AREA Z Core 233
15 – 17.00 feet





AREA Z Core 234
0 – 5 feet







AREA Z Core 234
5 – 10 feet







AREA Z Core 234
10 – 14.58 feet







AREA Z Core 235
0 – 5 feet







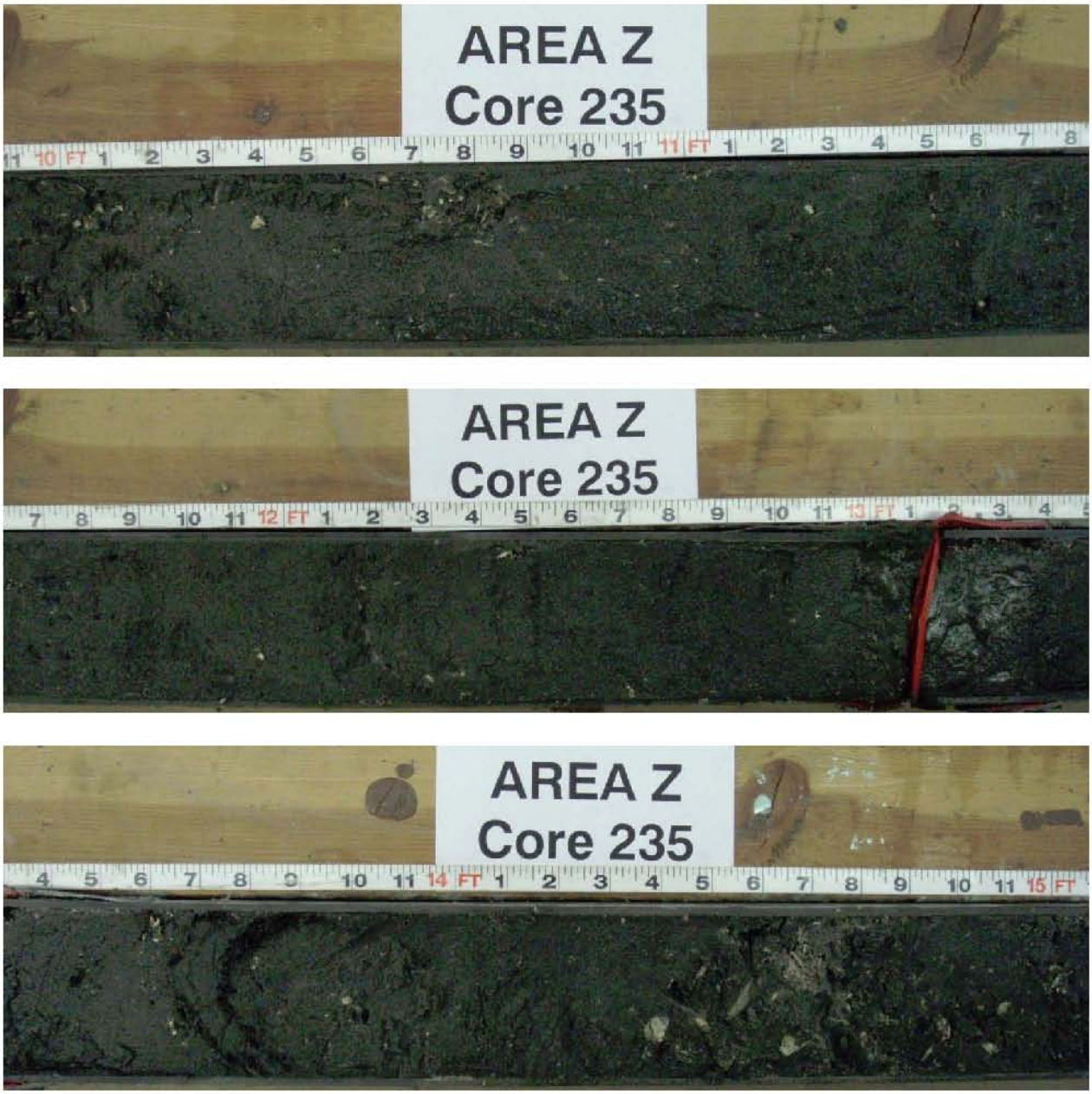
AREA Z Core 235
5 – 10 feet







AREA Z Core 235
10 – 15 feet



AREA Z Core 235
14.67 – 16.08 feet



AREA Z Core 255
0 – 5 feet







AREA Z Core 255
5 – 10 feet

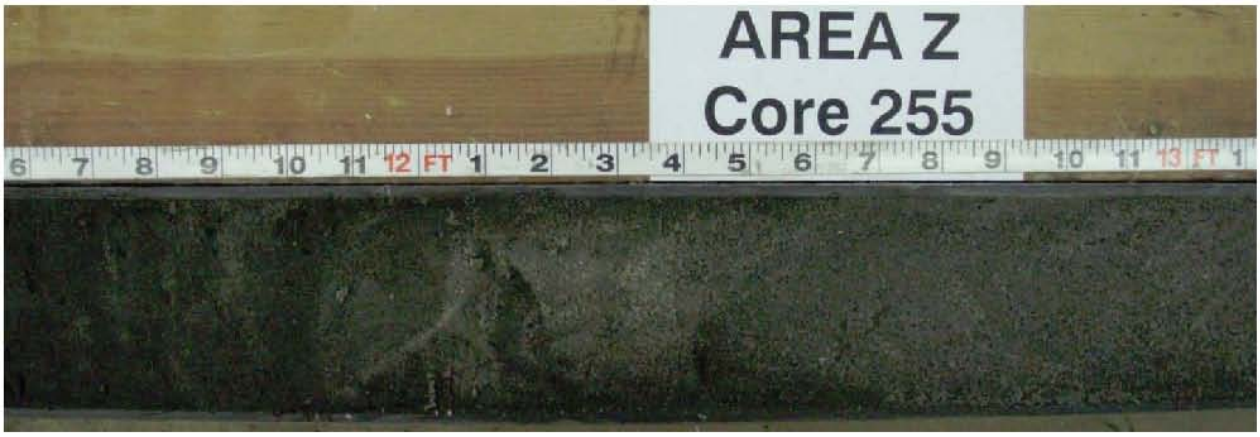






AREA Z Core 255
10 – 13.42 feet







AREA Z Core 256
0 – 5 feet







AREA Z Core 256
5 – 10 feet







AREA Z Core 256
10 – 15 feet







AREA Z Core 256
14.5 – 16.00 feet



AREA Z Core 257
0 – 5 feet







AREA Z Core 257
5 – 10 feet







AREA Z Core 257
10 – 15 feet







AREA Z Core 257
15 – 17.00 feet



AREA Z Core 258
0 – 5 feet







AREA Z Core 258
5 – 10 feet







AREA Z Core 258
10 – 15.08 feet







AREA Z Core 259
0 – 5 feet







AREA Z Core 259
5 – 10 feet







AREA Z Core 259
10 – 15 feet







AREA Z Core 259
14.83 – 16.08 feet



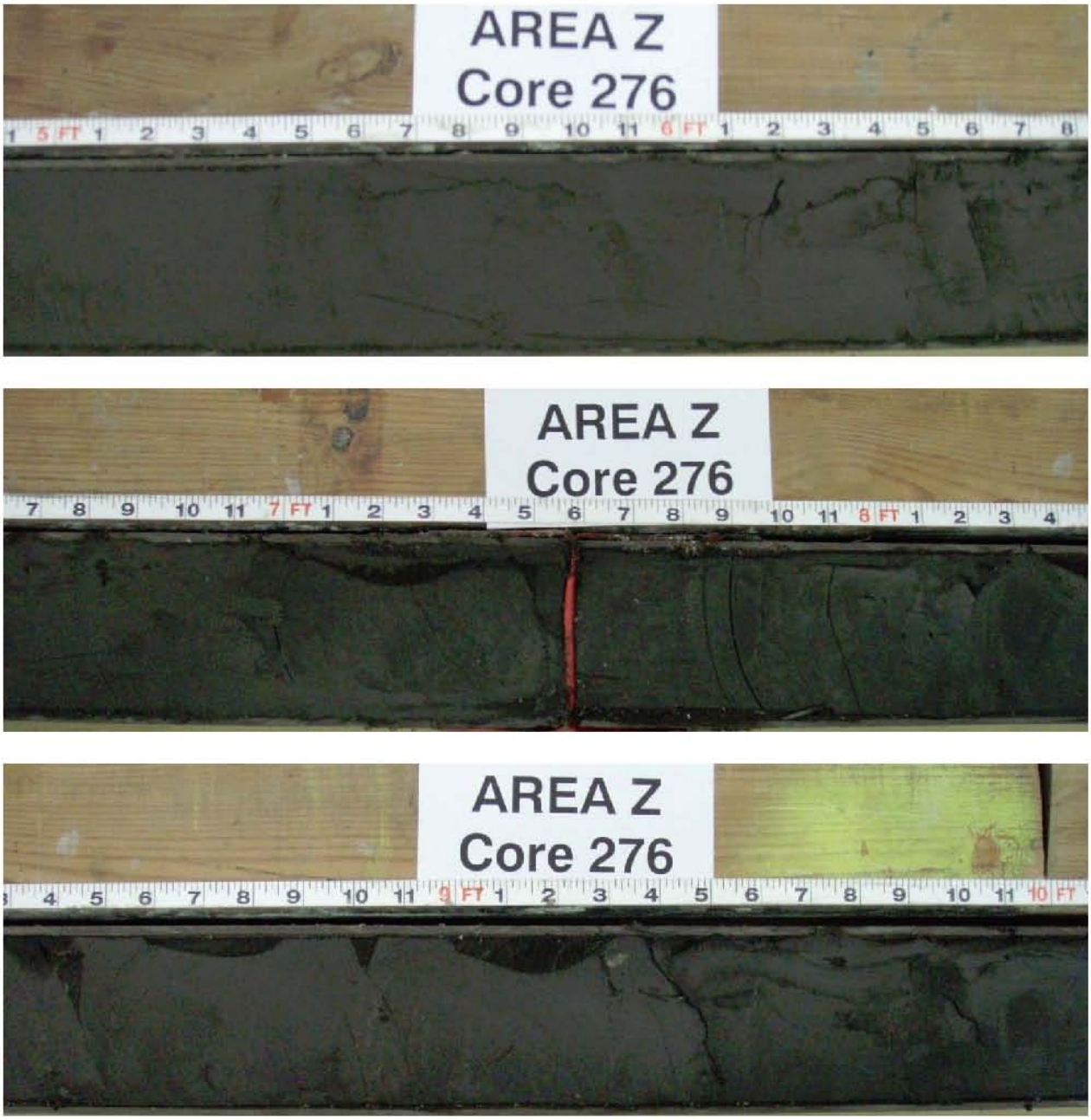
AREA Z Core 276
0 – 5 feet







AREA Z Core 276
5 – 10 feet



AREA Z Core 276
10 – 14.00 feet







AREA Z Core 277
0 – 5 feet







AREA Z Core 277
5 – 10 feet







AREA Z Core 277
10 – 15 feet







AREA Z Core 277
15 – 18.14 feet





AREA Z Core 278
0 – 5 feet







AREA Z Core 278
5 – 10 feet







AREA Z Core 278
10 – 15.50 feet







AREA Z Core 279
0 – 5 feet







AREA Z Core 279
5 – 10 feet







AREA Z Core 279
10 – 14.92







AREA Z Core 298
0- 5 feet







AREA Z Core 298
5 – 10 feet







AREA Z Core 298
10 – 14.00 feet







AREA Z Core 299
0 – 5 feet







AREA Z Core 299
5 – 10 feet







AREA Z Core 299
10 – 14.27 feet







AREA Z Core 300
0 – 5 feet



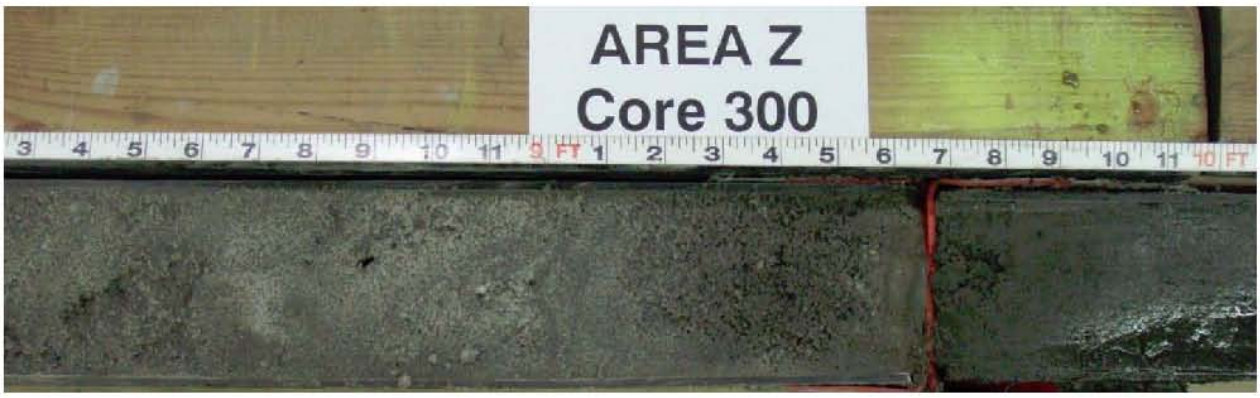




AREA Z Core 300
5 – 10 feet







AREA Z Core 300
10 – 15 feet







AREA Z Core 300
15 – 16.25 feet



AREA Z Core 301
0 – 5 feet







AREA Z Core 301
5 – 10 feet







AREA Z Core 301
10 – 15 feet







AREA Z Core 301
15 – 16.58 feet



Bogue Inlet Core BI-1
0 – 5 feet







Bogue Inlet Core BI-2
0 – 5 feet







Bogue Inlet Core BI-2

5-5.6 feet



Bogue Inlet Core BI-3
0 – 5.2 feet







Bogue Inlet Core BI-2

5-5.6 feet



Bogue Inlet Core BI-4
0 –4.9 feet







Bogue Inlet Core BI-5
0 – 3.5 feet





Bogue Inlet Core BI-2

3.5-5.6 feet



APPENDIX 5

GRAIN SIZE ANALYSIS and CARBONATE CONTENT ANALYSIS

Carteret County, NC
Sediment Analysis
Areas O,Y,Z and B1

Submitted to:

Alpine Ocean Seismic Survey, Inc.
Norwood, NJ

Submitted by:

Coastal Tech
Melbourne, Florida

April 30, 2012



Coastal Technology Corporation

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2.0 Granularmetric Curves

3.0 Granularmetric Tables

1.0 Sedimentologic Summary

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
O1	0-2.9	1	1.23	87.21	11.56	10.72	0.30	F	1.53	SW-SM	1.8	21.7	76.5	WET
	2.9-4.0	2	0.32	94.71	4.97	4.62	0.23	F	0.96	SW	1.2	22.9	75.9	WET
	4.0-8.0	3	14.94	74.86	10.20	9.60	0.99	M	2.04	SW-SM	1.6	43.8	54.6	WET
	11.0-16.0	4	11.07	82.12	6.81	6.66	0.62	M	1.55	SW-SM	0.7	14.1	85.2	WET
	16.0-18.0	5	0.34	85.29	14.37	13.22	0.26	F	1.05	SW-SM	1.2	5.7	93.1	WET
O2	0-4.0	1	1.08	88.80	10.12	9.40	0.33	F	1.52	SW-SM	2.3	18.7	79.0	WET
	4.0-12.0	2	4.91	80.06	15.03	14.11	0.66	M	1.78	SM	1.8	36.2	62.0	WET
	12.0-15.0	3	12.49	73.82	13.69	13.19	0.88	M	2.02	SM	2.2	49.0	48.8	WET
	15.0-18.8	4	0.69	81.31	18.00	17.24	0.39	F	1.52	SM	1.4	18.6	80.0	WET
O3	0-4.0	1	0.10	98.92	0.98	0.51	0.20	F	0.86	SW	0.5	9.5	90.0	DRY
	4.0-10.0	2	0.00	83.32	16.68	15.71	0.23	F	1.16	SM	1.8	15.3	82.9	WET
	10.0-13.0	3	2.79	80.93	16.28	14.93	0.41	F	1.72	SM	1.4	29.7	68.9	WET
	13.0-16.9	4	5.21	82.03	12.76	12.09	0.66	M	1.77	SM	1.8	40.4	57.8	WET
O4	0-7.5	1	0.25	62.70	37.05	34.58	0.21	F	1.16	SM	2.4	11.9	85.7	WET
	7.5-12.0	2	5.38	78.57	16.05	15.52	0.64	M	1.76	SM	2.1	55.2	42.7	WET
	12.0-16.7	3	3.09	81.45	15.46	14.52	0.57	M	1.67	SM	2.0	38.7	59.3	WET
O5	0-6.5	1	0.12	99.06	0.82	0.63	0.24	F	0.89	SW	0.6	10.9	88.5	DRY
	6.5-10	2	0.40	92.19	7.41	6.98	0.26	F	1.13	SW-SM	1.8	19.6	78.6	WET
	10-17.8	3	12.95	72.12	14.93	14.29	1.02	M	1.98	SM	2.1	48.2	49.7	WET
O6	0-3.4	1	0.27	99.56	0.17	0.14	0.28	F	0.79	SP	0.4	10.0	89.6	DRY
	3.4-5.2	2	5.35	83.95	10.70	10.26	0.37	F	1.71	SW-SM	2.1	14.5	83.4	WET
	5.2-9.0	3	3.40	96.20	0.40	0.28	0.29	F	1.14	SW	0.5	11.2	88.3	DRY
	9.0-14.0	4	1.45	98.08	0.47	0.43	0.34	F	1.15	SW	0.6	17.8	81.6	DRY
	14.0-17.2	5	1.05	85.08	13.87	13.30	0.36	F	1.54	SM	2.2	21.7	76.1	WET
O7	0-2.5	1	0.18	99.70	0.12	0.04	0.28	F	0.79	SP	0.4	8.3	91.3	DRY
	2.5-4.5	2	1.18	97.79	1.03	0.65	0.34	F	1.30	SW	0.7	20.7	78.6	DRY
	4.5-6.9	3	0.49	99.01	0.50	0.42	0.38	F	1.02	SW	0.6	14.5	84.9	DRY
	6.9-13.9	4	0.56	99.05	0.39	0.26	0.27	F	0.97	SW	0.6	11.5	87.9	DRY
O8	0-1.9	1	0.00	80.67	19.33	17.75	0.21	F	1.02	SM	2.6	13.7	83.7	WET
	1.9-4.7	2	0.78	89.00	10.22	9.51	0.27	F	1.04	SW-SM	1.6	12.9	85.5	WET
	4.7-7.5	3	0.59	75.78	23.63	22.71	0.26	F	1.37	SM	2.1	22.9	75.0	WET
	7.5-19.0	4	12.88	75.56	11.56	11.04	0.98	M	2.02	SW-SM	2.4	44.7	52.9	WET
O9	0-4.0	1	0.40	99.43	0.17	0.13	0.30	F	0.97	SW	0.7	15.7	83.6	DRY
	4.0-5.2	2	0.00	84.91	15.09	14.24	0.18	F	0.90	SM	1.8	9.3	88.9	WET
	5.2-9.5	3	0.85	87.75	11.40	10.65	0.33	F	1.51	SW-SM	1.8	32.2	66.0	WET
	9.5-18.3	4	9.39	79.15	11.46	10.85	0.88	M	1.94	SW-SM	2.4	46.5	51.1	WET
O10	0-5.0	1	1.18	98.64	0.18	0.12	0.27	F	0.99	SW	0.6	11.8	87.6	DRY
	5.0-10.0	2	0.22	99.43	0.35	0.29	0.28	F	0.93	SW	0.6	12.9	86.5	DRY
	10.0-15.0	3	0.18	99.50	0.32	0.25	0.26	F	0.82	SP	0.6	10.0	89.4	DRY
	15.0-20.0	4	0.74	99.06	0.20	0.18	0.33	F	1.01	SW	0.6	13.5	85.9	DRY
O11	0-2.0	1	2.70	96.48	0.82	0.63	0.34	F	1.35	SW	0.7	15.5	83.8	DRY
	2.0-5.0	2	0.43	99.28	0.29	0.27	0.33	F	1.07	SW	0.6	13.7	85.7	DRY
	5.0-10.0	3	0.07	99.66	0.27	0.26	0.26	F	0.83	SP	0.6	13.8	85.6	DRY
	10.0-15.0	4	1.93	97.92	0.15	0.12	0.29	F	1.09	SW	0.6	14.1	85.3	DRY

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
O12	0-5.0	1	4.59	95.09	0.32	0.26	0.45	M	1.59	SW	0.7	23.3	76.0	DRY
	5.0-9.0	2	1.32	98.39	0.29	0.21	0.32	F	1.15	SW	0.8	14.2	85.0	DRY
	9.0-14.0	3	0.34	68.50	31.16	30.21	0.20	F	0.99	SM	3.1	17.8	79.1	WET
	14.0-18.0	4	0.02	88.97	11.01	10.46	0.29	F	1.12	SW-SM	1.7	29.7	68.6	WET
O13	0-6.0	1	0.08	99.53	0.39	0.28	0.29	F	0.88	SW	0.6	11.5	87.9	DRY
	6.0-9.0	2	0.24	89.53	10.23	9.73	0.23	F	1.01	SW-SM	1.3	15.9	82.8	WET
	9.0-11.0	3	0.01	34.78	65.21	64.04	0.18	F	0.79	CL	4.3	11.0	84.7	WET
O14	0-5.0	1	0.70	98.81	0.49	0.33	0.35	F	1.15	SW	0.6	18.0	81.4	DRY
	5.0-8.5	2	0.87	98.69	0.44	0.21	0.28	F	1.17	SW	0.6	17.6	81.8	DRY
	8.5-12.0	3	17.29	82.02	0.69	0.60	1.00	M	1.96	SW w/ Gravel	0.8	39.8	59.4	DRY
O15	0-5.0	1	0.28	99.56	0.16	0.09	0.22	F	0.76	SP	0.6	9.5	89.9	DRY
	5.0-10.5	2	0.00	99.91	0.09	0.04	0.27	F	0.83	SP	0.6	10.9	88.5	DRY
	10.5-12.0	3	8.09	88.40	3.51	3.26	0.38	F	2.00	SW	1.5	33.6	64.9	WET
O16	0-2.5	1	1.85	97.76	0.39	0.33	0.32	F	1.16	SW	0.6	13.4	86.0	DRY
	2.5-4.6	2	2.60	80.73	16.67	15.89	0.25	F	1.42	SM	1.2	11.8	87.0	WET
	4.6-5.0	3	0.00	22.26	77.74	76.89	0.18	F	0.96	CL	4.0	7.7	88.3	WET
O17	0-4.0	1	0.40	96.64	2.96	2.75	0.22	F	0.81	SP	0.9	10.0	89.1	WET
	4.0-5.5	2	5.47	89.46	5.07	4.64	0.25	F	1.64	SW-SM	1.7	13.1	85.2	WET
	5.5-11.3	3	0.00	96.57	3.43	3.13	0.18	F	0.41	SP	0.7	6.2	93.1	WET
	11.3-12.0	4	18.24	67.80	13.96	12.97	0.99	M	1.82	SM w/ Gravel	2.0	34.5	63.5	WET
O18	0-6	1	1.22	98.07	0.71	0.53	0.28	F	1.10	SW	0.9	12.1	87.0	DRY
	6-12	2	0.21	99.39	0.40	0.29	0.28	F	1.02	SW	0.6	12.6	86.8	DRY
	12-18	3	0.09	80.56	19.35	18.62	0.20	F	1.05	SM	2.0	23.2	74.8	WET
O19	0-6	1	0.00	99.82	0.18	0.08	0.25	F	0.86	SW	0.6	10.6	88.8	DRY
	6-12	2	1.69	98.27	0.04	0.00	0.29	F	1.07	SW	0.6	13.5	85.9	DRY
	12-17	3	1.63	98.19	0.18	0.12	0.32	F	1.10	SW	0.7	12.8	86.5	DRY
	17-19.3	4	0.00	99.30	0.70	0.49	0.24	F	0.73	SP	0.7	9.5	89.8	DRY
O20	0-5	1	2.55	97.31	0.14	0.12	0.35	F	1.29	SW	0.6	17.8	81.6	DRY
	5-10	2	1.28	97.83	0.89	0.72	0.31	F	1.18	SW	0.8	21.2	78.0	DRY
	10-13.9	3	2.31	97.24	0.45	0.39	0.30	F	1.21	SW	0.6	9.3	90.1	DRY
O21	0-5	1	0.36	99.34	0.30	0.28	0.30	F	0.92	SW	0.6	16.2	83.2	DRY
	5-10	2	1.77	97.72	0.51	0.46	0.36	F	1.24	SW	0.6	11.7	87.7	DRY
	10-15	3	1.66	98.11	0.23	0.16	0.31	F	1.08	SW	0.7	12.3	87.0	DRY
O22	0-5	1	2.14	97.72	0.14	0.13	0.34	F	1.20	SW	0.6	16.2	83.2	DRY
	5-10	2	2.12	97.68	0.20	0.14	0.31	F	1.18	SW	0.4	12.3	87.3	DRY
	10-15	3	1.58	98.04	0.38	0.37	0.29	F	1.03	SW	0.4	11.7	87.9	DRY
	15-20	4	1.06	98.53	0.41	0.40	0.34	F	1.02	SW	0.5	14.7	84.8	DRY

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
O23	0-6	1	1.88	97.98	0.14	0.11	0.36	F	1.25	SW	0.6	13.3	86.1	WET
	6-10	2	0.08	91.77	8.15	7.82	0.19	F	0.71	SP-SM	1.0	8.0	91.0	WET
	10-15	3	0.71	82.41	16.88	16.64	0.27	F	1.06	SM	1.2	24.2	74.6	WET
	15-17.2	4	9.13	81.15	9.72	9.42	0.81	M	1.90	SW-SM	1.9	53.3	44.8	WET
O24	0-4.9	1	4.78	90.03	5.19	4.81	0.24	F	1.59	SW-SM	1.5	13.0	85.5	WET
	4.9-6.8	2	0.32	99.38	0.30	0.20	0.26	F	0.85	SP	0.5	10.4	89.1	DRY
	6.8-13.9	3	1.85	78.09	20.06	18.63	0.38	F	1.63	SM	2.3	32.9	64.8	WET
O25	0-6	1	0.90	98.65	0.45	0.36	0.33	F	1.10	SW	0.5	13.6	85.9	DRY
	6-12	2	2.05	96.99	0.96	0.83	0.33	F	1.21	SW	0.5	18.0	81.5	DRY
	12-17.9	3	1.79	98.06	0.15	0.12	0.32	F	1.17	SW	0.9	19.2	79.9	DRY
	17.9-19.5	4	0.00	93.03	6.97	6.63	0.18	F	0.80	SP-SM	1.6	9.7	88.7	WET
O26	0-5	1	5.01	94.52	0.47	0.37	0.36	F	1.62	SW	0.6	12.7	86.7	DRY
	5-9.3	2	0.97	98.79	0.24	0.21	0.30	F	0.97	SW	0.4	11.9	87.7	DRY
	9.3-13.8	3	0.35	77.82	21.83	20.37	0.23	F	1.33	SM	1.5	10.7	87.8	WET
O27	0-4	1	0.56	99.24	0.20	0.20	0.40	F	1.06	SW	0.5	16.7	82.8	DRY
	4-8	2	0.67	98.95	0.38	0.35	0.32	F	1.00	SW	0.5	12.0	87.5	DRY
	8-12.9	3	0.16	99.35	0.49	0.41	0.29	F	0.88	SW	0.5	11.8	87.7	DRY
	12.9-16.8	4	0.40	86.13	13.47	12.72	0.21	F	1.15	SM	1.8	20.3	77.9	WET
O28	0-6	1	0.59	99.29	0.12	0.09	0.28	F	0.93	SW	0.5	12.8	86.7	DRY
	6-11.6	2	0.41	99.34	0.25	0.16	0.30	F	0.95	SW	0.5	13.4	86.1	DRY
	11.6-12.9	3	0.35	76.30	23.35	22.80	0.27	F	1.13	SM	1.7	13.9	84.4	WET
O29	0-3.0	1	4.46	91.98	3.56	3.27	0.22	F	1.18	SW	1.1	11.4	87.5	WET
	3.0-4.3	2	0.57	12.62	86.81	85.36	0.21	F	1.67	ML-CL	3.4	11.2	85.4	WET
	4.3-10.0	3	1.36	82.89	15.75	14.93	0.33	F	1.51	SM	1.8	27.9	70.3	WET
	10-15.7	4	2.77	82.98	14.25	13.68	0.59	M	1.62	SM	2.1	37.7	60.2	WET
O30	0-3.3	1	5.64	92.00	2.36	2.15	0.30	F	1.72	SW	0.9	17.8	81.3	WET
	3.3-5.6	2	0.00	8.59	91.41	89.32	0.15	F	1.13	ML-CL	4.0	6.5	89.5	WET
	5.6-9.0	3	2.67	72.17	25.16	24.08	0.32	F	1.63	SM	2.3	39.0	58.7	WET
	9.0-16.0	4	2.11	81.31	16.58	16.09	0.48	M	1.67	SM	2.7	36.1	61.2	WET
O31	0-1.5	1	5.12	92.30	2.58	2.39	0.34	F	1.58	SW	1.3	29.8	68.9	WET
	1.5-4.5	2	1.25	14.84	83.91	81.10	0.24	F	2.02	ML-CL	3.0	13.5	83.5	WET
	4.5-6.0	3	0.27	73.77	25.96	24.58	0.22	F	1.15	SM	1.9	21.1	77.0	WET
O32	0-4.2	1	0.51	98.04	1.45	1.13	0.26	F	1.14	SW	1.3	14.2	84.5	DRY
	4.2-7.5	2	0.00	40.21	59.79	56.36	0.19	F	1.21	ML-CL	2.7	13.6	83.7	WET
	7.5-11.2	3	2.05	79.80	18.15	16.98	0.42	F	1.74	SM	2.4	32.3	65.3	WET
O33	0-3.5	1	0.00	95.96	4.04	3.78	0.20	F	0.70	SP	1.2	11.7	87.1	WET
	3.5-5.0	2	0.42	64.04	35.54	32.36	0.23	F	1.42	SM	2.1	14.3	83.6	WET
	5.0-9.0	3	1.62	79.62	18.76	18.12	0.42	F	1.65	SM	2.3	38.4	59.3	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
O34	0-4.0	1	0.15	99.49	0.36	0.27	0.27	F	0.96	SW	0.7	13.0	86.3	DRY
	4.0-5.9	2	1.29	92.46	6.25	5.82	0.21	F	1.18	SW-SM	1.7	8.7	89.6	WET
	5.9-8.0	3	0.36	79.31	20.33	19.03	0.24	F	1.21	SM	2.5	24.4	73.1	WET
	8.0-12.5	4	1.31	80.04	18.65	17.49	0.36	F	1.57	SM	2.4	39.2	58.4	WET
O35	0-4.9	1	1.05	98.37	0.58	0.47	0.28	F	1.07	SW	0.7	10.6	88.7	DRY
	4.9-8.0	2	4.65	85.22	10.13	9.58	0.29	F	1.70	SW-SM	1.9	25.9	72.2	WET
	8.0-10.0	3	0.48	57.02	42.50	41.82	0.21	F	1.04	SM	2.3	11.7	86.0	WET
O36	0-3.5	1	0.15	99.77	0.08	0.06	0.29	F	0.86	SW	0.6	11.8	87.6	DRY
	3.5-6.2	2	2.15	92.03	5.82	5.47	0.27	F	1.44	SW-SM	1.5	21.8	76.7	WET
	6.2-11.0	3	0.00	93.18	6.82	6.70	0.14	F	0.34	SP-SM	1.0	8.2	90.8	WET
	11.0-15.9	4	2.80	80.72	16.48	15.43	0.33	F	1.66	SM	2.3	33.9	63.8	WET
O37	0-2.0	1	0.91	98.72	0.37	0.25	0.27	F	1.08	SW	0.5	14.5	85.0	DRY
	2.0-5.0	2	2.89	94.14	2.97	2.68	0.22	F	1.38	SW	1.0	14.0	85.0	WET
	5.0-11.0	3	0.00	90.81	9.19	8.53	0.16	F	0.44	SP-SM	0.7	2.3	97.0	WET
	11.0-15.0	4	4.69	81.45	13.86	13.44	0.67	M	1.75	SM	2.2	48.2	49.6	WET
O38	0-4.0	1	1.97	97.72	0.31	0.25	0.44	M	1.37	SW	0.6	23.1	76.3	DRY
	4.0-7.0	2	0.06	99.15	0.79	0.46	0.23	F	0.95	SW	0.9	10.0	89.1	DRY
	7.0-12.0	3	0.00	20.54	79.46	77.61	0.20	F	1.27	ML-CL	2.8	7.8	89.4	WET
O39	0-4.0	1	0.59	89.12	10.29	9.29	0.20	F	0.90	SW-SM	1.0	17.9	81.1	WET
	4.0-6.0	2	4.65	83.79	11.56	10.94	0.50	M	1.79	SW-SM	1.6	31.2	67.2	WET
	6.0-11.0	3	6.27	69.98	23.75	23.33	0.86	M	1.81	SM	2.8	52.7	44.5	WET
O40	0-1.3	1	5.81	88.61	5.58	5.21	0.30	F	1.74	SW-SM	1.2	19.3	79.5	WET
	1.3-4.0	2	0.30	50.66	49.04	47.68	0.24	F	1.49	SM	1.7	9.5	88.8	WET
	4.0-11.0	3	0.87	82.26	16.87	15.85	0.29	F	1.52	SM	1.8	33.8	64.4	WET
O41	0-6.0	1	5.09	94.75	0.16	0.13	0.40	F	1.29	SW	0.5	14.8	84.7	DRY
	6.0-9.0	2	0.00	99.73	0.27	0.19	0.22	F	0.73	SP	0.8	13.1	86.1	DRY
	9.0-16.2	3	2.08	93.35	4.57	4.16	0.22	F	1.24	SW	1.1	14.4	84.5	WET
O42	0-2.0	1	1.30	98.32	0.38	0.34	0.48	M	1.11	SW	0.6	22.3	77.1	DRY
	2.0-7.5	2	0.75	83.53	15.72	15.17	0.22	F	1.11	SM	1.4	15.1	83.5	WET
	7.5-11.5	3	0.16	75.58	24.26	23.46	0.30	F	1.36	SM	2.0	27.5	70.5	WET
O43	0-4.9	1	0.85	98.84	0.31	0.23	0.31	F	1.19	SW	0.6	19.8	79.6	DRY
	4.9-10.0	2	1.33	82.64	16.03	15.25	0.25	F	1.45	SM	1.5	16.6	81.9	WET
	10.0-15.0	3	0.17	75.82	24.01	23.28	0.26	F	1.23	SM	2.3	24.2	73.5	WET
O44	0-5.0	1	1.28	89.81	8.91	8.67	0.21	F	1.03	SW-SM	0.8	13.7	85.5	WET
	5.0-9.5	2	0.15	83.53	16.32	15.61	0.24	F	1.07	SM	1.2	18.2	80.6	WET
	9.5-14.3	3	8.17	75.13	16.70	16.10	0.61	M	2.04	SM	2.3	50.8	46.9	WET

Sedimentologic Summary

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
O45	0-3.0	1	0.15	87.19	12.66	11.87	0.19	F	0.81	SM	1.0	8.8	90.2	WET
	3.0-6.7	2	0.00	88.06	11.94	10.13	0.15	F	0.62	SP-SM	1.3	1.0	97.7	WET
	6.7-10.0	3	7.24	75.12	17.64	16.97	0.68	M	1.91	SM	2.0	38.4	59.6	WET
O46	0-4.5	1	2.81	96.56	0.63	0.34	0.44	M	1.51	SW	0.7	17.2	82.1	DRY
	4.5-7.8	2	2.53	96.81	0.66	0.47	0.29	F	1.36	SW	0.7	21.8	77.5	DRY
	7.8-11.0	3	0.00	28.92	71.08	68.42	0.18	F	1.15	ML-CL	2.3	7.4	90.3	WET
O47	0-4.3	1	2.30	97.56	0.14	0.10	0.40	F	1.25	SW	0.6	19.8	79.6	DRY
	4.3-10.5	2	1.35	98.18	0.47	0.28	0.28	F	1.24	SW	0.6	15.1	84.3	DRY
	10.5-13.6	3	0.00	20.15	79.85	73.94	0.15	F	1.19	ML-CL	3.4	7.3	89.3	WET
O48	0-5.0	1	0.14	93.19	6.67	6.33	0.20	F	0.86	SW-SM	0.7	7.5	91.8	WET
	5.0-7.9	2	0.23	98.59	1.18	0.75	0.21	F	0.85	SP	0.9	11.0	88.1	DRY
	7.9-8.9	3	3.98	88.03	7.99	7.41	0.29	F	1.71	SW-SM	1.5	21.8	76.7	WET
O49	0-2.5	1	8.90	87.19	3.91	3.64	0.40	F	2.11	SW	1.1	11.3	87.6	WET
	2.5-4.0	2	0.04	62.96	37.00	34.19	0.20	F	1.02	SM	2.7	22.7	74.6	WET
	4.0-9.0	3	0.33	79.98	19.69	18.62	0.29	F	1.31	SM	2.1	34.6	63.3	WET
	9.0-11.0	4	4.26	92.51	3.23	2.86	0.51	M	1.51	SW	1.8	49.8	48.4	WET
	11.0-16.5	5	1.93	82.86	15.21	14.91	0.53	M	1.64	SM	2.3	40.7	57.0	WET
O50	0-2.0	1	0.98	72.91	26.11	24.05	0.25	F	1.40	SM	2.6	16.4	81.0	WET
	2.0-7.1	2	0.30	74.88	24.82	23.32	0.26	F	1.36	SM	3.6	26.9	69.5	WET
	7.1-9.7	3	0.52	73.74	25.74	24.71	0.35	F	1.49	SM	1.3	23.8	74.9	WET
	9.7-10.6	4	0.52	95.02	4.46	3.91	0.23	F	1.17	SW	2.3	27.1	70.6	WET
O51	0-1.5	1	1.44	75.81	22.75	20.93	0.29	F	1.64	SM	2.0	28.9	69.1	WET
	1.5-3.5	2	0.00	49.17	50.83	49.22	0.21	F	1.33	SM	3.2	17.8	79.0	WET
	3.5-9.6	3	0.68	86.99	12.33	11.15	0.26	F	1.21	SM	1.8	16.1	82.1	WET
	9.6-17.3	4	8.58	77.19	14.23	13.88	0.82	M	1.86	SM	2.4	41.8	55.8	WET
O52	0-3.0	1	0.22	76.29	23.49	23.03	0.19	F	0.69	SM	1.2	8.9	89.9	WET
	3.0-7.0	2	0.52	71.05	28.43	26.15	0.24	F	1.45	SM	2.3	15.8	81.9	WET
	7.0-13.0	3	2.29	79.02	18.69	18.18	0.40	F	1.60	SM	1.9	31.5	66.6	WET
	13.0-17.9	4	8.95	75.96	15.09	14.66	0.82	M	2.01	SM	2.3	61.5	36.2	WET
O53	0-0.3	1	10.54	83.40	6.06	5.56	0.35	F	1.66	SW-SM	1.3	15.3	83.4	WET
	0.3-3.7	2	0.00	28.70	71.30	67.64	0.16	F	1.03	ML-CL	2.8	8.8	88.4	WET
	3.7-12.0	3	3.02	73.68	23.30	21.64	0.41	F	1.82	SM	2.1	31.8	66.1	WET
	12.0-16.3	4	16.14	70.25	13.61	13.30	1.48	M	1.76	SM w/ Gravel	2.3	53.9	43.8	WET
O54	0-8.0	1	0.00	23.14	76.86	75.50	0.18	F	0.94	ML-CL	4.1	7.3	88.6	WET
	8.0-12.5	2	26.46	62.35	11.19	10.86	1.87	M	1.95	SW-SM w/ Gravel	2.4	50.0	47.6	WET
O55	0-1.0	1	1.46	94.40	4.14	3.58	0.21	F	1.06	SW	0.9	9.0	90.1	WET
	1.0-4.0	2	0.00	31.71	68.29	64.80	0.15	F	0.95	ML-CL	2.4	13.1	84.5	WET
	4.0-10.3	3	3.06	80.14	16.80	15.50	0.38	F	1.74	SM	1.8	34.5	63.7	WET
	10.3-14.5	4	11.67	76.80	11.53	11.11	0.66	M	2.13	SW-SM	2.2	38.6	59.2	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
O56	0-0.6	1	2.03	89.50	8.47	7.70	0.23	F	1.35	SW-SM	1.9	12.2	85.9	WET
	0.6-3.9	2	0.00	34.47	65.53	59.98	0.14	F	1.05	ML-CL	1.7	11.6	86.7	WET
	3.9-12.0	3	0.35	72.85	26.80	23.67	0.29	F	1.51	SM	2.1	42.5	55.4	WET
	12.0-16.5	4	9.46	75.38	15.16	14.51	0.71	M	1.87	SM	2.4	42.3	55.3	WET
O57	0-0.9	1	4.03	91.63	4.34	3.73	0.24	F	1.54	SW	1.2	18.4	80.4	WET
	0.9-3.0	2	0.00	41.37	58.63	54.28	0.16	F	1.05	ML-CL	2.2	11.6	86.2	WET
	3.0-9.0	3	0.63	81.93	17.44	15.43	0.33	F	1.55	SM	1.9	33.5	64.6	WET
	9.0-14.0	4	8.81	71.70	19.49	19.16	0.82	M	1.93	SM	1.8	44.8	53.4	WET
O58	0-2.0	1	0.80	56.42	42.78	36.89	0.21	F	1.39	SM	2.1	25.4	72.5	WET
	2.0-9.7	2	2.70	77.47	19.83	18.18	0.37	F	1.80	SM	1.6	26.0	72.4	WET
O59	0-0.6	1	3.12	94.19	2.69	2.32	0.61	M	1.84	SW	1.3	55.3	43.4	WET
	0.6-6.5	2	0.10	58.04	41.86	37.87	0.17	F	1.27	SM	2.0	13.8	84.2	WET
	6.5-8.7	3	0.27	94.92	4.81	4.25	0.30	F	1.07	SW	1.3	34.8	63.9	WET
	8.7-18.2	4	4.32	82.13	13.55	13.31	0.63	M	1.79	SM	1.8	42.0	56.2	WET
O60	0-3.5	1	0.23	74.80	24.97	23.85	0.22	F	1.14	SM	1.7	19.6	78.7	WET
	3.5-8.0	2	0.05	59.29	40.66	36.63	0.14	F	1.00	SM	2.2	7.6	90.2	WET
	8.0-13.0	3	2.23	84.64	13.13	12.39	0.37	F	1.58	SM	1.6	30.9	67.5	WET
O192	0-1.2	1	0.71	99.02	0.27	0.25	0.34	F	1.19	SW	0.4	15.9	83.7	DRY
	1.2-2	2	17.47	82.30	0.23	0.19	1.25	M	1.80	SW with gravel	0.8	44.2	55.0	DRY
	2-7	3	1.01	98.96	0.03	0.02	0.29	F	0.97	SW	0.3	10.6	89.1	DRY
	7-9.5	4	1.87	97.97	0.16	0.16	0.45	M	1.25	SW	0.5	23.6	76.0	DRY
	9.5-16.2	5	1.64	98.25	0.11	0.06	0.30	F	1.05	SW	0.4	12.5	87.1	DRY
Y66	0-1.1	1	0.00	13.81	86.19	85.48	0.16	F	0.94	ML-CL	9.2	11.5	79.3	WET
	1.1-2.3	2	11.99	81.35	6.66	6.05	0.75	M	2.11	SW-SM	2.8	20.2	77.0	WET
	2.3-3.5	3	23.72	71.67	4.61	4.30	1.59	M	2.04	SW w/ Gravel	2.3	46.7	51.0	WET
	3.5-4.9	4	10.79	81.26	7.95	7.46	0.62	M	2.09	SW-SM	2.2	18.7	79.1	WET
	4.9-7.3	5	3.81	93.53	2.66	2.60	0.51	M	1.21	SW	0.7	2.3	97.0	WET
	7.3-9.0	6	29.30	66.93	3.77	3.66	2.10	C	1.77	SW w/ Gravel	0.2	0.9	98.9	WET
Y67	0-0.9	1	20.57	75.76	3.67	3.32	1.39	M	2.01	SW w/ Gravel	4.6	41.3	54.1	WET
	0.9-2.8	2	0.00	87.02	12.98	11.97	0.20	F	1.02	SM	1.6	18.2	80.2	WET
	2.8-6.0	3	16.36	79.22	4.42	4.16	0.97	M	1.90	SW w/ Gravel	1.9	24.3	73.8	WET
	6.0-15.0	4	0.00	88.94	11.06	10.45	0.20	F	0.66	SP-SM	1.2	2.2	96.6	WET
Y68	0-0.9	1	17.70	76.10	6.20	5.77	0.87	M	1.86	SW-SM w/ Gravel	1.3	40.5	58.2	WET
	0.9-3.0	2	0.18	87.43	12.39	11.60	0.22	F	1.04	SW-SM	2.1	16.4	81.5	WET
	3.0-3.9	3	46.08	49.97	3.95	3.58	2.73	C	2.21	SW w/ Gravel	2.4	30.8	66.8	WET
	3.9-9.5	4	0.00	26.25	73.75	70.94	0.12	F	0.76	ML-CL	4.5	7.6	87.9	WET
	9.5-17.3	5	0.00	91.91	8.09	7.46	0.20	F	0.73	SP-SM	0.6	2.2	97.2	WET
Y69	0-1.8	1	3.85	83.33	12.82	11.64	0.47	M	1.74	SM	2.9	27.1	70.0	WET
	1.8-4.5	2	0.74	82.92	16.34	14.85	0.25	F	1.33	SM	1.7	17.6	80.7	WET
	4.5-6.9	3	42.13	52.17	5.70	5.36	2.51	C	2.25	SW-SM w/ Gravel	2.1	31.0	66.9	WET
	6.9-17.4	4	0.00	91.09	8.91	8.22	0.19	F	0.66	SP-SM	0.3	1.9	97.8	WET
Y70	0-7.0	1	0.14	81.58	18.28	16.71	0.20	F	1.01	SM	2.0	17.6	80.4	WET
	7.0-9.8	2	35.69	59.65	4.66	4.31	1.85	M	2.37	SW w/ Gravel	3.9	28.6	67.5	WET
	9.8-19.2	3	0.23	88.00	11.77	11.18	0.18	F	0.76	SP-SM	1.3	4.2	94.5	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Y71	0-1.1	1	2.51	85.22	12.27	11.57	0.33	F	1.72	SM	1.5	10.5	88.0	WET
	1.1-12.0	2	0.00	22.54	77.46	75.89	0.26	F	1.45	ML-CL	11.5	8.7	79.8	WET
Y72	0-0.5	1	0.00	40.13	59.87	59.43	0.21	F	0.84	ML-CL	3.5	11.8	84.7	WET
	0.5-2.0	2	37.72	58.40	3.88	3.59	2.75	C	2.02	SW w/ Gravel	1.7	25.2	73.1	WET
	2.0-6.0	3	0.00	94.57	5.43	4.96	0.19	F	0.50	SP-SM	1.2	1.0	97.8	WET
	7.0-11.9	4	0.00	85.96	14.04	11.48	0.16	F	0.55	SM	1.0	0.4	98.6	WET
Y73	0-2.0	1	31.24	66.17	2.59	2.45	2.19	C	1.91	SW w/ Gravel	1.8	43.7	54.5	WET
	2.0-5.0	2	0.00	91.25	8.75	7.90	0.18	F	0.63	SP-SM	1.1	2.6	96.3	WET
	5.0-10.0	3	0.00	90.09	9.91	9.11	0.18	F	0.62	SP-SM	0.9	1.8	97.3	WET
	10.0-16.0	4	0.00	92.64	7.36	6.84	0.19	F	0.59	SP-SM	0.8	1.7	97.5	WET
Y74	0-1.1	1	40.50	57.82	1.68	1.57	2.91	C	1.86	SW w/ Gravel	1.7	48.0	50.3	WET
	1.1-8.5	2	0.00	99.66	0.34	0.21	0.23	F	0.74	SP	0.3	4.5	95.2	DRY
	8.5-11.5	3	1.67	97.91	0.42	0.32	0.24	F	0.93	SW	0.4	6.2	93.4	DRY
	11.5-17.2	4	1.23	97.89	0.88	0.70	0.33	F	1.21	SW	0.6	14.0	85.4	DRY
Y75	0-5.0	1	0.00	99.15	0.85	0.74	0.26	F	0.56	SP	0.4	1.5	98.1	DRY
	5.0-11.0	2	0.00	99.53	0.47	0.38	0.29	F	0.61	SP	0.5	2.0	97.5	DRY
	11.0-16.8	3	0.00	93.79	6.21	5.31	0.17	F	0.57	SP-SM	0.9	2.1	97.0	WET
Y76	0-0.8	1	4.27	91.11	4.62	4.44	0.50	M	1.95	SW	1.3	10.1	88.6	WET
	0.8-4.2	2	0.27	88.94	10.79	9.90	0.17	F	0.63	SP-SM	1.1	2.2	96.7	WET
	4.2-9.0	3	0.00	91.66	8.34	7.81	0.19	F	0.67	SP-SM	0.7	1.9	97.4	WET
	9.0-15.0	4	0.00	93.33	6.67	6.19	0.21	F	0.75	SP-SM	1.0	1.9	97.1	WET
Y77	0-2.2	1	0.00	5.67	94.33	93.77	0.20	F	1.27	ML-CL	15.5	7.4	77.1	WET
	2.2-7.0	2	0.00	91.37	8.63	6.47	0.15	F	0.45	SP-SM	0.5	0.6	98.9	WET
	7.0-12.9	3	0.00	98.72	1.28	0.94	0.22	F	0.58	SP	0.2	0.3	99.5	DRY
	12.9-15.0	4	0.00	92.78	7.22	6.36	0.19	F	0.63	SP-SM	0.4	1.1	98.5	WET
Y78	0-1.1	1	42.47	56.67	0.86	0.86	3.56	C	1.86	SW w/ Gravel	6.1	20.3	73.6	WET
	1.1-7.8	2	0.00	97.42	2.58	1.90	0.19	F	0.73	SP	1.1	2.5	96.4	DRY
	7.8-14.1	3	0.00	92.12	7.88	7.15	0.16	F	0.53	SP-SM	0.8	1.7	97.5	WET
Y79	0-3.0	1	3.79	74.12	22.09	21.70	0.39	F	1.62	SM	0.8	9.7	89.5	WET
	3.0-5.0	2	0.00	20.59	79.41	79.19	0.24	F	0.90	ML-CL	4.9	6.4	88.7	WET
	5.0-13.9	3	0.00	93.54	6.46	5.86	0.17	F	0.52	SP-SM	1.0	2.3	96.7	WET
Y80	0-5.0	1	0.00	95.61	4.39	4.24	0.18	F	0.43	SP			100.0	WET
	5.0-10.0	2	0.00	95.81	4.19	3.96	0.21	F	0.57	SP	0.5	2.0	97.5	WET
	10.0-15.9	3	0.00	90.65	9.35	8.95	0.17	F	0.50	SP-SM	1.4	3.1	95.5	WET
Y81	0-5.0	1	0.19	88.04	11.77	10.91	0.19	F	0.76	SP-SM	1.5	3.2	95.3	WET
	5.0-10.0	2	0.00	91.66	8.34	7.70	0.17	F	0.57	SP-SM	1.0	1.9	97.1	WET
	10.0-13.5	3	0.00	90.50	9.50	8.86	0.18	F	0.61	SP-SM	1.1	2.0	96.9	WET
	13.5-16.1	4	0.00	87.01	12.99	12.42	0.20	F	0.70	SM	1.2	1.9	96.9	WET
Y82	0.5-6.0	1	0.00	73.19	26.81	25.98	0.19	F	0.73	SM	2.3	1.8	95.9	WET
	6.0-11.6	2	0.00	76.80	23.20	22.16	0.18	F	0.58	SM	3.1	1.2	95.7	WET
Y83	0-2.7	1	0.00	12.24	87.76	87.66	0.24	F	1.19	ML-CL	12.6	7.5	79.9	WET
	2.7-7.5	2	0.00	94.41	5.59	4.52	0.19	F	0.53	SP-SM	0.8	1.0	98.2	WET
	7.5-11.5	3	5.46	93.79	0.75	0.71	0.76	M	1.37	SW	0.3	0.9	98.8	DRY
	11.5-13.1	4	0.00	92.57	7.43	6.70	0.16	F	0.45	SP-SM	1.1	1.8	97.1	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Y84	0-2.0	1	1.57	90.56	7.87	7.54	0.25	F	1.35	SW-SM	1.5	12.5	86.0	WET
	2.0-5.0	2	0.00	95.45	4.55	4.30	0.19	F	0.43	SP	0.5	1.9	97.6	WET
	5.0-10.0	3	0.00	96.02	3.98	3.73	0.19	F	0.40	SP	0.4	1.6	98.0	WET
	10.0-14.4	4	0.00	96.17	3.83	3.63	0.19	F	0.48	SP	0.4	1.7	97.9	WET
Y85	0-1.2	1	17.98	79.92	2.10	1.89	0.56	M	2.36	SW w/ Gravel	1.0	7.8	91.2	WET
	1.2-6.0	2	0.00	97.10	2.90	2.15	0.18	F	0.66	SP	1.3	5.7	93.0	DRY
	6.0-12.0	3	0.00	97.56	2.44	1.82	0.16	F	0.53	SP	0.8	1.9	97.3	DRY
	12.0-15.0	4	0.00	92.73	7.27	6.42	0.16	F	0.49	SP-SM	1.0	2.1	96.9	WET
Y86	0.4-3.5	1	0.00	62.48	37.52	35.47	0.18	F	0.71	SM	4.2	3.2	92.6	WET
	3.5-10.0	2	0.00	26.75	73.25	72.10	0.26	F	1.09	ML-CL	19.9	9.8	70.3	WET
	10.0-13.2	3	0.00	83.25	16.75	14.18	0.14	F	0.44	SM	1.5	0.9	97.6	WET
Y87	0-5.4	1	17.90	75.42	6.68	6.34	0.68	M	2.25	SW-SM w/ Gravel	3.9	35.8	60.3	WET
	5.4-10.0	2	0.00	95.36	4.64	4.33	0.18	F	0.41	SP	0.5	1.8	97.7	WET
	10.0-13.0	3	0.00	98.77	1.23	0.95	0.19	F	0.42	SP	0.5	1.2	98.3	DRY
Y88	0-5.0	1	5.13	87.91	6.96	6.10	0.37	F	1.95	SW-SM	0.7	36.5	62.8	WET
	5.0-7.0	2	0.28	94.17	5.55	4.66	0.16	F	0.91	SP-SM	0.5	8.2	91.3	WET
	7.0-9.3	3	19.89	77.62	2.49	2.23	1.17	M	2.14	SW w/ Gravel	0.8	21.2	78.0	WET
Y89	0-2.0	1	7.04	92.54	0.42	0.35	0.58	M	1.84	SW	1.2	14.7	84.1	DRY
	2.0-8.0	2	0.00	4.15	95.85	95.50	0.20	F	1.06	PT	29.6	9.3	61.1	WET
	8.0-12.0	3	0.00	77.51	22.49	20.37	0.15	F	0.49	SM	1.0	1.0	98.0	WET
Y90	0-0.7	1	0.00	90.83	9.17	8.42	0.19	F	0.62	SP-SM	1.0	1.6	97.4	WET
	0.7-4.0	2	2.73	96.88	0.39	0.29	0.36	F	1.10	SW	0.3	0.8	98.9	DRY
	4.0-8.0	3	23.76	75.74	0.50	0.42	1.28	M	1.99	SW w/ Gravel	0.4	0.7	98.9	DRY
	8.0-11.0	4	0.07	98.57	1.36	1.13	0.19	F	0.45	SP	0.4	1.2	98.4	DRY
	11.0-14.0	5	0.00	95.98	4.02	3.81	0.18	F	0.41	SP	0.3	1.4	98.3	WET
Y91	0-2.7	1	2.43	74.25	23.32	20.98	0.22	F	1.73	SM	2.0	20.2	77.8	WET
	2.7-8.0	2	20.15	74.09	5.76	5.10	0.90	M	2.38	SW-SM w/ Gravel	1.2	30.8	68.0	WET
	8.0-9.5	3	1.68	90.40	7.92	5.75	0.16	F	1.15	SW-SM	0.3	7.7	92.0	WET
	9.5-11.0	4	28.19	68.08	3.73	3.37	1.79	M	2.11	SW w/ Gravel	1.5	64.7	33.8	WET
	11.0-14.0	5	0.00	96.24	3.76	3.56	0.19	F	0.42	SP	0.6	1.6	97.8	WET
Y92	0-8.0	1	0.00	7.16	92.84	90.74	0.12	F	1.06	ML-CL	7.2	5.2	87.6	WET
	8.0-9.5	2	55.04	40.23	4.73	4.46	3.32	C	2.37	GW	1.0	1.4	97.6	WET
	9.5-16.0	3	5.79	89.40	4.81	4.30	0.31	F	1.61	SW	0.6	12.8	86.6	WET
Y93	0-7.0	1	0.00	39.84	60.16	58.61	0.21	F	0.96	ML-CL	6.1	4.8	89.1	WET
	7.0-9.0	2	0.00	78.52	21.48	17.69	0.14	F	0.62	SM	2.8	1.2	96.0	WET
	9.0-11.8	3	0.15	84.17	15.68	12.44	0.14	F	0.67	SM	0.8	0.8	98.4	WET
Y94	0-1.5	1	0.35	86.16	13.49	12.68	0.31	F	1.41	SM	1.9	13.8	84.3	WET
	1.5-4.0	2	21.46	72.37	6.17	5.86	1.51	M	2.10	SW-SM w/ Gravel	1.7	22.3	76.0	WET
	4.0-5.5	3	1.40	84.87	13.73	13.09	0.40	F	1.45	SM	1.0	5.5	93.5	WET
	5.5-16.2	4	0.00	27.04	72.96	71.89	0.36	F	1.54	ML-CL	12.1	7.7	80.2	WET
Y95	0-2.6	1	21.08	72.48	6.44	6.16	1.65	M	1.95	SW-SM w/ Gravel	2.9	10.9	86.2	WET
	2.6-7.9	2	0.07	95.58	4.35	3.98	0.31	M	0.83	SP	1.8	0.9	97.3	WET
	7.9-14.0	3	0.00	93.35	6.65	6.15	0.22	F	0.78	SP-SM	1.0	1.4	97.6	WET
	14.0-17.1	4	4.51	87.48	8.01	6.93	0.25	F	1.64	SW-SM	1.0	10.9	88.1	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Y96	0-2.4	1	22.68	74.16	3.16	2.94	1.28	M	2.17	SW w/ Gravel	4.8	13.3	81.9	WET
	2.4-9.1	2	0.00	38.33	61.67	59.05	0.21	F	1.09	ML-CL	6.3	4.1	89.6	WET
	9.1-12.1	3	0.00	93.11	6.89	6.41	0.17	F	0.46	SP-SM	1.0	1.0	98.0	WET
Y97	0-2.7	1	32.83	63.86	3.31	3.07	2.75	C	1.94	SW w/ Gravel	2.2	34.3	63.5	WET
	2.7-10.0	2	0.00	91.01	8.99	8.51	0.19	F	0.64	SP-SM	1.1	1.8	97.1	WET
	10.0-16.0	3	0.00	90.15	9.85	9.01	0.22	F	0.81	SP-SM	1.0	2.4	96.6	WET
Y98	0-1.9	1	24.60	71.02	4.38	4.09	1.59	M	2.21	SW w/ Gravel	2.7	17.5	79.8	WET
	1.9-8.0	2	0.00	50.33	49.67	43.81	0.16	F	1.38	SM	7.6	5.2	87.2	WET
	8.0-16.1	3	0.00	84.77	15.23	14.71	0.25	F	0.80	SM	6.3	2.6	91.1	WET
Y101	0-2.5	1	16.11	63.13	20.76	18.83	0.74	M	2.23	SM w/ Gravel	7.5	6.0	86.5	WET
	2.5-9.0	2	0.00	3.31	96.69	96.49	0.33	F	1.40	ML-CL	13.1	11.7	75.2	WET
	9.0-16.0	3	0.00	91.77	8.23	6.62	0.17	F	0.59	SP-SM	0.8	0.8	98.4	WET
Y103	0-4.0	1	0.00	87.10	12.90	10.91	0.19	F	0.72	SM	0.0	1.2	98.8	WET
	4.0-7.0	2	29.89	69.48	0.63	0.55	1.36	M	2.17	SW w/ Gravel	0.3	0.6	99.1	WET
	7.0-10.0	3	0.00	91.36	8.64	7.65	0.16	F	0.54	SP-SM	0.8	1.2	98.0	WET
	10.0-16.3	4	0.00	90.29	9.71	8.91	0.18	F	0.60	SP-SM	1.0	1.5	97.5	WET
Y107	0-8.5	1	0.00	12.01	87.99	87.86	0.47	M	1.41	ML-CL	10.8	9.4	79.8	WET
	8.5-10.1	2	0.00	93.84	6.16	5.37	0.19	F	0.46	SP-SM	1.5	0.6	97.9	WET
Y110	0-1.1	1	20.84	78.85	0.31	0.21	0.71	M	2.21	SW w/ Gravel	1.1	13.5	85.4	DRY
	1.1-5.5	2	6.14	93.23	0.63	0.58	0.54	M	1.34	SW	0.4	1.0	98.6	DRY
	5.5-8.0	3	0.00	91.07	8.93	8.12	0.16	F	0.45	SP-SM	0.6	1.6	97.8	WET
	8.0-14.2	4	0.00	95.42	4.58	4.01	0.15	F	0.40	SP	0.7	1.8	97.5	WET
Y114	0-0.75	1	23.71	74.58	1.71	1.60	0.97	M	2.30	SW w/ Gravel	1.4	23.3	75.3	WET
	0.75-10.33	2	0.00	9.65	90.35	89.96	0.31	F	1.42	ML-CL	15.6	11.3	73.1	WET
Y115	0-5.2	1	0.00	82.10	17.90	15.70	0.16	F	0.47	SM	0.8	0.9	98.3	WET
	5.2-8.0	2	20.55	77.67	1.78	1.74	0.97	M	1.40	SW w/ Gravel	0.4	0.7	98.9	WET
	8.0-10.25	3	0.00	98.42	1.58	1.56	0.28	F	0.54	SP	0.3	0.6	99.1	WET
	10.25-14.25	4	0.00	93.16	6.84	6.39	0.17	F	0.48	SP-SM	0.4	1.7	97.9	WET
Y119	0-1.5	1	1.56	84.05	14.39	14.16	0.29	F	1.53	SM	4.9	9.5	85.6	WET
	1.5-12.0	2	0.31	88.02	11.67	11.18	0.21	F	0.86	SW-SM	1.3	1.3	97.4	WET
	12.0-16.17	3	0.12	85.55	14.33	13.94	0.23	F	0.90	SM	4.1	2.1	93.8	WET
Y120	0-1.0	1	42.35	56.08	1.57	1.46	1.93	M	2.43	SW w/ Gravel	2.0	8.0	90.0	WET
	1.0-12.0	2	0.00	96.67	3.33	3.16	0.23	F	0.73	SP	0.3	1.5	98.2	WET
	12.0-16.17	3	0.00	92.04	7.96	7.36	0.17	F	0.45	SP-SM	0.9	2.1	97.0	WET
Y121	0-0.4	1	8.91	89.48	1.61	1.50	0.42	F	1.89	SW	0.7	8.3	91.0	WET
	0.4-6.0	2	0.00	54.08	45.92	44.58	0.31	F	1.45	SM	12.9	6.5	80.6	WET
	6.0-8.4	3	0.00	93.81	6.19	5.10	0.17	F	0.54	SP-SM	1.0	1.0	98.0	WET
	8.4-10.75	4	1.31	95.17	3.52	3.28	0.31	F	1.16	SW	0.8	0.8	98.4	WET
Y122	0-5.0	1	0.00	76.58	23.42	22.62	0.19	F	0.55	SM	2.5	2.2	95.3	WET
	5.0-10.0	2	0.00	94.31	5.69	5.33	0.29	F	0.79	SP-SM	0.6	0.7	98.7	WET
	10.0-15.75	3	0.00	96.01	3.99	3.69	0.21	F	0.59	SP	0.5	0.8	98.7	WET
Y126	0-6.3	1	8.63	81.74	9.63	9.12	0.55	M	2.07	SW-SM	2.6	20.5	76.9	WET
	6.3-11.5	2	0.97	87.29	11.74	11.14	0.21	F	0.98	SW-SM	1.2	2.0	96.8	WET
	11.5-16.2	3	0.00	92.80	7.20	6.64	0.19	F	0.63	SP-SM	1.0	1.7	97.3	WET
Y129	0-2.8	1	21.85	70.80	7.35	7.03	1.16	M	2.22	SW-SM w/ Gravel	2.0	25.8	72.2	WET
	2.8-10.5	2	0.00	91.87	8.13	7.45	0.19	F	0.68	SP-SM	1.1	1.9	97.0	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Y132	0-0.25	1	1.87	19.57	78.56	78.22	0.73	M	1.89	CL	16.8	18.1	65.1	WET
	0.25-2.3	2	32.21	64.35	3.44	3.30	2.33	C	1.90	SW w/ Gravel	2.2	37.9	59.9	WET
	2.3-10.0	3	0.00	91.10	8.90	8.15	0.18	F	0.59	SP-SM	1.2	2.3	96.5	WET
	10.0-16.2	4	0.00	92.39	7.61	6.82	0.20	F	0.67	SP-SM	1.0	2.1	96.9	WET
Y135	0-0.67	1	3.15	88.15	8.70	8.35	0.30	F	1.43	SW-SM	1.5	15.3	83.2	WET
	0.67-1.58	2	35.06	60.48	4.46	4.26	2.71	C	1.98	SW w/ Gravel	1.8	19.8	78.4	WET
	1.58-8.0	3	1.55	90.08	8.37	7.87	0.24	F	1.10	SW-SM	1.1	2.7	96.2	WET
	8.0-16.0	4	0.00	90.84	9.16	8.46	0.19	F	0.64	SP-SM	1.0	1.8	97.2	WET
Y136	0-1.17	1	41.89	56.69	1.42	1.37	2.41	C	2.18	SW w/ Gravel	1.7	31.0	67.3	WET
	1.17-7.0	2	0.48	89.51	10.01	9.08	0.19	F	0.96	SW-SM	2.1	6.6	91.3	WET
	7.0-15.9	3	0.00	89.83	10.17	9.49	0.19	F	0.65	SP-SM	1.1	2.0	96.9	WET
Y141	0-1.83	1	31.57	67.36	1.07	1.02	2.41	C	1.78	SW w/ Gravel	1.3	39.4	59.3	WET
	1.83-7.42	2	2.74	94.83	2.43	2.27	0.22	F	1.19	SW	0.5	9.5	90.0	WET
	7.42-11.92	3	0.00	91.60	8.40	7.56	0.16	F	0.56	SP-SM	0.8	1.9	97.3	WET
Y153	0-5.17	1	3.63	90.24	6.13	5.02	0.21	F	1.59	SW-SM	0.5	16.3	83.2	WET
	5.17-9.0	2	31.43	65.60	2.97	2.62	1.22	M	2.47	SW w/ Gravel	1.0	48.0	51.0	WET
	9.0-14.17	3	0.30	95.47	4.23	4.07	0.20	F	0.51	SP	0.6	2.1	97.3	WET
Y154	0-3.0	1	5.20	82.96	11.84	10.37	0.30	F	1.85	SW-SM	0.9	20.3	78.8	WET
	3.0-9.75	2	13.81	81.35	4.84	4.28	0.95	M	2.25	SW	1.0	64.2	34.8	WET
	9.75-13.58	3	16.20	78.67	5.13	4.75	0.56	M	2.39	SW-SM w/ Gravel	1.8	14.2	84.0	WET
	13.58-14.17	4	0.09	94.98	4.93	4.72	0.19	F	0.63	SP	0.5	2.5	97.0	WET
Y156	0-0.67	1	10.46	74.30	15.24	13.86	0.54	M	2.29	SM	1.4	48.7	49.9	WET
	0.67-4.75	2	16.48	74.01	9.51	8.37	0.51	M	2.57	SW-SM w/ Gravel	1.0	30.7	68.3	WET
	4.75-8.33	3	19.54	77.19	3.27	2.96	0.85	M	2.47	SW w/ Gravel	1.0	46.7	52.3	WET
	8.33-14.75	4	0.00	96.16	3.84	3.65	0.19	F	0.48	SP	0.5	3.8	95.7	WET
Y157	0-2.17	1	22.57	72.38	5.05	4.73	0.91	M	2.29	SW-SM w/ Gravel	0.9	46.0	53.1	WET
	2.17-5.0	2	4.71	80.64	14.65	11.82	0.21	F	1.79	SM	1.4	11.1	87.5	WET
	5.0-8.67	3	12.69	75.78	11.53	9.95	0.48	M	2.54	SW-SM	1.5	33.5	65.0	WET
	8.67-10.92	4	29.64	65.13	5.23	4.56	1.17	M	2.66	SW-SM w/ Gravel	1.0	42.6	56.4	WET
Y158	0-2.25	1	4.79	82.96	12.25	10.77	0.23	F	1.64	SM	0.7	4.8	94.5	WET
	2.25-8.67	2	11.03	78.10	10.87	9.29	0.41	F	2.35	SW-SM	1.2	29.4	69.4	WET
	8.67-10.92	3	19.83	77.16	3.01	2.73	1.35	M	2.29	SW w/ Gravel	1.3	59.2	39.5	WET
	10.92-15.0	4	2.26	91.42	6.32	5.22	0.21	F	1.47	SW-SM	0.6	8.5	90.9	WET
Y160	0-1.67	1	10.67	77.78	11.55	11.33	0.57	M	2.01	SW-SM	3.7	27.5	68.8	WET
	1.67-4.5	2	3.63	82.20	14.17	13.94	0.42	F	1.44	SM	1.6	18.2	80.2	WET
	4.5-11.0	3	30.57	65.93	3.50	3.32	1.27	M	2.51	SW w/ Gravel	0.8	29.4	69.8	WET
	11.0-15.0	4	10.91	78.25	10.84	9.40	0.49	M	2.35	SW-SM	1.3	36.2	62.5	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Z165	0-1.58	1	3.64	82.59	13.77	12.95	0.36	F	1.66	SM	2.8	22.4	74.8	WET
	1.58-7.42	2	0.18	89.63	10.19	8.84	0.17	F	0.82	SP-SM	1.4	5.5	93.1	WET
	8.08-11.42	3	0.00	95.47	4.53	4.21	0.25	F	0.46	SP	0.3	1.1	98.6	WET
	11.42-14.17	4	0.00	97.68	2.32	2.10	0.28	F	0.48	SP	1.2	1.5	97.3	WET
Z166	0-0.58	1	4.58	91.86	3.56	3.34	0.32	F	1.50	SW	1.1	10.6	88.3	WET
	0.58-1	2	21.64	76.11	2.25	2.12	1.15	M	2.11	SW with gravel	1.2	27.8	71.0	WET
	1-3.42	3	9.38	79.15	11.47	11.13	0.70	M	2.03	SP-SM	2.1	28.8	69.1	WET
	3.42-15	4	0.03	24.43	75.54	73.62	0.15	F	1.02	ML-CL	7.8	5.2	87.0	WET
Z167	0-2.42	1	10.65	81.84	7.51	7.24	0.98	M	1.87	SW-SM	1.9	25.0	73.1	WET
	2.42-11.67	2	0.00	29.38	70.62	68.71	0.35	F	1.45	ML-CL	12.9	5.8	81.3	WET
	11.67-14.17	3	0.38	97.92	1.70	1.66	0.40	F	1.00	SW	0.4	0.7	98.9	WET
	14.17-15.58	4	0.00	86.02	13.98	12.04	0.16	F	0.46	SM	0.7	1.1	98.2	WET
Z168	0-3.75	1	6.36	82.74	10.90	10.61	0.49	M	1.93	SW-SM	4.6	15.8	79.6	WET
	3.75-7.83	2	0.00	26.83	73.17	71.91	0.19	F	0.94	ML-CL	3.7	2.3	94.0	WET
	7.83-10.42	3	0.20	92.88	6.92	6.05	0.18	F	0.55	SP-SM	0.8	0.9	98.3	WET
	10.42-14.75	4	0.00	99.69	0.31	0.26	0.28	F	0.56	SP	0.3	0.7	99.0	DRY
Z169	0-4.33	1	4.61	81.37	14.02	13.40	0.44	M	1.72	SM	2.5	12.0	85.5	WET
	4.33-5.08	2	2.18	79.36	18.46	17.74	0.32	F	1.47	SM	1.7	1.7	96.6	WET
	5.08-9.58	3	5.70	87.26	7.04	6.59	0.68	M	1.44	SW-SM	0.8	1.5	97.7	WET
	9.58-15.17	4	15.29	83.61	1.10	0.94	1.09	M	1.88	SW with gravel	0.5	0.9	98.6	DRY
Z170	0-0.75	1	1.23	86.34	12.43	11.59	0.22	F	1.12	SM	2.0	8.7	89.3	WET
	0.75-1.42	2	34.84	60.65	4.51	4.39	2.87	C	1.86	SW with gravel	2.1	8.6	89.3	WET
	1.42-13.75	3	0.00	13.66	86.34	84.07	0.12	F	1.01	ML-CL	9.3	6.2	84.5	WET
	13.75-16	4	2.11	97.56	0.33	0.28	0.42	F	1.15	SW	0.5	0.9	98.6	DRY
Z171	0-2.17	1	12.03	82.64	5.33	5.14	0.52	M	1.81	SW-SM	1.9	19.9	78.2	WET
	2.17-4.42	2	19.90	78.96	1.14	0.99	1.34	M	2.08	SW	0.8	3.4	95.8	DRY
	4.42-11	3	0.00	87.88	12.12	11.53	0.19	F	0.69	SM	1.1	1.8	97.1	WET
	11-16	4	0.00	99.69	0.31	0.21	0.26	F	0.50	SP	0.4	0.9	98.7	DRY
Z172	0.58-1.42	1	33.61	59.59	6.80	6.64	1.60	M	2.61	SW-SM w/ gravel	1.6	6.2	92.2	WET
	1.42-5	2	0.15	90.21	9.64	9.08	0.20	F	0.73	SP-SM	1.2	1.5	97.3	WET
	5-10	3	0.00	90.26	9.74	9.27	0.21	F	0.78	SP-SM	0.7	1.2	98.1	WET
	10-16.5	4	0.00	90.52	9.48	8.79	0.19	F	0.60	SP-SM	1.2	2.2	96.5	WET
Z173	0-7	1	0.62	84.73	14.65	12.96	0.16	F	0.99	SM	1.8	13.7	84.4	WET
	7-8.33	2	4.20	87.97	7.83	7.69	0.75	M	1.49	SW-SM	0.9	3.8	95.2	WET
	8.33-12.42	3	0.25	93.66	6.09	6.04	0.36	F	0.85	SP-SM	1.5	0.8	97.8	WET
	12.42-16.25	4	0.00	5.92	94.08	91.97	0.11	F	0.82	ML-CL	4.3	6.8	88.9	WET
Z174	0-7.83	1	11.81	86.77	1.42	1.34	0.35	F	2.05	SW	1.1	11.1	87.8	WET
	7.83-10	2	0.00	80.36	19.64	19.13	0.35	F	0.80	SM	1.5	1.6	97.0	WET
	10-13.42	3	0.00	86.10	13.90	13.65	0.25	F	0.56	SM	1.1	1.2	97.7	WET
	13.42-16.25	4	0.00	84.29	15.71	15.39	0.36	F	0.80	SM	1.0	1.1	97.9	WET

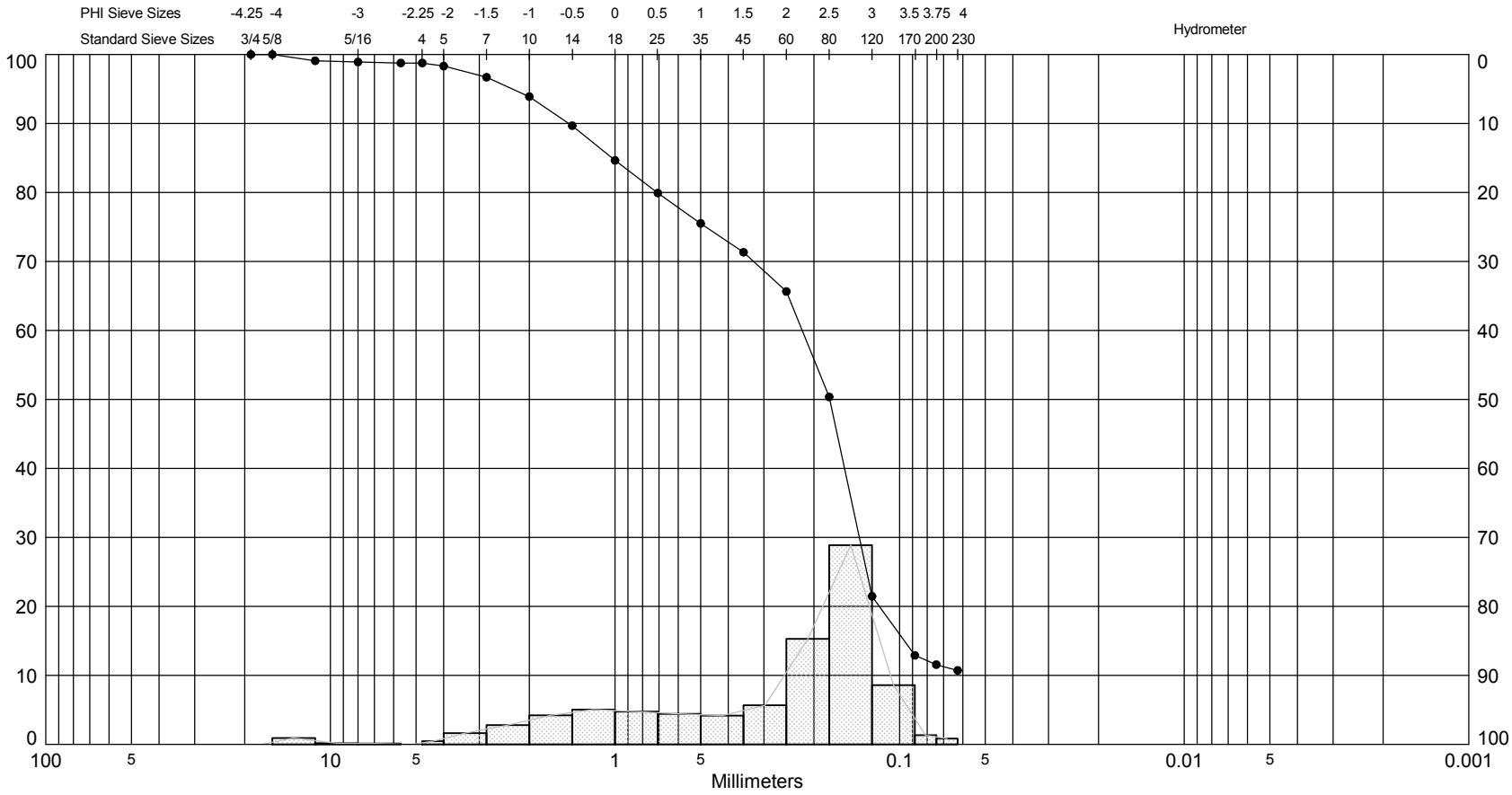
Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Z175	0-1	1	16.25	67.42	16.33	16.00	0.97	M	2.10	SM with gravel	1.5	21.3	77.3	WET
	1-9	2	0.00	1.98	98.02	97.77	0.31	F	1.58	ML-CL	10.2	7.8	82.1	WET
	9.33-11	3	2.42	80.57	17.01	15.67	0.28	F	1.44	SM	21.4	3.9	74.7	WET
	11-13.92	4	0.18	88.82	11.00	9.99	0.23	F	0.87	SW-SM	1.1	1.0	98.0	WET
Z176	0-1.58	1	10.16	87.40	2.44	2.28	0.55	M	1.90	SW	1.3	11.3	87.4	WET
	1.58-2.58	2	0.00	20.20	79.80	79.17	0.49	M	1.80	ML-CL	7.8	7.4	84.8	WET
	2.58-9	3	3.28	71.10	25.62	24.88	0.47	M	1.73	SM	6.9	4.8	88.2	WET
	9-13.75	4	0.00	1.82	98.18	97.46	0.17	F	1.39	ML-CL	15.3	6.1	78.6	WET
Z177	0-1.83	1	16.76	74.21	9.03	8.81	1.27	M	1.96	SW-SM w/gravel	2.2	38.7	59.0	WET
	1.83-3.08	2	0.00	16.44	83.56	82.87	0.25	F	1.56	ML-CL	6.4	4.6	89.0	WET
	3.08-4.17	3	46.74	51.43	1.83	1.69	2.83	C	2.05	SW with gravel	0.2	0.3	99.5	WET
	4.17-5.08	4	0.42	15.87	83.71	83.02	0.20	F	1.38	ML-CL	23.4	5.2	71.5	WET
	5.08-16.17	5	0.00	95.90	4.10	3.58	0.19	F	0.56	SP	1.3	1.0	97.8	WET
Z178	0-2.05	1	4.16	84.50	11.34	10.77	0.34	F	1.61	SW-SM	4.0	16.2	79.8	WET
	2.05-12.92	2	0.00	21.24	78.76	73.20	0.10	F	0.63	ML-CL	7.0	3.9	89.1	WET
	12.92-15.42	3	0.00	87.76	12.24	11.45	0.20	F	0.43	SM	0.7	1.9	97.4	WET
	15.42-16.08	4	0.00	92.28	7.72	7.11	0.19	F	0.39	SP-SM	0.6	2.4	97.1	WET
Z179	0-3.08	1	2.11	88.28	9.61	9.37	0.40	F	1.50	SW-SM	5.3	11.3	83.5	WET
	3.08-5.5	2	0.46	93.29	6.25	6.10	0.29	F	0.99	SW-SM	1.0	9.2	89.8	WET
	5.5-6.75	3	0.24	42.32	57.44	56.08	0.25	F	1.49	ML-CL	5.9	5.5	88.6	WET
	6.75-10.08	4	15.84	81.34	2.82	2.73	1.27	M	1.78	SW with gravel	1.5	0.6	98.0	WET
Z180	0-0.25	1	7.82	89.39	2.79	2.64	0.48	M	1.85	SW	2.1	14.2	83.7	WET
	0.25-2.42	2	0.01	91.67	8.32	7.76	0.19	F	0.81	SP-SM	2.0	8.3	89.7	WET
	2.42-9.5	3	0.00	5.20	94.80	94.66	0.35	F	1.58	ML-CL	14.7	10.3	75.0	WET
Z181	0-2	1	32.78	63.96	3.26	3.08	2.53	C	1.77	SW with gravel	3.1	31.6	65.3	WET
	2-3.5	2	19.66	71.97	8.37	8.05	0.98	M	2.28	SW-SM w/gravel	1.8	17.8	80.4	WET
	3.5-14.8	3	0.00	96.87	3.13	2.56	0.21	F	0.62	SP	0.1	1.4	98.6	DRY
	14.8-16.62	4	0.42	97.16	2.42	1.98	0.32	F	1.12	SW	0.7	2.2	97.0	DRY
Z185	0-3.08	1	0.90	87.54	11.56	10.12	0.27	F	1.44	SW-SM	2.1	18.2	79.8	WET
	3.08-4.92	2	9.90	81.55	8.55	8.10	0.69	M	2.00	SW-SM	1.5	12.6	85.9	WET
	4.92-10	3	1.17	43.26	55.57	51.60	0.27	F	1.81	ML-CL	7.5	4.5	88.0	WET
	10-16.25	4	0.00	31.04	68.96	66.23	0.35	F	1.69	ML-CL	8.6	6.9	84.5	WET
Z186	0-0.92	1	0.47	96.24	3.29	3.00	0.27	F	1.02	SW	0.9	10.3	88.8	WET
	0.92-5.58	2	1.99	83.87	14.14	12.91	0.32	F	1.57	SM	2.4	19.7	77.9	WET
	5.58-10.17	3	0.00	97.48	2.52	2.09	0.26	F	0.77	SP	1.1	1.3	97.6	DRY
	10.17-14.62	4	0.00	98.94	1.06	0.91	0.30	F	0.54	SP	0.3	1.1	98.7	DRY
Z191	0-0.83	1	11.60	87.90	0.50	0.47	1.08	M	1.56	SW	1.6	25.5	72.9	DRY
	0.83-2.17	2	0.63	83.00	16.37	15.96	0.41	F	1.31	SM	3.1	17.6	79.4	WET
	2.17-3.17	3	36.38	62.08	1.54	1.46	3.29	C	1.53	SW with gravel	1.5	8.6	89.9	WET
	3.17-10.58	4	0.00	40.70	59.30	57.69	0.32	F	1.57	ML-CL	21.4	8.5	70.1	WET
	10.58-12.75	5	0.00	95.86	4.14	3.09	0.28	F	0.83	SP	0.5	0.5	99.0	DRY

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Z193	0-2.75	1	0.04	82.90	17.06	15.34	0.17	F	0.81	SM	2.2	10.8	87.0	WET
	2.75-7.75	2	35.07	64.28	0.65	0.53	1.78	M	2.12	SW with gravel	1.2	26.9	71.9	DRY
	7.75-8.17	3	3.67	78.24	18.09	17.83	0.51	M	1.70	SM	2.9	3.1	94.0	WET
	8.17-9	4	0.00	15.32	84.68	84.00	0.18	F	1.14	ML-CL	24.1	7.1	68.8	WET
	9-10.08	5	0.00	87.97	12.03	9.12	0.15	F	0.64	SM	0.9	0.8	98.4	WET
	11.33-17.33	6	0.00	65.67	34.33	31.37	0.14	F	0.48	SM	1.9	1.7	96.4	WET
Z200	0-2.8	1	26.25	72.82	0.93	0.78	1.52	M	2.10	SW with gravel	1.4	31.1	67.5	DRY
	2.8-5.17	2	0.81	89.11	10.08	8.47	0.15	F	0.78	SP-SM	1.3	5.8	92.8	WET
	5.17-14.5	3	0.00	7.12	92.88	92.49	0.13	F	0.78	CL	5.7	8.1	86.2	WET
	14.5-16.83	4	0.13	91.28	8.59	8.26	0.53	M	0.82	SP-SM	1.3	2.9	95.8	WET
	16.83-17.25	5	28.04	65.99	5.97	5.64	2.43	C	1.76	SW-SM w/gravel	2.8	3.7	93.5	WET
Z213	0-7	1	1.71	90.25	8.04	7.04	0.23	F	1.22	SW-SM	1.1	12.0	86.9	WET
	7-9.17	2	12.37	84.07	3.56	3.24	0.90	M	1.90	SW	1.1	36.6	62.3	WET
	9.17-11.75	3	23.99	64.99	11.02	10.74	1.18	M	2.10	SW-SM w/gravel	1.5	31.4	67.1	WET
	11.75-13.5	4	14.68	79.91	5.41	5.12	0.86	M	1.93	SW-SM	1.4	55.4	43.3	WET
Z214	0-3.75	1	0.55	93.11	6.34	5.44	0.23	F	1.17	SW-SM	0.8	8.1	91.0	WET
	3.75-4.58	2	12.73	86.66	0.61	0.54	1.61	M	1.35	SW	1.4	13.8	84.8	WET
	4.58-7.33	3	0.43	69.43	30.14	27.34	0.17	F	1.04	SM	3.1	17.1	79.8	WET
	7.33-9.83	4	9.13	87.56	3.31	3.12	0.75	M	1.79	SW	1.2	35.2	63.6	WET
	9.83-16.75	5	3.78	84.74	11.48	10.97	0.31	F	1.55	SW-SM	1.5	16.2	82.3	WET
Z215	0-4	1	0.42	93.55	6.03	5.53	0.23	F	0.97	SW-SM	1.1	8.3	90.6	WET
	4-9.17	2	16.09	72.27	11.64	10.69	0.67	M	2.13	SW-SM w/gravel	2.0	14.5	83.6	WET
	9.17-10.33	3	0.00	13.88	86.12	84.41	0.12	F	0.97	ML-CL	5.5	7.7	86.8	WET
	10.33-11.58	4	15.12	68.55	16.33	15.46	1.10	M	2.05	SM w/gravel	2.4	7.2	90.4	WET
	11.58-17.17	5	0.01	89.89	10.10	9.69	0.25	F	0.70	SP-SM	0.9	1.7	97.4	WET
Z231	0-4.17	1	1.37	87.39	11.24	9.82	0.22	F	1.30	SW-SM	0.6	11.6	87.8	WET
	4.17-5.33	2	19.92	73.89	6.19	6.01	1.36	M	2.06	SW-SM w/gravel	11.9	22.0	66.1	WET
	5.33-10.33	3	0.00	90.63	9.37	8.78	0.21	F	0.61	SP-SM	1.9	11.9	86.2	WET
Z232	0-3.83	1	5.63	80.80	13.57	12.87	0.35	F	1.88	SM	2.2	10.2	87.6	WET
	3.83-4.67	2	7.85	56.84	35.31	35.09	1.19	M	1.88	SM	7.7	16.0	76.3	WET
	4.67-8.42	3	0.00	16.35	83.65	83.50	0.36	F	1.71	ML-CL	14.7	10.2	75.1	WET
	8.42-10.17	4	0.00	77.72	22.28	20.18	0.15	F	0.80	SM	8.6	2.3	89.1	WET
	10.17-14.12	5	0.00	86.48	13.52	11.08	0.18	F	0.78	SM	0.9	1.3	97.8	WET
Z233	0-0.75	1	24.65	73.16	2.19	2.09	1.04	M	2.36	SW with gravel	0.9	47.0	52.1	WET
	0.75-3.5	2	2.95	82.16	14.89	13.95	0.21	F	1.37	SM	1.4	8.6	90.0	WET
	3.5-5.83	3	26.83	68.13	5.04	4.88	1.48	M	2.33	SW-SM w/gravel	1.0	11.6	87.5	WET
	5.83-11.17	4	0.00	87.40	12.60	11.47	0.17	F	0.59	SM	1.0	1.5	97.5	WET
	11.17-17	5	0.14	89.57	10.29	10.13	0.38	F	1.13	SW-SM	1.1	1.8	97.1	WET
Z234	0-1.67	1	1.25	87.80	10.95	10.32	0.30	F	1.42	SW-SM	1.6	17.7	80.6	WET
	1.67-3.5	2	23.25	67.30	9.45	9.24	1.57	M	2.11	SW-SM w/gravel	2.3	32.5	65.3	WET
	3.5-5.58	3	13.97	80.52	5.51	5.40	1.09	M	1.87	SW-SM	0.7	2.2	97.1	WET
	5.58-14.58	4	0.67	89.61	9.72	8.99	0.25	F	1.17	SW-SM	1.1	2.3	96.7	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Z235	0-2.83	1	5.39	83.90	10.71	10.08	0.44	M	1.92	SW-SM	4.6	18.5	76.9	WET
	2.83-5.5	2	0.00	91.37	8.63	8.00	0.22	F	0.85	SP-SM	1.3	4.9	93.8	WET
	5.5-10	3	21.83	72.26	5.91	5.48	0.64	M	2.39	SW-SM w/gravel	1.4	14.4	84.2	WET
	10-16.08	4	0.16	89.02	10.82	9.49	0.17	F	0.69	SP-SM	0.9	3.6	95.5	WET
Z255	0-1	1	23.09	72.26	4.65	4.47	1.05	M	2.43	SW w/gravel	1.7	19.0	79.3	WET
	1-4.83	2	0.00	17.41	82.59	81.73	0.39	F	1.46	ML-CL	14.5	6.2	79.3	WET
	4.83-7	3	0.00	73.32	26.68	22.59	0.15	F	0.71	SM	0.9	1.0	98.1	WET
	7-11.08	4	0.00	97.43	2.57	2.32	0.23	F	0.53	SP	0.4	0.7	98.9	WET
	11.08-13.42	5	0.37	96.39	3.24	2.94	0.35	F	0.94	SW	0.5	0.9	98.6	WET
Z256	0-4.75	1	0.00	96.35	3.65	3.48	0.23	F	0.45	SP	0.5	3.3	96.2	WET
	4.75-7.58	2	30.74	64.39	4.87	4.66	1.28	M	2.51	SW w/gravel	1.2	56.2	42.6	WET
	7.58-10.67	3	4.74	92.65	2.61	2.58	0.76	M	1.48	SW	0.4	0.6	99.0	WET
	10.67-16.01	4	3.48	85.73	10.79	10.33	0.33	F	1.55	SW-SM	1.6	9.6	88.8	WET
Z257	0-2.83	1	6.57	85.58	7.85	7.61	0.38	F	1.78	SW-SM	1.8	9.3	88.9	WET
	2.83-4.5	2	4.19	89.98	5.83	5.27	0.44	M	1.54	SW-SM	0.9	1.7	97.4	WET
	4.5-11.25	3	0.80	96.24	2.96	2.85	0.54	M	1.21	SW	0.3	0.6	99.1	WET
	11.25-17	4	0.00	91.28	8.72	8.11	0.29	F	1.13	SW-SM	1.2	1.4	97.4	WET
Z258	0-3.5	1	6.84	86.26	6.90	6.60	0.46	M	1.85	SW-SM	4.7	18.9	76.4	WET
	3.5-6.08	2	0.00	1.63	98.37	98.24	0.34	F	1.37	ML-CL	17.5	9.9	72.6	WET
	6.08-9.42	3	0.71	65.86	33.43	29.23	0.16	F	1.10	SM	7.7	1.8	90.5	WET
	9.42-11.5	4	11.89	85.71	2.40	2.33	0.82	M	1.71	SW	0.6	1.0	98.4	WET
	11.5-15.08	5	0.22	93.00	6.78	6.25	0.24	F	0.91	SW-SM	1.3	1.5	97.2	WET
Z259	0-2	1	24.17	73.50	2.33	2.19	1.09	M	2.31	SW w/gravel	1.4	18.6	80.0	WET
	2-11.5	2	0.00	90.64	9.36	8.65	0.20	F	0.72	SP-SM	0.7	1.6	97.7	WET
	11.5-15.42	3	0.00	91.64	8.36	7.58	0.20	F	0.78	SP-SM	1.0	1.5	97.5	WET
	15.42-16.08	4	0.00	92.75	7.25	5.94	0.25	F	0.89	SW-SM	0.4	0.9	98.7	WET
Z276	0-0.86	1	14.47	83.29	2.24	2.14	0.66	M	2.07	SW	1.0	13.5	85.5	WET
	0.86-1.5	2	25.66	71.88	2.46	2.33	1.93	M	1.81	SW w/gravel	1.5	29.5	69.0	WET
	1.5-13.5	3	0.00	5.24	94.76	93.35	0.13	F	1.31	ML-CL	18.4	10.8	70.8	WET
	13.5-13.92	4	0.00	87.75	12.25	9.37	0.14	F	0.46	SM	0.6	0.9	98.5	WET
Z277	0-1.42	1	15.69	80.41	3.90	3.70	1.11	M	2.02	SW w/gravel	1.9	7.7	90.4	WET
	1.42-1.86	2	7.04	54.85	38.11	37.59	0.70	M	2.01	SM	8.2	5.2	86.6	WET
	1.86-12	3	1.45	95.73	2.82	2.69	0.42	F	1.02	SW	0.3	0.7	99.0	WET
	12-18.58	4	0.00	96.52	3.48	3.29	0.25	F	0.52	SP	0.3	1.2	98.5	WET
Z278	0-7	1	0.00	9.16	90.84	90.50	0.21	F	1.08	ML-CL	16.9	8.5	74.6	WET
	7-10.33	2	3.04	94.49	2.47	2.32	0.35	F	1.32	SW	0.5	0.8	98.7	WET
	10.33-11.75	3	0.00	91.76	8.25	7.78	0.22	F	0.71	SP-SM	0.9	2.1	97.0	WET
	11.75-15.5	4	10.57	82.84	6.59	6.21	0.41	F	2.08	SW-SM	1.2	13.3	85.5	WET
Z279	0-1.56	1	15.28	81.99	2.73	2.56	0.51	M	2.22	SW w/gravel	0.9	19.5	79.6	WET
	1.56-2.5	2	43.42	53.24	3.34	3.19	2.97	C	1.99	SW w/gravel	3.7	14.7	81.6	WET
	2.5-5.86	3	0.17	92.29	7.54	7.03	0.20	F	0.75	SP-SM	3.4	6.5	90.1	WET
	5.86-14.92	4	2.81	91.47	5.72	5.42	0.33	F	1.53	SW-SM	0.8	8.8	90.5	WET

Vibracore	Sample Interval	Sample Number	gINT Granularmetrics							USC	Composition (wt%)			Sieve Treatment
			Size Class (wt%)				Descriptive Statistics							
			Gravel	*Sand*	*<#200*	*<#230*	*Mean (mm)*	*Verbal*	*Std. Dev.(phi)*		*Organic*	*Carbonate*	*Siliciclastic*	
Z298	0-1	1	18.77	80.91	0.32	0.31	1.38	M	1.70	SW w/gravel	3.3	13.3	83.4	WET
	1-1.58	2	14.38	83.57	2.05	1.94	0.73	M	2.09	SW	4.4	19.2	76.5	WET
	1.58-10.42	3	0.00	3.13	96.87	95.08	0.13	F	1.56	ML-CL	14.9	6.1	79.0	WET
	10.42-14	4	0.73	92.75	6.52	5.89	0.33	F	0.97	SW-SM	1.4	1.0	97.6	WET
Z299	0-0.5	1	9.58	90.22	0.20	0.10	0.48	M	1.63	SW	0.9	17.3	81.8	DRY
	0.5-4.25	2	0.00	61.44	38.56	35.12	0.19	F	1.27	SM	2.5	2.2	95.3	WET
	4.25-12.08	3	0.00	4.84	95.16	94.62	0.19	F	1.32	ML-CL	20.0	8.1	71.9	WET
	12.08-14.27	4	0.00	79.19	20.81	18.34	0.14	F	0.51	SM	3.1	1.4	95.5	WET
Z300	0-1.2	1	2.30	97.51	0.19	0.13	0.34	F	1.40	SW	1.0	15.8	83.2	DRY
	1.2-1.75	2	0.00	43.37	56.63	55.42	0.39	F	1.48	ML-CL	19.0	8.6	72.4	WET
	1.75-9.5	3	1.85	93.82	4.33	3.96	0.37	F	1.30	SW	0.4	0.7	98.9	WET
	9.5-16.25	4	0.00	92.84	7.16	6.58	0.20	F	0.68	SP-SM	1.0	1.5	97.5	WET
Z301	0-1.58	1	23.57	72.90	3.53	3.34	1.10	M	2.21	SW w/gravel	1.7	9.7	88.7	WET
	1.58-12.67	2	2.86	94.69	2.45	2.39	0.50	M	1.20	SW	0.7	1.0	98.4	WET
	12.67-16.58	3	0.00	93.38	6.62	5.98	0.22	F	0.75	SP-SM	0.9	1.1	98.0	WET
B1-1	0-3.0	1	2.10	97.57	0.33	0.33	0.51	M	1.16	SW	0.7	25.3	74.0	DRY
	3.0-5.2	2	0.00	99.80	0.20	0.20	0.35	F	1.01	SW	0.6	14.8	84.6	DRY
B1-2	0-2.6	1	0.47	99.53	0.00	0.00	0.35	F	0.86	SW	0.6	15.9	83.5	DRY
	2.6-5.7	2	0.71	99.25	0.04	0.03	0.29	F	0.89	SW	0.5	12.3	87.1	DRY
B1-3	0-2.6	1	2.99	96.61	0.40	0.39	0.57	M	1.25	SW	0.7	29.2	70.1	DRY
	2.6-5.8	2	2.56	97.19	0.25	0.24	0.50	M	1.29	SW	0.7	24.7	74.6	DRY
B1-4	0-2.5	1	0.00	99.96	0.04	0.04	0.21	F	0.44	SP	0.4	4.8	94.8	DRY
	2.5-4.8	2	0.00	99.97	0.03	0.00	0.23	F	0.57	SP	0.5	8.3	91.2	DRY
B1-5	0-2.6	1	0.00	99.97	0.03	0.02	0.24	F	0.66	SP	0.5	7.2	92.4	DRY
	2.6-5.0	2	0.00	99.93	0.07	0.06	0.27	F	0.54	SP	0.5	9.2	90.3	DRY

2.0 Granularmetric Curves



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O1 #1	—●—		SW-SM	#200 - 11.56 #230 - 10.72	1.80	21.70	2.51	1.72	-1.21	3.87	1.53

Comments:

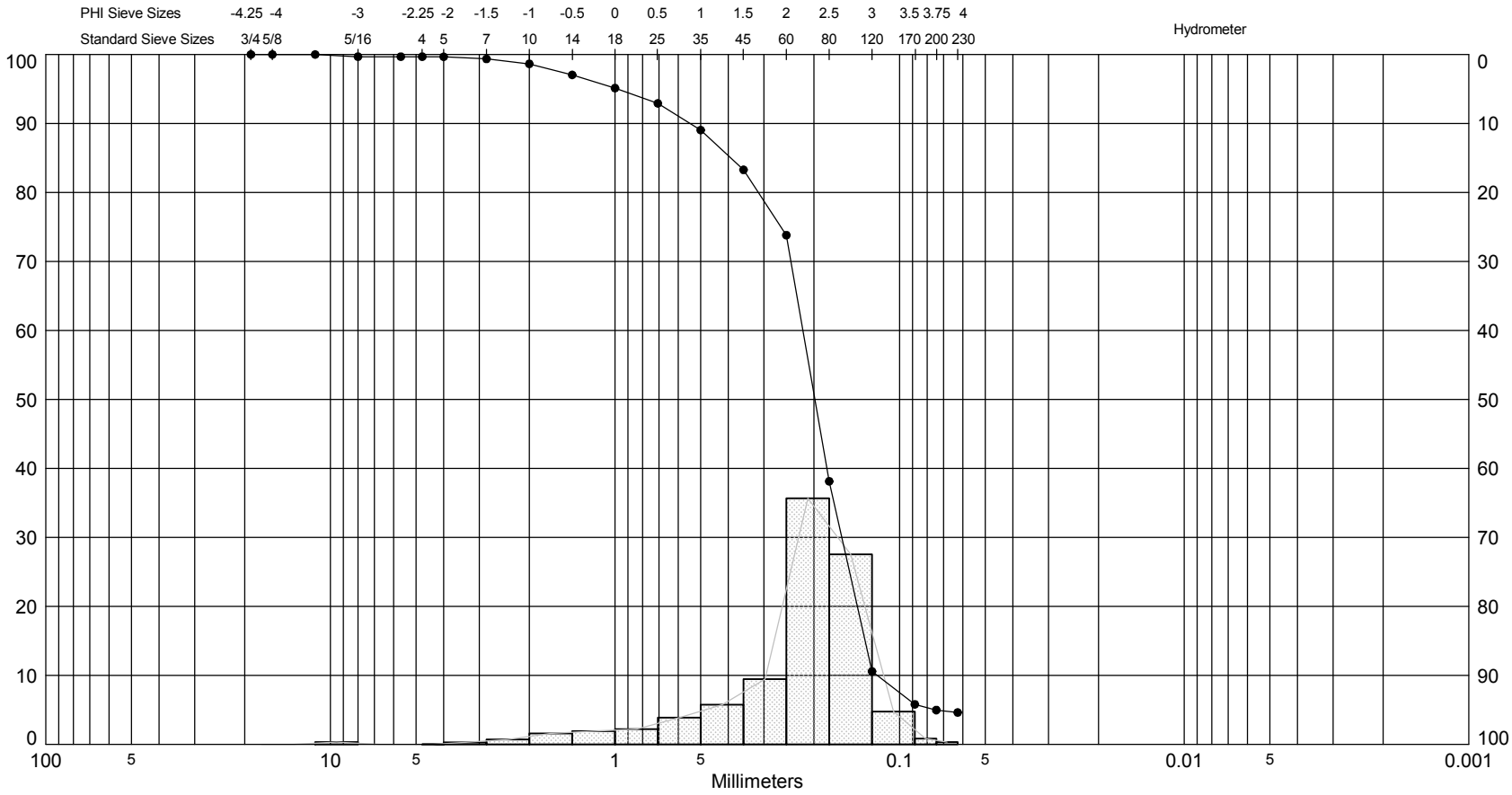
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O1 #2	—●—		SW	#200 - 4.97 #230 - 4.62	1.20	22.90	2.33	2.09	-1.92	8.04	0.96

Comments:

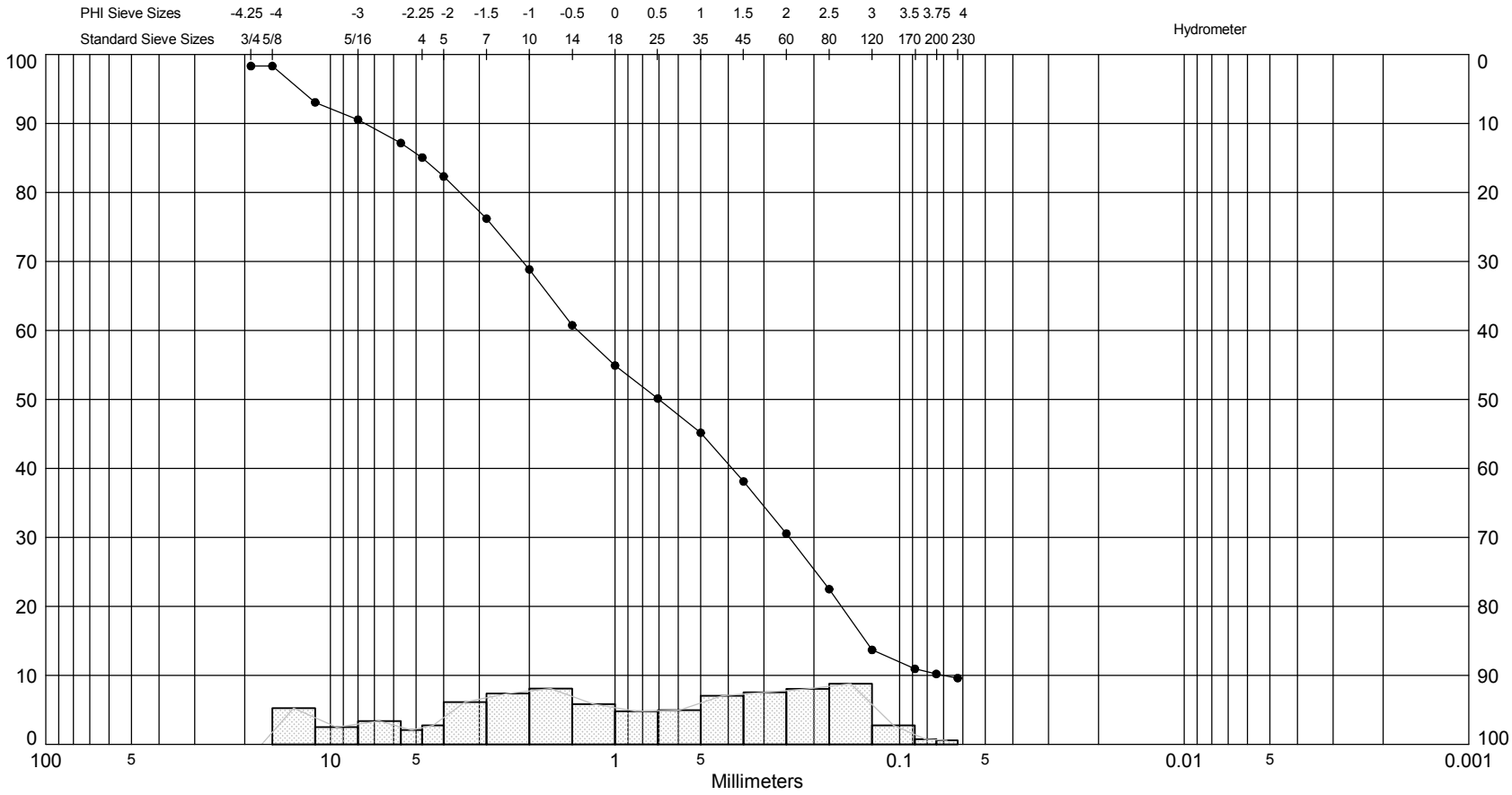
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O1 #3	—●—		SW-SM	#200 - 10.20 #230 - 9.60	1.60	43.80	0.51	0.01	-0.06	1.95	2.04

