

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ28-1 @ 1 ft							
Analysis Date:							
Easting (ft): 559,715		Northing (ft): 2,032,504		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -10.1 NAVD88	
USCS: SW		Munsell: 10YR 5/3		Fines (%): #200 - 0.39 #230 - 0.29		Organics (%): 33.00	
Carbonates (%): 45		Shells (%): 45					
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.50	0.00		0.00		
#3.5	-2.50	5.60	5.14		5.14		
#4	-2.25	4.75	1.82		6.96		
#5	-2.00	4.00	6.40		13.36		
#7	-1.50	2.80	5.89		19.25		
#10	-1.00	2.00	5.57		24.82		
#14	-0.50	1.40	9.19		34.01		
#18	0.00	1.00	10.62		44.63		
#25	0.50	0.71	10.60		55.23		
#35	1.00	0.50	12.01		67.24		
#45	1.50	0.36	10.79		78.03		
#60	2.00	0.25	4.13		82.16		
#80	2.50	0.18	9.29		91.45		
#120	3.00	0.13	6.20		97.65		
#170	3.50	0.09	1.85		99.50		
#200	3.75	0.08	0.11		99.61		
#230	4.00	0.06	0.10		99.71		
SHELL, mostly sand to gravel-sized whole and broken shell fragments, some medium to coarse-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.79	2.10	1.36	0.25	-0.99	-1.78	-2.52	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	0.18	0.88	0.25	0.84	1.63	-0.09	2.14

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ28-1 @ 1.1 ft							
Analysis Date:							
Easting (ft): 559,715		Northing (ft): 2,032,504		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -10.2 NAVD88	
USCS: SW		Munsell: 10YR 5/3		Fines (%): #200 - 3.04 #230 - 2.99		Organics (%): Carbonates (%): Shells (%):	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.50	0.00		0.00		
#3.5	-2.50	5.60	3.30		3.30		
#4	-2.25	4.75	1.16		4.46		
#5	-2.00	4.00	3.01		7.47		
#7	-1.50	2.80	4.46		11.93		
#10	-1.00	2.00	1.61		13.54		
#14	-0.50	1.40	3.04		16.58		
#18	0.00	1.00	6.07		22.65		
#25	0.50	0.71	6.58		29.23		
#35	1.00	0.50	8.89		38.12		
#45	1.50	0.36	11.52		49.64		
#60	2.00	0.25	20.22		69.86		
#80	2.50	0.18	13.80		83.66		
#120	3.00	0.13	10.17		93.83		
#170	3.50	0.09	2.82		96.65		
#200	3.75	0.08	0.31		96.96		
#230	4.00	0.06	0.05		97.01		
SAND, poorly-graded, mostly fine to coarse-grained sand-sized quartz, few sand to gravel-sized shell, trace silt (Re-sieved after carbonate testing)							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.21	2.52	2.19	1.51	0.18	-0.60	-2.21	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	0.98	0.51	1.51	0.35	1.57	-0.88	2.94

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report					 US Army Corps of Engineers Jacksonville District		
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ28-1 @ 3.5 ft							
Analysis Date:							
Easting (ft): 559,715		Northing (ft): 2,032,504		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -12.6 NAVD88	
USCS:		Munsell: 10YR 4/1		Fines (%): #200 - 5.69 #230 - 5.43		Organics (%): Carbonates (%): Shells (%): 5	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.50	0.00		0.00		
#3.5	-2.50	5.60	0.29		0.29		
#4	-2.25	4.75	0.07		0.36		
#5	-2.00	4.00	0.10		0.46		
#7	-1.50	2.80	0.14		0.60		
#10	-1.00	2.00	0.10		0.70		
#14	-0.50	1.40	0.94		1.64		
#18	0.00	1.00	1.69		3.33		
#25	0.50	0.71	2.90		6.23		
#35	1.00	0.50	6.15		12.38		
#45	1.50	0.36	10.35		22.73		
#60	2.00	0.25	19.26		41.99		
#80	2.50	0.18	15.29		57.28		
#120	3.00	0.13	18.69		75.97		
#170	3.50	0.09	16.15		92.12		
#200	3.75	0.08	2.19		94.31		
#230	4.00	0.06	0.26		94.57		
SAND, poorly-graded with silt, mostly fine to medium-grained sand-sized quartz, few silt pockets, few sand to gravel-sized shell							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
	3.25	2.97	2.26	1.56	1.17	0.29	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.08	0.24	2.26	0.21	1.01	-1.02	4.94

