very Coarse	1.00	18	3.24
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Sand, Coarse	0.500	35	7.09
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Sand, Medium	0.250	60	22.9
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Sand, Fine	0.125	120	10.4
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Sand, Very Fine	0.0625	230	0.71
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Silt	0.0625-0.0039	NA	0.13
PTLA-SG11	PTLA-SG11-A1	0.0' - 0.5'	70.22500	146.34750	Clay	<0.0039	NA	0.13

Particle Size Re-analysis Results

Sample ID	Sample ID	Depth	Location	Sampled	Grain Size	Sieve Particle Size (mm)	Sieve Number	Percent Retained
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Coarse Gravel	4.00	5	0.00
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Gravel	2.00	10	0.00
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Sand, Very Coarse	1.00	18	0.04
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Sand, Coarse	0.500	35	0.40
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Sand, Medium	0.250	60	46.7
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Sand, Fine	0.125	120	47.2
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Sand, Very Fine	0.0625	230	4.13
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Silt	0.0625-0.0039	NA	0.79
PTLA-SG12	PTLA-SG12-A1	0.0' - 0.5'	70.20317	146.31850	Clay	<0.0039	NA	0.74
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Coarse Gravel	4.00	5	63.2
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Gravel	2.00	10	1.20
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Sand, Very Coarse	1.00	18	0.38
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Sand, Coarse	0.500	35	1.63
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Sand, Medium	0.250	60	23.5
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Sand, Fine	0.125	120	3.00
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Sand, Very Fine	0.0625	230	1.78
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Silt	0.0625-0.0039	NA	3.85
PTLA-SG13	PTLA-SG13-A1	0.0' - 0.5'	70.19400	146.32933	Clay	<0.0039	NA	1.63
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Coarse Gravel	4.00	5	22.2
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Gravel	2.00	10	2.44
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Sand, Very Coarse	1.00	18	0.62
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Sand, Coarse	0.500	35	0.96
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Sand, Medium	0.250	60	3.03
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Sand, Fine	0.125	120	2.17
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Sand, Very Fine	0.0625	230	4.68
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Silt	0.0625-0.0039	NA	47.9
PTLA-SG14	PTLA-SG14-A1	0.0' - 0.5'	70.18400	146.32200	Clay	<0.0039	NA	8.42
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Coarse Gravel	4.00	5	0.03
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Gravel	2.00	10	0.24
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Sand, Very Coarse	1.00	18	0.29
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Sand, Coarse	0.500	35	0.57
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Sand, Medium	0.250	60	10.1
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Sand, Fine	0.125	120	33.6
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Sand, Very Fine	0.0625	230	8.18
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Silt	0.0625-0.0039	NA	36.7
PTLA-SG15	PTLA-SG15-A1	0.0' - 0.5'	70.18333	146.35000	Clay	<0.0039	NA	10.6

Particle Size Re-analysis Results

Sample ID	Sample ID	Depth	Sample Date	Temperature	Grain Size	Sieve Particle Size (mm)	Sieve Number	Percent Retained
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Coarse Gravel	4.00	5	0.00
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Gravel	2.00	10	0.02
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Sand, Very Coarse	1.00	18	0.19
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Sand, Coarse	0.500	35	0.56
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Sand, Medium	0.250	60	62.5
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Sand, Fine	0.125	120	31.2
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Sand, Very Fine	0.0625	230	4.29
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Silt	0.0625-0.0039	NA	0.50
PTLA-SG16	PTLA-SG16-A1	0.0' - 0.5'	70.20500	146.31900	Clay	<0.0039	NA	0.58
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Coarse Gravel	4.00	5	0.00
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Gravel	2.00	10	0.12
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Sand, Very Coarse	1.00	18	0.31
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Sand, Coarse	0.500	35	1.39
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Sand, Medium	0.250	60	72.8
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Sand, Fine	0.125	120	24.6
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Sand, Very Fine	0.0625	230	0.42
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Silt	0.0625-0.0039	NA	0.26
PTLA-SG17	PTLA-SG17-A1	0.0' - 0.5'	70.23133	146.55467	Clay	<0.0039	NA	0.50
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Coarse Gravel	4.00	5	0.00
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Gravel	2.00	10	0.12
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Sand, Very Coarse	1.00	18	0.29
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Sand, Coarse	0.500	35	0.70
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Sand, Medium	0.250	60	9.26
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Sand, Fine	0.125	120	62.4
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Sand, Very Fine	0.0625	230	18.2
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Silt	0.0625-0.0039	NA	7.01
PTME-SG01	PTME-SG01-A1	0.0' - 0.5'	70.22467	146.26500	Clay	<0.0039	NA	1.60
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Coarse Gravel	4.00	5	7.76
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Gravel	2.00	10	10.0
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Sand, Very Coarse	1.00	18	5.27
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Sand, Coarse	0.500	35	3.46
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Sand, Medium	0.250	60	10.3
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Sand, Fine	0.125	120	25.4
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Sand, Very Fine	0.0625	230	7.41
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Silt	0.0625-0.0039	NA	24.1
PTME-SG02	PTME-SG02-A1	0.0' - 0.5'	70.22367	146.24417	Clay	<0.0039	NA	5.08

Particle Size Re-analysis Results

Station ID	Sample ID	Type	Latitude	Longitude	GrainSize	Sieve Particle Size (mm)	Sieve Number	Percent Retained
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Coarse Gravel	4.00	5	0.00
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Gravel	2.00	10	0.18
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Sand, Very Coarse	1.00	18	0.29
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Sand, Coarse	0.500	35	1.52
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Sand, Medium	0.250	60	31.3
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Sand, Fine	0.125	120	44.5
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Sand, Very Fine	0.0625	230	18.0
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Silt	0.0625-0.0039	NA	2.85
PTME-SG03	PTME-SG03-A1	0.0' - 0.5'	70.21900	146.23517	Clay	<0.0039	NA	1.49
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Coarse Gravel	4.00	5	0.00
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Gravel	2.00	10	0.06
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Sand, Very Coarse	1.00	18	0.12
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Sand, Coarse	0.500	35	0.69
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Sand, Medium	0.250	60	10.1
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Sand, Fine	0.125	120	25.4
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Sand, Very Fine	0.0625	230	18.8
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Silt	0.0625-0.0039	NA	33.4
PTME-SG04	PTME-SG04-A1	0.0' - 0.5'	70.21667	146.22100	Clay	<0.0039	NA	11.4
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Coarse Gravel	4.00	5	0.16
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Gravel	2.00	10	0.29
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Sand, Very Coarse	1.00	18	0.54
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Sand, Coarse	0.500	35	1.87
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Sand, Medium	0.250	60	23.1
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Sand, Fine	0.125	120	60.3
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Sand, Very Fine	0.0625	230	11.6
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Silt	0.0625-0.0039	NA	1.46
PTME-SG05	PTME-SG05-A1	0.0' - 0.5'	70.21050	146.20833	Clay	<0.0039	NA	0.86

mm - Millimeters

NA - Not applicable