Comments:

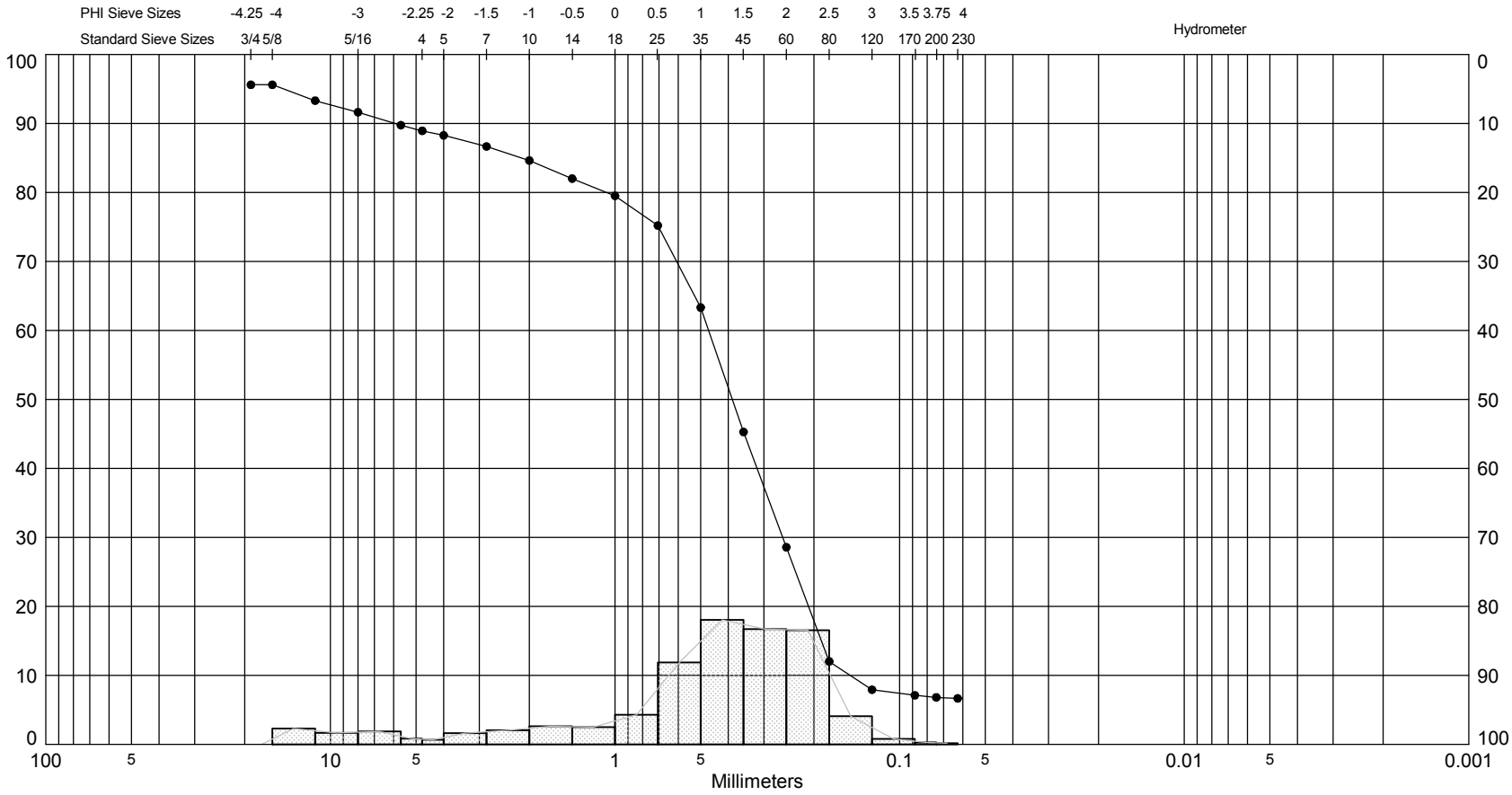
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O1 #4	—●—		SW-SM	#200 - 6.81 #230 - 6.66	0.70	14.10	1.37	0.69	-0.93	3.82	1.55

Comments:

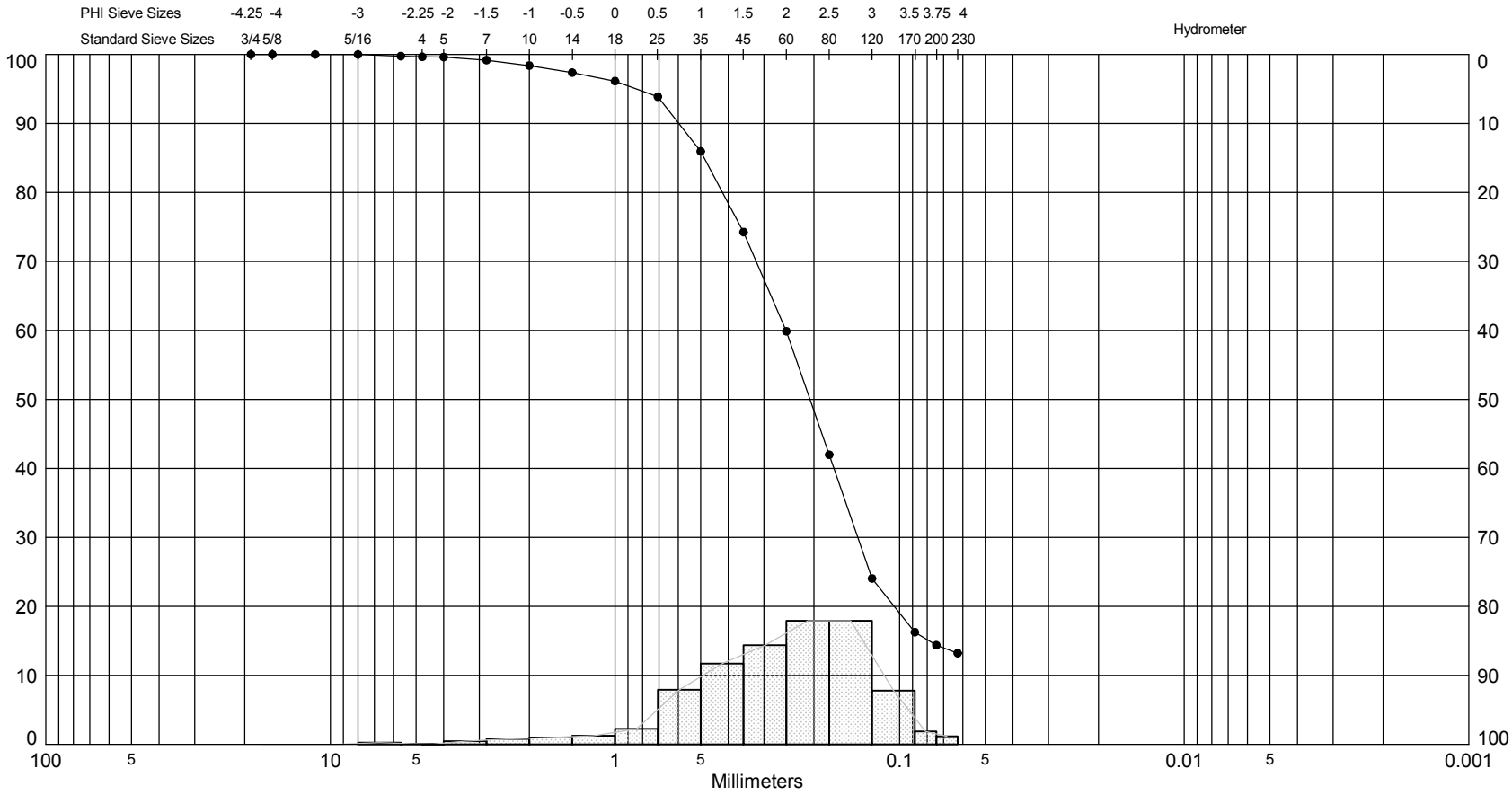
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O1 #5	—●—		SM	#200 - 14.37 #230 - 13.22	1.20	5.70	2.28	1.94	-1	4.82	1.05

Comments:

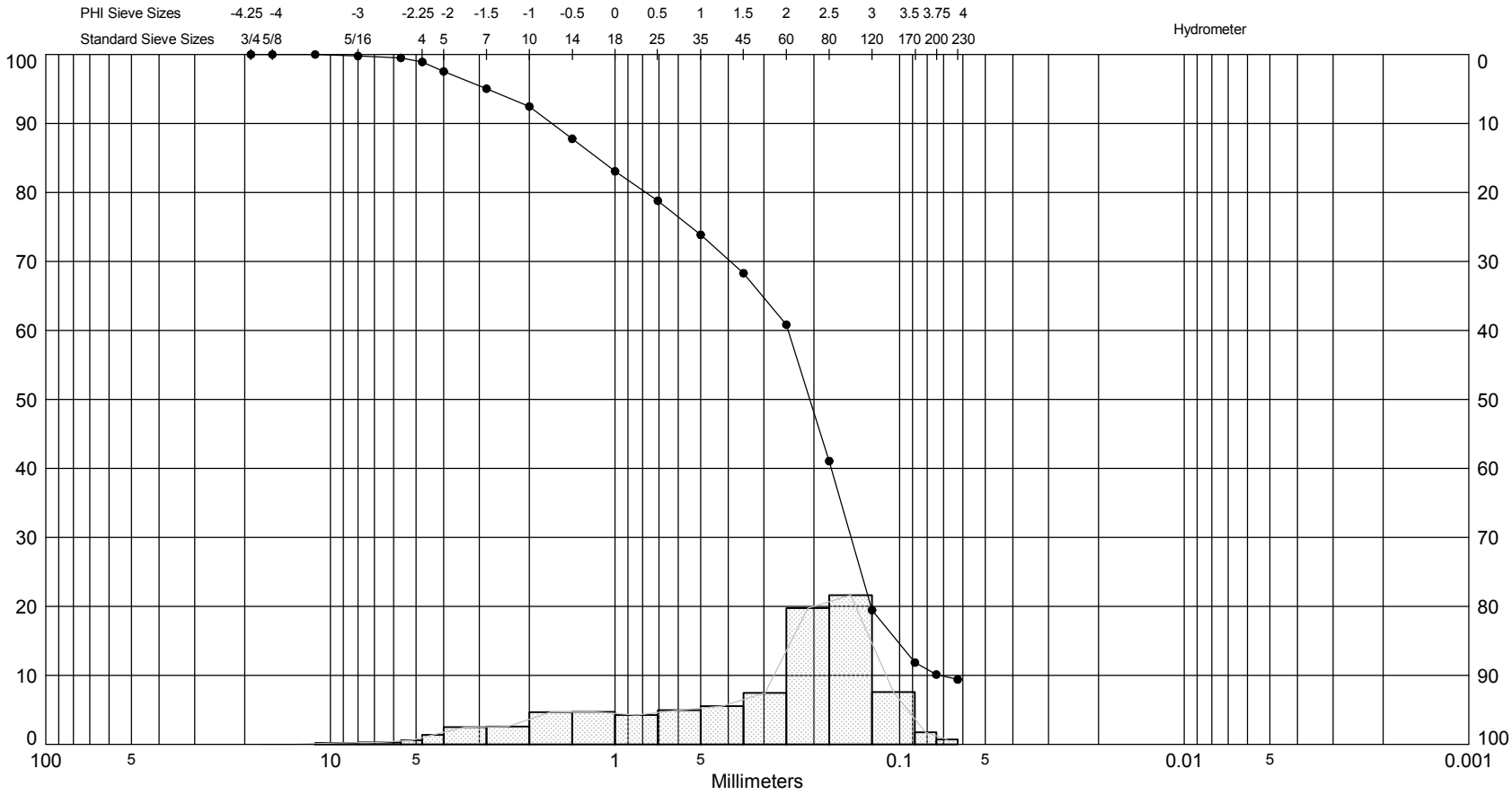
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
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Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O2 #1	—●—		SW-SM	#200 - 10.12 #230 - 9.40	2.30	18.70	2.27	1.59	-0.98	3.01	1.52

Comments:

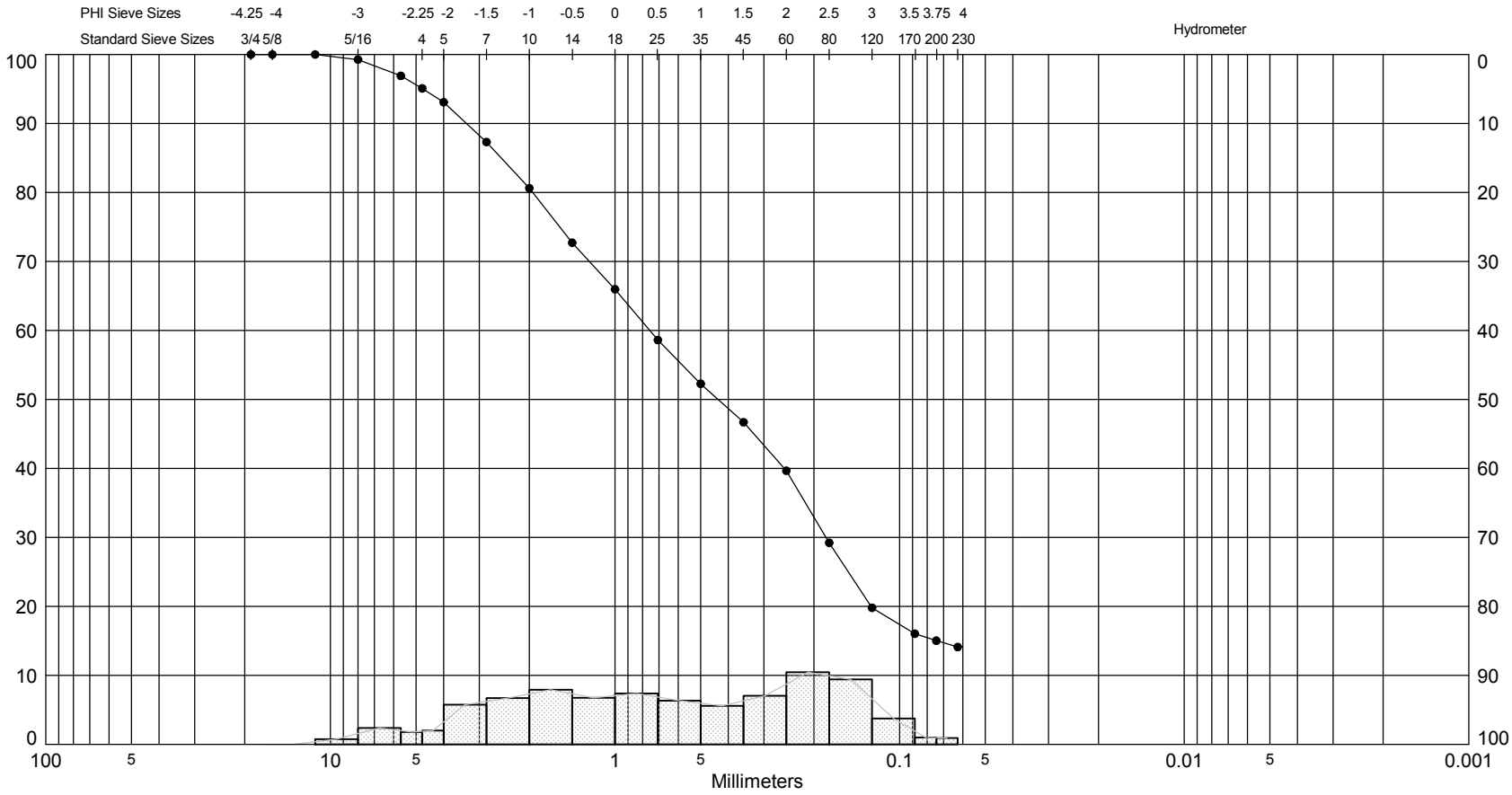
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O2 #2	—●—		SM	#200 - 15.03 #230 - 14.11	1.80	36.20	1.2	0.6	-0.15	1.92	1.78

Comments:

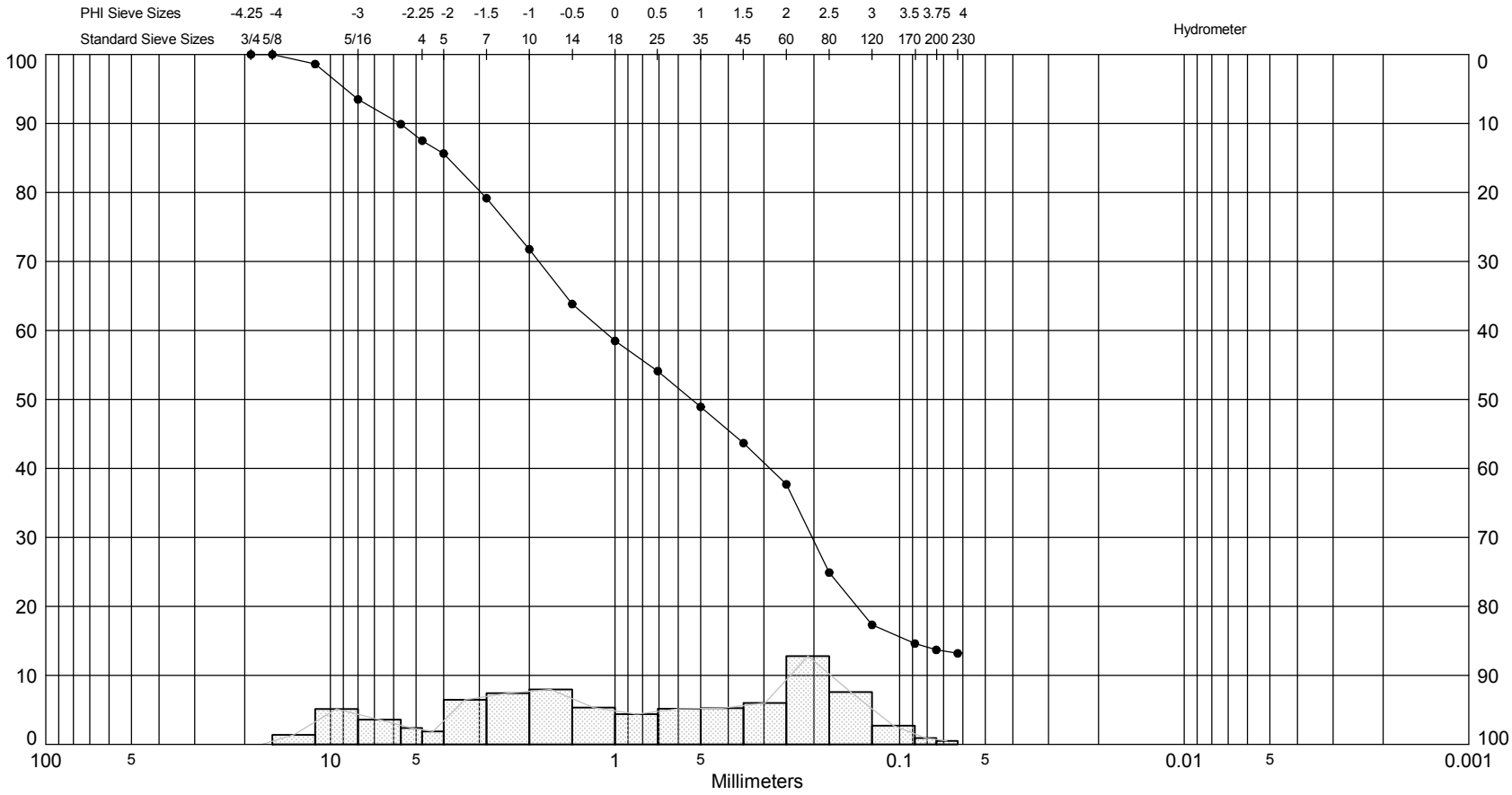
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O2 #3	—●—		SM	#200 - 13.69 #230 - 13.19	2.20	49.00	0.9	0.19	-0.16	1.83	2.02

Comments:

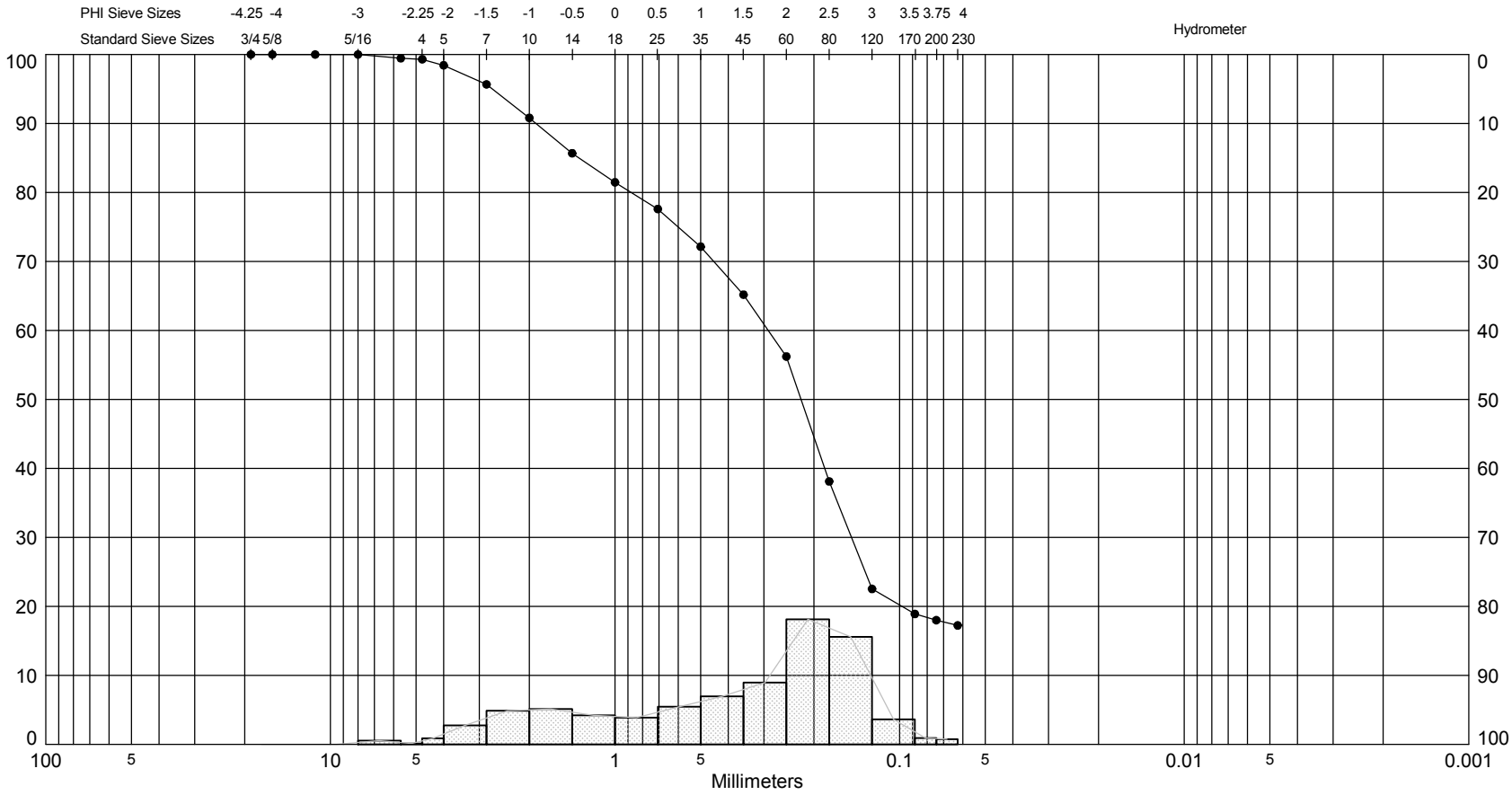
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O2 #4	—●—		SM	#200 - 18.00 #230 - 17.24	1.40	18.60	2.17	1.35	-0.74	2.49	1.52

Comments:

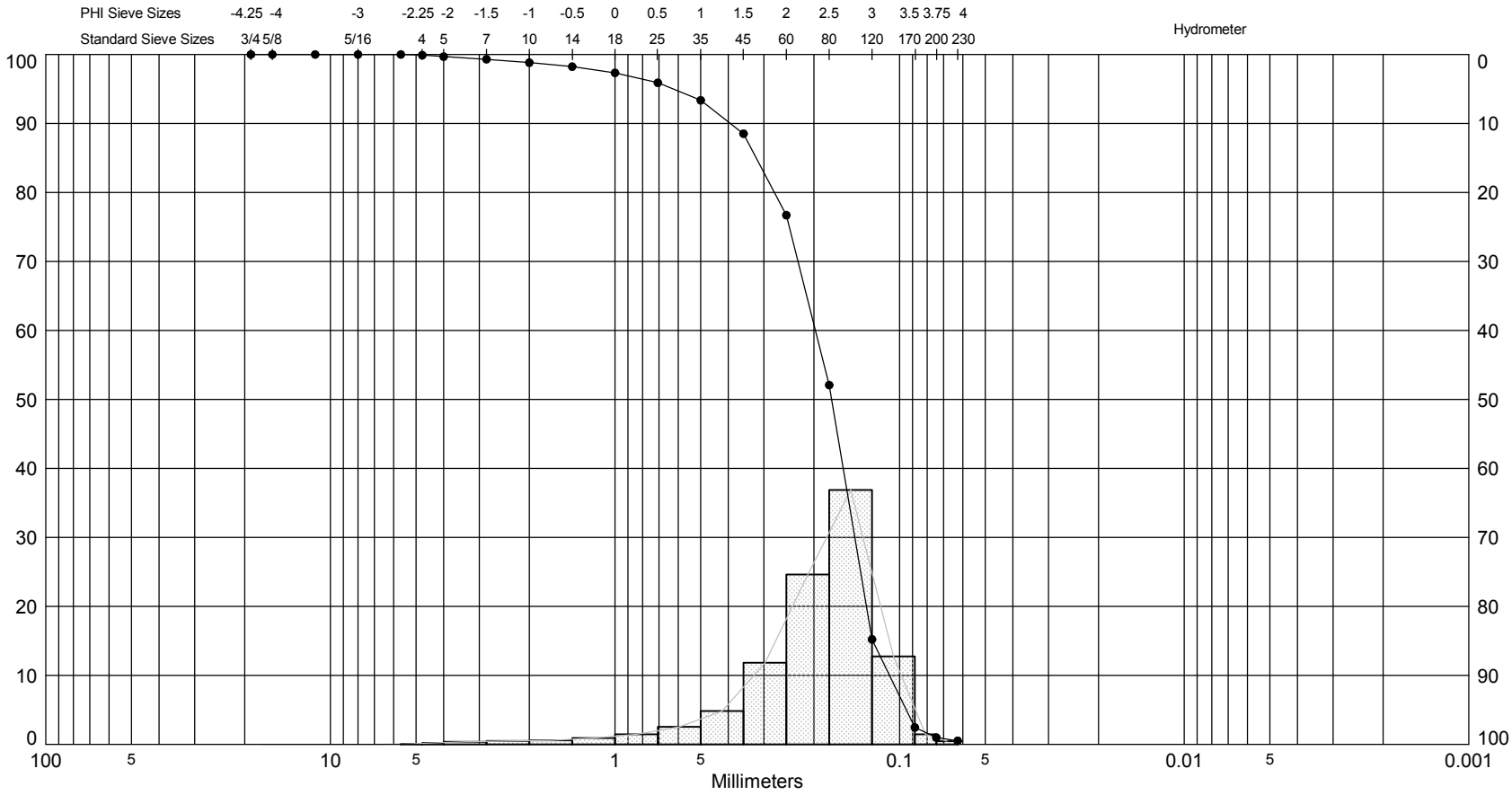
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Fax (321) 751-2343

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O3 #1	—●—		SW	#200 - 0.98 #230 - 0.51	0.50	9.50	2.53	2.33	-1.95	8.74	0.86

Comments:

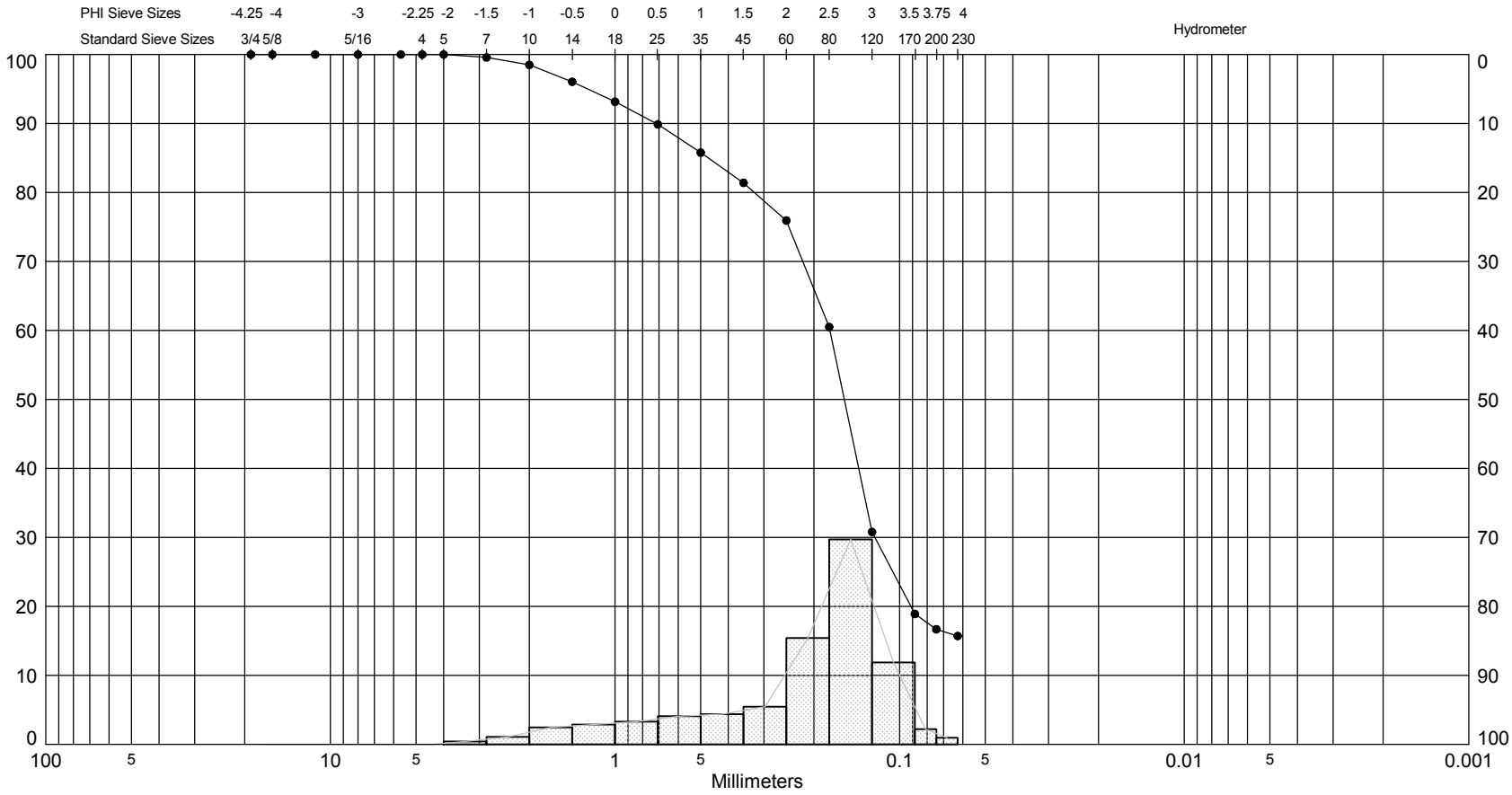
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O3 #2	—●—		SM	#200 - 16.68 #230 - 15.71	1.80	15.30	2.68	2.15	-1.29	4.02	1.16

Comments:

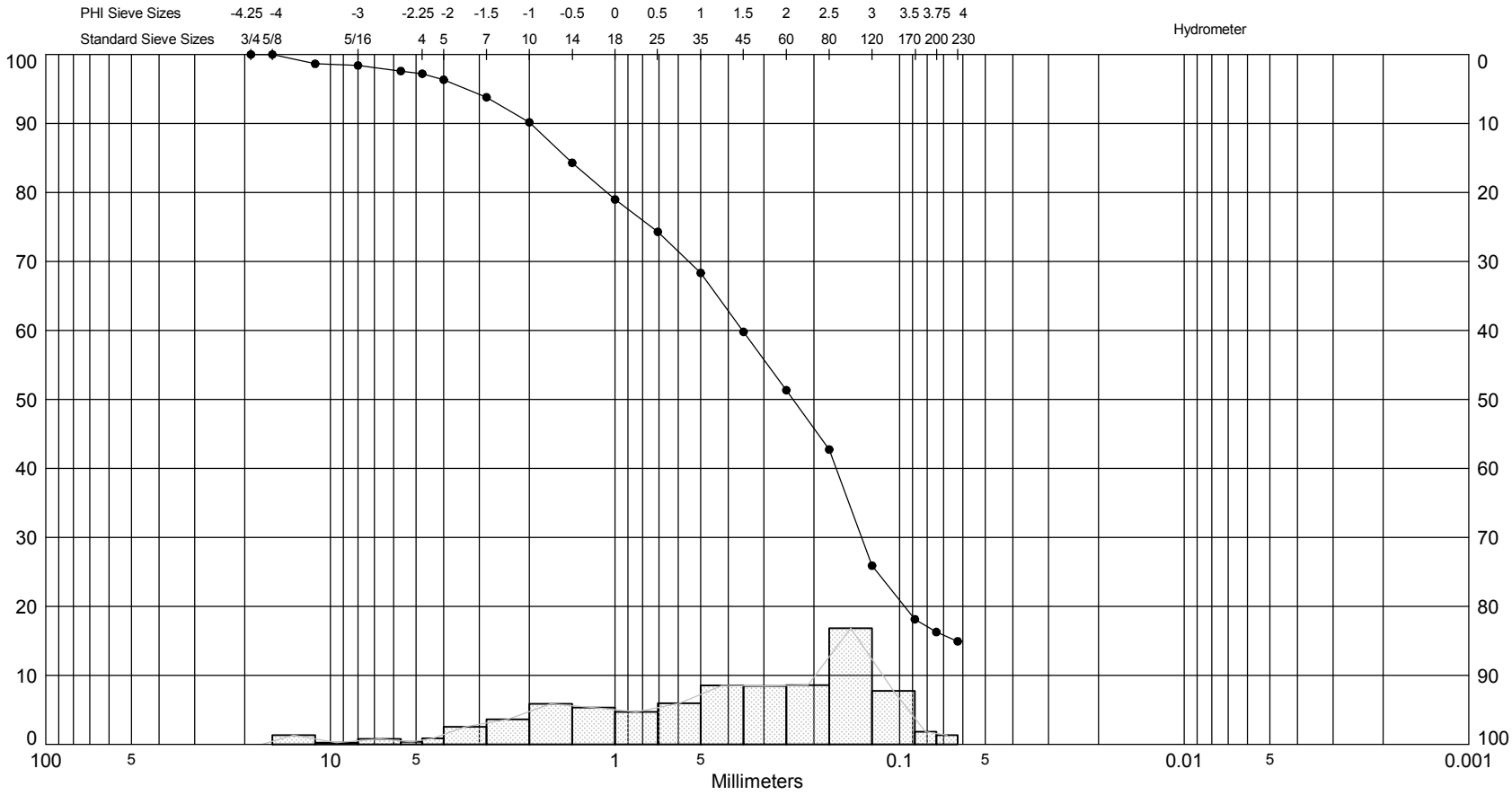
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O3 #3	—●—		SM	#200 - 16.28 #230 - 14.93	1.40	29.70	2.08	1.27	-0.76	2.89	1.72

Comments:

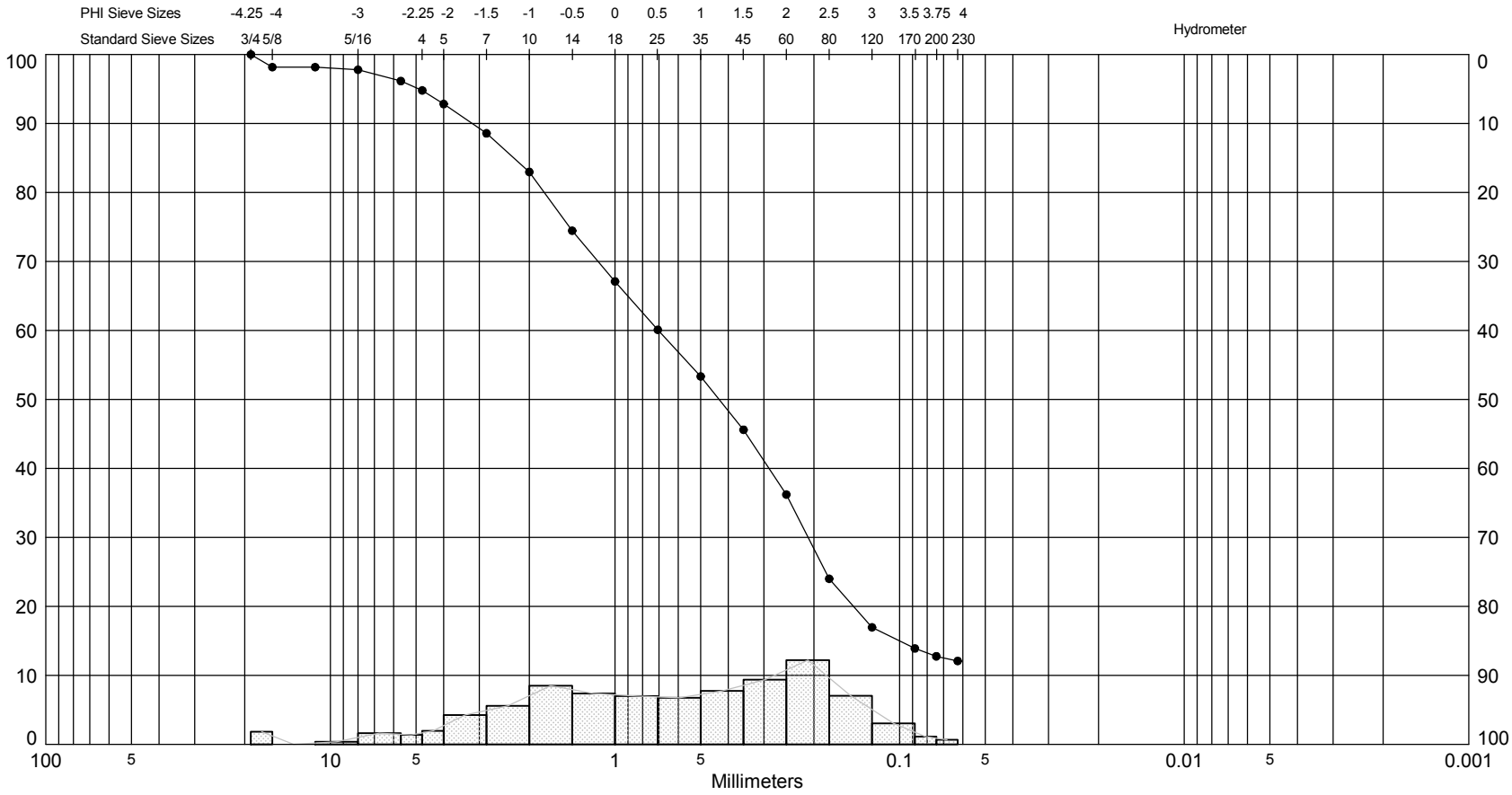
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O3 #4	—●—		SM	#200 - 12.76 #230 - 12.09	1.80	40.40	1.22	0.6	-0.44	2.56	1.77

Comments:

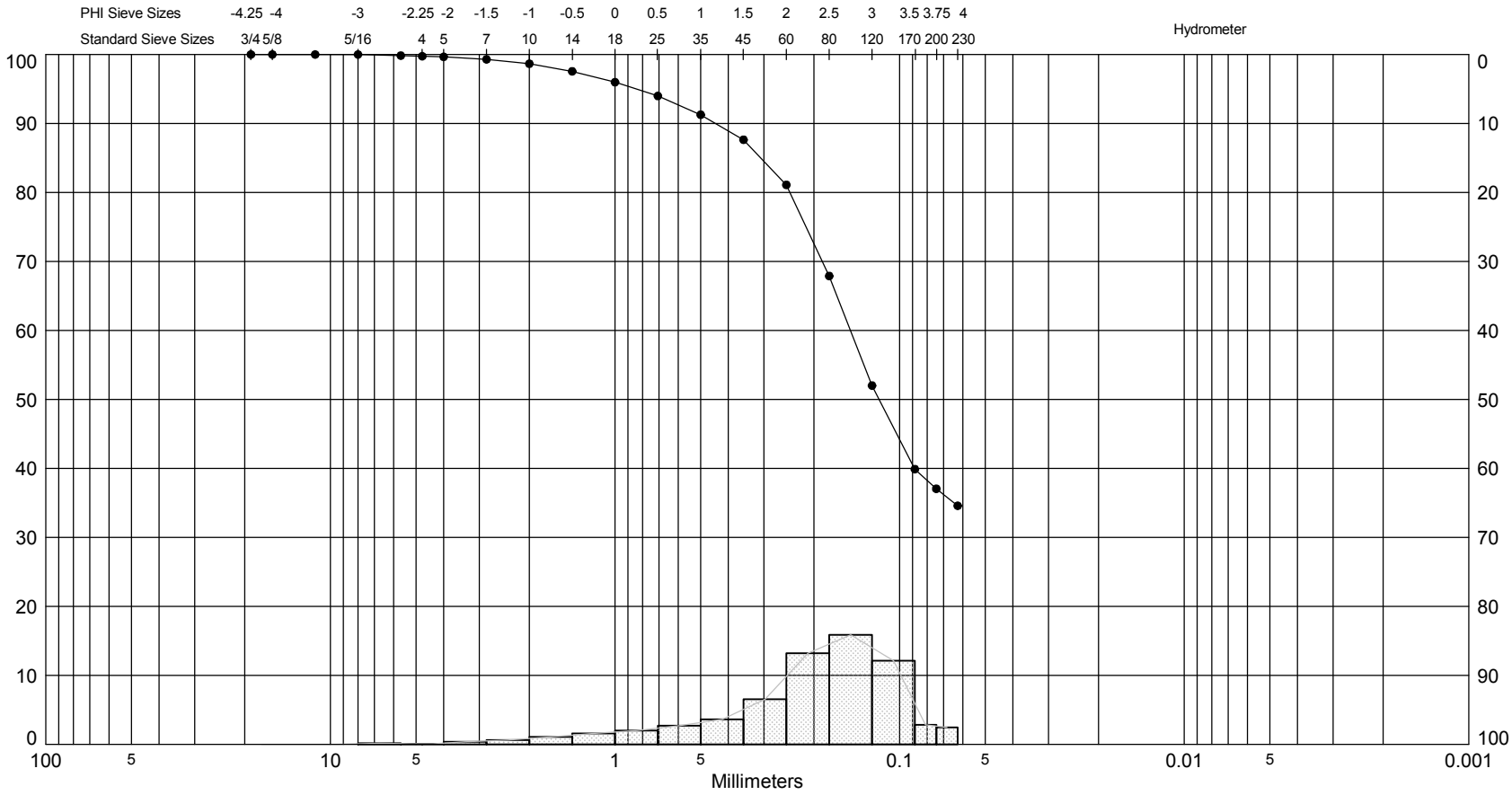
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O4 #1	—●—		SM	#200 - 37.05 #230 - 34.58	2.40	11.90	3.08	2.26	-1.37	5.09	1.16

Comments:

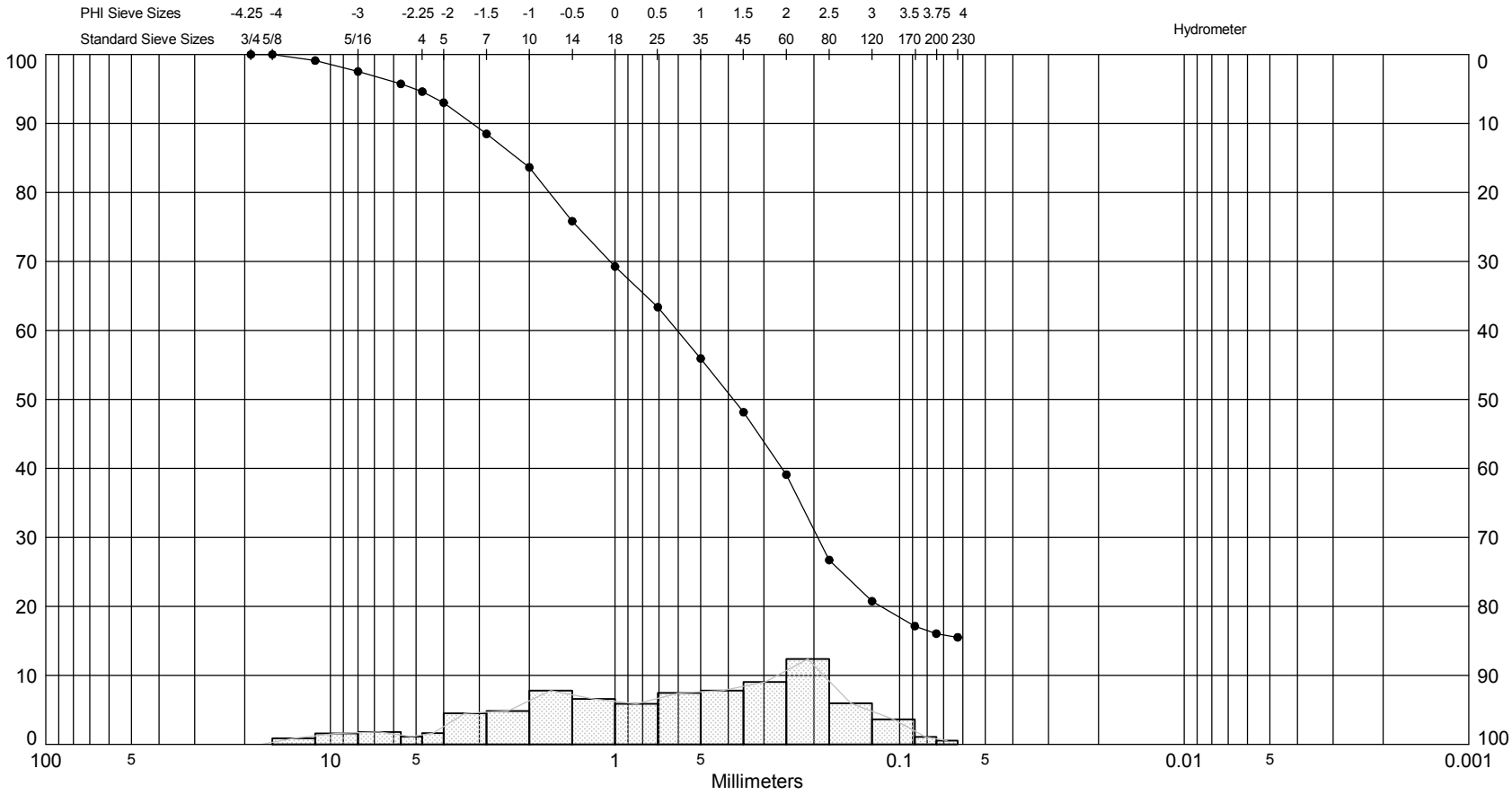
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O4 #2	—●—		SM	#200 - 16.05 #230 - 15.52	2.10	55.20	1.38	0.64	-0.41	2.33	1.76

Comments:

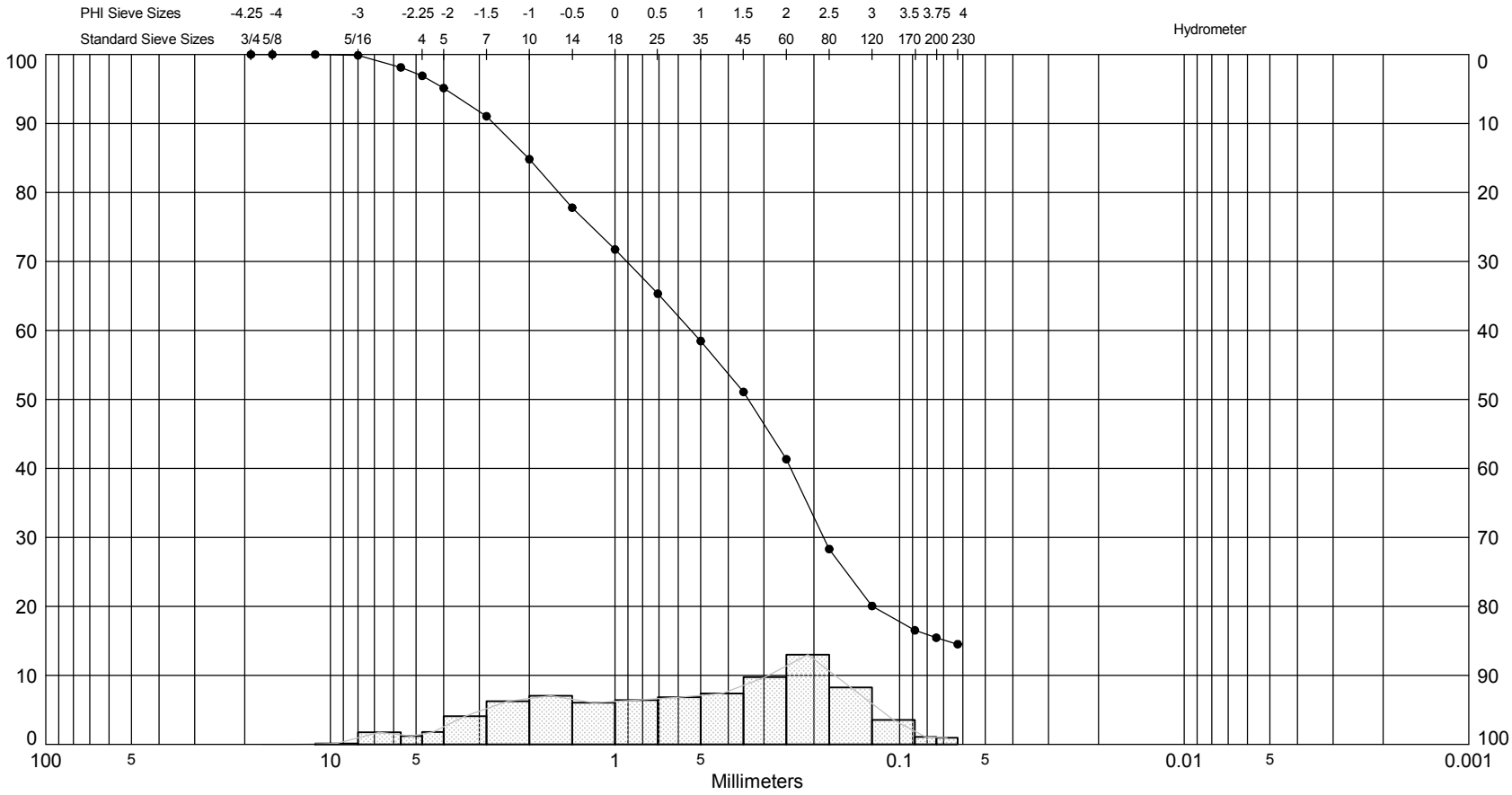
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O4 #3	—●—		SM	#200 - 15.46 #230 - 14.52	2.00	38.70	1.56	0.82	-0.33	2.08	1.67

Comments:

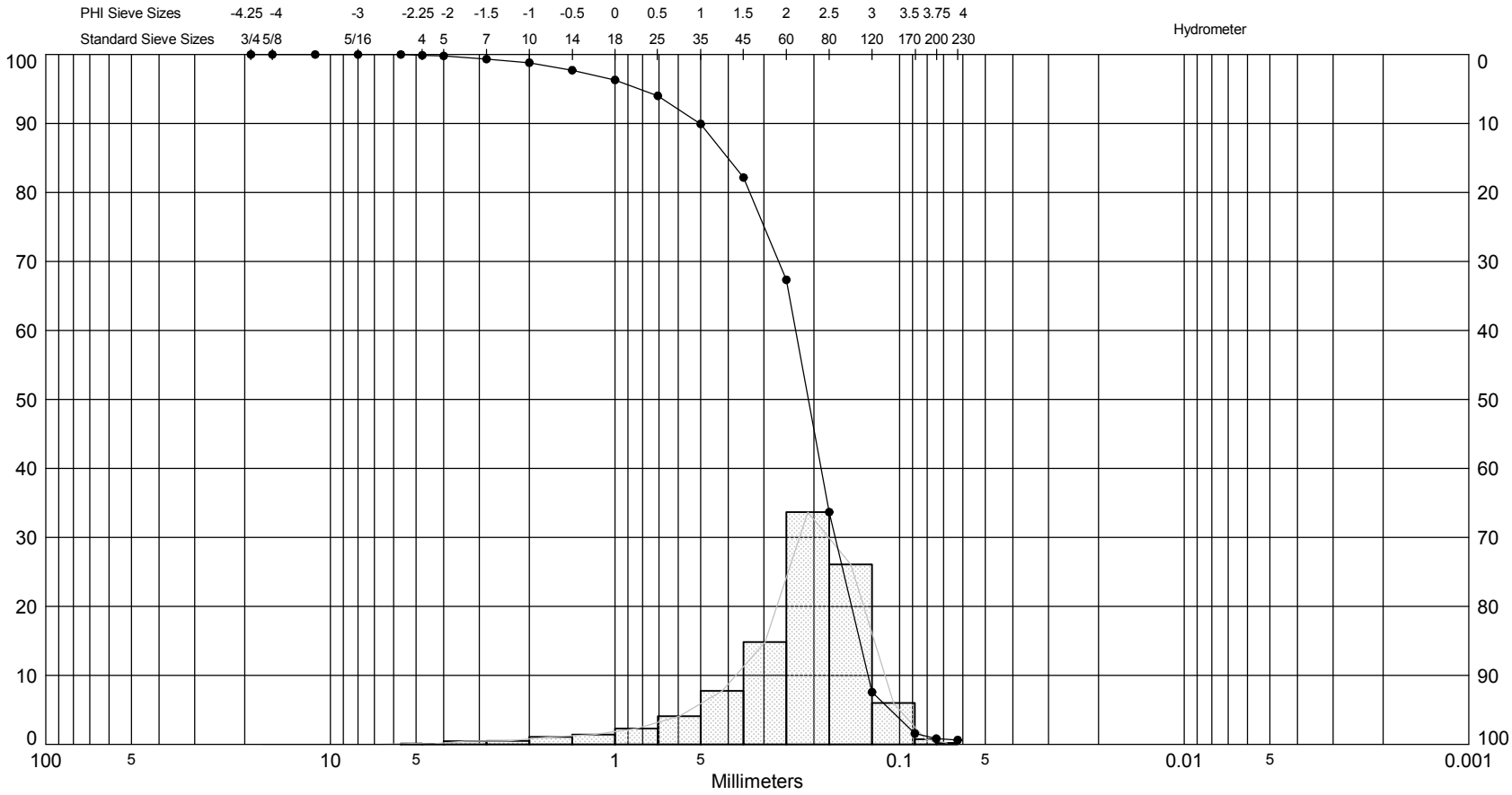
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-21-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O5 #1	—●—		SW	#200 - 0.82 #230 - 0.63	0.60	10.90	2.26	2.08	-1.62	6.77	0.89

Comments:

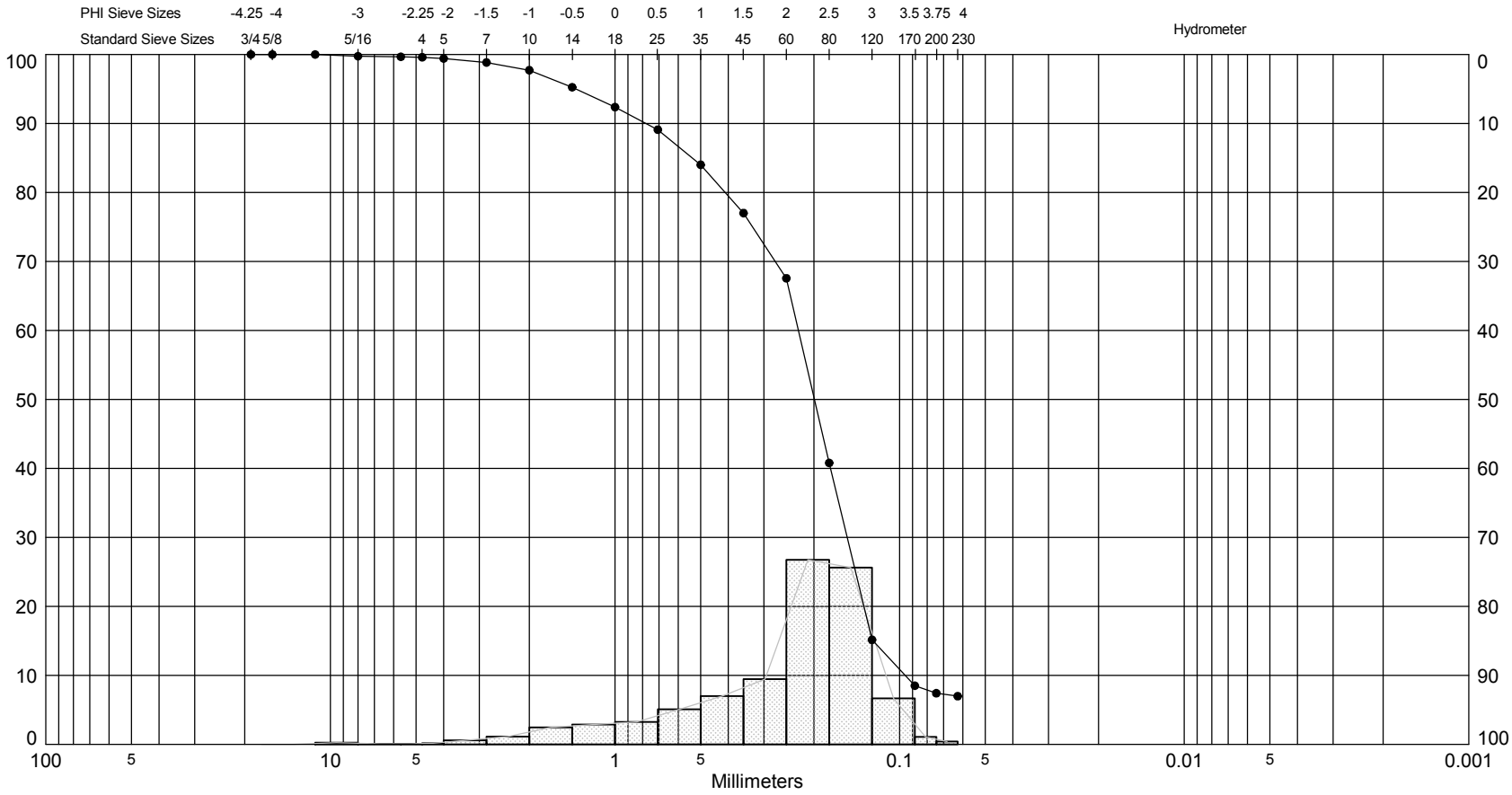
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O5 #2	—●—		SW-SM	#200 - 7.41 #230 - 6.98	1.80	19.60	2.33	1.95	-1.46	5.24	1.13

Comments:

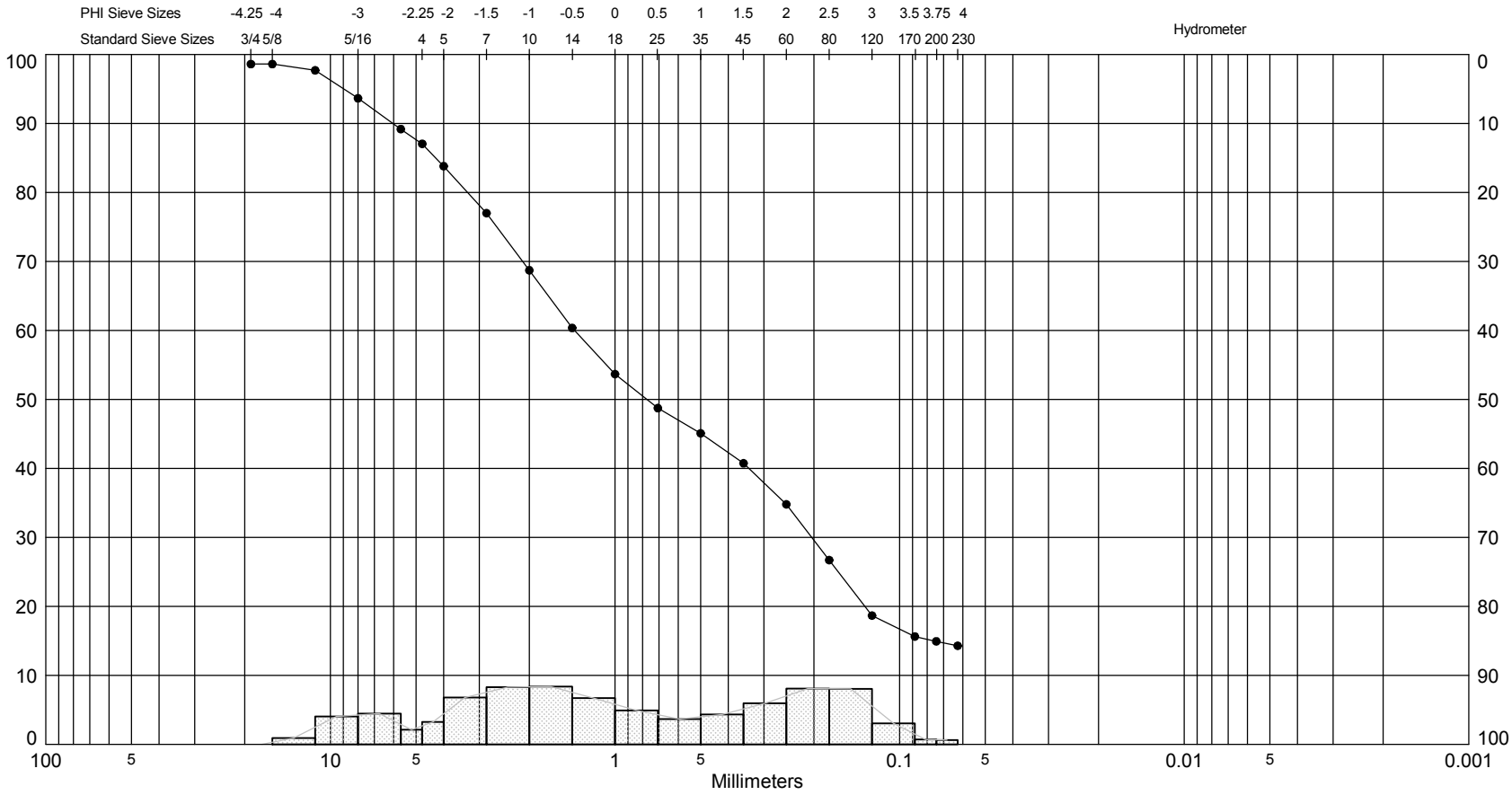
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O5 #3	—●—		SM	#200 - 14.93 #230 - 14.29	2.10	48.20	0.37	-0.03	0.16	1.87	1.98

Comments:

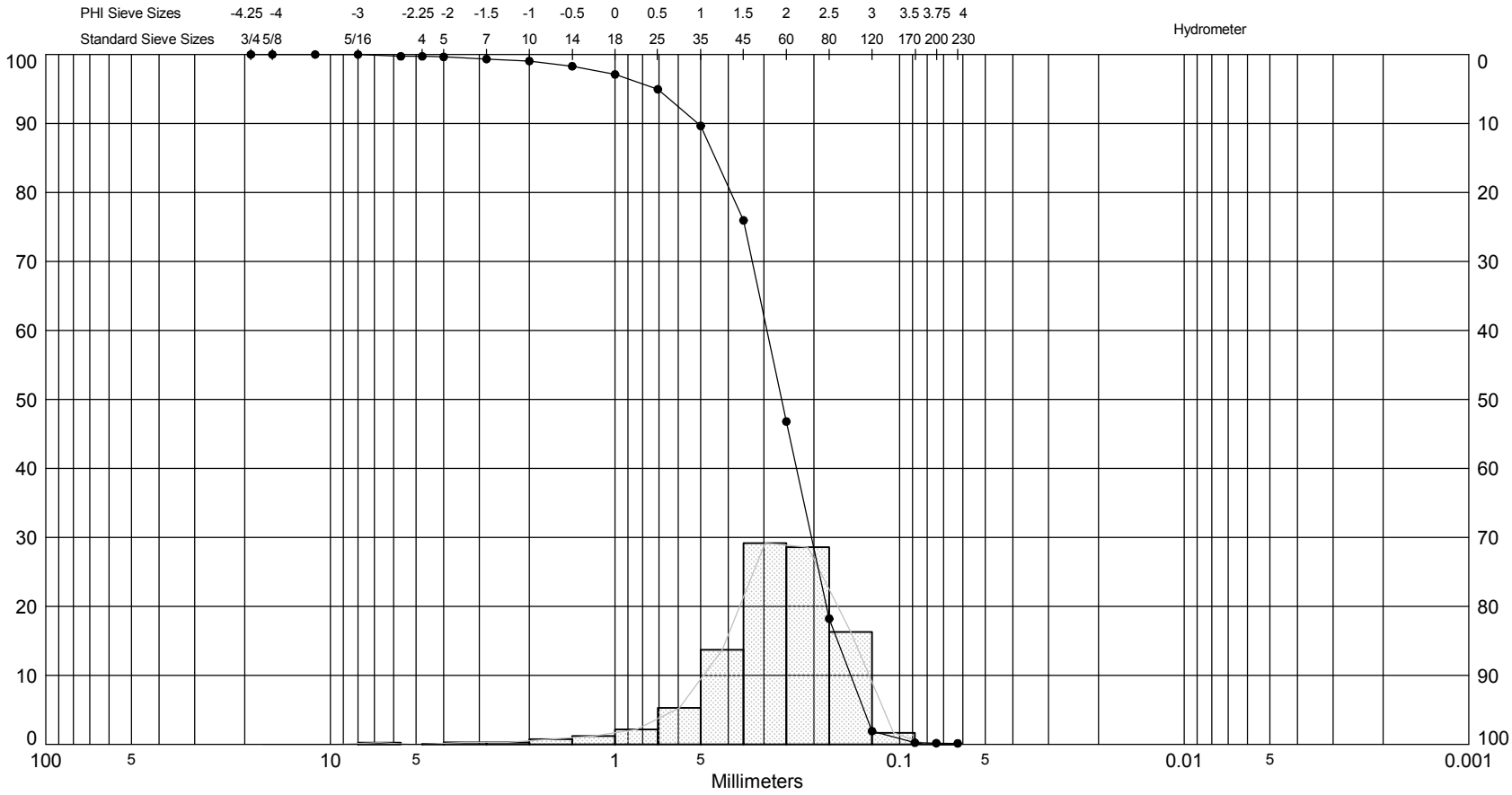
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O6 #1	—●—		SP	#200 - 0.17 #230 - 0.14	0.40	10.00	1.95	1.85	-1.59	8.17	0.79

Comments:

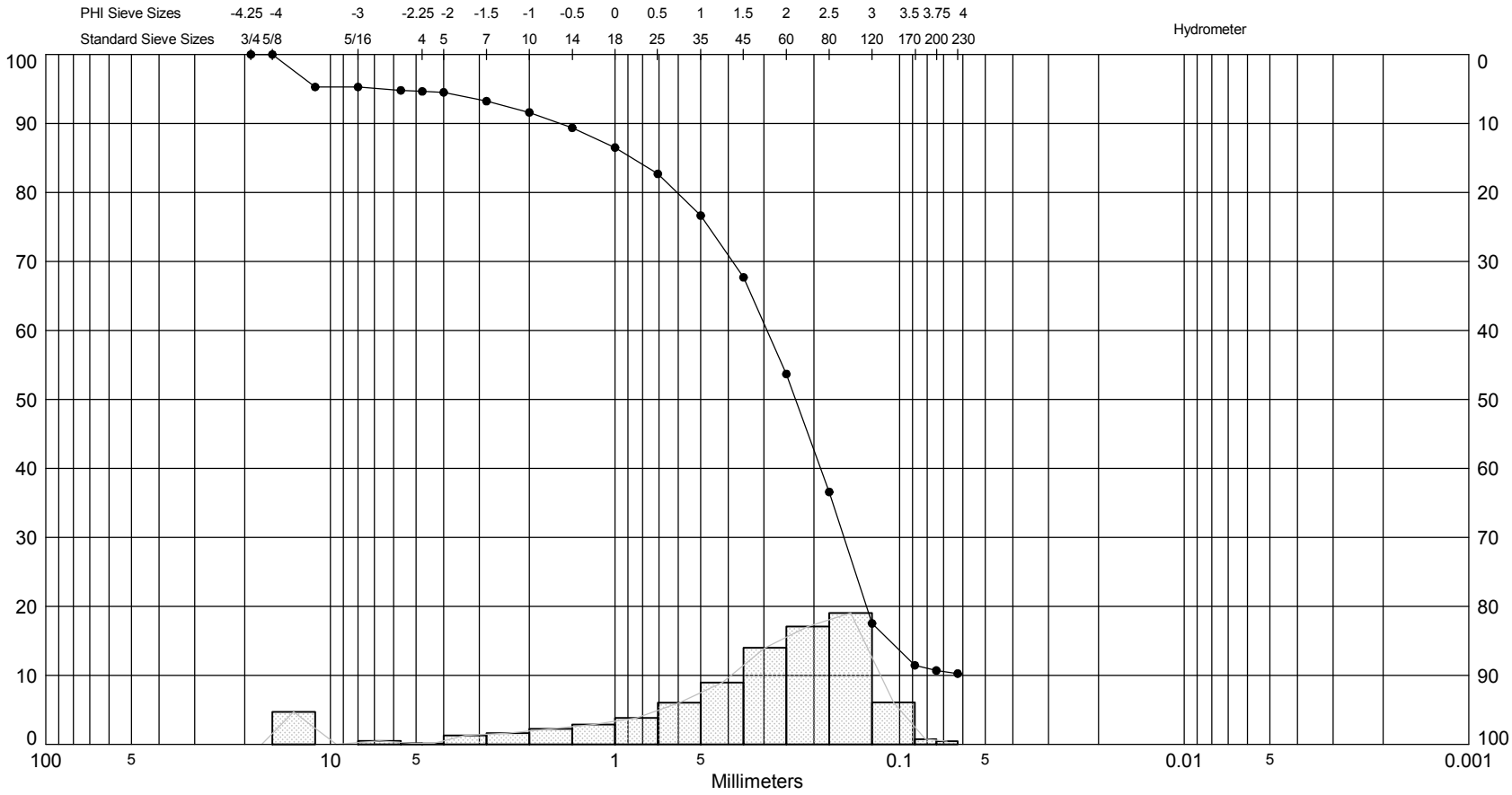
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O6 #2	—●—		SW-SM	#200 - 10.70 #230 - 10.26	2.10	14.50	2.11	1.45	-1.63	5.33	1.71

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

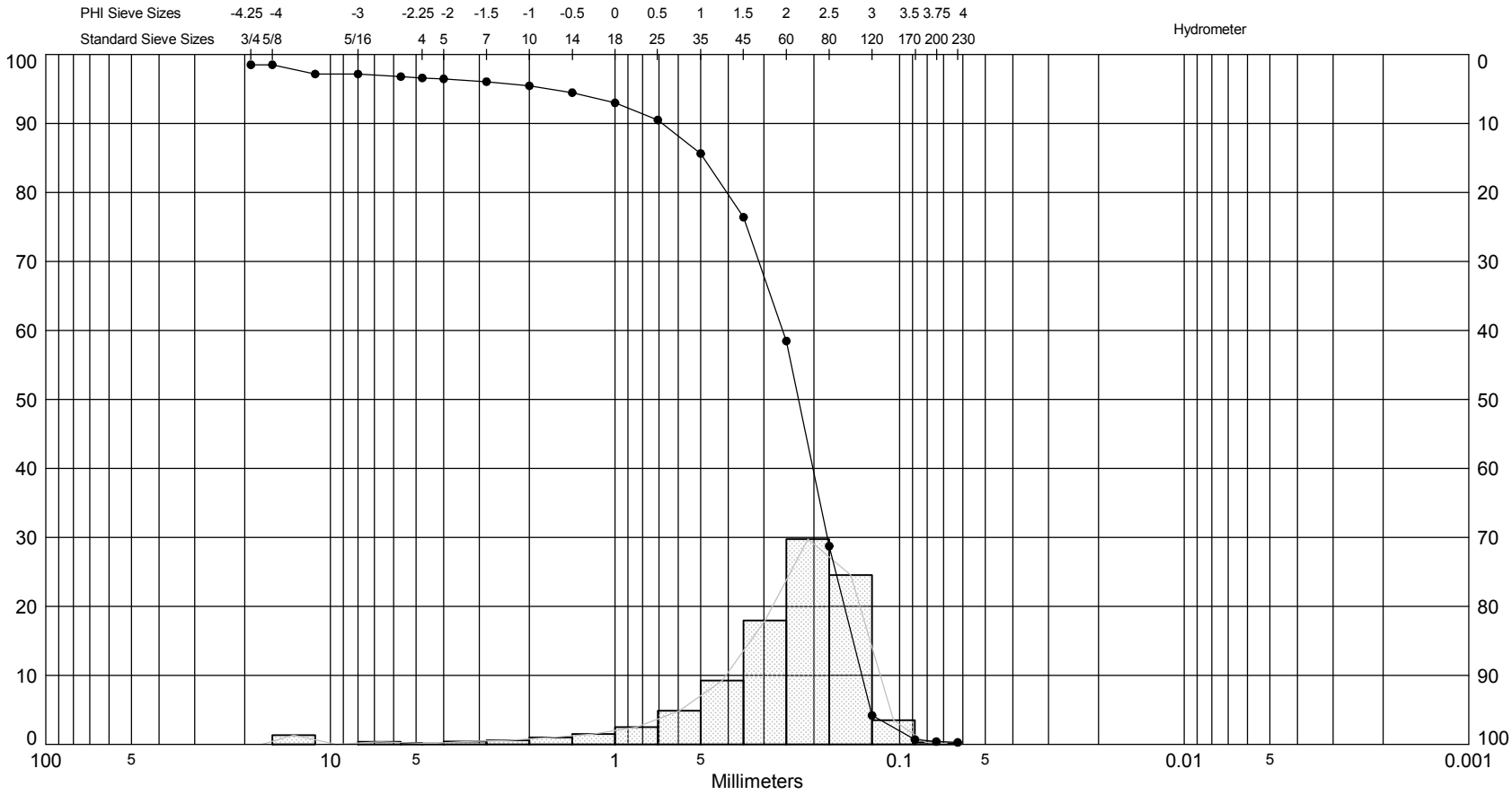
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O6 #3	—●—		SW	#200 - 0.40 #230 - 0.28	0.50	11.20	2.14	1.79	-2.22	10.52	1.14

Comments:

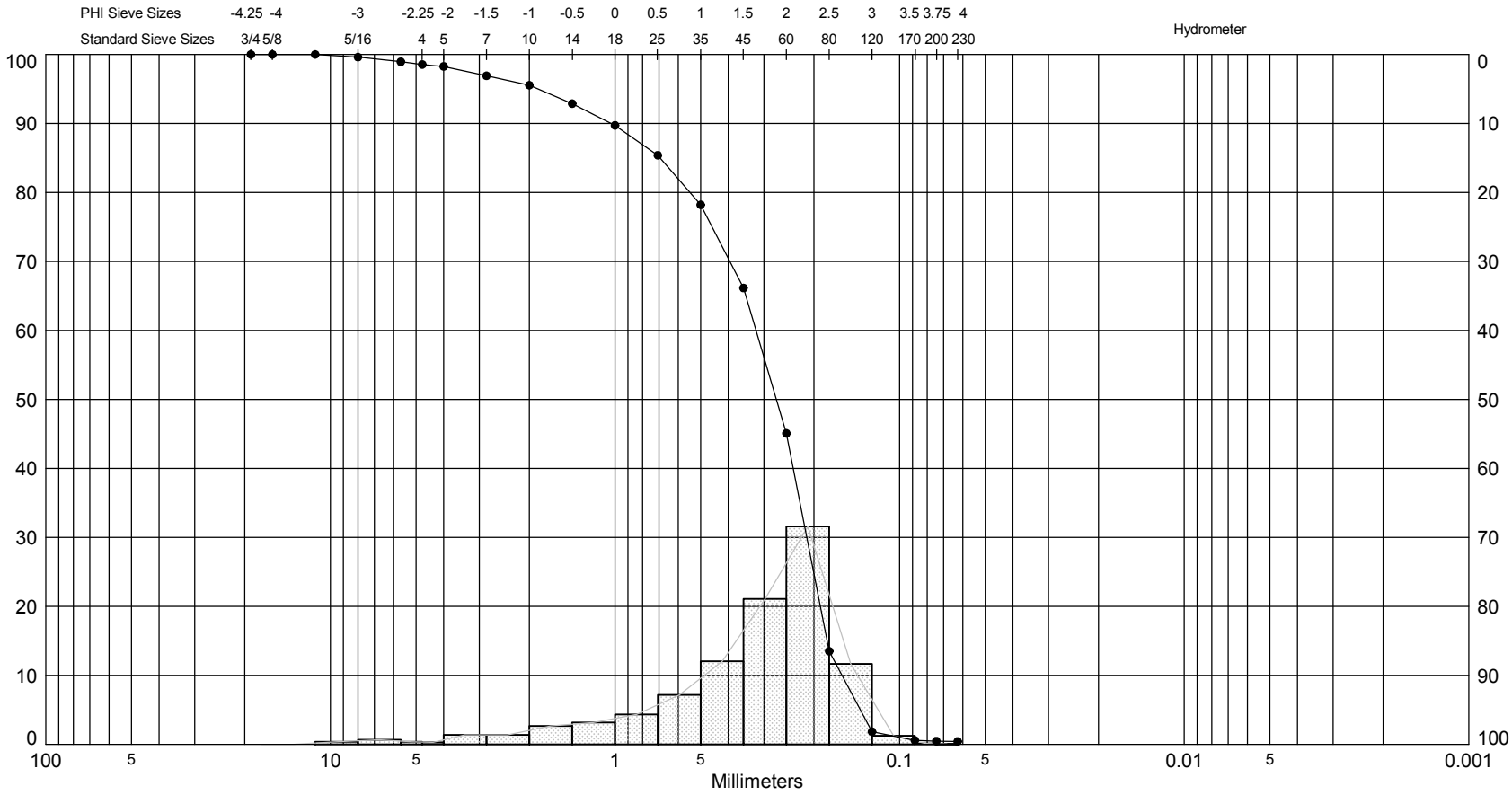
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O6 #4	—●—		SW	#200 - 0.47 #230 - 0.43	0.60	17.80	1.88	1.55	-1.58	5.73	1.15

Comments:

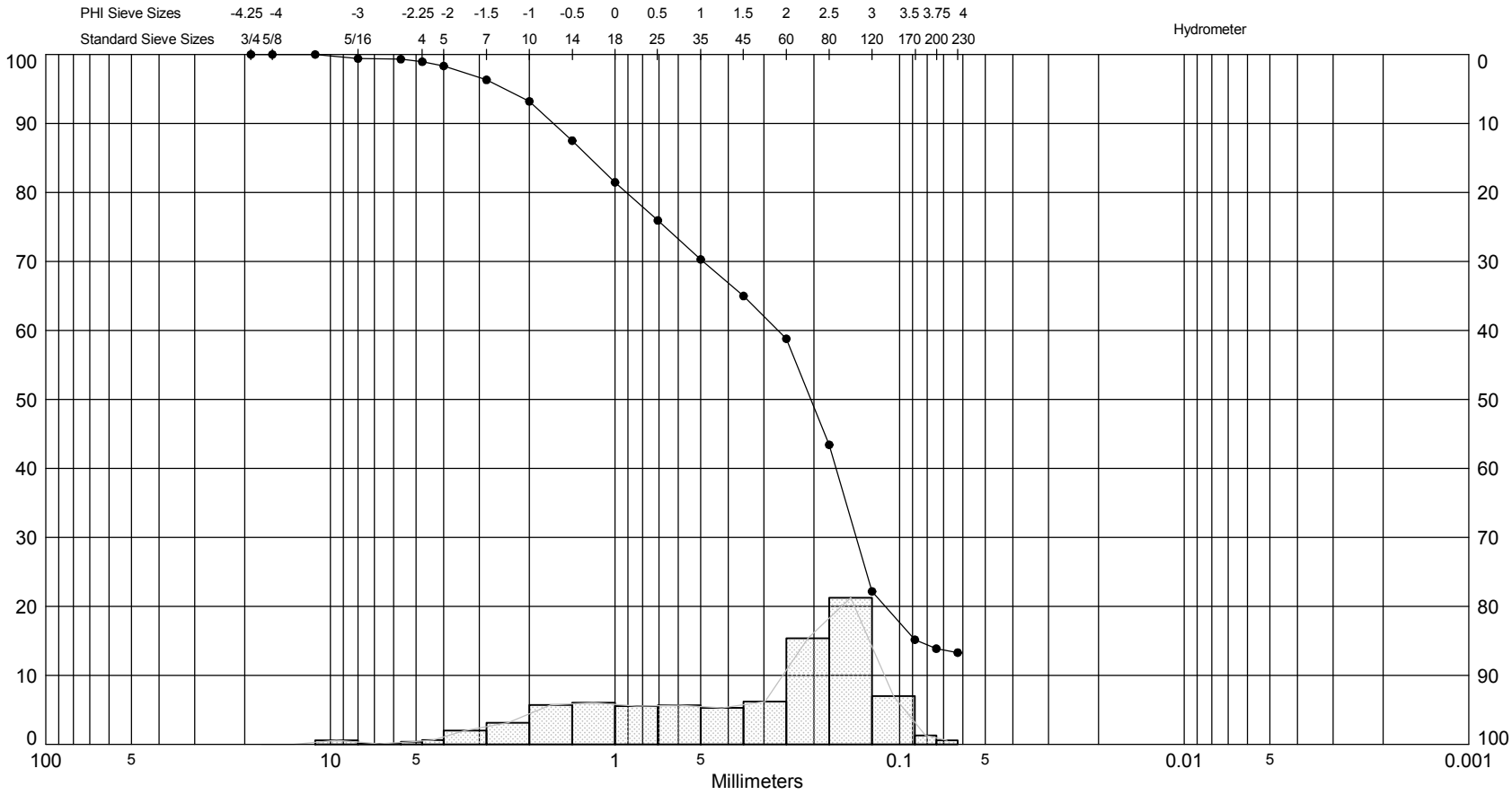
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O6 #5	—●—		SM	#200 - 13.87 #230 - 13.30	2.20	21.70	2.29	1.48	-0.78	2.63	1.54

Comments:

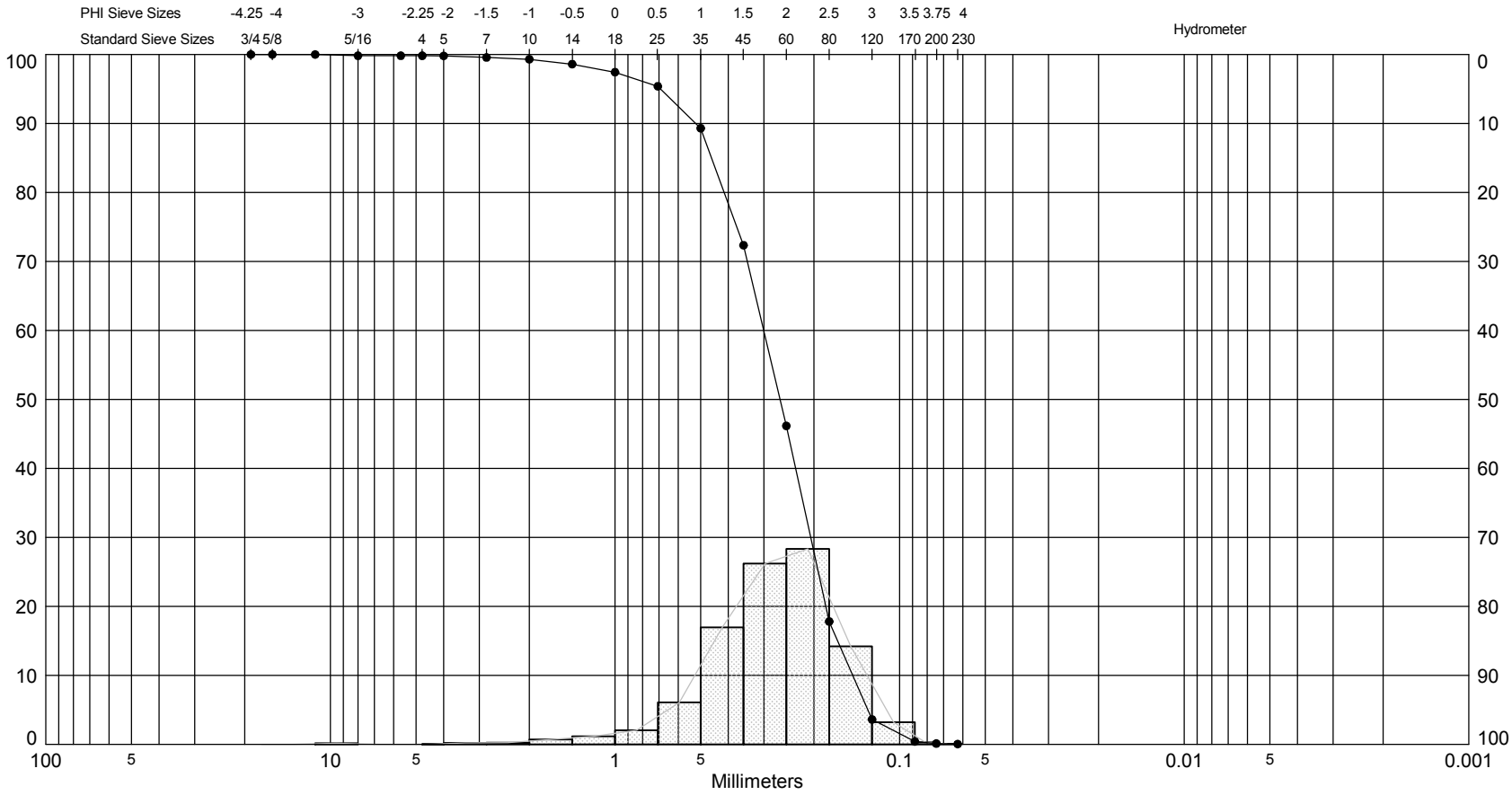
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O7 #1	—●—		SP	#200 - 0.12 #230 - 0.04	0.40	8.30	1.93	1.85	-1.26	7.41	0.79

Comments:

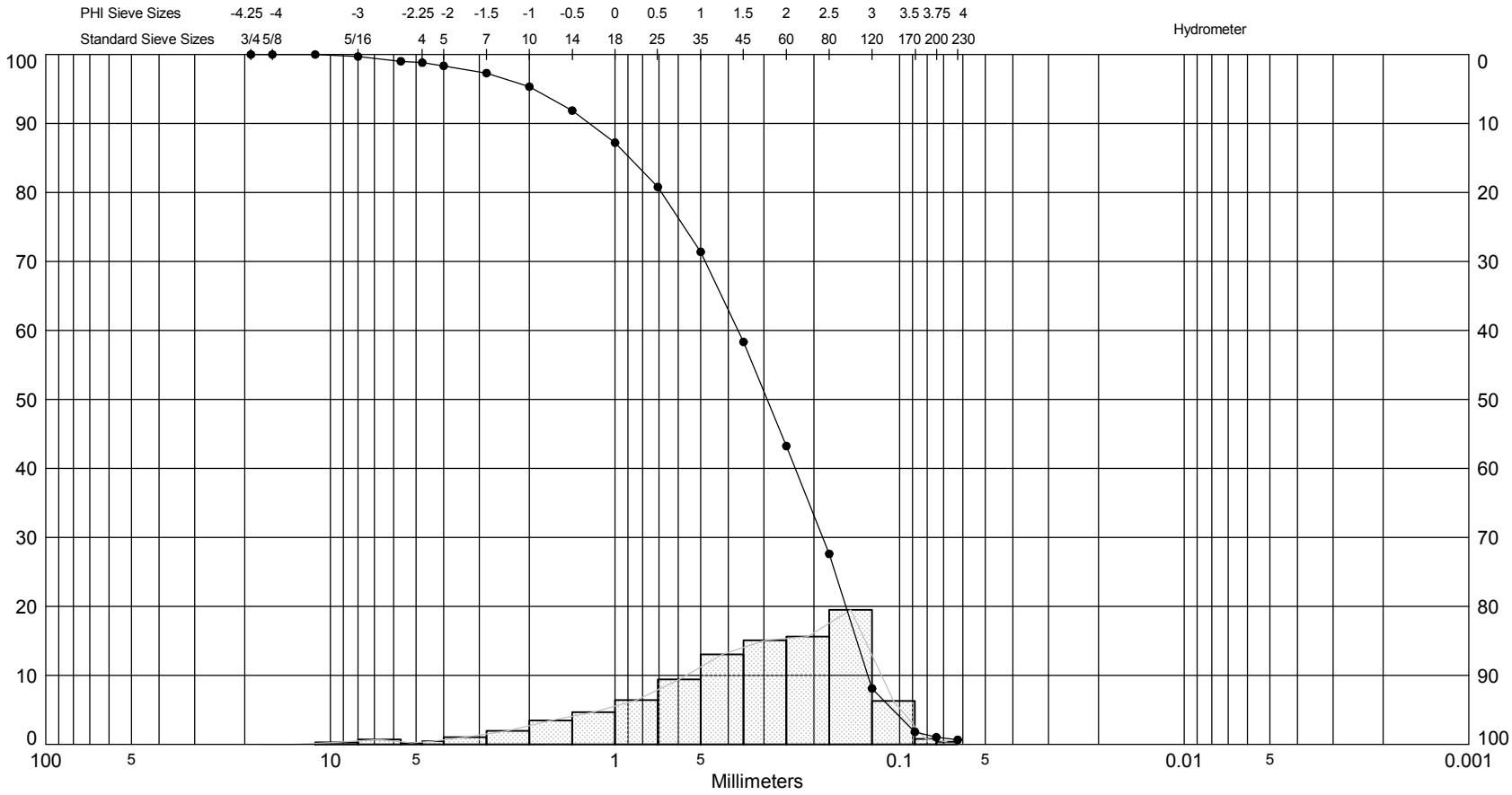
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O7 #2	—●—		SW	#200 - 1.03 #230 - 0.65	0.70	20.70	1.78	1.54	-0.94	3.72	1.3

Comments:

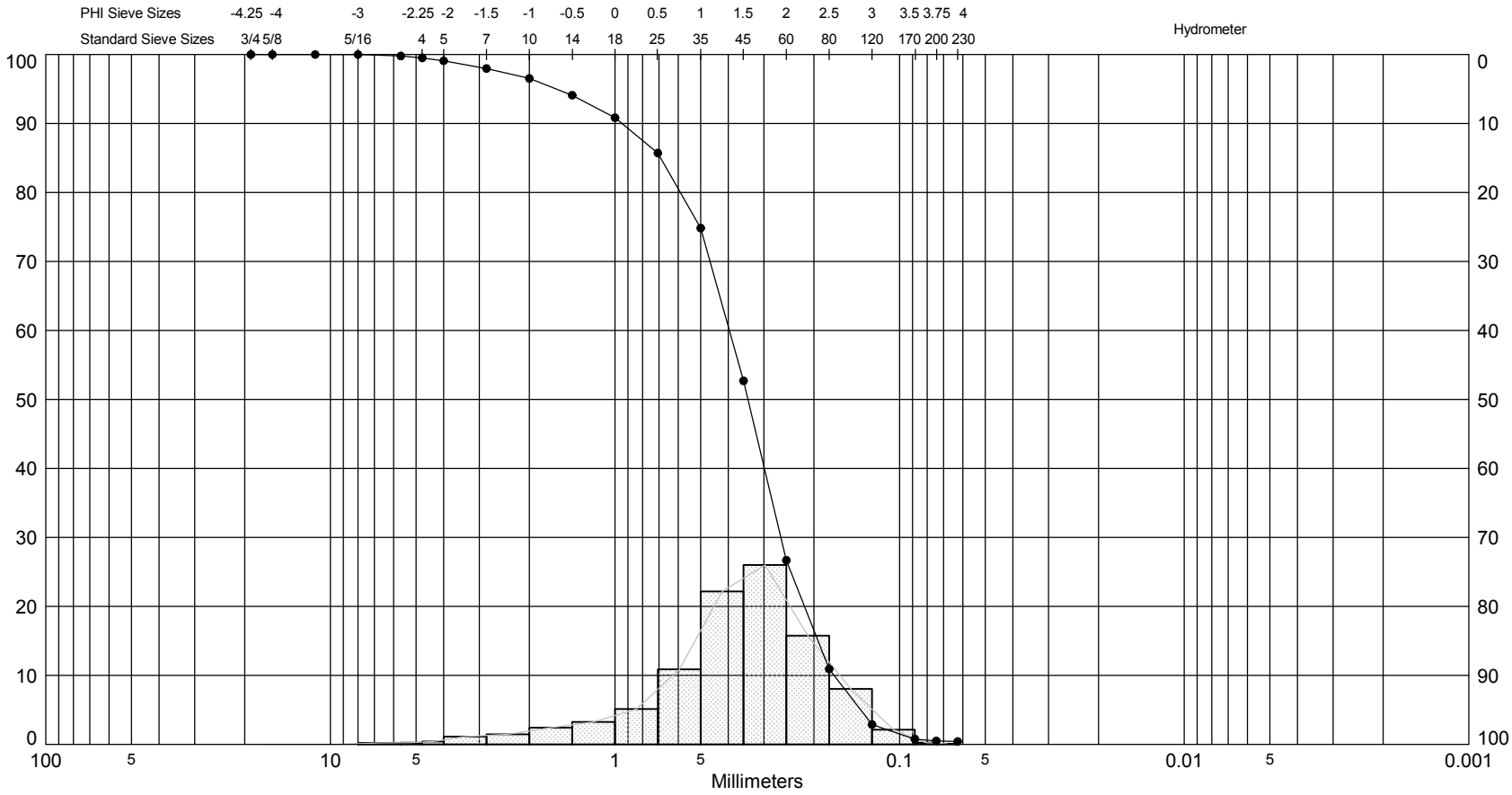
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O7 #3	—●—		SW	#200 - 0.50 #230 - 0.42	0.60	14.50	1.55	1.4	-1.06	4.8	1.02

Comments:

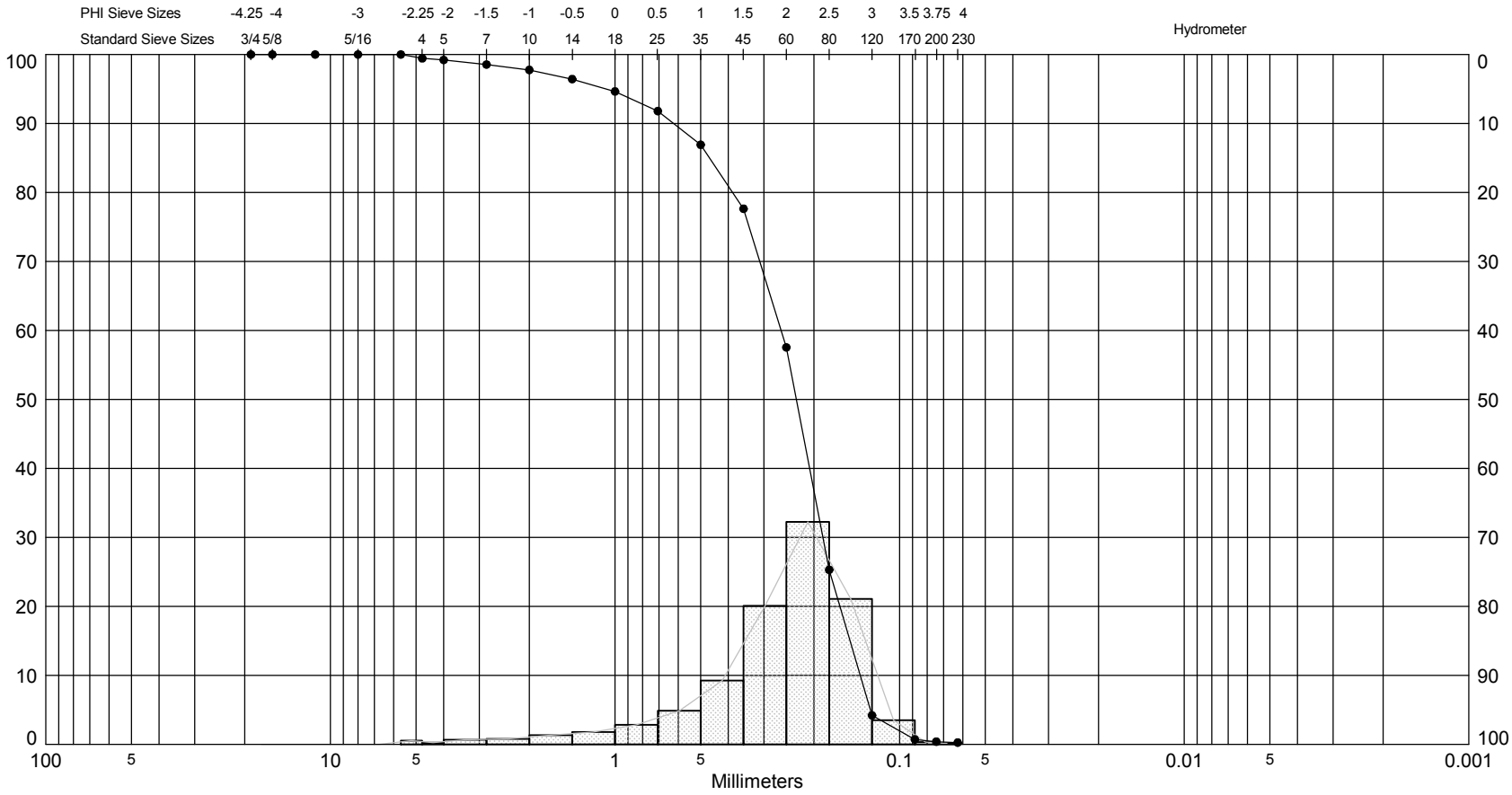
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O7 #4	—●—		SW	#200 - 0.39 #230 - 0.26	0.60	11.50	2.12	1.9	-1.7	6.85	0.97

Comments:

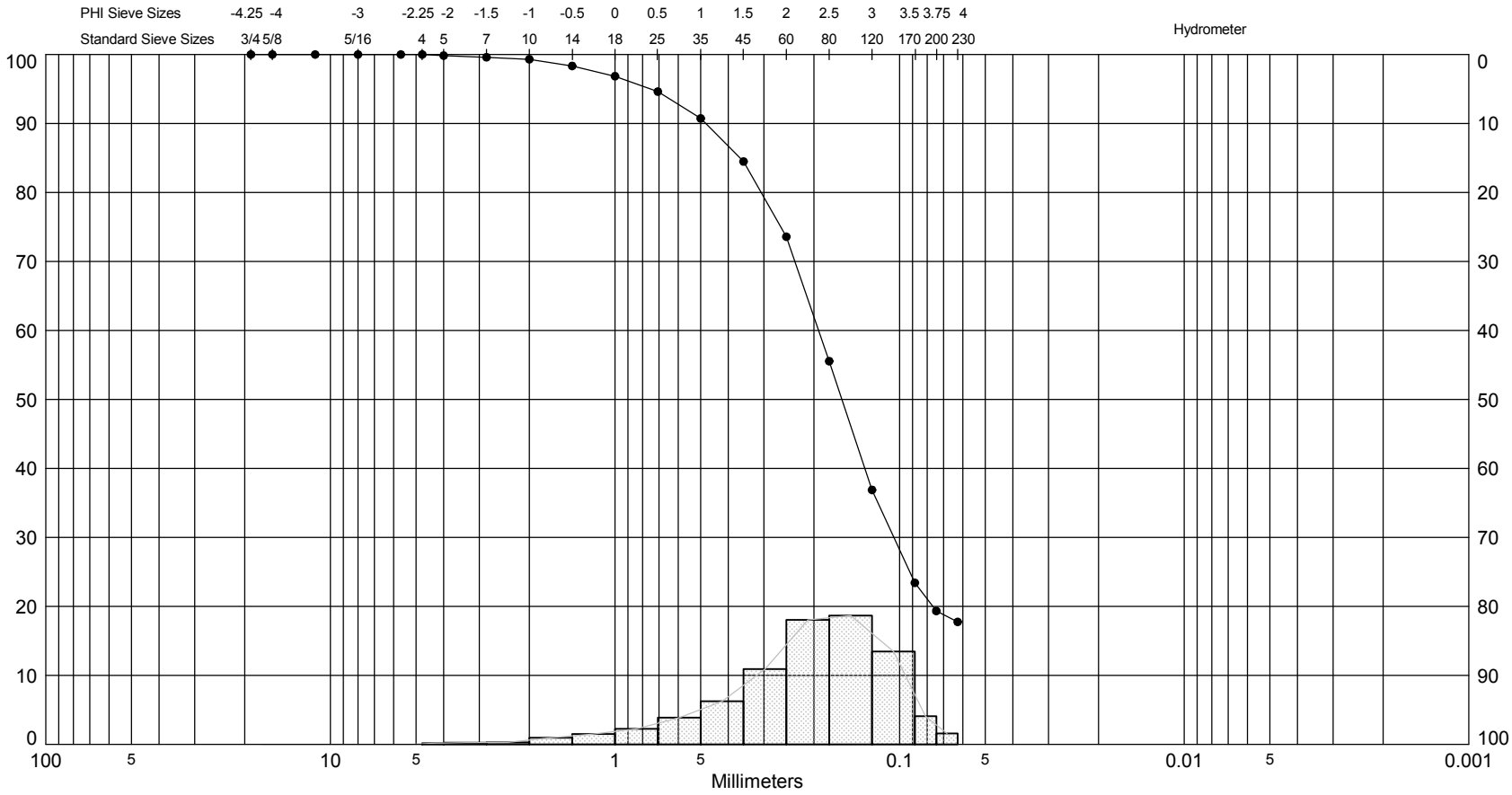
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O8 #1	—●—		SM	#200 - 19.33 #230 - 17.75	2.60	13.70	2.65	2.25	-1.1	4.55	1.02

Comments:

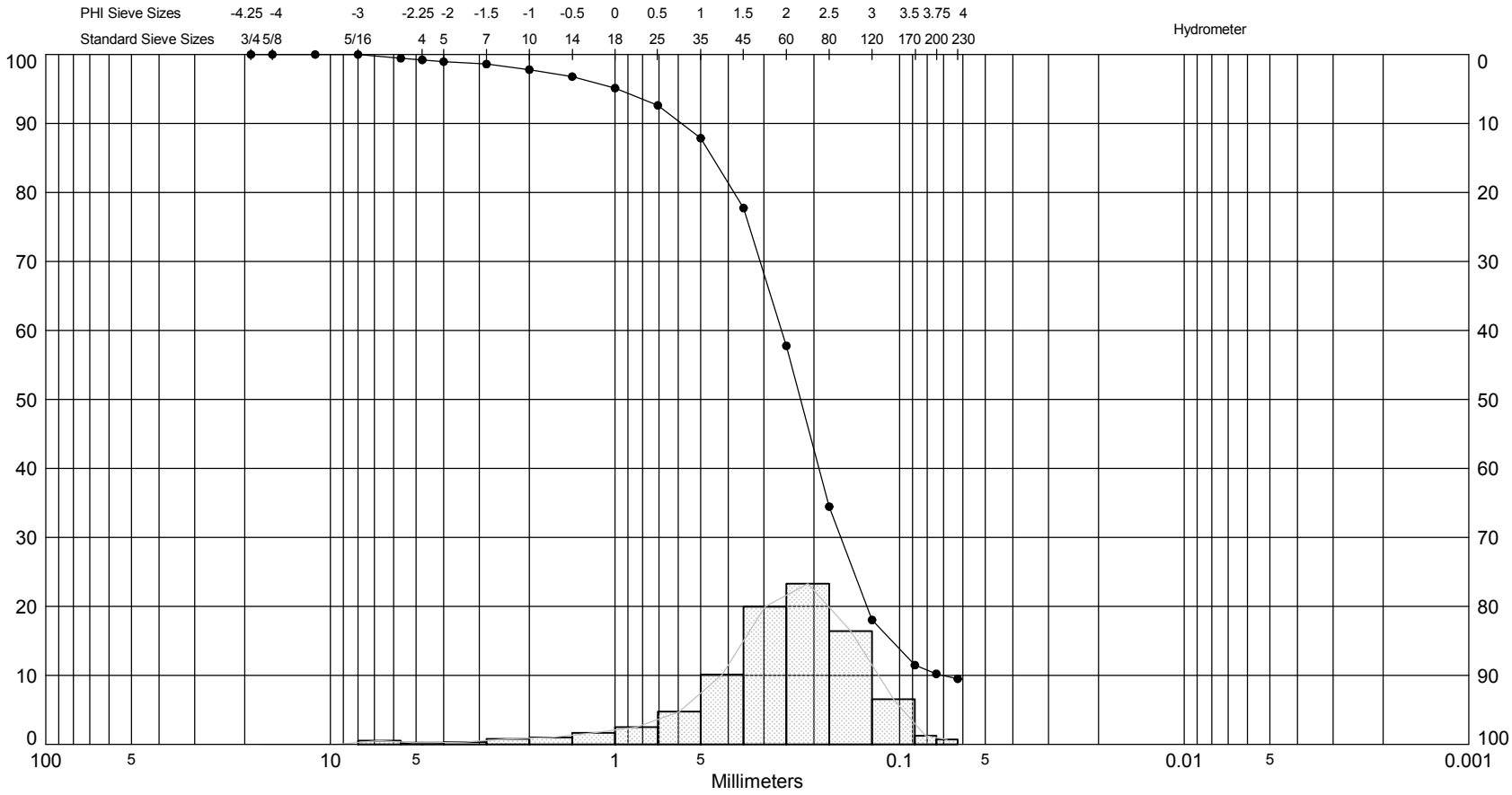
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O8 #2	—●—		SW-SM	#200 - 10.22 #230 - 9.51	1.60	12.90	2.17	1.91	-1.48	6.64	1.04

Comments:

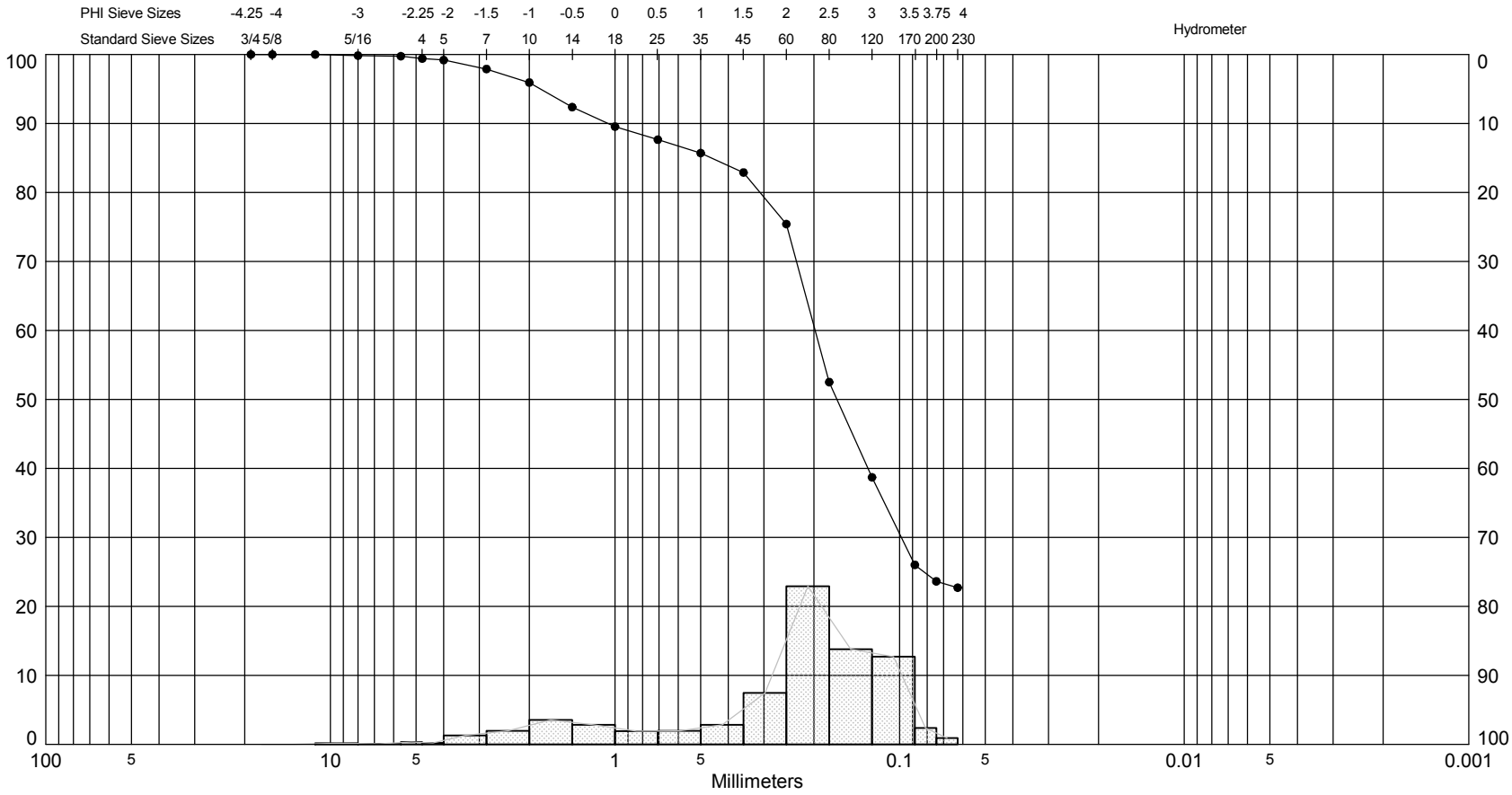
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O8 #3	—●—		SM	#200 - 23.63 #230 - 22.71	2.10	22.90	2.59	1.96	-1.33	4.15	1.37