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ28-1 @ 4.5 ft							
Analysis Date:							
Easting (ft): 559,715		Northing (ft): 2,032,504		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -13.6 NAVD88	
USCS: SW		Munsell: 10YR 5/1		Fines (%): #200 - 1.61 #230 - 1.39		Shells (%): 25	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.50	0.00		0.00		
#3.5	-2.50	5.60	0.88		0.88		
#4	-2.25	4.75	0.96		1.84		
#5	-2.00	4.00	2.15		3.99		
#7	-1.50	2.80	3.09		7.08		
#10	-1.00	2.00	3.49		10.57		
#14	-0.50	1.40	5.73		16.30		
#18	0.00	1.00	6.67		22.97		
#25	0.50	0.71	8.16		31.13		
#35	1.00	0.50	9.96		41.09		
#45	1.50	0.36	10.40		51.49		
#60	2.00	0.25	14.99		66.48		
#80	2.50	0.18	12.76		79.24		
#120	3.00	0.13	12.12		91.36		
#170	3.50	0.09	6.20		97.56		
#200	3.75	0.08	0.83		98.39		
#230	4.00	0.06	0.22		98.61		
SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, some sand to gravel-sized shell, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.29	2.70	2.33	1.43	0.12	-0.53	-1.84	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	1.11	0.46	1.43	0.37	1.5	-0.58	2.57

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ28-2 @ 0.1 ft							
Analysis Date:							
Easting (ft): 560,188		Northing (ft): 2,031,662		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -11.0 NAVD88	
USCS: SW		Munsell: 10YR 6/3		Fines (%): #200 - 0.35 #230 - 0.28		Organics (%): 30.00	
Carbonates (%): 45		Shells (%): 30.00					
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/4"	-4.25	19.00	0.00		0.00		
3/8"	-3.25	9.50	9.80		9.80		
#3.5	-2.50	5.60	8.41		18.21		
#4	-2.25	4.75	2.45		20.66		
#5	-2.00	4.00	3.40		24.06		
#7	-1.50	2.80	4.72		28.78		
#10	-1.00	2.00	5.29		34.07		
#14	-0.50	1.40	5.58		39.65		
#18	0.00	1.00	5.14		44.79		
#25	0.50	0.71	4.62		49.41		
#35	1.00	0.50	4.96		54.37		
#45	1.50	0.36	7.17		61.54		
#60	2.00	0.25	16.19		77.73		
#80	2.50	0.18	12.42		90.15		
#120	3.00	0.13	7.53		97.68		
#170	3.50	0.09	1.73		99.41		
#200	3.75	0.08	0.24		99.65		
#230	4.00	0.06	0.07		99.72		
SHELL, mostly sand to gravel-sized whole and broken shell fragments, some medium to coarse-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.82	2.25	1.92	0.56	-1.90	-2.70	-3.74	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	0.03	0.98	0.56	0.68	2.17	-0.38	1.79

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ28-2 @ 0.2 ft							
Analysis Date:							
Easting (ft): 560,188		Northing (ft): 2,031,662		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -11.1 NAVD88	
USCS: SW		Munsell: 10YR 6/3		Fines (%): #200 - 2.19 #230 - 2.11		Organics (%): Carbonates (%): Shells (%):	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.50	0.00		0.00		
#3.5	-2.50	5.60	1.82		1.82		
#4	-2.25	4.75	0.35		2.17		
#5	-2.00	4.00	2.03		4.20		
#7	-1.50	2.80	1.63		5.83		
#10	-1.00	2.00	2.28		8.11		
#14	-0.50	1.40	3.66		11.77		
#18	0.00	1.00	4.07		15.84		
#25	0.50	0.71	4.41		20.25		
#35	1.00	0.50	4.55		24.80		
#45	1.50	0.36	9.34		34.14		
#60	2.00	0.25	30.52		64.66		
#80	2.50	0.18	21.16		85.82		
#120	3.00	0.13	7.49		93.31		
#170	3.50	0.09	3.75		97.06		
#200	3.75	0.08	0.75		97.81		
#230	4.00	0.06	0.08		97.89		
SAND, poorly-graded, mostly fine to coarse-grained sand-sized quartz, few sand to gravel-sized shell, trace silt (Re-sieved after carbonate testing)							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.23	2.46	2.24	1.76	1.01	0.02	-1.75	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	1.36	0.39	1.76	0.30	1.36	-1.29	4.27

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ28-2 @ 2 ft							
Analysis Date:							
Easting (ft): 560,188		Northing (ft): 2,031,662		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -12.9 NAVD88	
USCS: SW		Munsell: 10YR 5/1		Fines (%): #200 - 0.58 #230 - 0.50		Organics (%): Carbonates (%): Shells (%): 10	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.50	0.00		0.00		
#3.5	-2.50	5.60	0.69		0.69		
#4	-2.25	4.75	0.55		1.24		
#5	-2.00	4.00	0.62		1.86		
#7	-1.50	2.80	0.89		2.75		
#10	-1.00	2.00	1.03		3.78		
#14	-0.50	1.40	2.38		6.16		
#18	0.00	1.00	3.32		9.48		
#25	0.50	0.71	4.28		13.76		
#35	1.00	0.50	6.21		19.97		
#45	1.50	0.36	12.02		31.99		
#60	2.00	0.25	33.46		65.45		
#80	2.50	0.18	21.70		87.15		
#120	3.00	0.13	9.93		97.08		
#170	3.50	0.09	2.16		99.24		
#200	3.75	0.08	0.18		99.42		
#230	4.00	0.06	0.08		99.50		
SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, few sand to gravel-sized shell, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.90	2.43	2.22	1.77	1.21	0.68	-0.74	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	1.54	0.34	1.77	0.29	1.09	-1.55	6.03

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ28-2 @ 4 ft							
Analysis Date:							
Easting (ft): 560,188		Northing (ft): 2,031,662		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -14.9 NAVD88	
USCS: SW		Munsell: 10YR 5/1		Fines (%): #200 - 0.76 #230 - 0.63		Organics (%): Carbonates (%): Shells (%): 15	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.50	0.00		0.00		
#3.5	-2.50	5.60	1.02		1.02		
#4	-2.25	4.75	0.68		1.70		
#5	-2.00	4.00	0.93		2.63		
#7	-1.50	2.80	3.32		5.95		
#10	-1.00	2.00	2.77		8.72		
#14	-0.50	1.40	4.67		13.39		
#18	0.00	1.00	6.19		19.58		
#25	0.50	0.71	7.82		27.40		
#35	1.00	0.50	11.96		39.36		
#45	1.50	0.36	16.66		56.02		
#60	2.00	0.25	22.60		78.62		
#80	2.50	0.18	11.76		90.38		
#120	3.00	0.13	4.81		95.19		
#170	3.50	0.09	3.47		98.66		
#200	3.75	0.08	0.58		99.24		
#230	4.00	0.06	0.13		99.37		
SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, few sand to gravel-sized shell, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.98	2.23	1.92	1.32	0.35	-0.29	-1.64	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	1.05	0.48	1.32	0.40	1.31	-0.75	3.33

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-1 @ 0.5 ft							
Analysis Date:							
Easting (ft): 561,851		Northing (ft): 2,027,426		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -11.3 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 0.58 #230 - 0.55		Organics (%): 5.00	
Carbonates (%): 0		Shells (%): 0					
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#10	-1.00	2.00	0.00		0.00		
#14	-0.50	1.40	0.14		0.14		
#18	0.00	1.00	0.37		0.51		
#25	0.50	0.71	0.37		0.88		
#35	1.00	0.50	0.64		1.52		
#45	1.50	0.36	1.30		2.82		
#60	2.00	0.25	3.76		6.58		
#80	2.50	0.18	28.23		34.81		
#120	3.00	0.13	56.37		91.18		
#170	3.50	0.09	7.98		99.16		
#200	3.75	0.08	0.26		99.42		
#230	4.00	0.06	0.03		99.45		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.24	2.94	2.86	2.63	2.33	2.17	1.79	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.56	0.17	2.63	0.16	0.47	-2.27	13.18

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-1 @ 0.6 ft							
Analysis Date:							
Easting (ft): 561,851		Northing (ft): 2,027,426		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -11.4 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 2.49 #230 - 2.38		Organics (%): Carbonates (%): Shells (%):	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#10	-1.00	2.00	0.00		0.00		
#14	-0.50	1.40	0.15		0.15		
#18	0.00	1.00	0.02		0.17		
#25	0.50	0.71	0.07		0.24		
#35	1.00	0.50	0.09		0.33		
#45	1.50	0.36	0.22		0.55		
#60	2.00	0.25	0.65		1.20		
#80	2.50	0.18	16.79		17.99		
#120	3.00	0.13	65.41		83.40		
#170	3.50	0.09	13.37		96.77		
#200	3.75	0.08	0.74		97.51		
#230	4.00	0.06	0.11		97.62		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt (Re-sieved after carbonate testing)							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.43	3.02	2.94	2.74	2.55	2.44	2.11	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.72	0.15	2.74	0.15	0.35	-2.08	20.9