Comments:

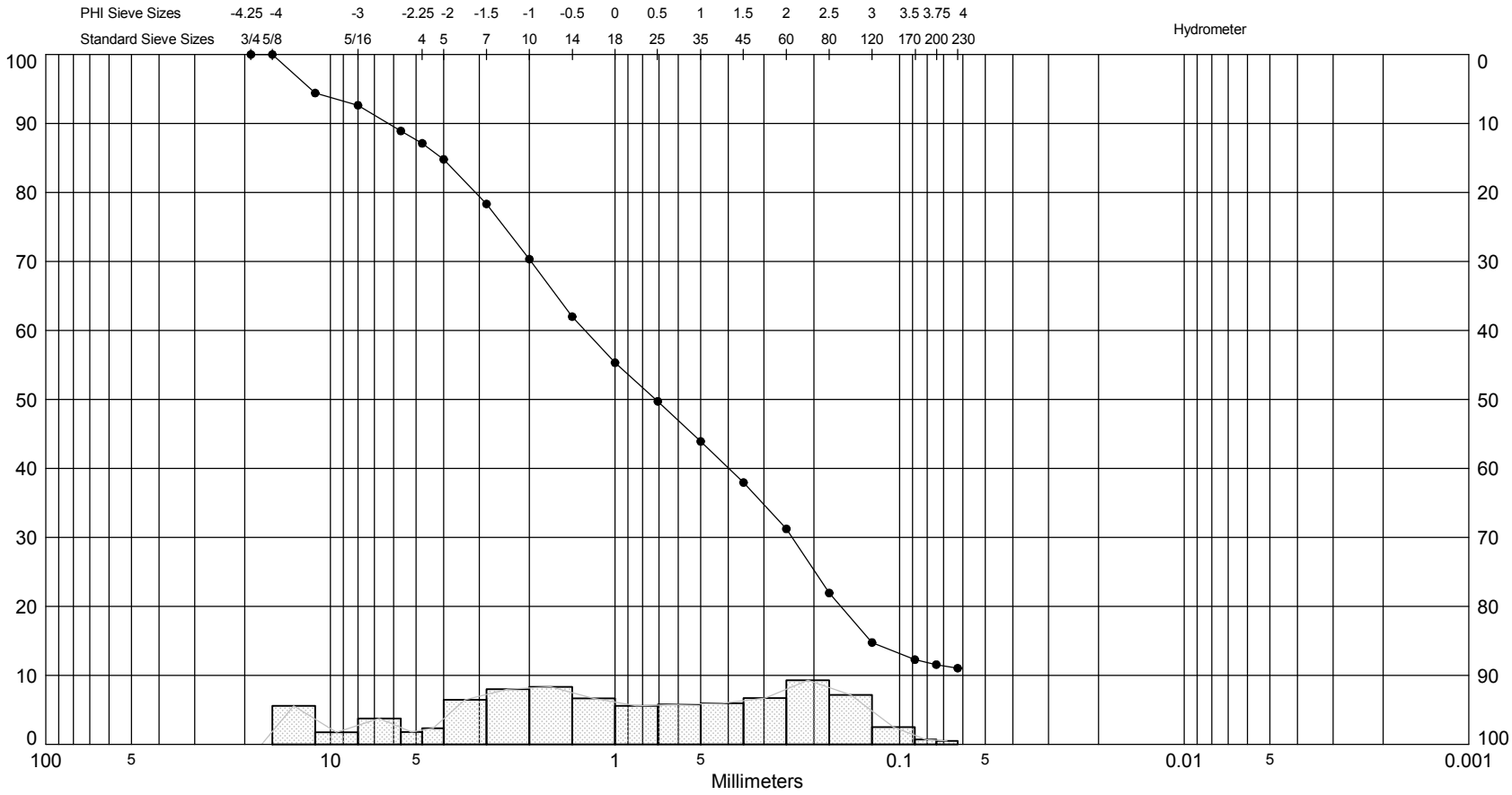
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O8 #4	—●—		SW-SM	#200 - 11.56 #230 - 11.04	2.40	44.70	0.48	0.03	-0.16	2.01	2.02

Comments:

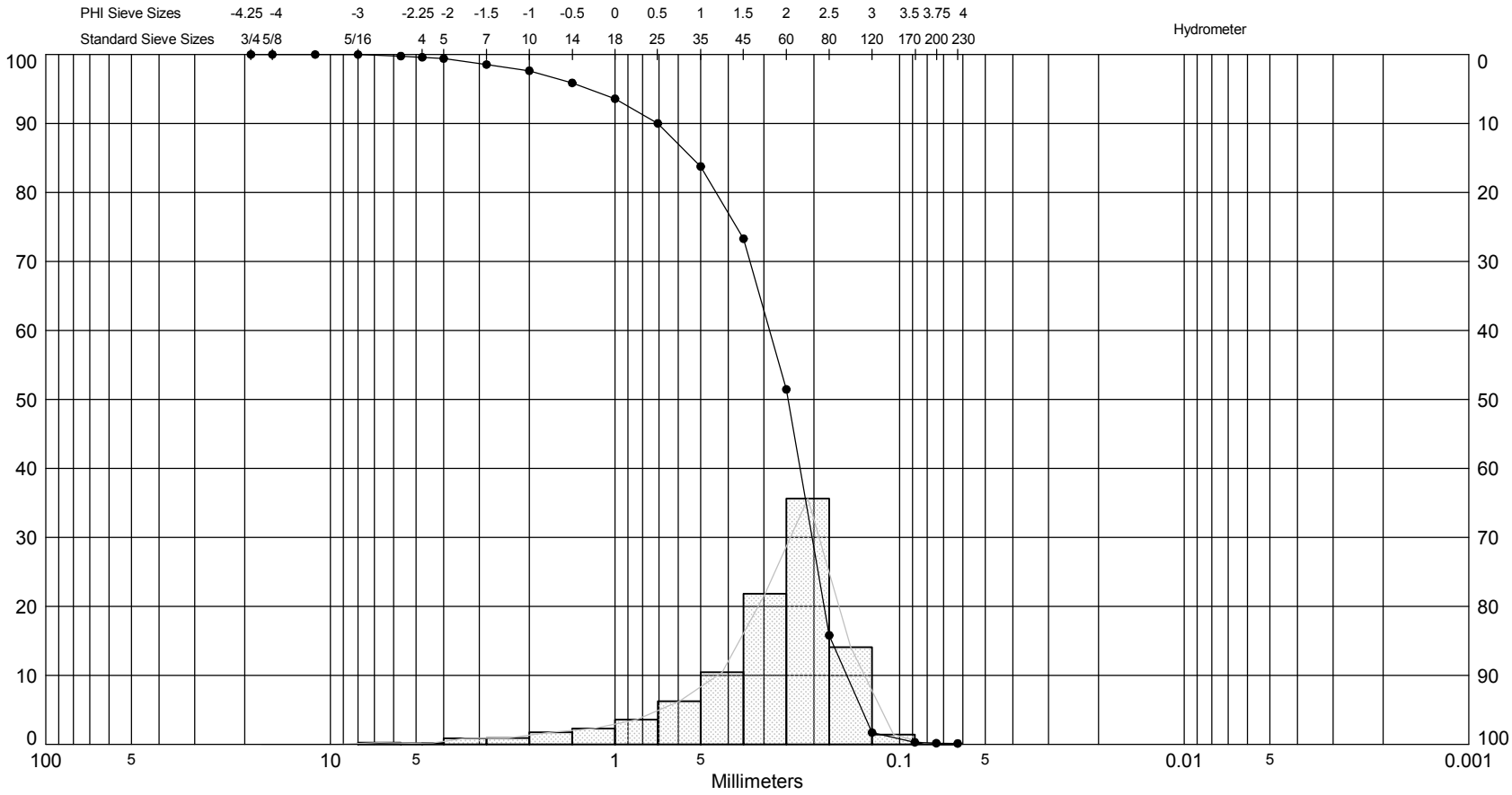
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O9 #1	—●—		SW	#200 - 0.17 #230 - 0.13	0.70	15.70	2.02	1.75	-1.64	6.32	0.97

Comments:

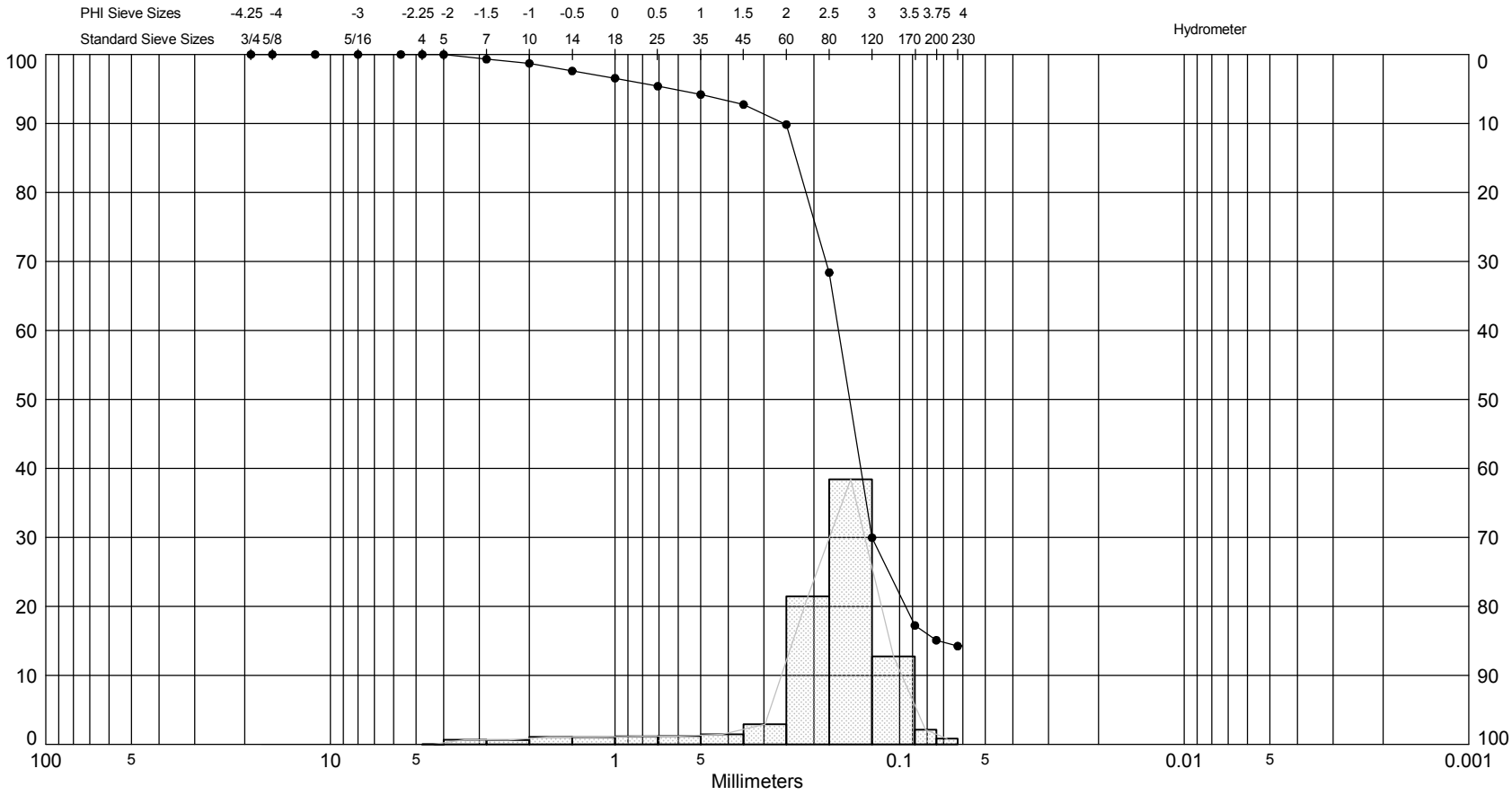
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O9 #2	—●—		SM	#200 - 15.09 #230 - 14.24	1.80	9.30	2.74	2.46	-2.42	10.1	0.9

Comments:

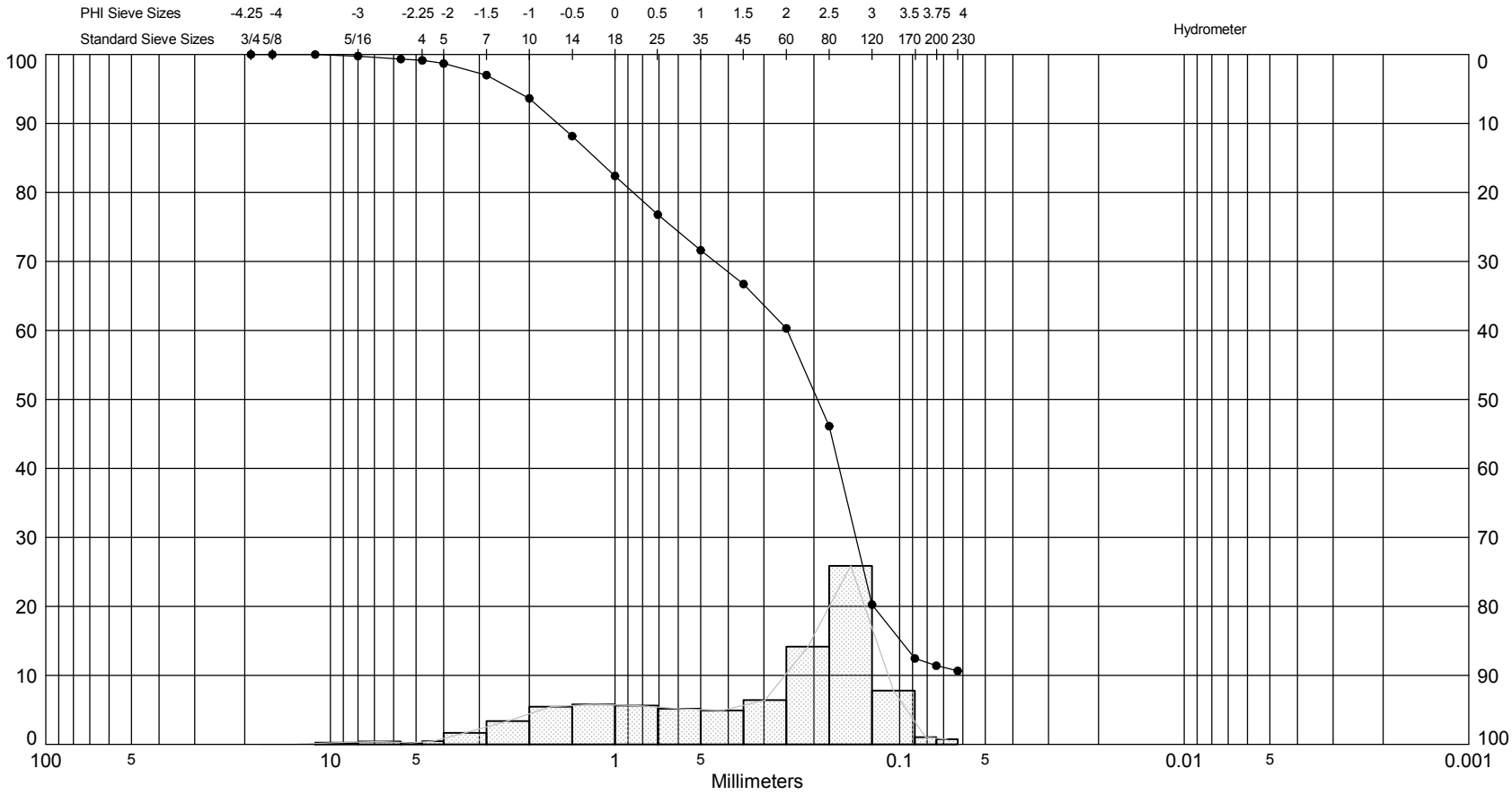
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O9 #3	—●—		SW-SM	#200 - 11.40 #230 - 10.65	1.80	32.20	2.36	1.59	-0.84	2.67	1.51

Comments:

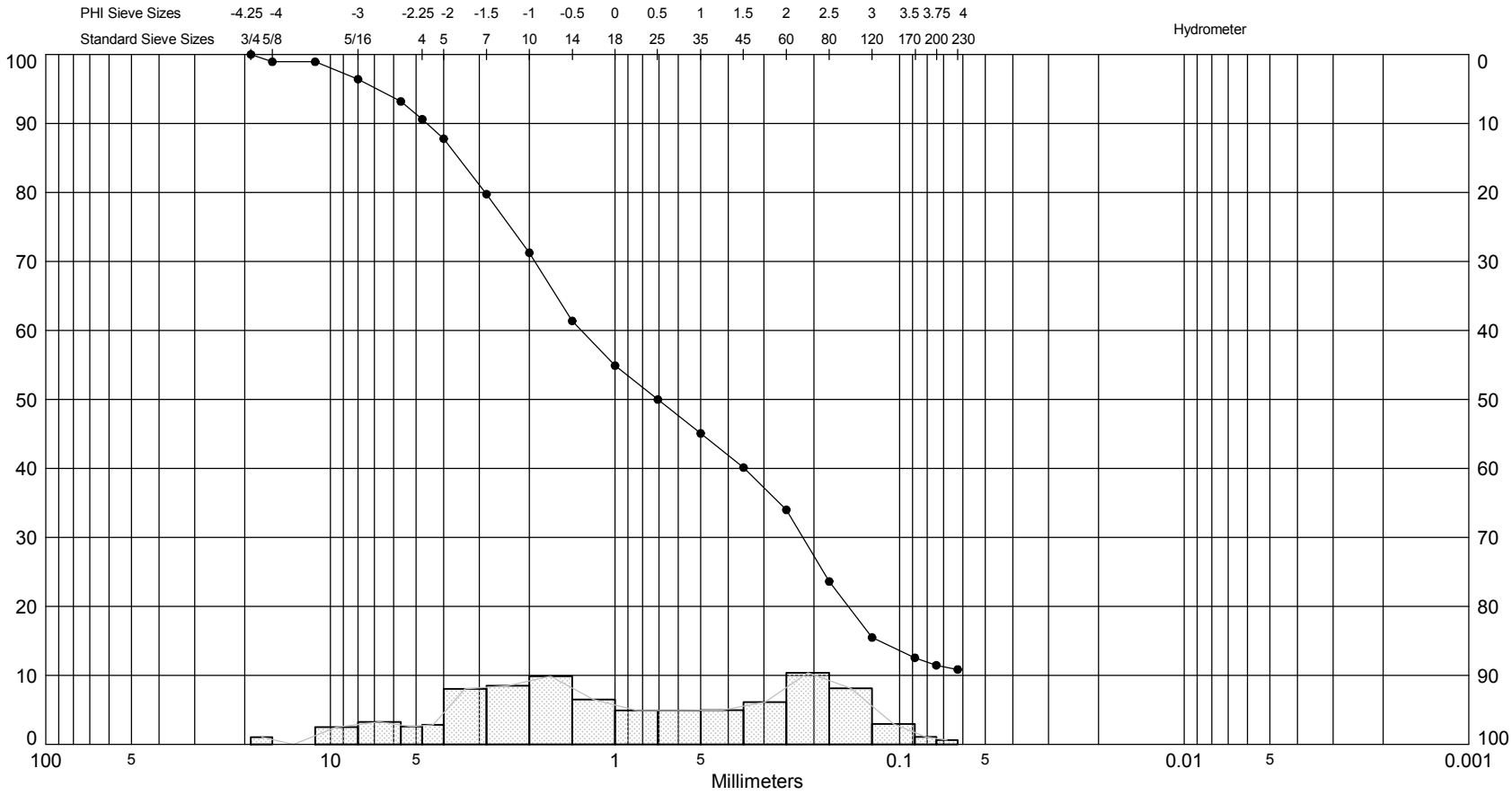
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O9 #4	—●—		SW-SM	#200 - 11.46 #230 - 10.85	2.40	46.50	0.5	0.18	-0.02	1.91	1.94

Comments:

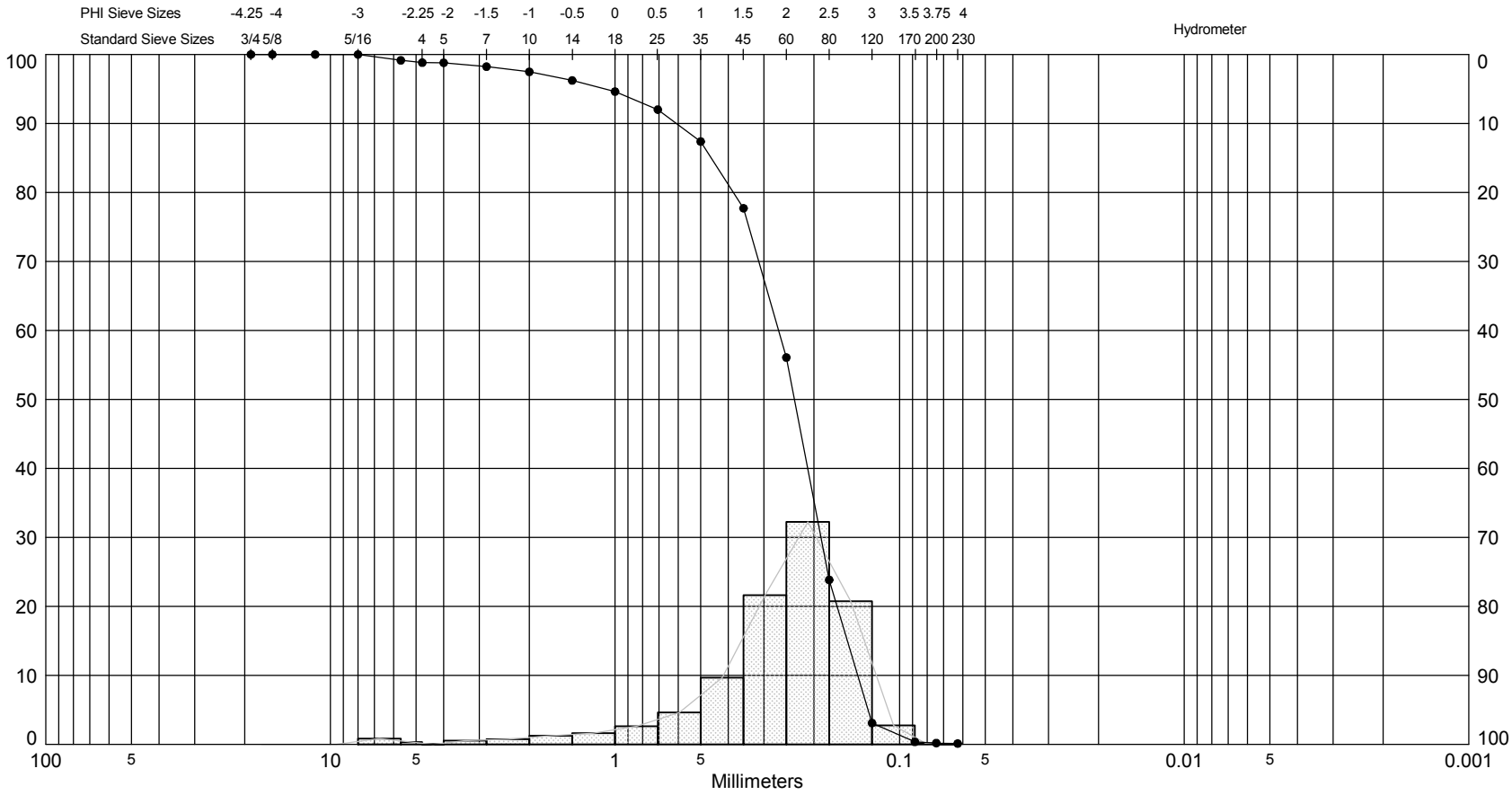
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O10 #1	—●—		SW	#200 - 0.18 #230 - 0.12	0.60	11.80	2.09	1.87	-1.99	8.39	0.99

Comments:

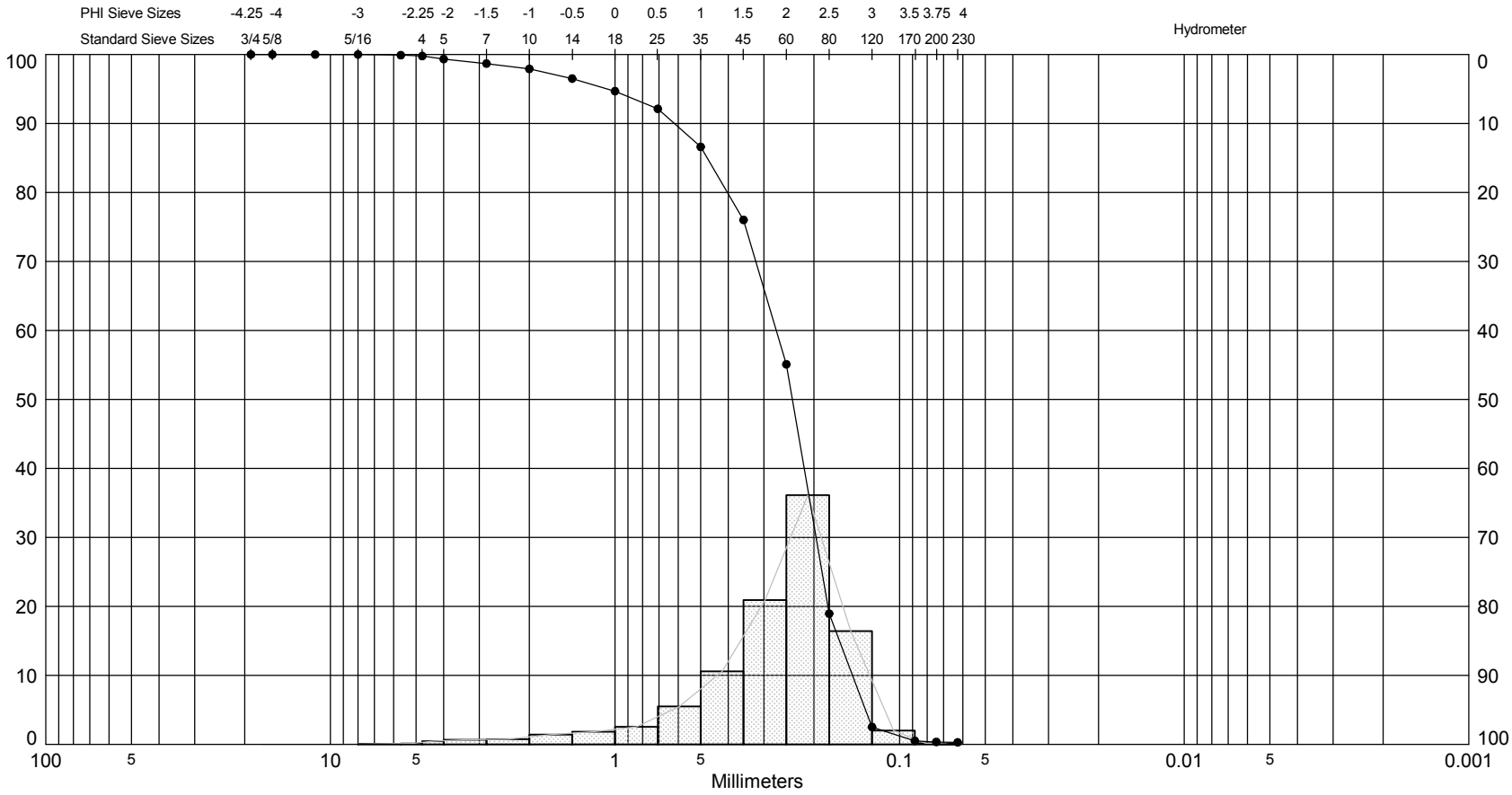
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O10 #2	—●—		SW	#200 - 0.35 #230 - 0.29	0.60	12.90	2.07	1.84	-1.73	7	0.93

Comments:

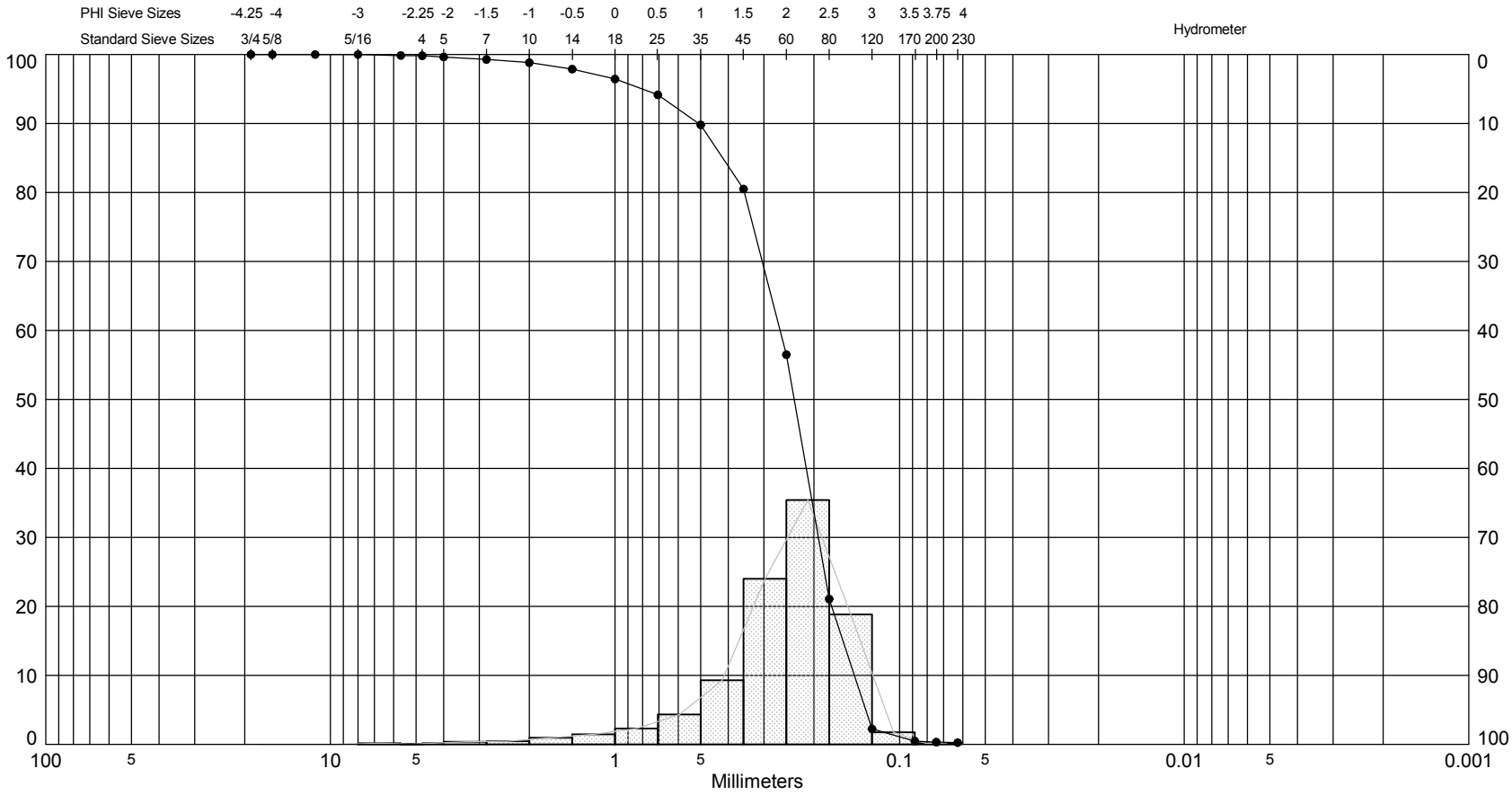
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O10 #3	—●—		SP	#200 - 0.32 #230 - 0.25	0.60	10.00	2.09	1.93	-1.79	8.07	0.82

Comments:

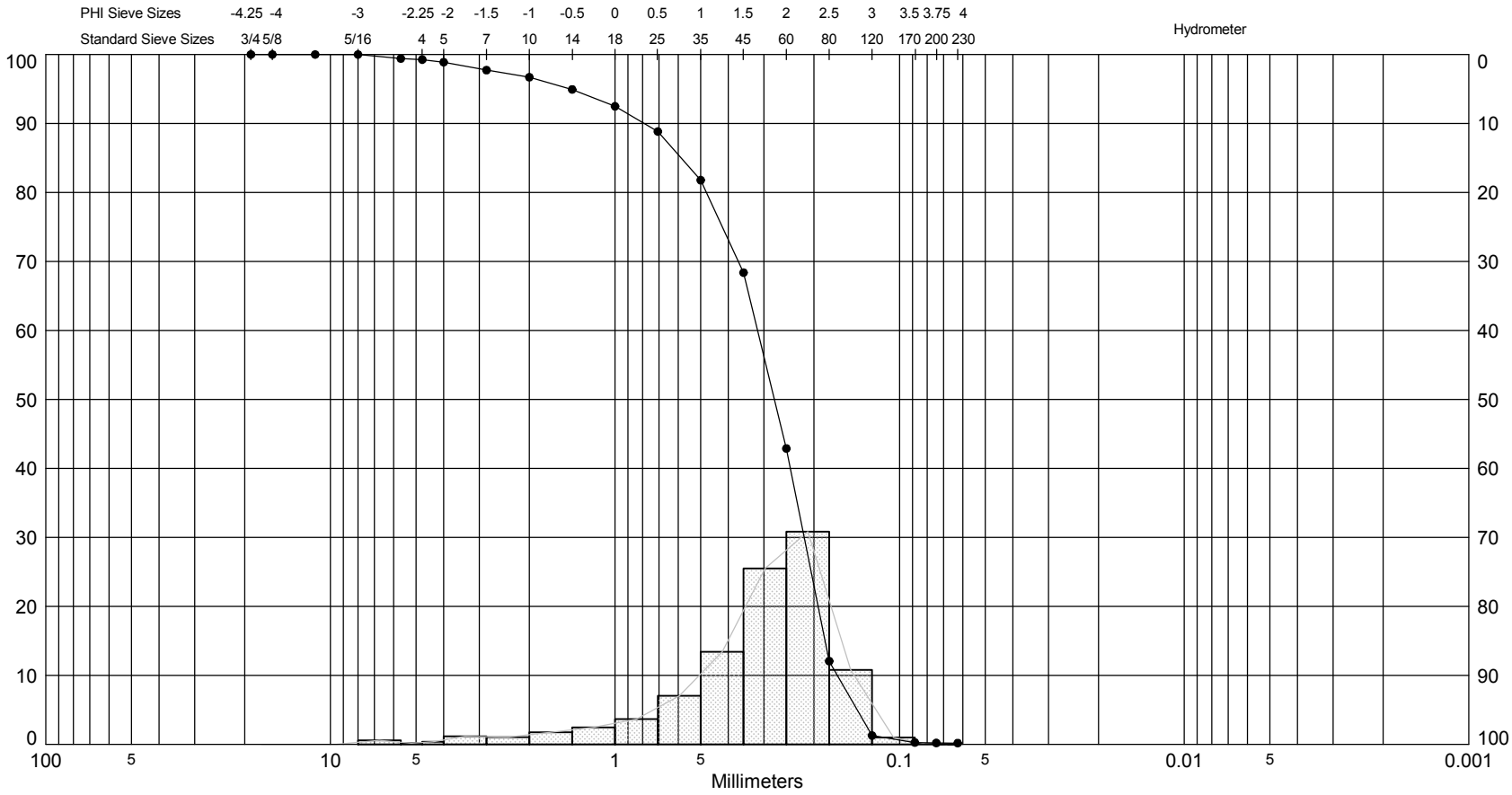
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O10 #4	—●—		SW	#200 - 0.20 #230 - 0.18	0.60	13.50	1.86	1.62	-1.68	6.49	1.01

Comments:

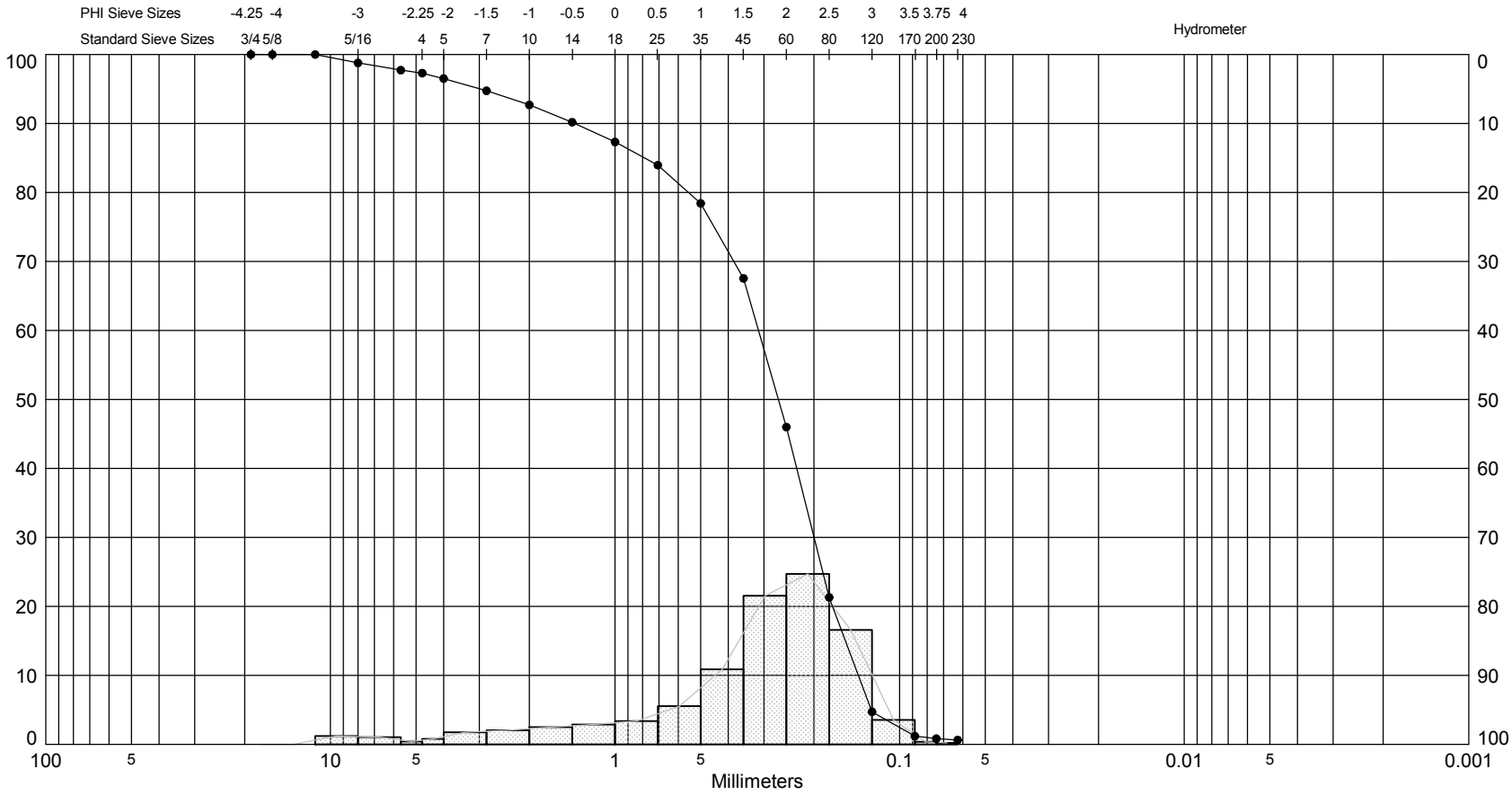
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O11 #1	—●—		SW	#200 - 0.82 #230 - 0.63	0.70	15.50	1.91	1.54	-1.56	5.28	1.35

Comments:

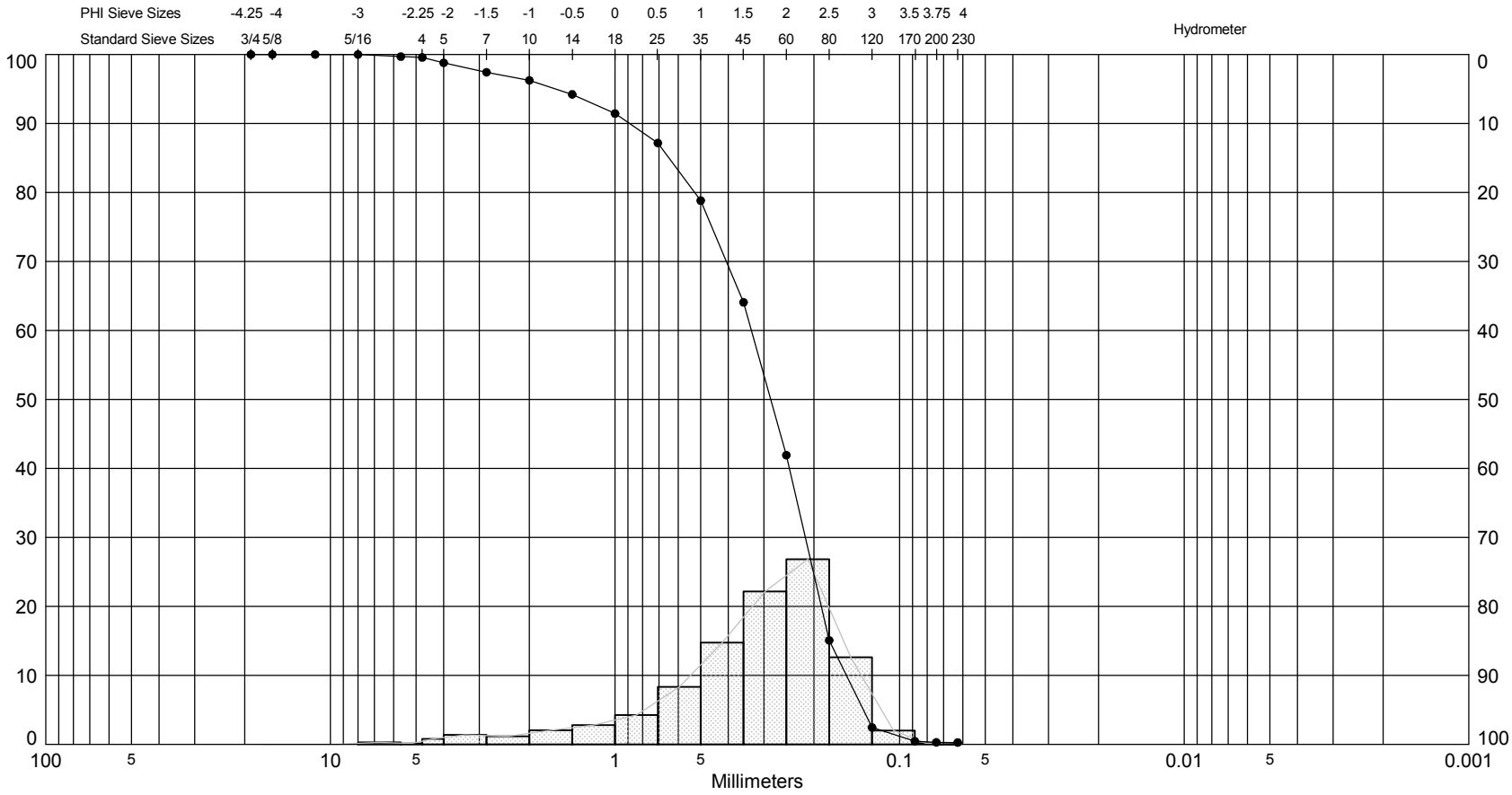
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O11 #2	—●—		SW	#200 - 0.29 #230 - 0.27	0.60	13.70	1.82	1.58	-1.38	5.23	1.07

Comments:

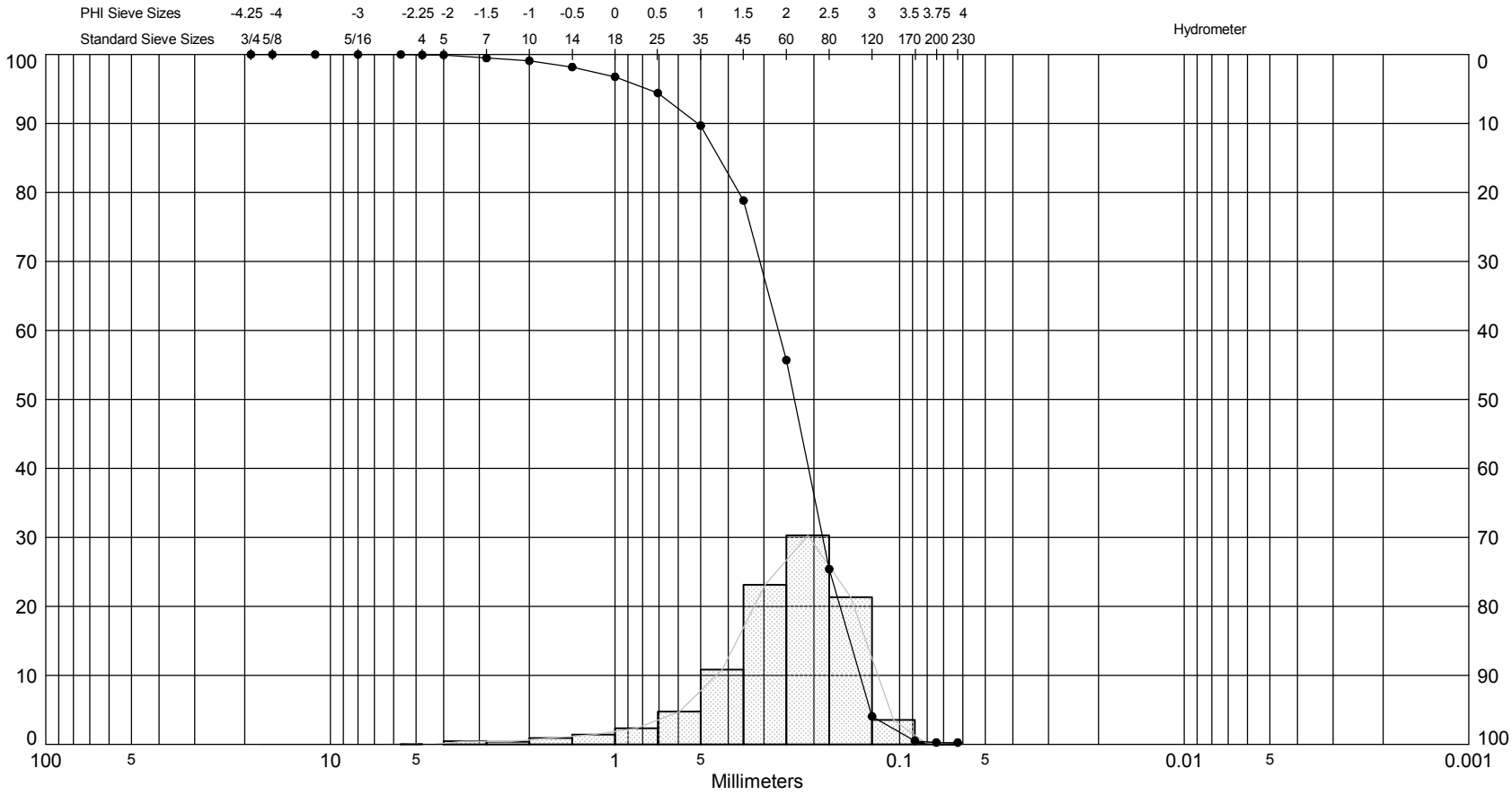
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O11 #3	—●—		SP	#200 - 0.27 #230 - 0.26	0.60	13.80	2.09	1.95	-1.4	6.21	0.83

Comments:

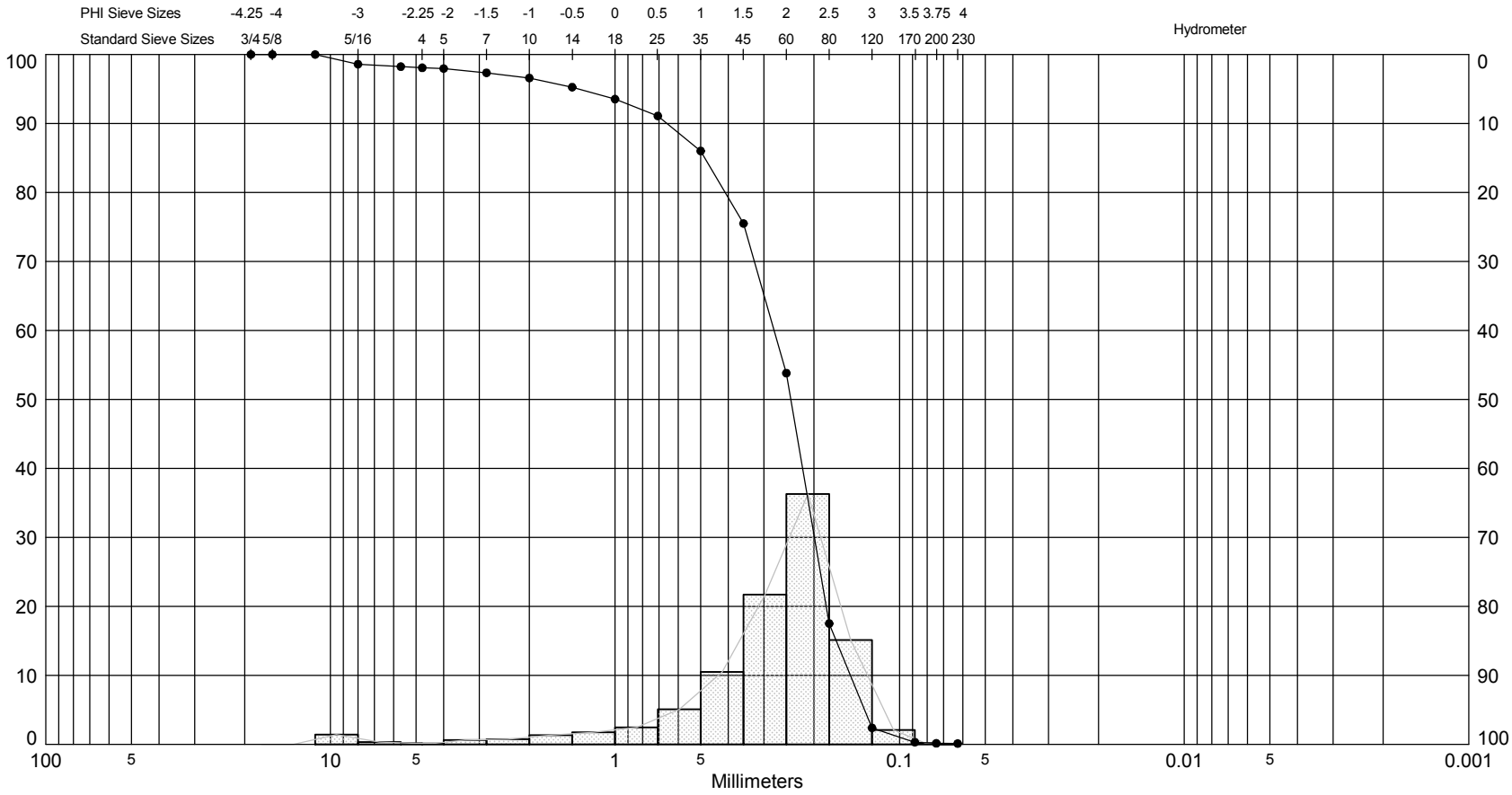
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O11 #4	—●—		SW	#200 - 0.15 #230 - 0.12	0.60	14.10	2.05	1.77	-2.31	9.86	1.09

Comments:

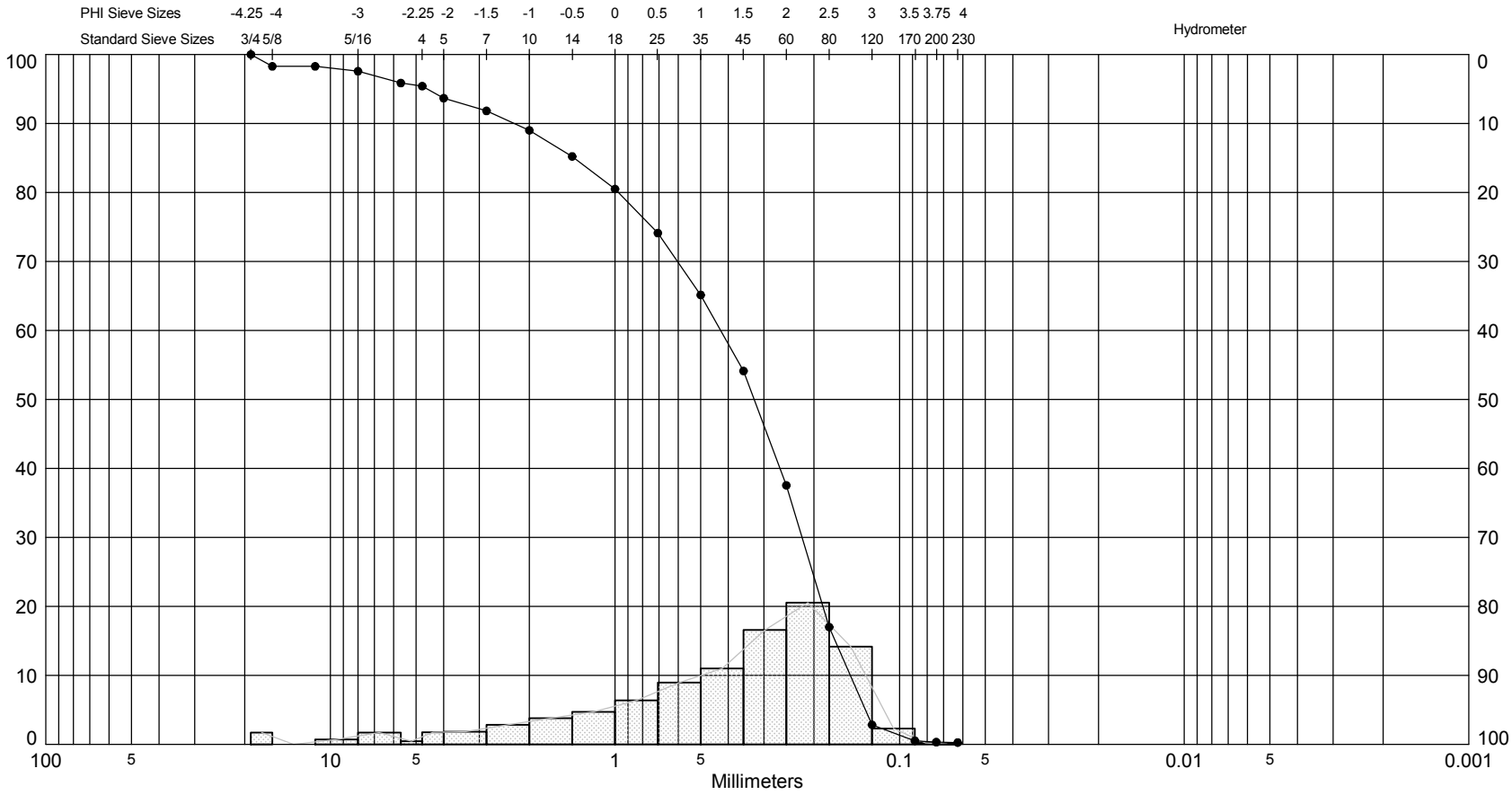
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O12 #1	—●—		SW	#200 - 0.32 #230 - 0.26	0.70	23.30	1.62	1.16	-1.28	4.31	1.59

Comments:

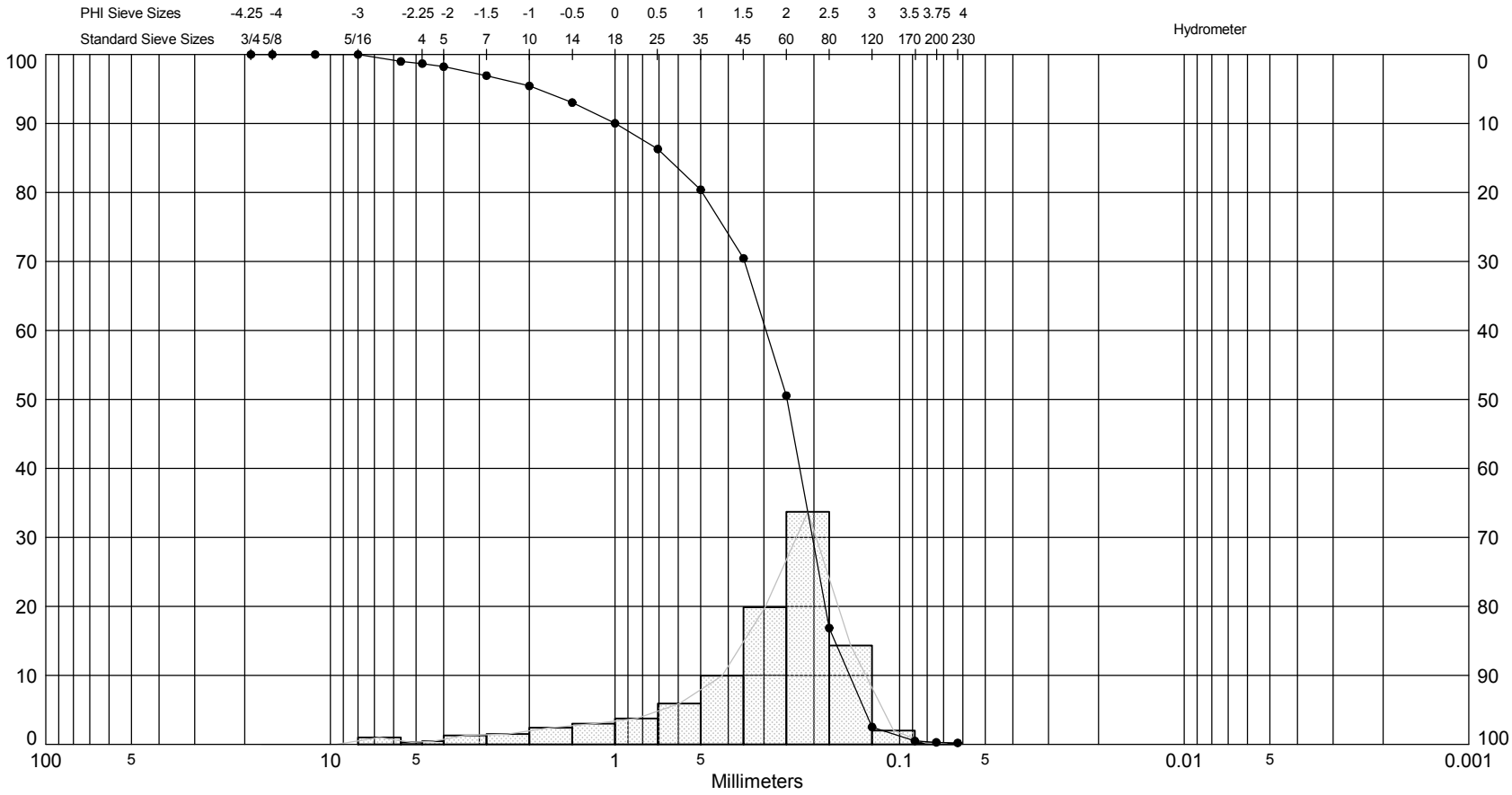
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O12 #2	—●—		SW	#200 - 0.29 #230 - 0.21	0.80	14.20	2.01	1.65	-1.62	5.69	1.15

Comments:

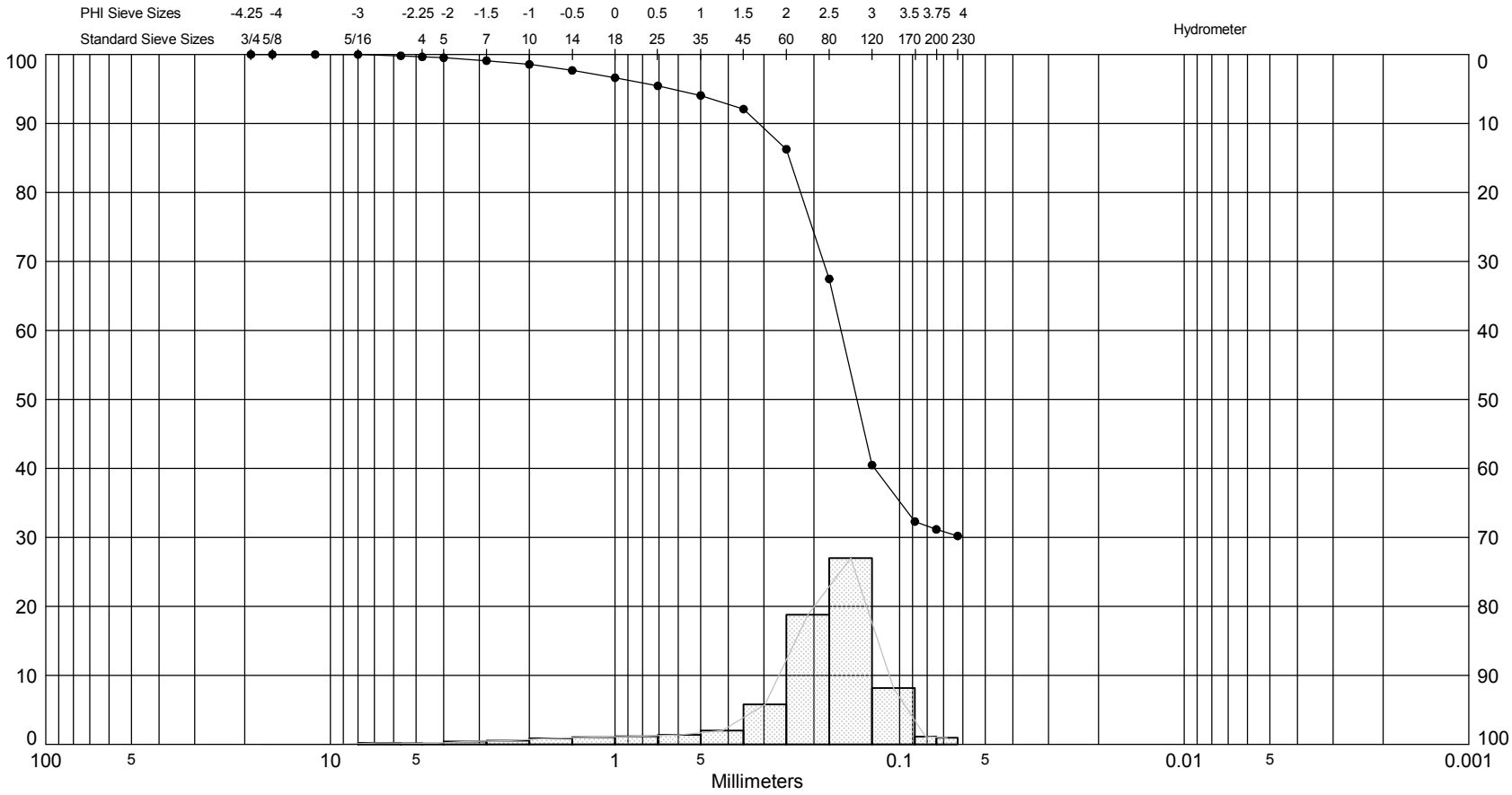
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O12 #3	—●—		SM	#200 - 31.16 #230 - 30.21	3.10	17.80	2.82	2.31	-2.21	9.13	0.99

Comments:

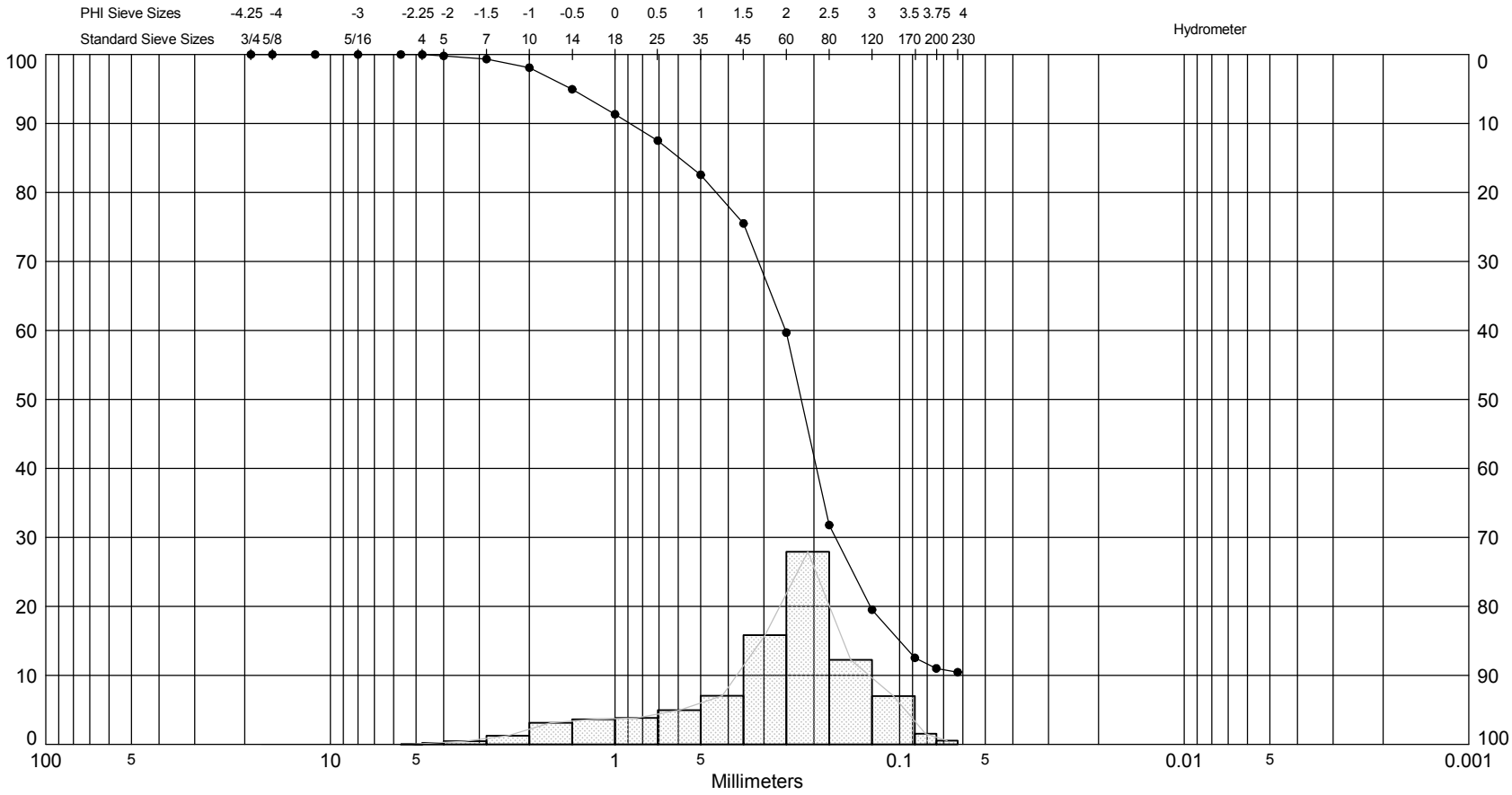
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O12 #4	—●—		SW-SM	#200 - 11.01 #230 - 10.46	1.70	29.70	2.17	1.81	-1.02	3.8	1.12

Comments:

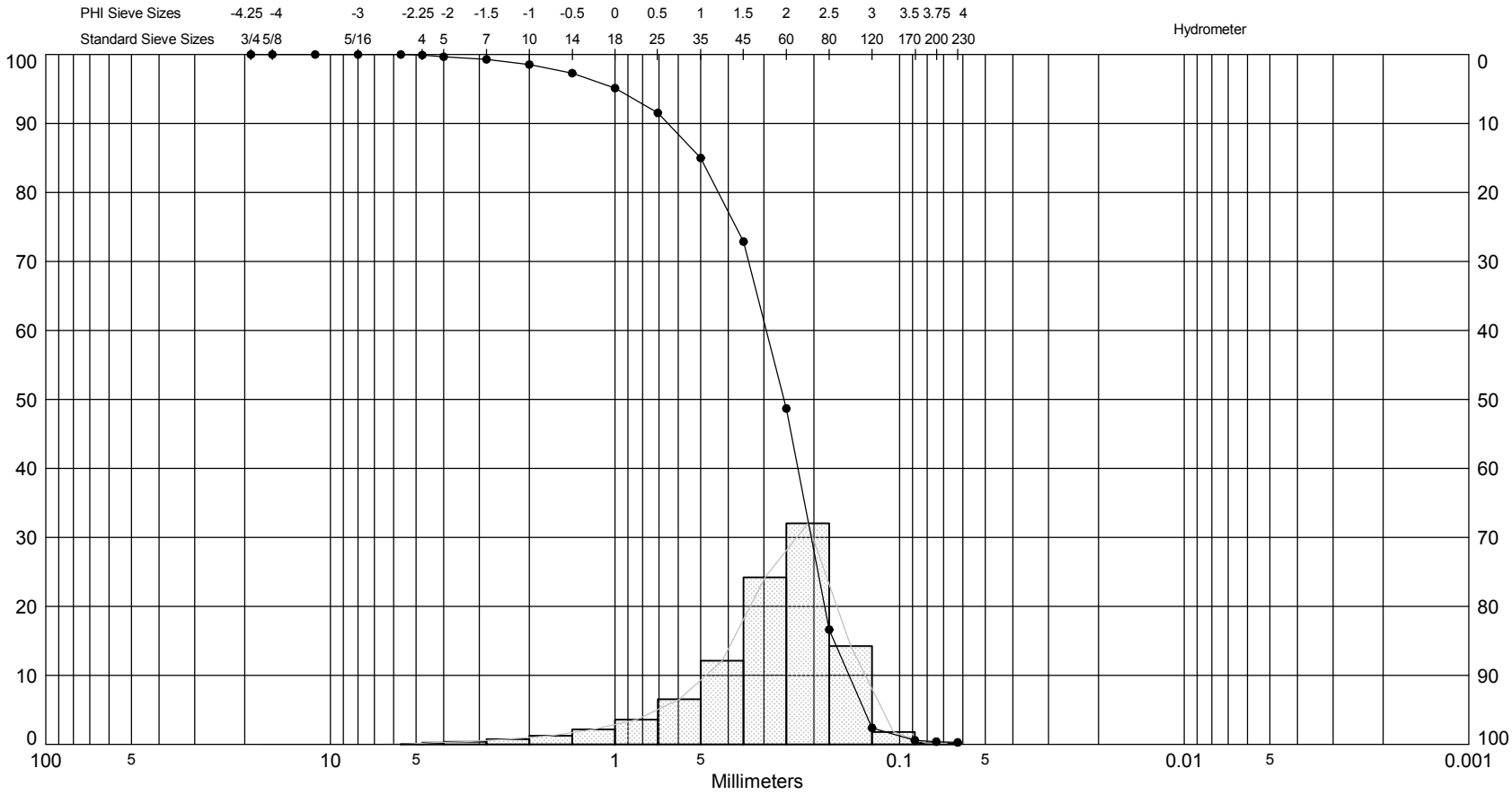
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O13 #1	—●—		SW	#200 - 0.39 #230 - 0.28	0.60	11.50	1.97	1.78	-1.37	5.71	0.88

Comments:

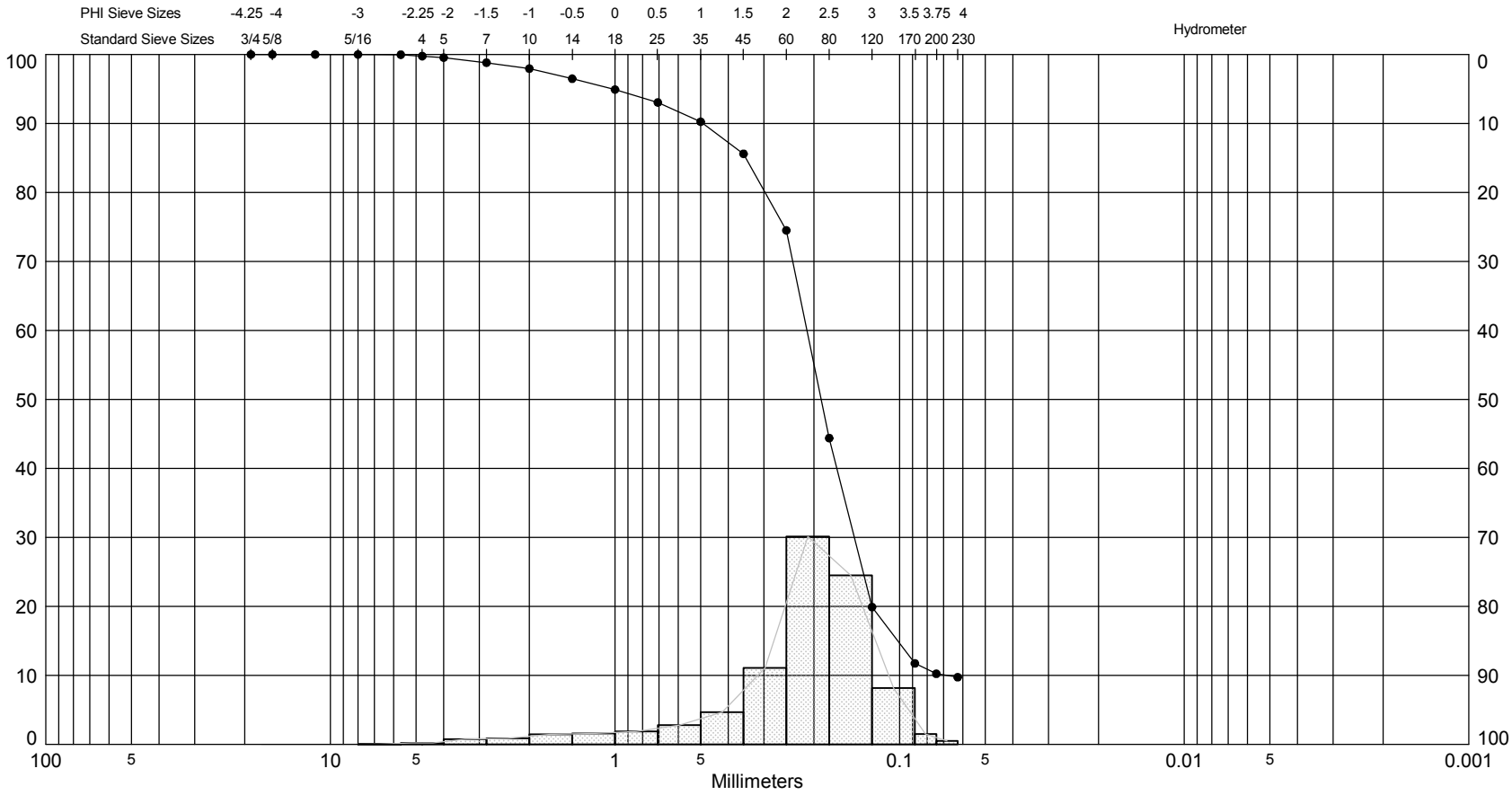
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O13 #2	—●—		SW-SM	#200 - 10.23 #230 - 9.73	1.30	15.90	2.41	2.13	-1.79	6.97	1.01

Comments:

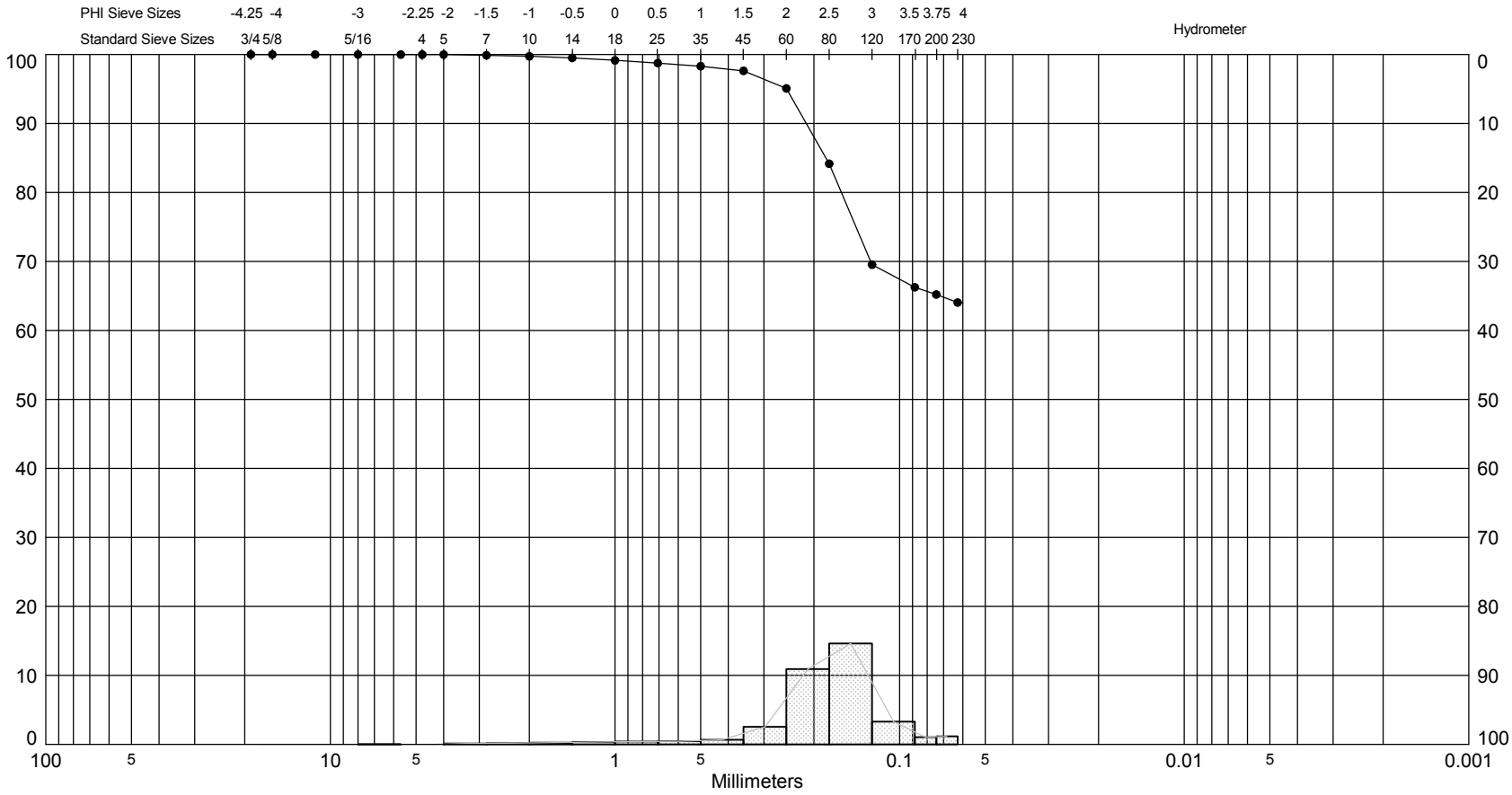
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O13 #3	—●—		CL	#200 - 65.21 #230 - 64.04	4.30	11.00		2.47	-1.97	10.07	0.79

Comments:

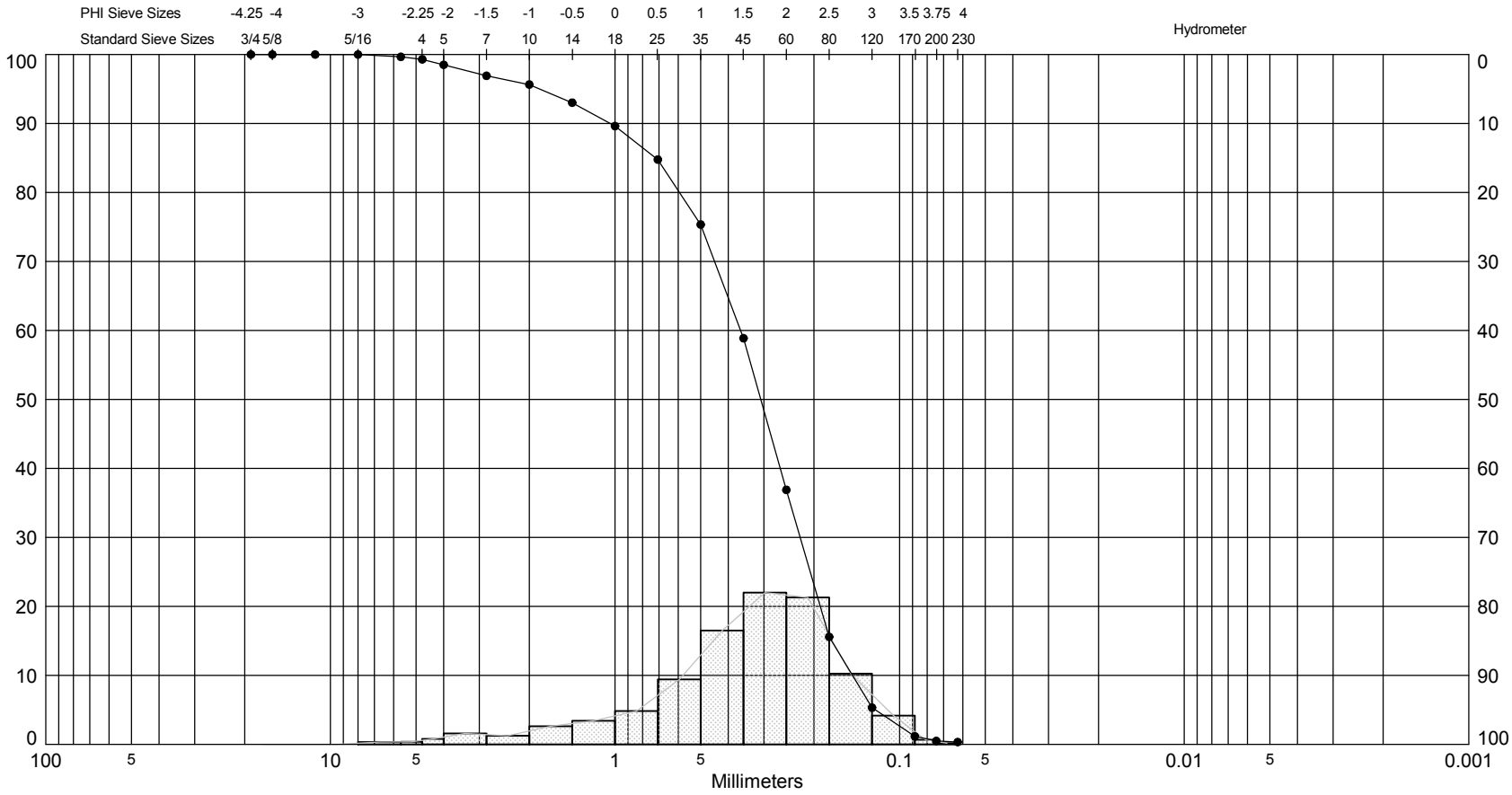
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O14 #1	—●—		SW	#200 - 0.49 #230 - 0.33	0.60	18.00	1.7	1.5	-1.1	4.47	1.15

Comments:

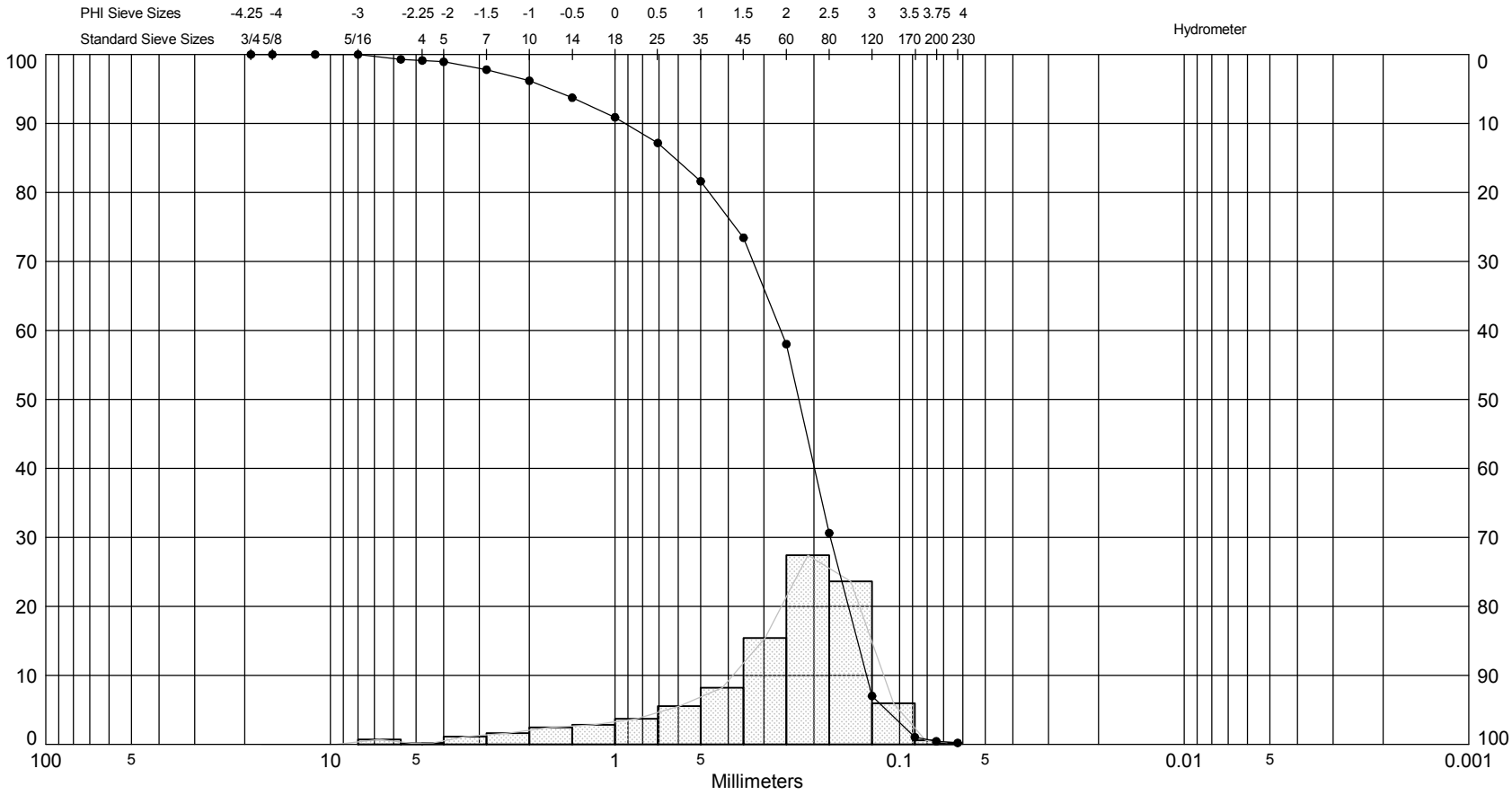
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O14 #2	—●—		SW	#200 - 0.44 #230 - 0.21	0.60	17.60	2.15	1.82	-1.47	5.17	1.17

Comments:

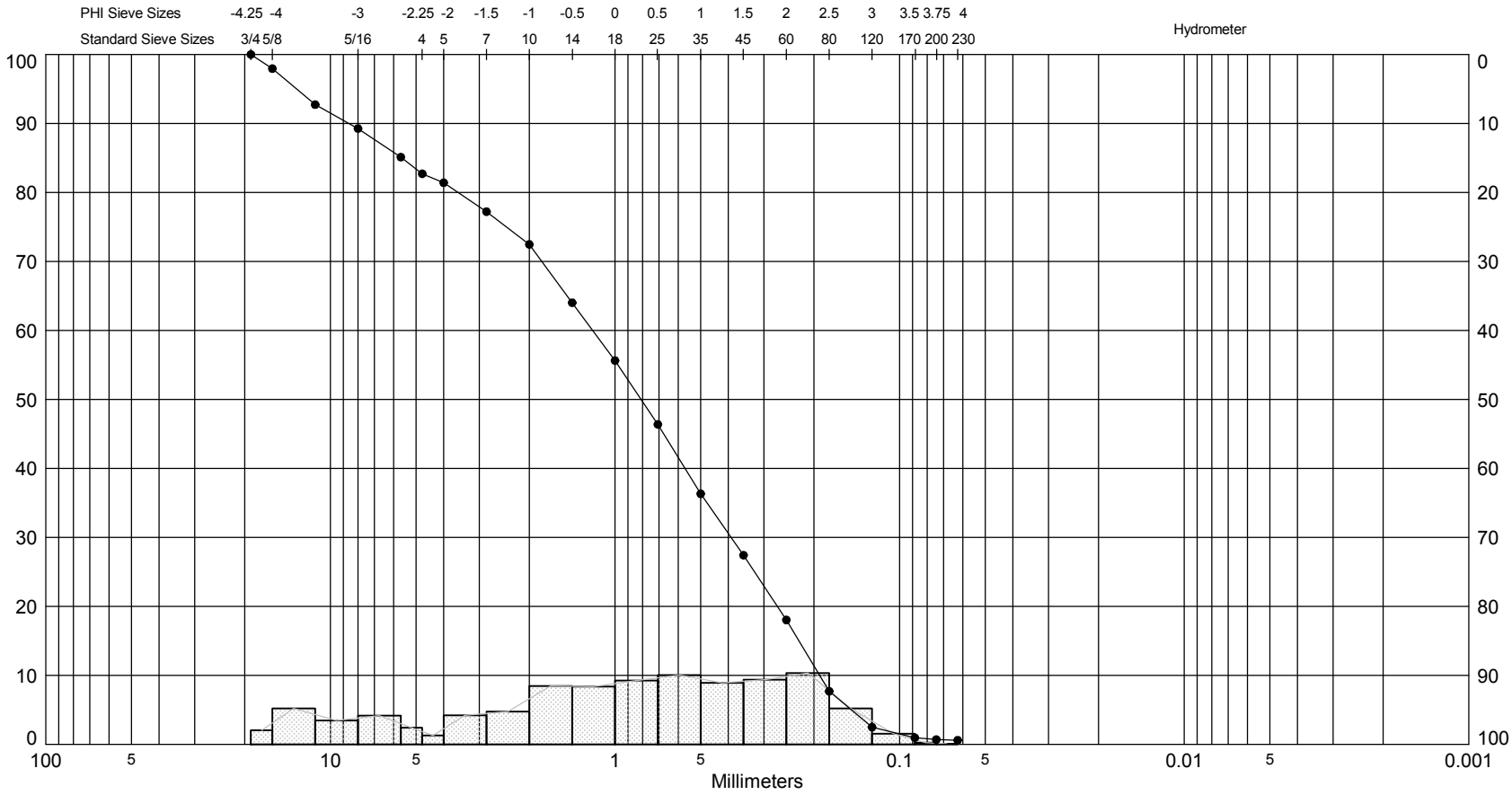
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O14 #3	—●—		SW	#200 - 0.69 #230 - 0.60	0.80	39.80	0.3	0	-0.45	2.25	1.96

Comments:

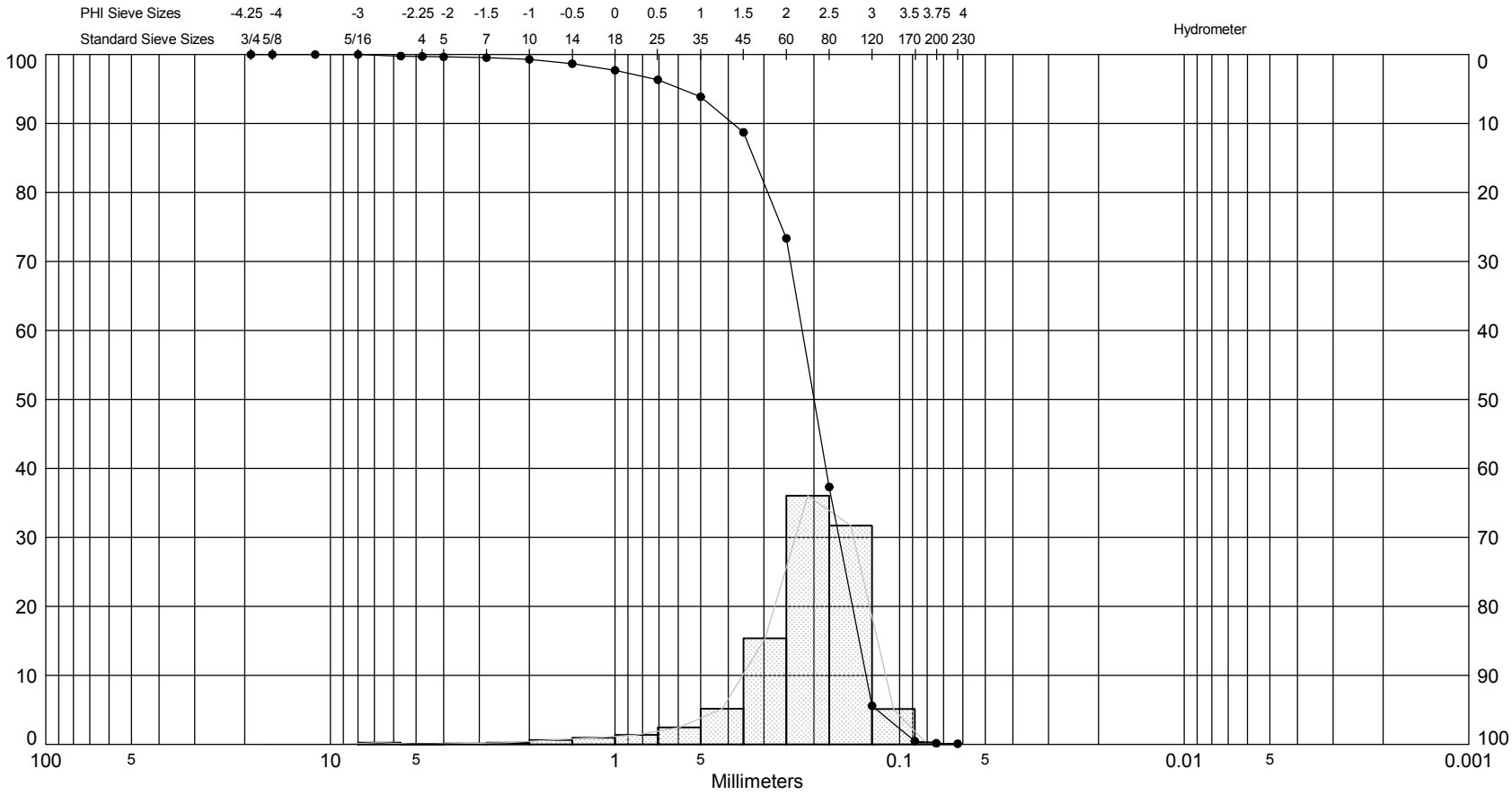
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-19-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O15 #1	—●—		SP	#200 - 0.16 #230 - 0.09	0.60	9.50	2.32	2.2	-2.18	11.05	0.76

Comments:

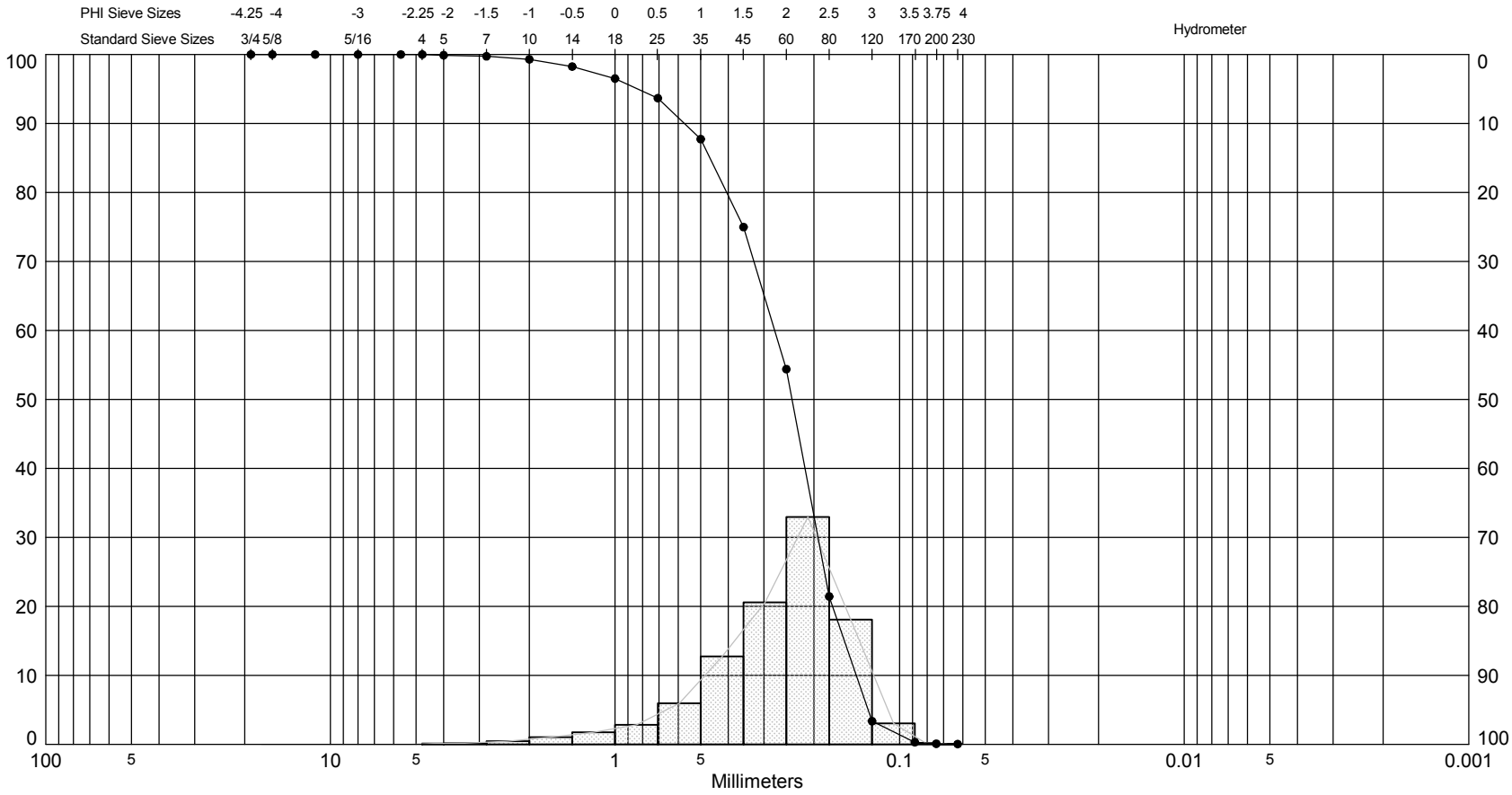
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-18-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O15 #2	—●—		SP	#200 - 0.09 #230 - 0.04	0.60	10.90	2.07	1.9	-1.2	5.17	0.83

Comments:

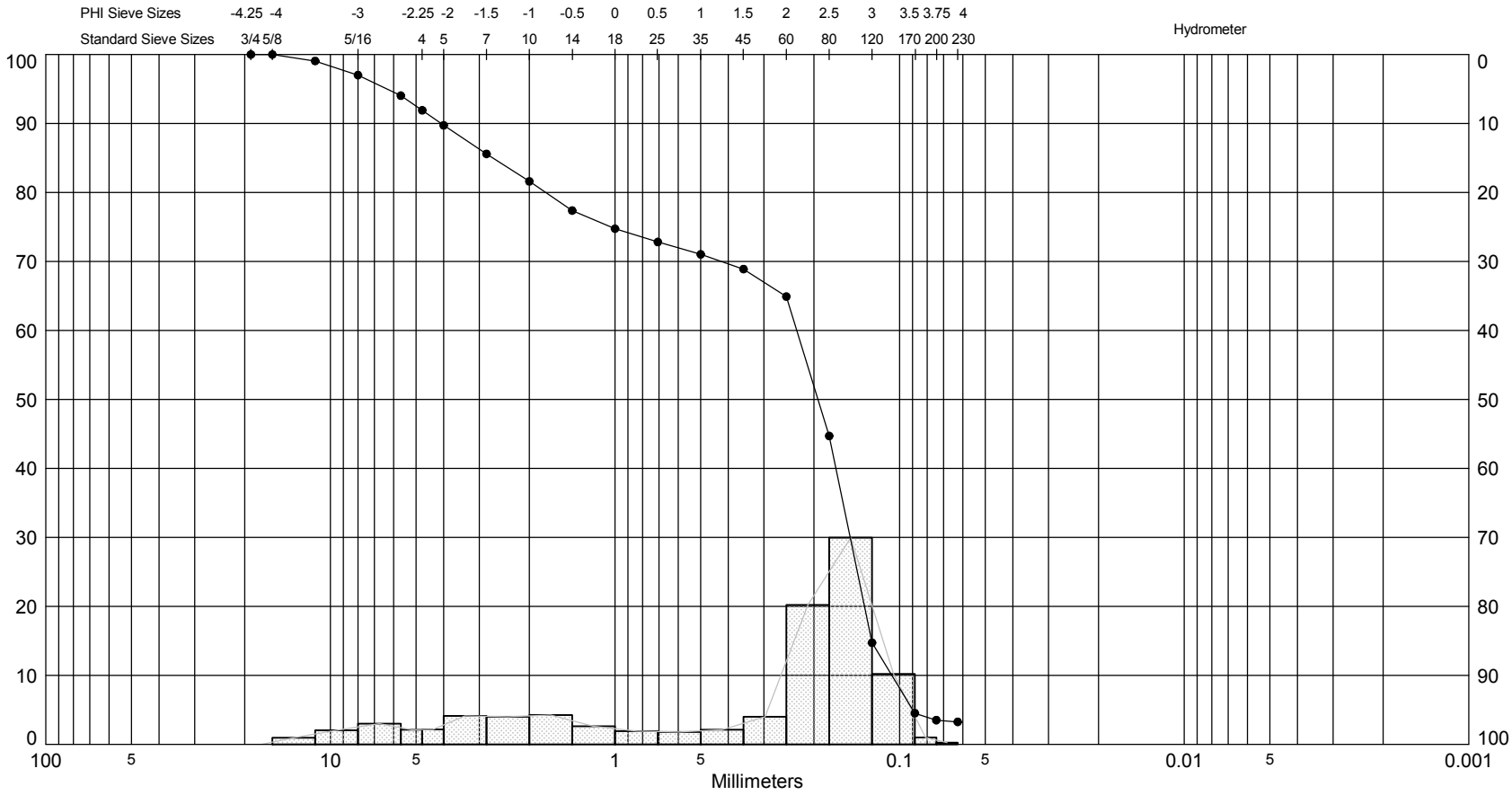
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-18-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O15 #3	—●—		SW	#200 - 3.51 #230 - 3.26	1.50	33.60	2.37	1.38	-1.06	2.68	2

Comments:

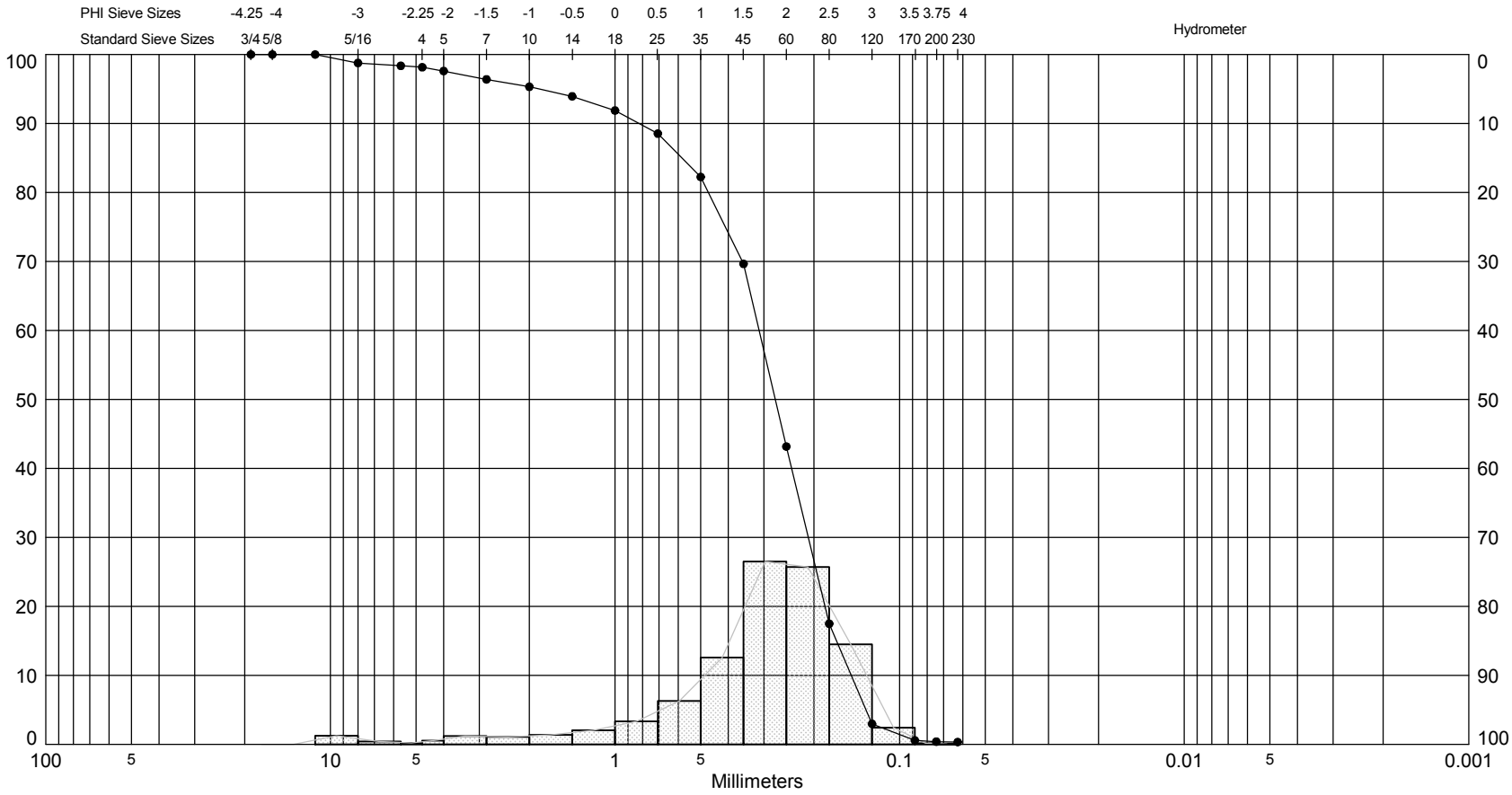
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-18-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O16 #1	—●—		SW	#200 - 0.39 #230 - 0.33	0.60	13.40	1.87	1.63	-1.9	7.52	1.16

Comments:

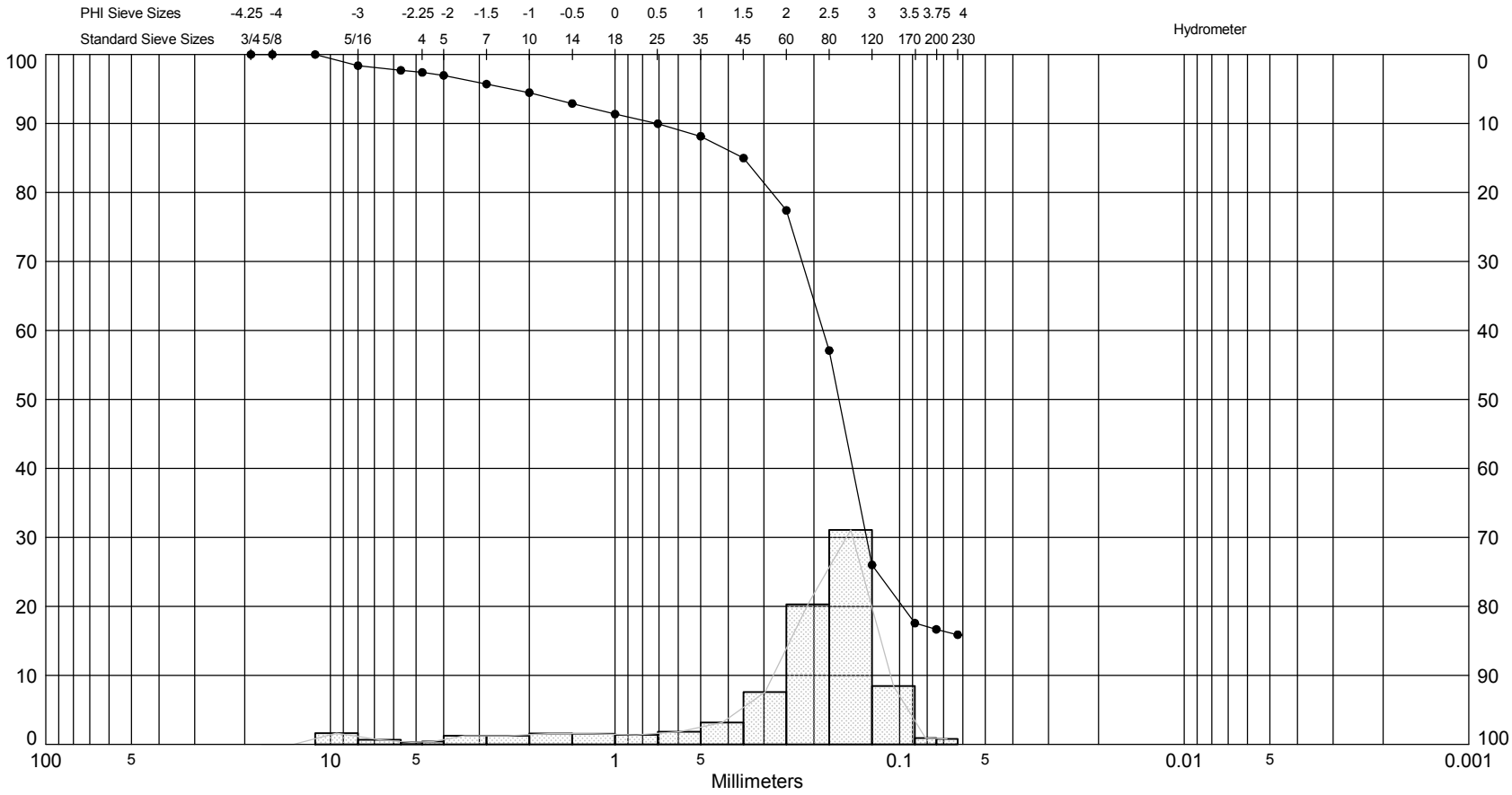
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-18-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O16 #2	—●—		SM	#200 - 16.67 #230 - 15.89	1.20	11.80	2.61	2.02	-2.09	7.07	1.42

Comments:

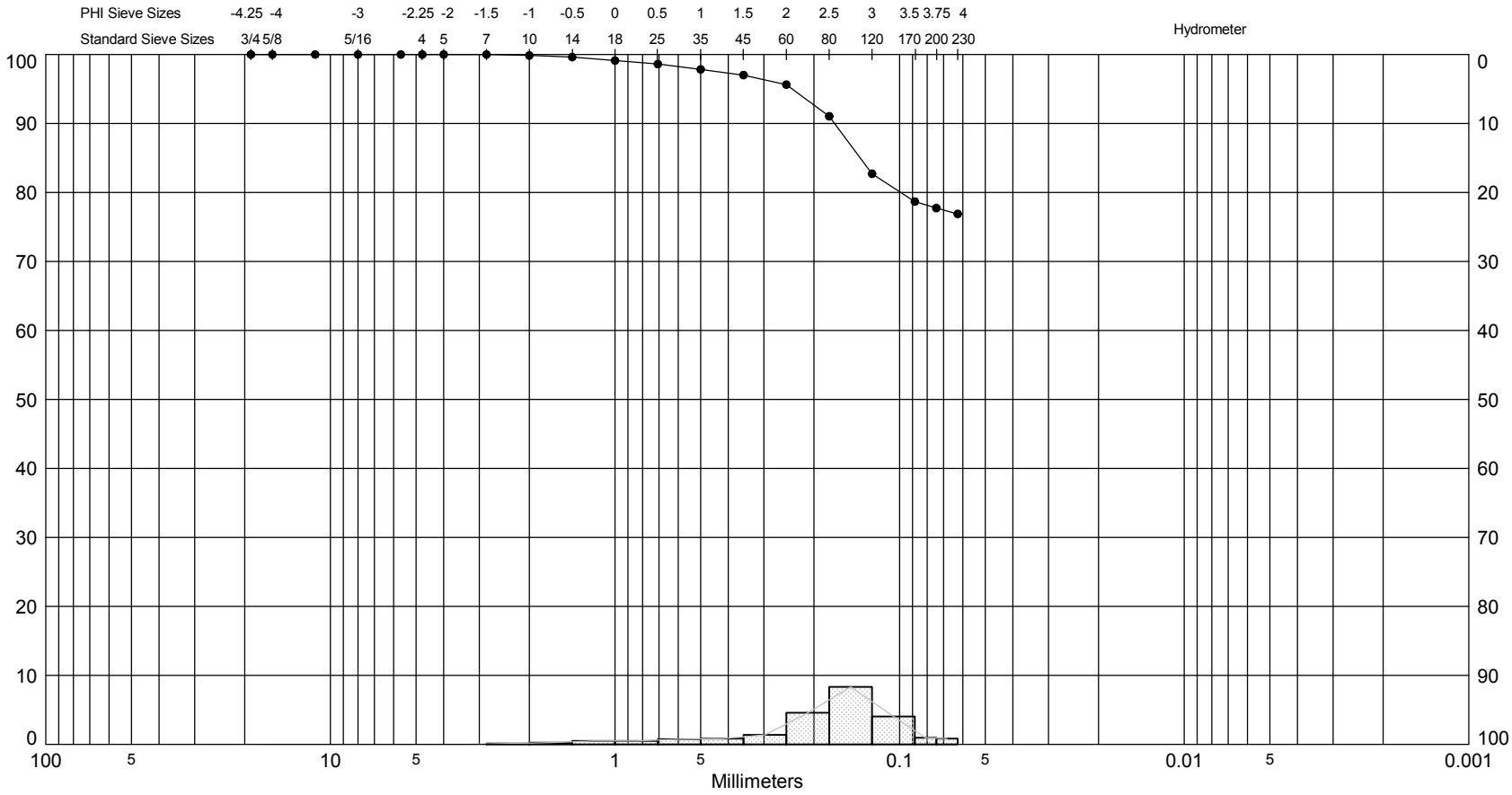
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-18-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O16 #3	—●—		CL	#200 - 77.74 #230 - 76.89	4.00	7.70		2.45	-1.48	5.48	0.96

Comments:

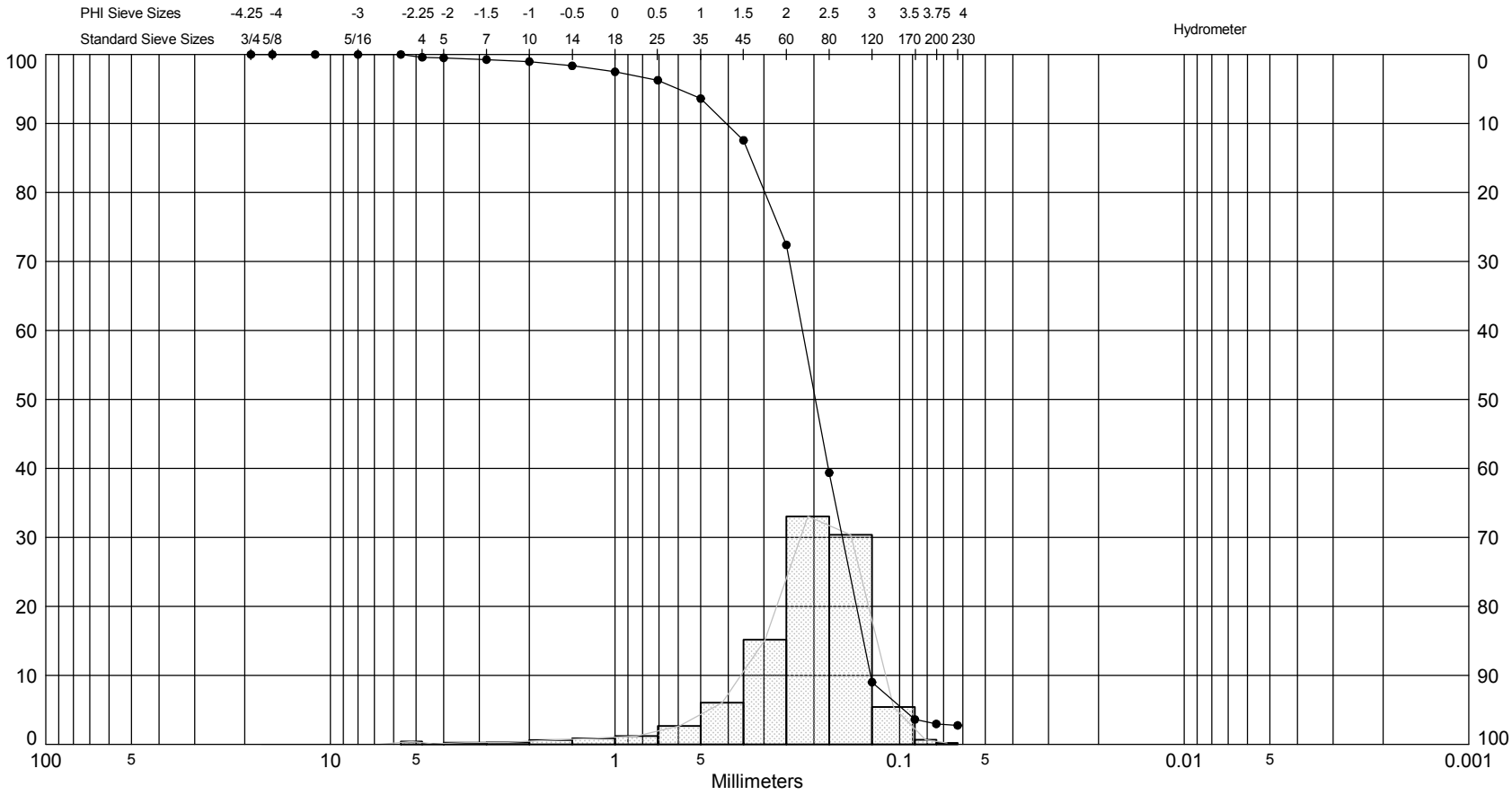
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-18-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O17 #1	—●—		SP	#200 - 2.96 #230 - 2.75	0.90	10.00	2.34	2.18	-2.08	10.21	0.81

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

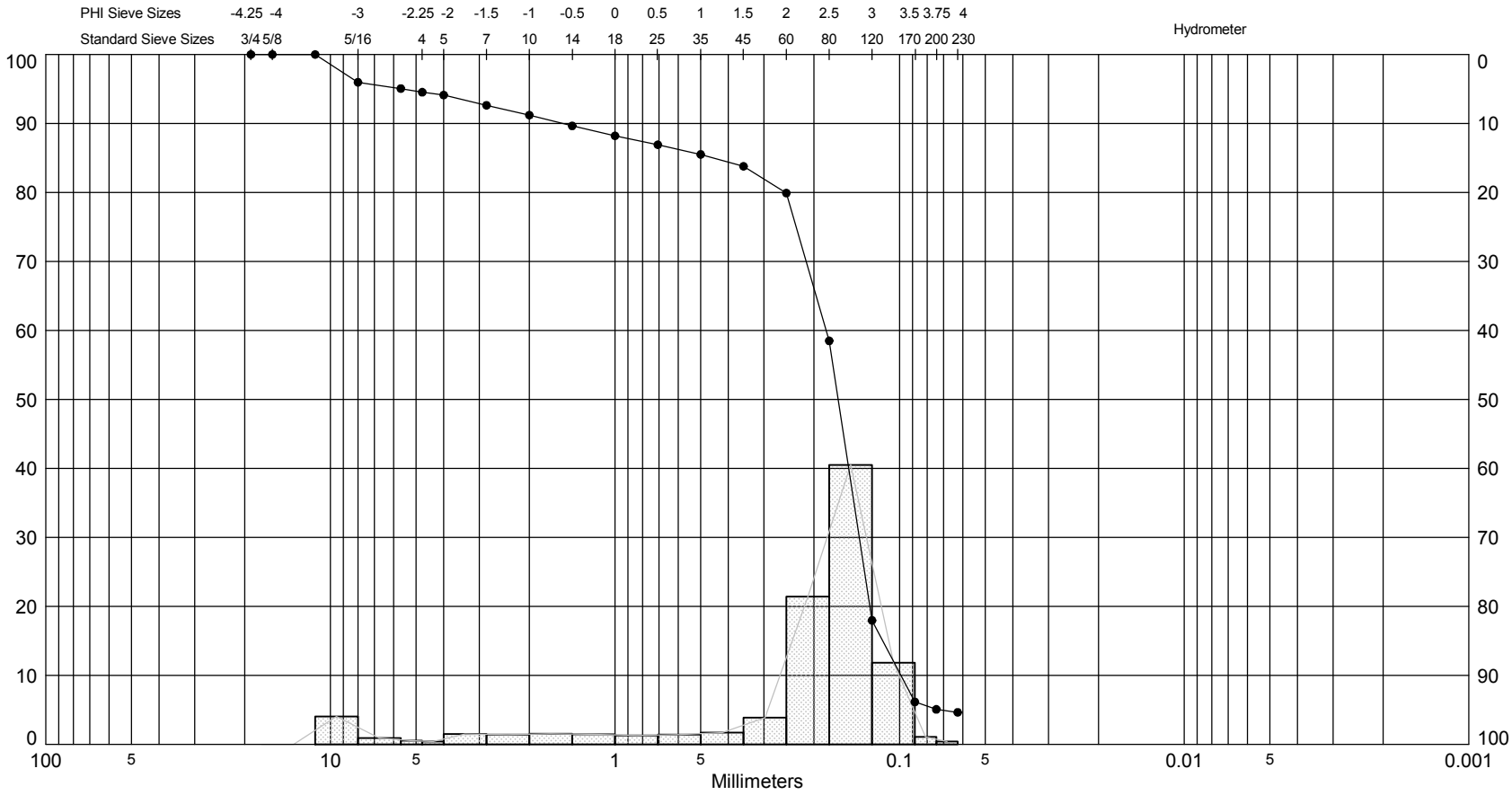
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O17 #2	—●—		SW-SM	#200 - 5.07 #230 - 4.64	1.70	13.10	2.6	2	-2.1	6.41	1.64

Comments:

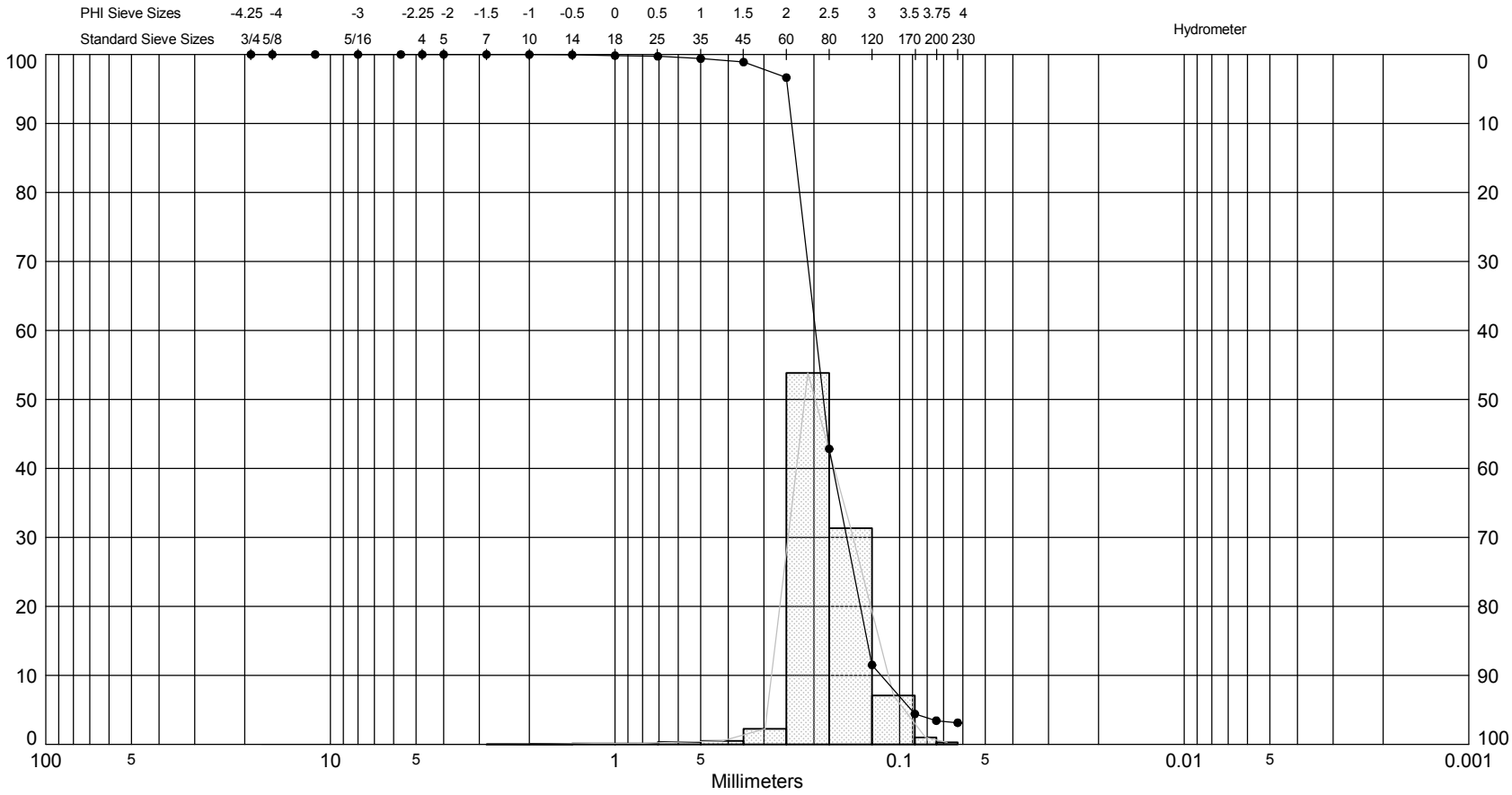
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O17 #3	—●—		SP	#200 - 3.43 #230 - 3.13	0.70	6.20	2.43	2.48	-0.46	9.51	0.41

Comments:

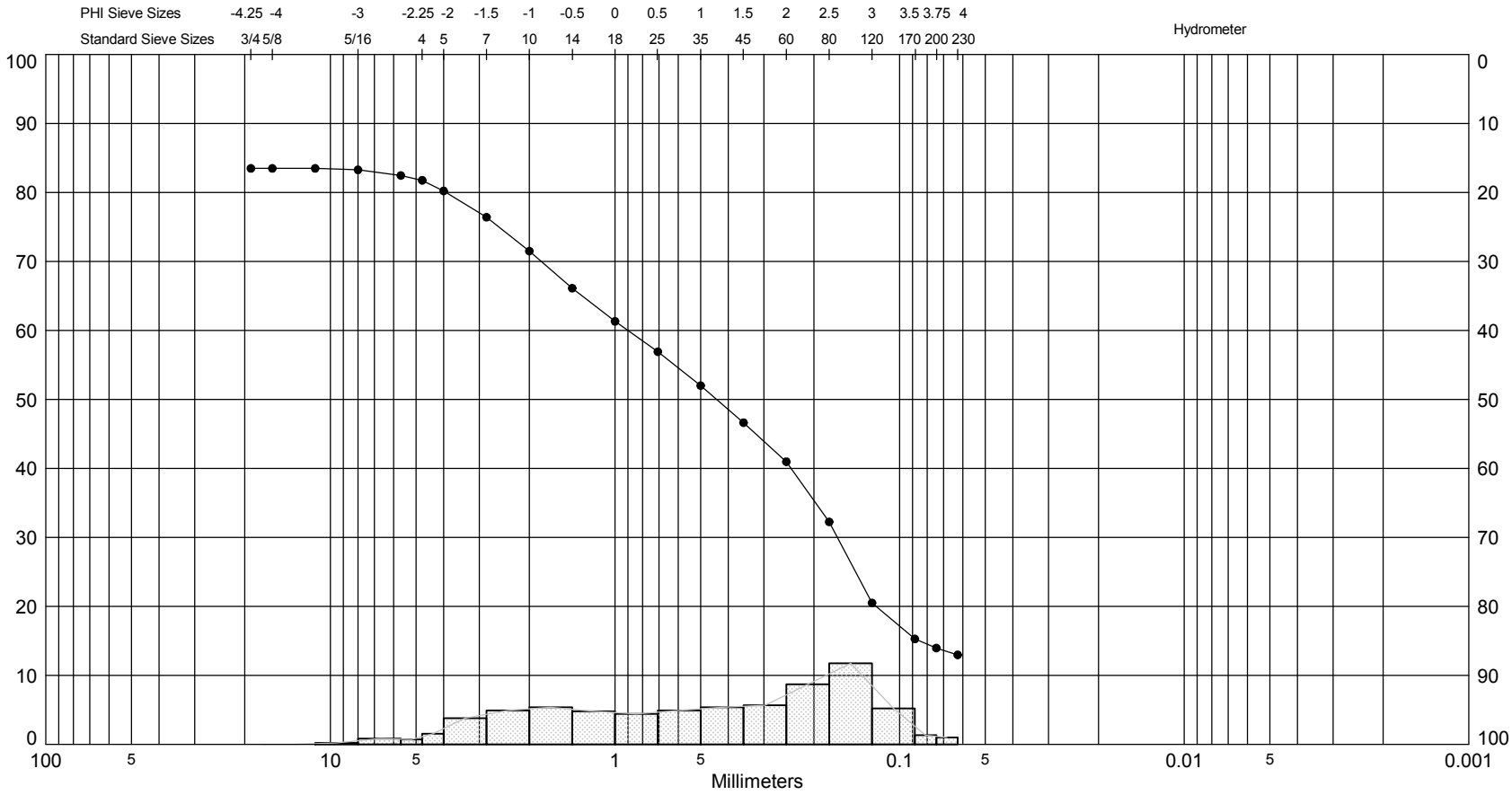
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O17 #4	—●—		SM	#200 - 13.96 #230 - 12.97	2.00	34.50	1.19	0.01	1.13	2.23	1.82

Comments:

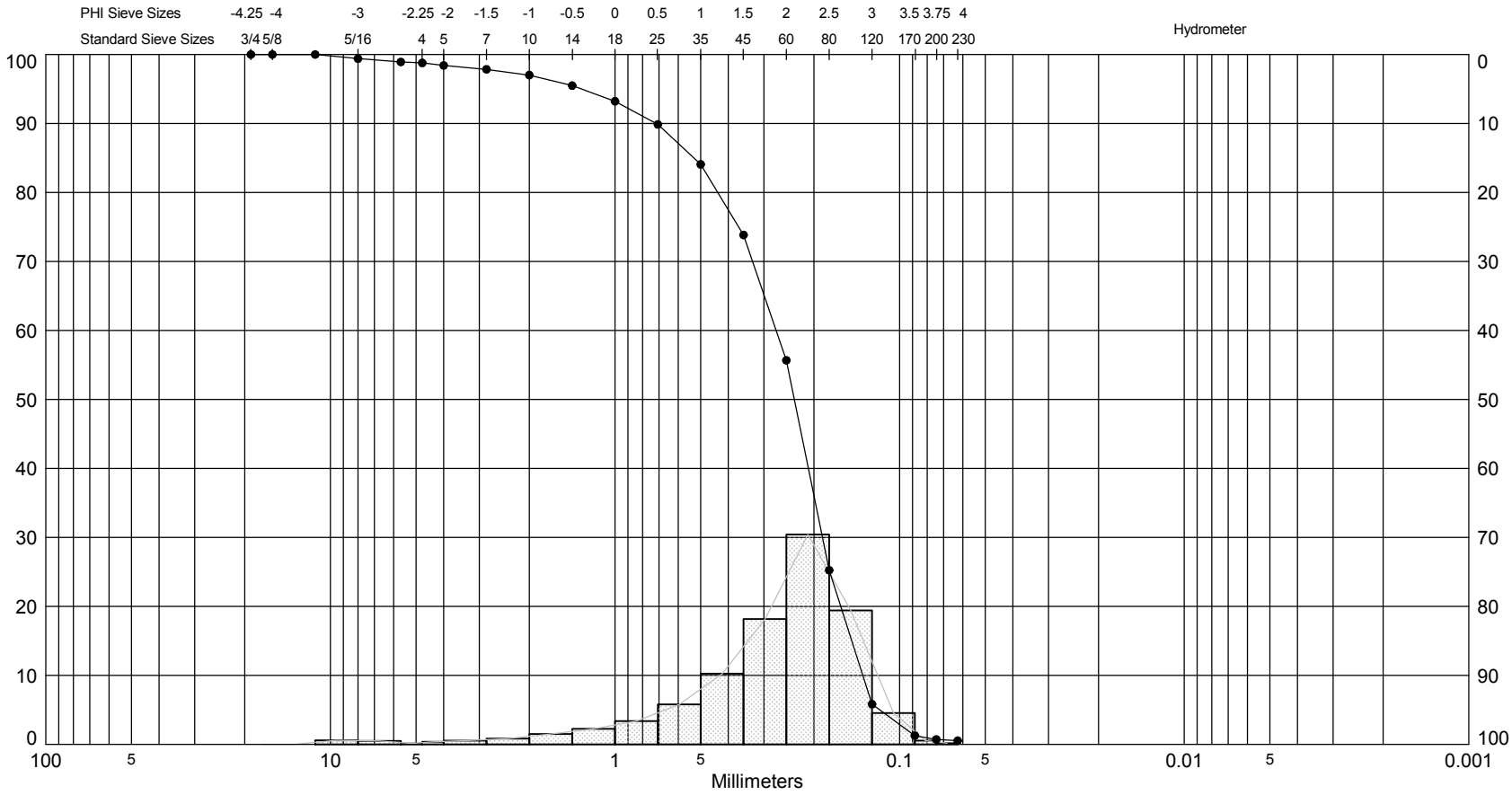
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O18 #1	—●—		SW	#200 - 0.71 #230 - 0.53	0.90	12.10	2.09	1.82	-1.78	7.36	1.1

Comments:

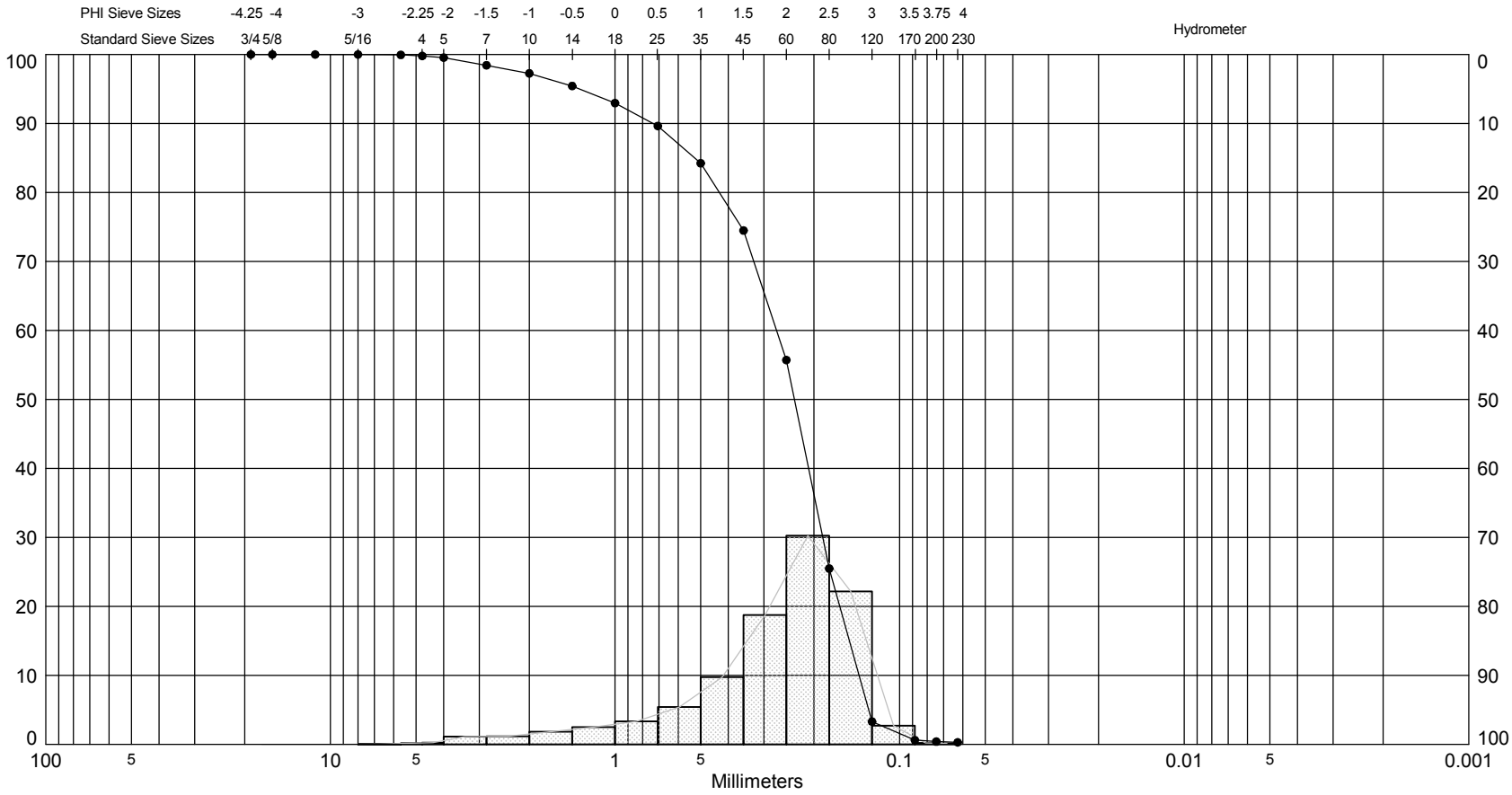
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O18 #2	—●—		SW	#200 - 0.40 #230 - 0.29	0.60	12.60	2.09	1.83	-1.52	5.54	1.02

Comments:

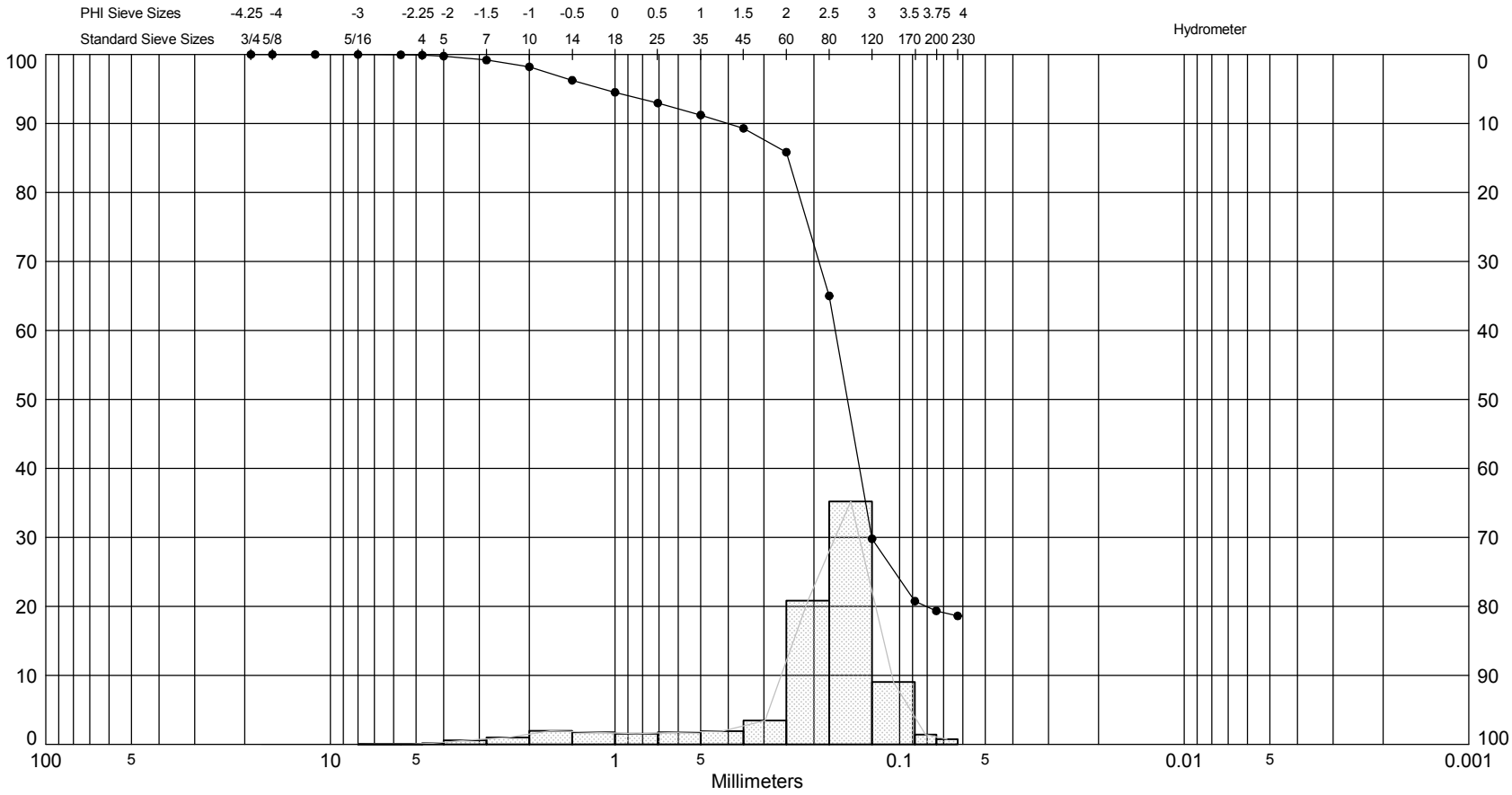
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O18 #3	—●—		SM	#200 - 19.35 #230 - 18.62	2.00	23.20	2.71	2.29	-2.05	7.19	1.05

Comments:

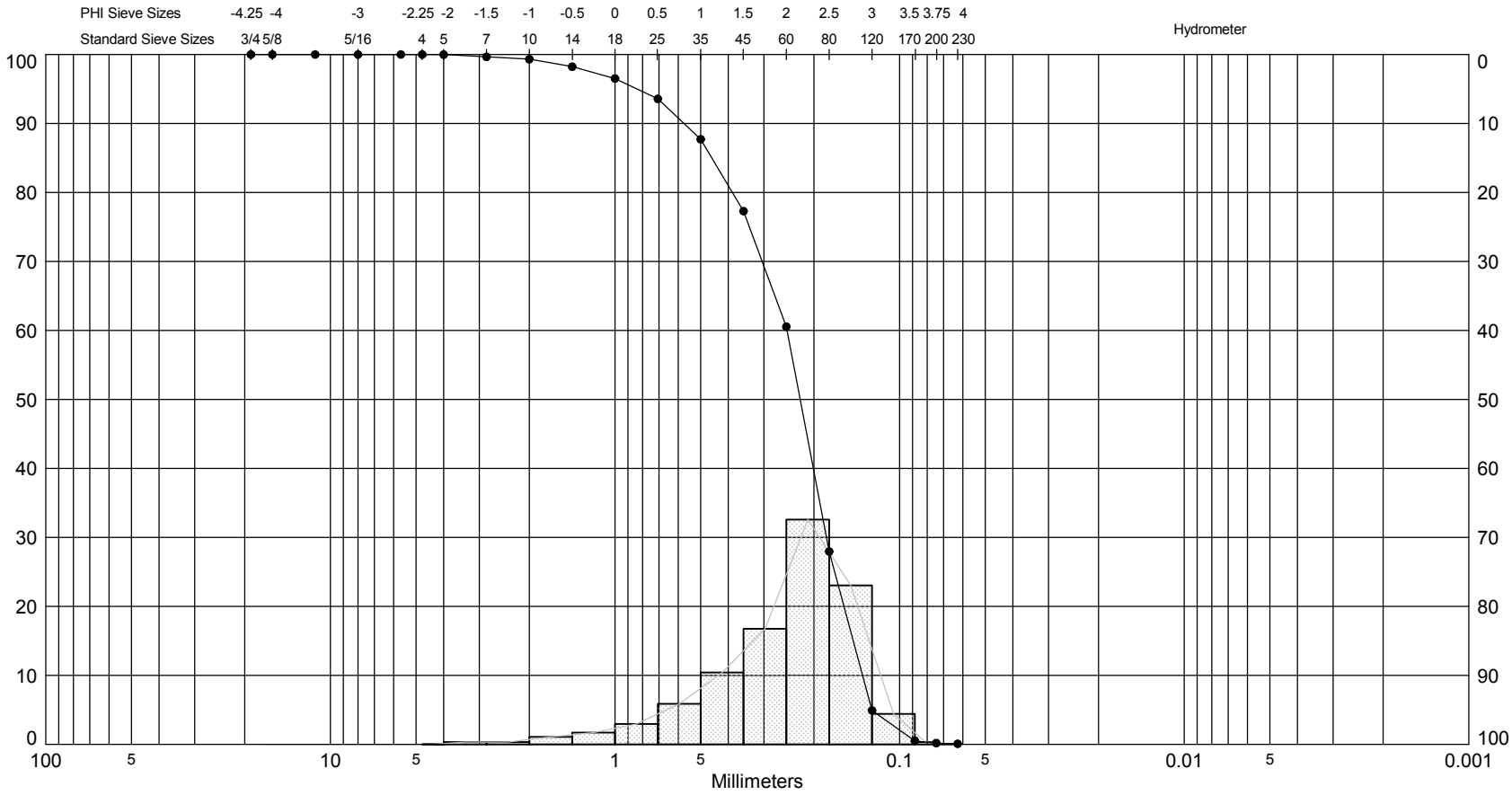
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O19 #1	—●—		SW	#200 - 0.18 #230 - 0.08	0.60	10.60	2.16	1.98	-1.25	5.07	0.86

Comments:

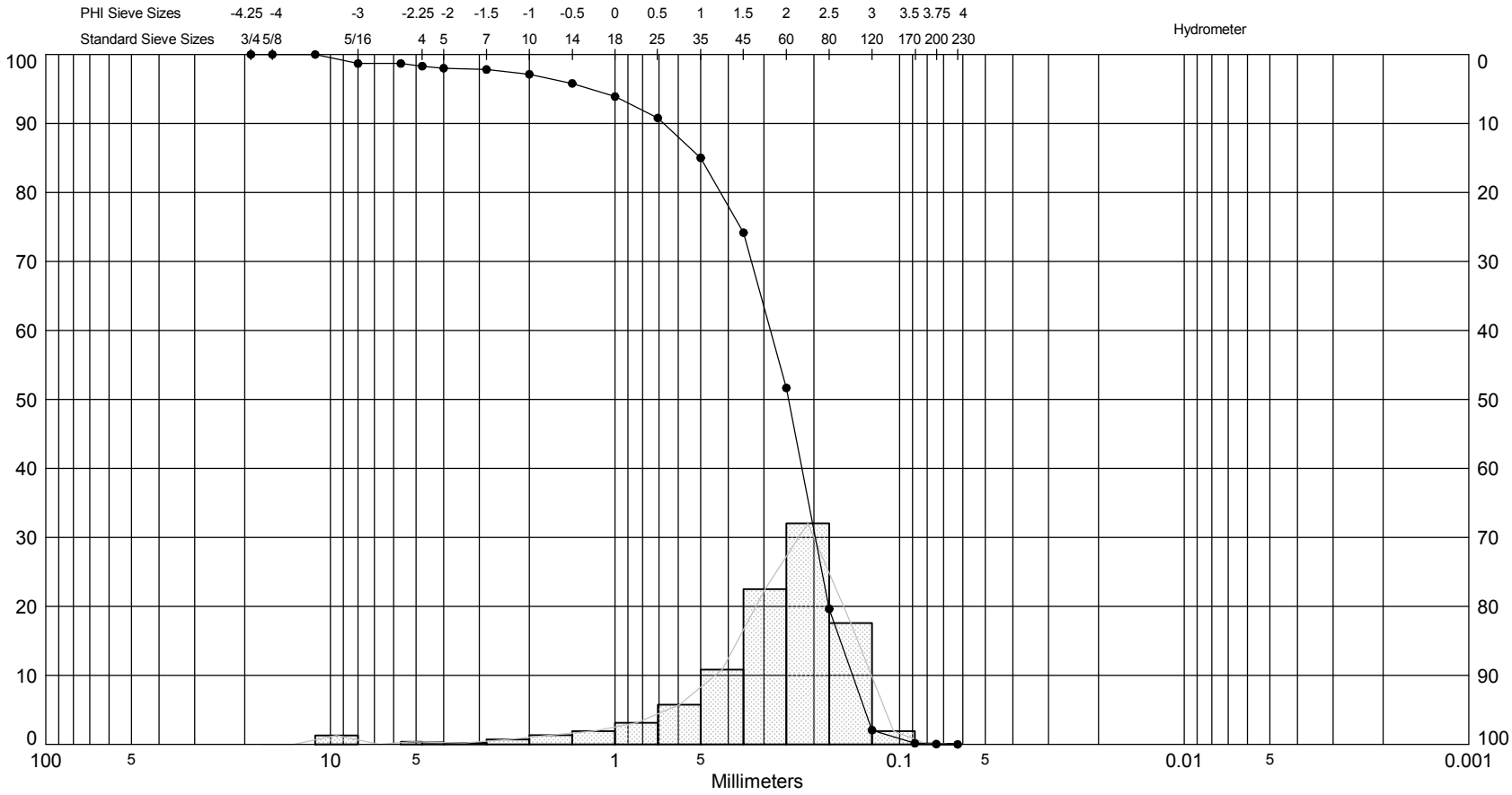
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O19 #2	—●—		SW	#200 - 0.04 #230 - 0.00	0.60	13.50	2.03	1.77	-2.18	9.5	1.07

Comments:

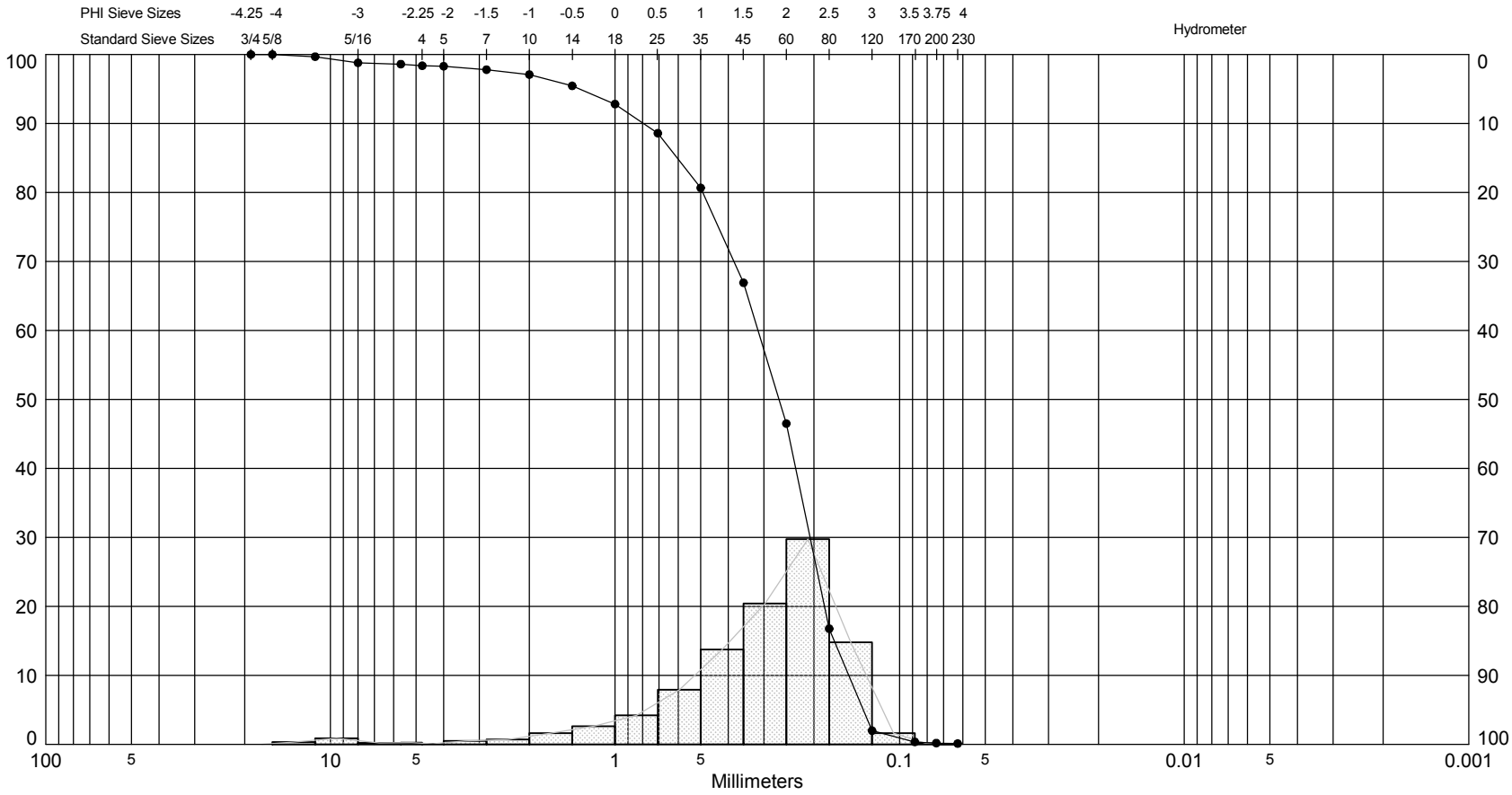
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O19 #3	—●—		SW	#200 - 0.18 #230 - 0.12	0.70	12.80	1.91	1.65	-1.89	8.21	1.1

Comments:

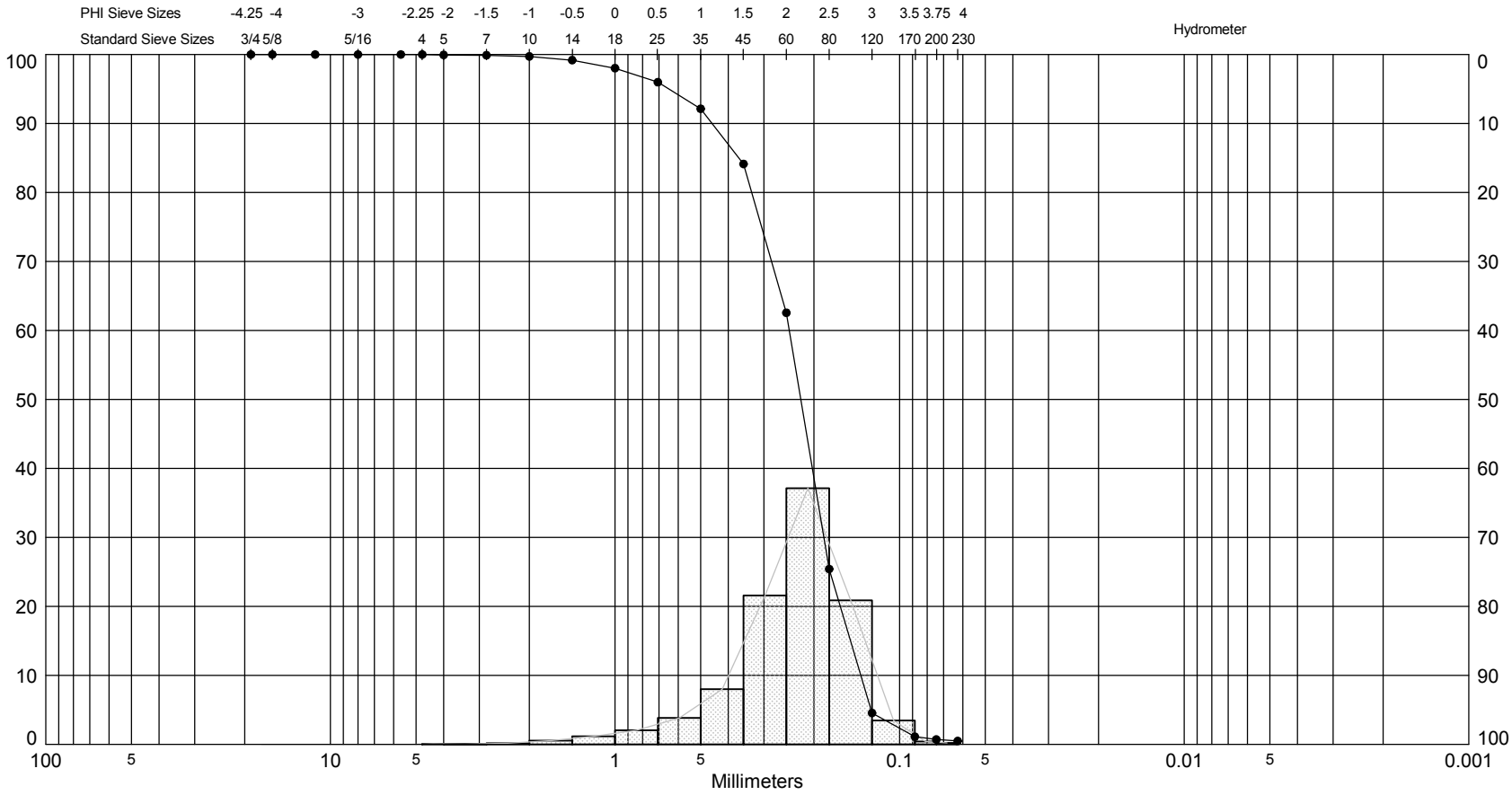
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O19 #4	—●—		SP	#200 - 0.70 #230 - 0.49	0.70	9.50	2.17	2.05	-1.28	6.1	0.73

Comments:

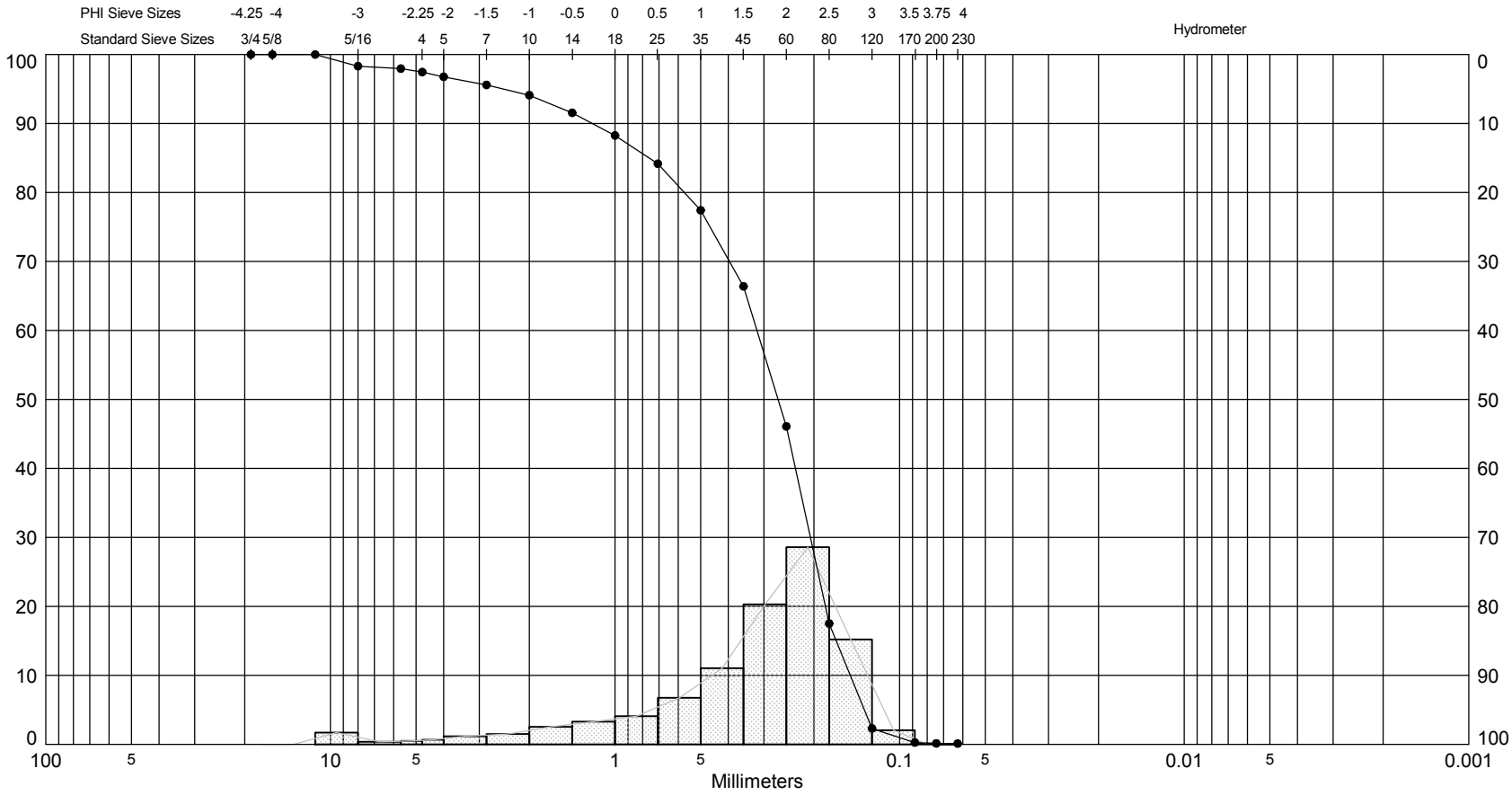
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O20 #1	—●—		SW	#200 - 0.14 #230 - 0.12	0.60	17.80	1.9	1.53	-1.67	5.92	1.29

Comments:

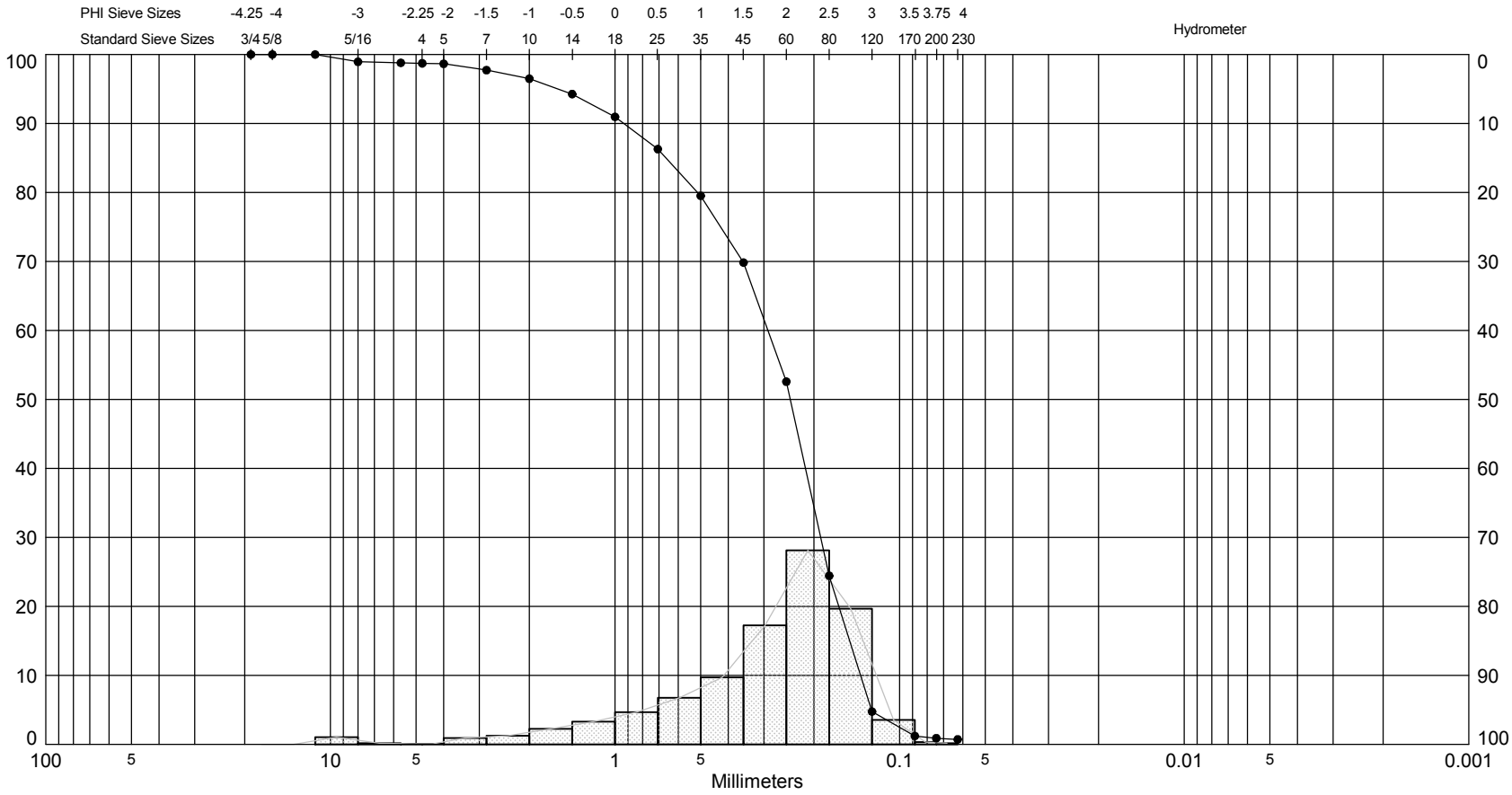
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O20 #2	—●—		SW	#200 - 0.89 #230 - 0.72	0.80	21.20	2.05	1.71	-1.59	6.15	1.18

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

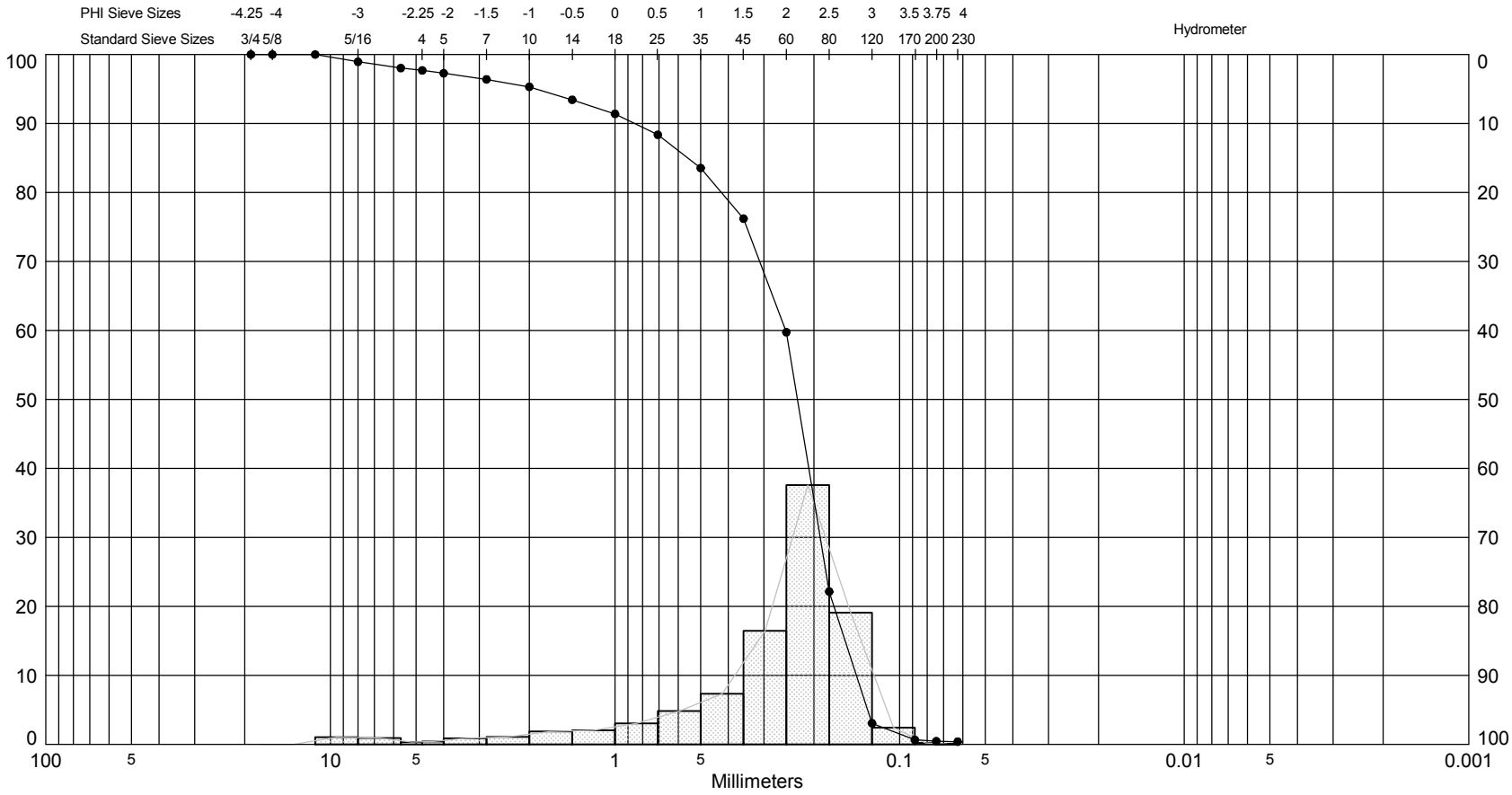
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O20 #3	—●—		SW	#200 - 0.45 #230 - 0.39	0.60	9.30	2.13	1.76	-2.07	7.65	1.21

Comments:

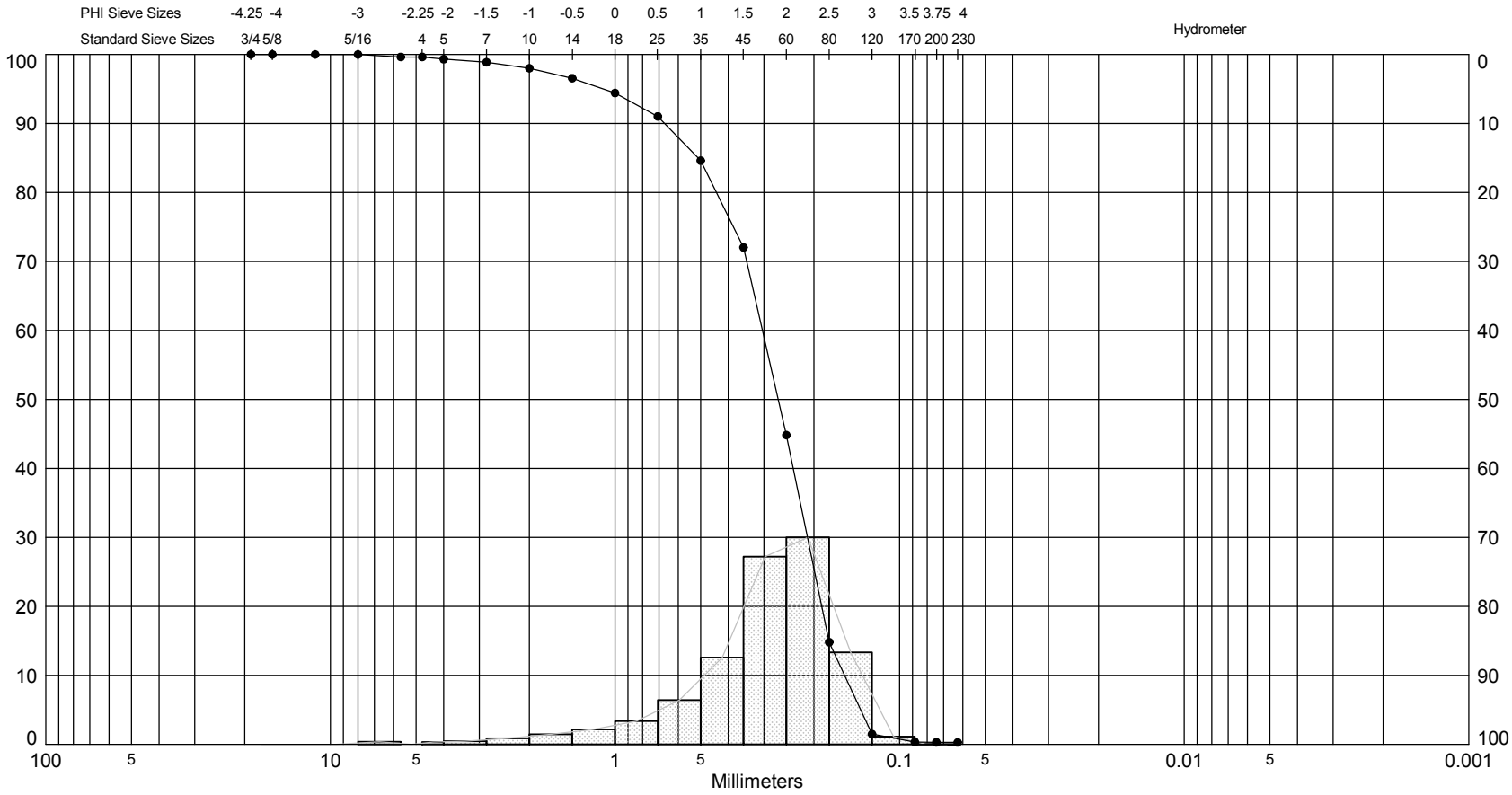
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O21 #1	—●—		SW	#200 - 0.30 #230 - 0.28	0.60	16.20	1.9	1.72	-1.63	6.83	0.92

Comments:

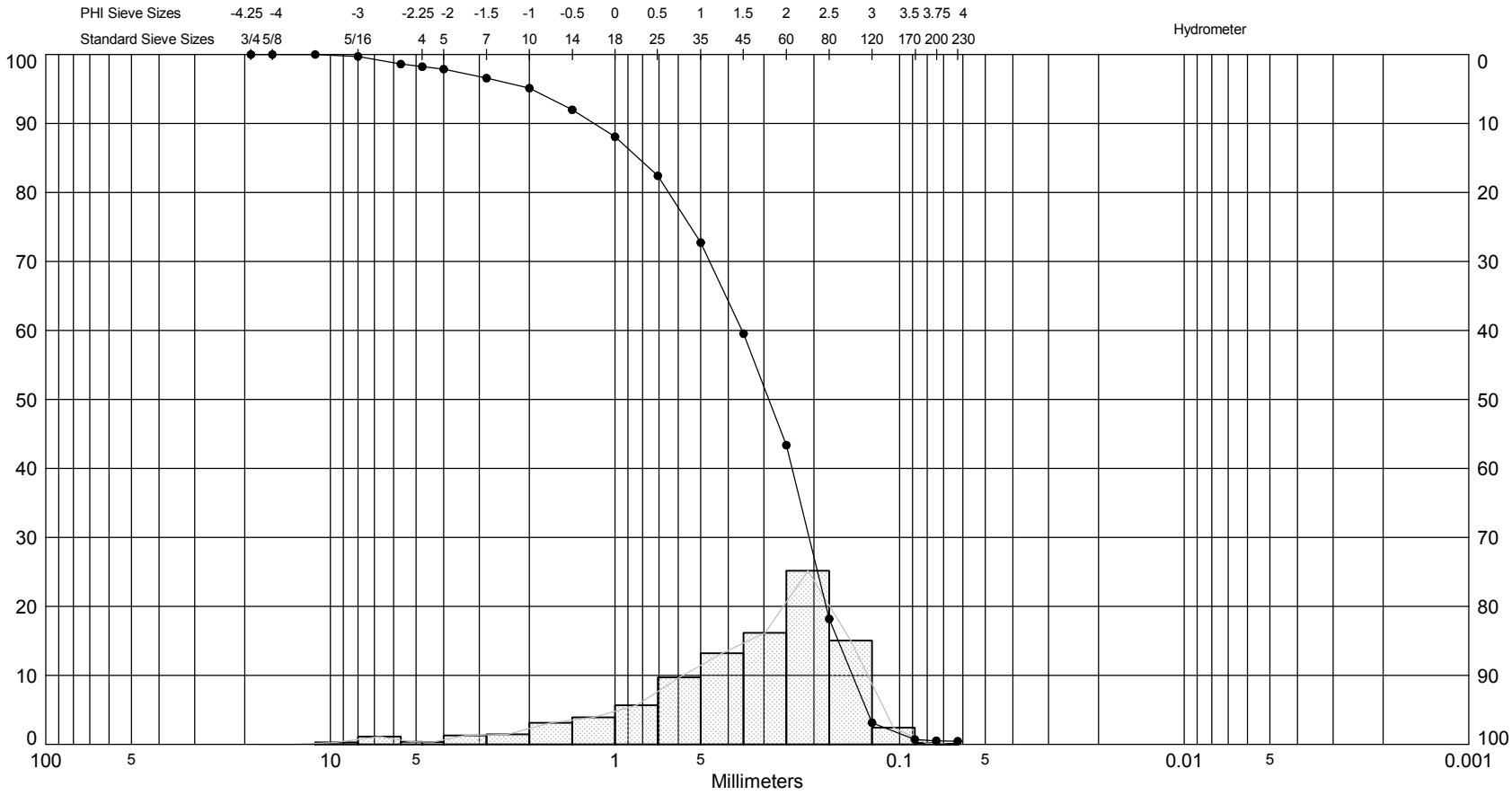
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O21 #2	—●—		SW	#200 - 0.51 #230 - 0.46	0.60	11.70	1.79	1.48	-1.26	4.62	1.24

Comments:

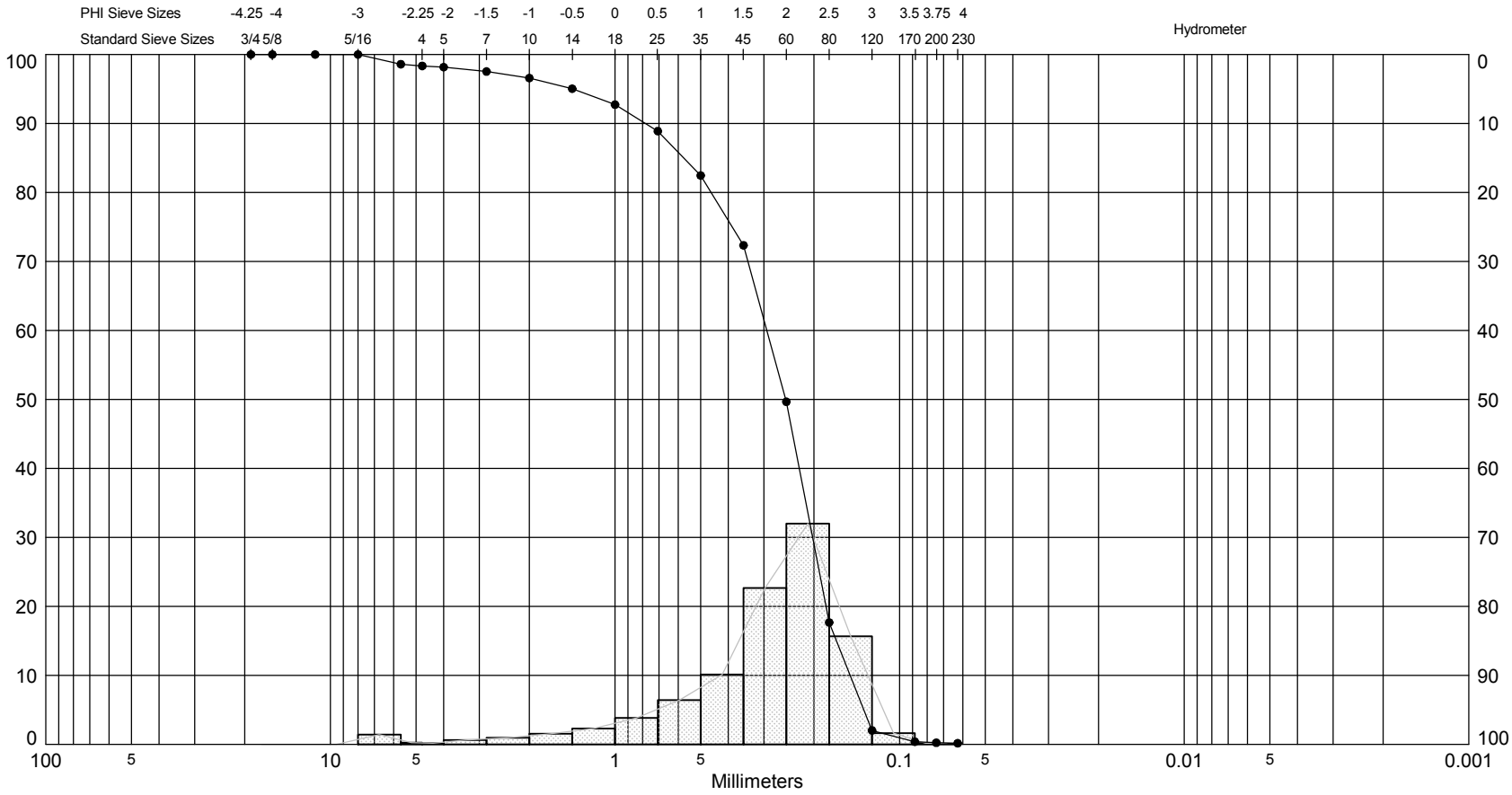
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O21 #3	—●—		SW	#200 - 0.23 #230 - 0.16	0.70	12.30	1.99	1.71	-1.84	7.2	1.08

Comments:

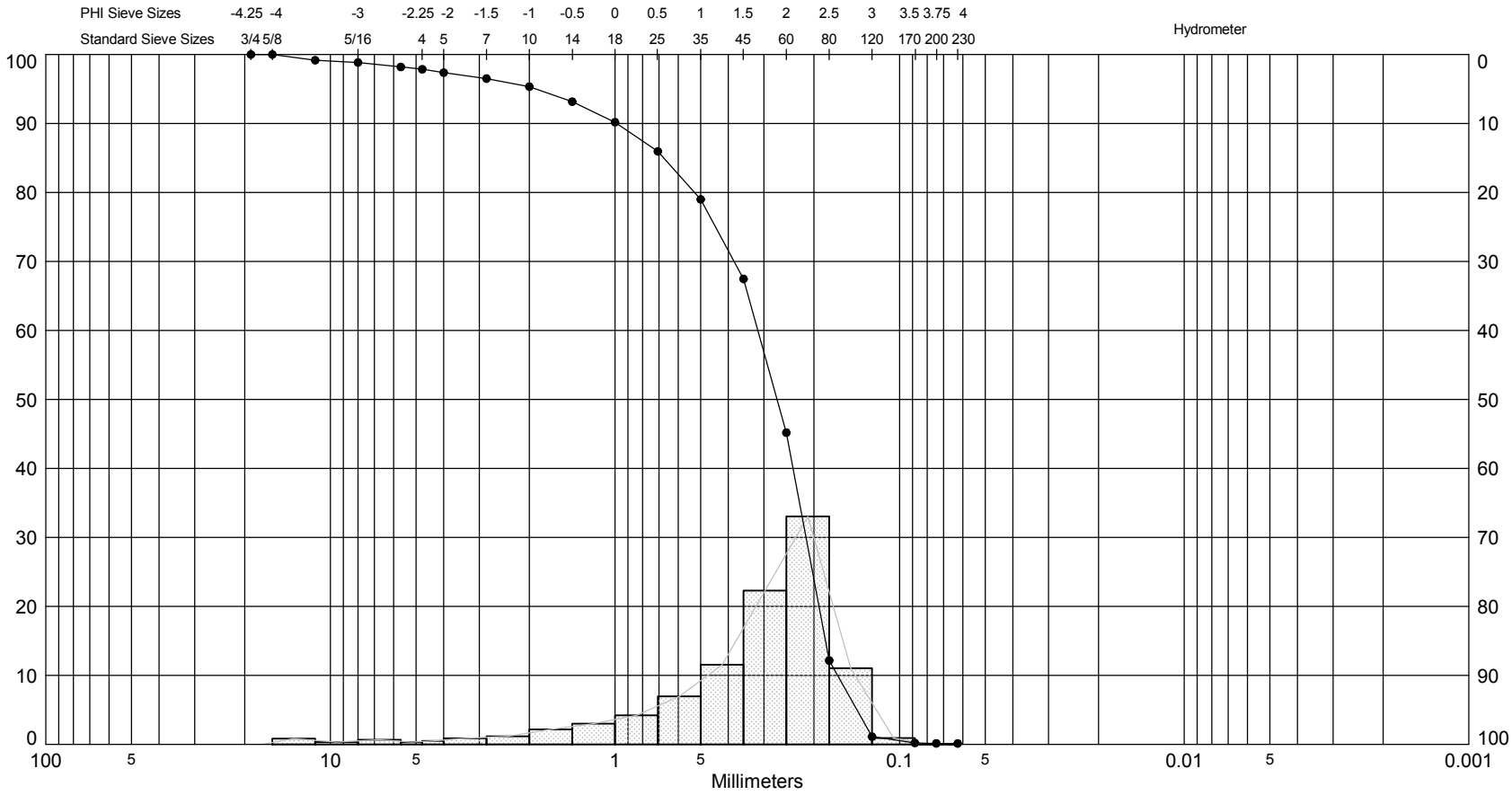
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O22 #1	—●—		SW	#200 - 0.14 #230 - 0.13	0.60	16.20	1.89	1.55	-1.95	7.52	1.2

Comments:

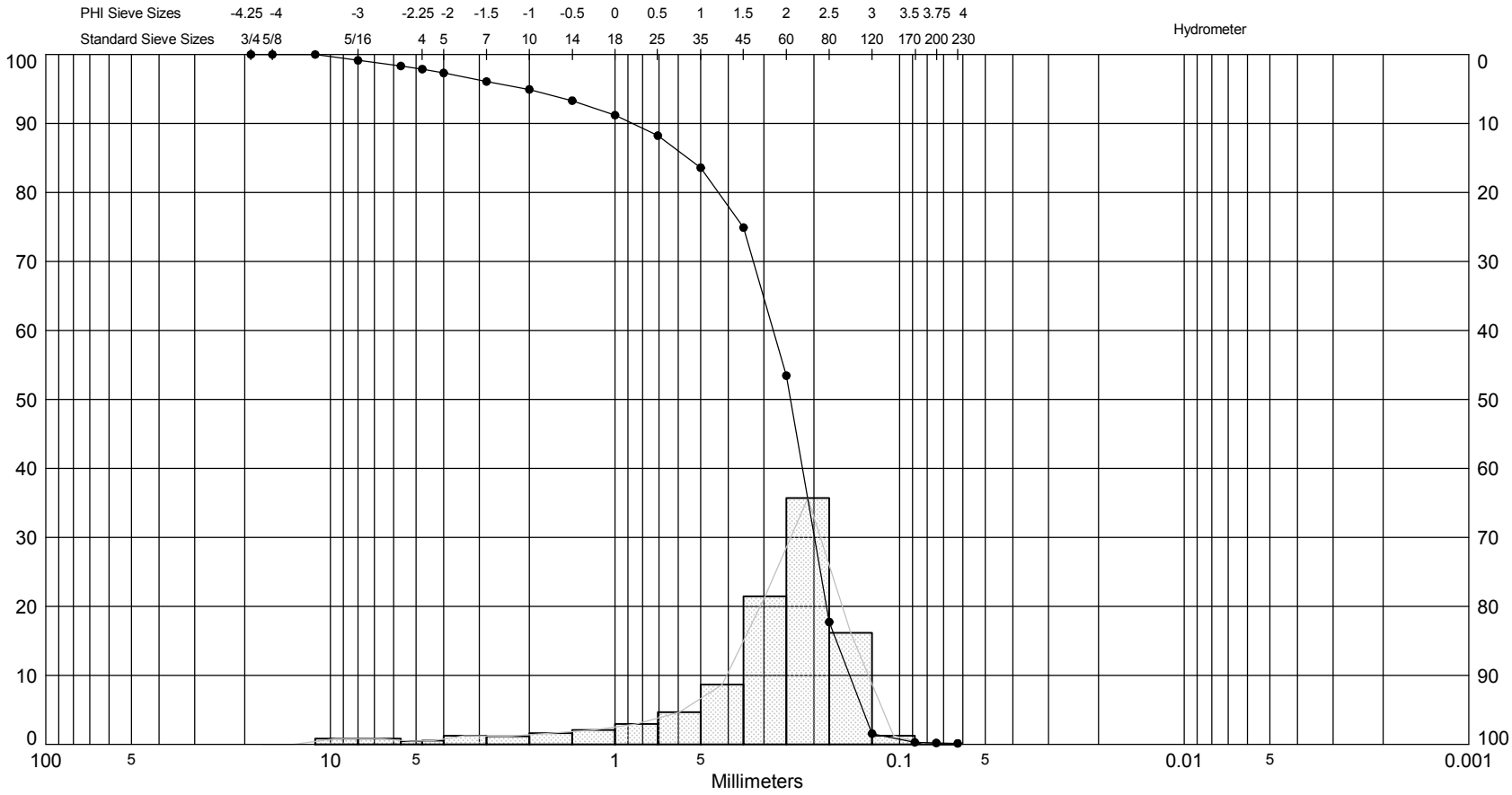
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O22 #2	—●—		SW	#200 - 0.20 #230 - 0.14	0.40	12.30	2.05	1.7	-2.05	7.54	1.18

Comments:

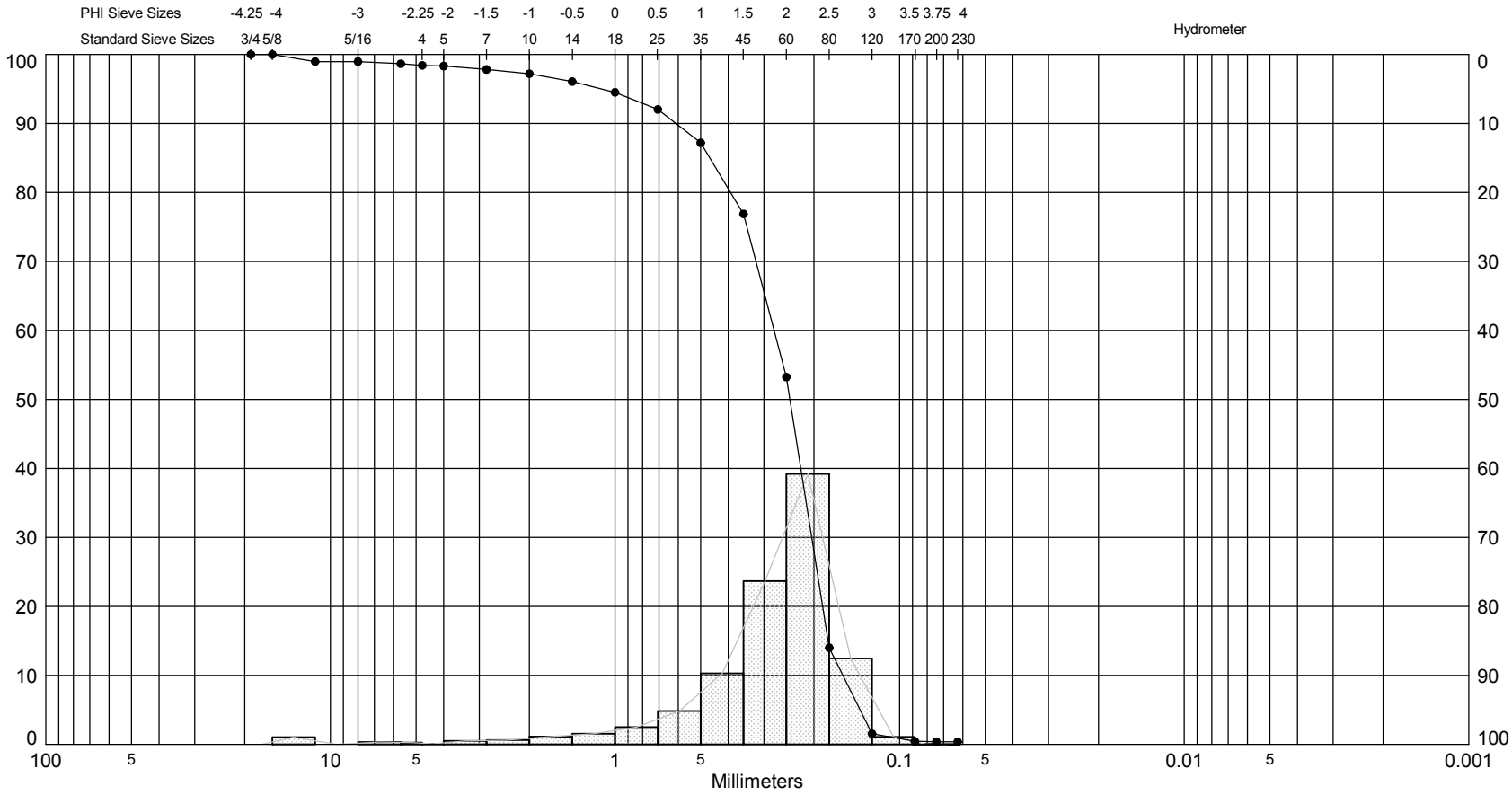
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O22 #3	—●—		SW	#200 - 0.38 #230 - 0.37	0.40	11.70	2.04	1.77	-2.66	12.61	1.03

Comments:

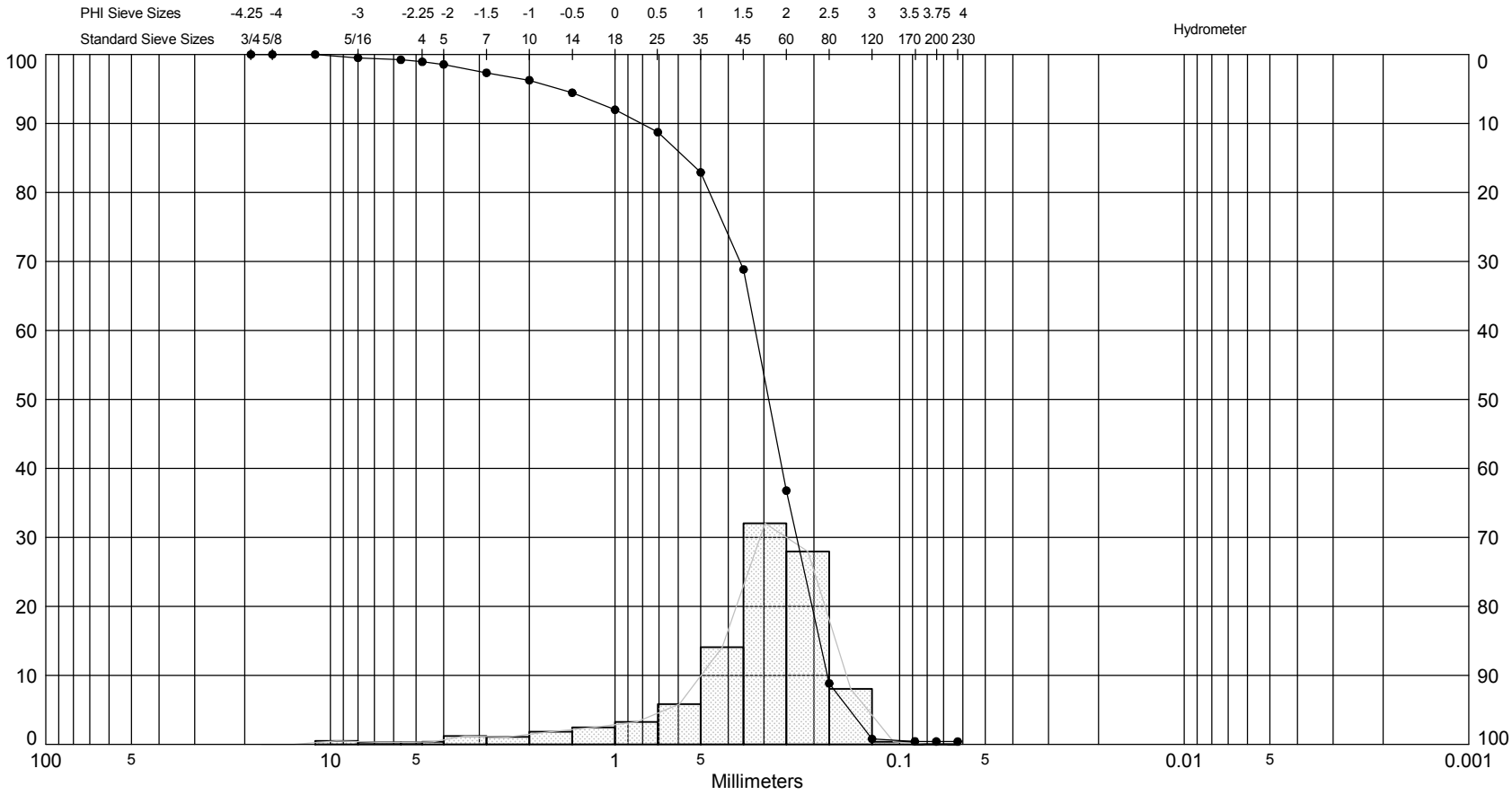
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O22 #4	—●—		SW	#200 - 0.41 #230 - 0.40	0.50	14.70	1.79	1.57	-1.95	7.72	1.02

Comments:

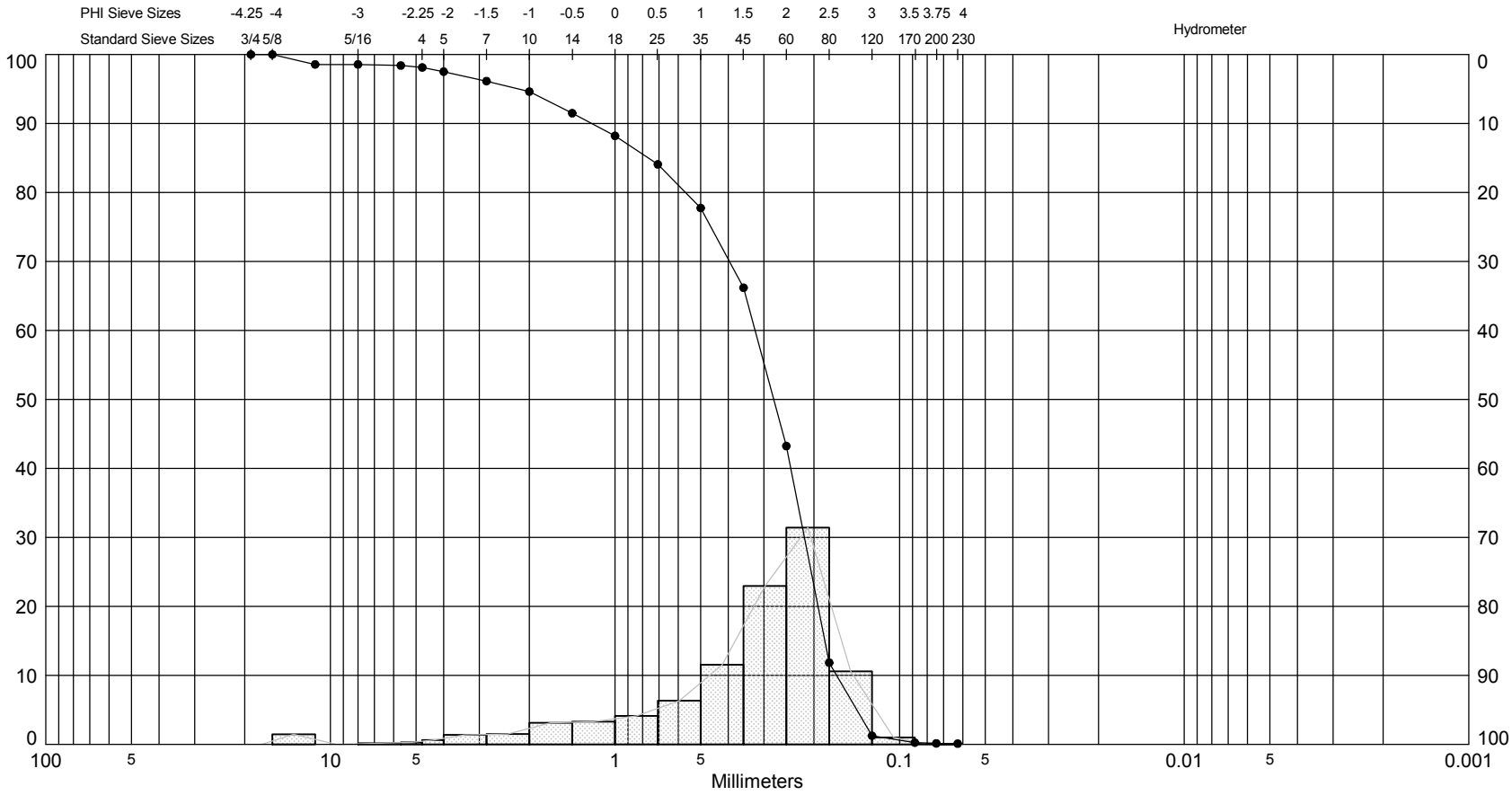
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O23 #1	—●—		SW	#200 - 0.14 #230 - 0.11	0.60	13.30	1.85	1.49	-1.84	6.94	1.25

Comments:

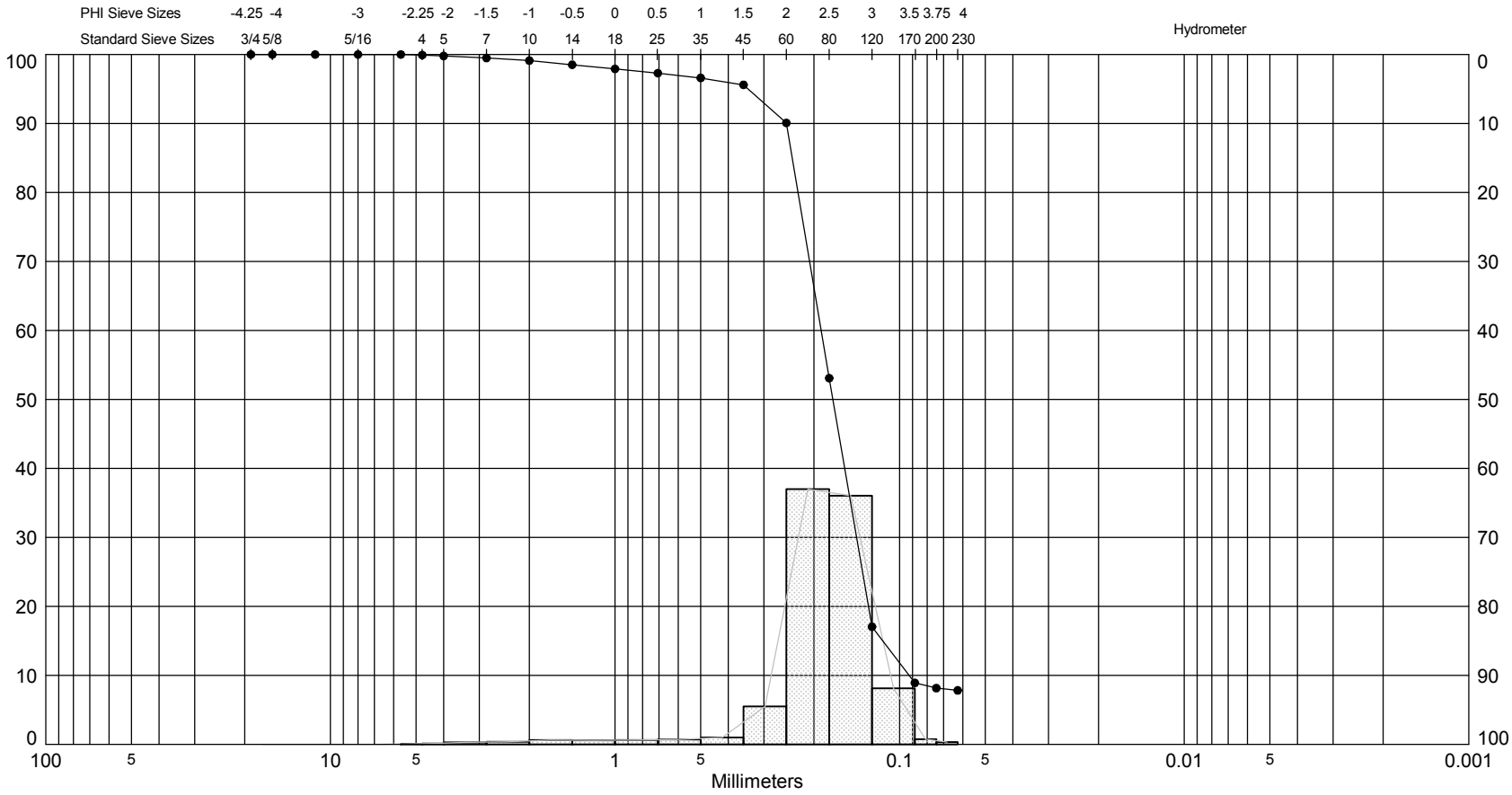
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O23 #2	—●—		SP-SM	#200 - 8.15 #230 - 7.82	1.00	8.00	2.54	2.41	-2.92	16.17	0.71

Comments:

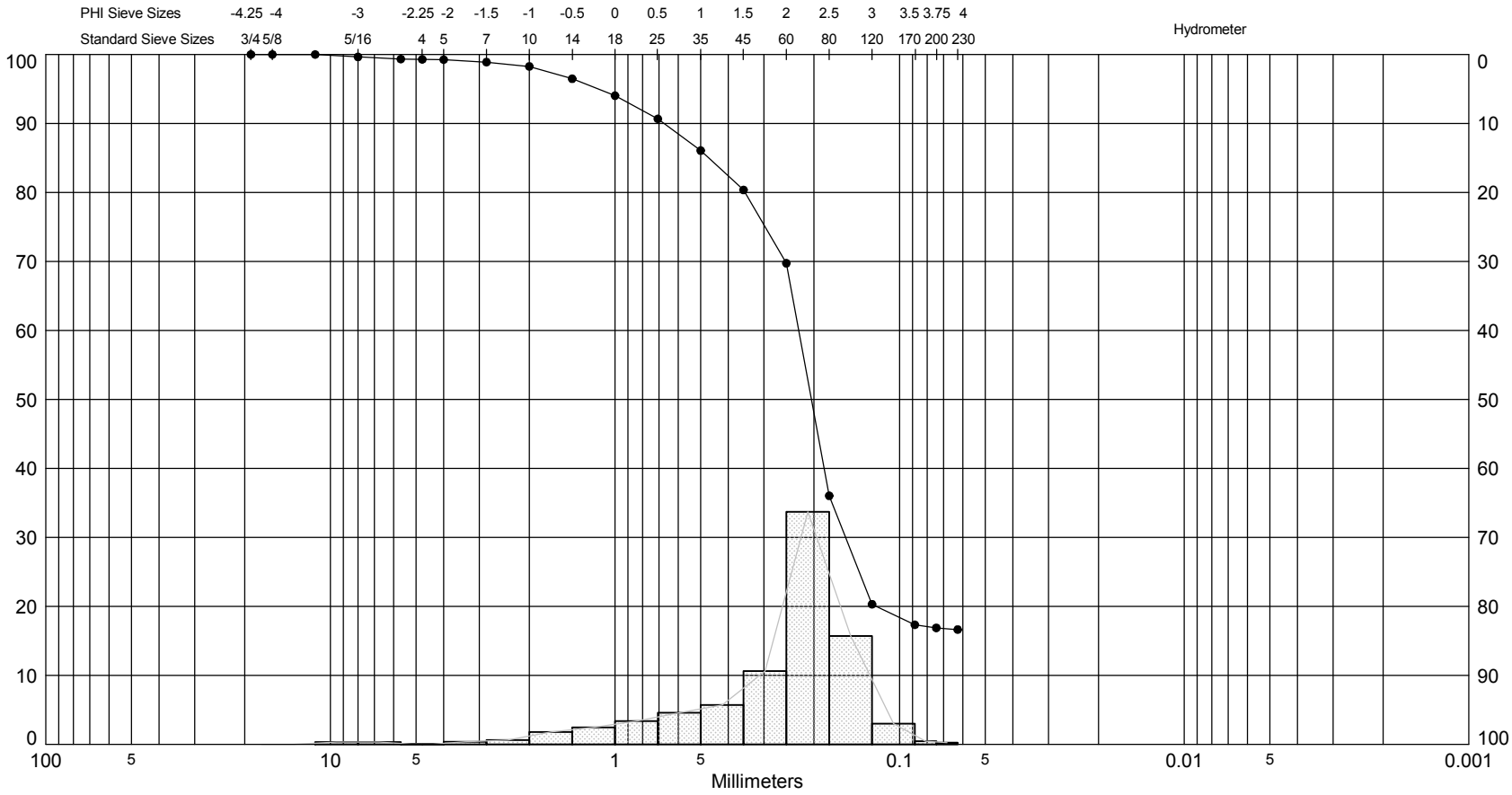
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O23 #3	—●—		SM	#200 - 16.88 #230 - 16.64	1.20	24.20	2.29	1.87	-1.75	6.91	1.06

Comments:

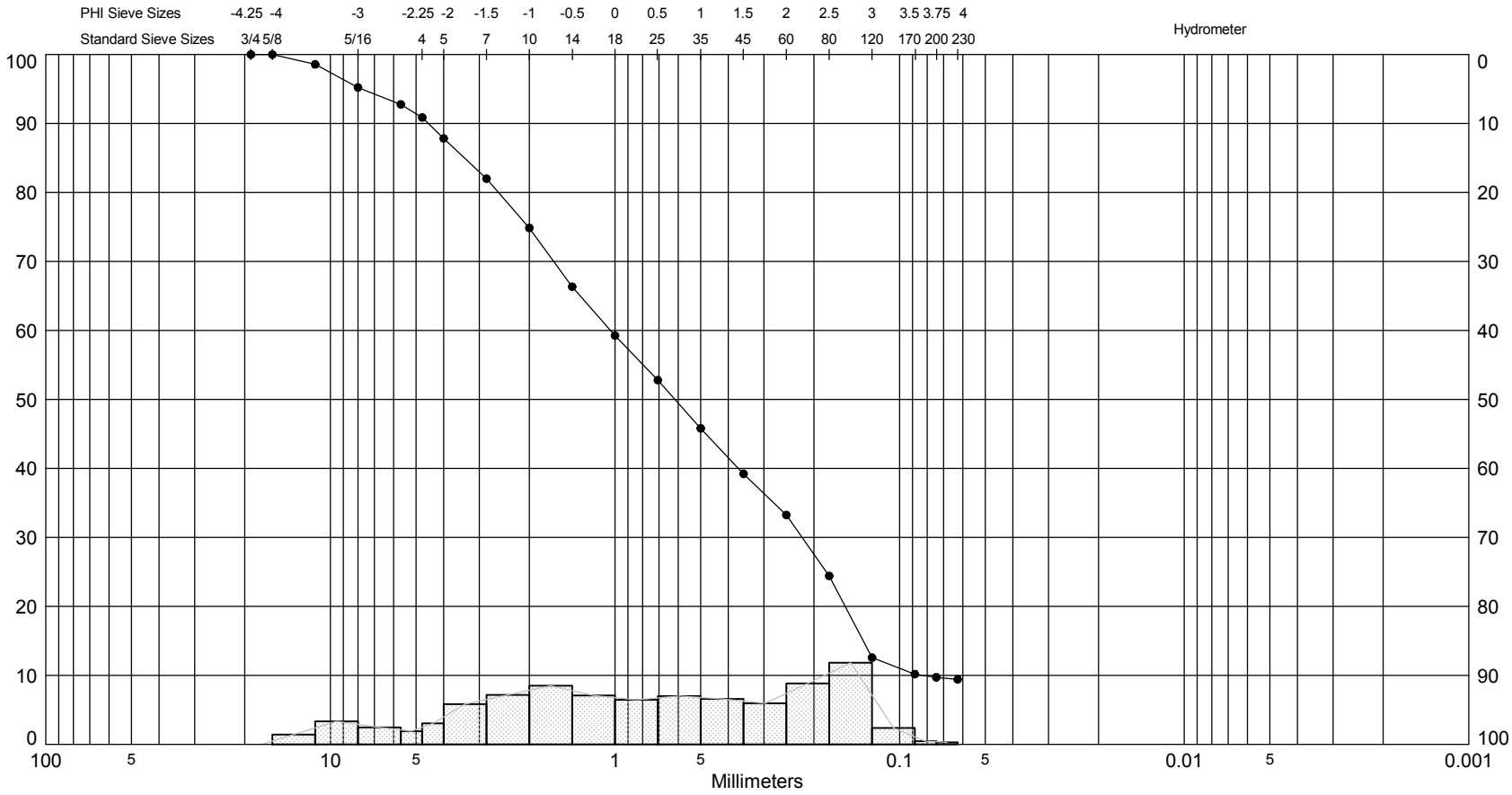
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O23 #4	—●—		SW-SM	#200 - 9.72 #230 - 9.42	1.90	53.30	0.7	0.3	-0.2	1.99	1.9

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

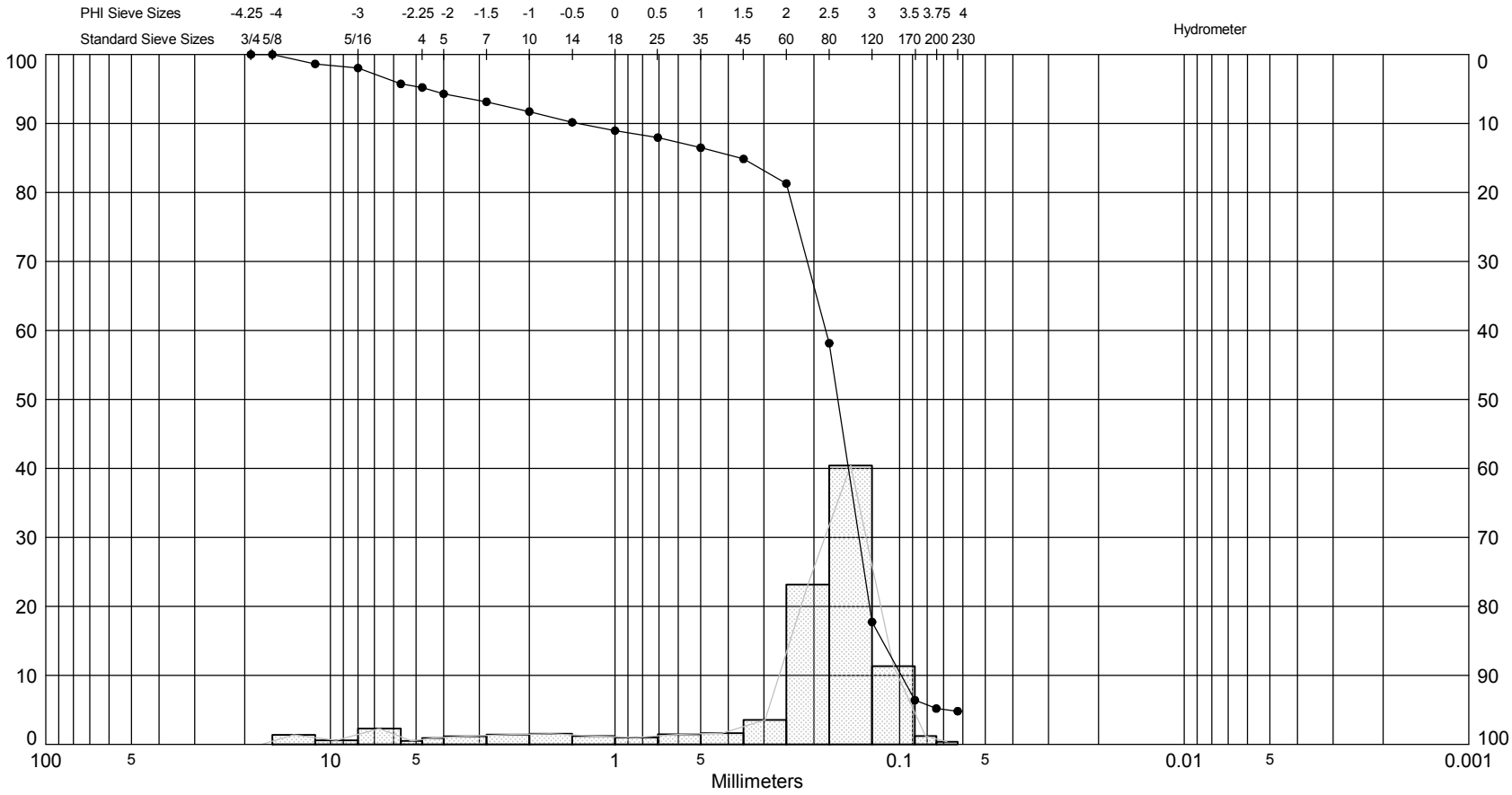
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O24 #1	—●—		SW-SM	#200 - 5.19 #230 - 4.81	1.50	13.00	2.6	2.03	-2.2	6.99	1.59