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-1 @ 2 ft							
Analysis Date:							
Easting (ft): 561,851		Northing (ft): 2,027,426		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -12.8 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 1.59 #230 - 1.34		Organics (%): Carbonates (%): Shells (%): 0	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#14	-0.50	1.40	0.00		0.00		
#18	0.00	1.00	0.02		0.02		
#25	0.50	0.71	0.00		0.02		
#35	1.00	0.50	0.00		0.02		
#45	1.50	0.36	0.07		0.09		
#60	2.00	0.25	2.29		2.38		
#80	2.50	0.18	33.03		35.41		
#120	3.00	0.13	55.08		90.49		
#170	3.50	0.09	7.40		97.89		
#200	3.75	0.08	0.52		98.41		
#230	4.00	0.06	0.25		98.66		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.30	2.94	2.86	2.63	2.34	2.21	2.04	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.60	0.16	2.63	0.16	0.34	-0.07	4.5

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-1 @ 4 ft							
Analysis Date:							
Easting (ft): 561,851		Northing (ft): 2,027,426		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -14.8 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 1.12 #230 - 1.12		Organics (%): Carbonates (%): Shells (%): 0	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#18	0.00	1.00	0.00		0.00		
#25	0.50	0.71	0.24		0.24		
#35	1.00	0.50	0.19		0.43		
#45	1.50	0.36	0.59		1.02		
#60	2.00	0.25	1.41		2.43		
#80	2.50	0.18	20.25		22.68		
#120	3.00	0.13	65.15		87.83		
#170	3.50	0.09	10.99		98.82		
#200	3.75	0.08	0.06		98.88		
#230	4.00	0.06	0.00		98.88		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.33	2.97	2.90	2.71	2.52	2.34	2.06	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.67	0.16	2.71	0.15	0.35	-1.59	10.69

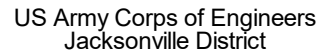
GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-2 @ 1 ft							
Analysis Date:							
Easting (ft): 562,059		Northing (ft): 2,027,077		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -9.6 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 1.10 #230 - 1.05		Organics (%): Carbonates (%): 6.00	
Shells (%): 0							
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-0.50	1.40	0.00		0.00		
5/16"	0.00	1.00	0.19		0.19		
#3.5	0.50	0.71	0.31		0.50		
#4	1.00	0.50	0.46		0.96		
#5	1.50	0.36	1.12		2.08		
#7	2.00	0.25	6.14		8.22		
#10	2.50	0.18	35.64		43.86		
#14	3.00	0.13	48.93		92.79		
#18	3.50	0.09	5.83		98.62		
#20	3.75	0.08	0.28		98.90		
#25	4.00	0.06	0.05		98.95		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.19	2.91	2.82	2.56	2.24	2.11	1.74	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.50	0.18	2.56	0.17	0.43	-1.43	8.73

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-2 @ 1.1 ft							
Analysis Date:							
Easting (ft): 562,059		Northing (ft): 2,027,077		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -9.7 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 2.33 #230 - 2.33		Organics (%): Carbonates (%): Shells (%):	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#18	0.00	1.00	0.00		0.00		
#25	0.50	0.71	0.26		0.26		
#35	1.00	0.50	0.14		0.40		
#45	1.50	0.36	0.11		0.51		
#60	2.00	0.25	1.79		2.30		
#80	2.50	0.18	28.93		31.23		
#120	3.00	0.13	57.32		88.55		
#170	3.50	0.09	8.50		97.05		
#200	3.75	0.08	0.62		97.67		
#230	4.00	0.06	0.00		97.67		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt (Re-sieved after carbonate testing)							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.38	2.96	2.88	2.66	2.39	2.24	2.05	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.62	0.16	2.66	0.16	0.36	-1.01	8.76

Granularmetric Report				US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-2 @ 3 ft							
Analysis Date:							
Easting (ft): 562,059		Northing (ft): 2,027,077		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -11.6 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 0.56 #230 - 0.32		Organics (%): Carbonates (%): Shells (%): 0	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#10	-1.00	2.00	0.00		0.00		
#14	-0.50	1.40	0.05		0.05		
#18	0.00	1.00	0.24		0.29		
#25	0.50	0.71	0.09		0.38		
#35	1.00	0.50	0.25		0.63		
#45	1.50	0.36	0.54		1.17		
#60	2.00	0.25	2.13		3.30		
#80	2.50	0.18	8.82		12.12		
#120	3.00	0.13	45.36		57.48		
#170	3.50	0.09	39.76		97.24		
#200	3.75	0.08	2.20		99.44		
#230	4.00	0.06	0.24		99.68		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.47	3.33	3.22	2.92	2.64	2.54	2.10	
Moment Statistics	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
	2.88	0.14	2.92	0.13	0.45	-2.05	12.75



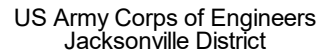
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained	C. % Weight Retained
#10	-1.00	2.00	0.00	0.00
#14	-0.50	1.40	0.05	0.05
#18	0.00	1.00	0.24	0.29
#25	0.50	0.71	0.09	0.38
#35	1.00	0.50	0.25	0.63
#45	1.50	0.36	0.54	1.17
#60	2.00	0.25	2.13	3.30
#80	2.50	0.18	8.82	12.12
#120	3.00	0.13	45.36	57.48
#170	3.50	0.09	39.76	97.24
#200	3.75	0.08	2.20	99.44
#230	4.00	0.06	0.24	99.68

12.75

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report						 US Army Corps of Engineers Jacksonville District	
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-2 @ 4 ft							
Analysis Date:							
Easting (ft): 562,059		Northing (ft): 2,027,077		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -12.6 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 1.62 #230 - 1.57		Organics (%): Carbonates (%): Shells (%): 0	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#5	-2.00	4.00	0.00		0.00		
#7	-1.50	2.80	0.31		0.31		
#10	-1.00	2.00	0.17		0.48		
#14	-0.50	1.40	0.23		0.71		
#18	0.00	1.00	0.41		1.12		
#25	0.50	0.71	0.00		1.12		
#35	1.00	0.50	0.43		1.55		
#45	1.50	0.36	1.53		3.08		
#60	2.00	0.25	10.15		13.23		
#80	2.50	0.18	36.31		49.54		
#120	3.00	0.13	43.46		93.00		
#170	3.50	0.09	5.10		98.10		
#200	3.75	0.08	0.28		98.38		
#230	4.00	0.06	0.05		98.43		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.20	2.90	2.79	2.51	2.16	2.04	1.59	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.42	0.19	2.51	0.18	0.56	-2.84	18.98

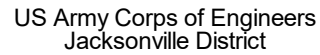
Granularmetric Report				US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-2 @ 6 ft							
Analysis Date:							
Easting (ft): 562,059		Northing (ft): 2,027,077		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -14.6 NAVD88	
USCS: SP		Munsell: 10YR 6/1		Fines (%): #200 - 0.26 #230 - 0.12		Organics (%): Carbonates (%): Shells (%): 0	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#7	-1.50	2.80	0.00		0.00		
#10	-1.00	2.00	0.03		0.03		
#14	-0.50	1.40	0.08		0.11		
#18	0.00	1.00	0.22		0.33		
#25	0.50	0.71	0.31		0.64		
#35	1.00	0.50	0.53		1.17		
#45	1.50	0.36	0.87		2.04		
#60	2.00	0.25	2.81		4.85		
#80	2.50	0.18	18.51		23.36		
#120	3.00	0.13	59.99		83.35		
#170	3.50	0.09	16.17		99.52		
#200	3.75	0.08	0.22		99.74		
#230	4.00	0.06	0.14		99.88		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.36	3.02	2.93	2.72	2.51	2.30	2.00	
Moment Statistics	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
	2.67	0.16	2.72	0.15	0.45	-2.25	14.13



Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained	C. % Weight Retained
#7	-1.50	2.80	0.00	0.00
#10	-1.00	2.00	0.03	0.03
#14	-0.50	1.40	0.08	0.11
#18	0.00	1.00	0.22	0.33
#25	0.50	0.71	0.31	0.64
#35	1.00	0.50	0.53	1.17
#45	1.50	0.36	0.87	2.04
#60	2.00	0.25	2.81	4.85
#80	2.50	0.18	18.51	23.36
#120	3.00	0.13	59.99	83.35
#170	3.50	0.09	16.17	99.52
#200	3.75	0.08	0.22	99.74
#230	4.00	0.06	0.14	99.88