Comments:

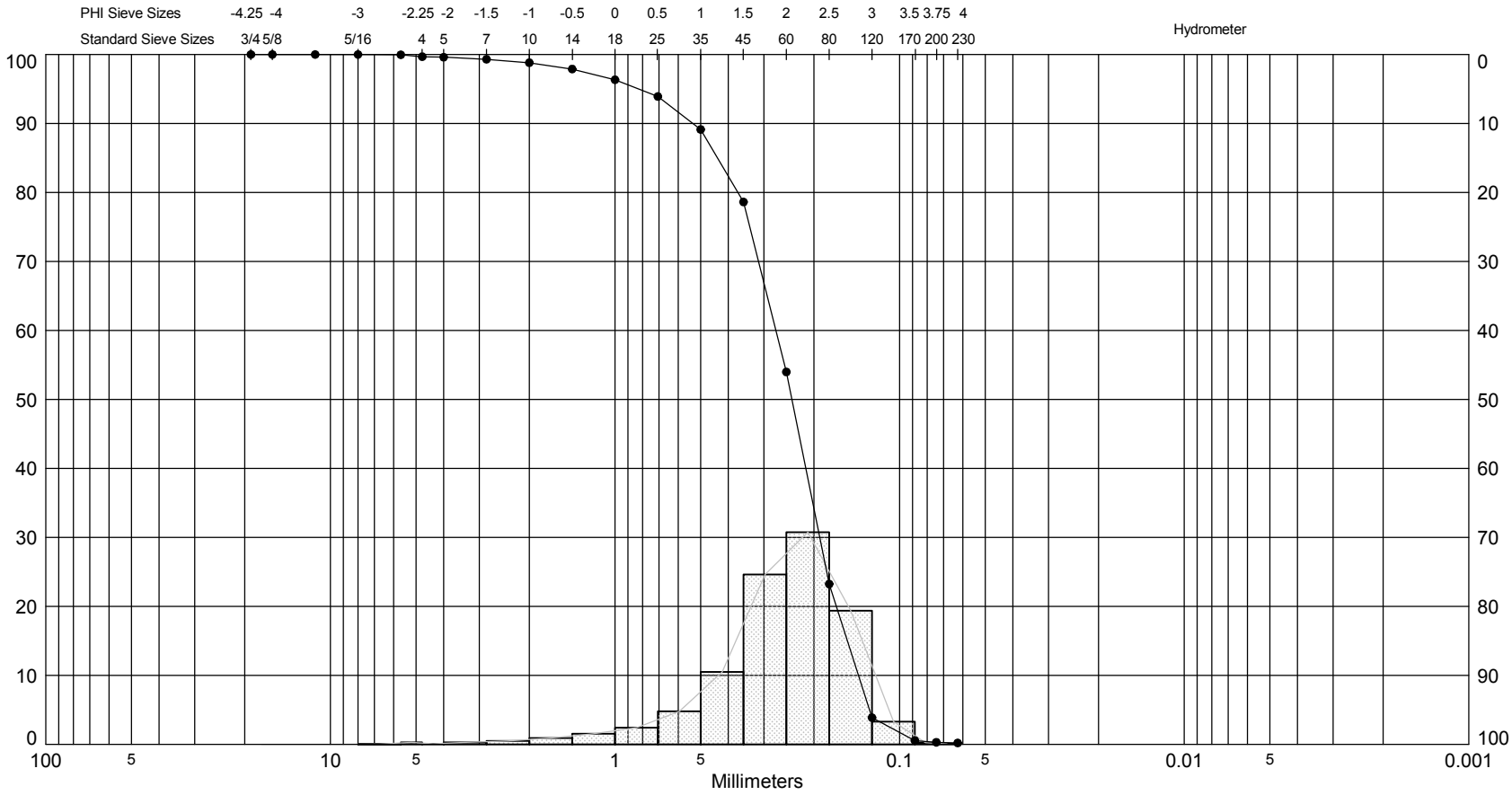
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O24 #2	—●—		SP	#200 - 0.30 #230 - 0.20	0.50	10.40	2.06	1.92	-1.55	7.11	0.85

Comments:

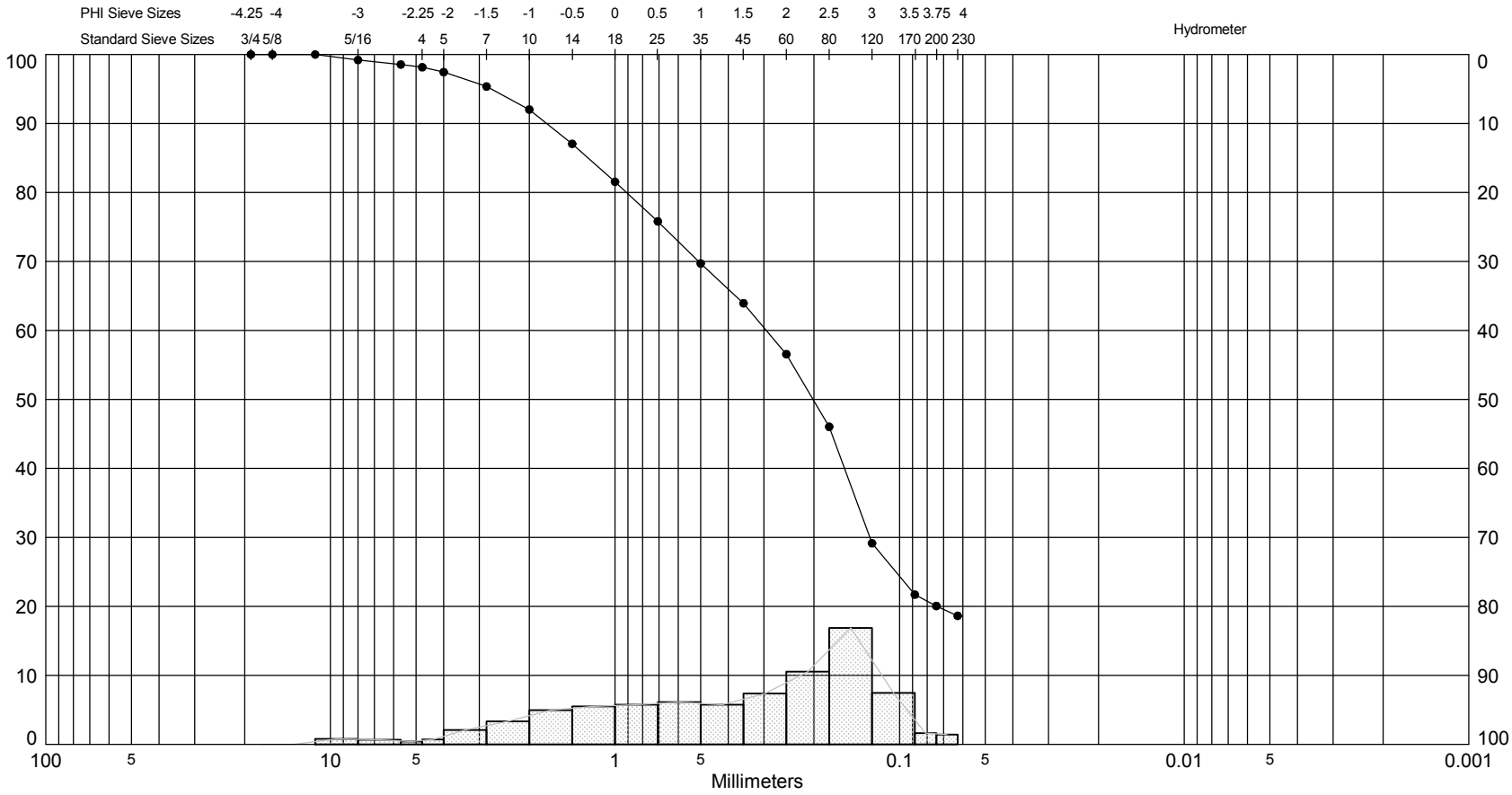
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O24 #3	—●—		SM	#200 - 20.06 #230 - 18.63	2.30	32.90	2.31	1.38	-0.68	2.61	1.63

Comments:

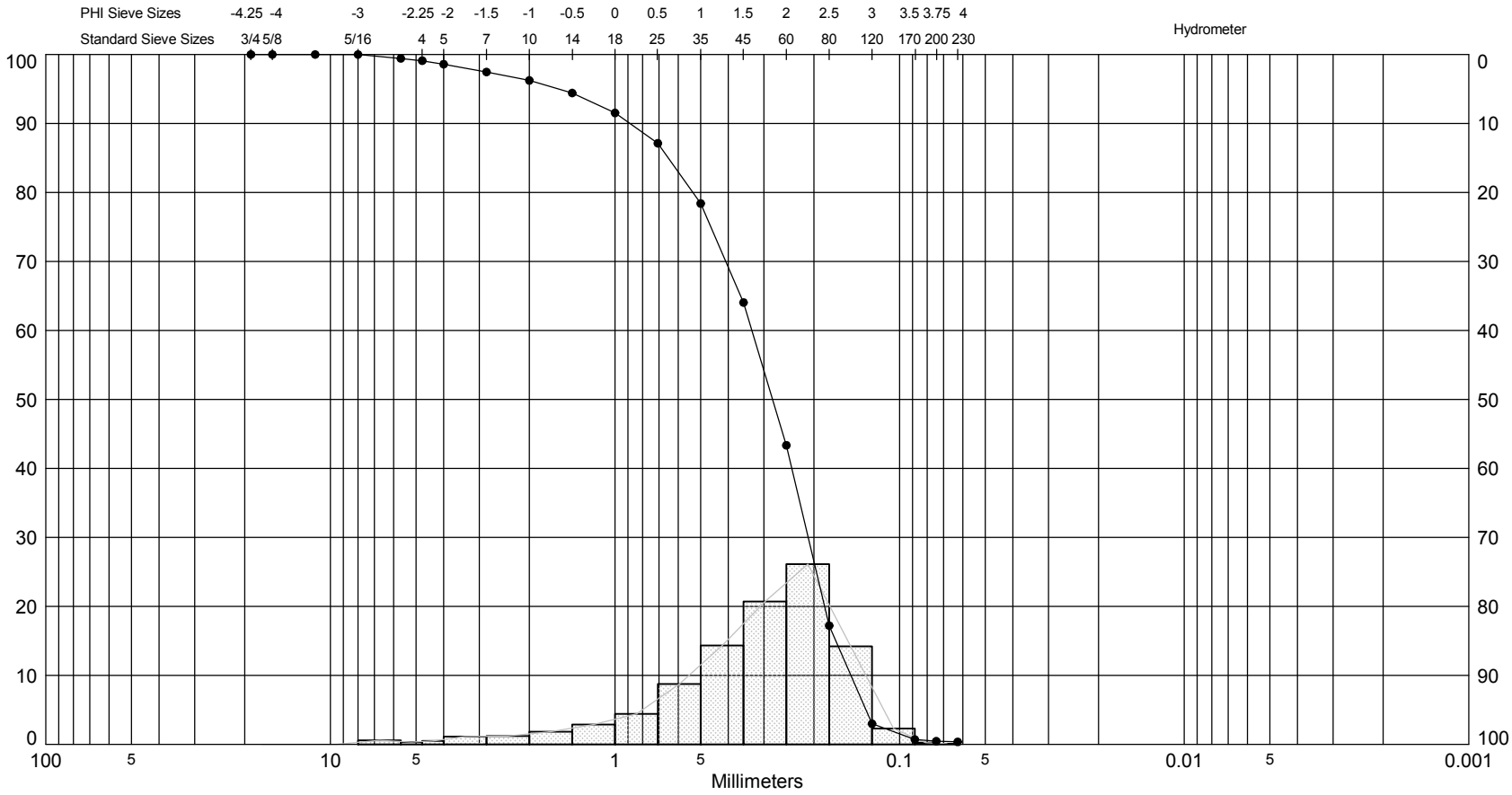
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O25 #1	—●—		SW	#200 - 0.45 #230 - 0.36	0.50	13.60	1.84	1.6	-1.38	5.35	1.1

Comments:

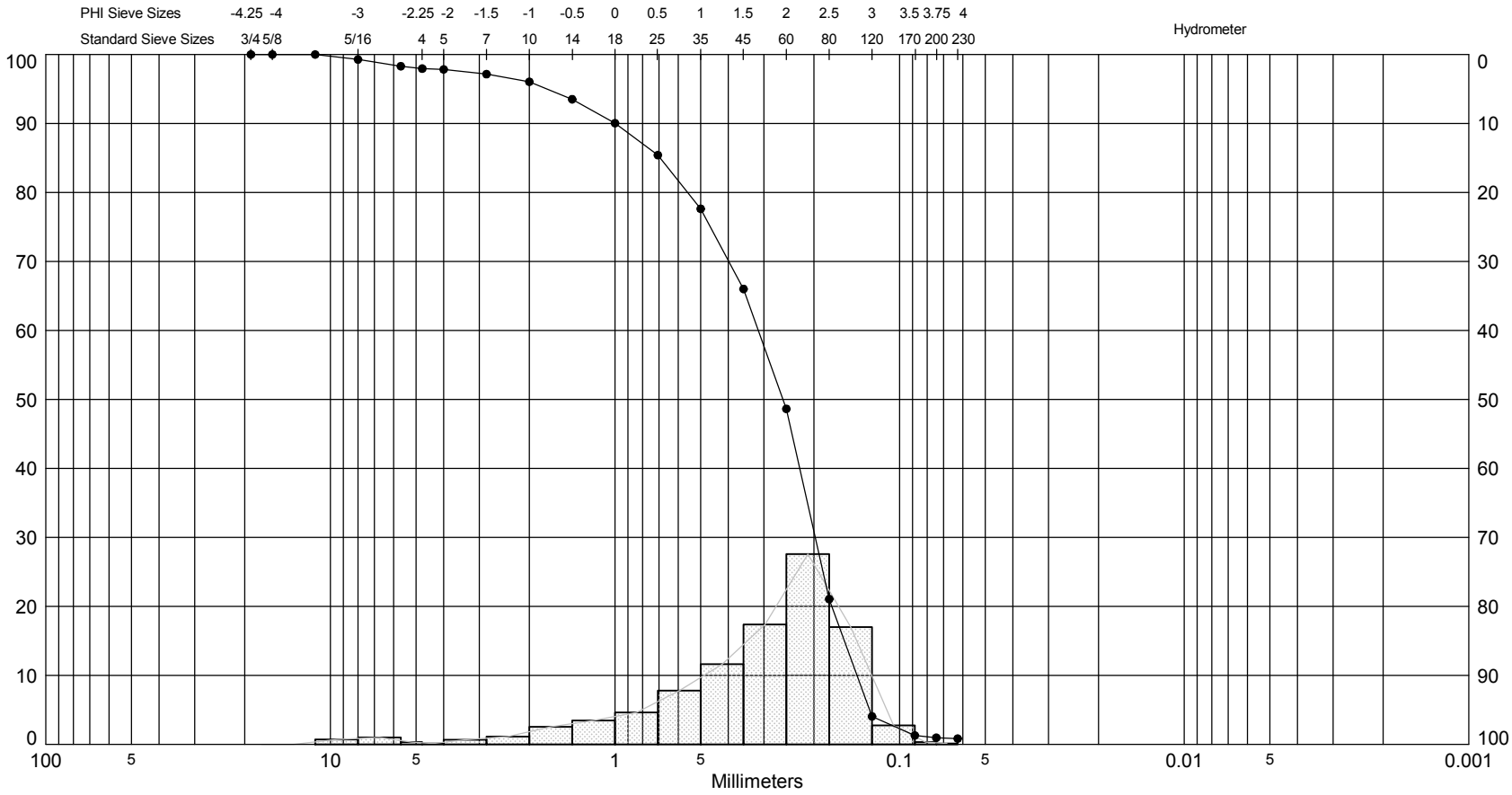
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O25 #2	—●—		SW	#200 - 0.96 #230 - 0.83	0.50	18.00	1.96	1.61	-1.54	5.84	1.21

Comments:

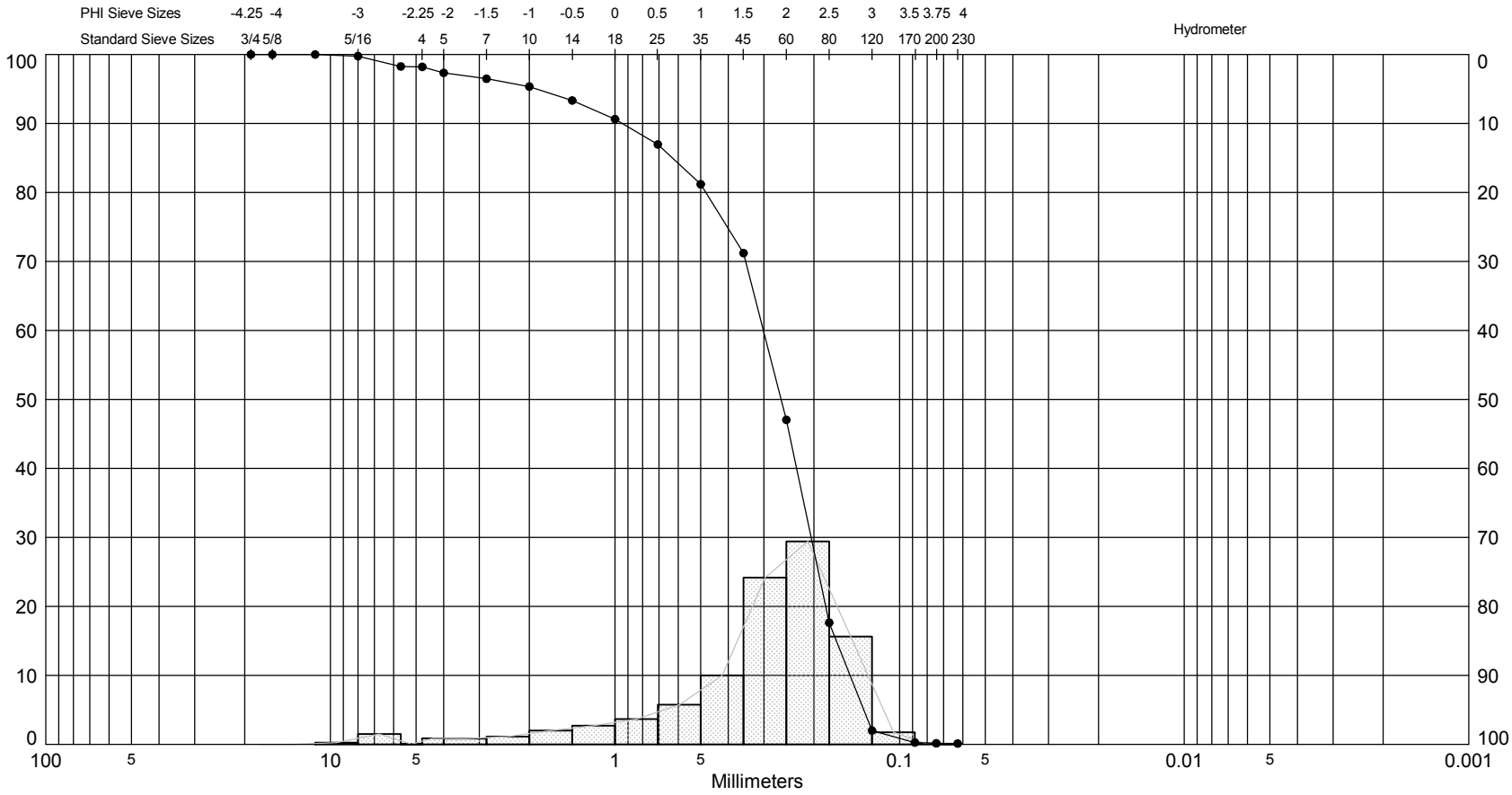
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O25 #3	—●—		SW	#200 - 0.15 #230 - 0.12	0.90	19.20	1.94	1.64	-1.79	6.54	1.17

Comments:

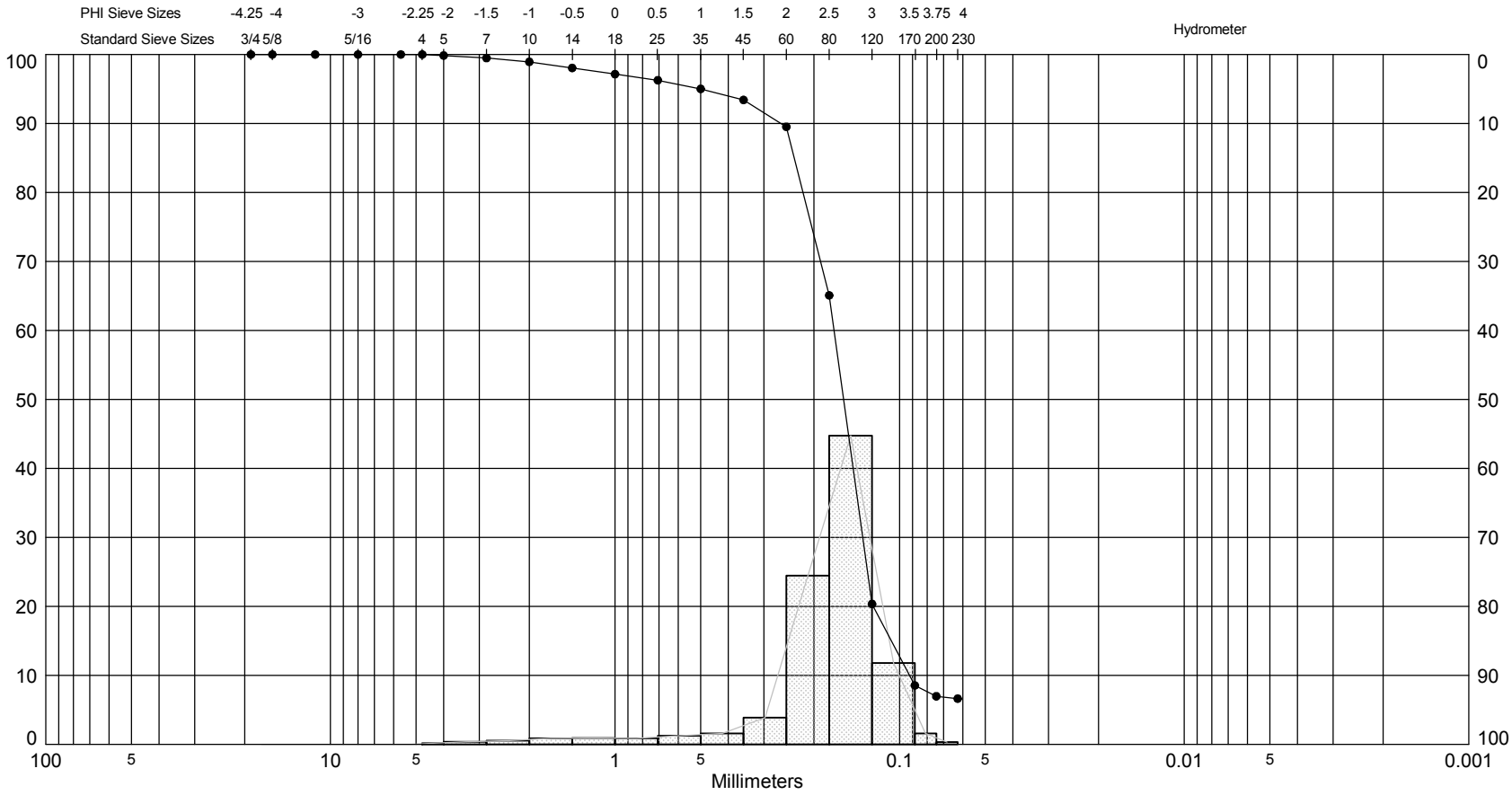
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O25 #4	—●—		SP-SM	#200 - 6.97 #230 - 6.63	1.60	9.70	2.67	2.47	-2.67	12.34	0.8

Comments:

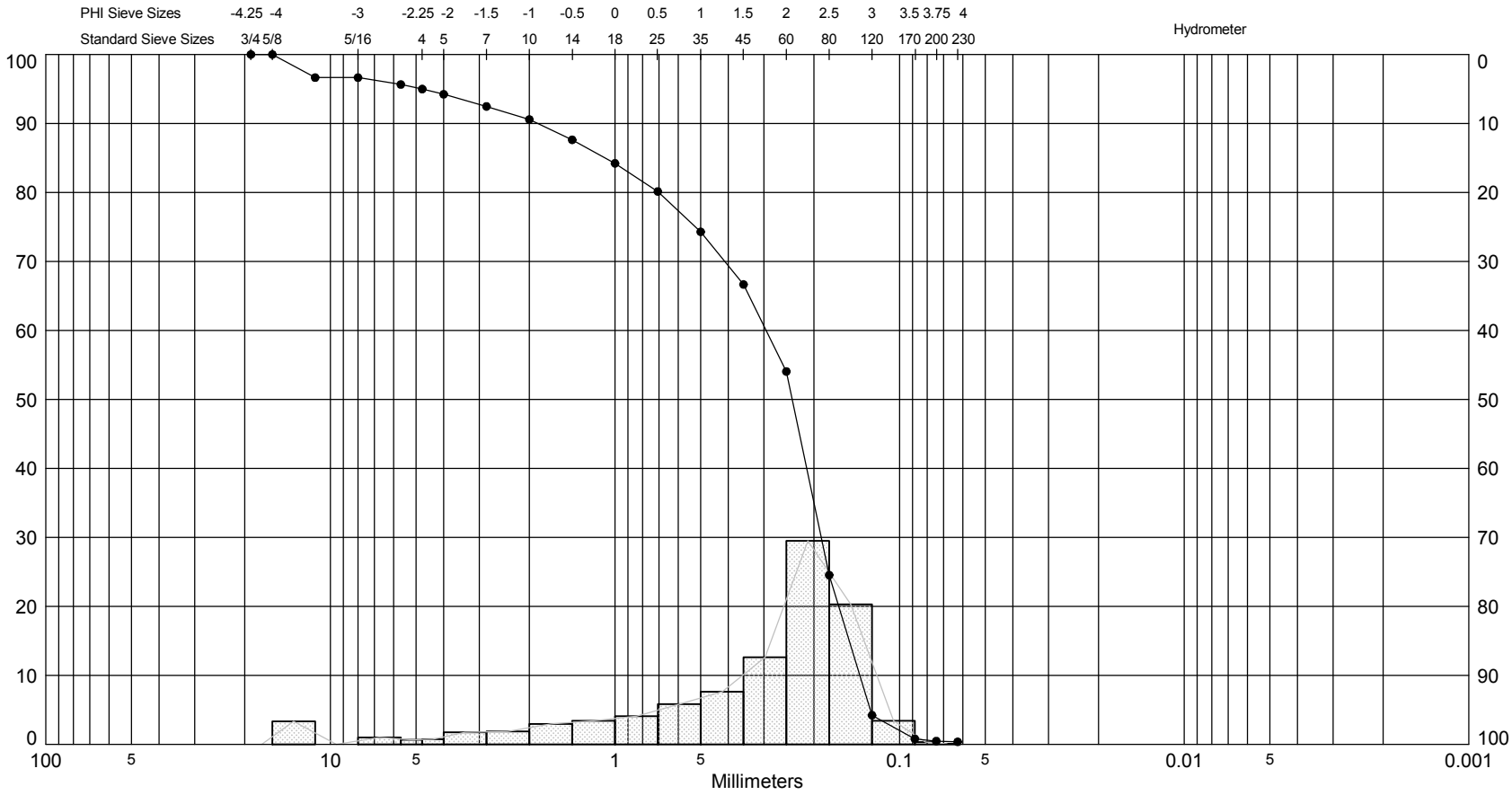
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O26 #1	—●—		SW	#200 - 0.47 #230 - 0.37	0.60	12.70	2.07	1.46	-1.64	5.22	1.62

Comments:

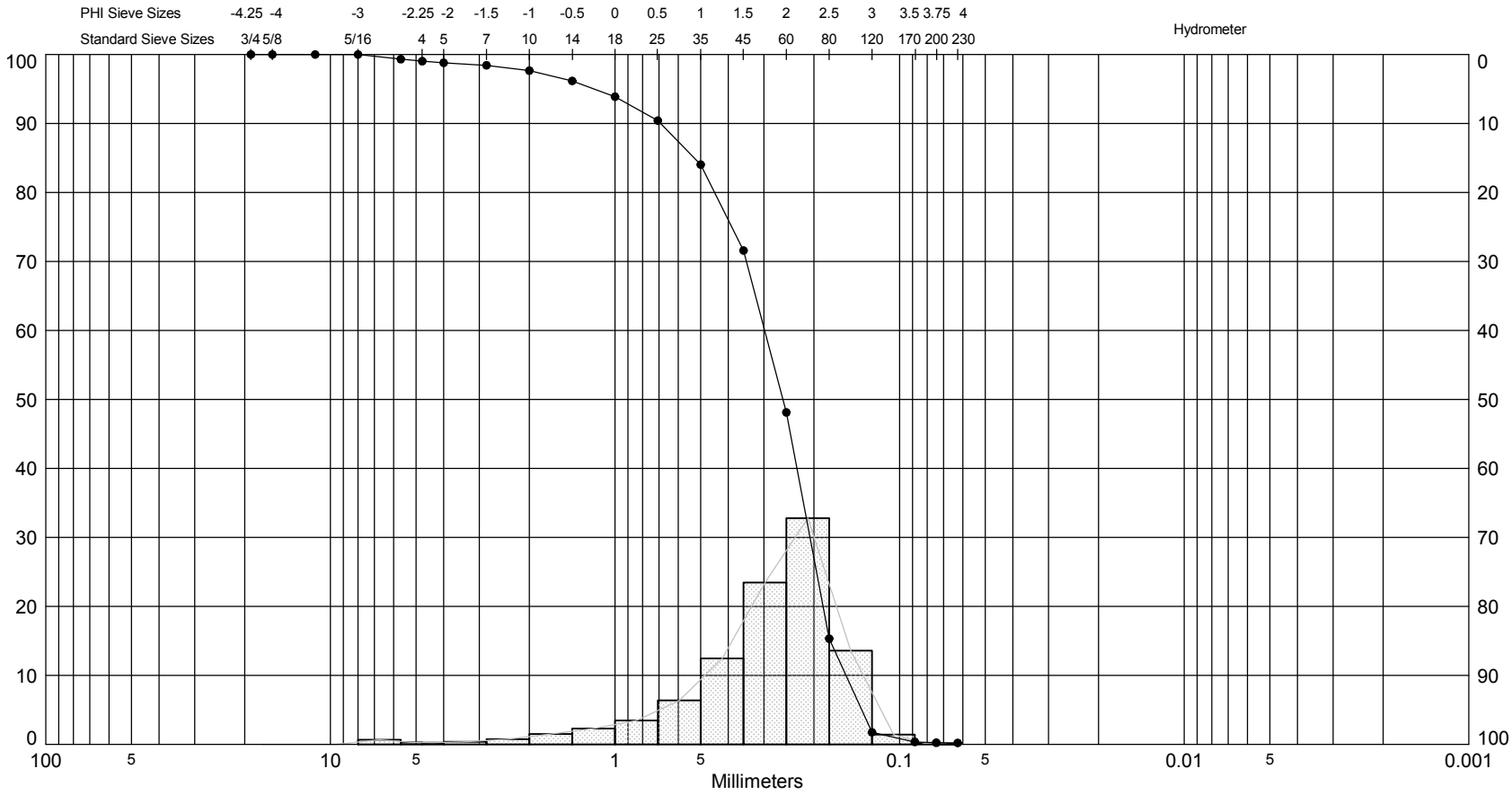
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O26 #2	—●—		SW	#200 - 0.24 #230 - 0.21	0.40	11.90	1.96	1.72	-1.77	7.34	0.97

Comments:

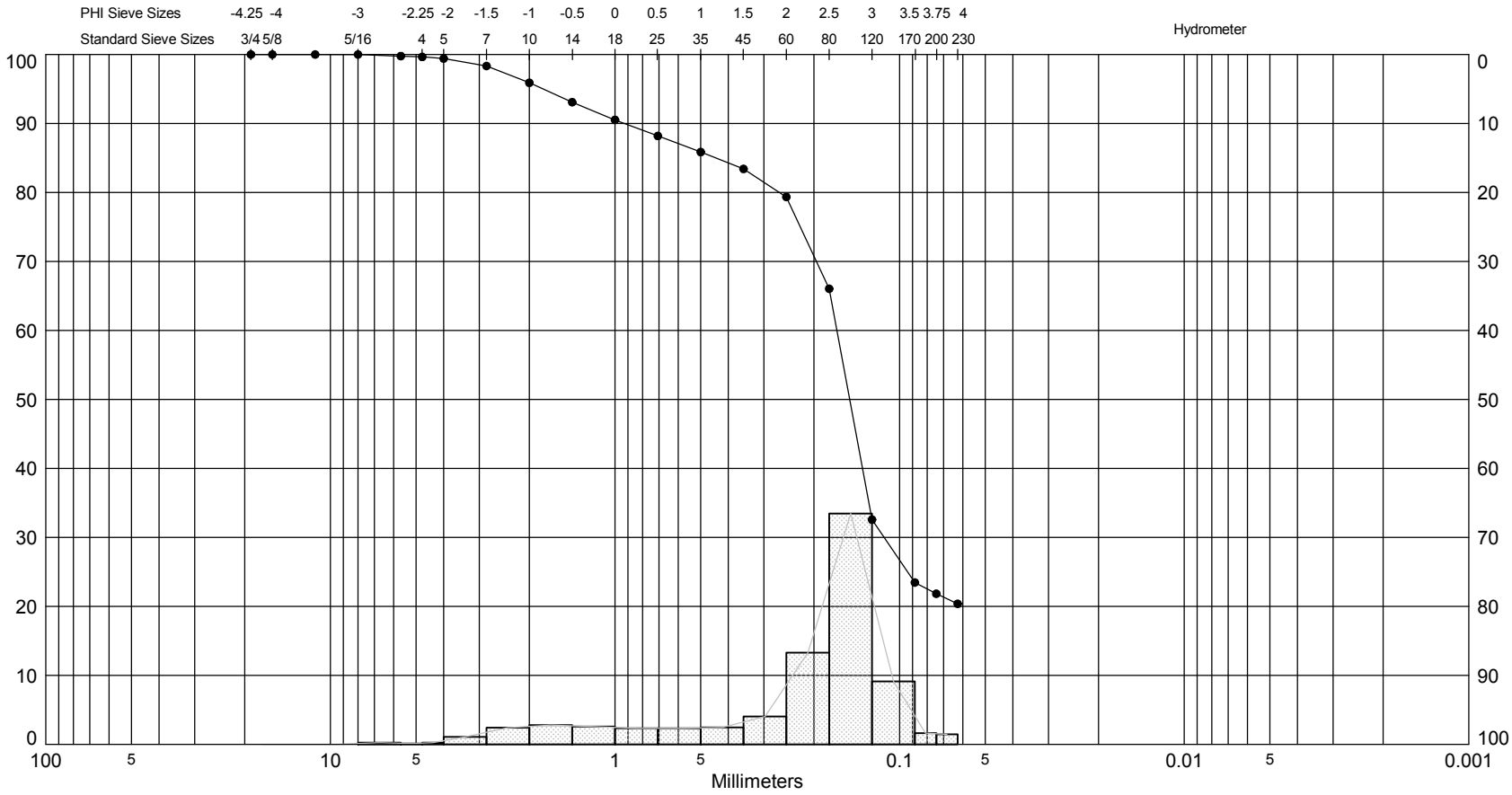
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O26 #3	—●—		SM	#200 - 21.83 #230 - 20.37	1.50	10.70	2.74	2.09	-1.52	4.48	1.33

Comments:

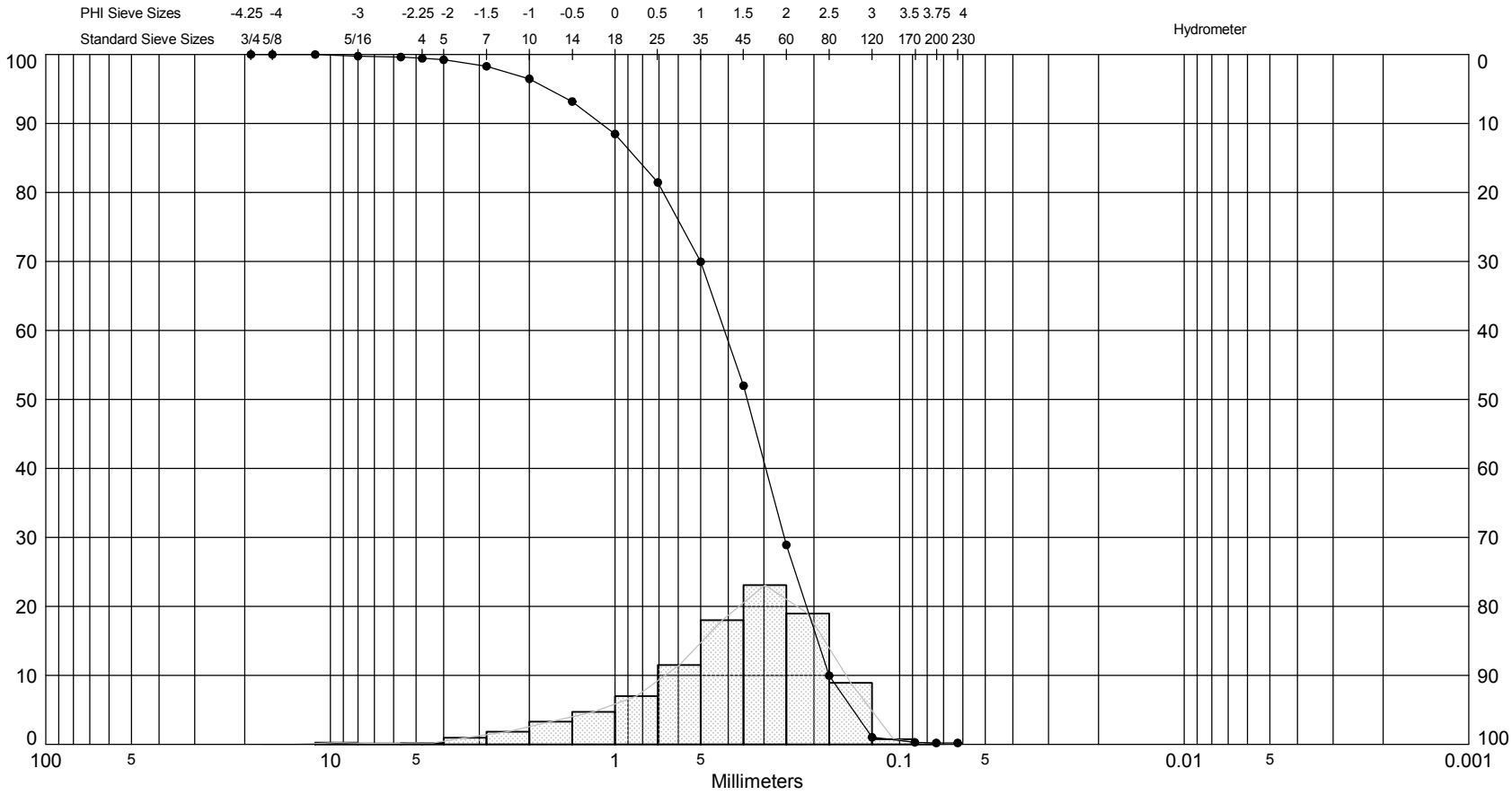
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-16-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O27 #1	—●—		SW	#200 - 0.20 #230 - 0.20	0.50	16.70	1.54	1.34	-1.02	4.24	1.06

Comments:

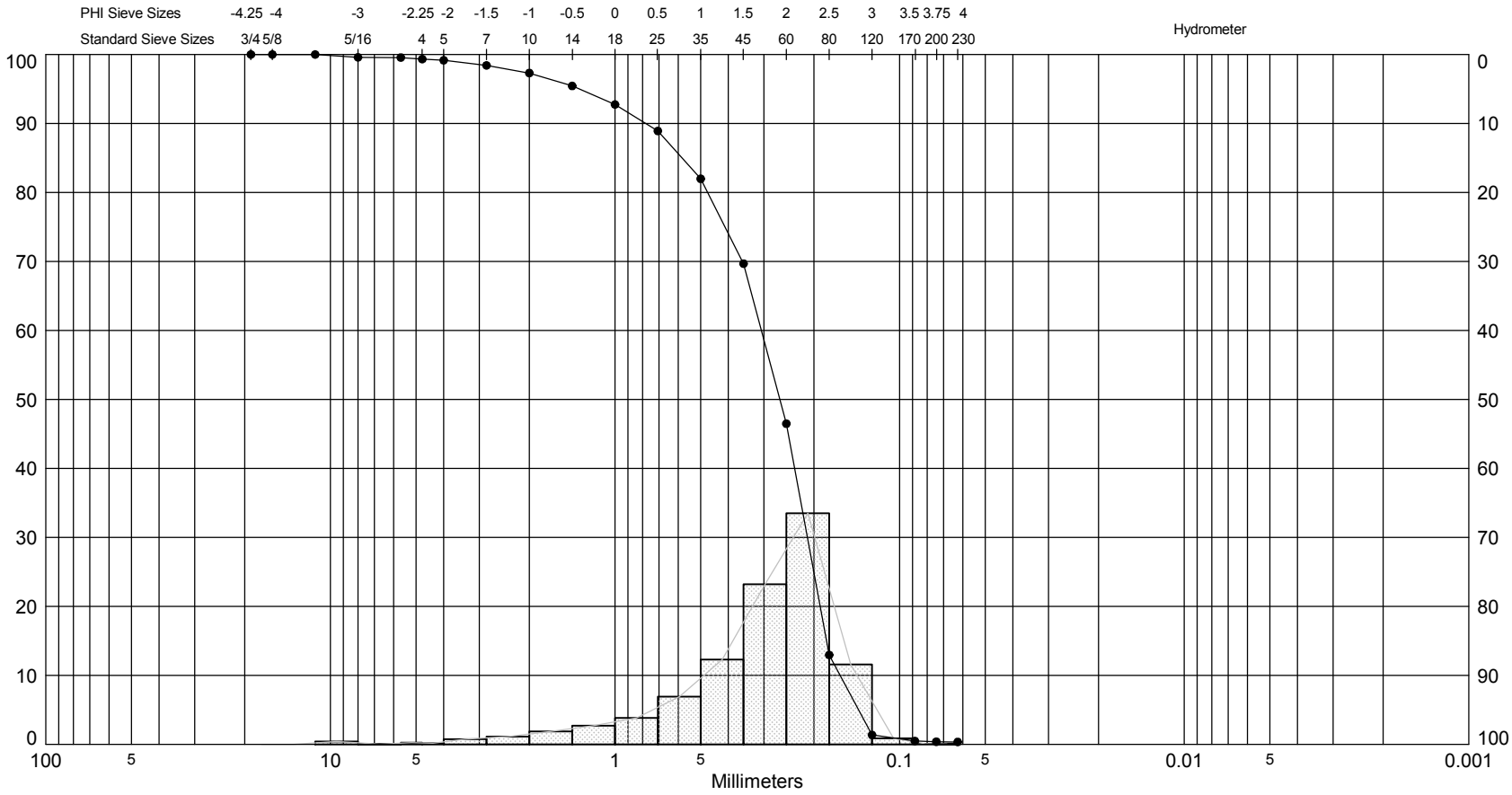
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O27 #2	—●—		SW	#200 - 0.38 #230 - 0.35	0.50	12.00	1.92	1.66	-1.7	6.84	1

Comments:

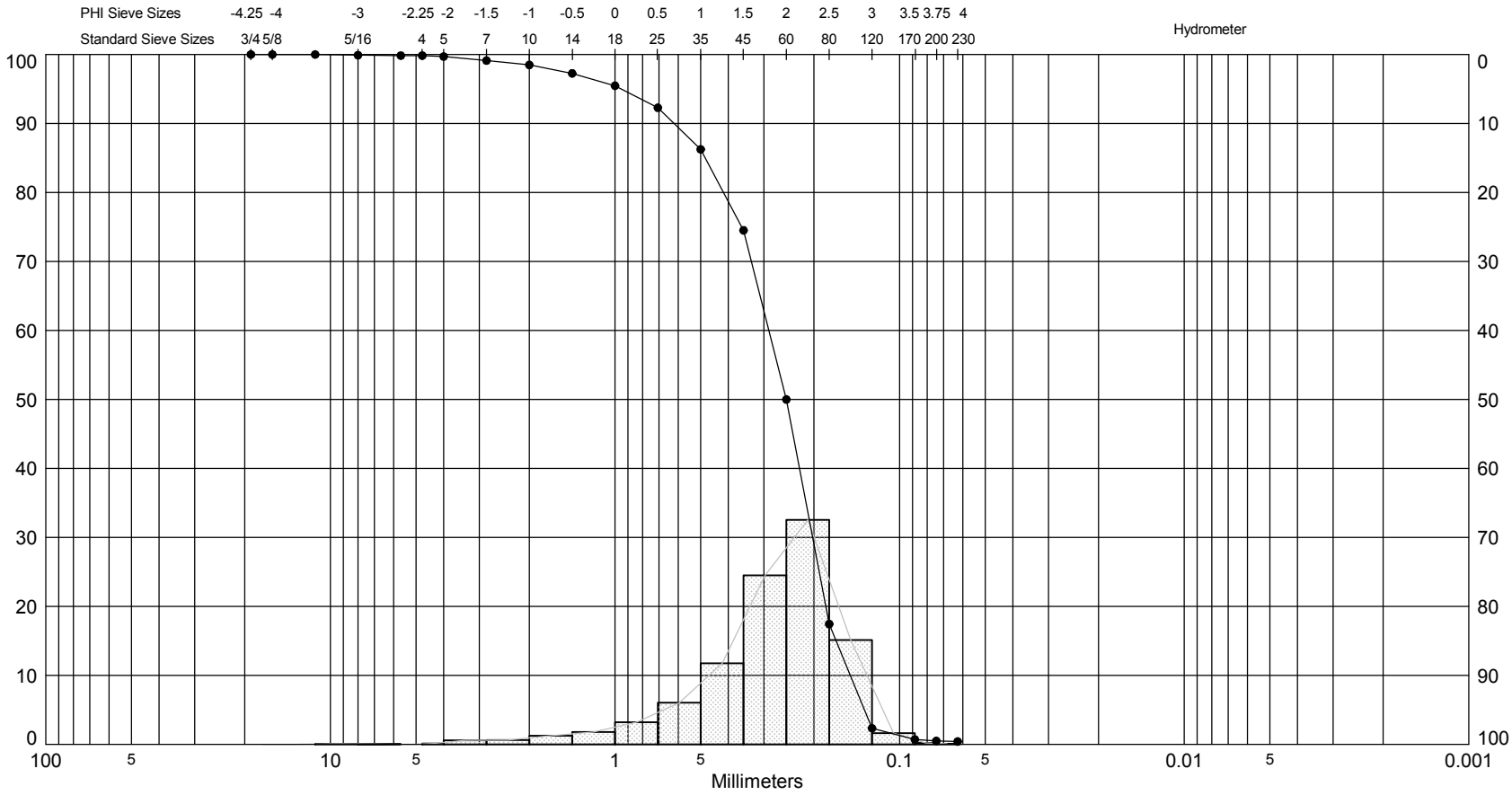
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O27 #3	—●—		SW	#200 - 0.49 #230 - 0.41	0.50	11.80	2	1.81	-1.56	6.8	0.88

Comments:

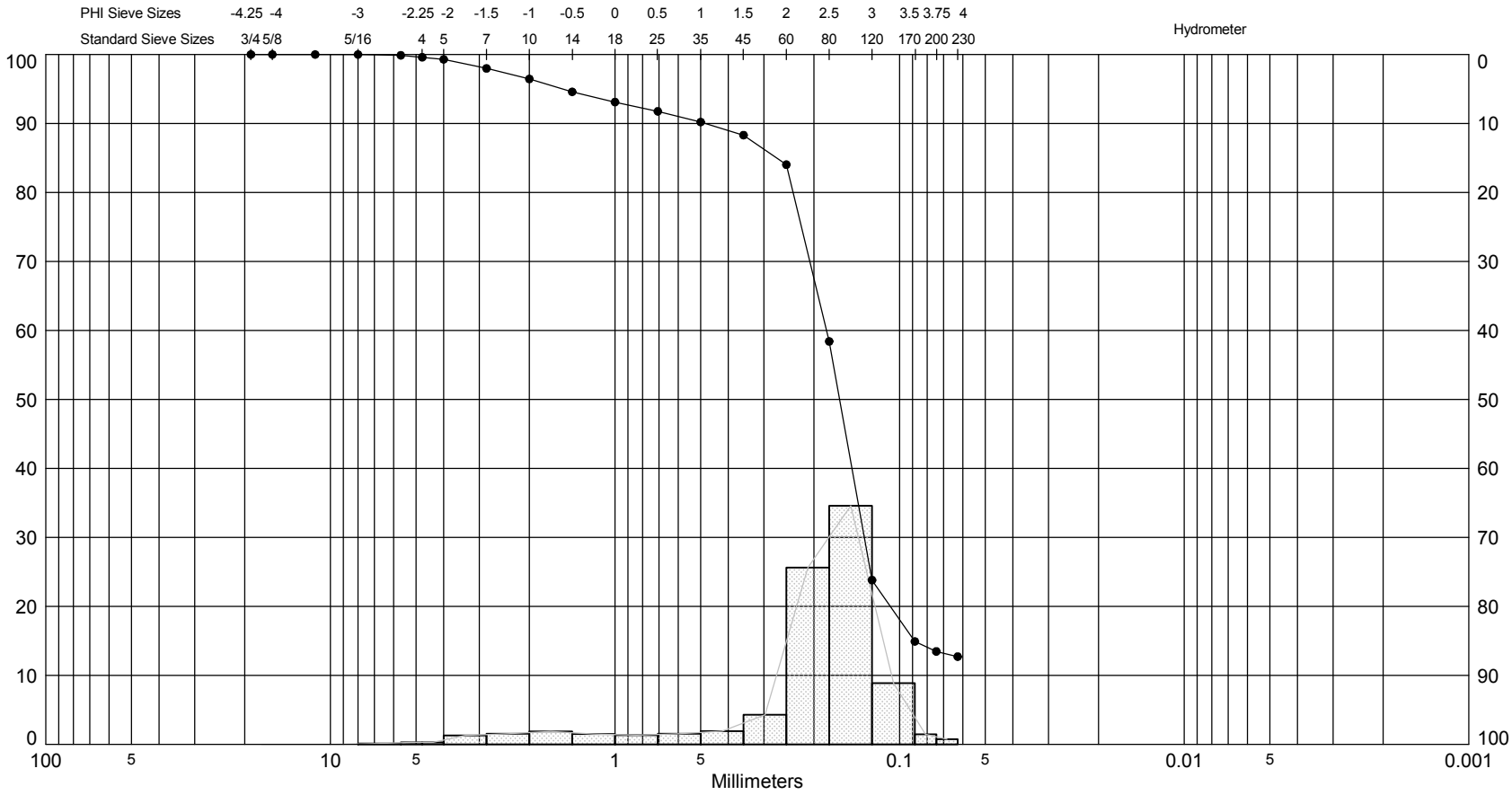
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O27 #4	—●—		SM	#200 - 13.47 #230 - 12.72	1.80	20.30	2.62	2.22	-2.12	7.34	1.15

Comments:

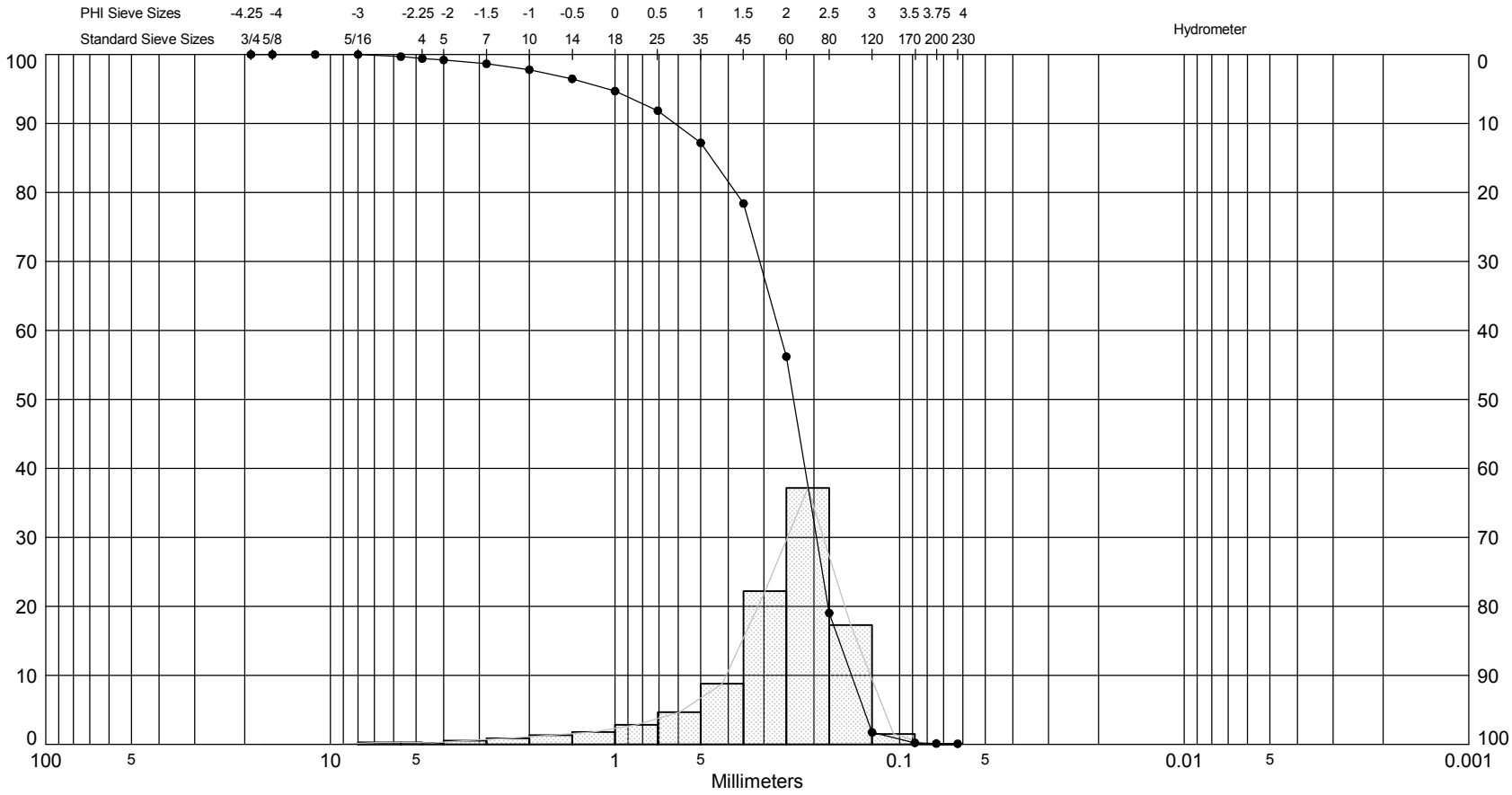
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O28 #1	—●—		SW	#200 - 0.12 #230 - 0.09	0.50	12.80	2.08	1.85	-1.93	7.91	0.93

Comments:

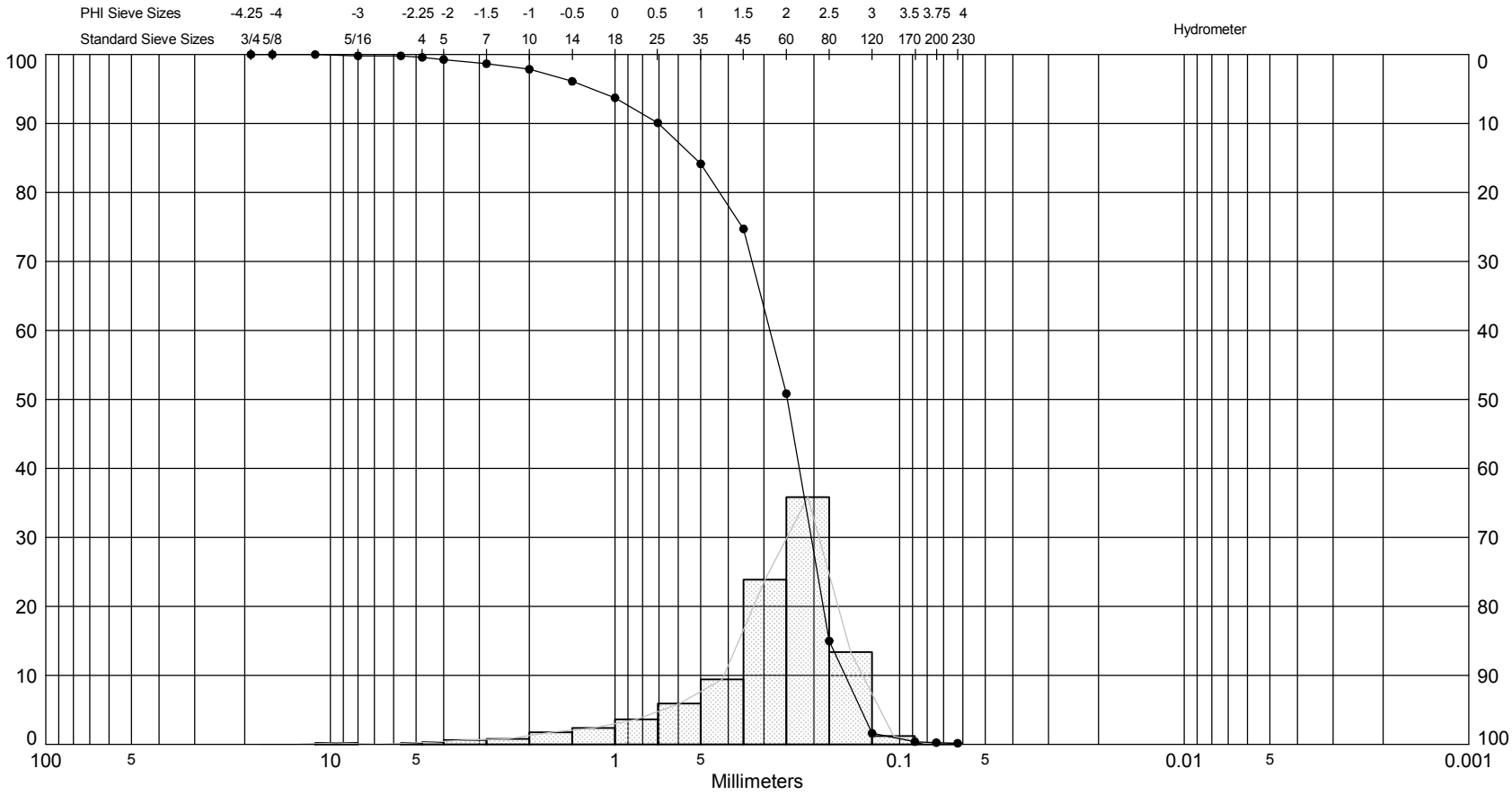
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O28 #2	—●—		SW	#200 - 0.25 #230 - 0.16	0.50	13.40	2.01	1.76	-1.73	6.93	0.95

Comments:

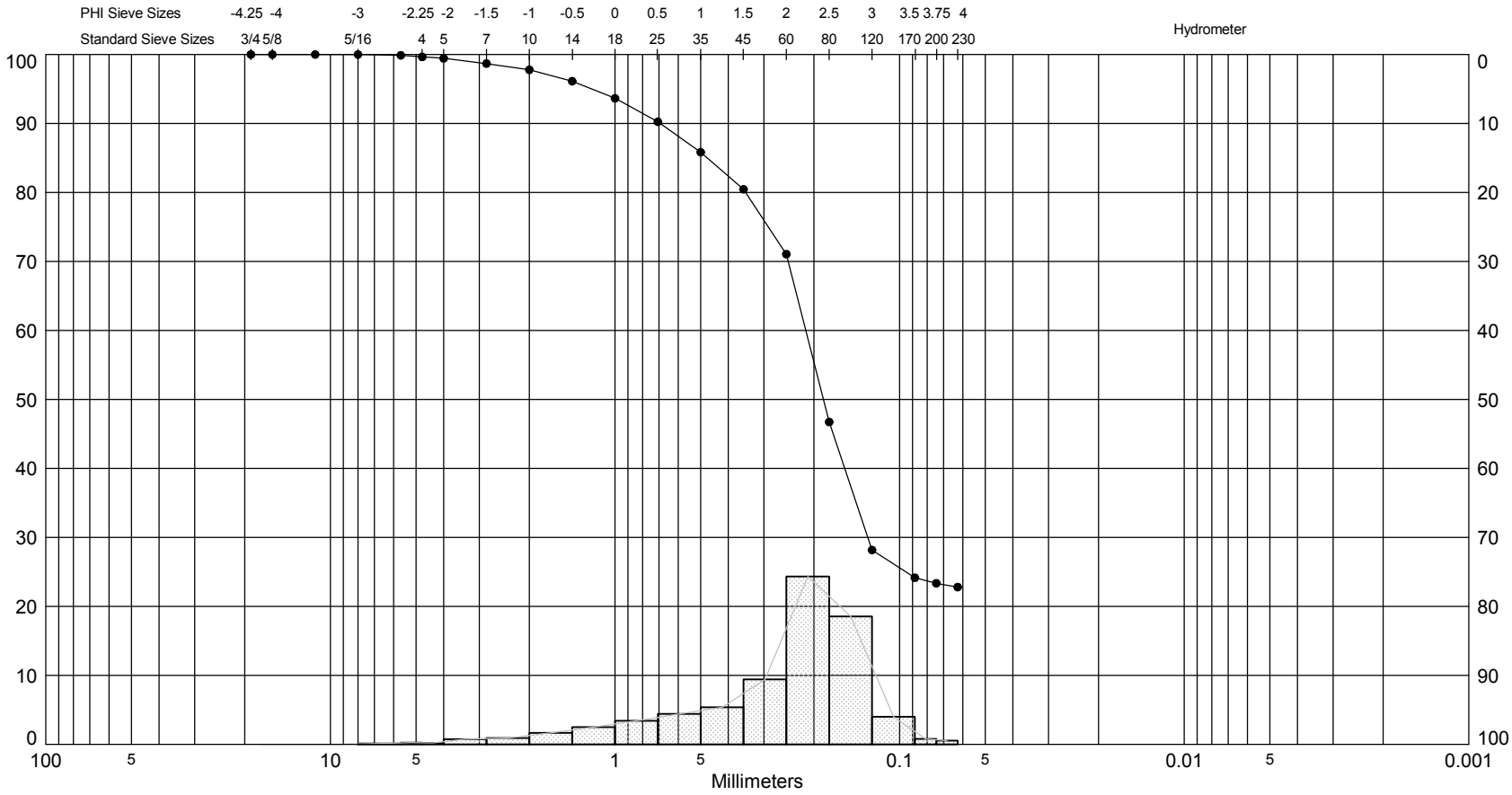
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O28 #3	—●—		SM	#200 - 23.35 #230 - 22.80	1.70	13.90	2.43	1.89	-1.38	4.89	1.13

Comments:

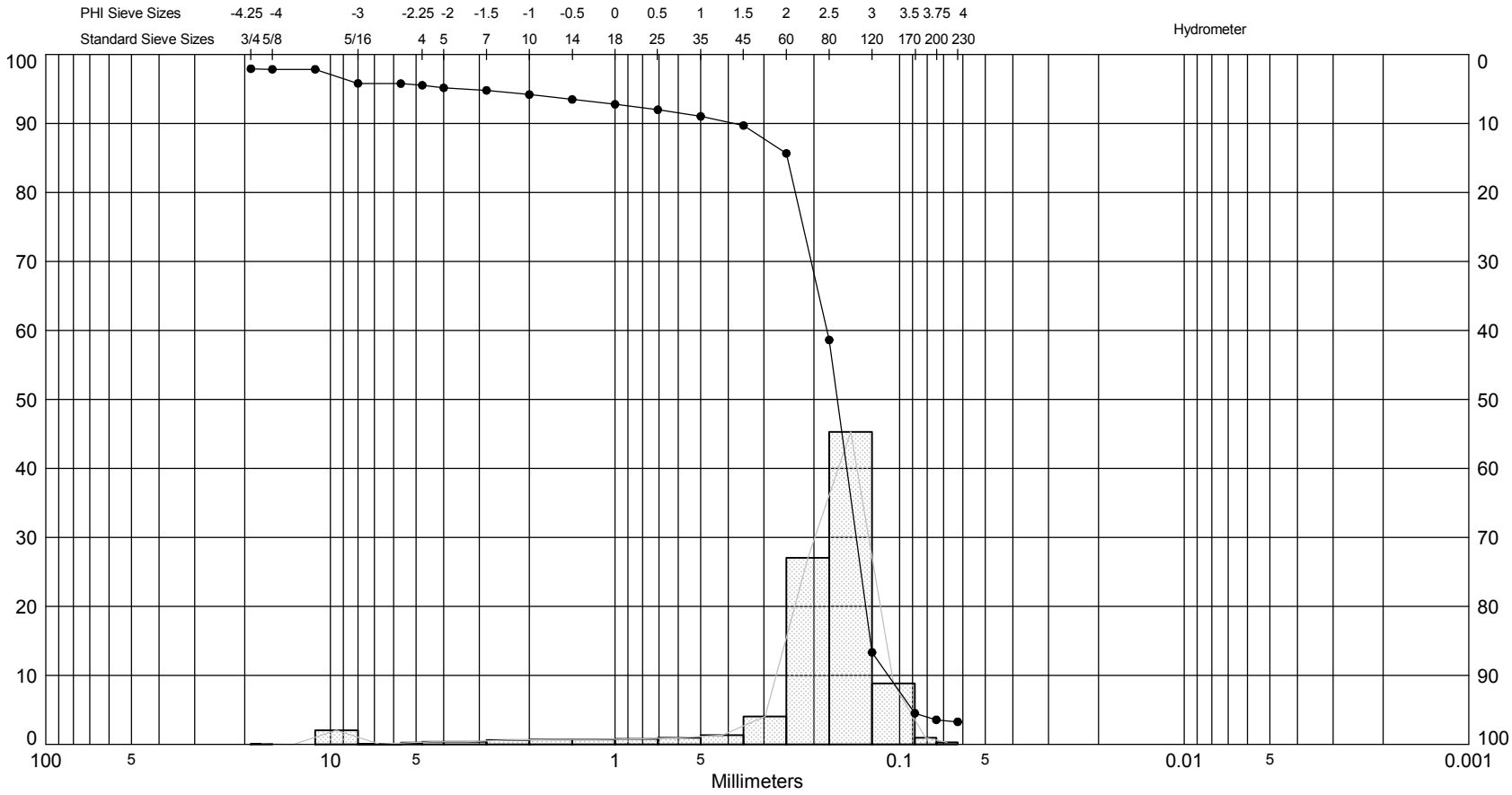
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-17-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O29 #1	—●—		SW	#200 - 3.56 #230 - 3.27	1.10	11.40	2.6	2.16	-2.88	12.87	1.18

Comments:

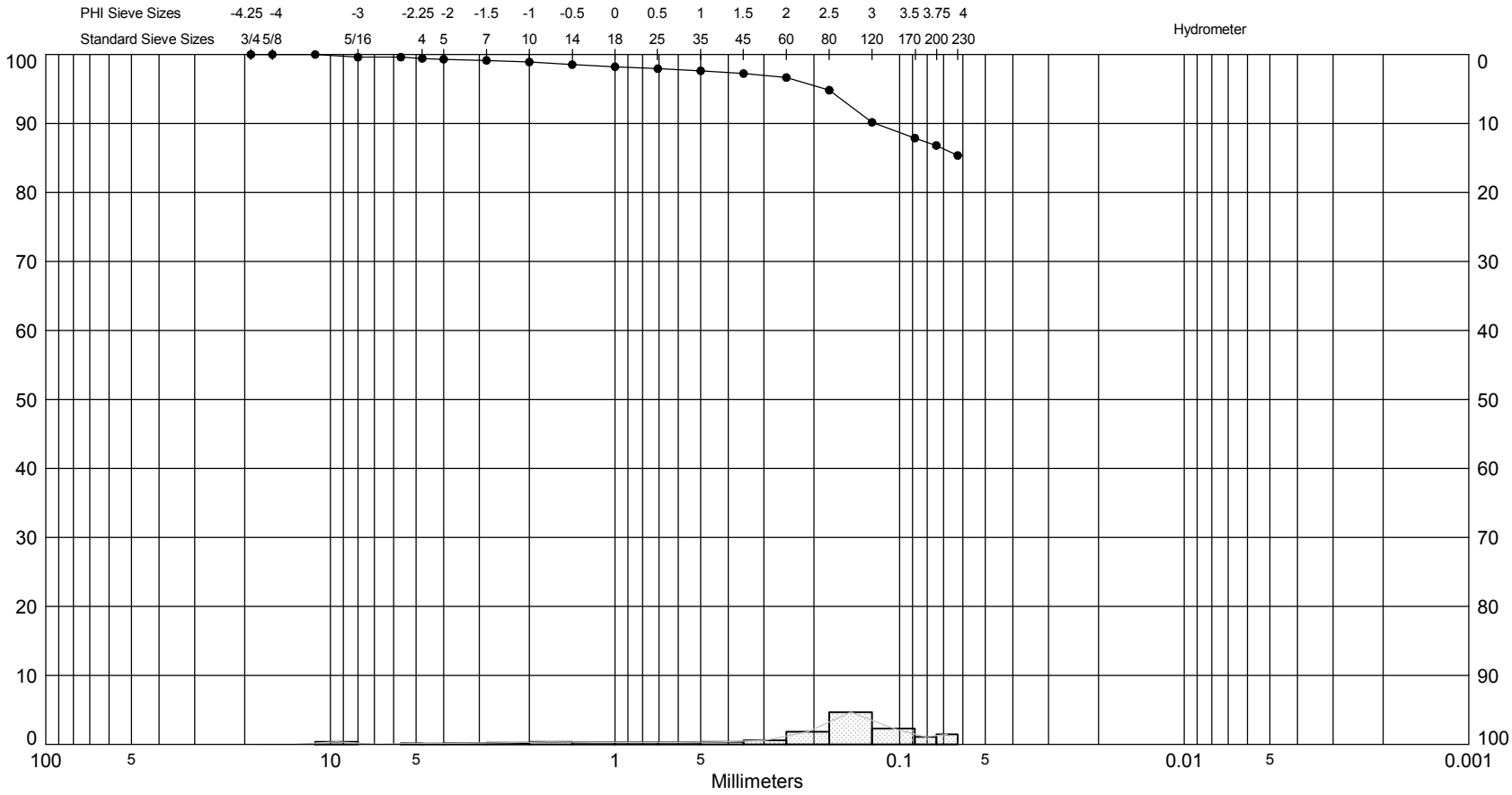
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O29 #2	—●—		ML-CL	#200 - 86.81 #230 - 85.36	3.40	11.20		2.24	-1.77	5.54	1.67

Comments:

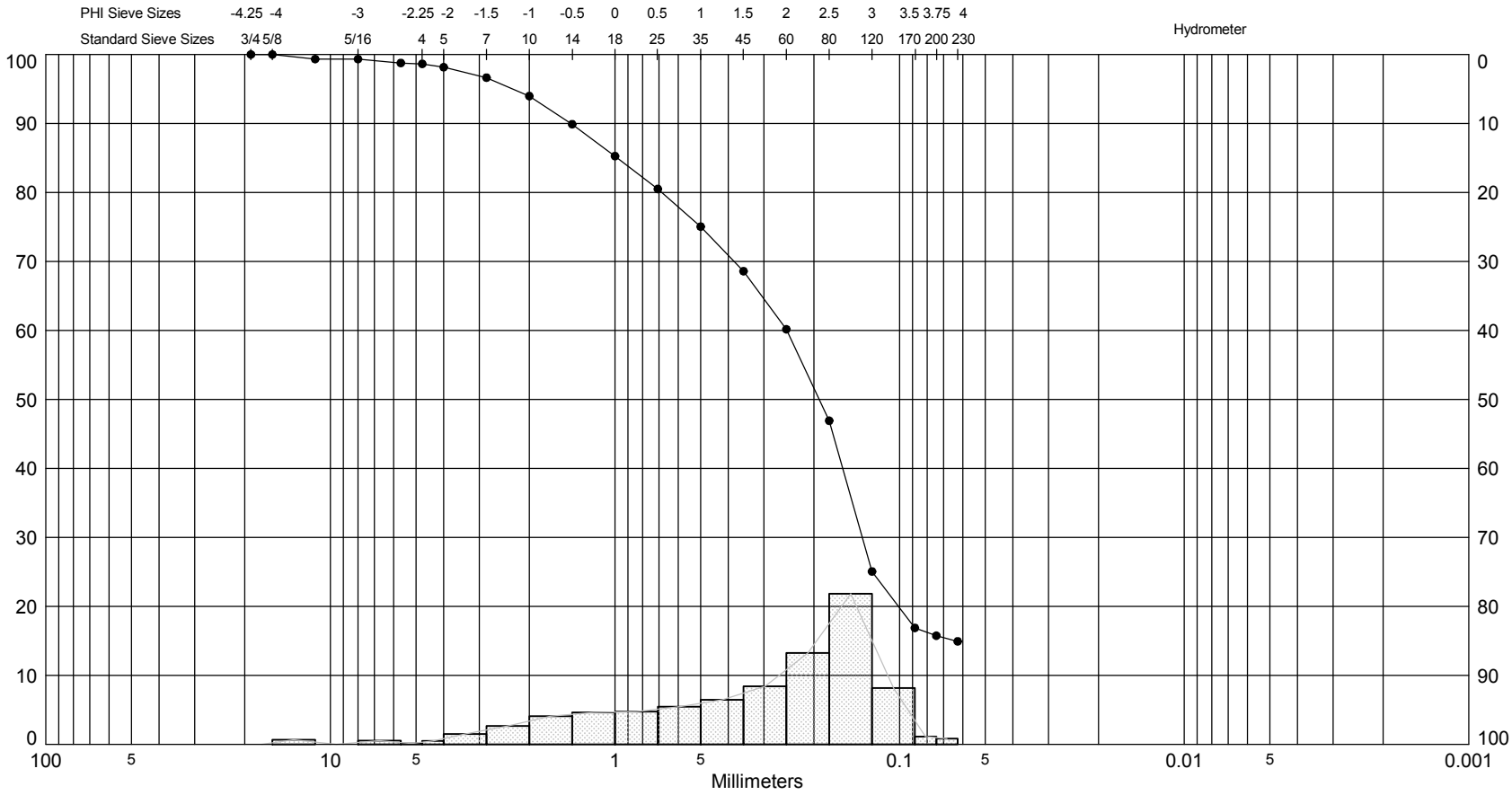
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O29 #3	—●—		SM	#200 - 15.75 #230 - 14.93	1.80	27.90	2.38	1.6	-1.04	3.55	1.51

Comments:

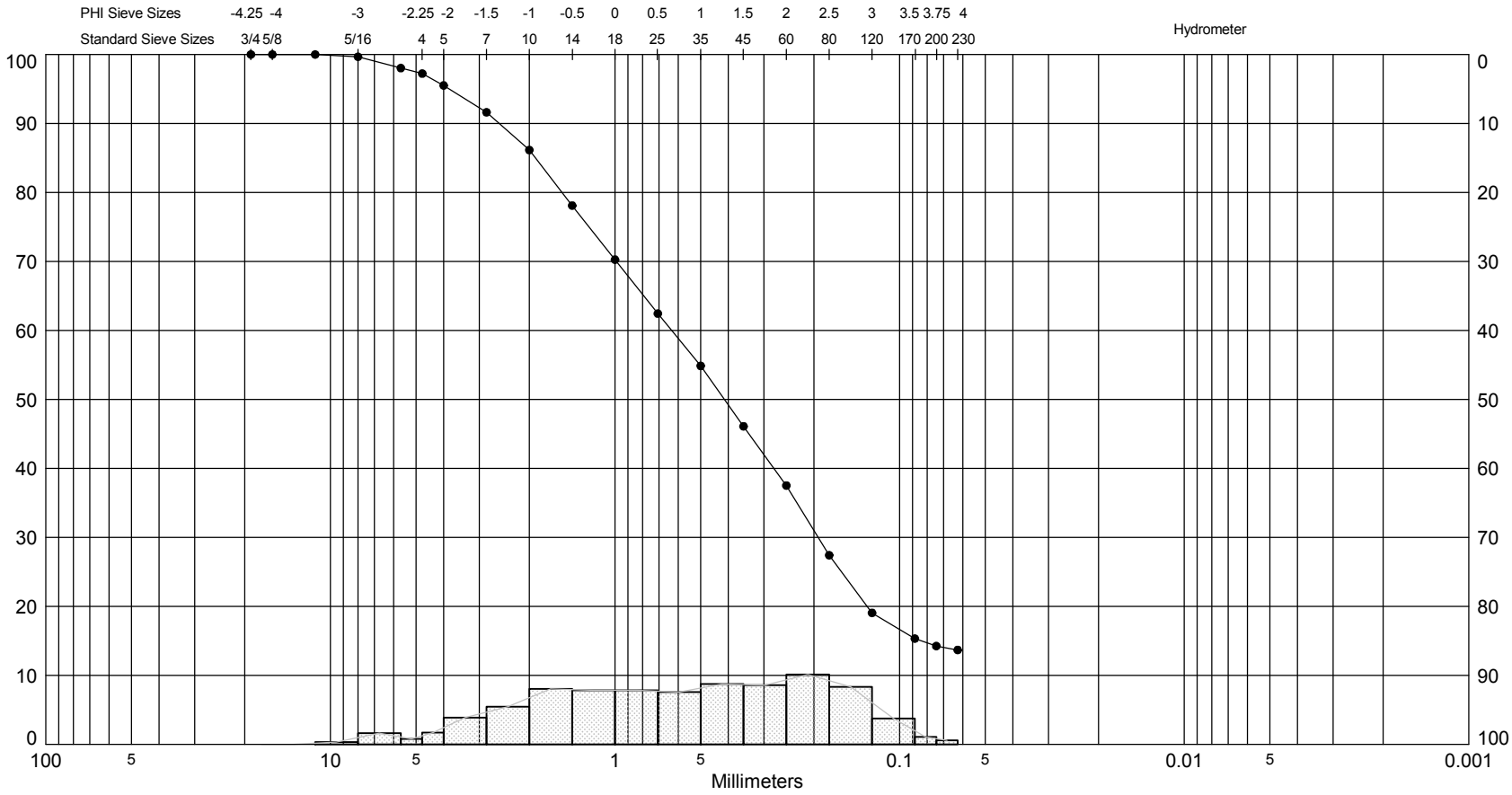
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O29 #4	—●—		SM	#200 - 14.25 #230 - 13.68	2.10	37.70	1.28	0.75	-0.23	2.16	1.62

Comments:

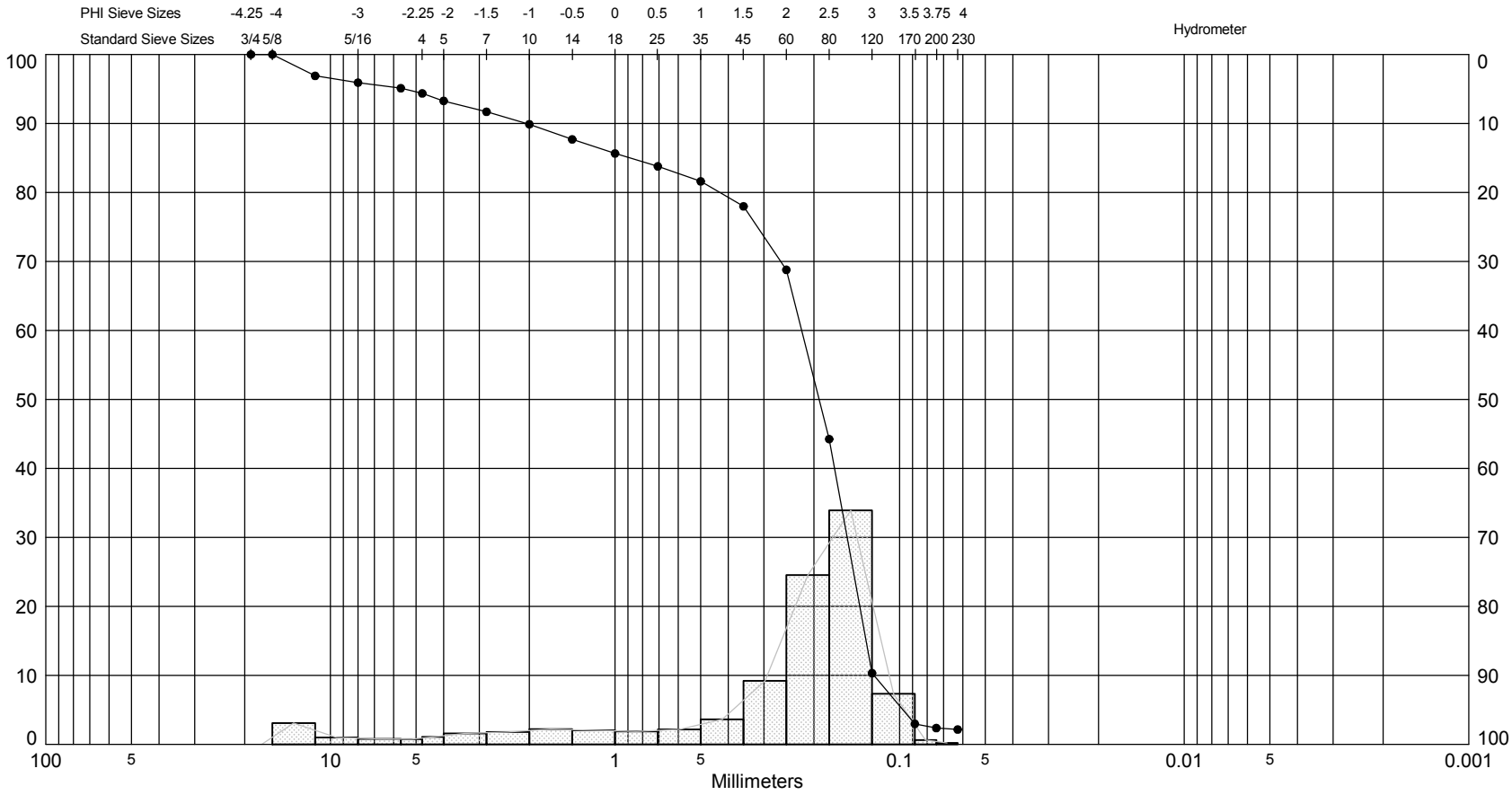
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O30 #1	—●—		SW	#200 - 2.36 #230 - 2.15	0.90	17.80	2.38	1.74	-1.87	5.64	1.72

Comments:

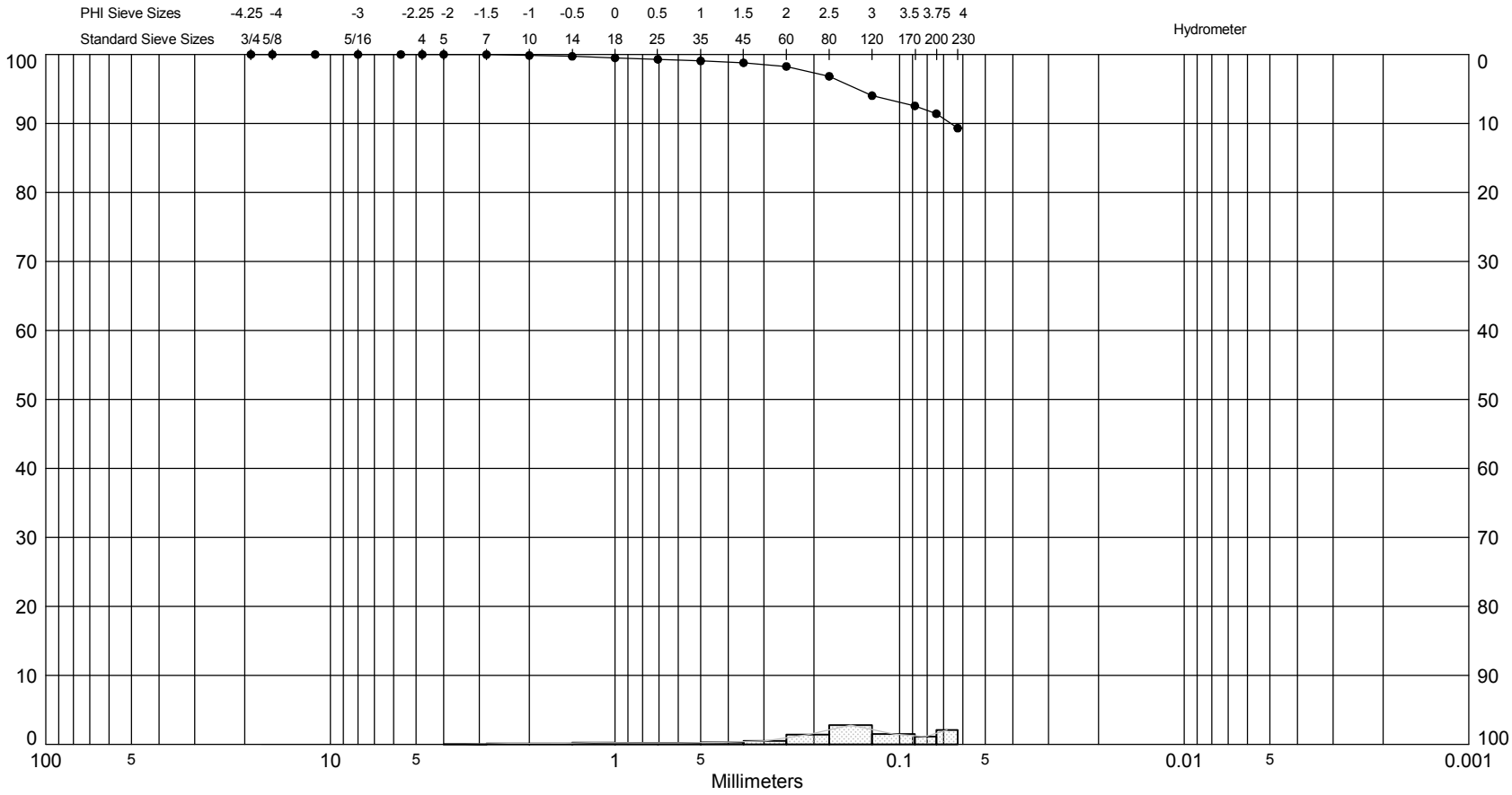
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O30 #2	—●—		ML-CL	#200 - 91.41 #230 - 89.32	4.00	6.50		2.72	-1.5	5.33	1.13

Comments:

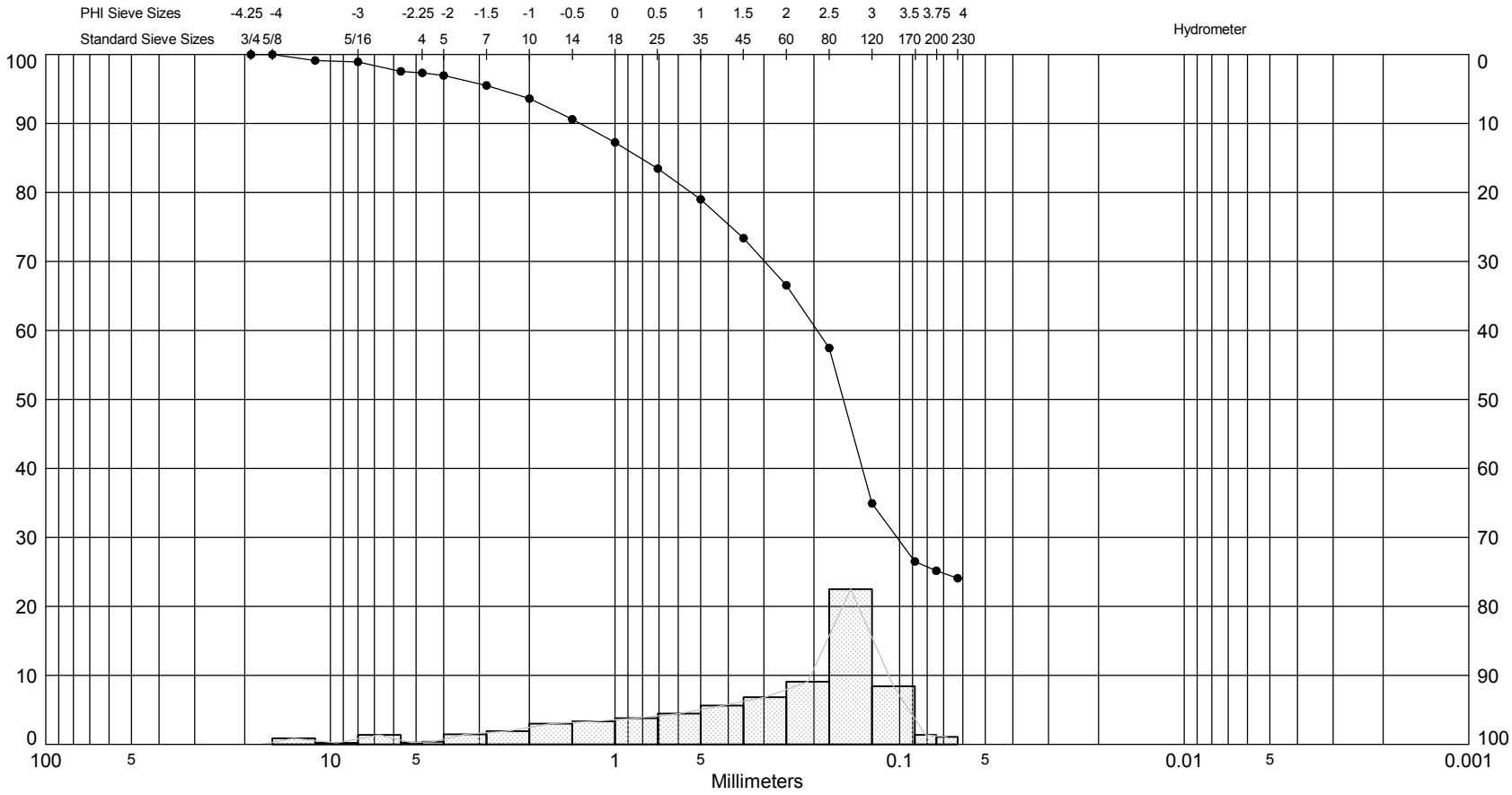
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O30 #3	—●—		SM	#200 - 25.16 #230 - 24.08	2.30	39.00	2.67	1.65	-1.22	3.93	1.63

Comments:

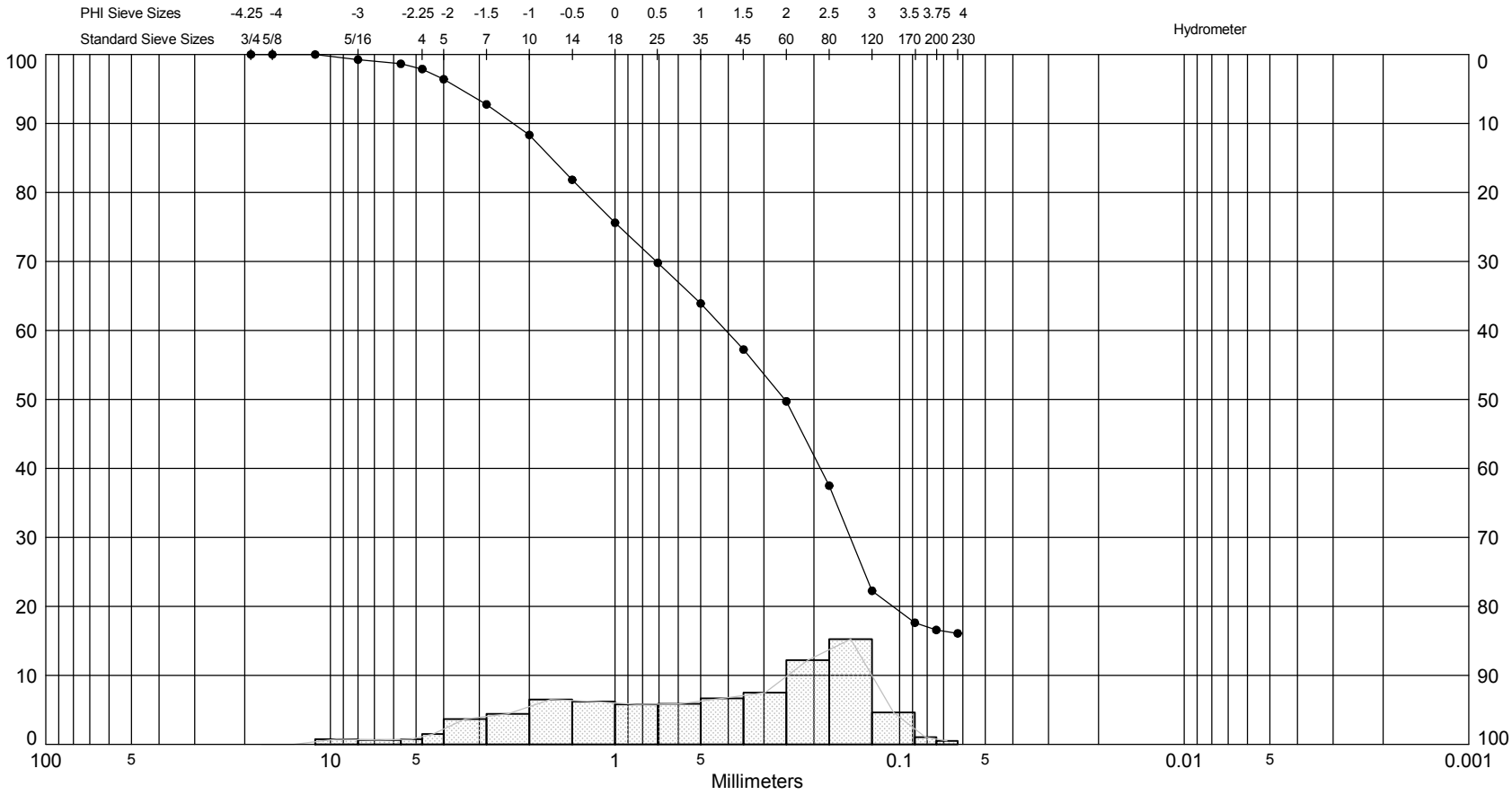
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O30 #4	—●—		SM	#200 - 16.58 #230 - 16.09	2.70	36.10	1.98	1.07	-0.51	2.21	1.67

Comments:

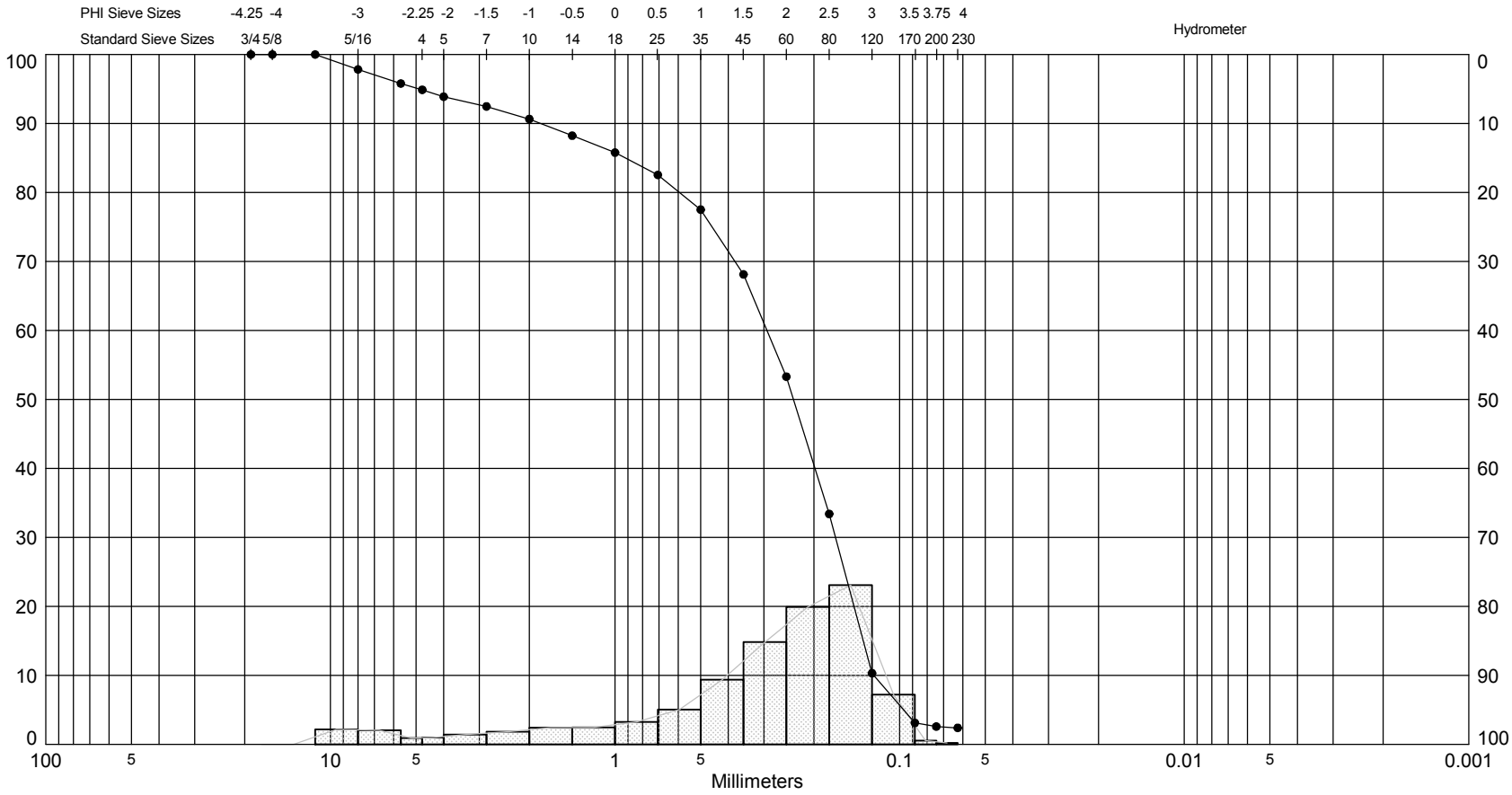
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O31 #1	—●—		SW	#200 - 2.58 #230 - 2.39	1.30	29.80	2.08	1.56	-1.49	4.62	1.58

Comments:

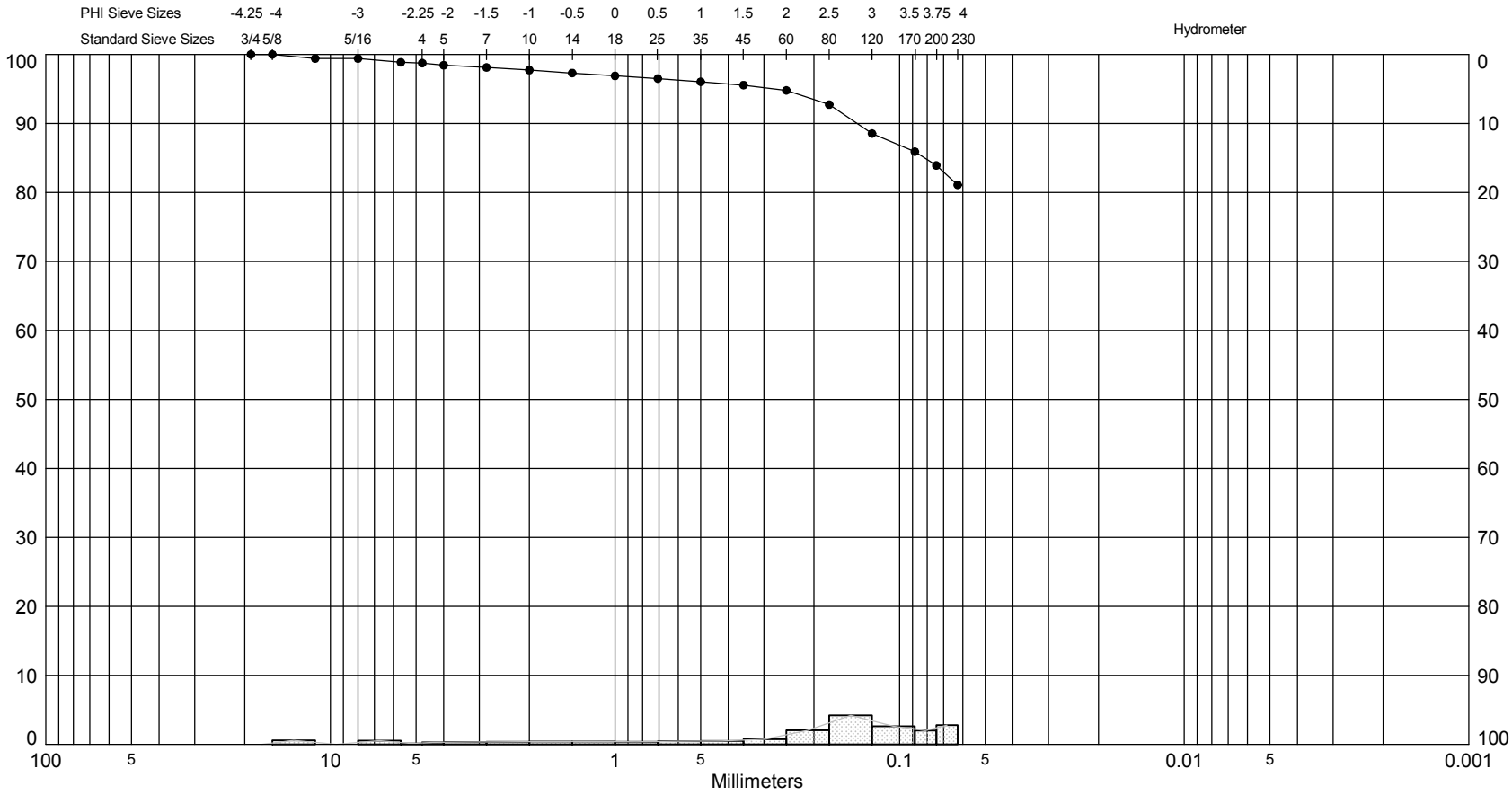
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O31 #2	—●—		ML-CL	#200 - 83.91 #230 - 81.10	3.00	13.50		2.07	-1.49	4.21	2.02

Comments:

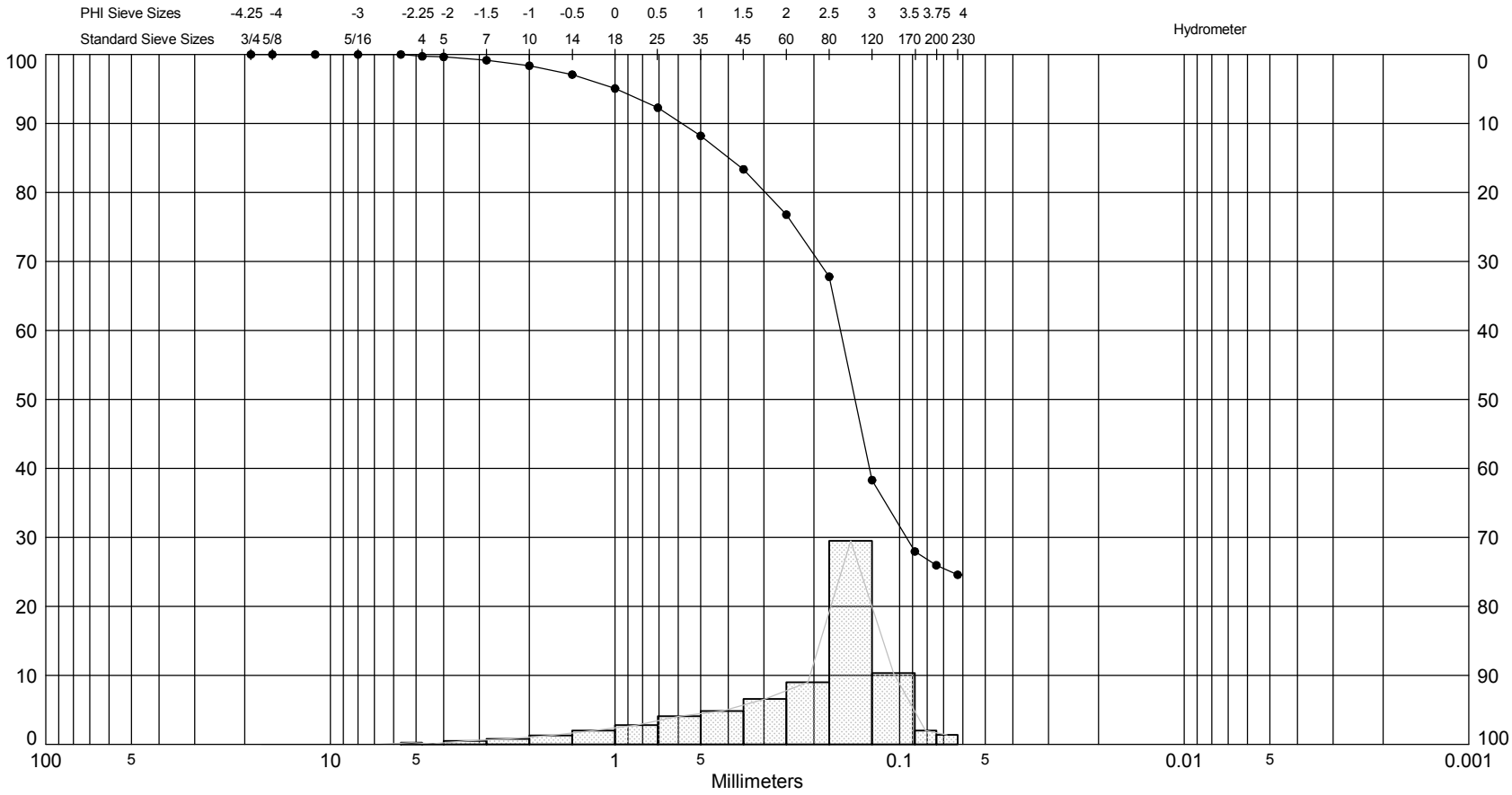
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O31 #3	—●—		SM	#200 - 25.96 #230 - 24.58	1.90	21.10	2.8	2.18	-1.39	4.72	1.15

Comments:

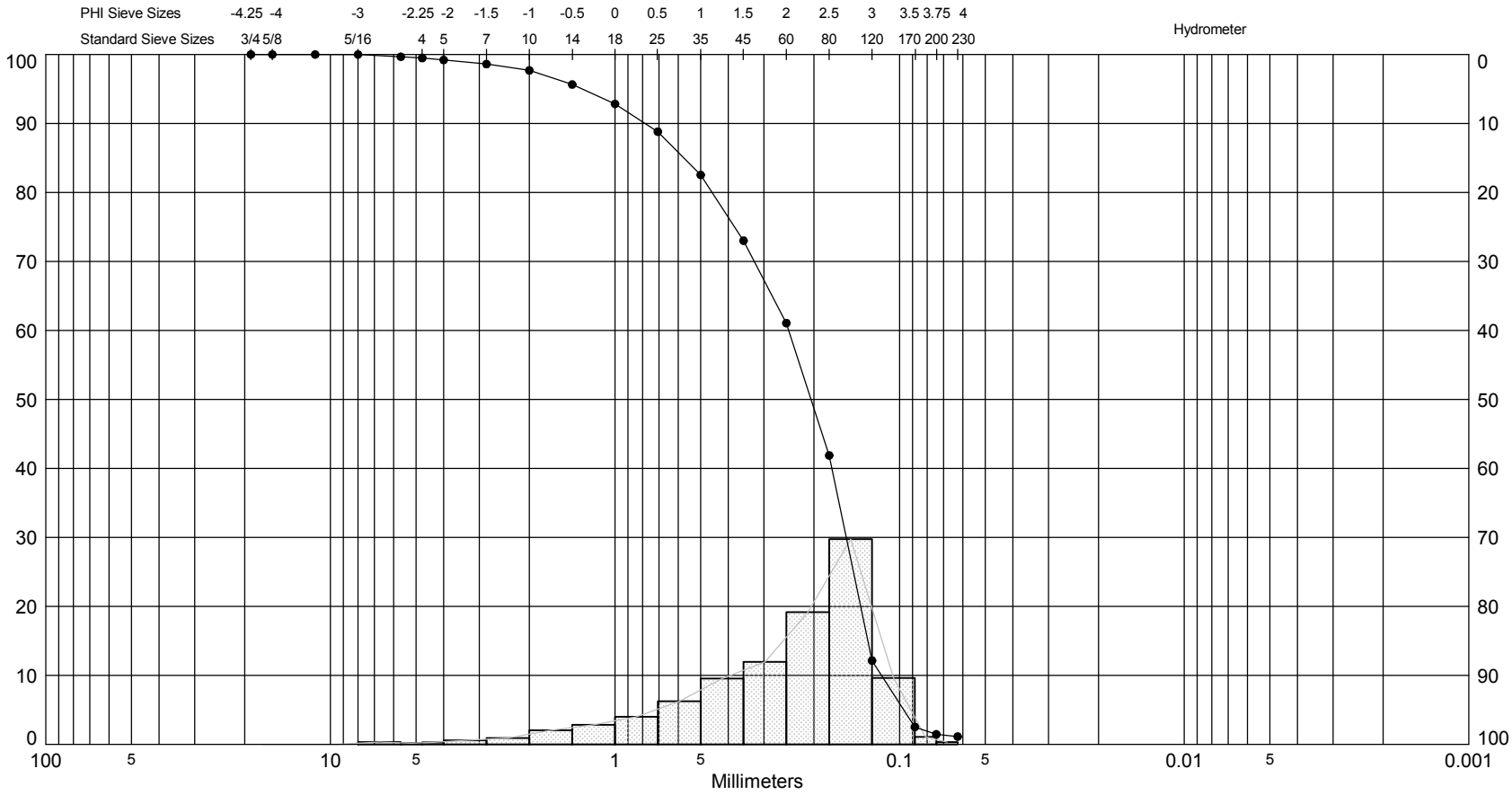
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O32 #1	—●—		SW	#200 - 1.45 #230 - 1.13	1.30	14.20	2.29	1.96	-1.3	4.74	1.14

Comments:

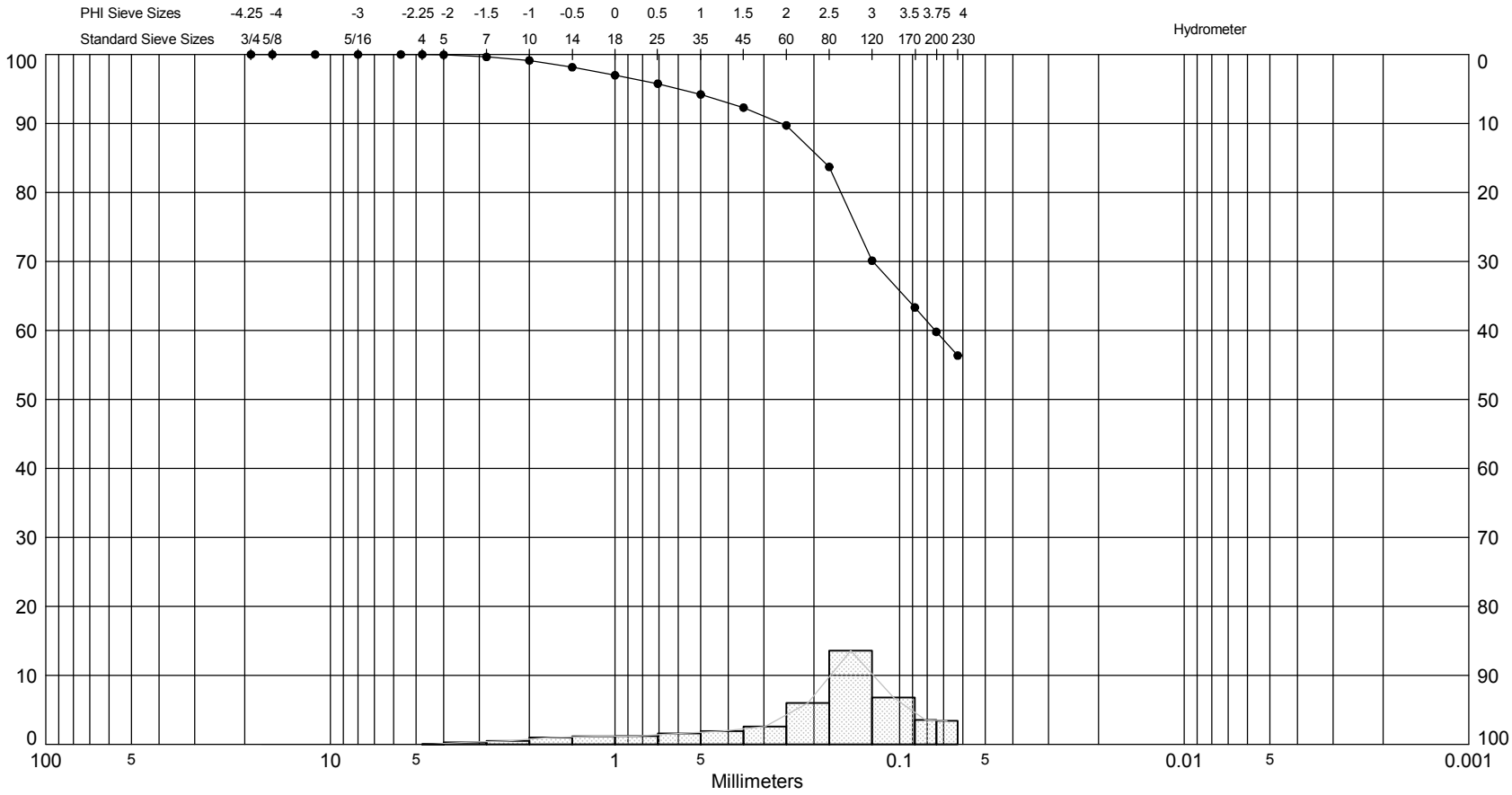
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O32 #2	—●—		ML-CL	#200 - 59.79 #230 - 56.36	2.70	13.60		2.41	-1.37	4.58	1.21

Comments:

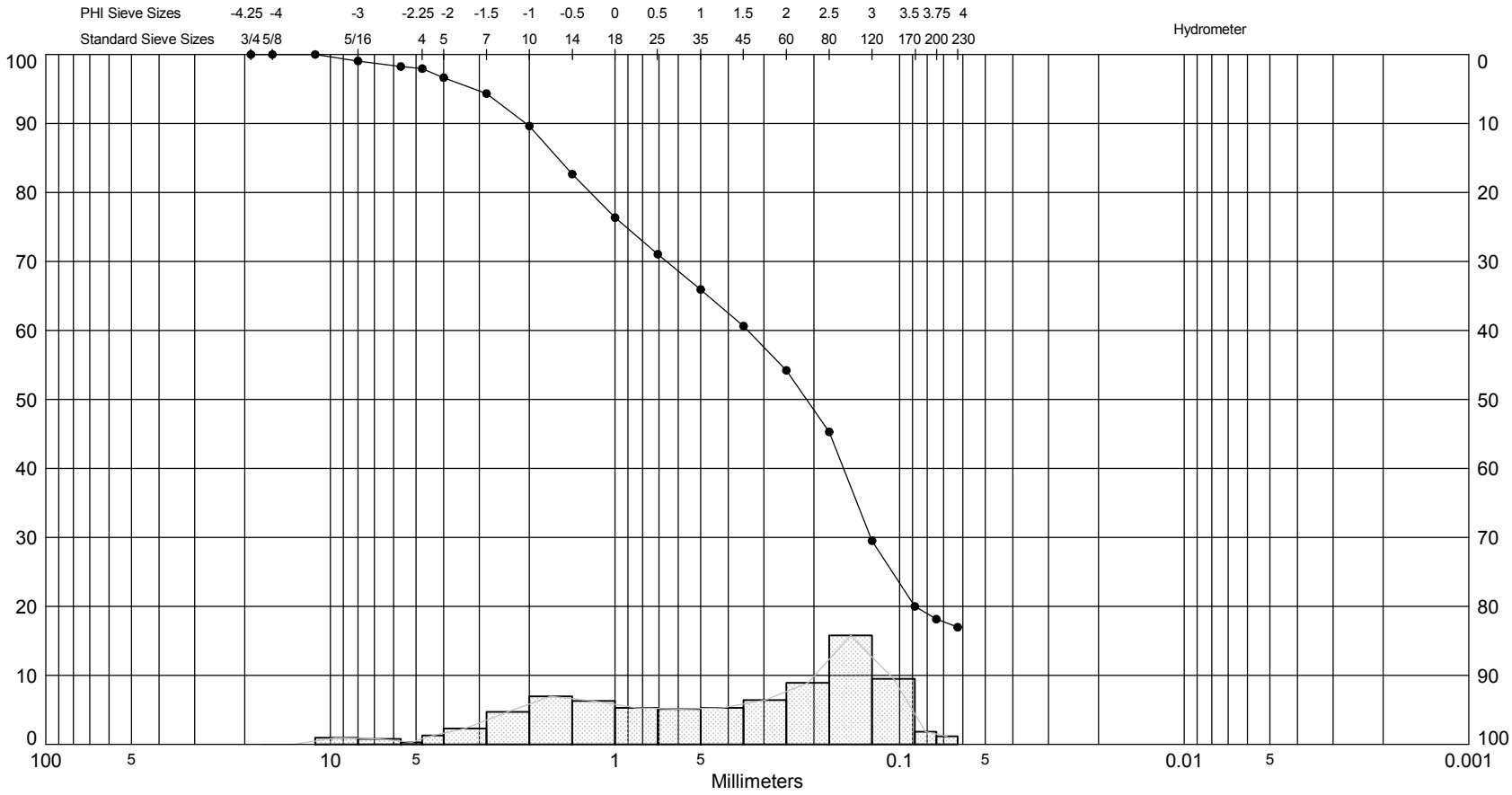
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O32 #3	—●—		SM	#200 - 18.15 #230 - 16.98	2.40	32.30	2.24	1.24	-0.52	2.19	1.74

Comments:

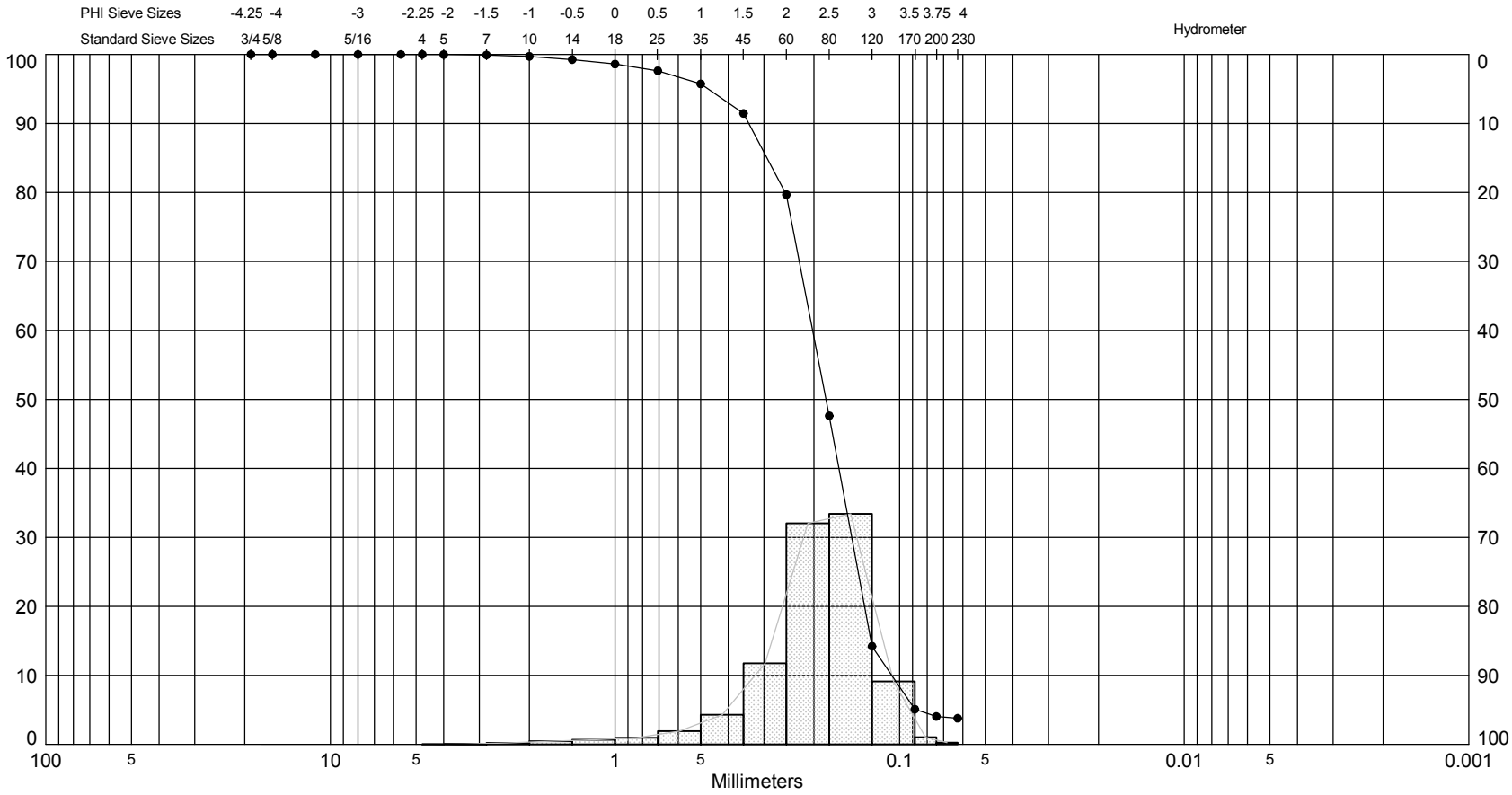
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O33 #1	—●—		SP	#200 - 4.04 #230 - 3.78	1.20	11.70	2.46	2.34	-1.6	7.85	0.7

Comments:

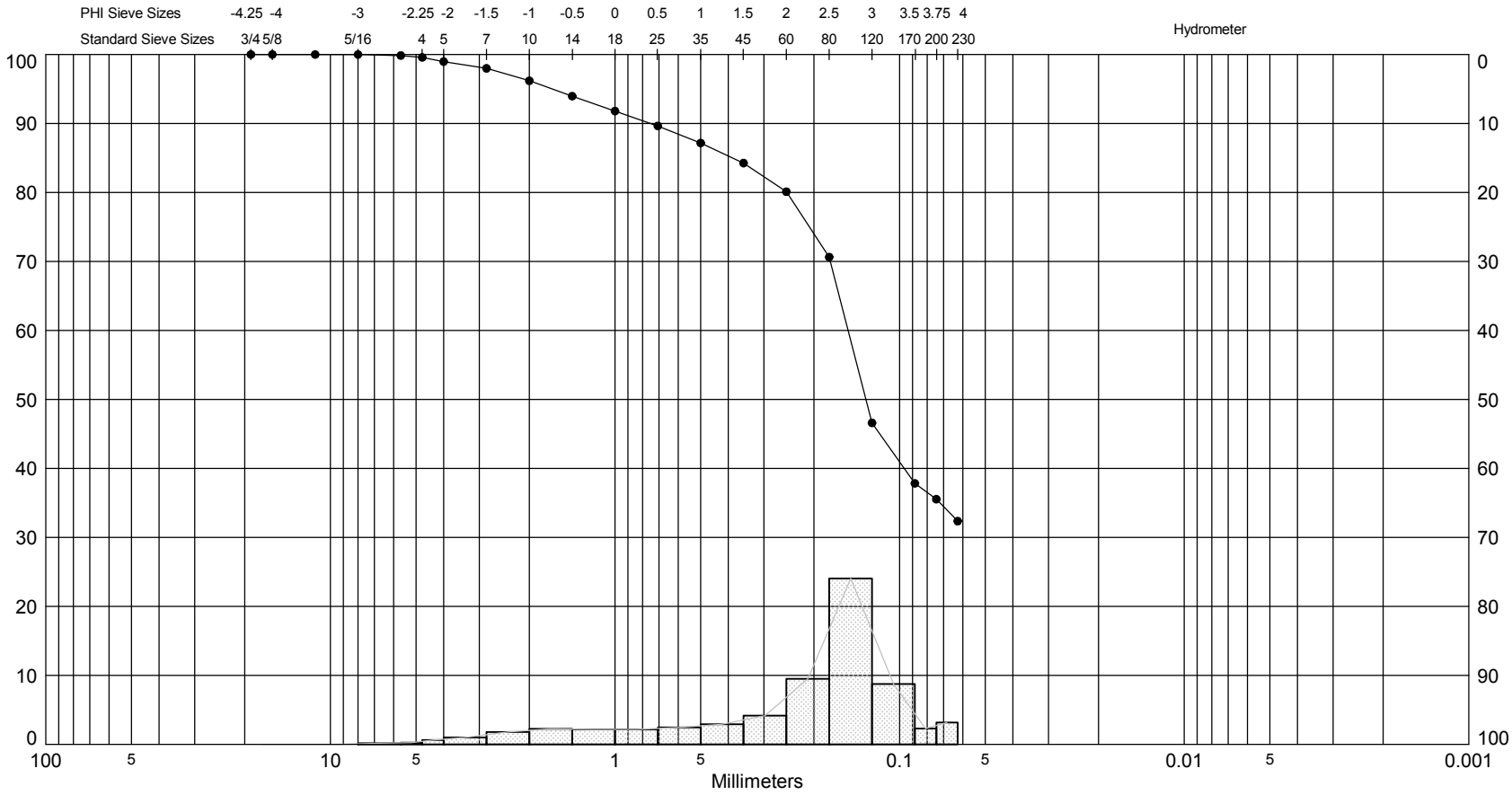
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O33 #2	—●—		SM	#200 - 35.54 #230 - 32.36	2.10	14.30	2.93	2.09	-1.35	4.1	1.42

Comments:

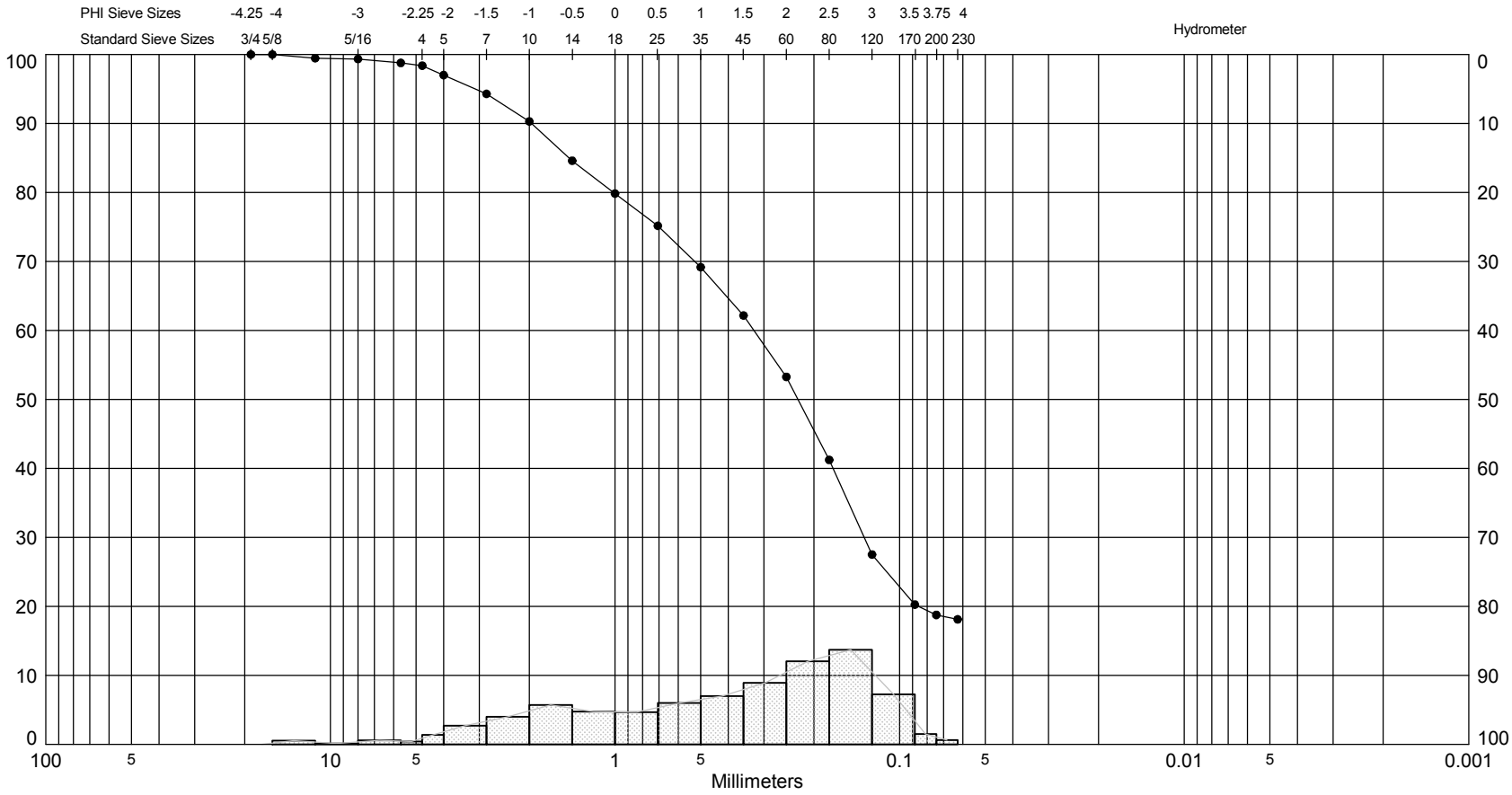
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O33 #3	—●—		SM	#200 - 18.76 #230 - 18.12	2.30	38.40	2.14	1.26	-0.68	2.59	1.65

Comments:

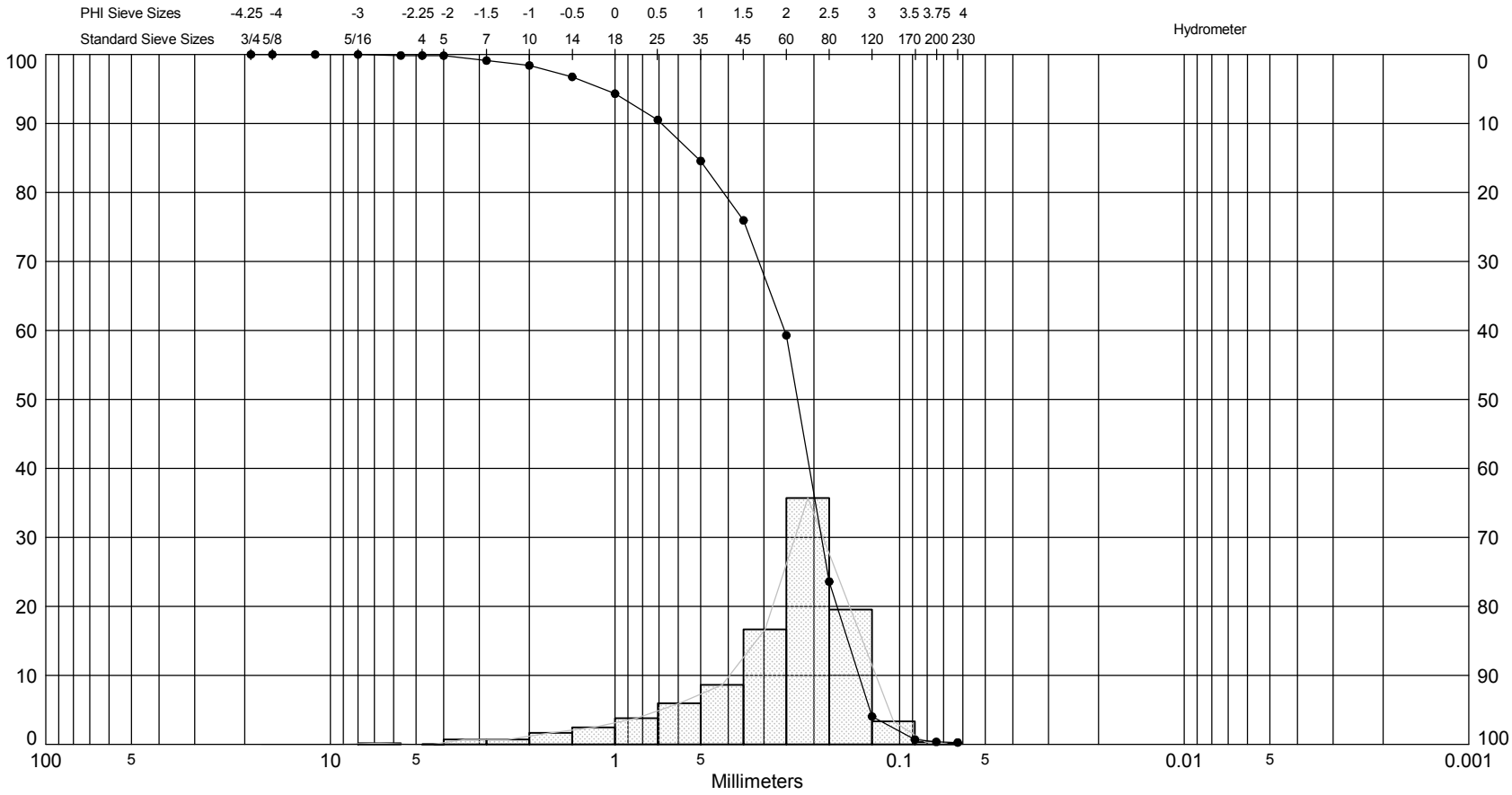
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O34 #1	—●—		SW	#200 - 0.36 #230 - 0.27	0.70	13.00	2.13	1.88	-1.46	5.54	0.96

Comments:

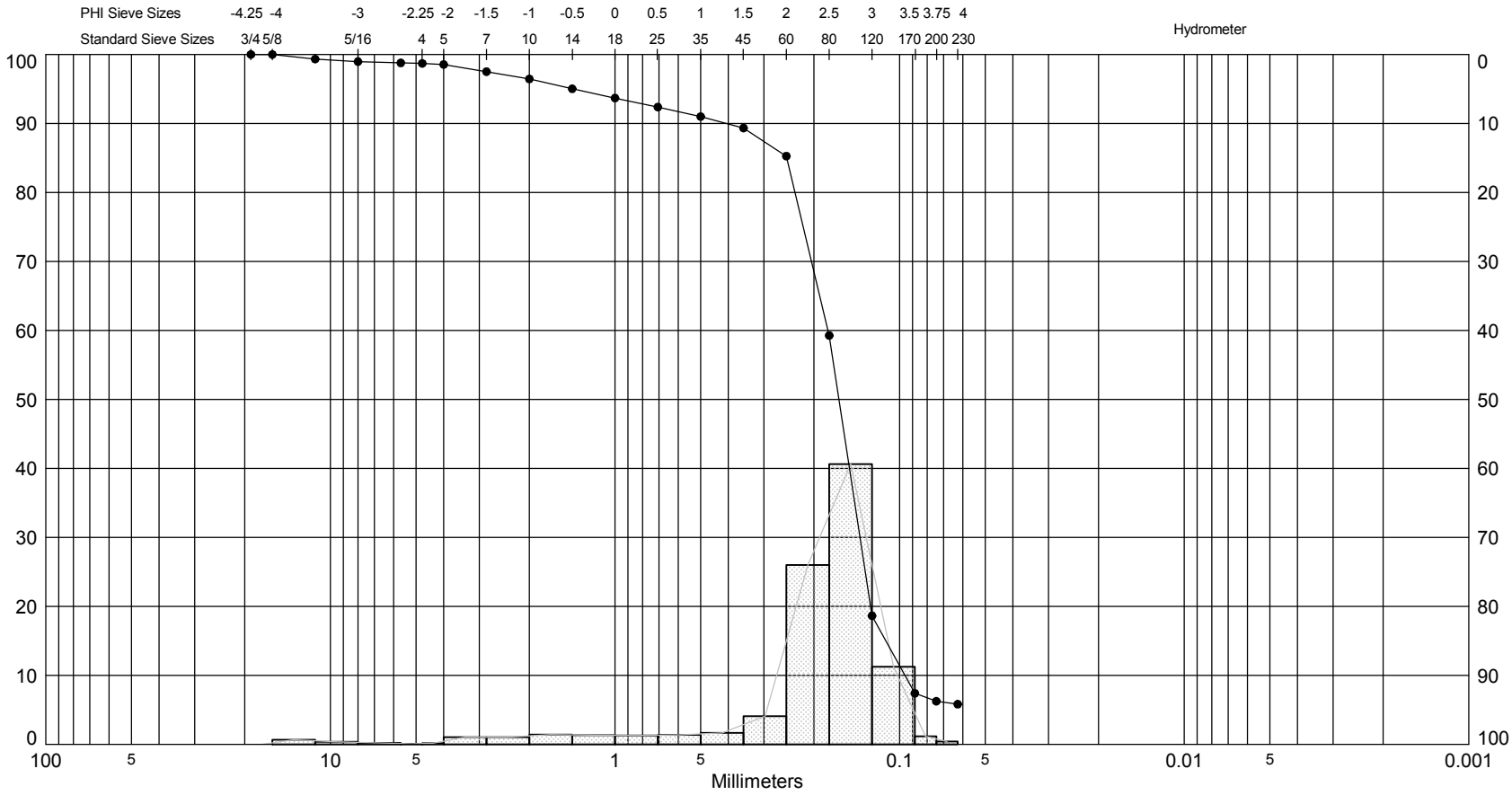
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O34 #2	—●—		SW-SM	#200 - 6.25 #230 - 5.82	1.70	8.70	2.61	2.27	-2.75	11.46	1.18

Comments:

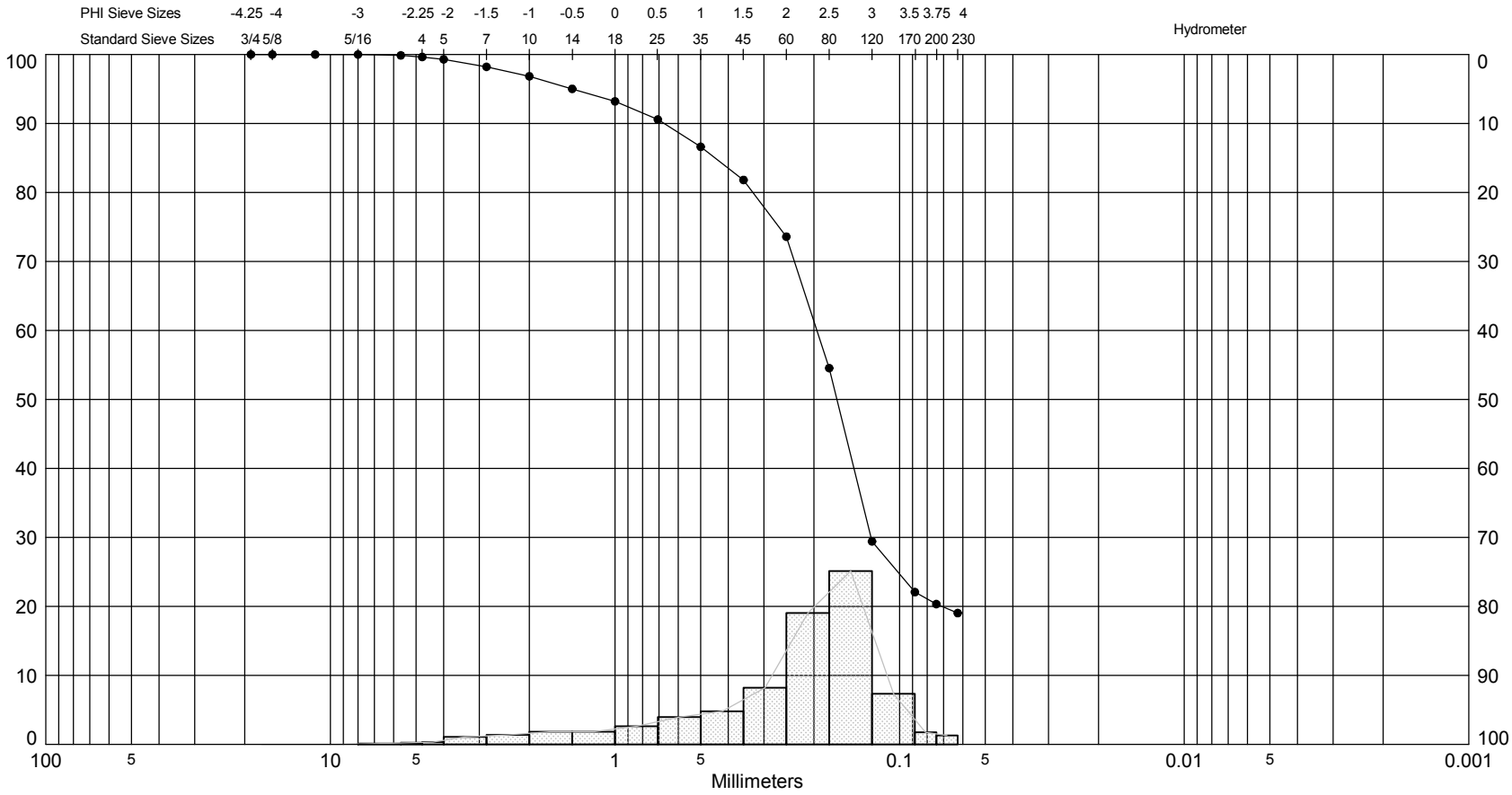
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O34 #3	—●—		SM	#200 - 20.33 #230 - 19.03	2.50	24.40	2.59	2.03	-1.47	5.01	1.21

Comments:

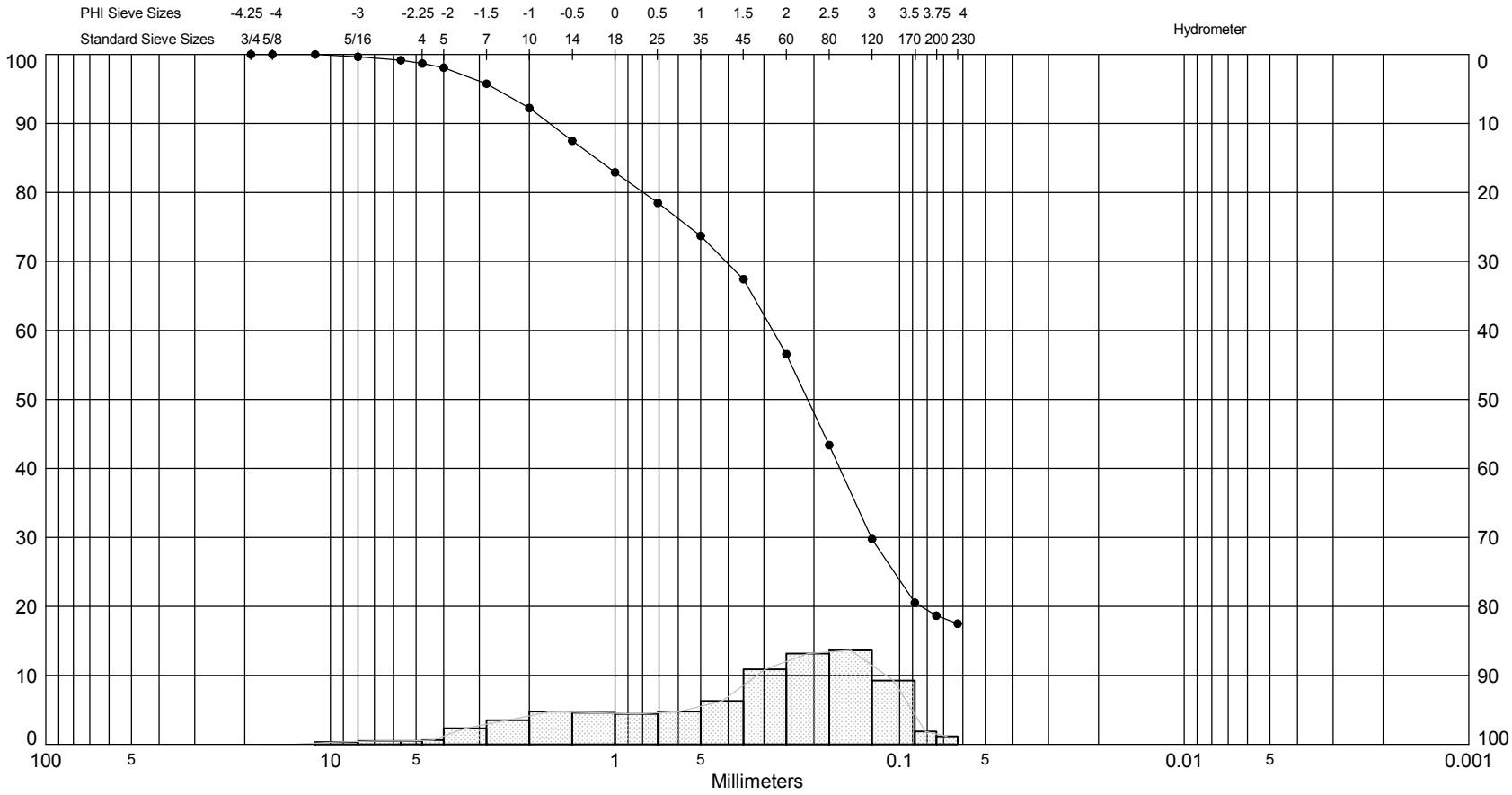
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O34 #4	—●—		SM	#200 - 18.65 #230 - 17.49	2.40	39.20	2.25	1.48	-0.76	2.71	1.57

Comments:

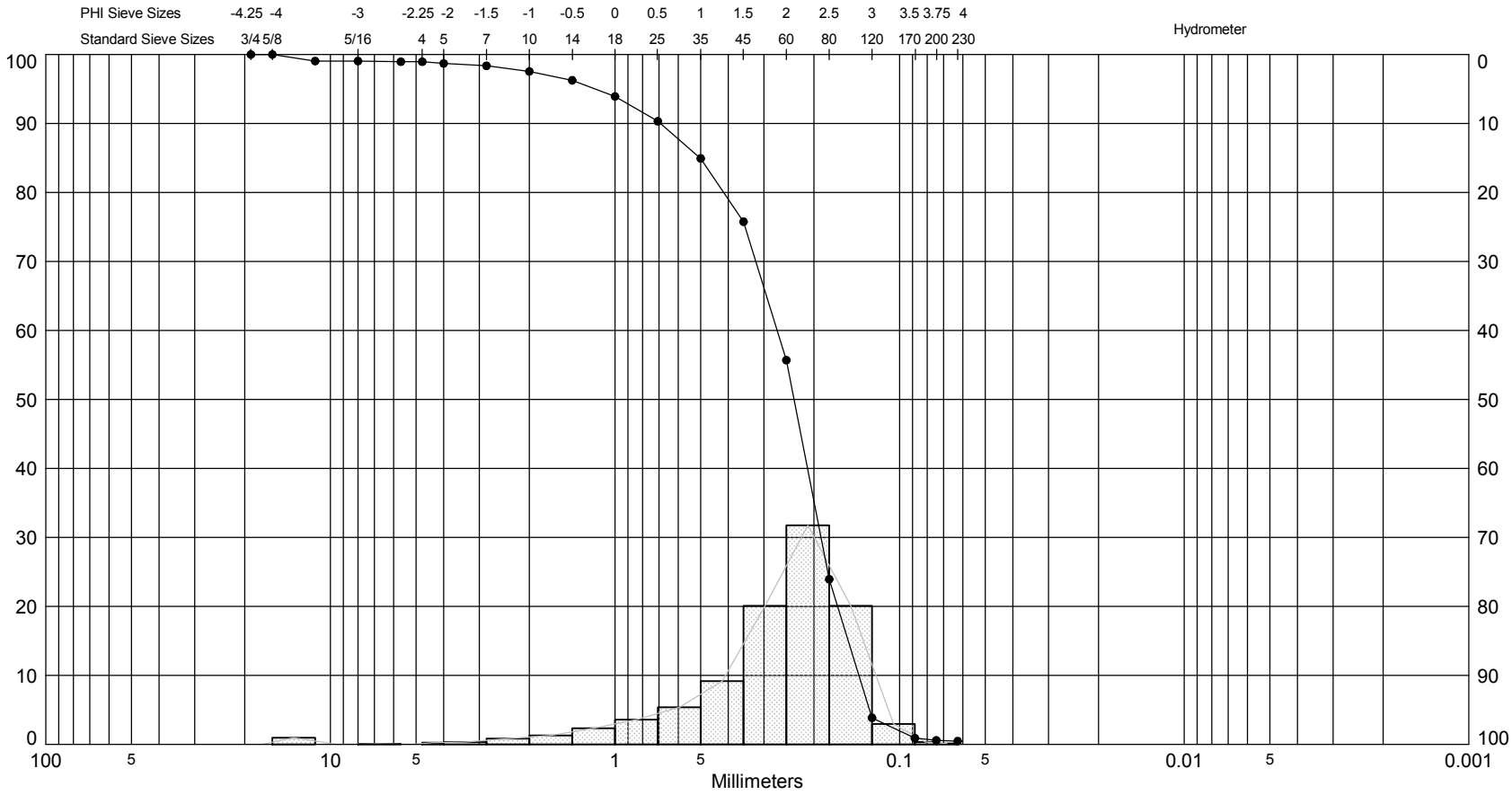
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O35 #1	—●—		SW	#200 - 0.58 #230 - 0.47	0.70	10.60	2.09	1.83	-2.15	9.94	1.07

Comments:

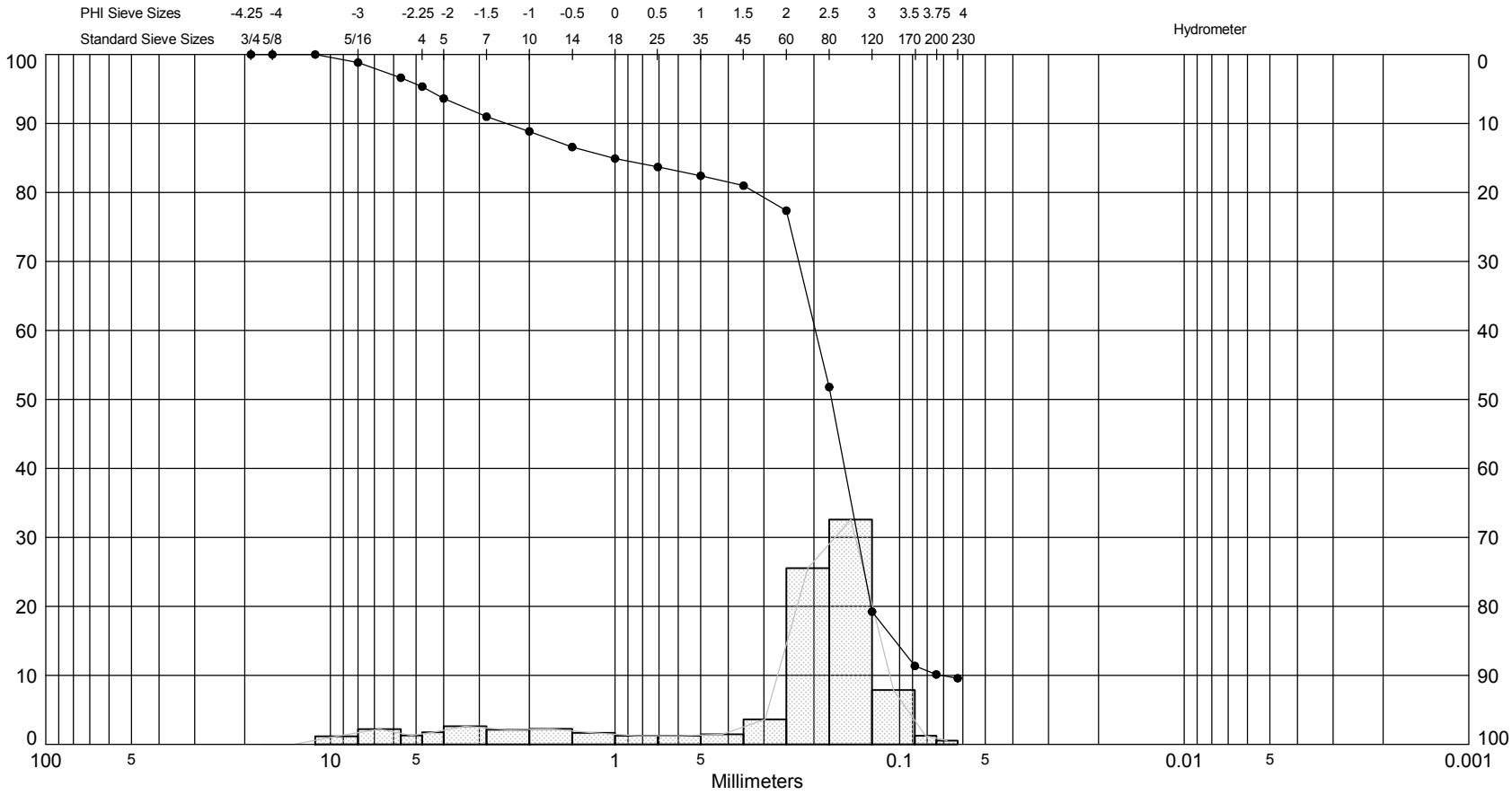
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O35 #2	—●—		SW-SM	#200 - 10.13 #230 - 9.58	1.90	25.90	2.53	1.8	-1.63	4.4	1.7

Comments:

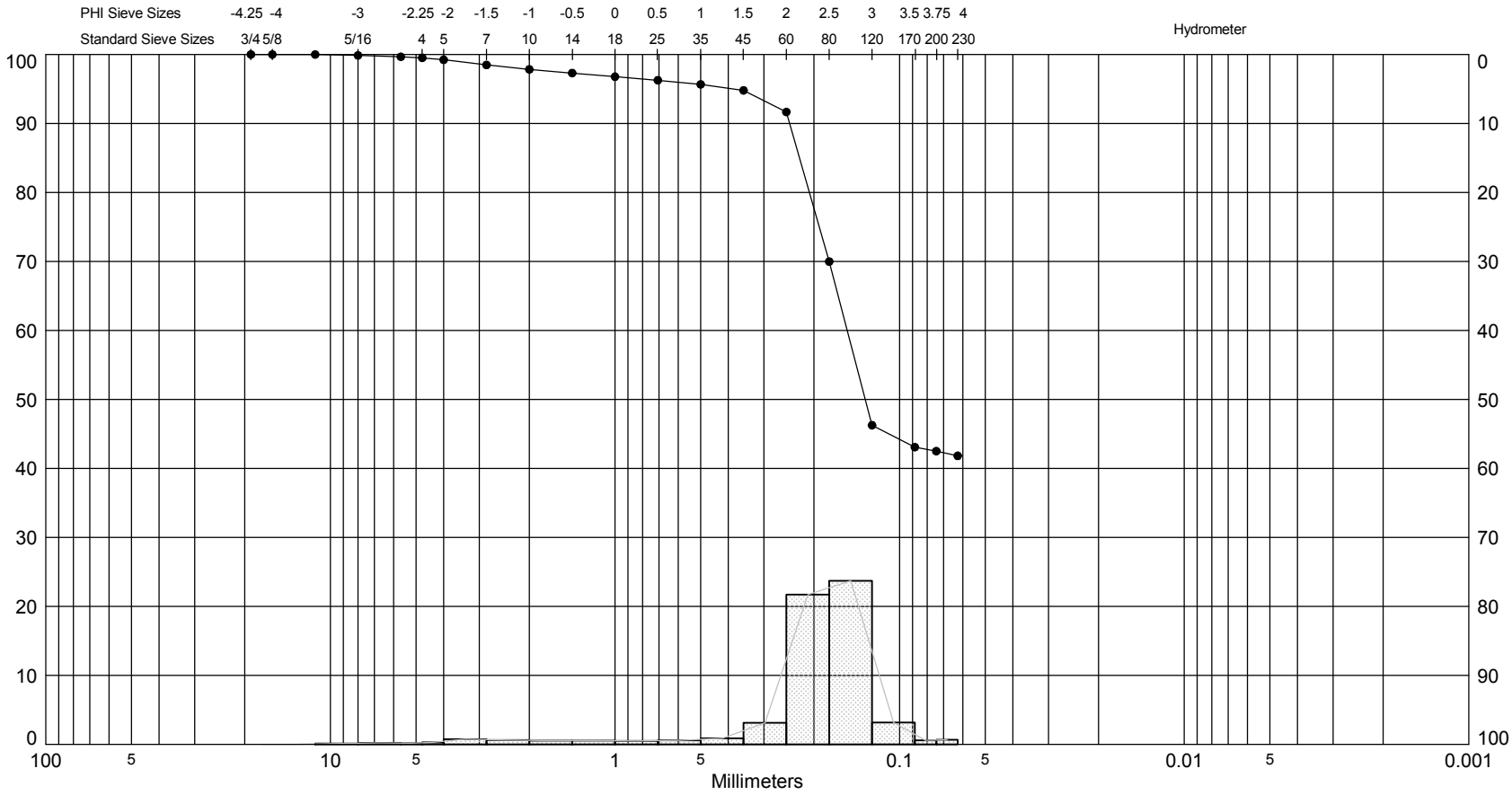
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O35 #3	—●—		SM	#200 - 42.50 #230 - 41.82	2.30	11.70	2.92	2.26	-2.82	11.91	1.04

Comments:

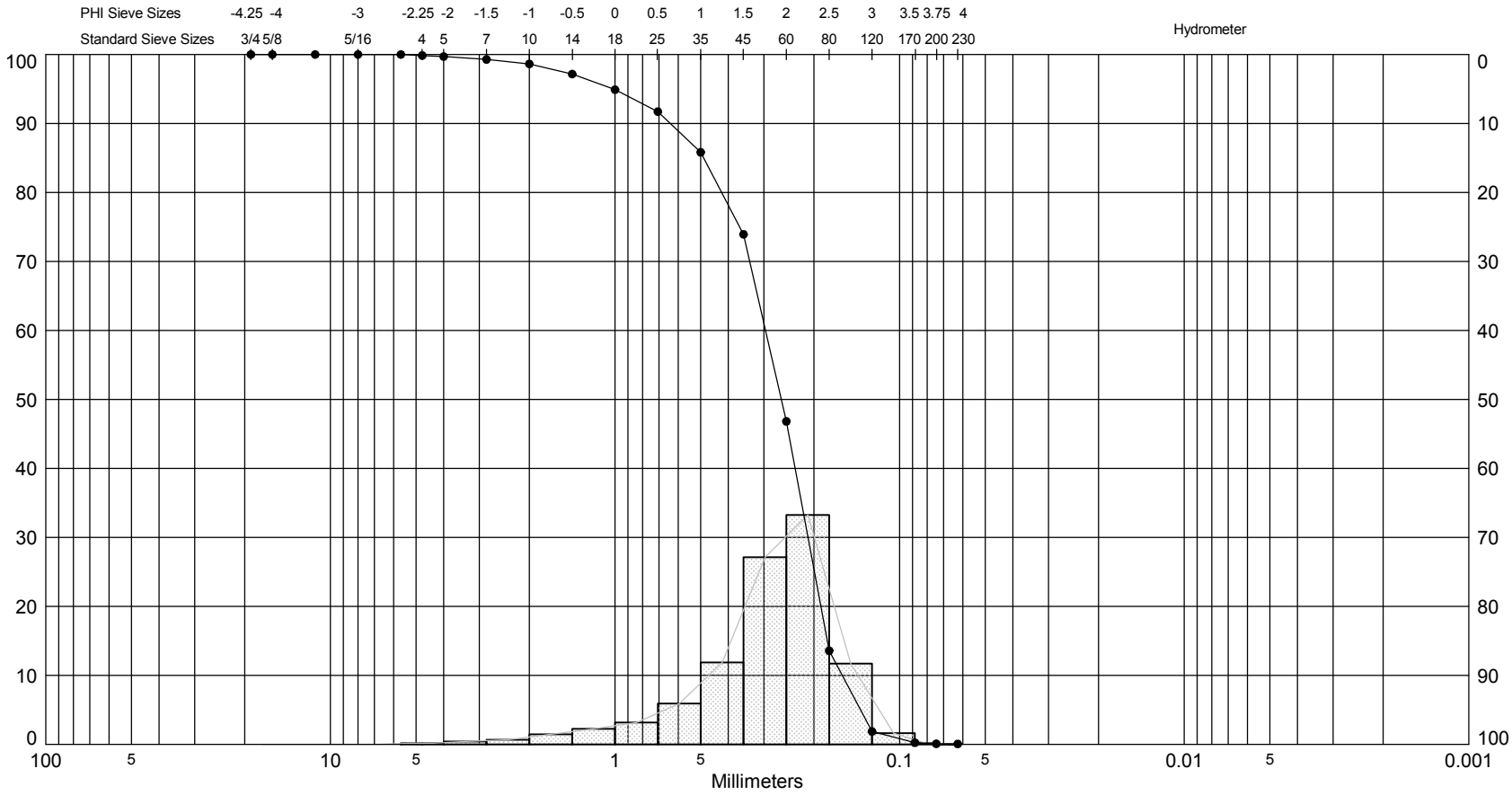
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O36 #1	—●—		SW	#200 - 0.08 #230 - 0.06	0.50	11.80	1.94	1.77	-1.48	6.14	0.86

Comments:

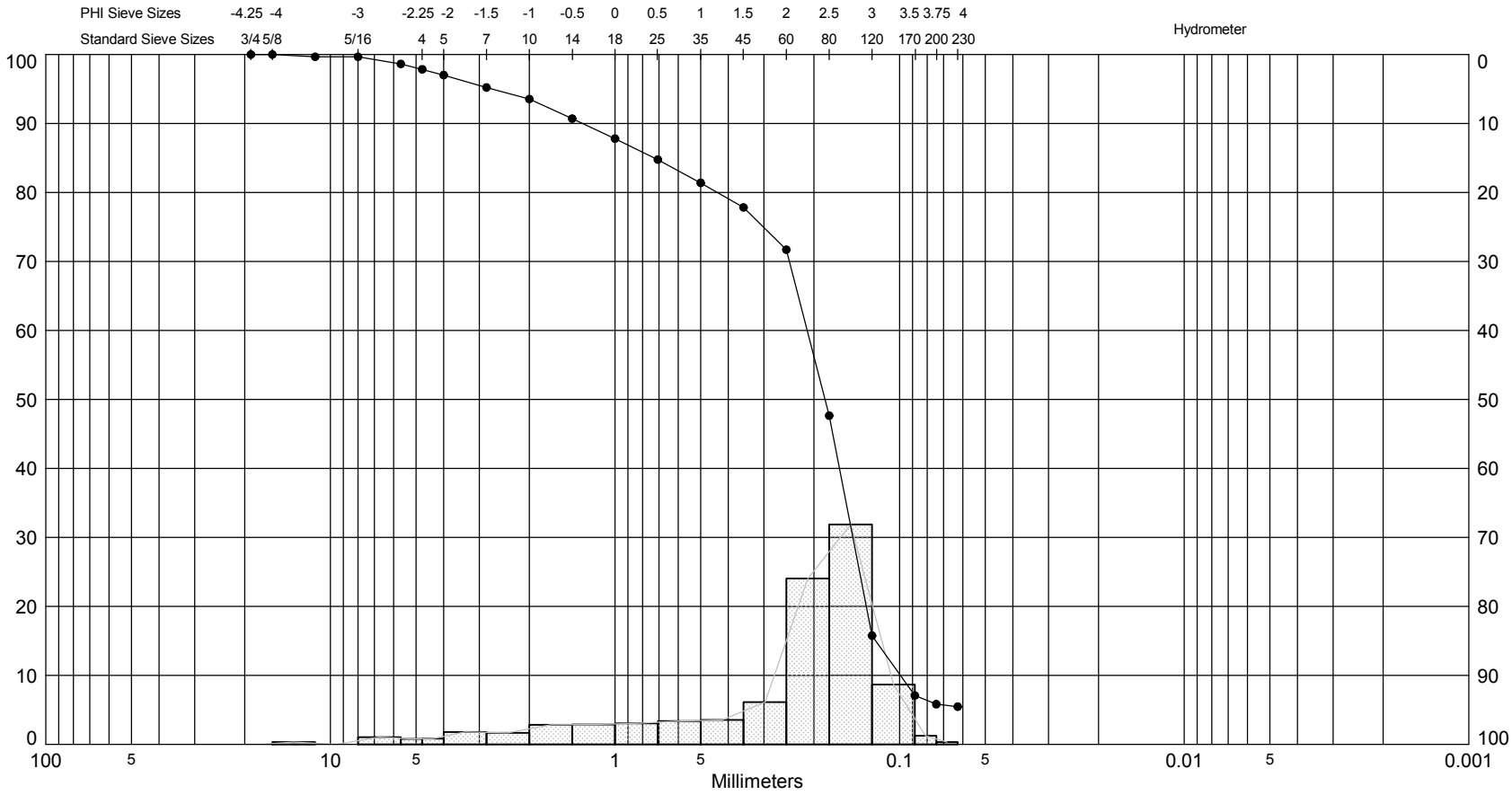
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O36 #2	—●—		SW-SM	#200 - 5.82 #230 - 5.47	1.50	21.80	2.45	1.89	-1.64	5.07	1.44

Comments:

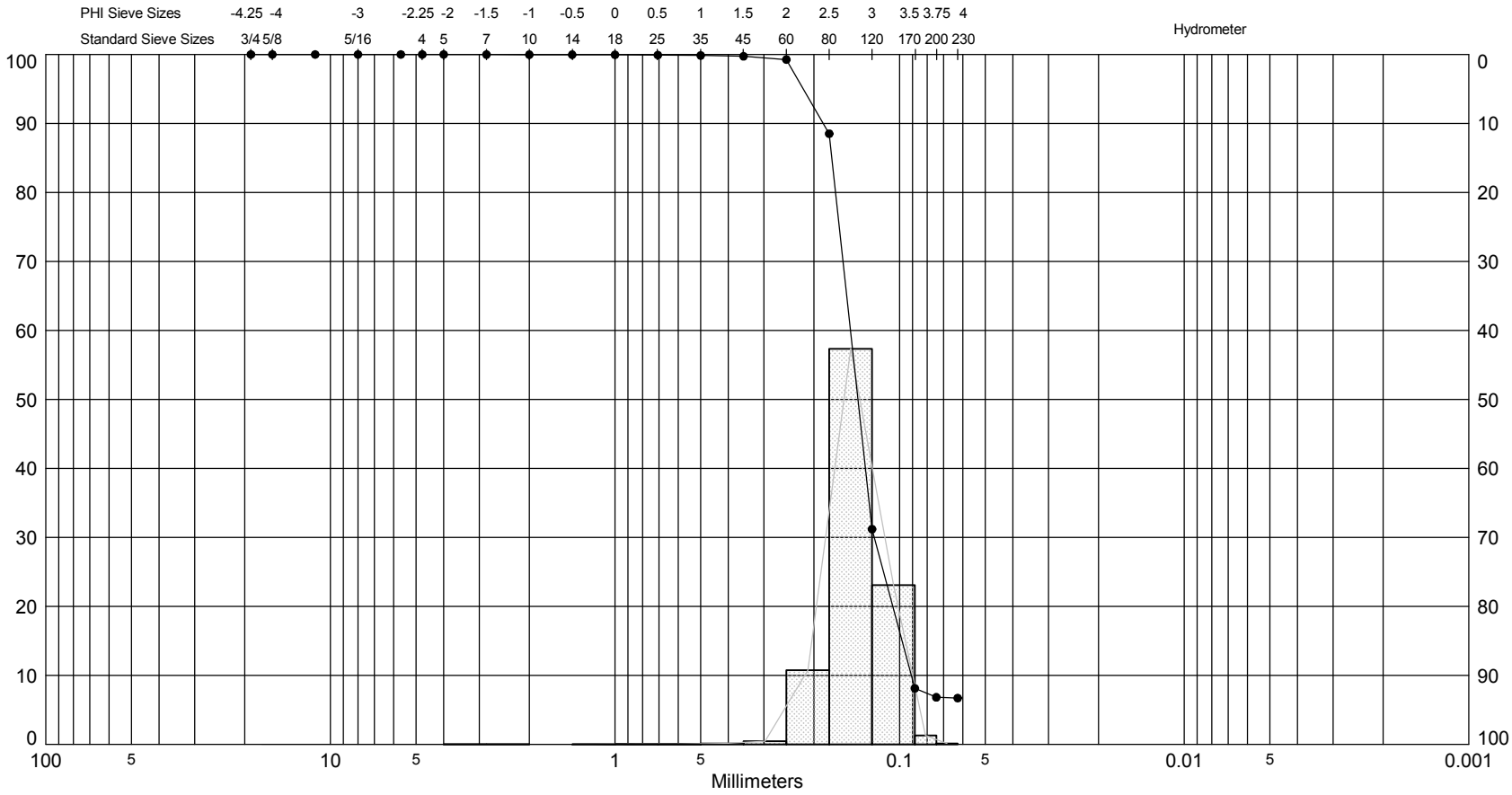
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O36 #3	—●—		SP-SM	#200 - 6.82 #230 - 6.70	1.00	8.20	2.84	2.82	-1.18	14.7	0.34

Comments:

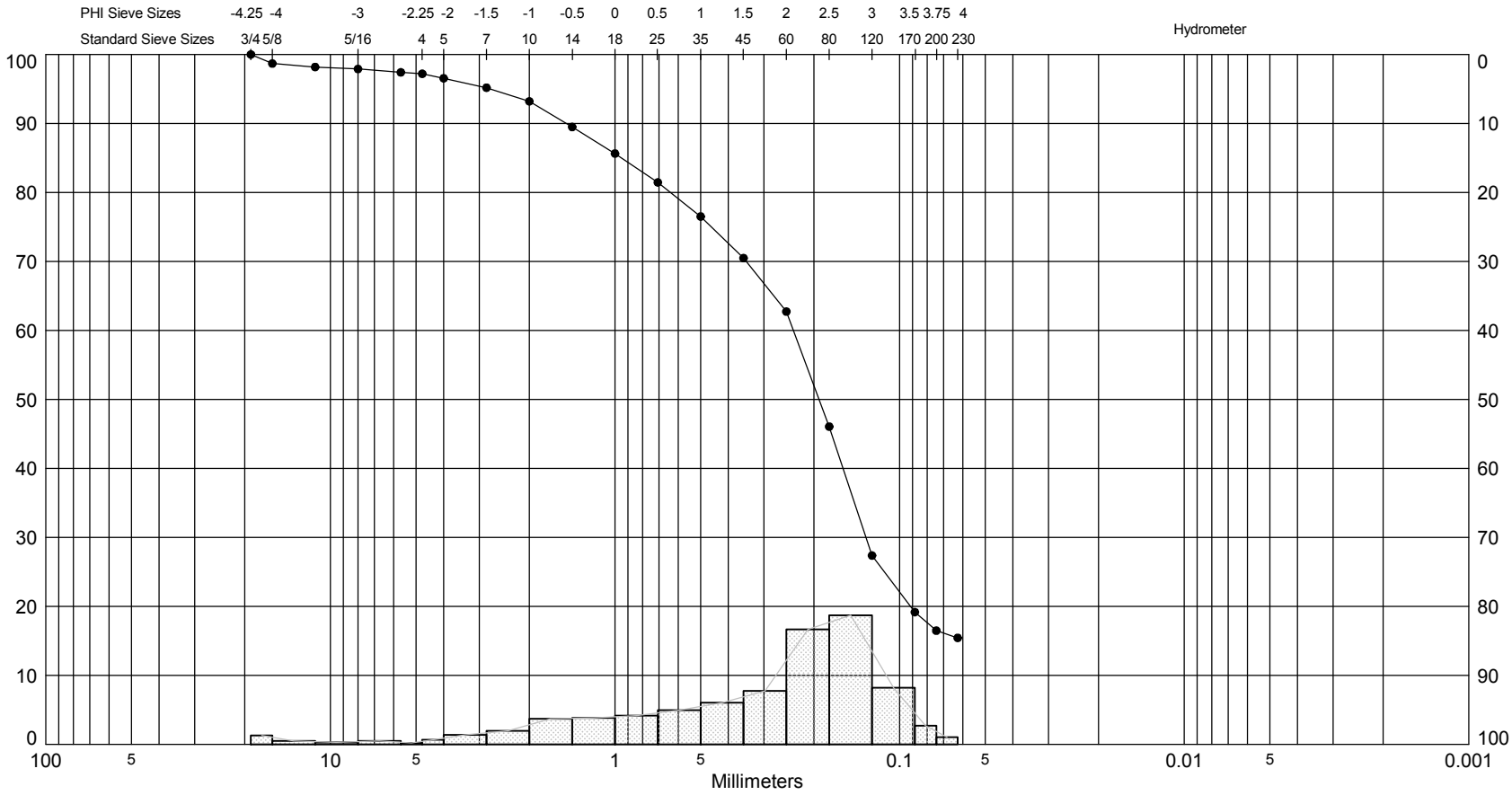
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O36 #4	—●—		SM	#200 - 16.48 #230 - 15.43	2.30	33.90	2.38	1.6	-1.34	4.62	1.66

Comments:

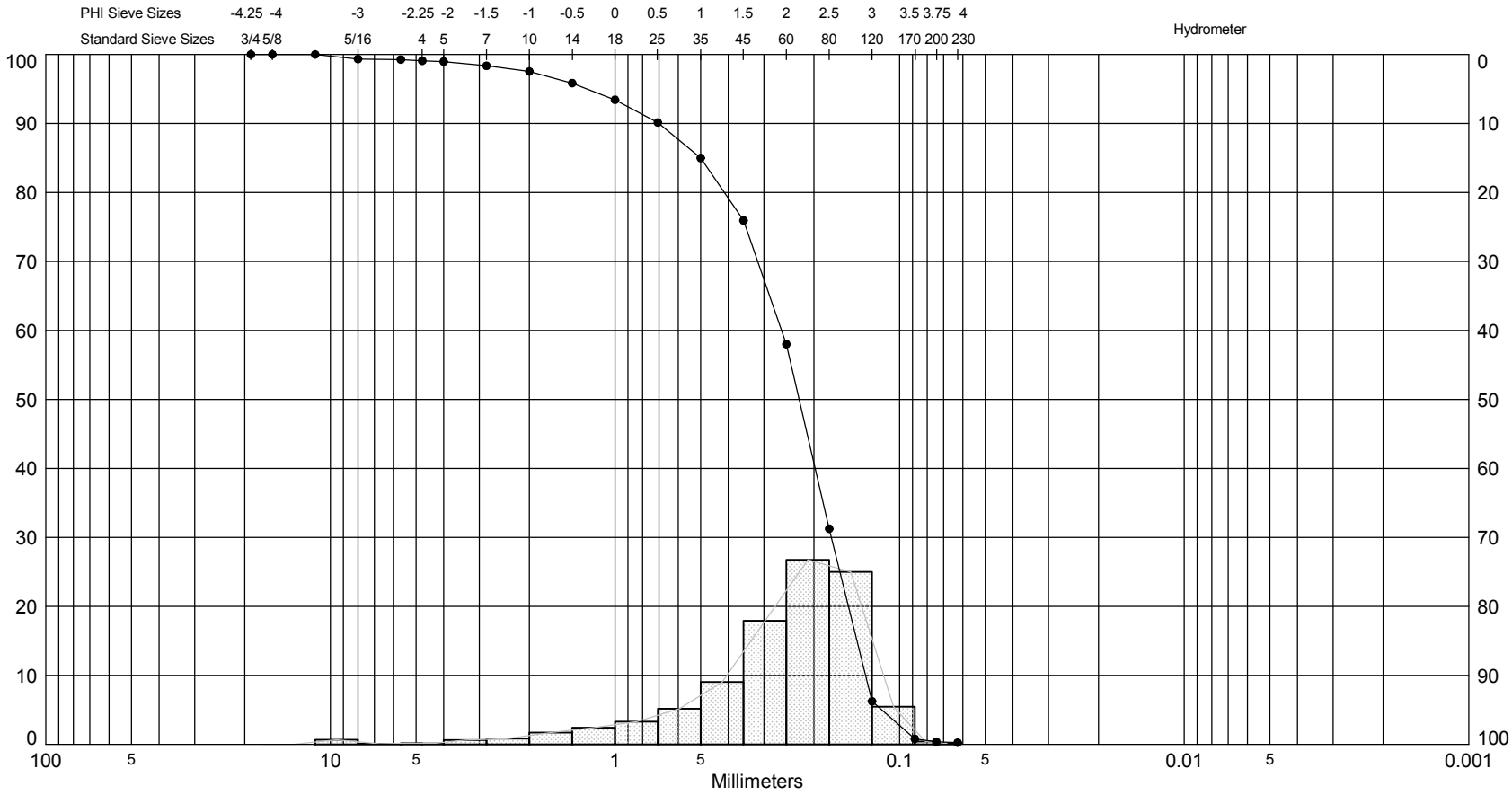
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O37 #1	—●—		SW	#200 - 0.37 #230 - 0.25	0.50	14.50	2.15	1.9	-1.75	7.19	1.08

Comments:

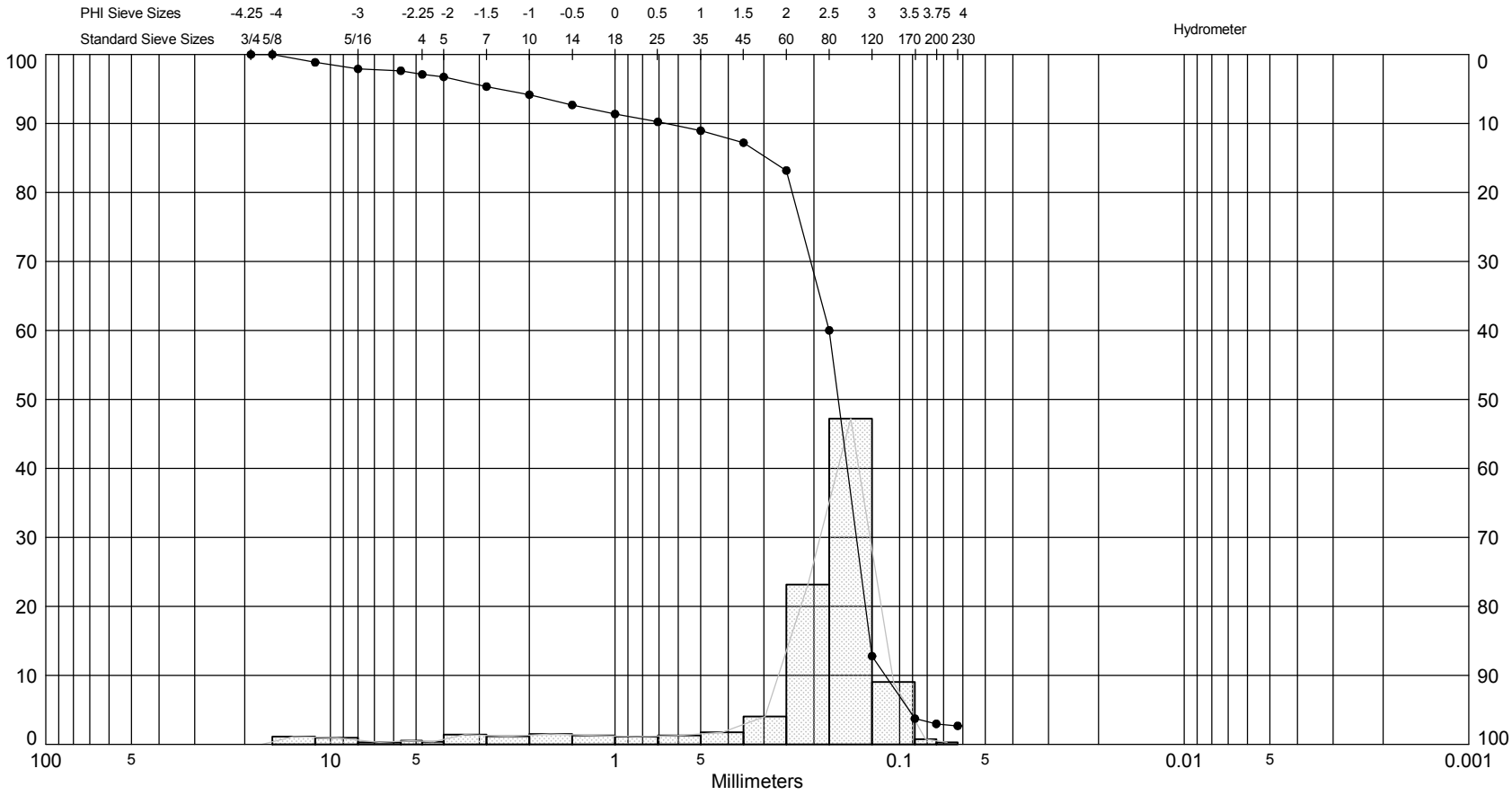
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O37 #2	—●—		SW	#200 - 2.97 #230 - 2.68	1.00	14.00	2.61	2.16	-2.61	9.58	1.38

Comments:

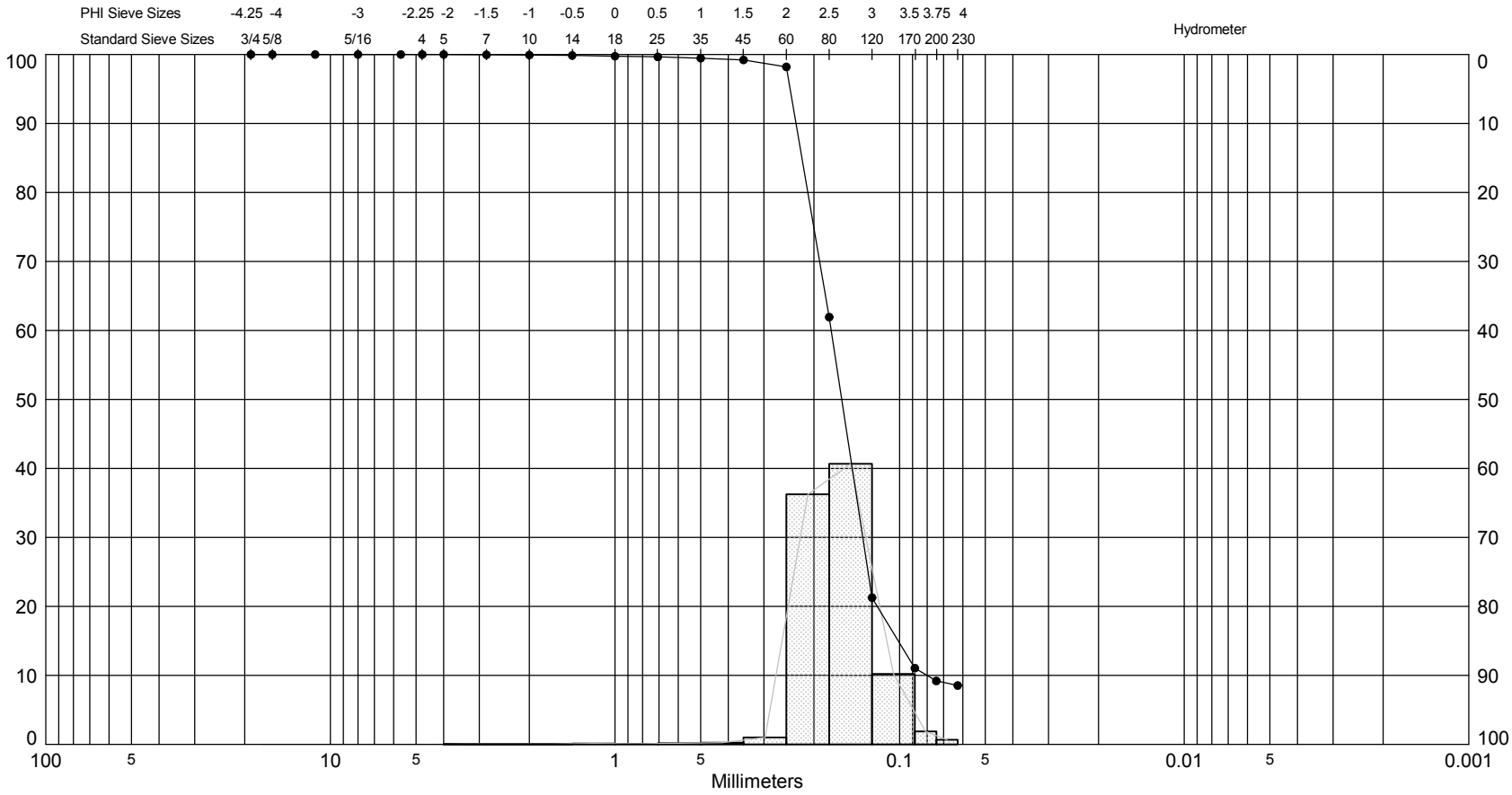
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O37 #3	—●—		SP-SM	#200 - 9.19 #230 - 8.53	0.70	2.30	2.65	2.6	-1.2	14.45	0.44

Comments:

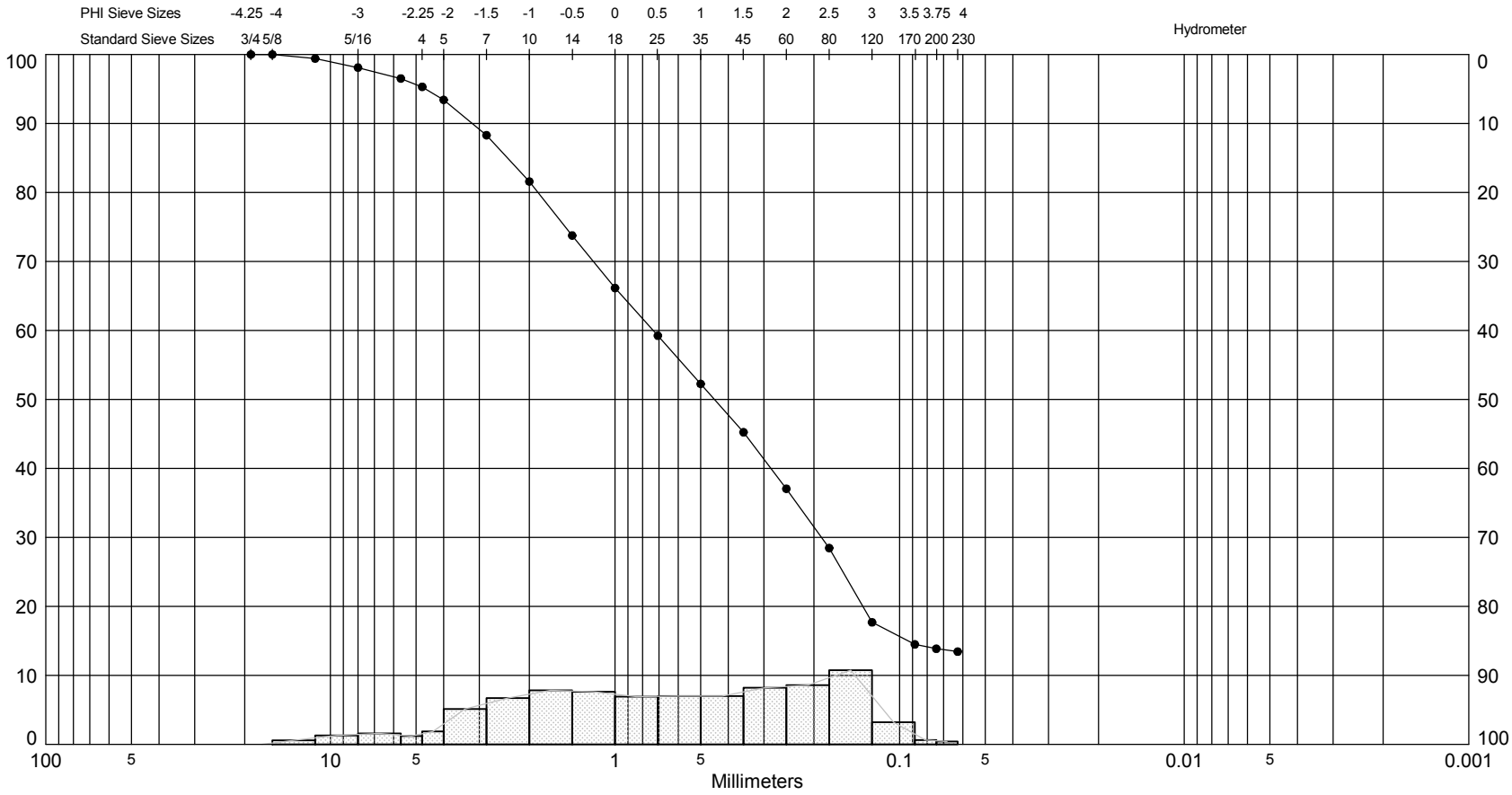
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O37 #4	—●—		SM	#200 - 13.86 #230 - 13.44	2.20	48.20	1.16	0.58	-0.26	2.13	1.75

Comments:

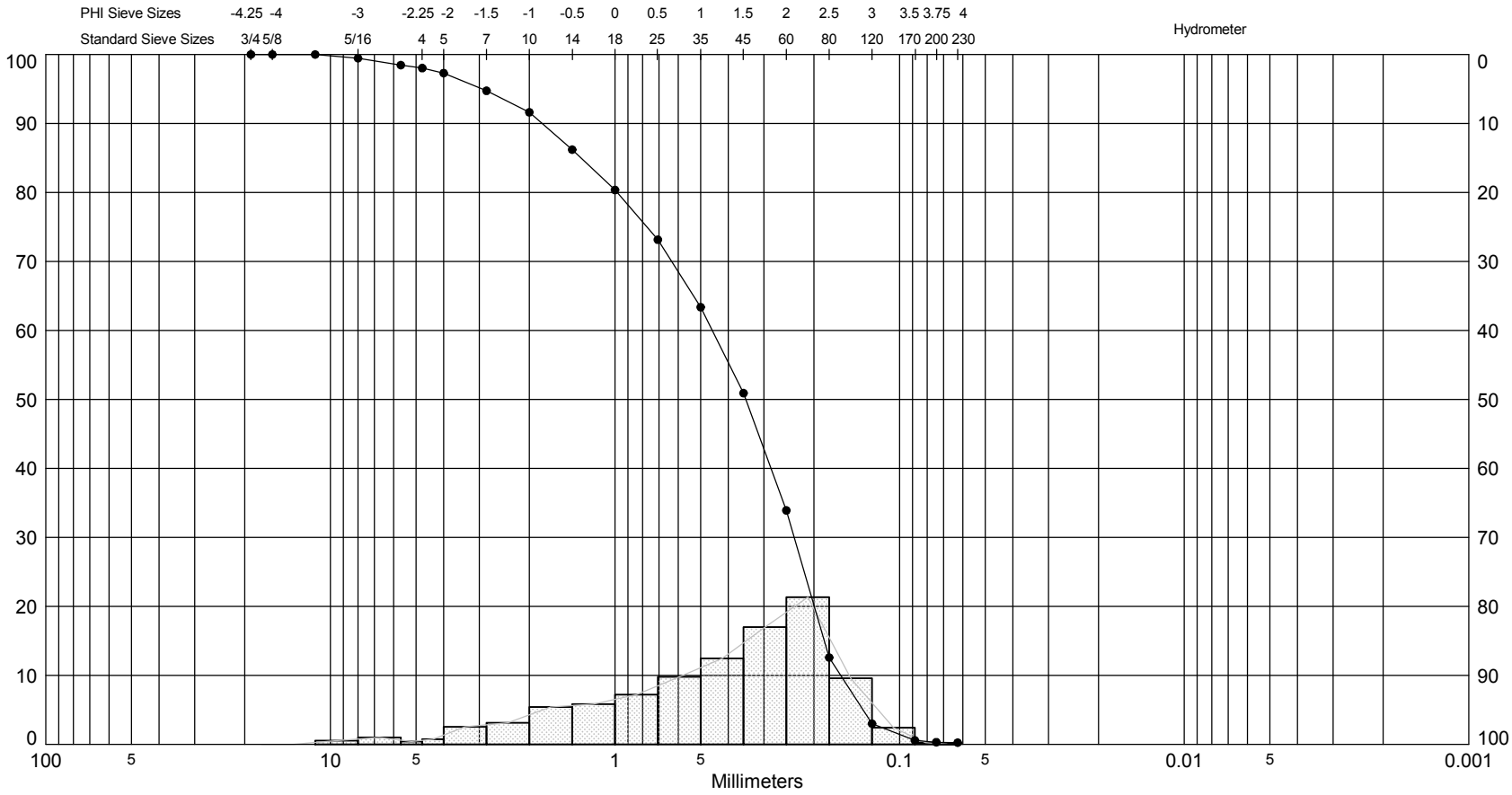
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-23-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O38 #1	—●—		SW	#200 - 0.31 #230 - 0.25	0.60	23.10	1.53	1.17	-0.9	3.29	1.37

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

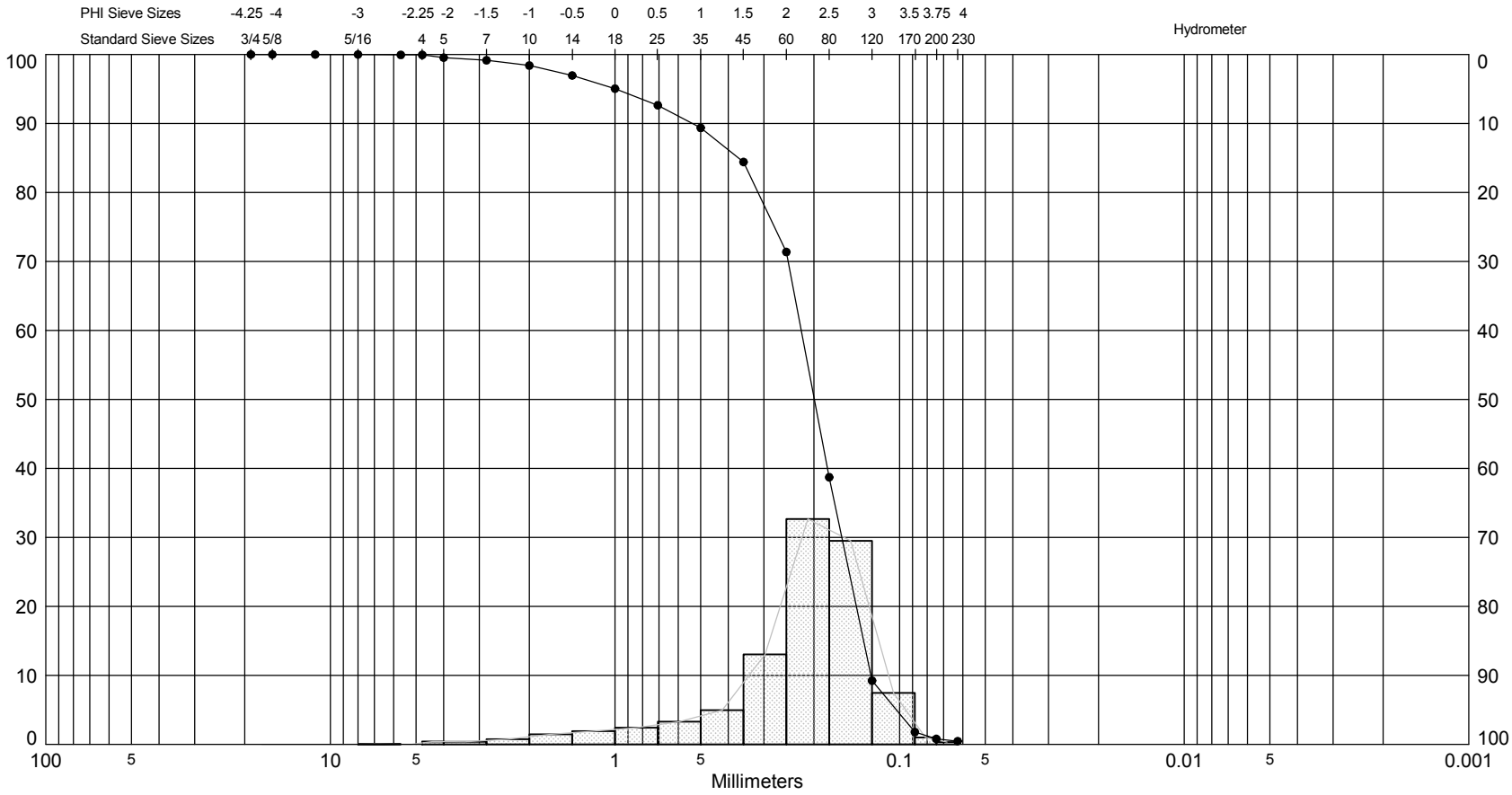
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O38 #2	—●—		SW	#200 - 0.79 #230 - 0.46	0.90	10.00	2.33	2.12	-1.78	6.98	0.95

Comments:

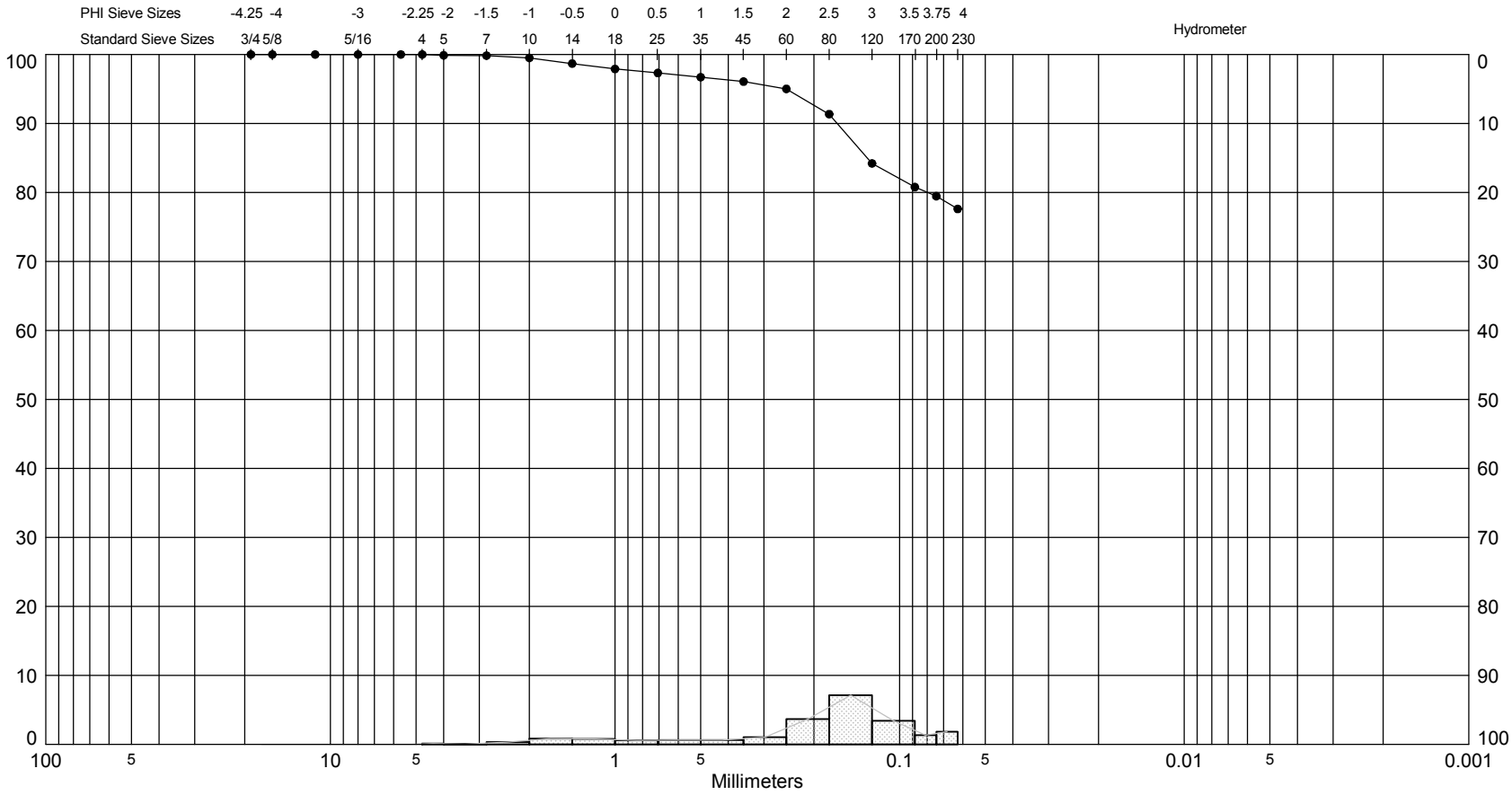
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O38 #3	—●—		ML-CL	#200 - 79.46 #230 - 77.61	2.80	7.80		2.35	-1.4	4.43	1.27

Comments:

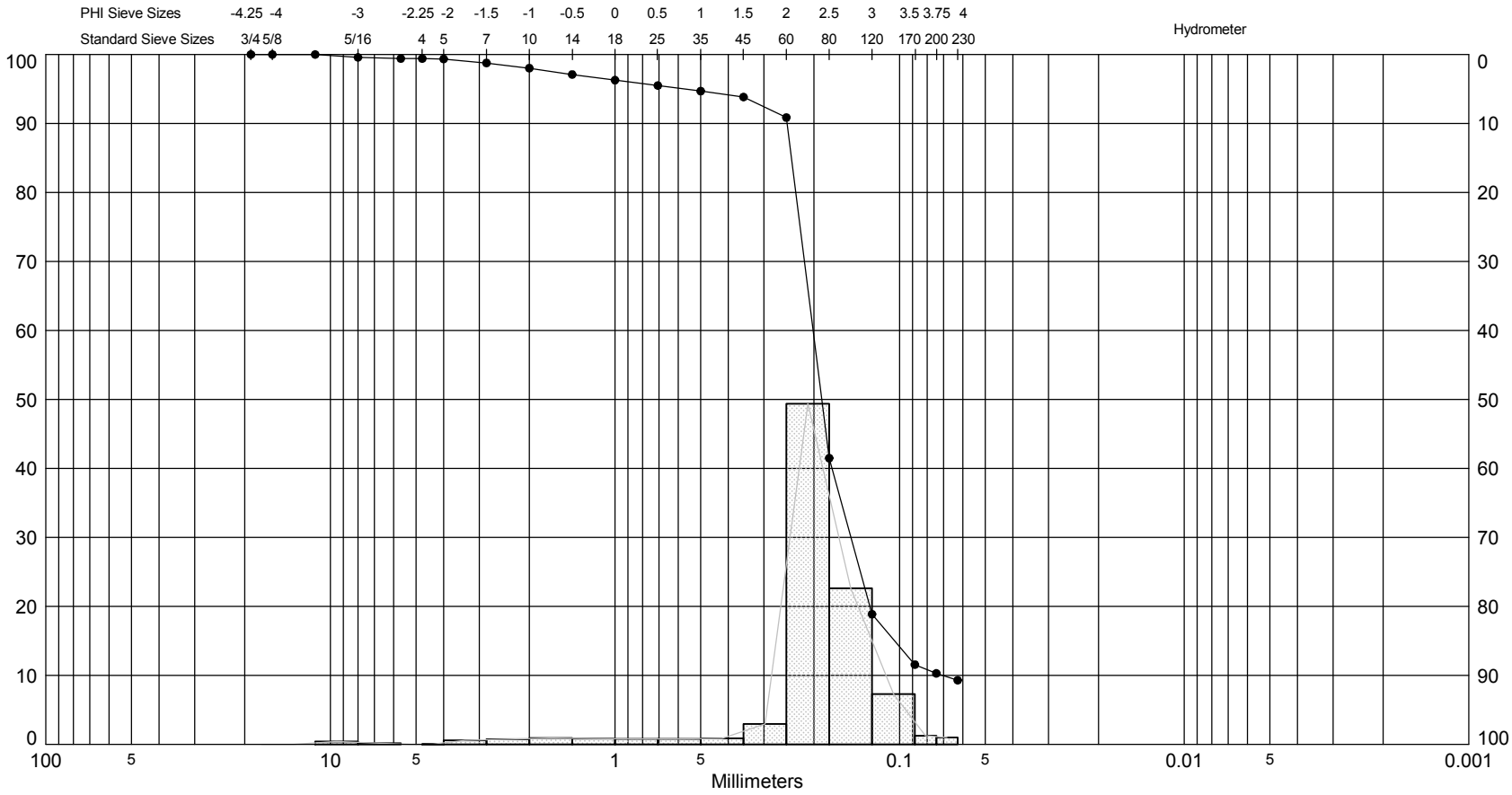
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O39 #1	—●—		SW-SM	#200 - 10.29 #230 - 9.29	1.00	17.90	2.41	2.29	-3.04	15.6	0.9

Comments:

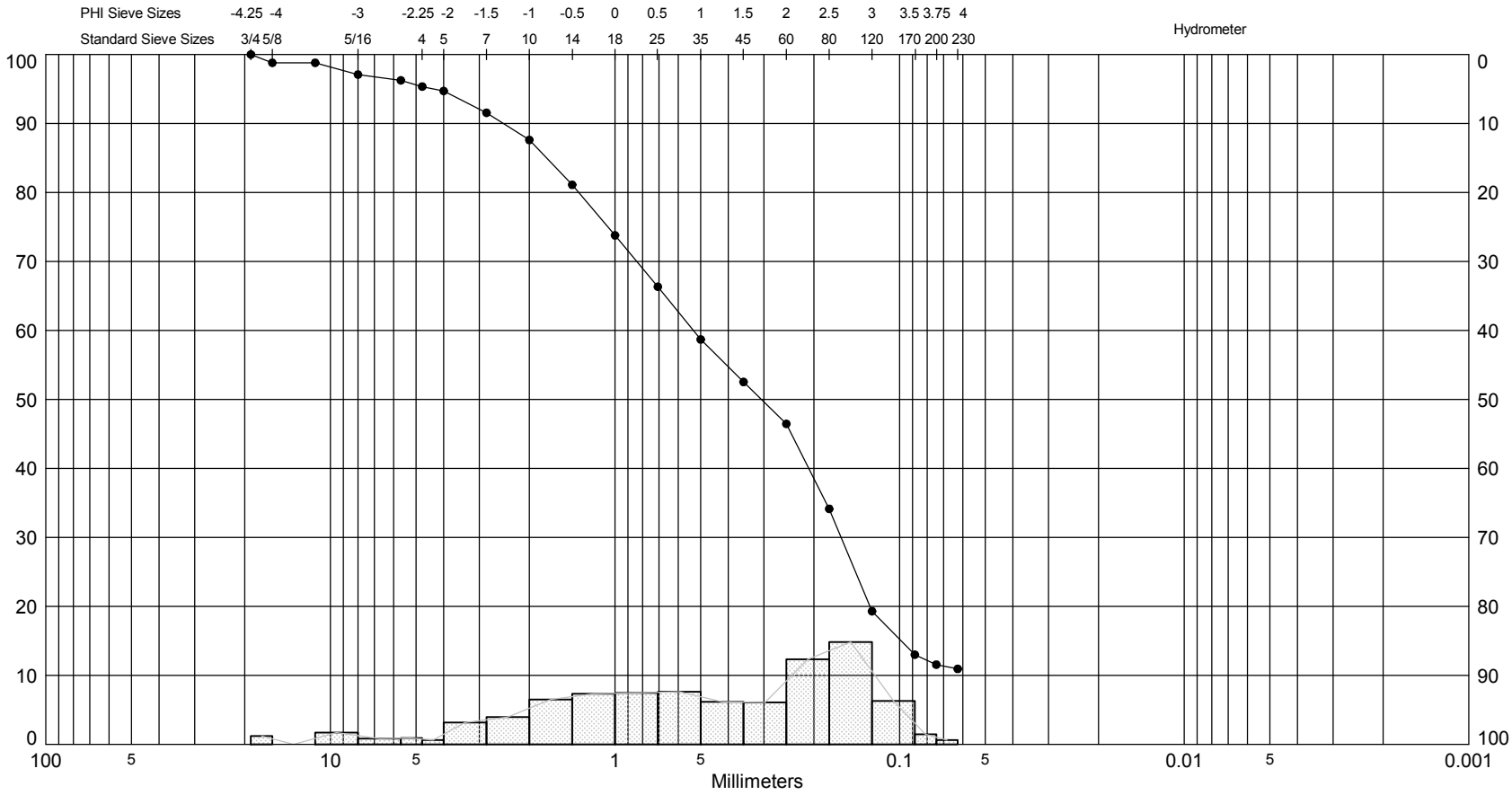
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O39 #2	—●—		SW-SM	#200 - 11.56 #230 - 10.94	1.60	31.20	1.71	1	-0.65	2.76	1.79

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

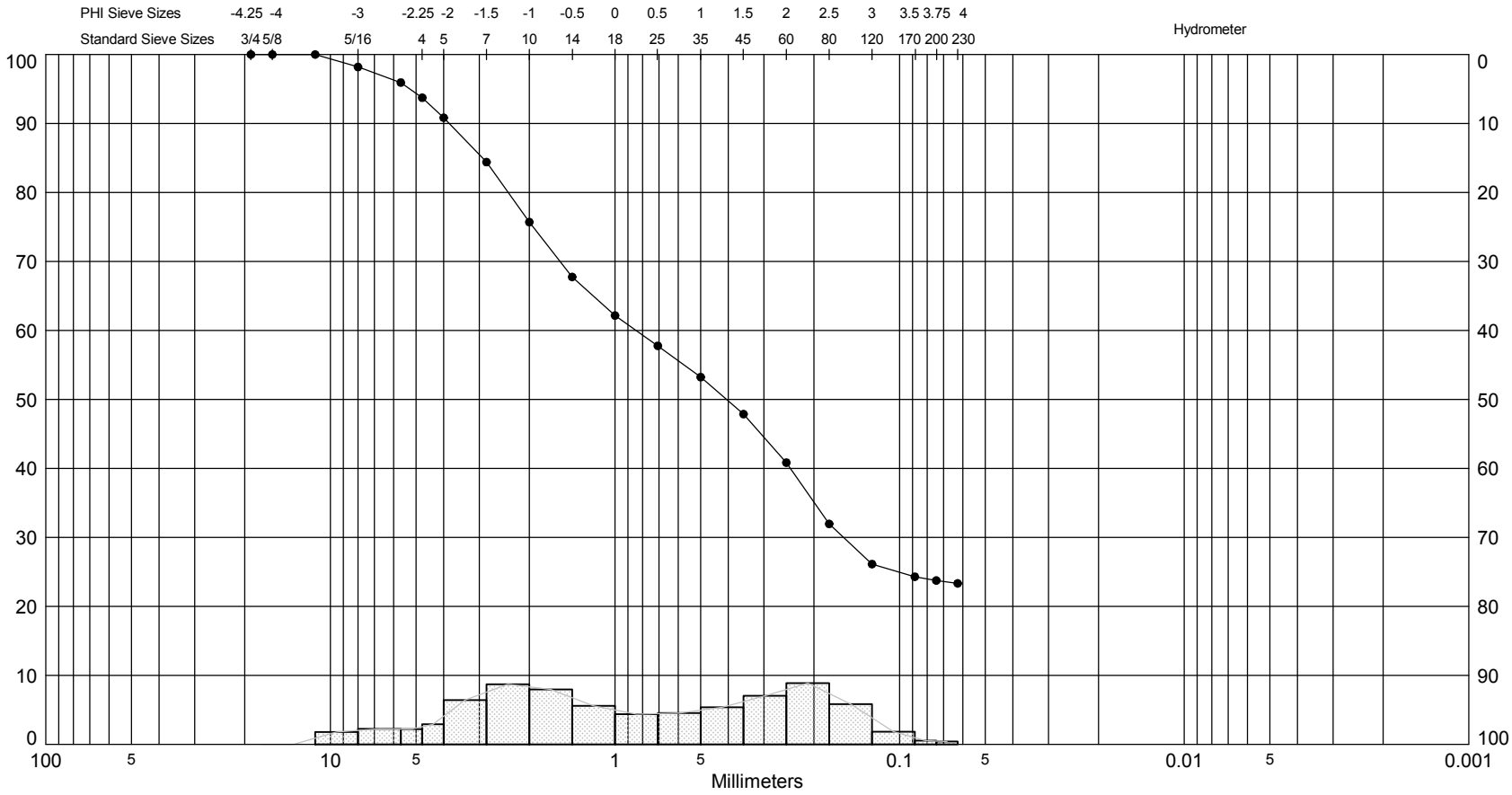
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O39 #3	—●—		SM	#200 - 23.75 #230 - 23.33	2.80	52.70	1.3	0.21	0.01	1.83	1.81

Comments:

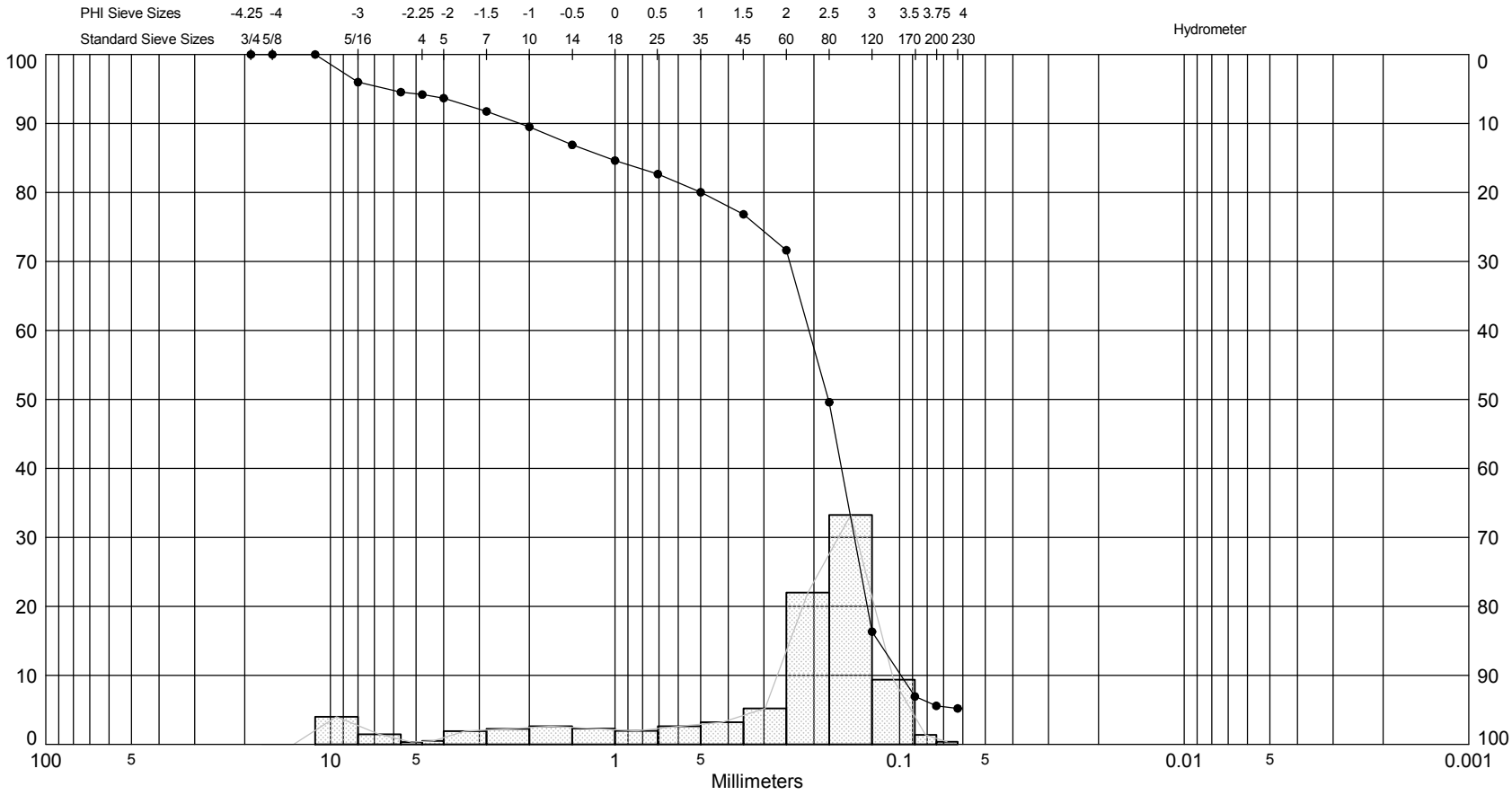
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O40 #1	—●—		SW-SM	#200 - 5.58 #230 - 5.21	1.20	19.30	2.49	1.75	-1.64	4.67	1.74