14.13

Granularmetric Report				US Army Corps of Engineers Jacksonville District					
Project Name: AIWW St Augustine									
Sample Name: VB-IWW21-SJ29A-3 @ 1 ft									
Analysis Date:									
Easting (ft): 562,252		Northing (ft): 2,026,673		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -11.1 NAVD88			
USCS: SP		Munsell: 10YR 7/1		Fines (%): #200 - 1.26 #230 - 1.20		Organics (%): Carbonates (%): 6.00		Shells (%): 0	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained			C. % Weight Retained			
#10	-1.00	2.00	0.00			0.00			
#14	-0.50	1.40	0.06			0.06			
#18	0.00	1.00	0.23			0.29			
#25	0.50	0.71	0.19			0.48			
#35	1.00	0.50	0.49			0.97			
#45	1.50	0.36	1.15			2.12			
#60	2.00	0.25	7.08			9.20			
#80	2.50	0.18	35.83			45.03			
#120	3.00	0.13	48.08			93.11			
#170	3.50	0.09	5.52			98.63			
#200	3.75	0.08	0.11			98.74			
#230	4.00	0.06	0.06			98.80			
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt									
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95			
3.17	2.91	2.81	2.55	2.22	2.09	1.70			
Moment Statistics	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis		
	2.49	0.18	2.55	0.17	0.44	-1.56	9.66		



Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained	C. % Weight Retained
#10	-1.00	2.00	0.00	0.00
#14	-0.50	1.40	0.06	0.06
#18	0.00	1.00	0.23	0.29
#25	0.50	0.71	0.19	0.48
#35	1.00	0.50	0.49	0.97
#45	1.50	0.36	1.15	2.12
#60	2.00	0.25	7.08	9.20
#80	2.50	0.18	35.83	45.03
#120	3.00	0.13	48.08	93.11
#170	3.50	0.09	5.52	98.63
#200	3.75	0.08	0.11	98.74
#230	4.00	0.06	0.06	98.80

9.66

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-3 @ 1.1 ft							
Analysis Date:							
Easting (ft): 562,252		Northing (ft): 2,026,673		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -11.2 NAVD88	
USCS: SP		Munsell: 10YR 7/1		Fines (%): #200 - 2.01 #230 - 2.01		Organics (%):	
				Carbonates (%):		Shells (%):	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#4	0.50	0.71	0.00		0.00		
#5	1.00	0.50	0.06		0.06		
#7	1.50	0.36	0.25		0.31		
#10	2.00	0.25	3.47		3.78		
#14	2.50	0.18	35.67		39.45		
#18	3.00	0.13	52.91		92.36		
#20	3.50	0.09	5.42		97.78		
#25	3.75	0.08	0.21		97.99		
#230	4.00	0.06	0.00		97.99		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt (Re-sieved after carbonate testing)							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.24	2.92	2.84	2.60	2.30	2.17	2.02	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.56	0.17	2.60	0.16	0.34	-0.36	3.81

GRANULARMETRIC REPORT % AIWW ST. AUGUSTINE_WORKING.GPJ CESAJ 20171021.GDT 5/8/26

Granularmetric Report				 US Army Corps of Engineers Jacksonville District			
Project Name: AIWW St Augustine							
Sample Name: VB-IWW21-SJ29A-3 @ 3 ft							
Analysis Date:							
Easting (ft): 562,252		Northing (ft): 2,026,673		Coordinate System: State Plane, FLE (U.S. Ft.)		Elevation (ft): -13.1 NAVD88	
USCS: SP		Munsell: 10YR 7/1		Fines (%): #200 - 0.54 #230 - 0.49		Organics (%): Carbonates (%): Shells (%): 0	
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
11/16"	-1.50	2.80	0.00		0.00		
3/8"	-1.00	2.00	0.09		0.09		
5/16"	-0.50	1.40	0.44		0.53		
#3.5	0.00	1.00	0.70		1.23		
#4	0.50	0.71	0.87		2.10		
#5	1.00	0.50	1.63		3.73		
#7	1.50	0.36	1.48		5.21		
#10	2.00	0.25	7.67		12.88		
#14	2.50	0.18	38.42		51.30		
#18	3.00	0.13	44.27		95.57		
#20	3.50	0.09	3.73		99.30		
#25	3.75	0.08	0.16		99.46		
#230	4.00	0.06	0.05		99.51		
SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.99	2.87	2.77	2.48	2.16	2.04	1.43	
Moment	Mean Phi	Mean mm	Median Phi	Median mm	Sorting	Skewness	Kurtosis
Statistics	2.38	0.19	2.48	0.18	0.58	-2.34	11.44