Comments:

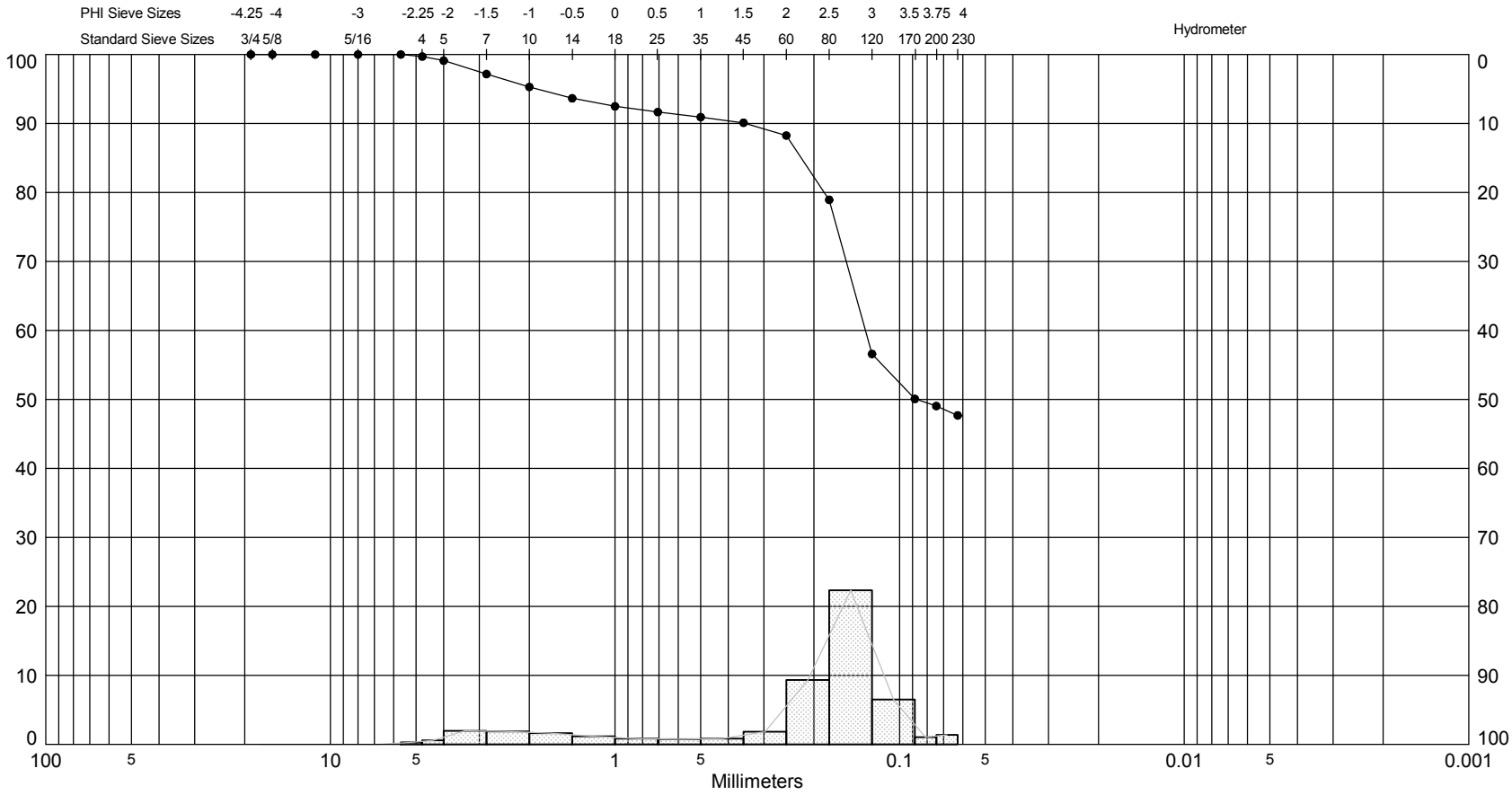
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O40 #2	—●—		SM	#200 - 49.04 #230 - 47.68	1.70	9.50	3.52	2.07	-1.6	4.39	1.49

Comments:

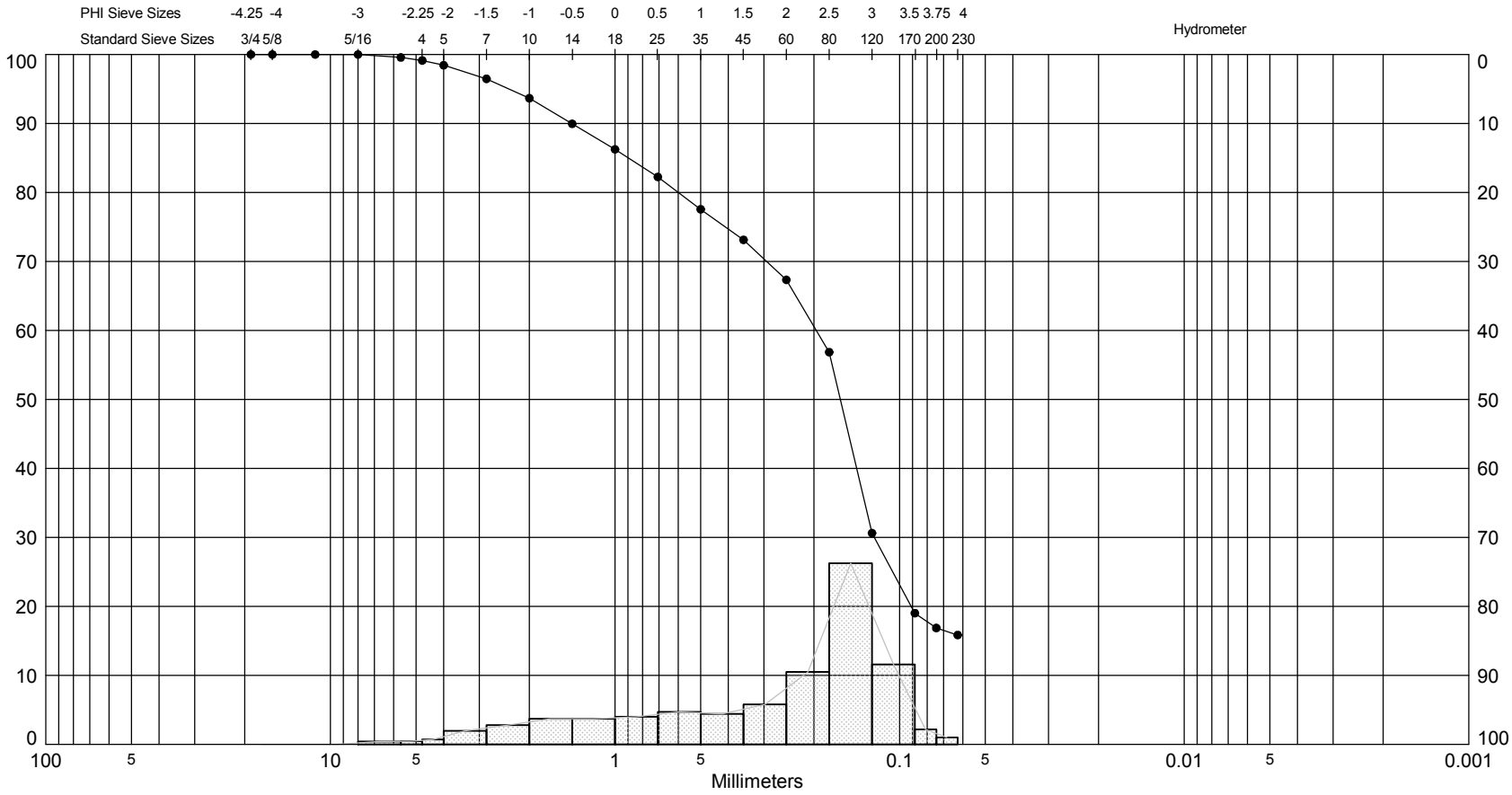
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O40 #3	—●—		SM	#200 - 16.87 #230 - 15.85	1.80	33.80	2.63	1.79	-1.05	3.07	1.52

Comments:

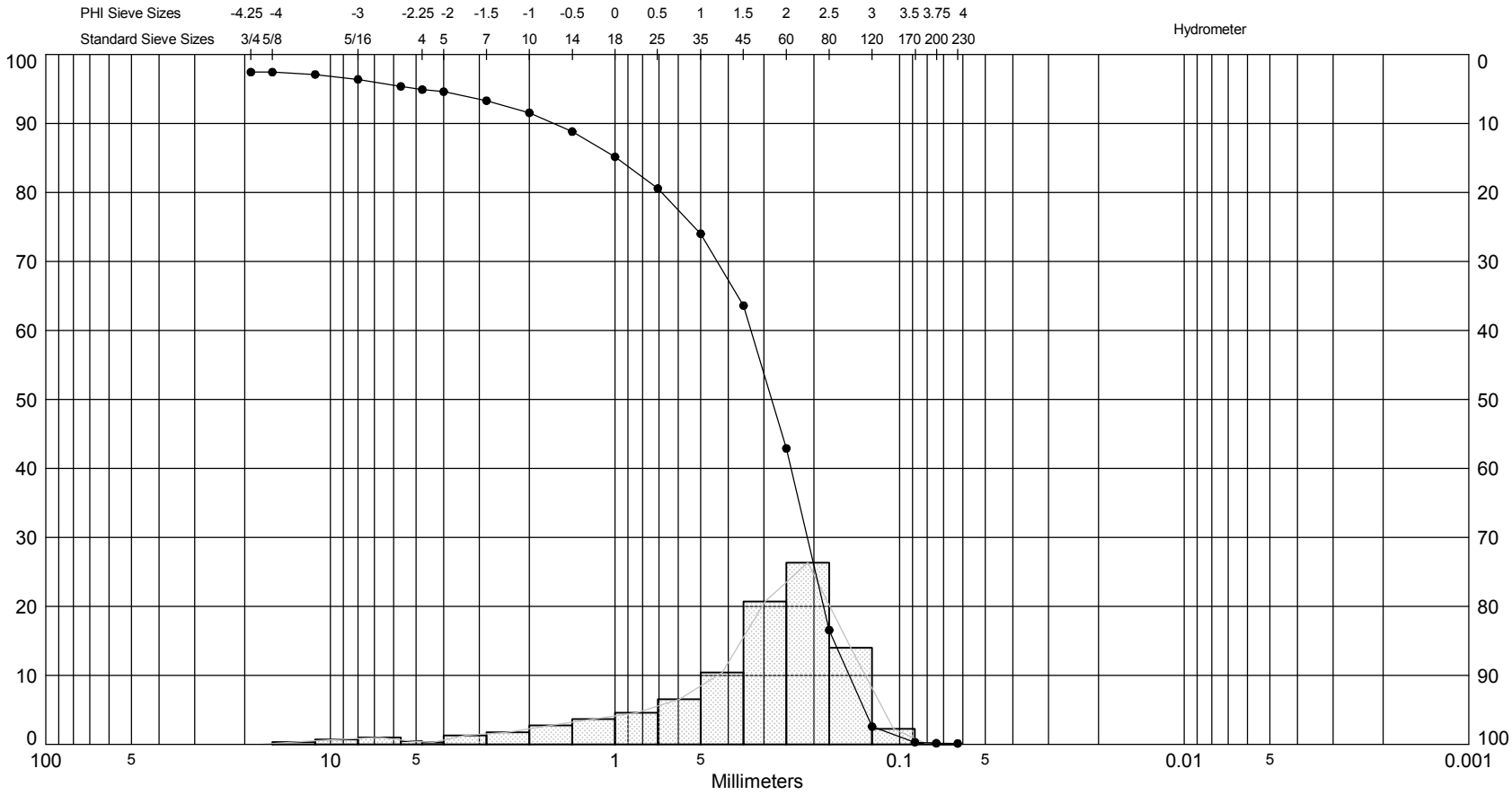
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O41 #1	—●—		SW	#200 - 0.16 #230 - 0.13	0.50	14.80	1.83	1.34	-1.21	4.9	1.29

Comments:

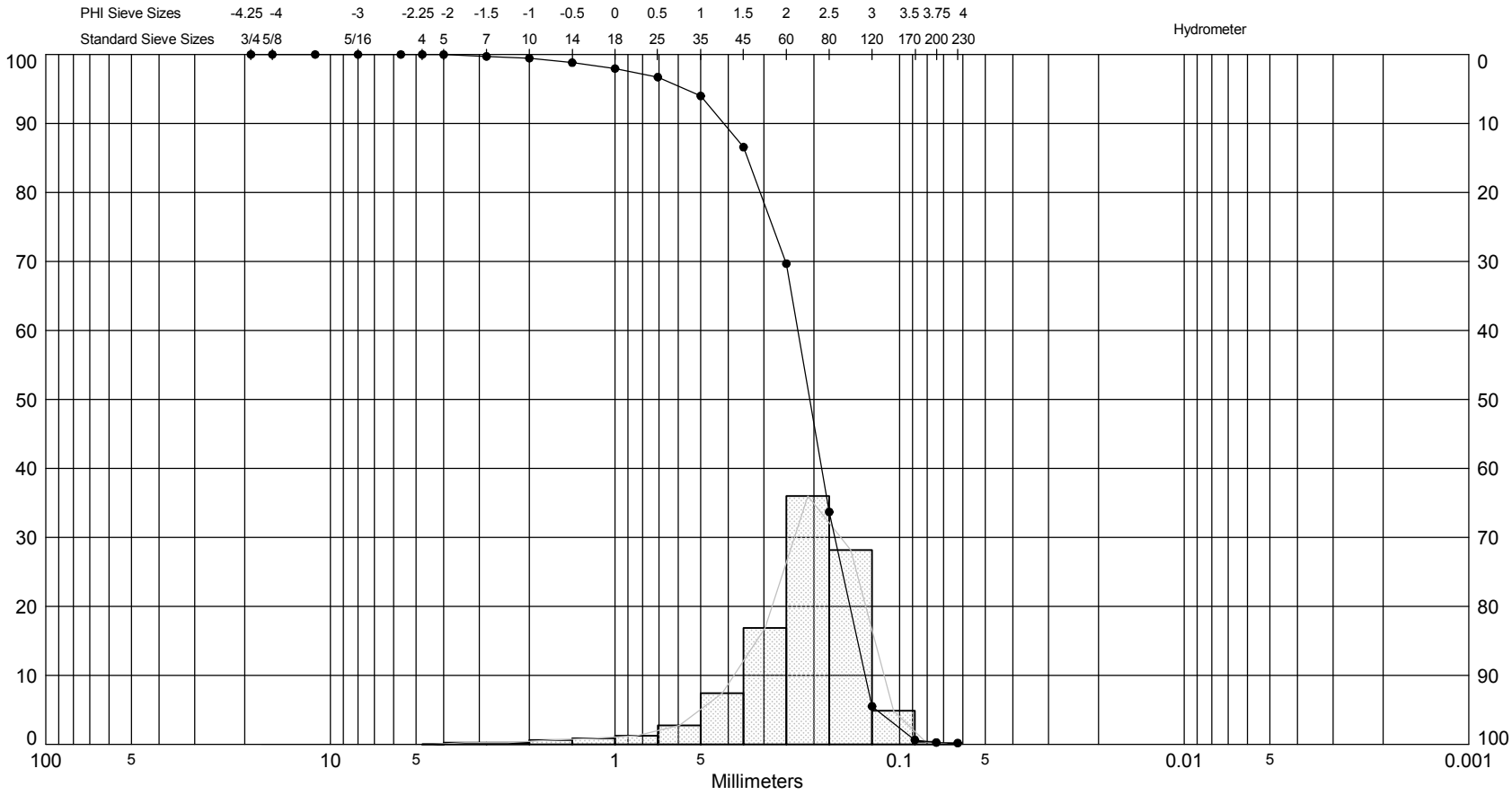
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O41 #2	—●—		SP	#200 - 0.27 #230 - 0.19	0.80	13.10	2.27	2.16	-1.65	7.77	0.73

Comments:

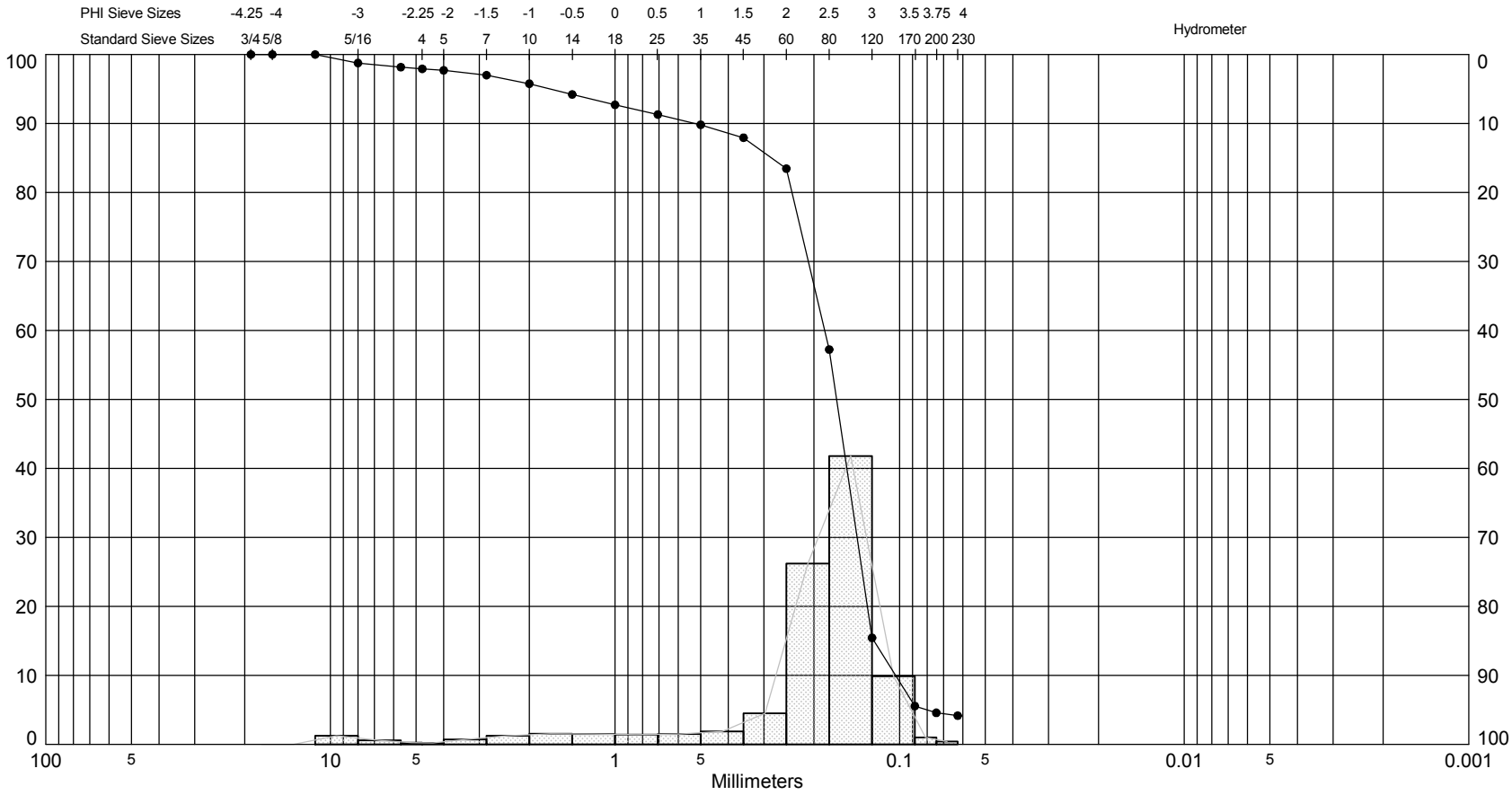
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O41 #3	—●—		SW	#200 - 4.57 #230 - 4.16	1.10	14.40	2.59	2.21	-2.58	9.9	1.24

Comments:

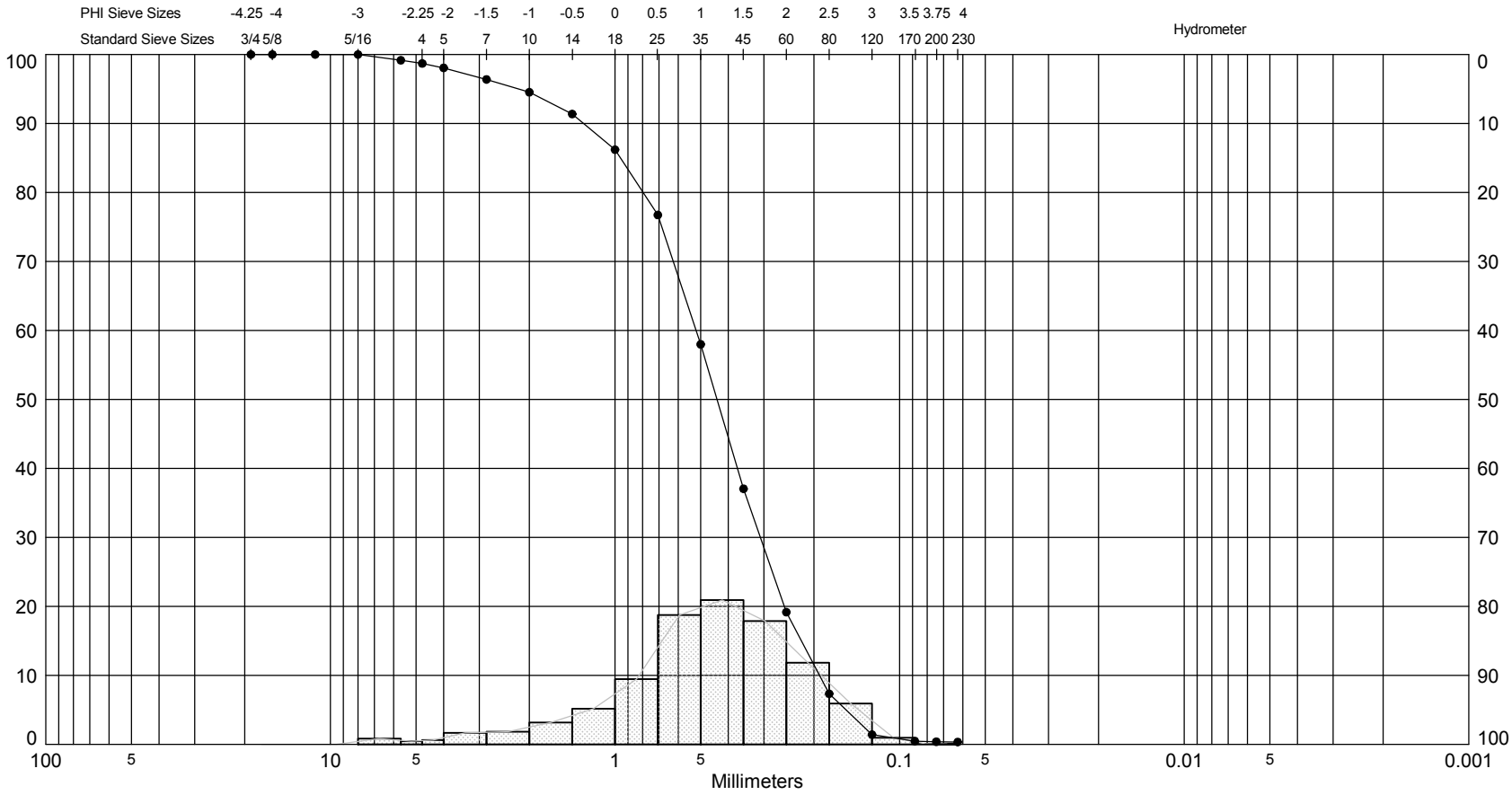
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O42 #1	—●—		SW	#200 - 0.38 #230 - 0.34	0.60	22.30	1.19	1.07	-0.87	4.14	1.11

Comments:

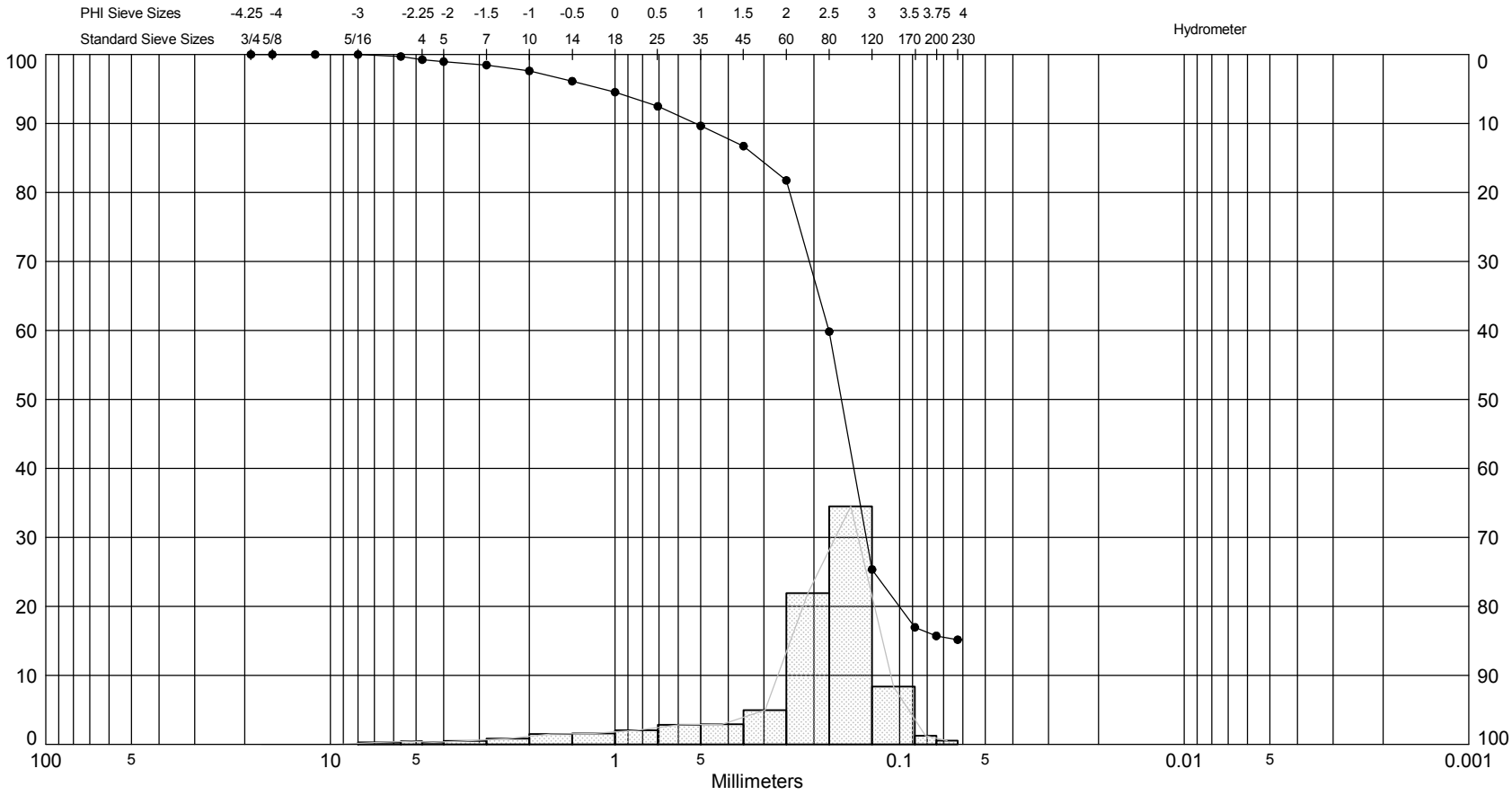
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O42 #2	—●—		SM	#200 - 15.72 #230 - 15.17	1.40	15.10	2.64	2.2	-2.06	7.57	1.11

Comments:

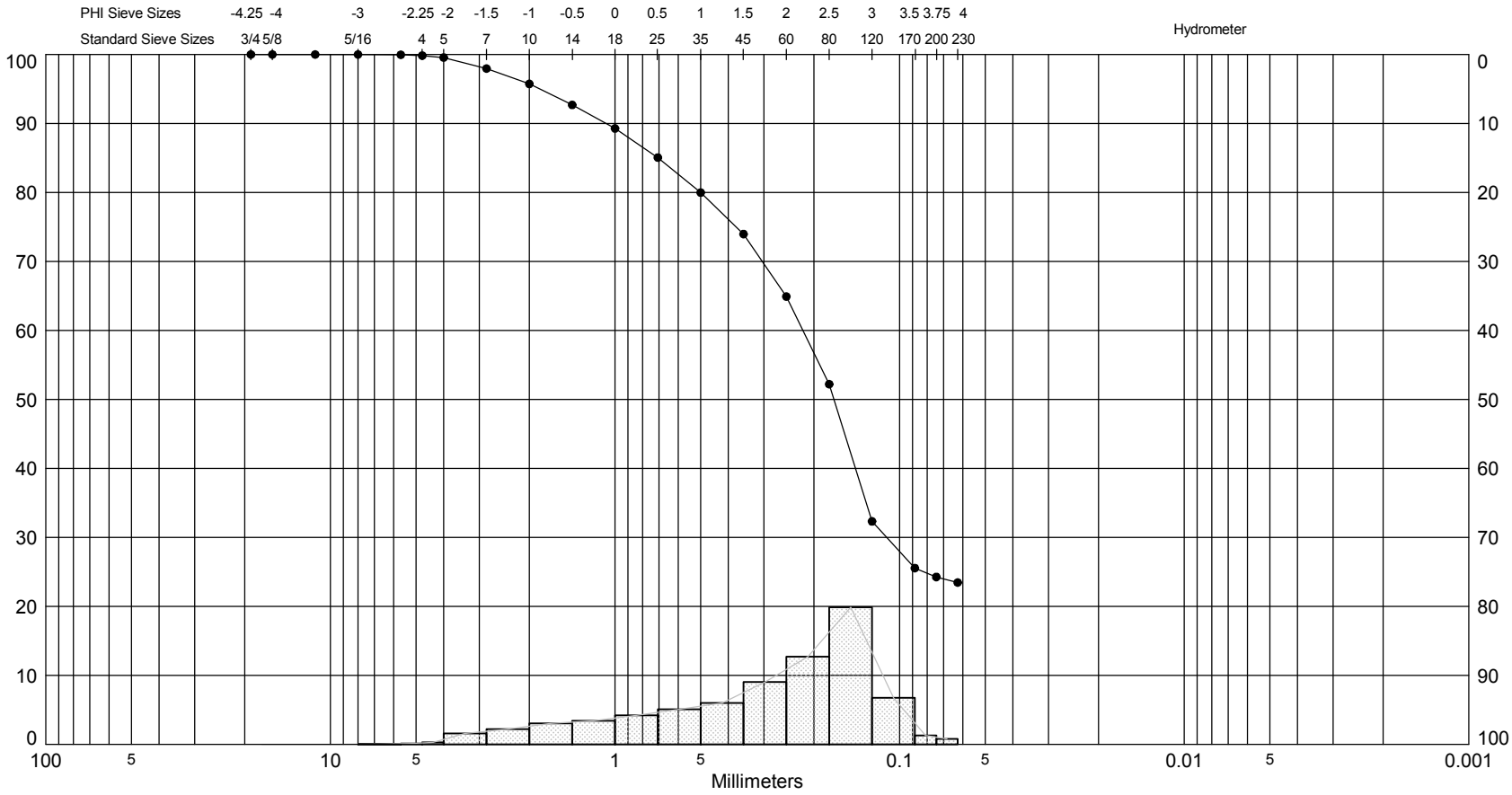
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O42 #3	—●—		SM	#200 - 24.26 #230 - 23.46	2.00	27.50	2.56	1.72	-0.92	3.04	1.36

Comments:

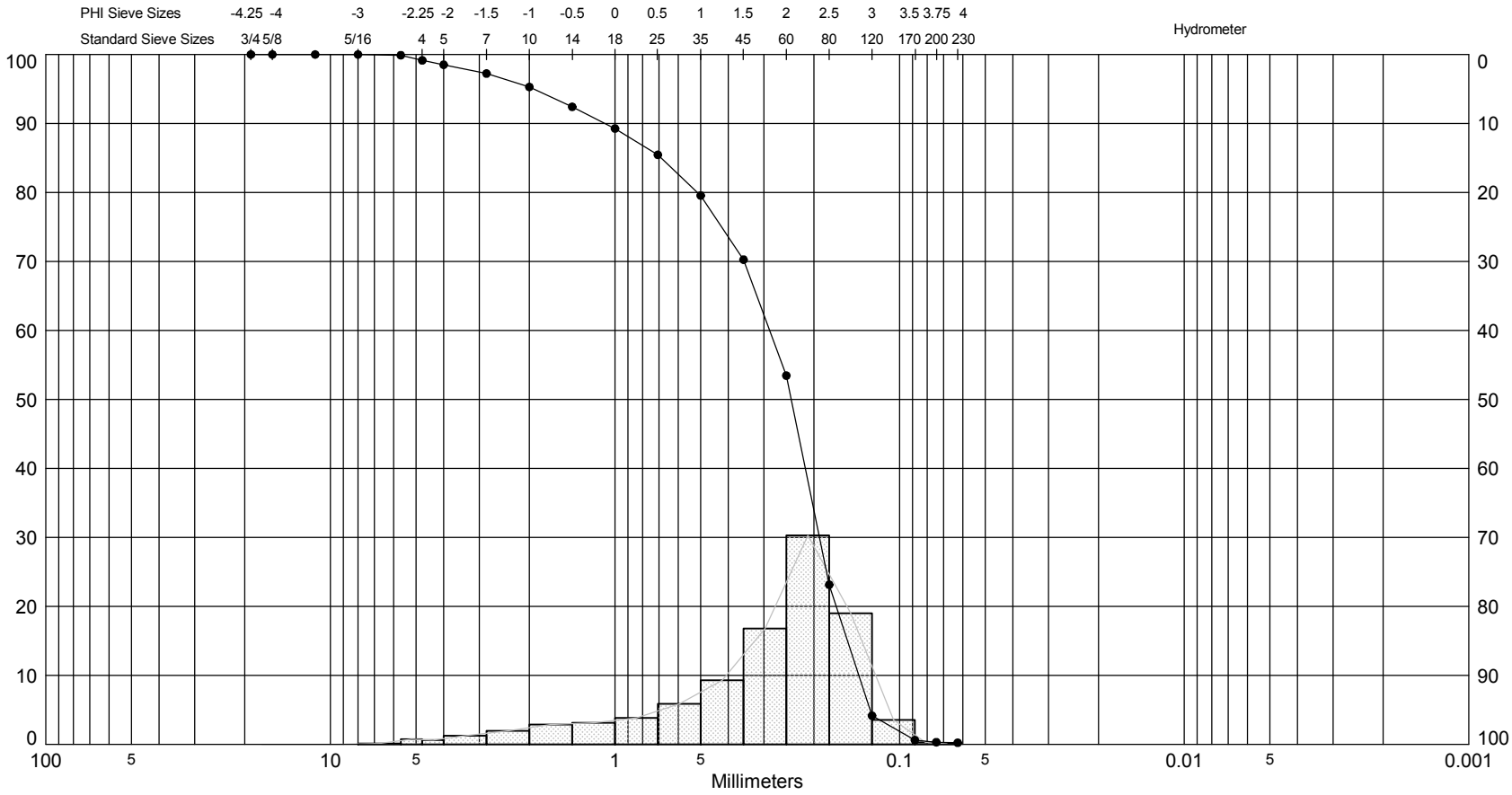
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O43 #1	—●—		SW	#200 - 0.31 #230 - 0.23	0.60	19.80	2.06	1.69	-1.4	4.68	1.19

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

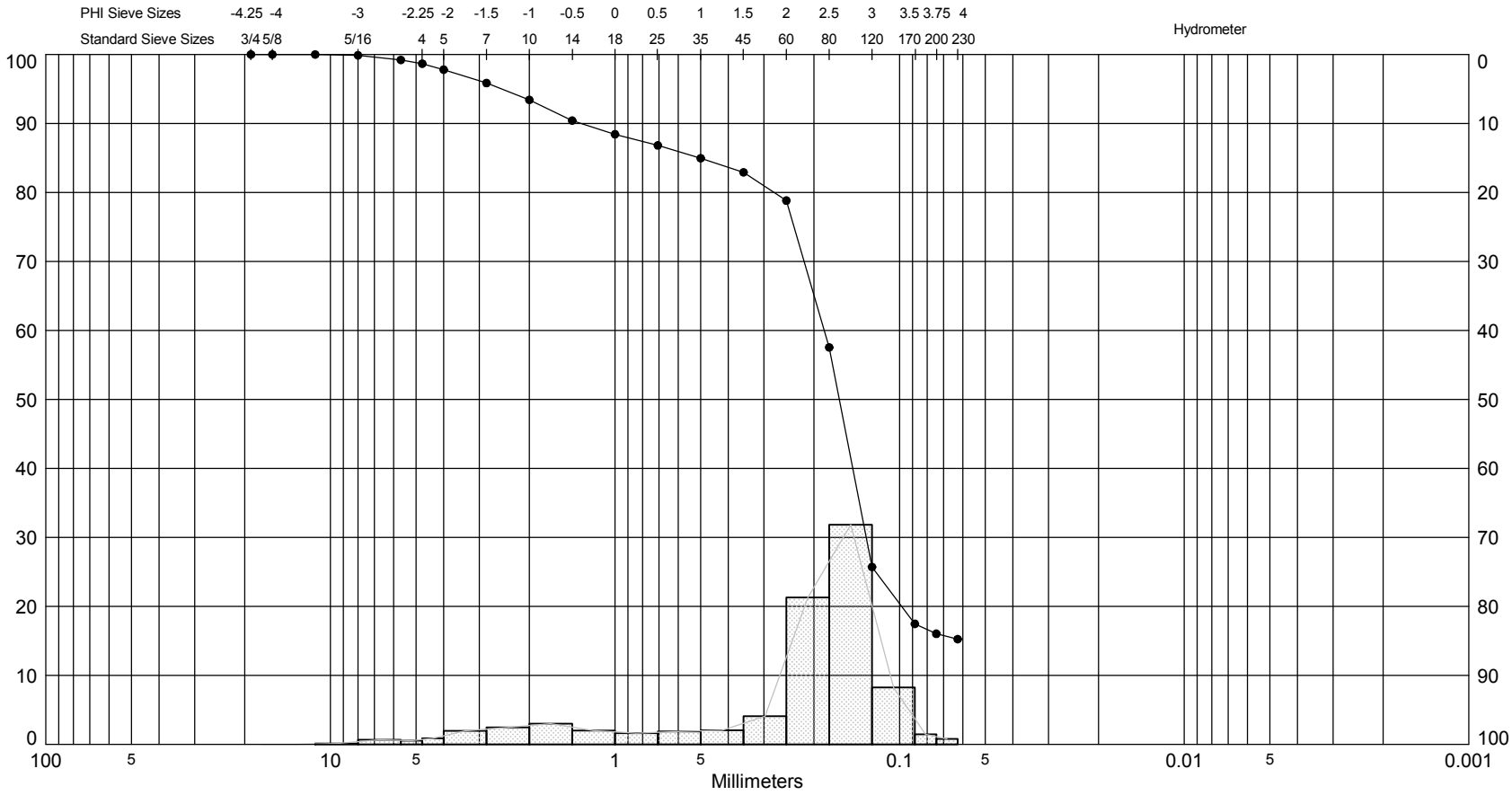
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O43 #2	—●—		SM	#200 - 16.03 #230 - 15.25	1.50	16.60	2.62	1.98	-1.66	4.83	1.45

Comments:

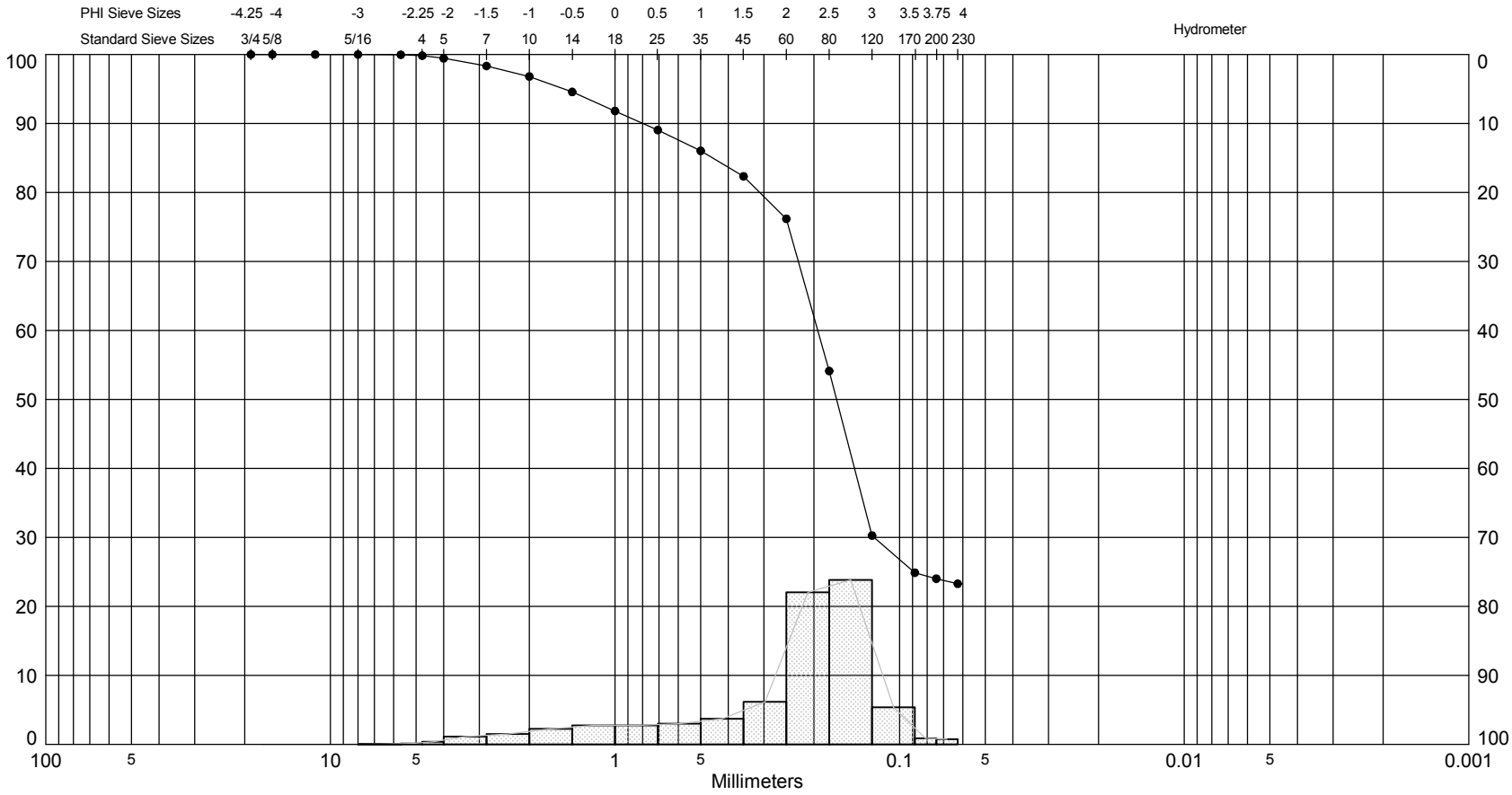
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O43 #3	—●—		SM	#200 - 24.01 #230 - 23.28	2.30	24.20	2.59	1.95	-1.45	4.53	1.23

Comments:

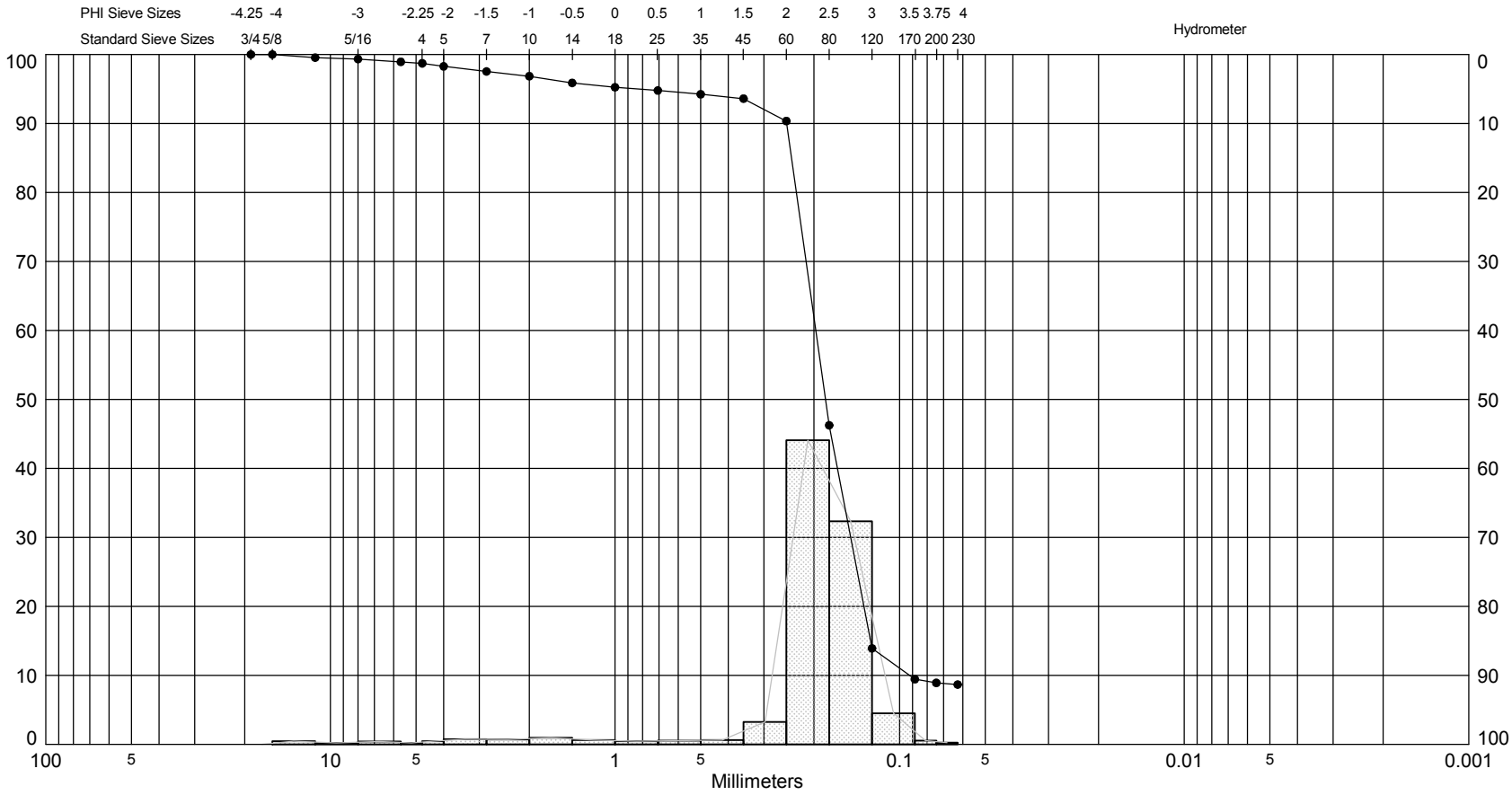
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O44 #1	—●—		SW-SM	#200 - 8.91 #230 - 8.67	0.80	13.70	2.46	2.24	-3.44	16.26	1.03

Comments:

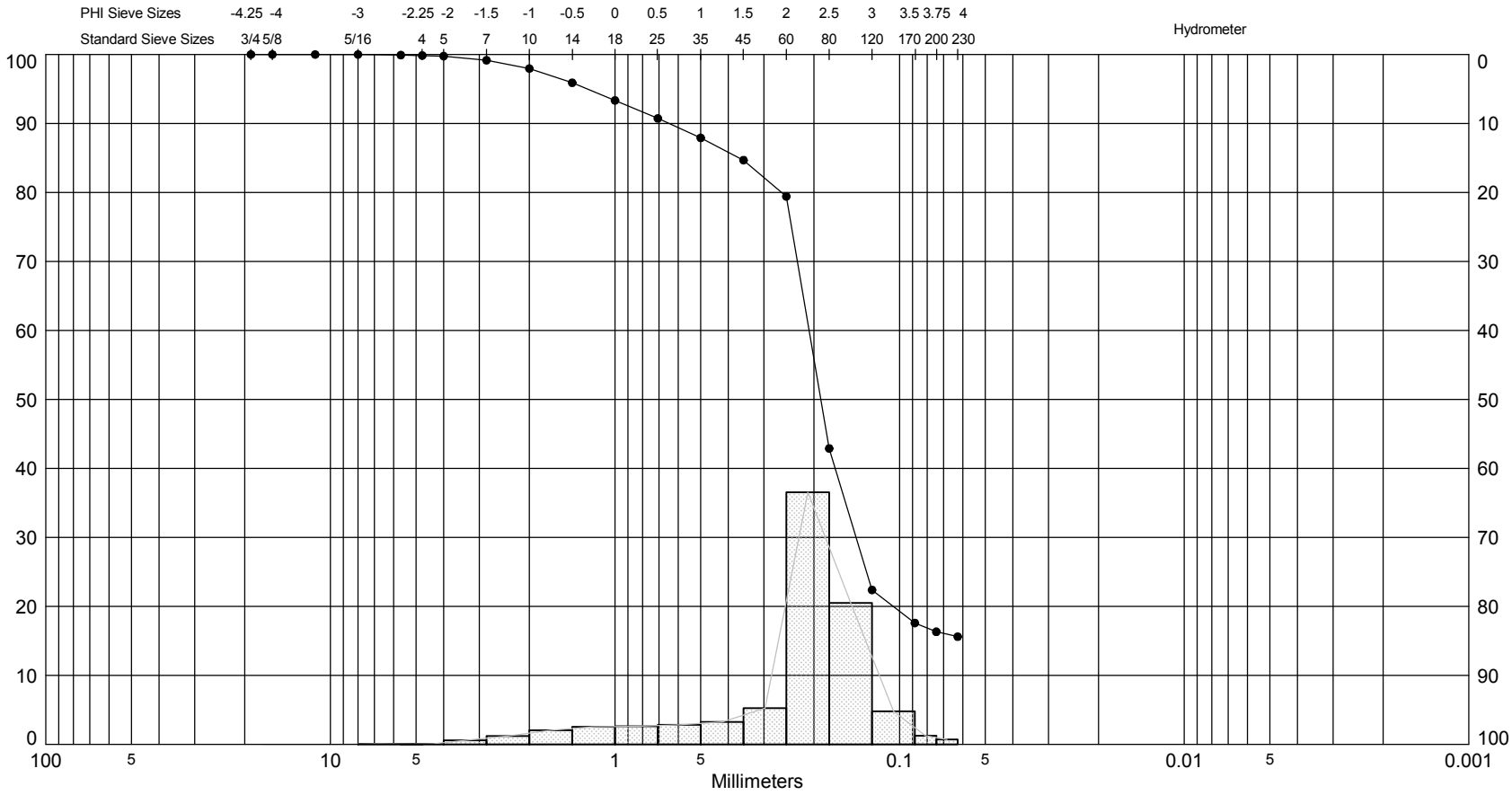
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O44 #2	—●—		SM	#200 - 16.32 #230 - 15.61	1.20	18.20	2.4	2.04	-1.66	5.72	1.07

Comments:

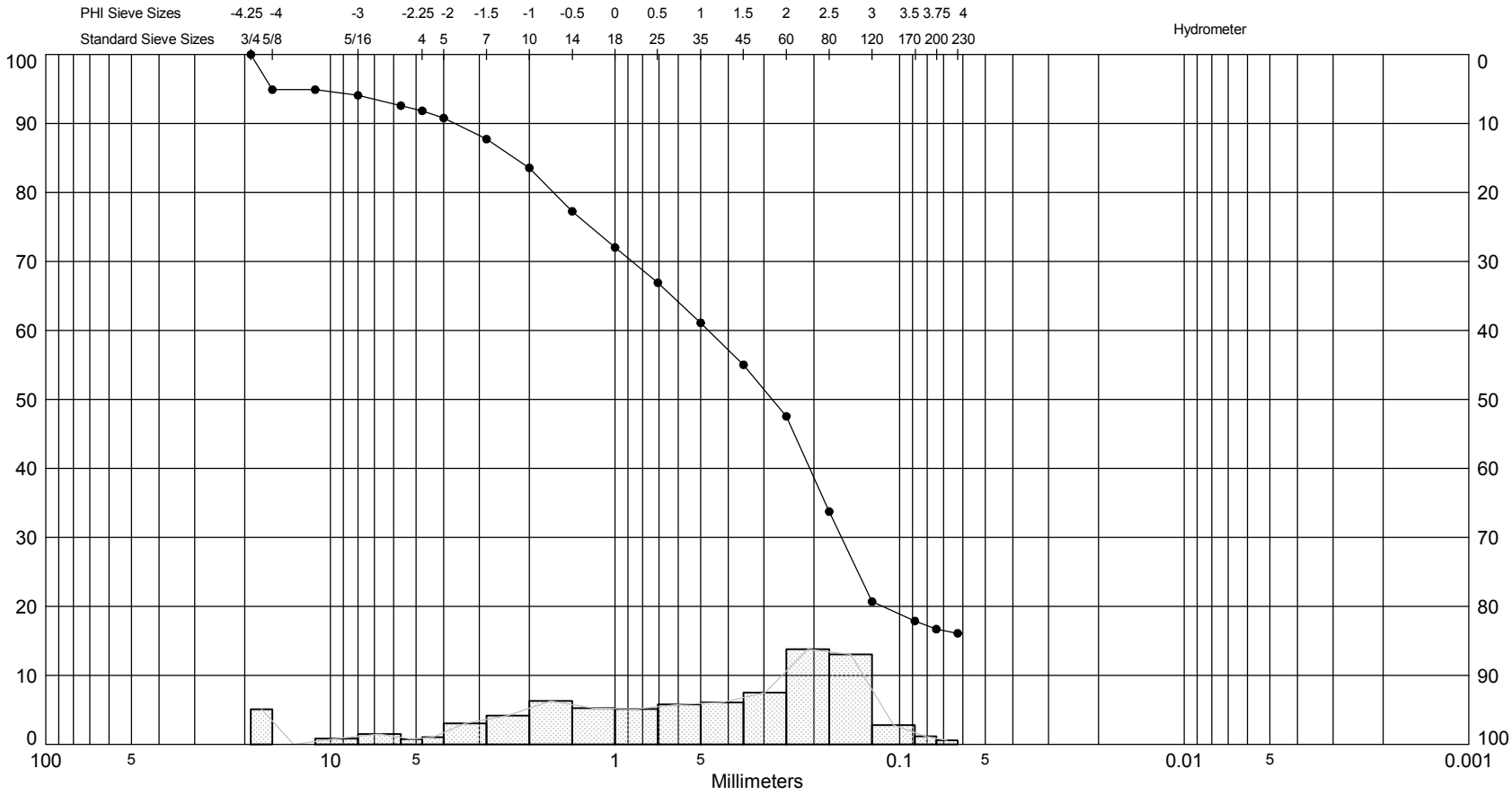
Depths and elevations based on measured values

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Fax (321) 751-2343

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O44 #3	—●—		SM	#200 - 16.70 #230 - 16.10	2.30	50.80	1.84	0.72	-0.82	2.84	2.04

Comments:

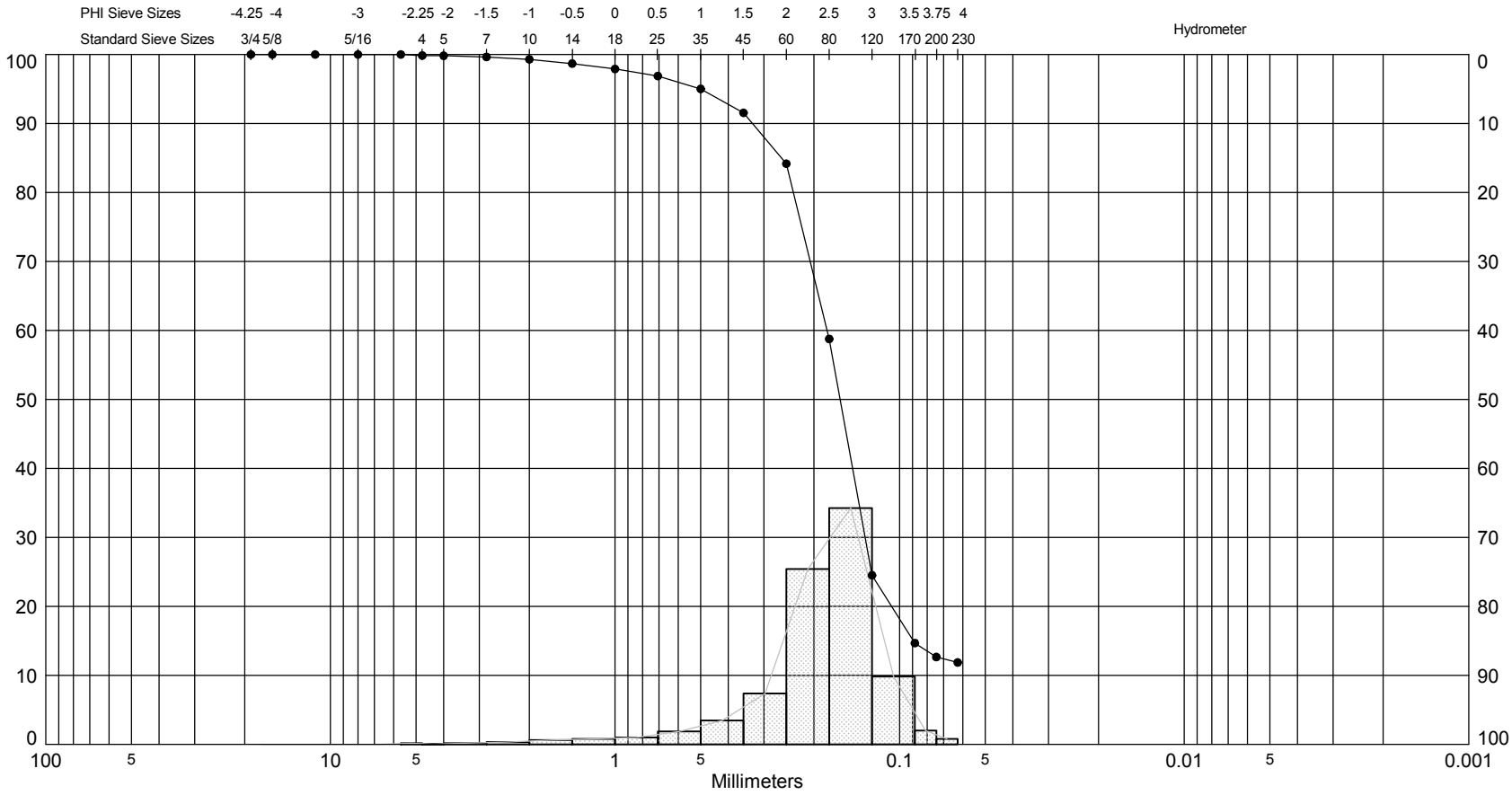
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O45 #1	—●—		SM	#200 - 12.66 #230 - 11.87	1.00	8.80	2.63	2.39	-2.01	9.56	0.81

Comments:

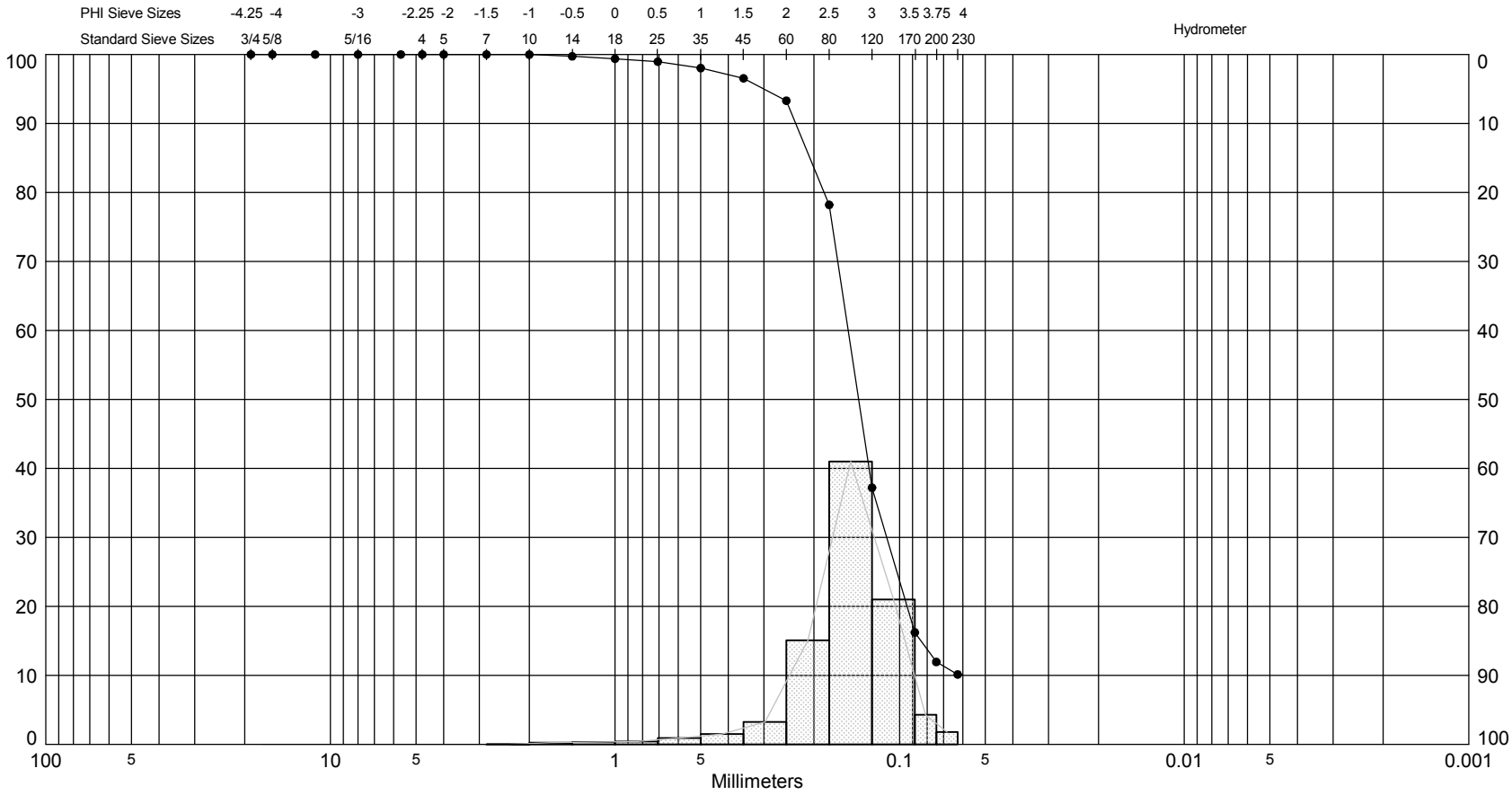
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-24-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O45 #2	—●—		SP-SM	#200 - 11.94 #230 - 10.13	1.30	1.00	2.84	2.73	-1.7	9.14	0.62

Comments:

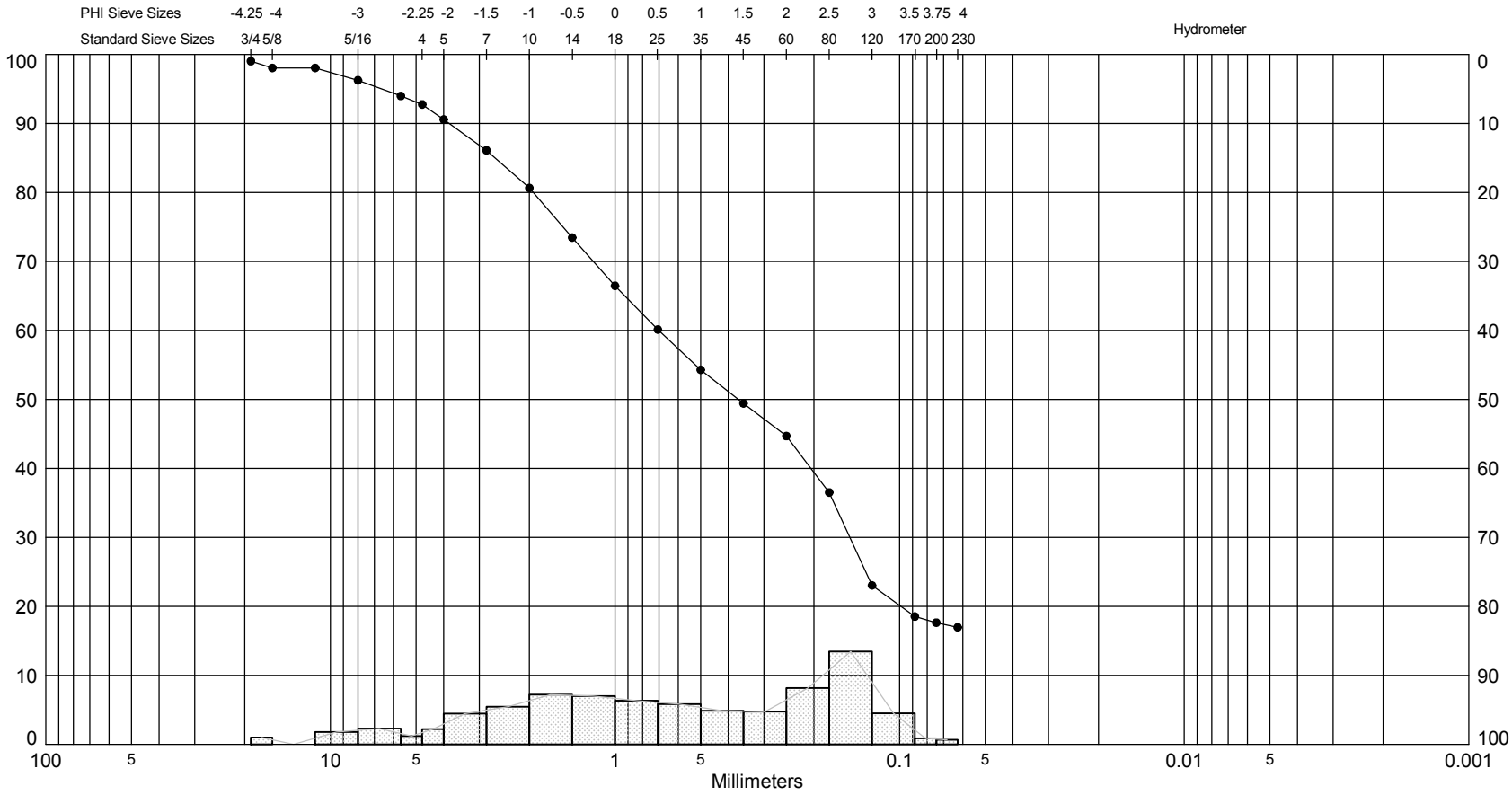
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-25-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O45 #3	—●—		SM	#200 - 17.64 #230 - 16.97	2.00	38.40	1.44	0.56	-0.23	2.09	1.91

Comments:

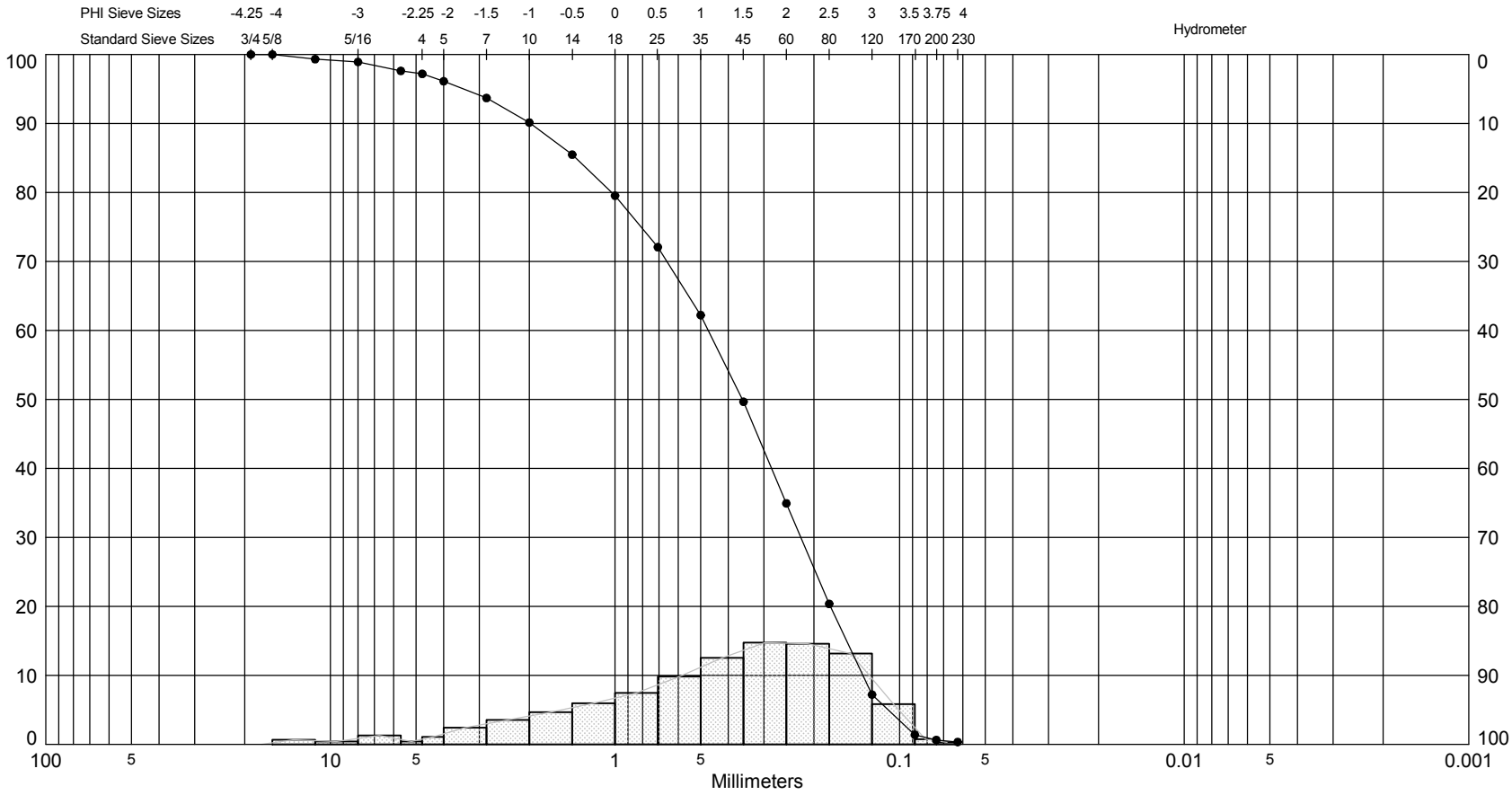
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-25-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O46 #1	—●—		SW	#200 - 0.63 #230 - 0.34	0.70	17.20	1.49	1.18	-0.84	3.33	1.51

Comments:

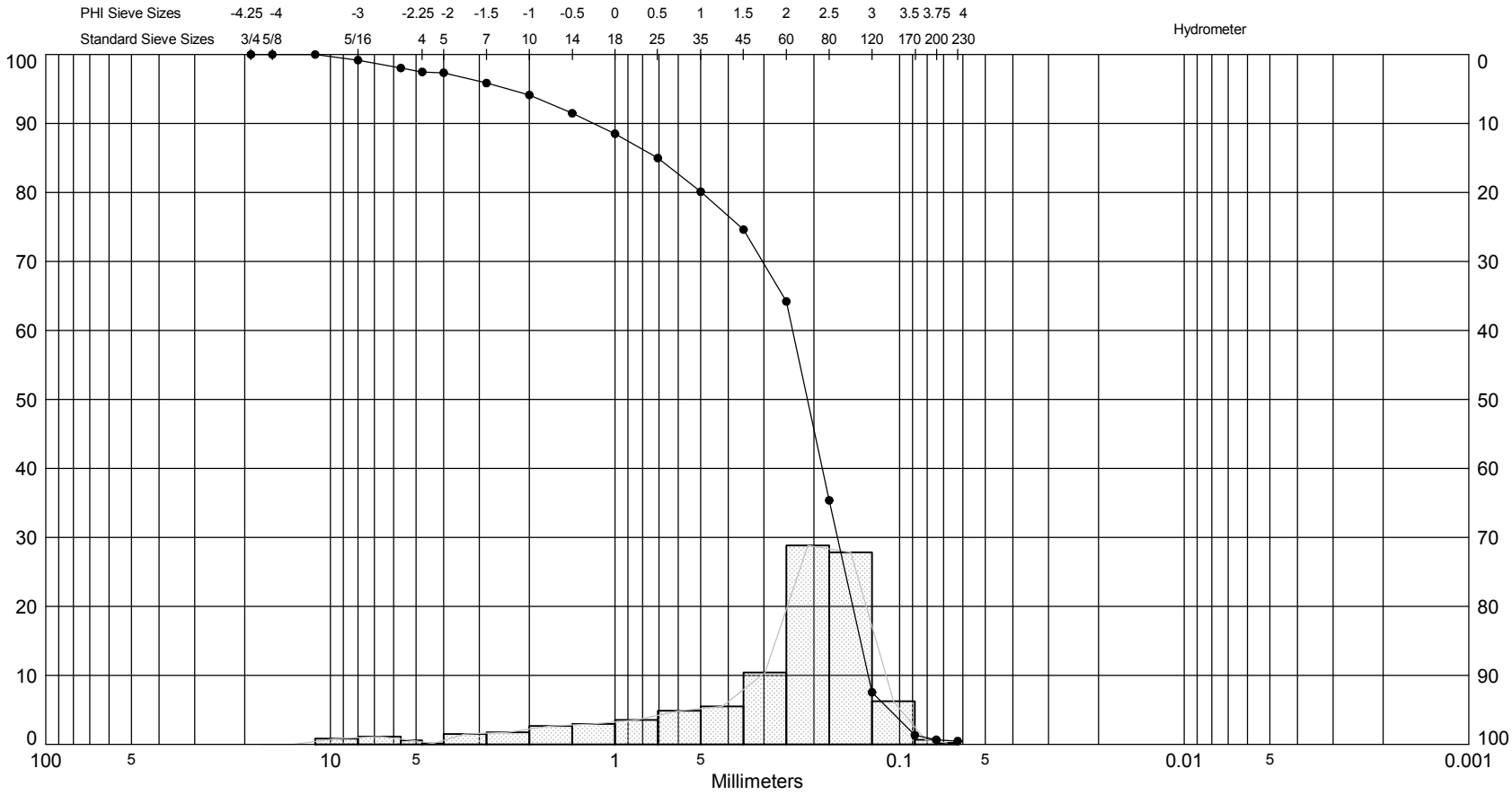
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-25-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O46 #2	—●—		SW	#200 - 0.66 #230 - 0.47	0.70	21.80	2.25	1.8	-1.67	5.52	1.36

Comments:

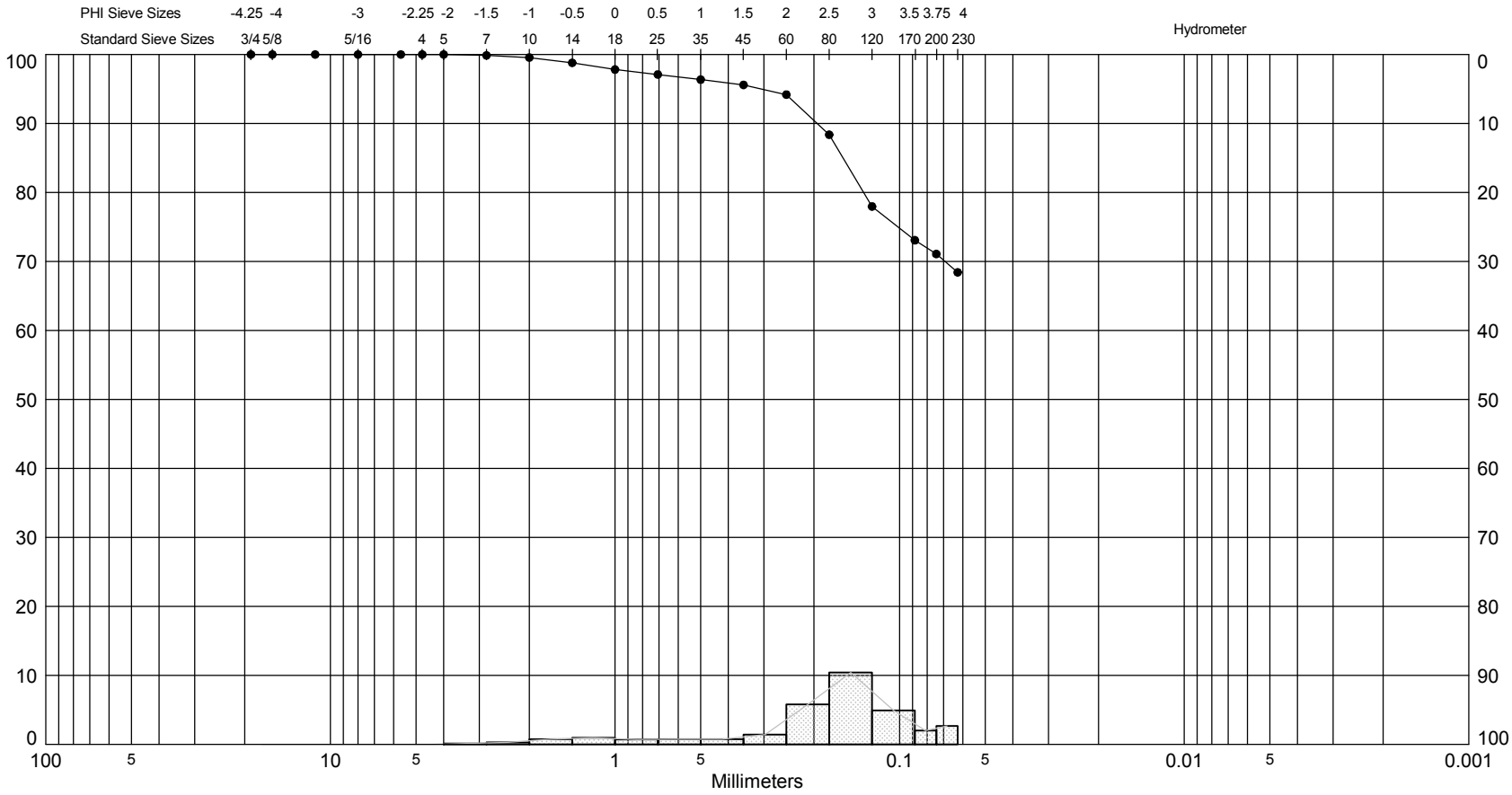
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-25-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O46 #3	—●—		ML-CL	#200 - 71.08 #230 - 68.42	2.30	7.40		2.46	-1.5	5.12	1.15

Sample Information	
Project Name:	Carteret County
Analysis Date:	01-25-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

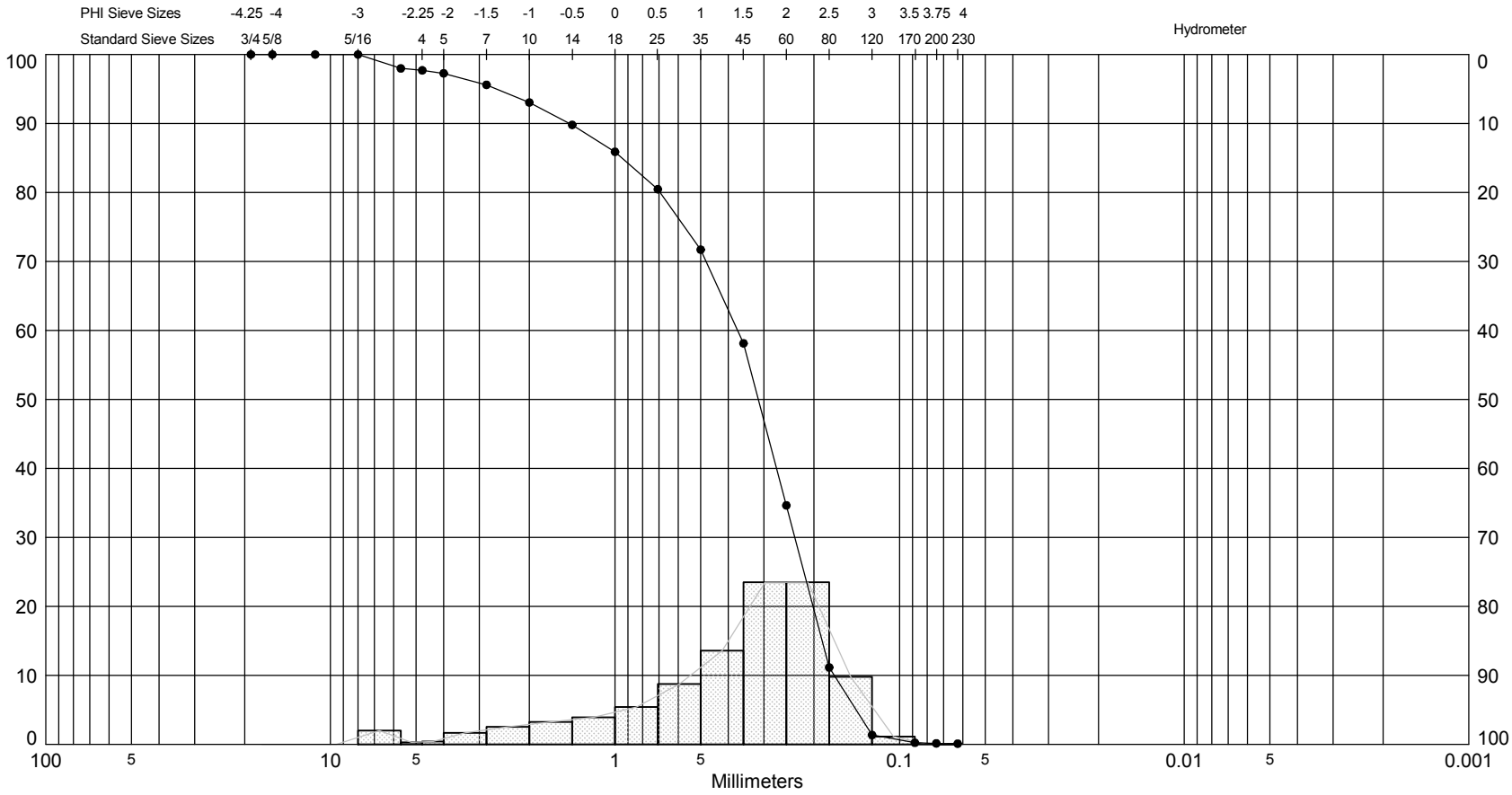
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O47 #1	—●—		SW	#200 - 0.14 #230 - 0.10	0.60	19.80	1.67	1.33	-1.31	4.49	1.25

Comments:

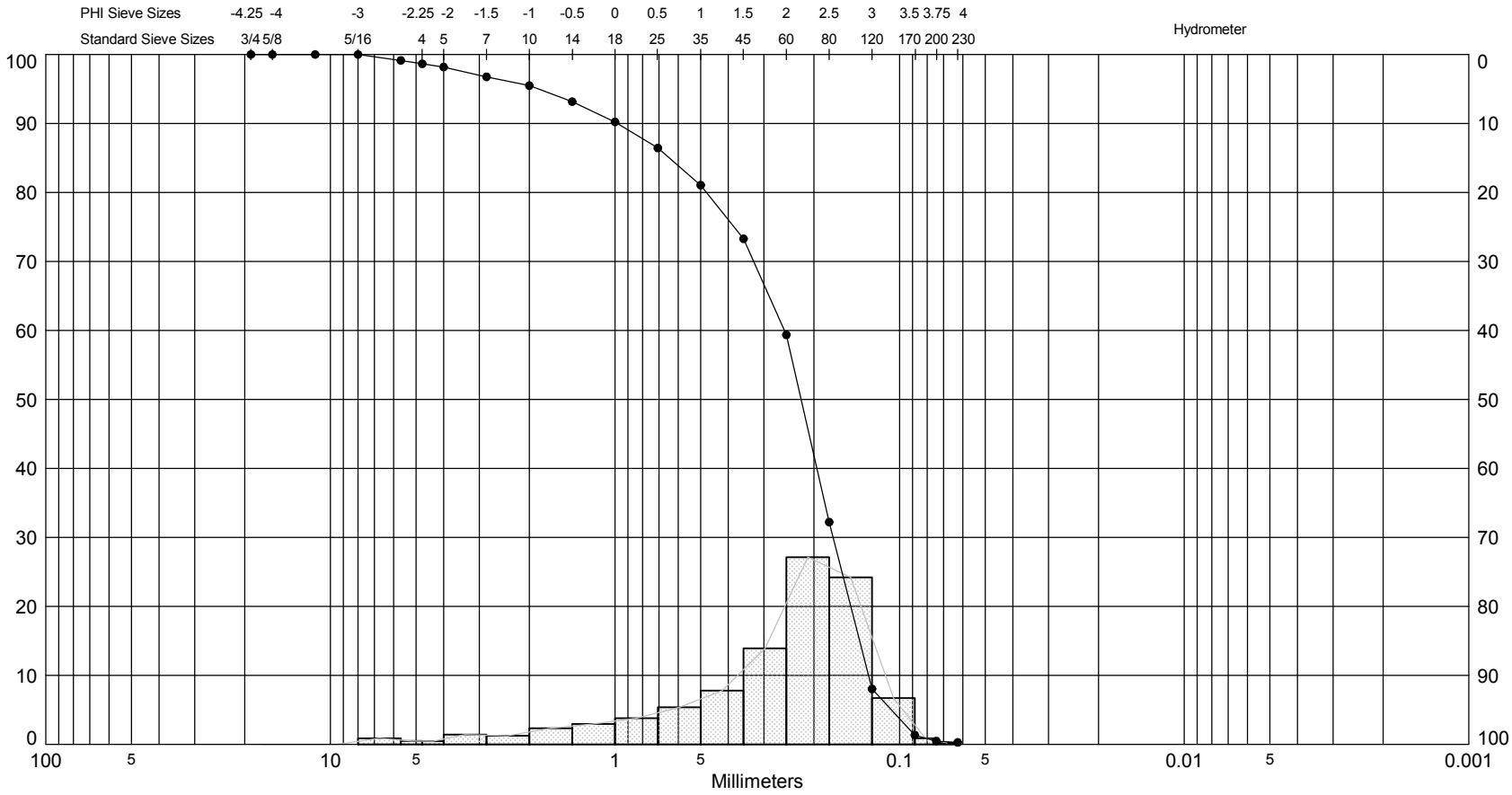
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O47 #2	—●—		SW	#200 - 0.47 #230 - 0.28	0.60	15.10	2.17	1.82	-1.51	5.21	1.24

Comments:

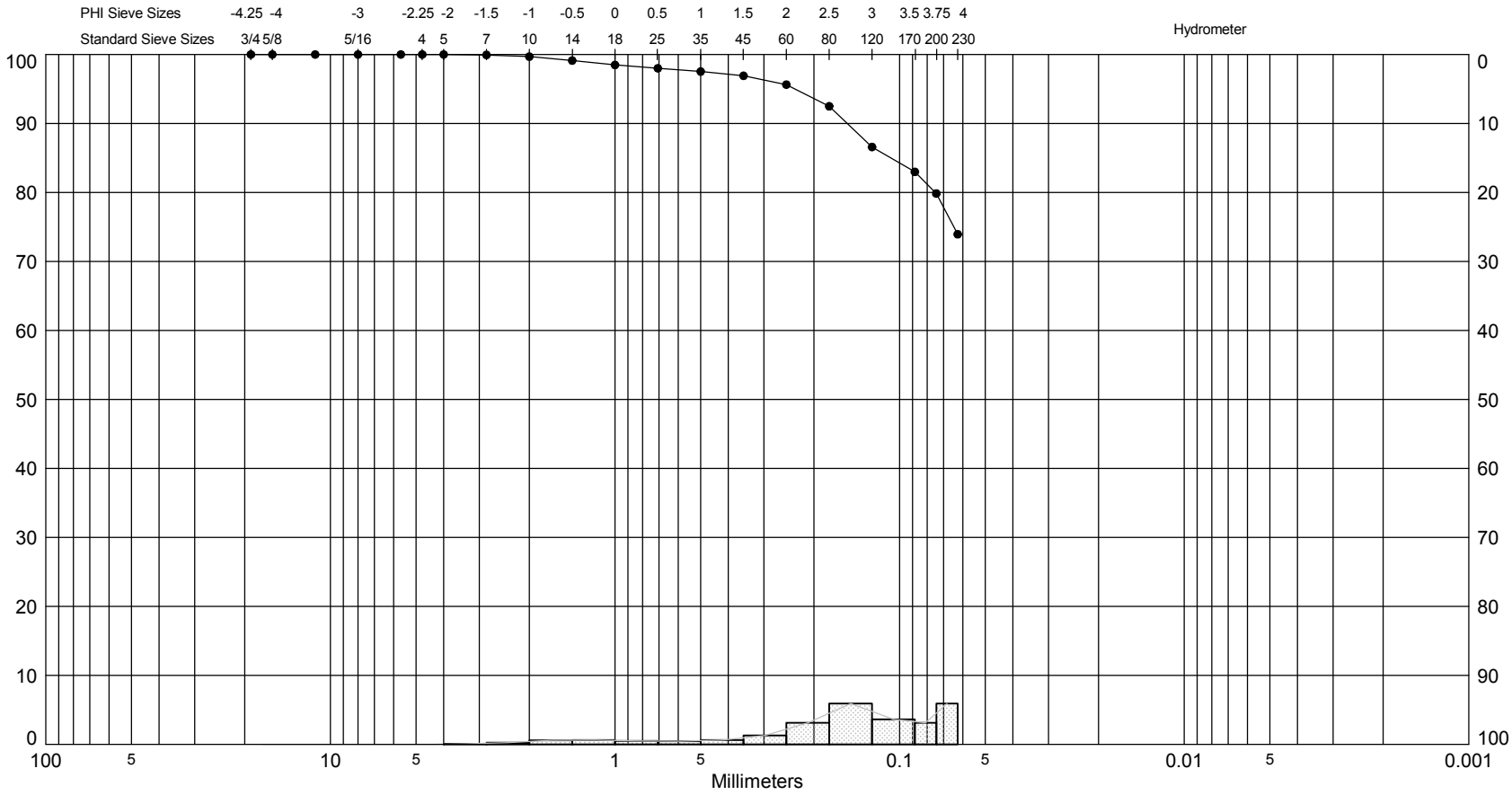
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O47 #3	—●—		ML-CL	#200 - 79.85 #230 - 73.94	3.40	7.30		2.75	-1.53	5.11	1.19

Comments:

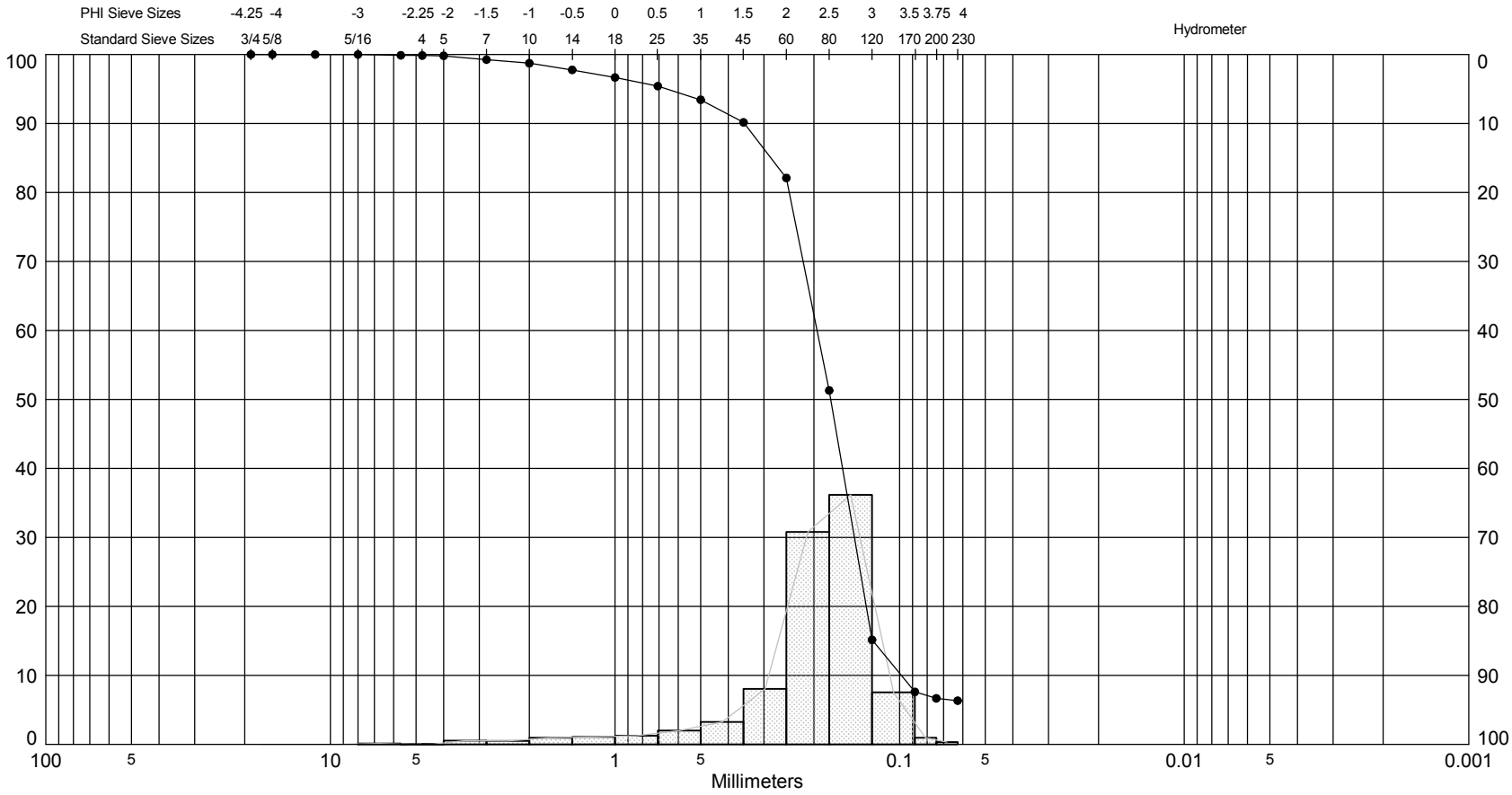
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O48 #1	—●—		SW-SM	#200 - 6.67 #230 - 6.33	0.70	7.50	2.52	2.29	-2.3	10.17	0.86

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

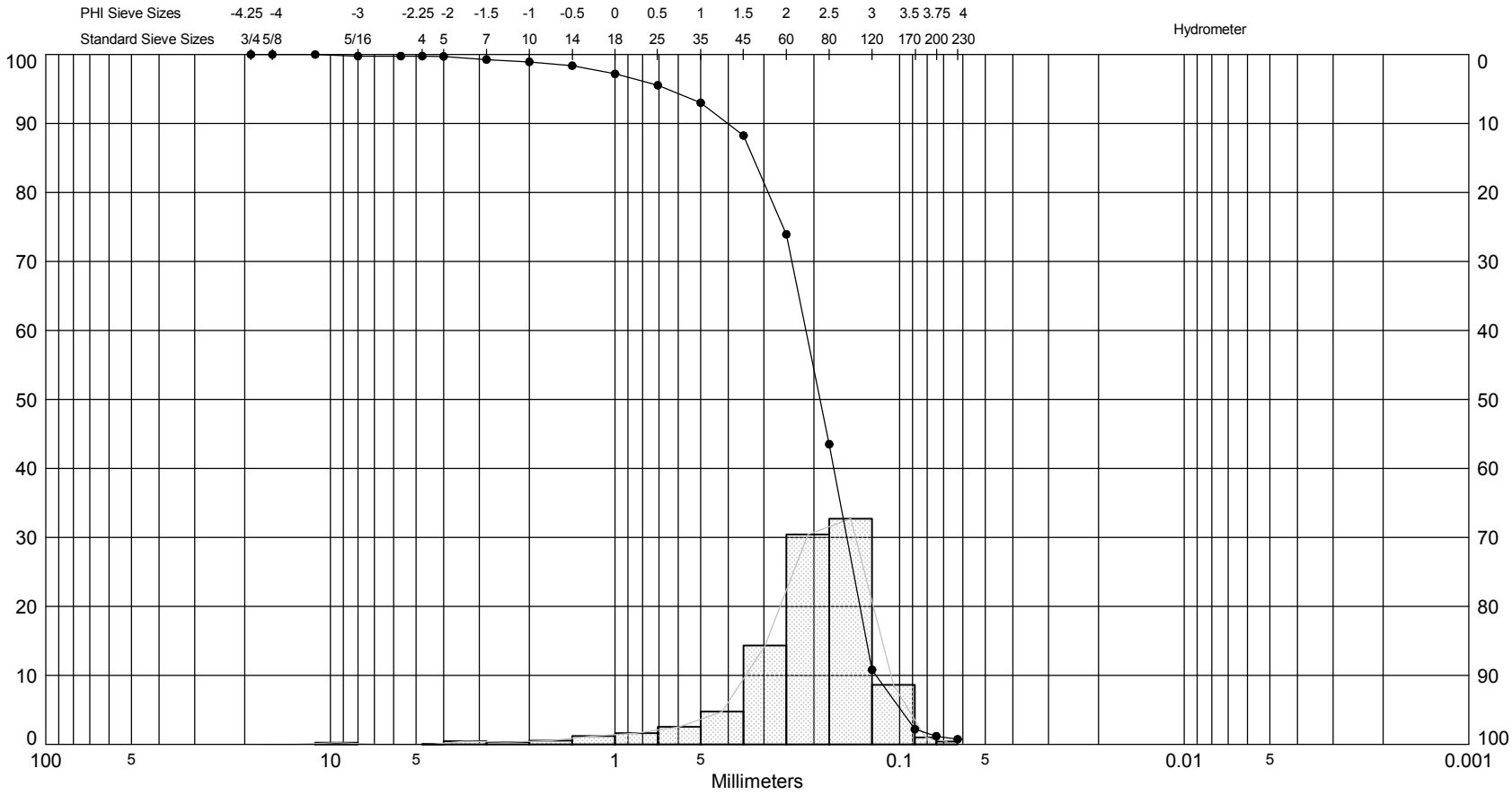
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O48 #2	—●—		SP	#200 - 1.18 #230 - 0.75	0.90	11.00	2.39	2.24	-2.08	10.37	0.85

Comments:

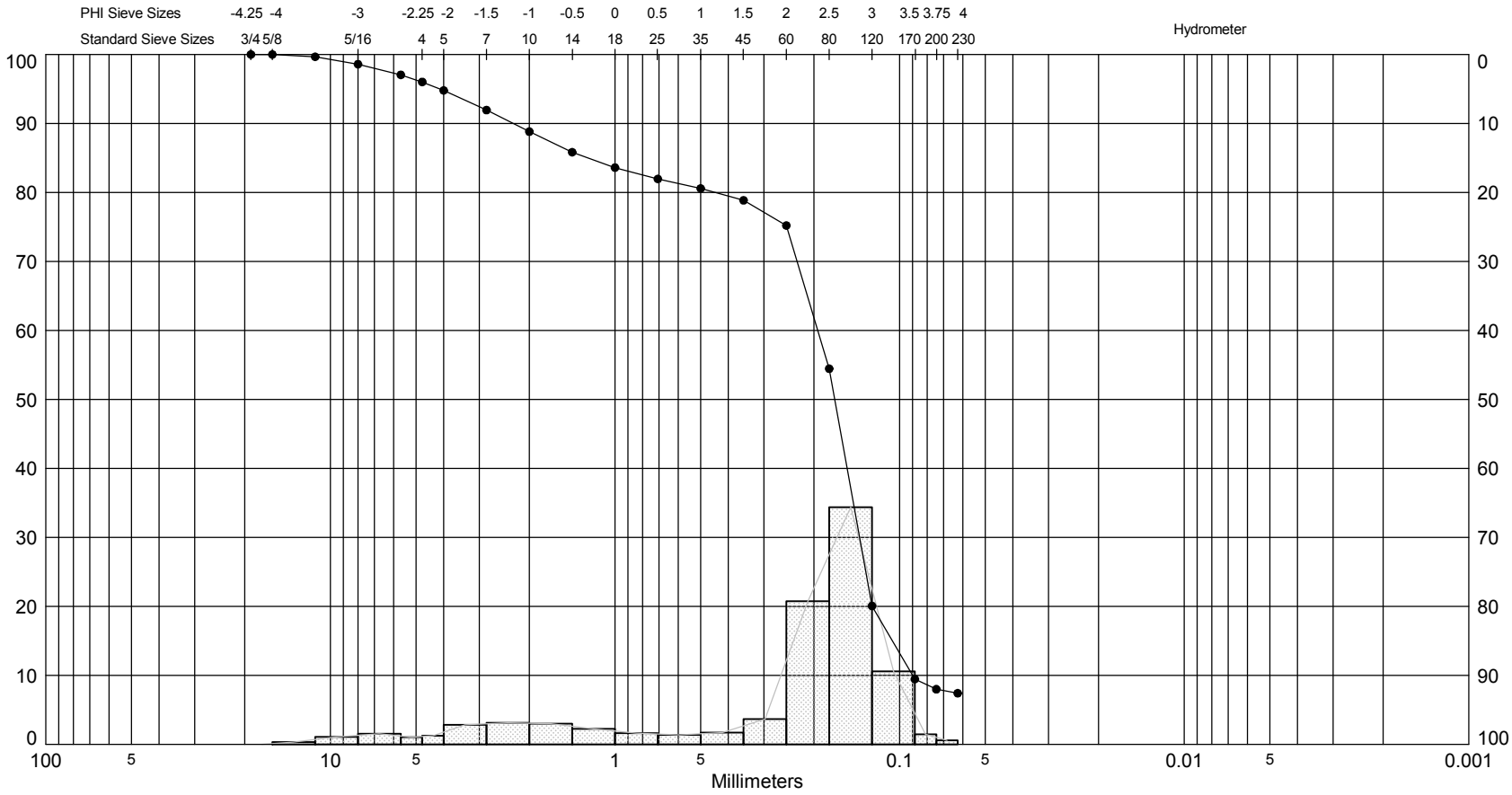
Depths and elevations based on measured values

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Fax (321) 751-2343

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O48 #3	—●—		SW-SM	#200 - 7.99 #230 - 7.41	1.50	21.80	2.56	1.81	-1.54	4.17	1.71

Comments:

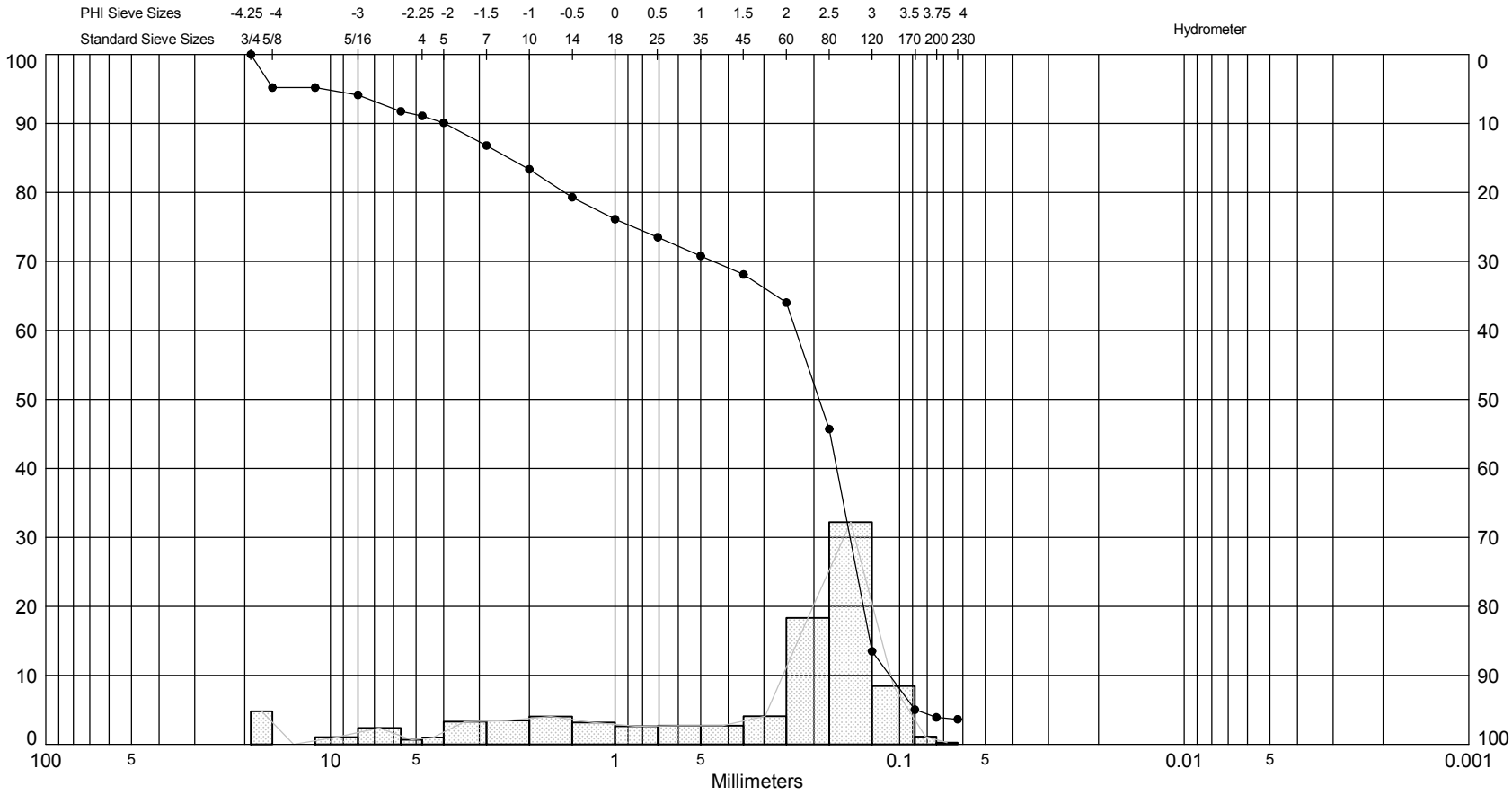
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O49 #1	—●—		SW	#200 - 3.91 #230 - 3.64	1.10	11.30	2.38	1.33	-1.26	3.4	2.11

Comments:

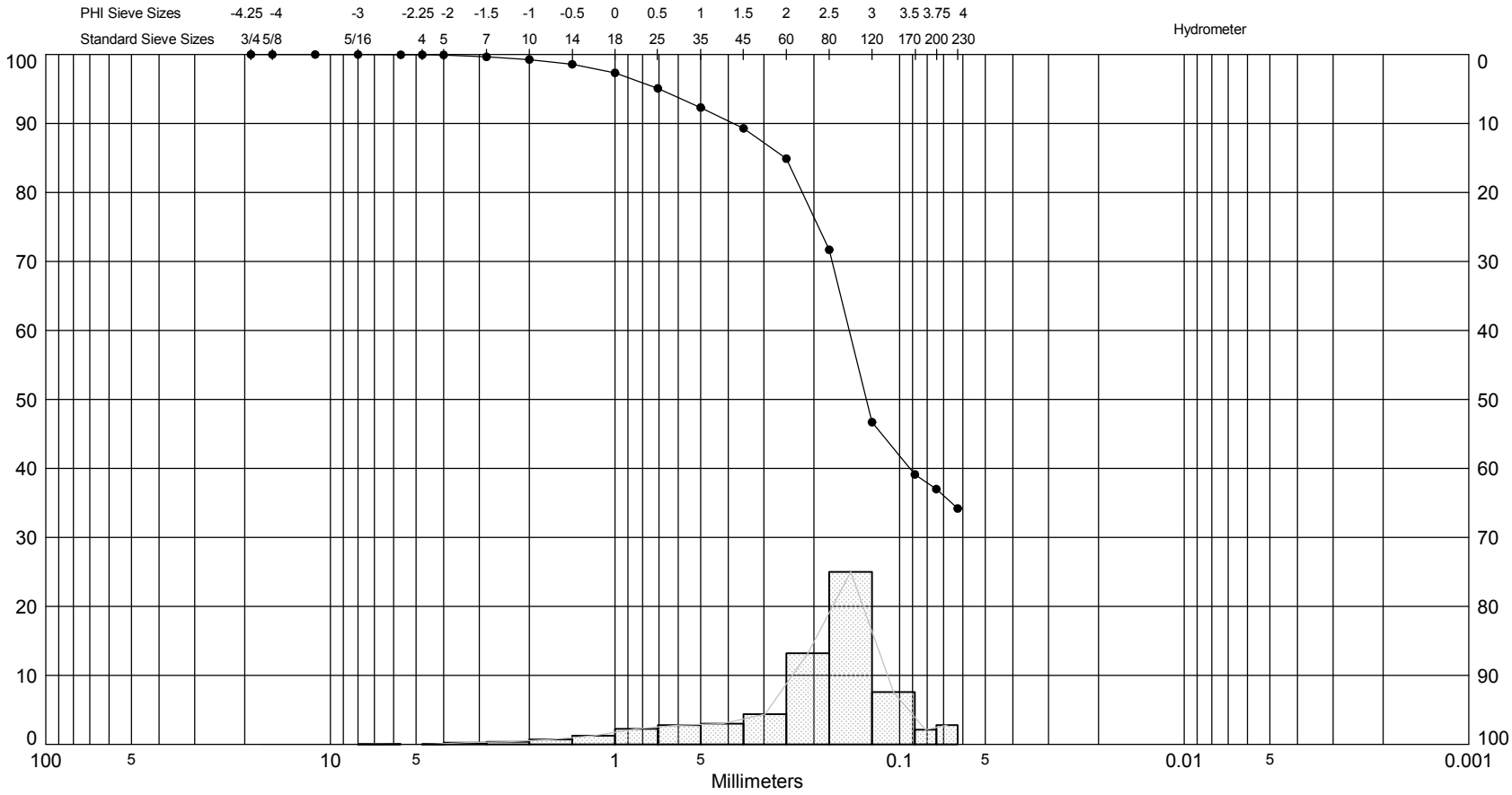
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O49 #2	—●—		SM	#200 - 37.00 #230 - 34.19	2.70	22.70	2.93	2.34	-1.42	5.39	1.02

Comments:

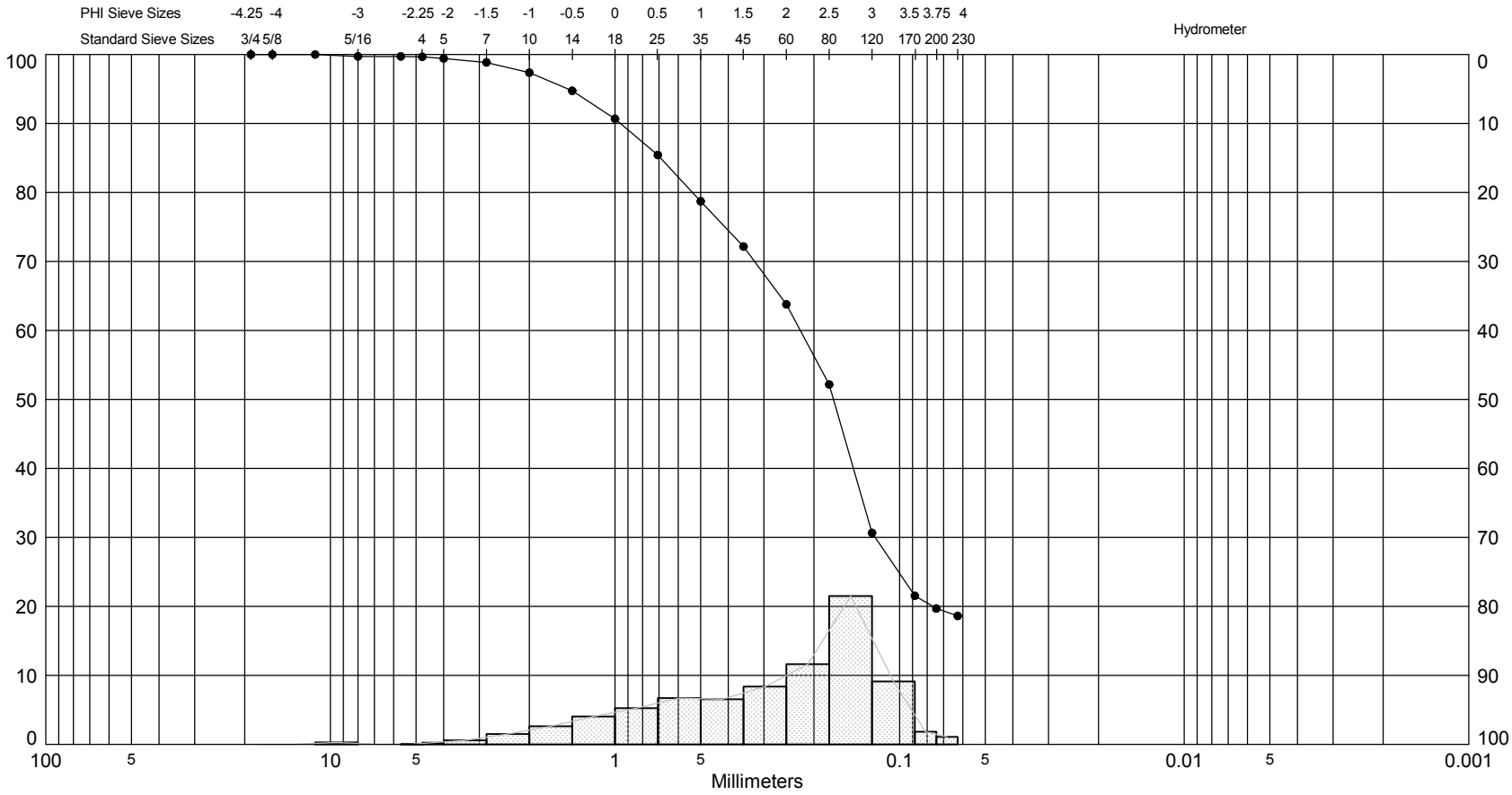
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O49 #3	—●—		SM	#200 - 19.69 #230 - 18.62	2.10	34.60	2.55	1.81	-0.9	3.31	1.31

Comments:

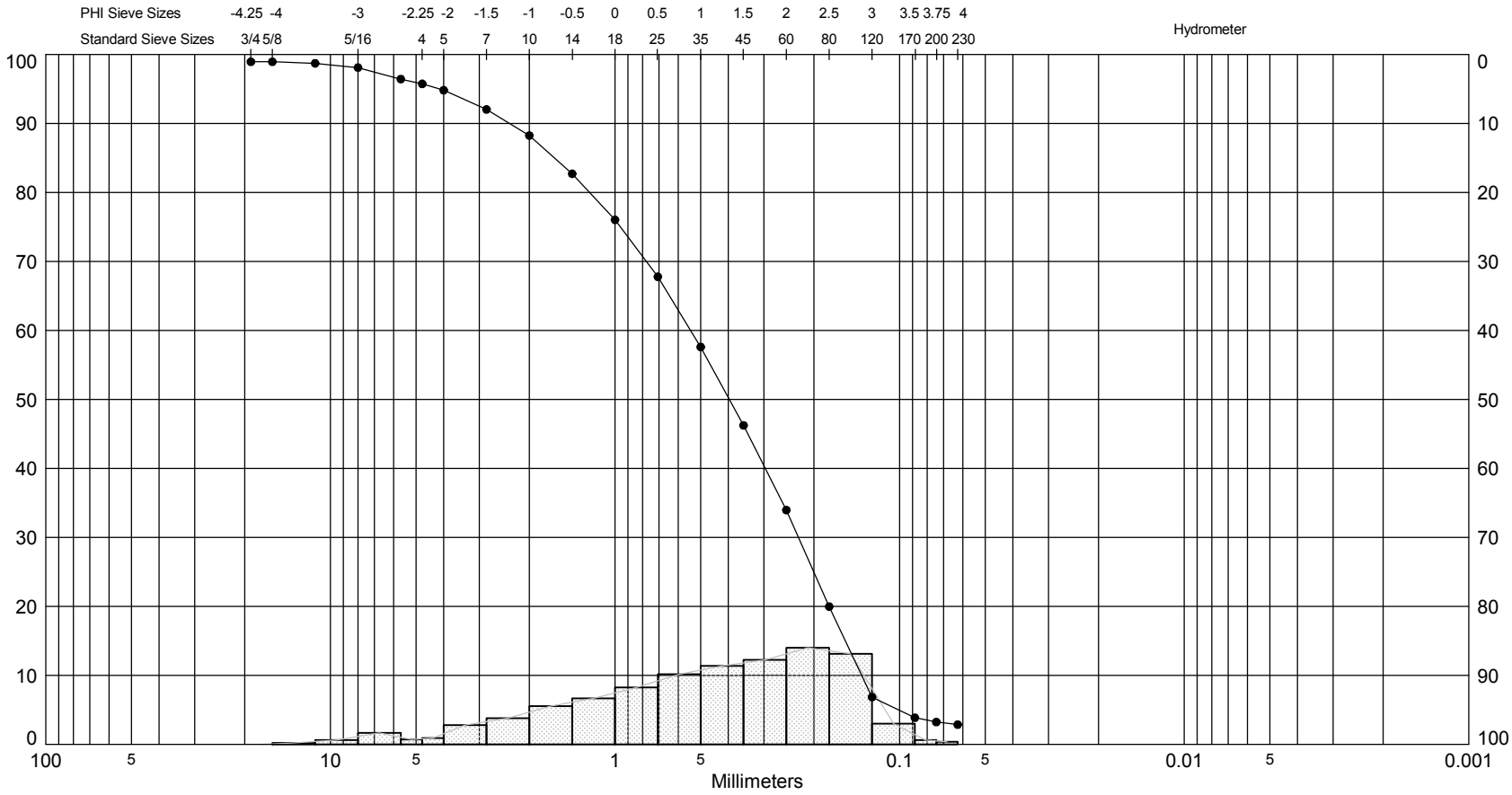
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O49 #4	—●—		SM	#200 - 3.23 #230 - 2.86	1.80	49.80	1.33	0.98	-0.57	2.82	1.51

Comments:

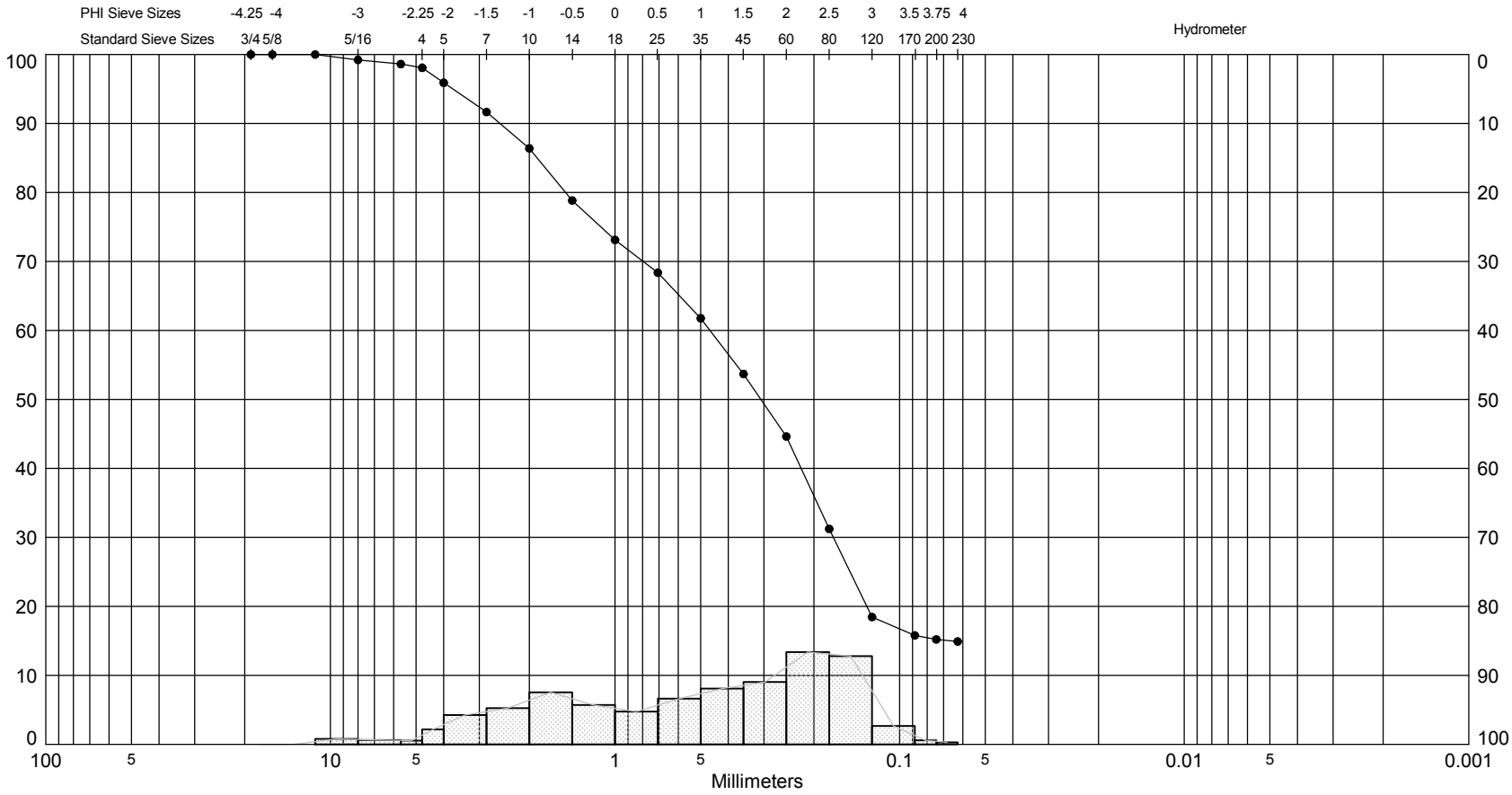
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O49 #5	—●—		SM	#200 - 15.21 #230 - 14.91	2.30	40.70	1.7	0.92	-0.47	2.14	1.64

Comments:

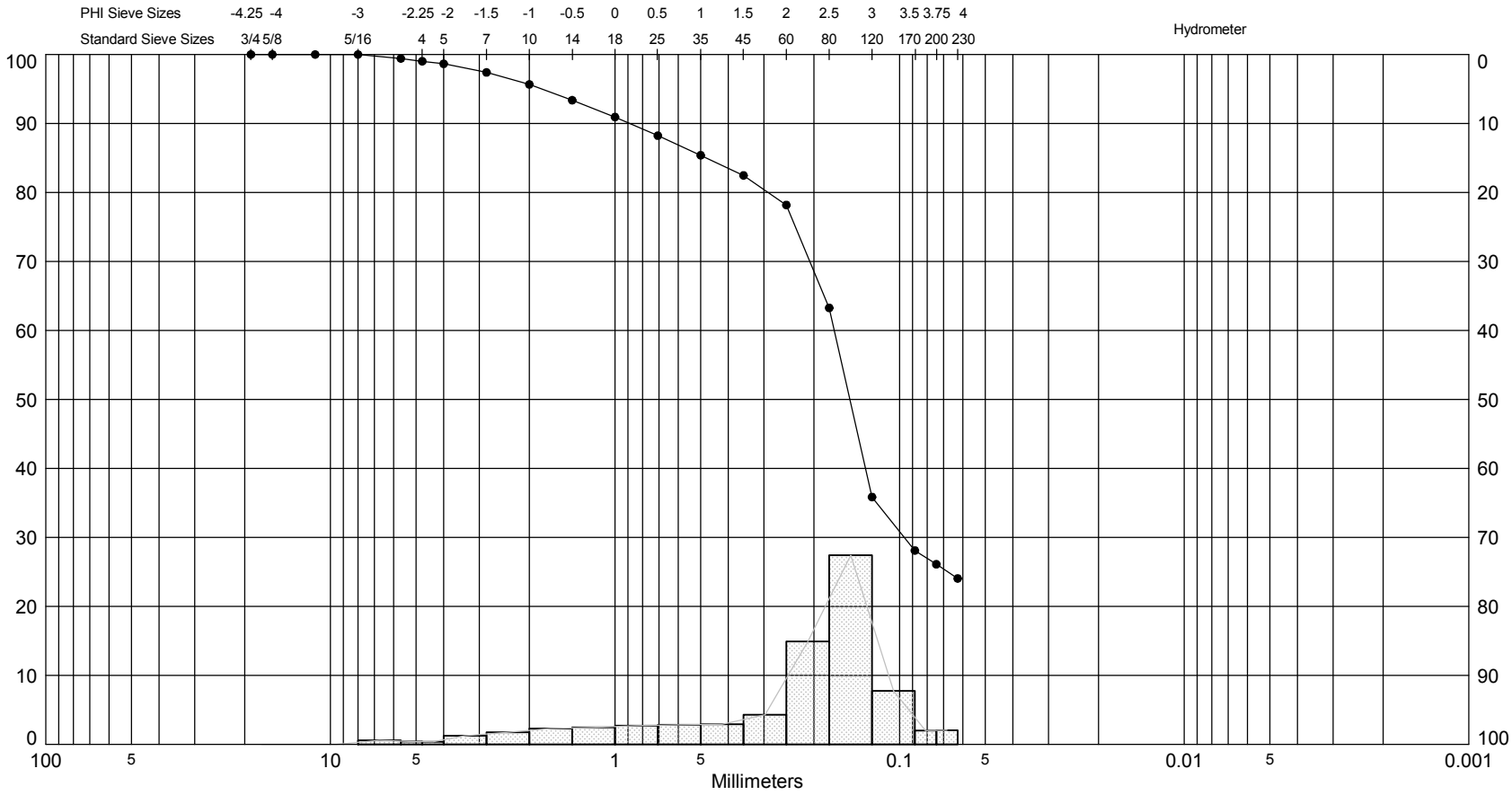
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O50 #1	—●—		SM	#200 - 26.11 #230 - 24.05	2.60	16.40	2.74	2.02	-1.46	4.51	1.4

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

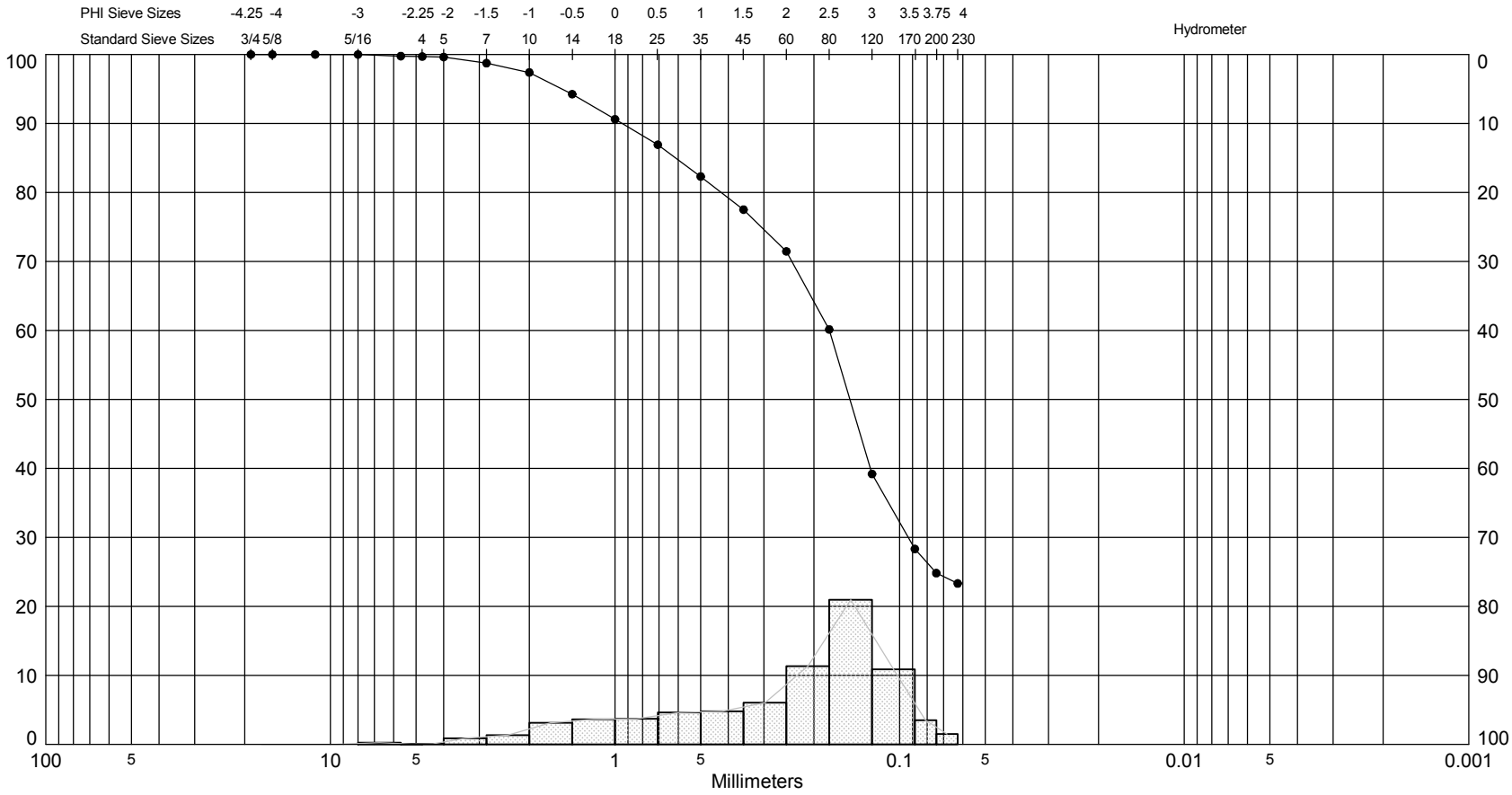
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O50 #2	—●—		SM	#200 - 24.82 #230 - 23.32	3.60	26.90	2.74	1.96	-1.01	3.24	1.36

Comments:

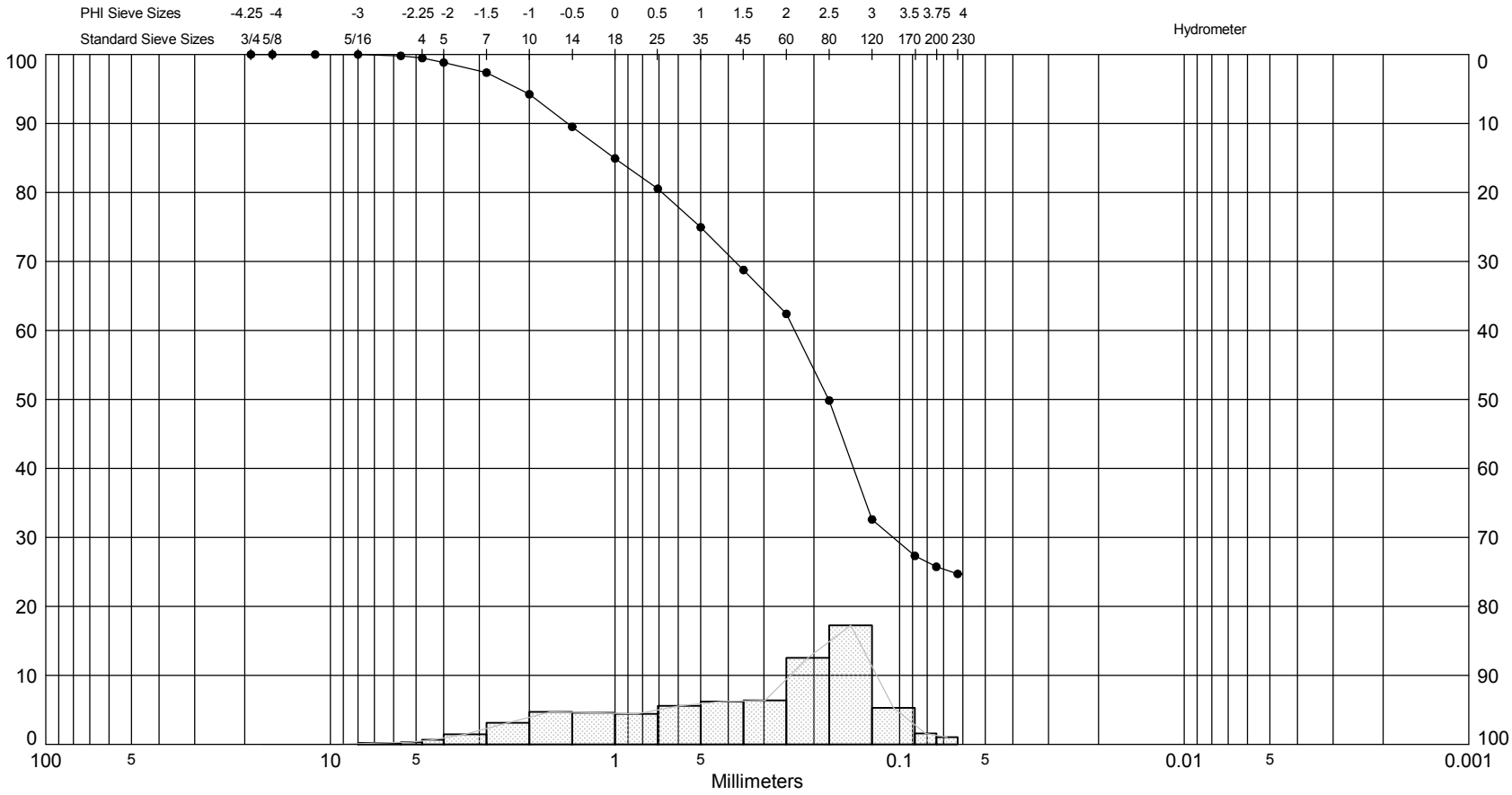
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O50 #3	—●—		SM	#200 - 25.74 #230 - 24.71	1.30	23.80	2.49	1.5	-0.69	2.48	1.49

Comments:

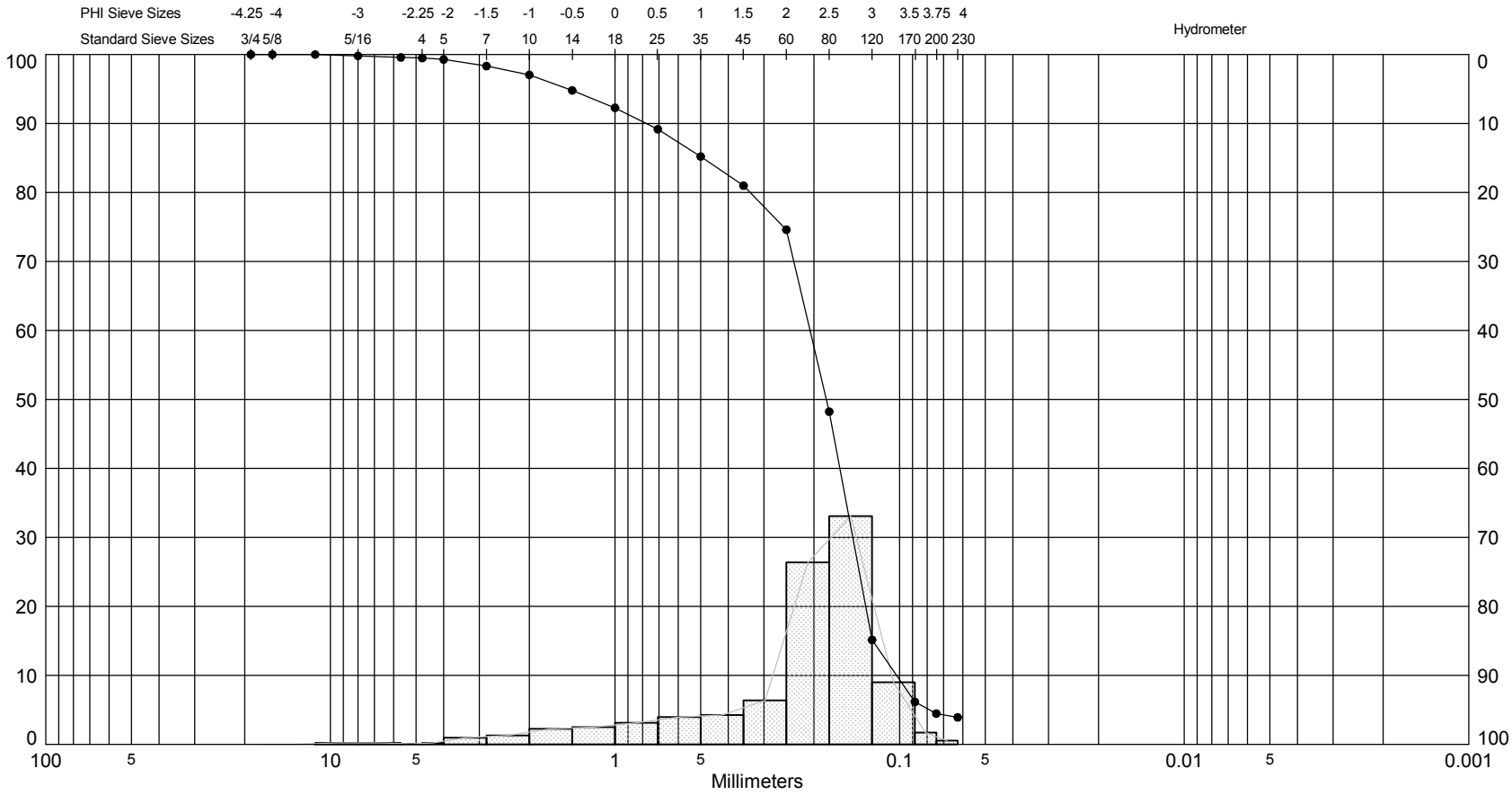
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O50 #4	—●—		SW	#200 - 4.46 #230 - 3.91	2.30	27.10	2.47	2.09	-1.72	5.94	1.17

Comments:

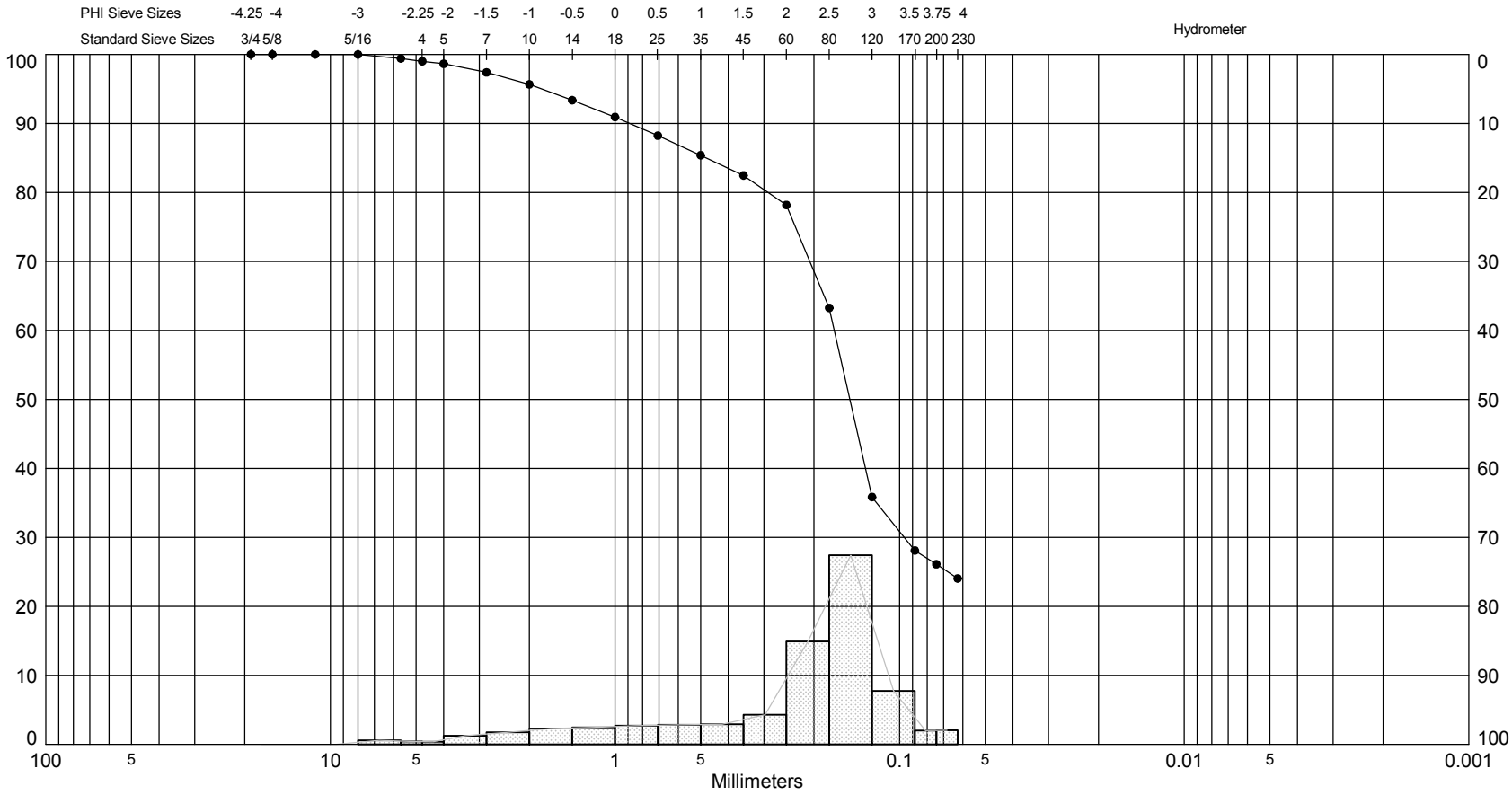
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O50 #1	—●—		SM	#200 - 26.11 #230 - 24.05	2.60	16.40	2.74	2.02	-1.46	4.51	1.4

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

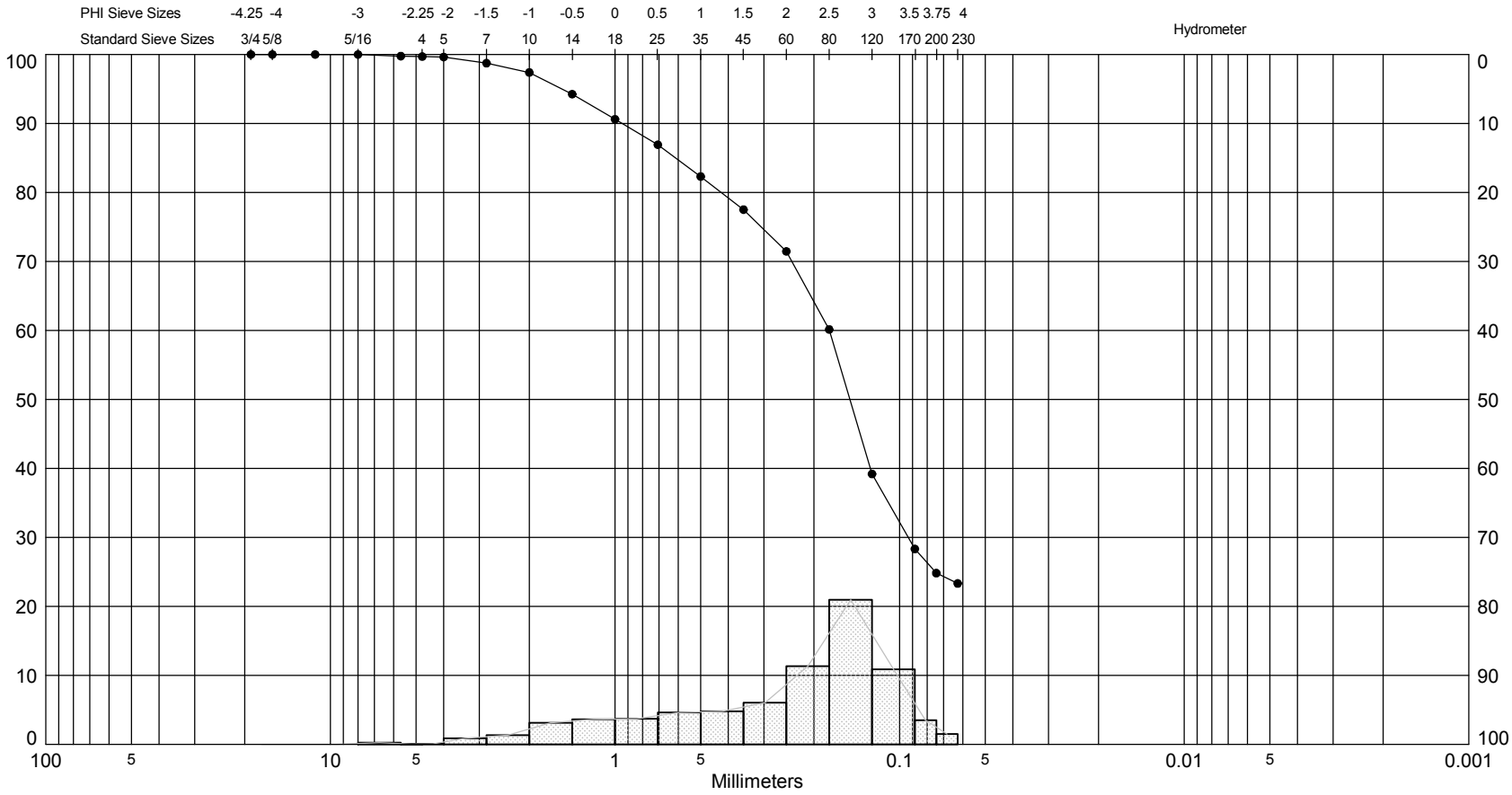
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O50 #2	—●—		SM	#200 - 24.82 #230 - 23.32	3.60	26.90	2.74	1.96	-1.01	3.24	1.36

Comments:

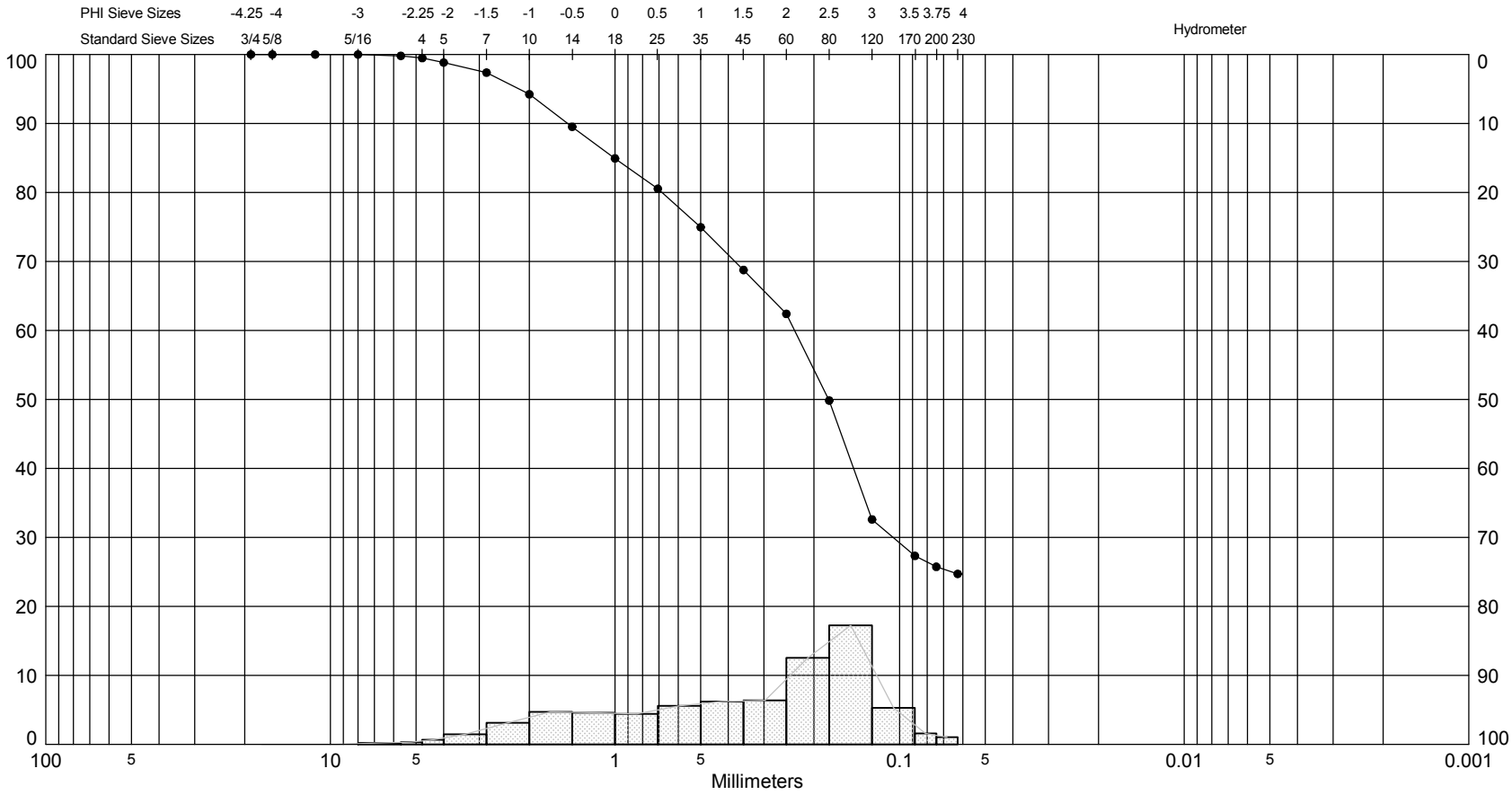
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O50 #3	—●—		SM	#200 - 25.74 #230 - 24.71	1.30	23.80	2.49	1.5	-0.69	2.48	1.49

Comments:

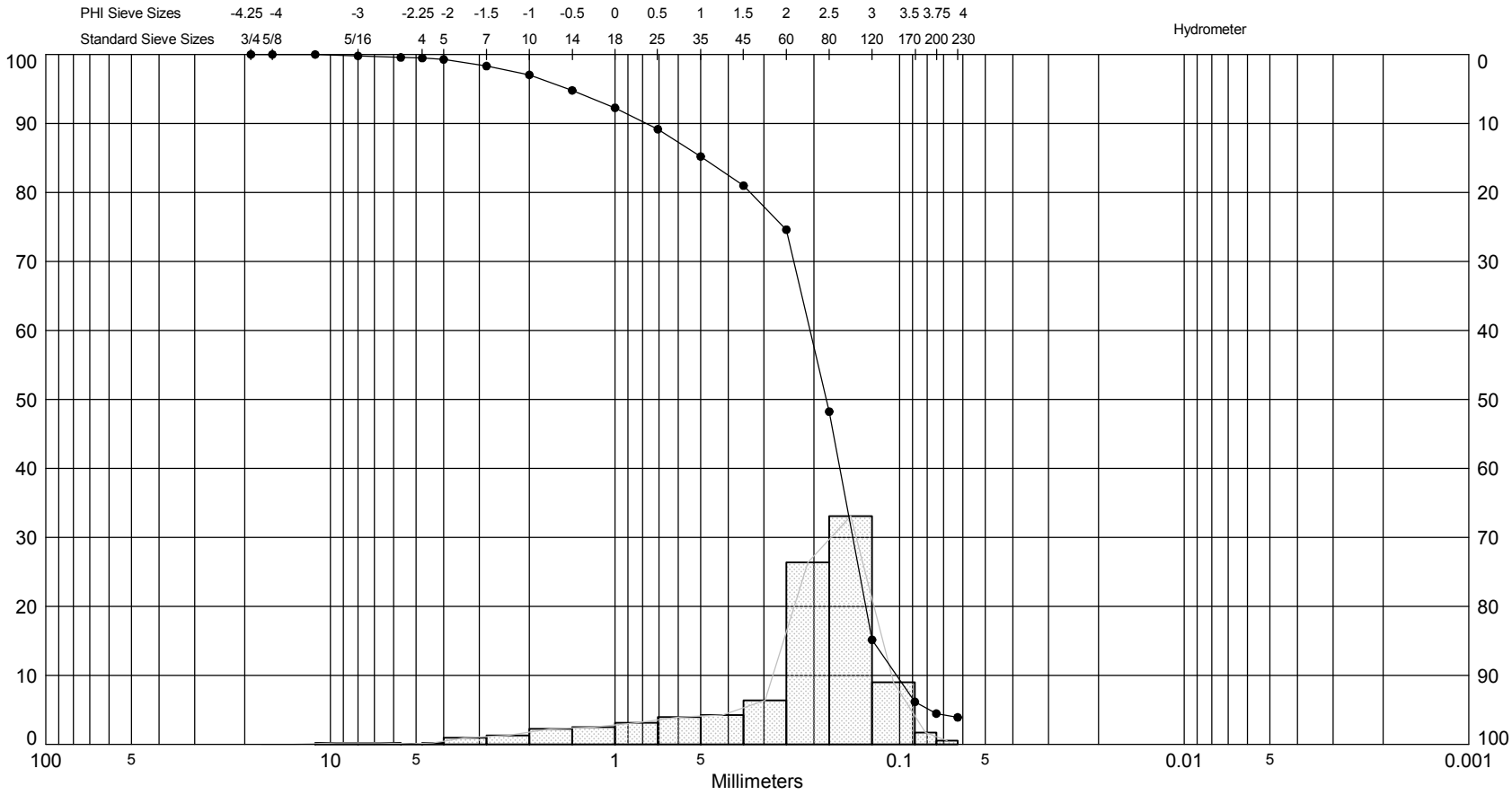
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O50 #4	—●—		SW	#200 - 4.46 #230 - 3.91	2.30	27.10	2.47	2.09	-1.72	5.94	1.17

Comments:

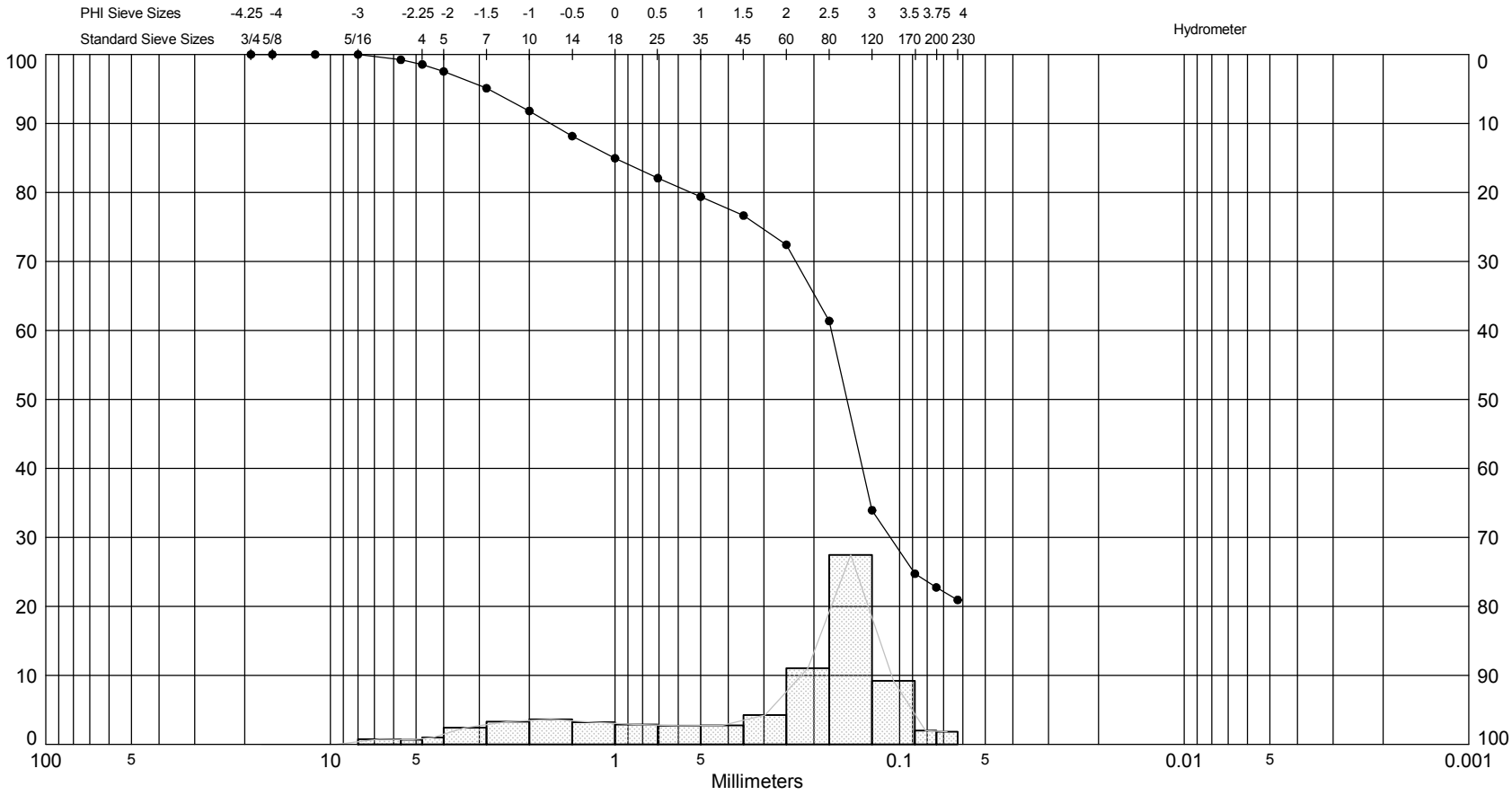
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O51 #1	—●—		SM	#200 - 22.75 #230 - 20.93	2.00	28.90	2.71	1.77	-1.11	3.05	1.64

Comments:

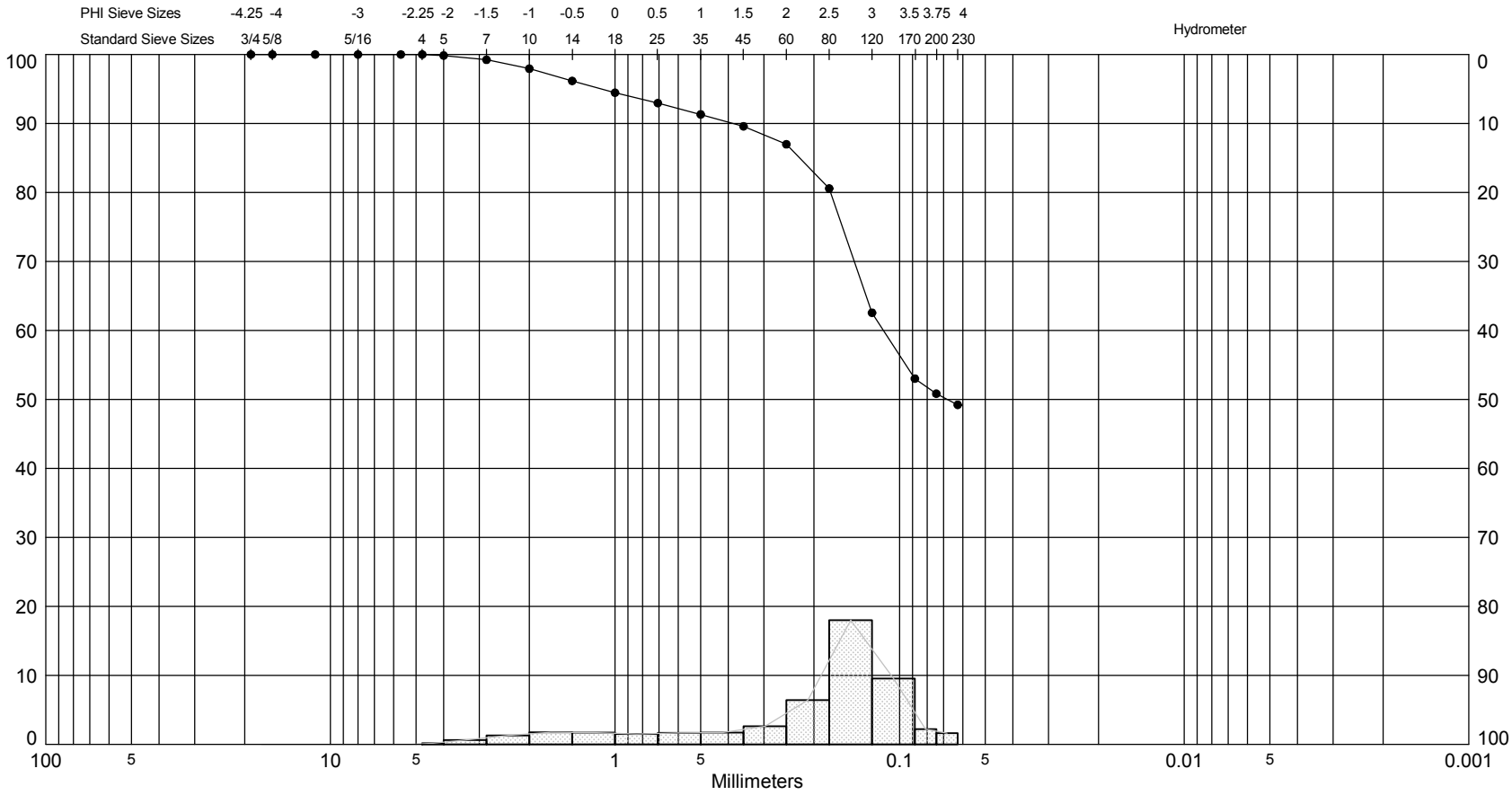
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O51 #2	—●—		SM	#200 - 50.83 #230 - 49.22	3.20	17.80	3.88	2.22	-1.42	4.17	1.33

Comments:

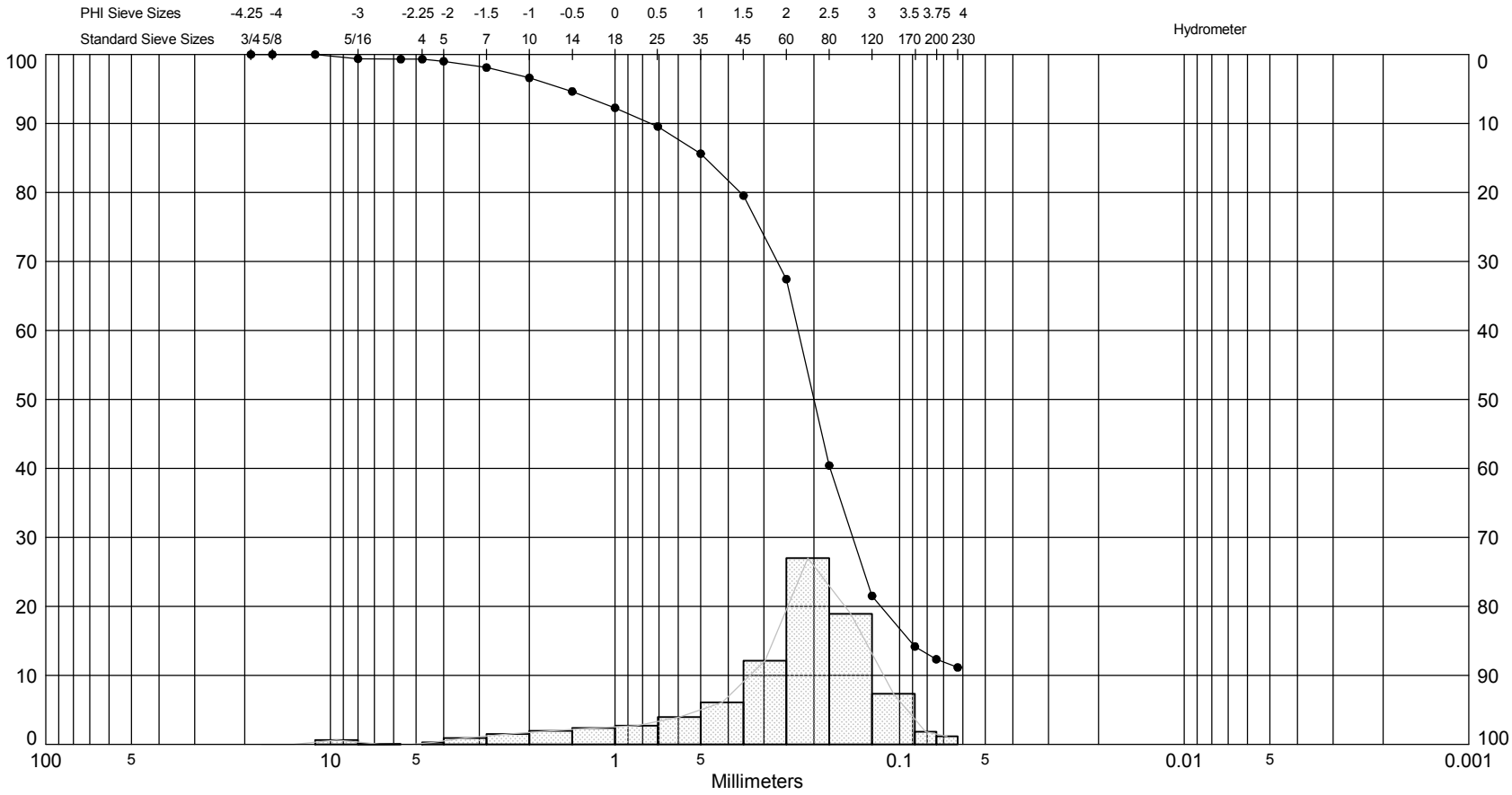
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O51 #3	—●—		SW-SM	#200 - 12.33 #230 - 11.15	1.80	16.10	2.32	1.94	-1.56	5.93	1.21

Comments:

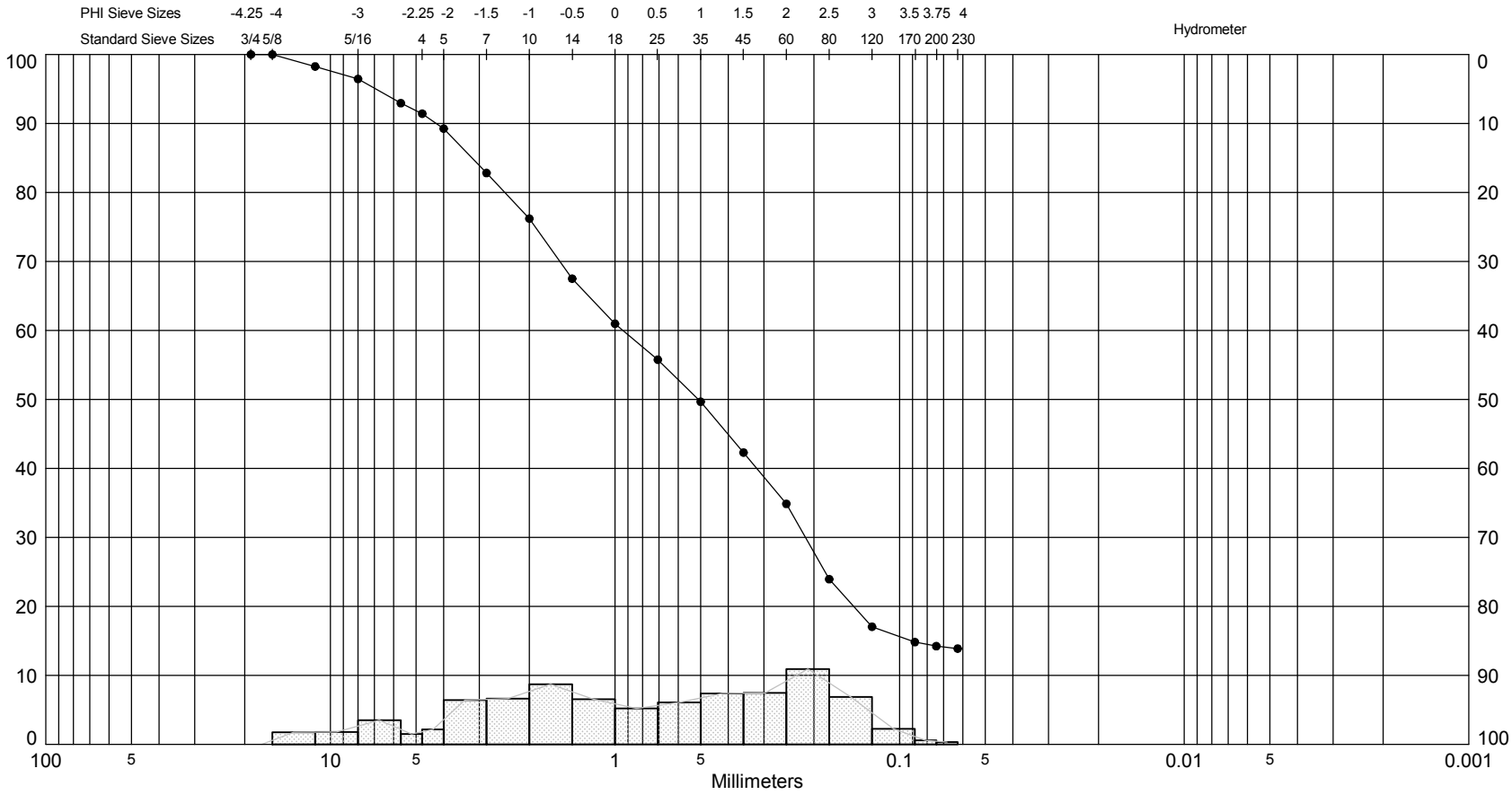
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O51 #4	—●—		SM	#200 - 14.23 #230 - 13.88	2.40	41.80	0.97	0.28	-0.23	2.03	1.86

Comments:

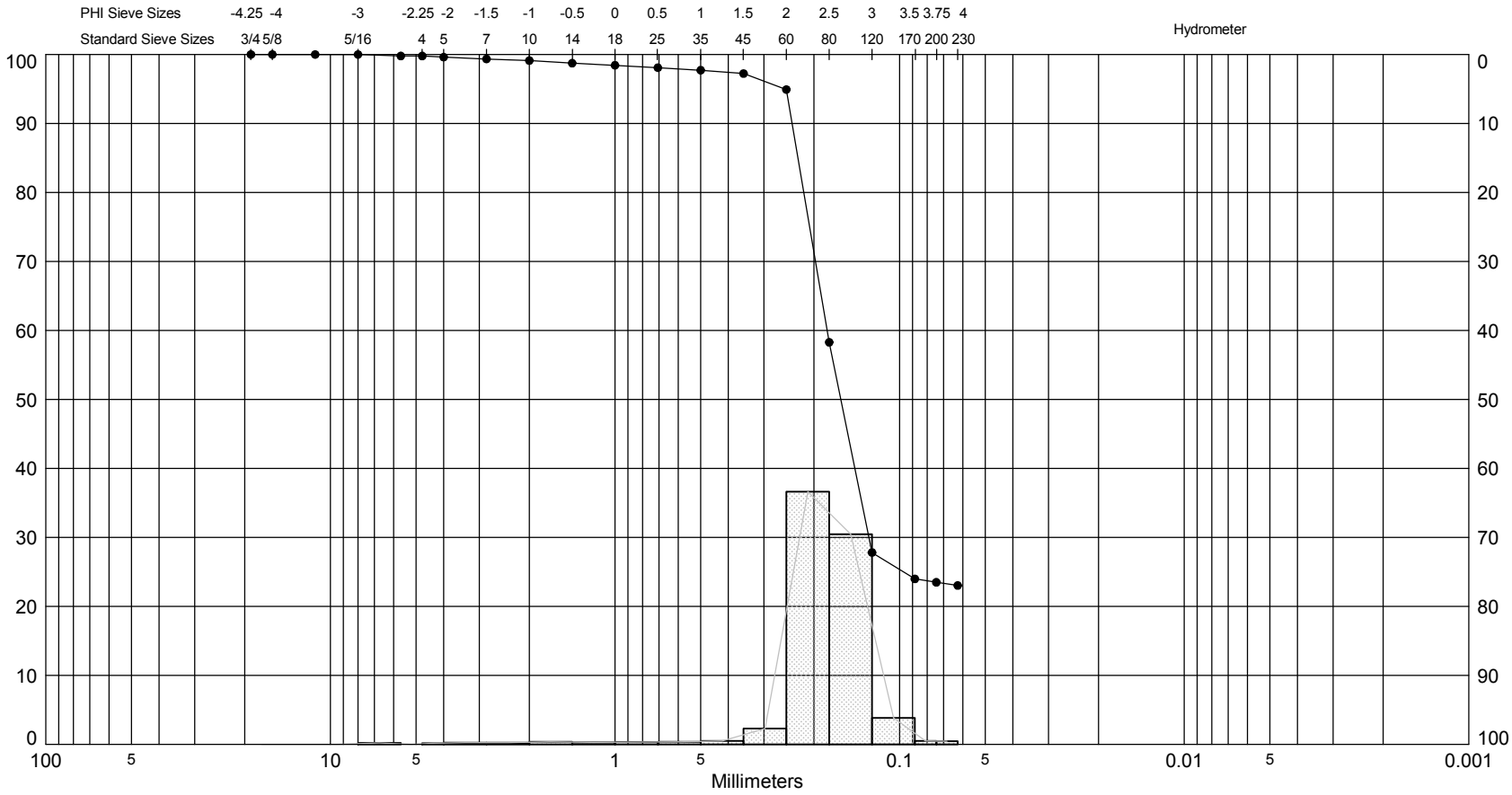
Depths and elevations based on measured values

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Fax (321) 751-2343

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O52 #1	—●—		SM	#200 - 23.49 #230 - 23.03	1.20	8.90	2.64	2.41	-3.82	24.56	0.69

Comments:

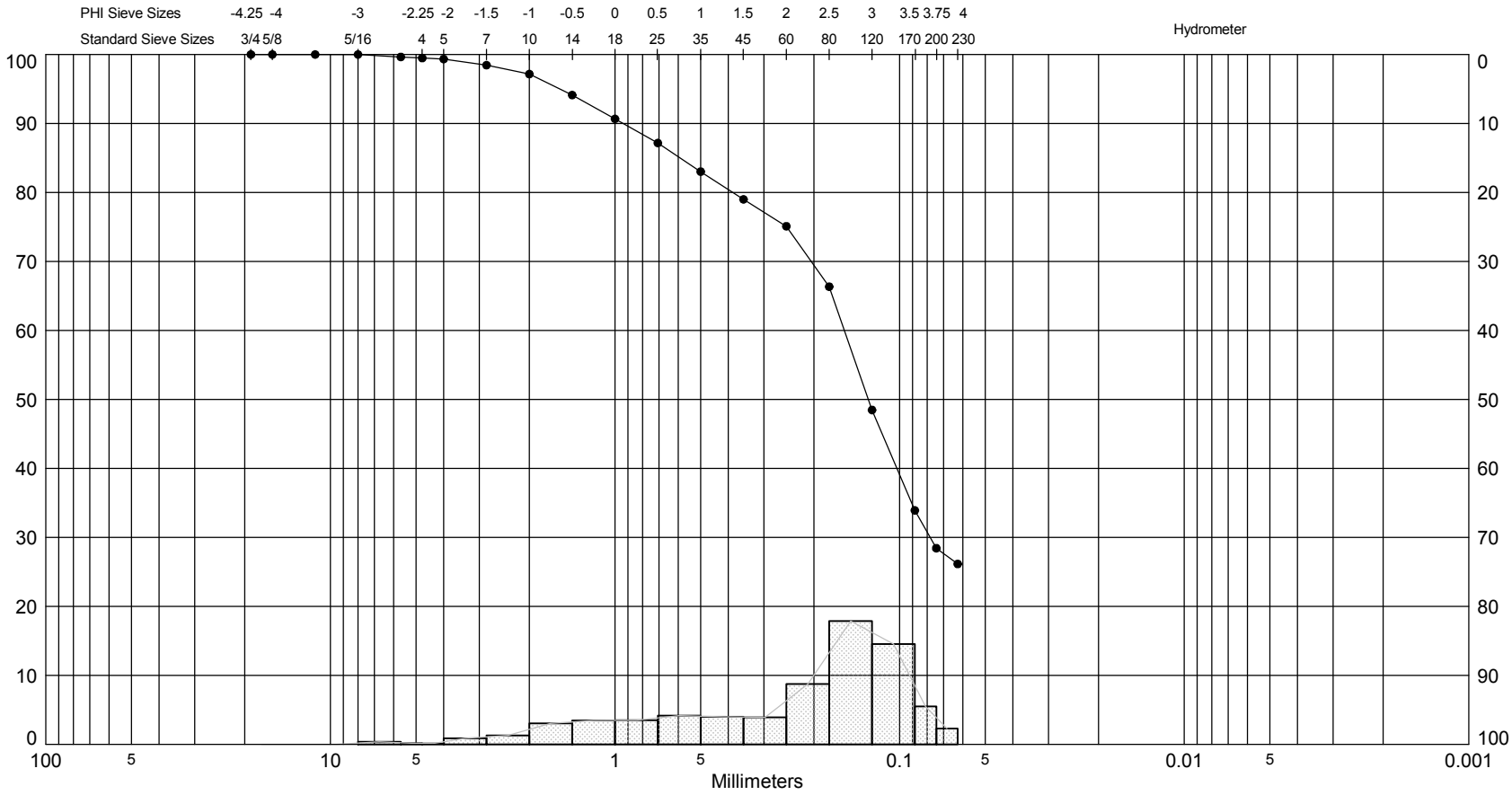
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O52 #2	—●—		SM	#200 - 28.43 #230 - 26.15	2.30	15.80	2.96	2.07	-1.07	3.3	1.45

Comments:

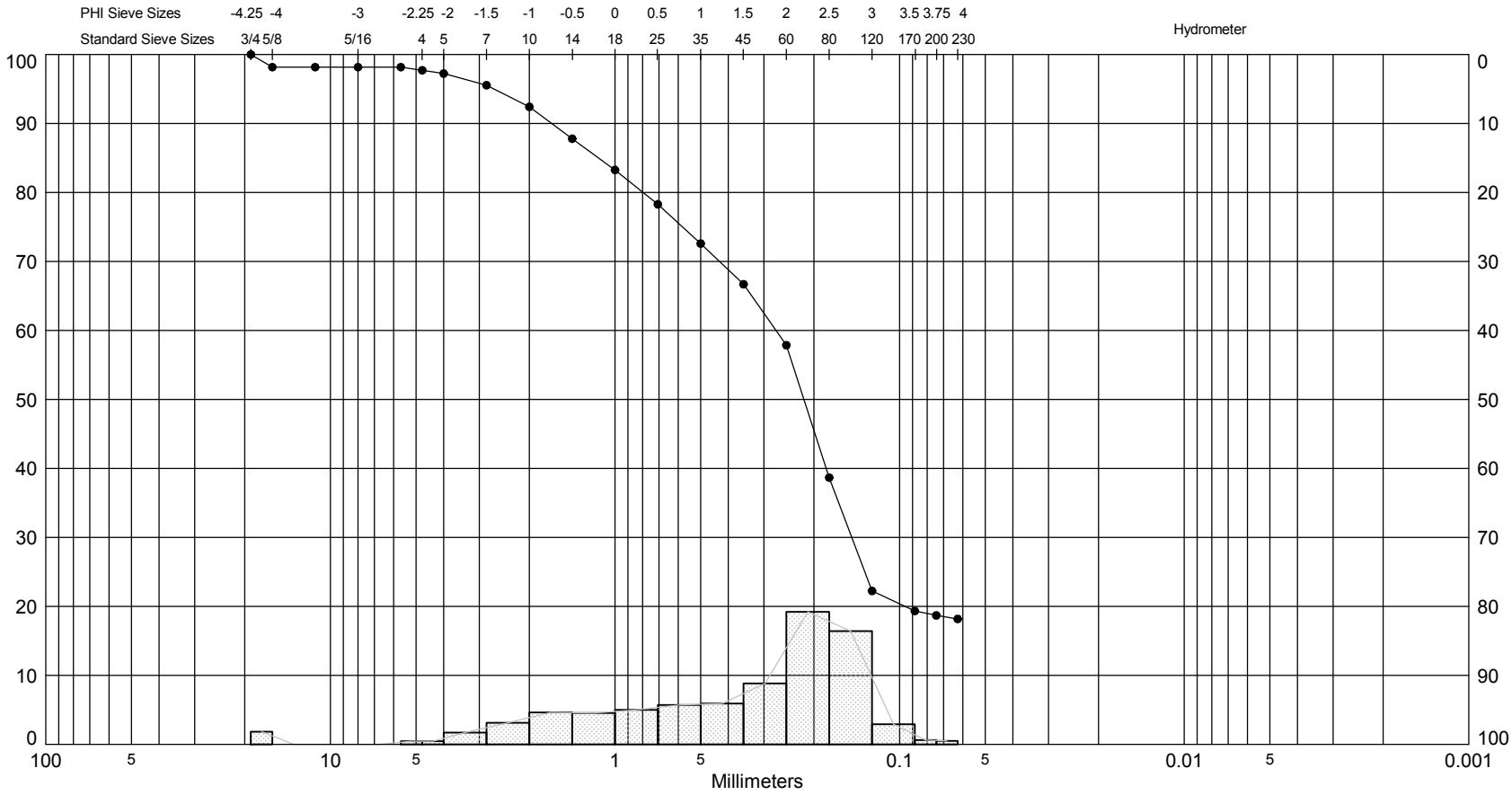
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O52 #3	—●—		SM	#200 - 18.69 #230 - 18.18	1.90	31.50	2.2	1.34	-1.23	4.34	1.6

Comments:

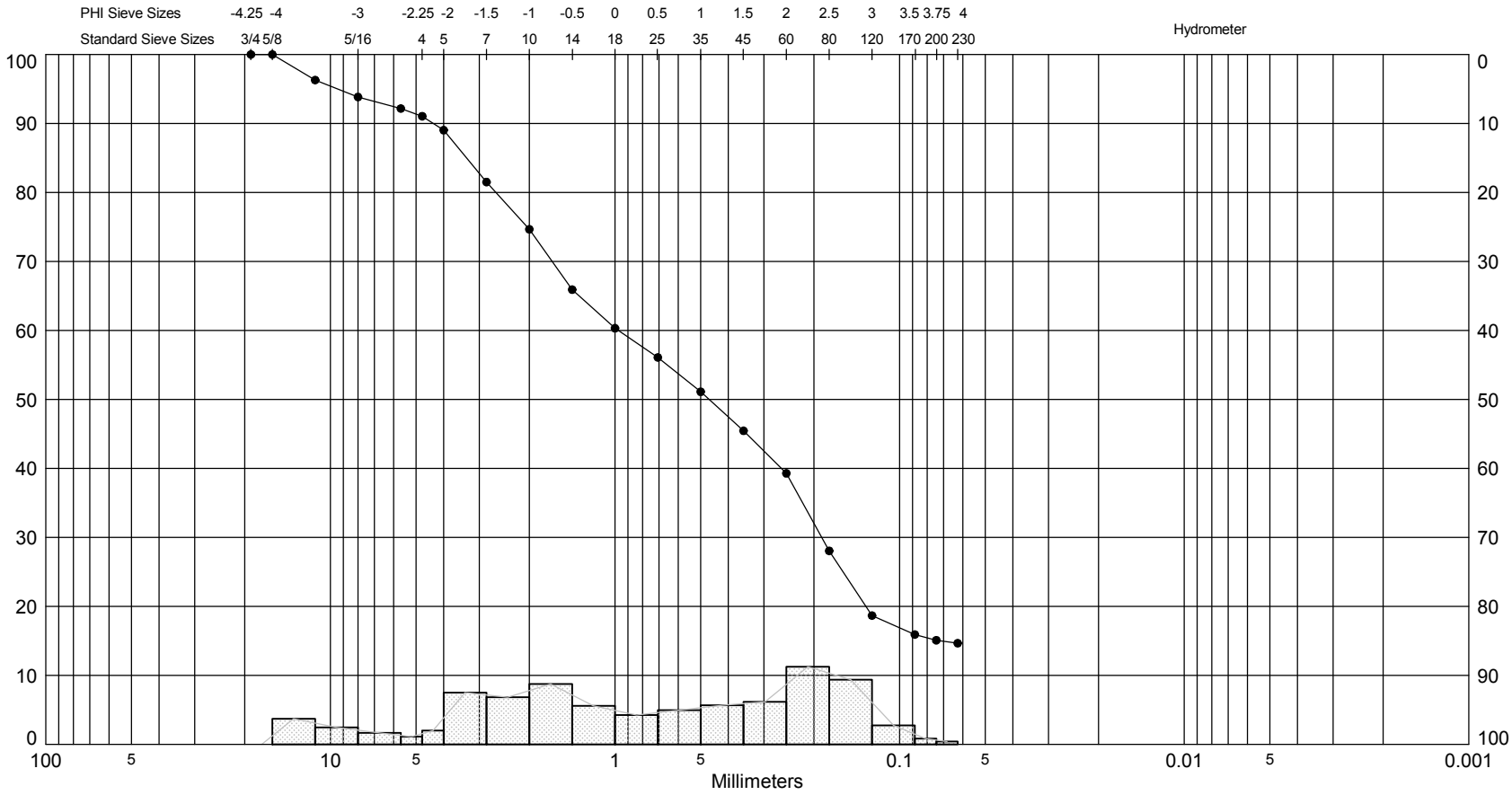
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O52 #4	—●—		SM	#200 - 15.09 #230 - 14.66	2.30	61.50	1.1	0.28	-0.25	1.99	2.01

Comments:

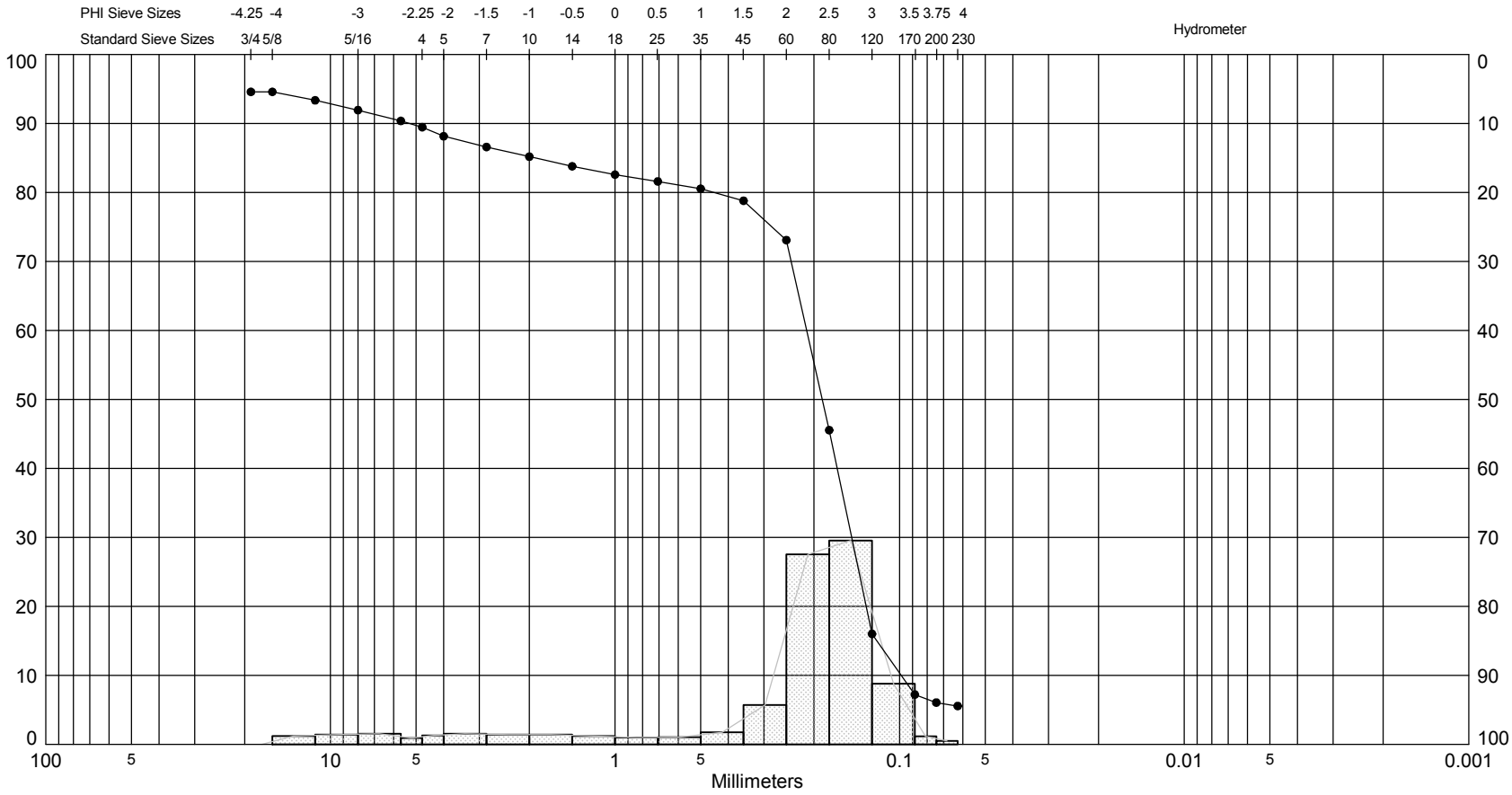
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O53 #1	—●—		SW-SM	#200 - 6.06 #230 - 5.56	1.30	15.30	2.42	1.52	-1.27	4.35	1.66

Comments:

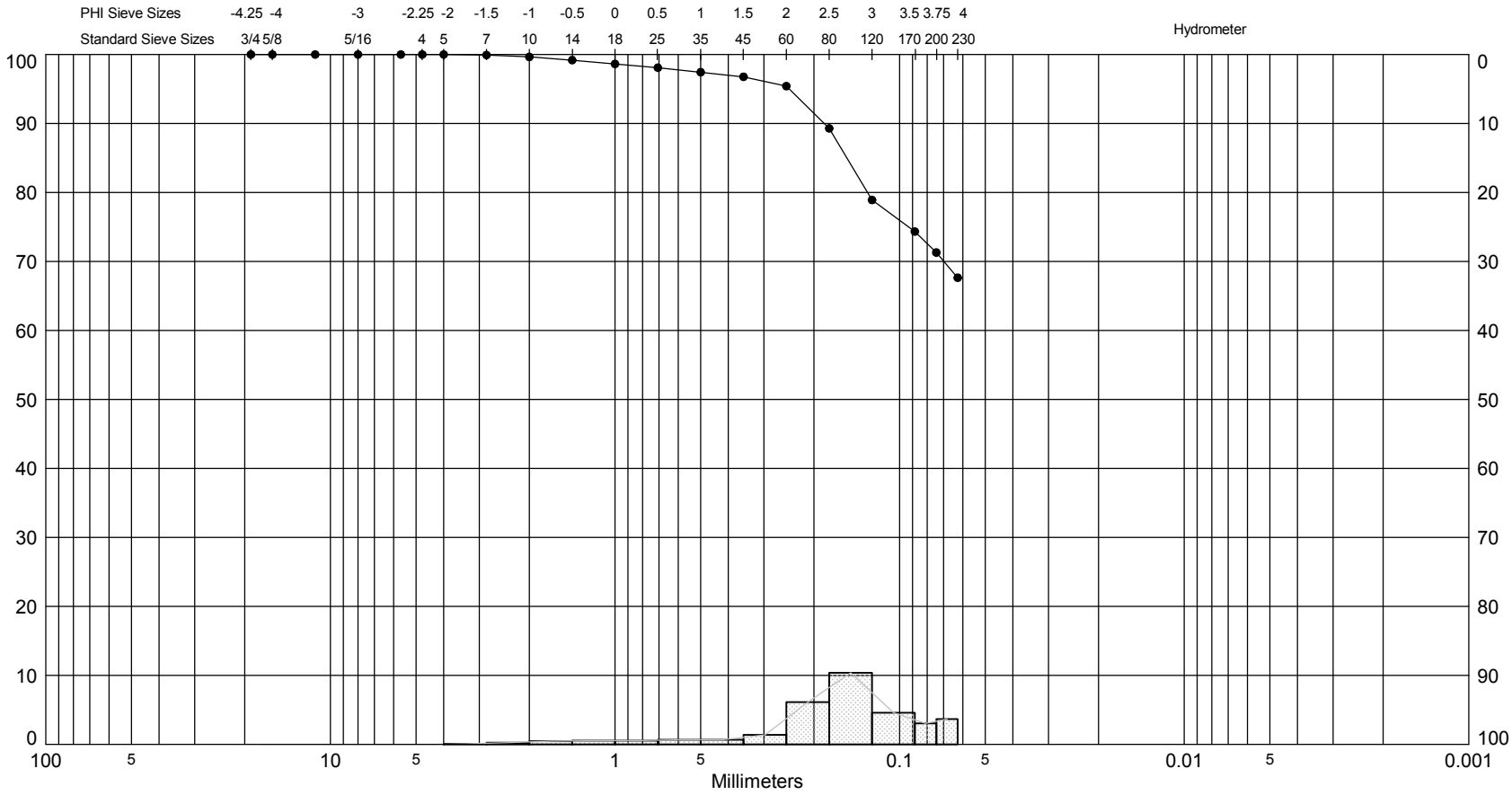
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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O53 #2	—●—		ML-CL	#200 - 71.30 #230 - 67.64	2.80	8.80		2.63	-1.6	6.23	1.03

Comments:

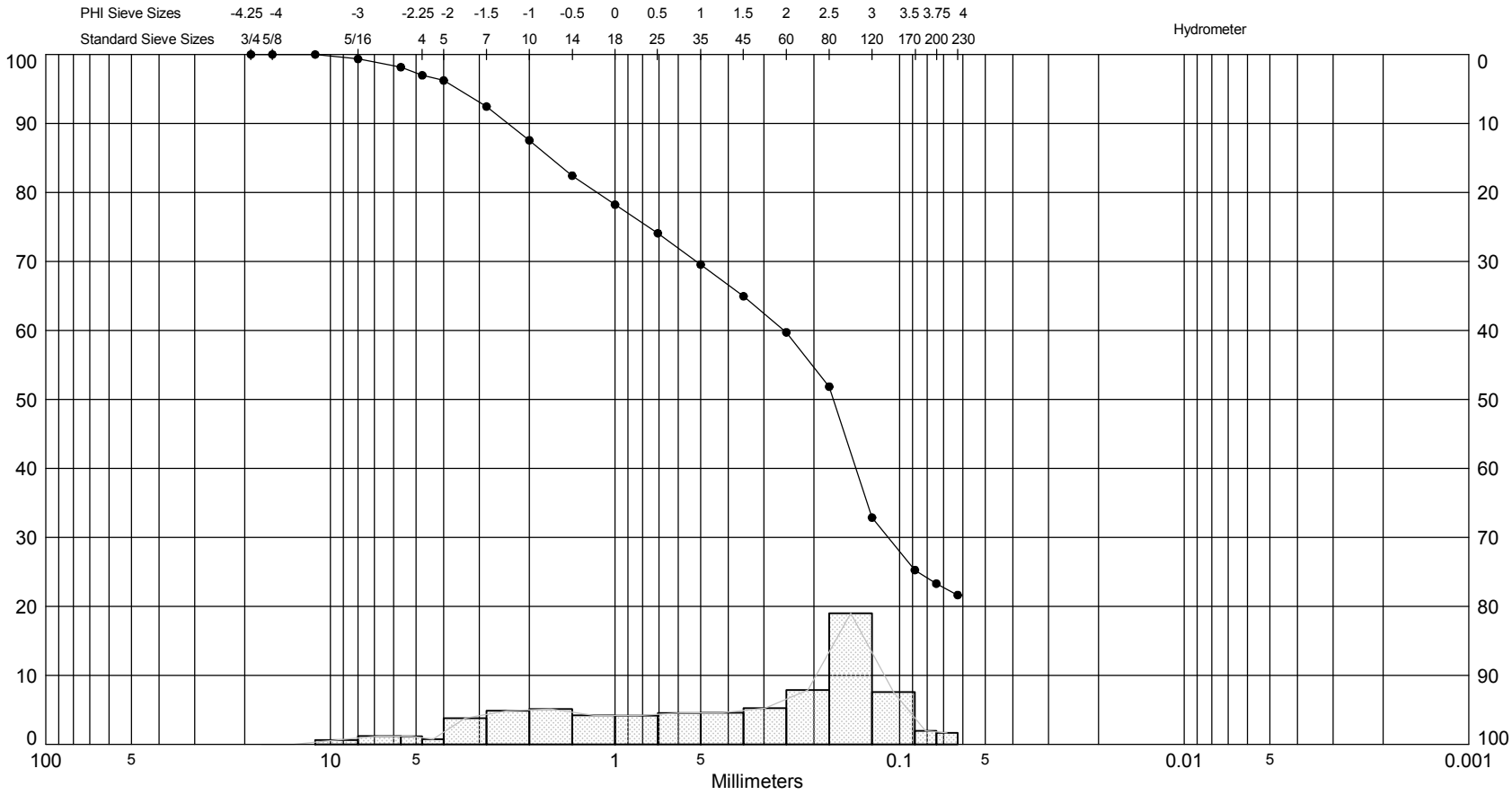
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O53 #3	—●—		SM	#200 - 23.30 #230 - 21.64	2.10	31.80	2.55	1.28	-0.61	2.16	1.82

Comments:

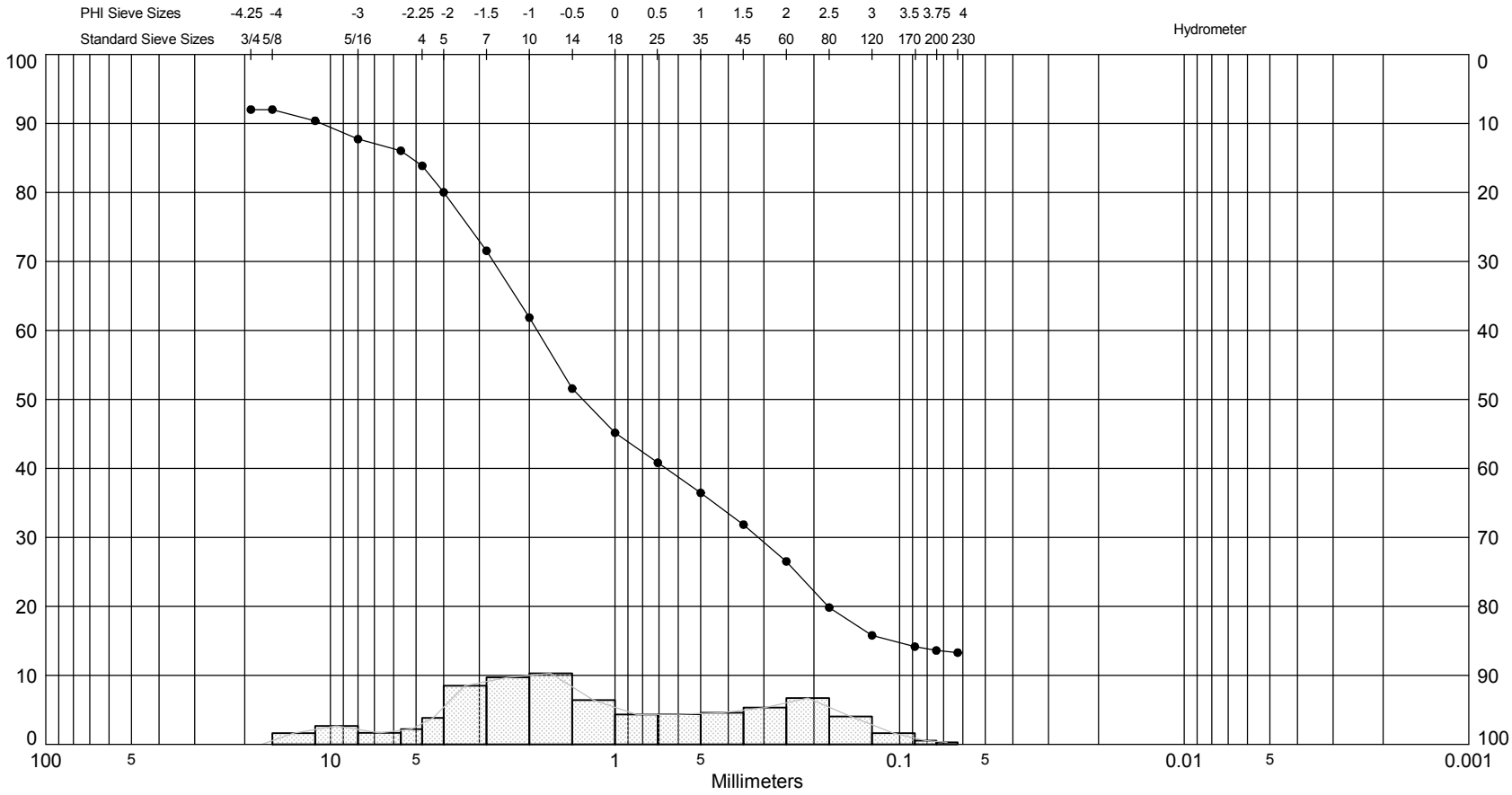
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O53 #4	—●—		SM	#200 - 13.61 #230 - 13.30	2.30	53.90		-0.57	0.85	2.61	1.76

Comments:

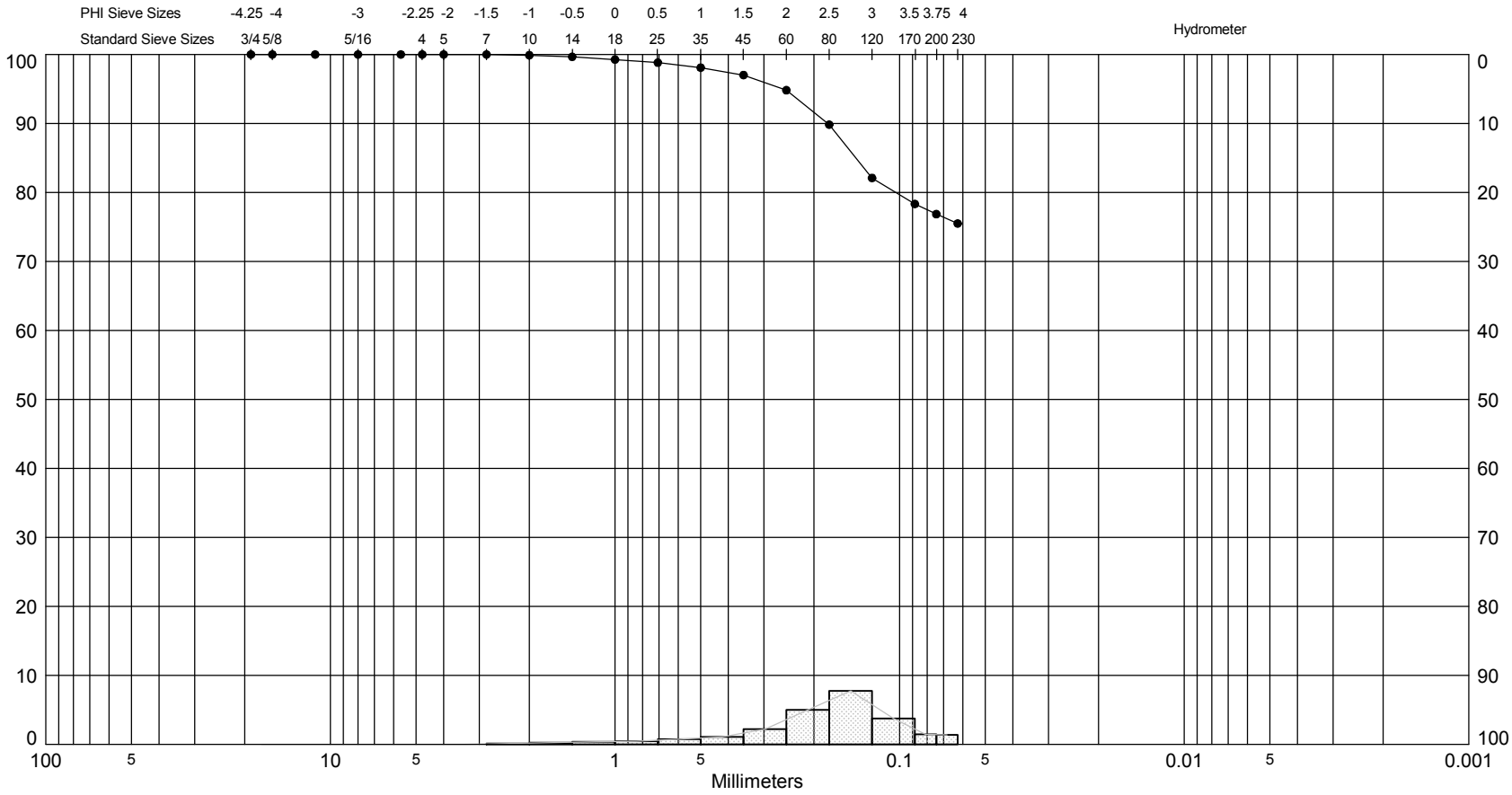
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O54 #1	—●—		ML-CL	#200 - 76.86 #230 - 75.50	4.10	7.30		2.48	-1.24	5.08	0.94

Comments:

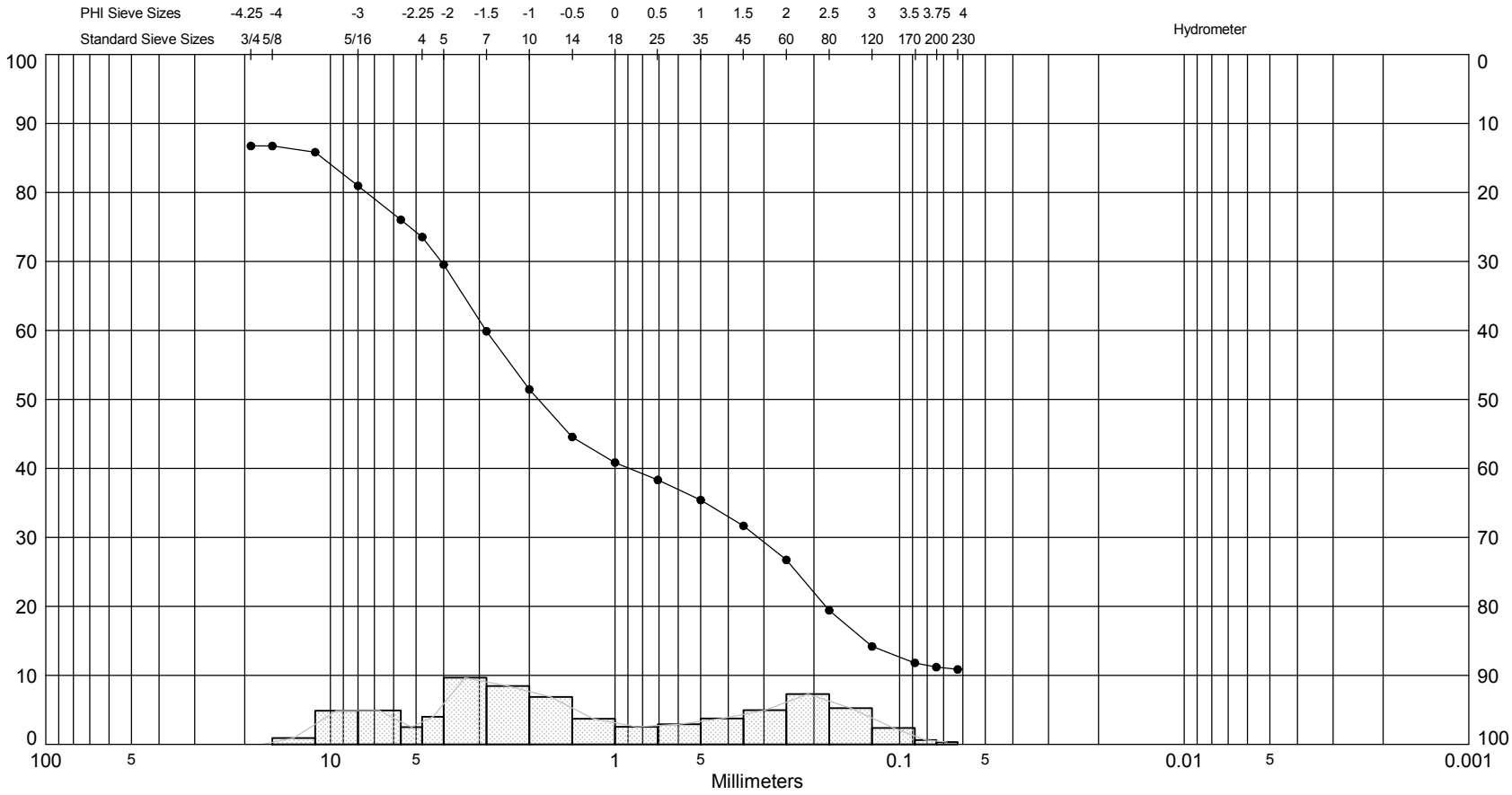
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O54 #2	—●—		SW-SM	#200 - 11.19 #230 - 10.86	2.40	50.00		-0.9	1.15	2.66	1.95

Comments:

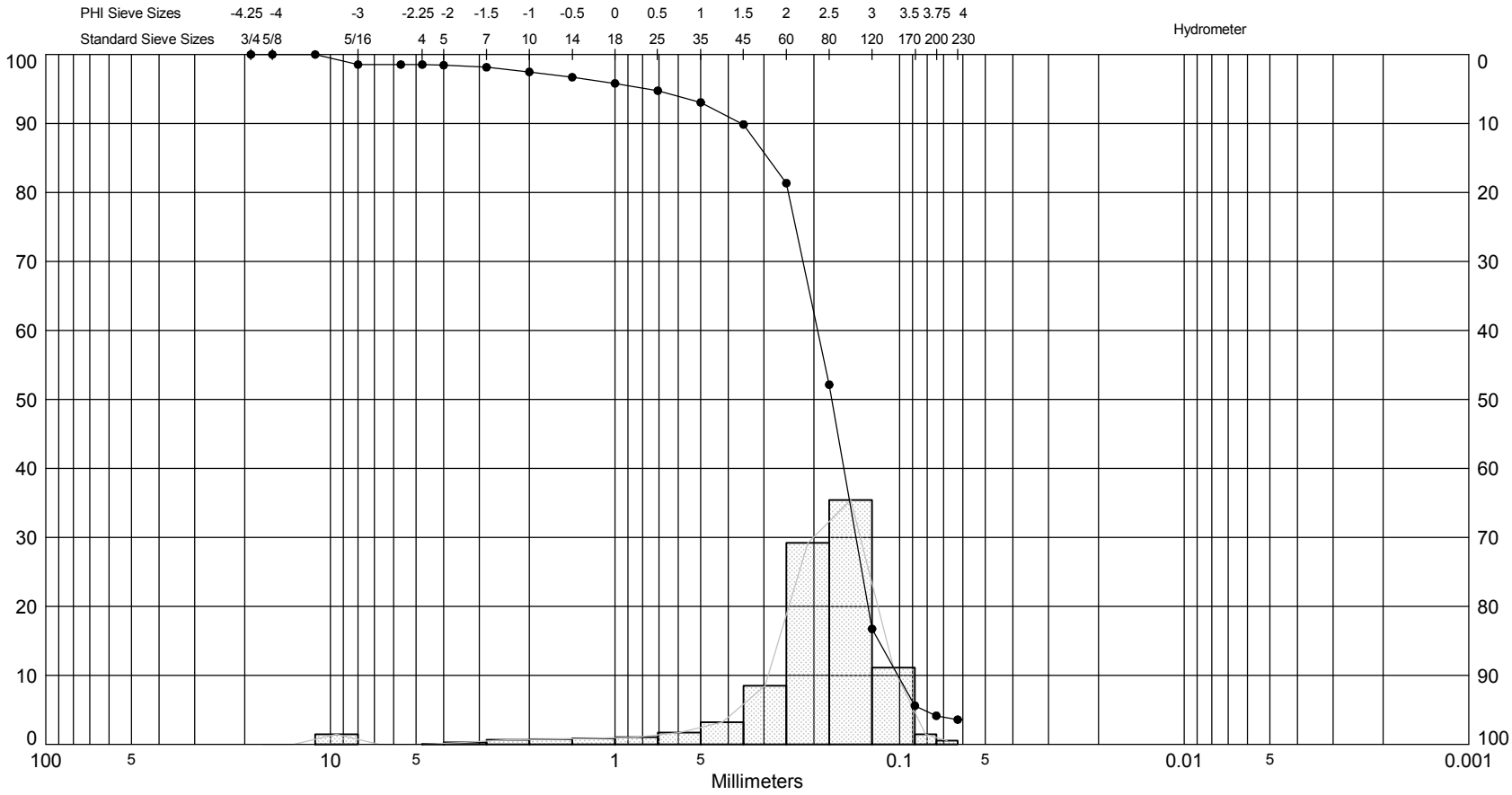
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O55 #1	—●—		SW	#200 - 4.14 #230 - 3.58	0.90	9.00	2.53	2.28	-2.94	14.12	1.06

Comments:

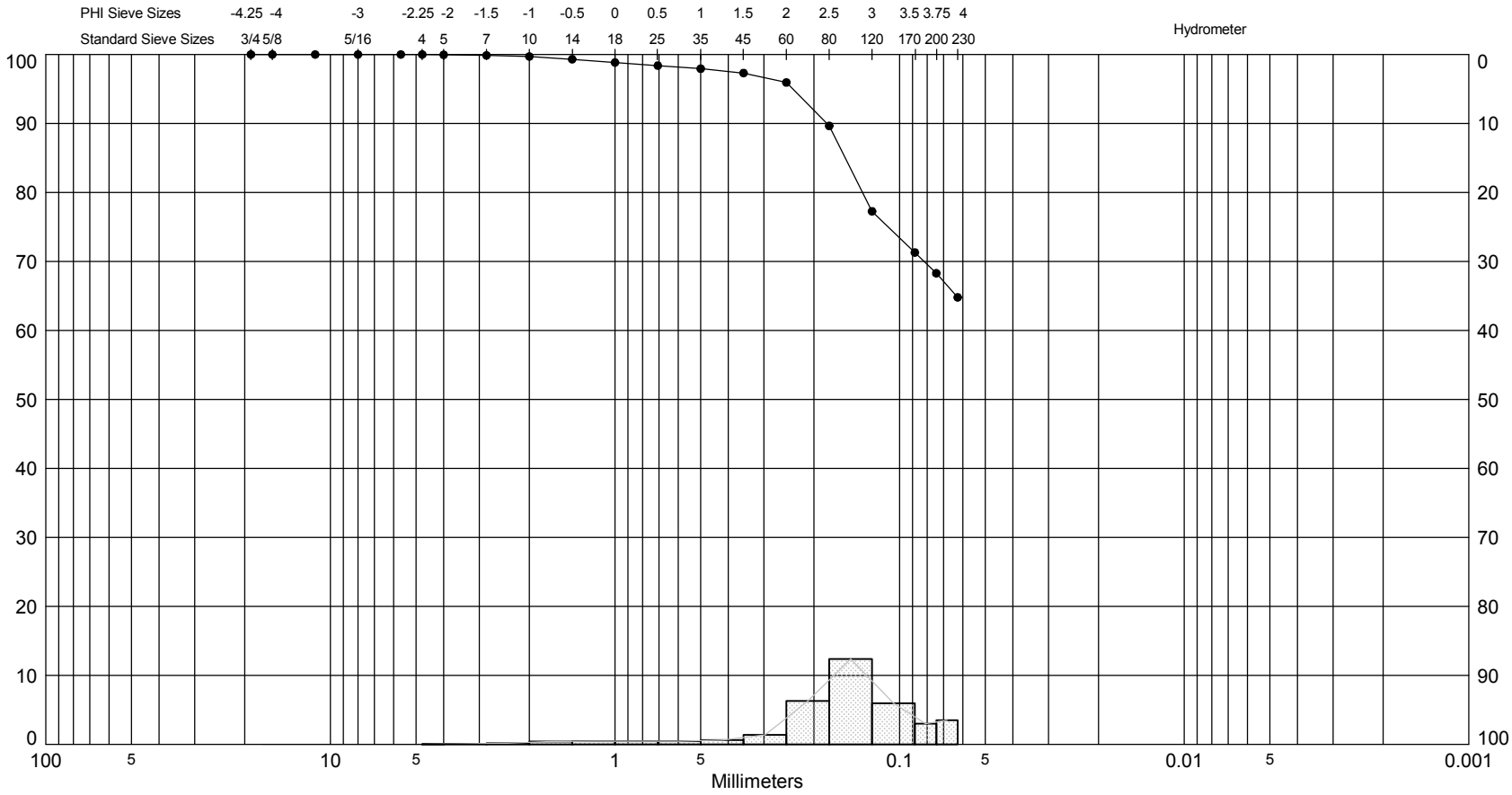
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O55 #2	—●—		ML-CL	#200 - 68.29 #230 - 64.80	2.40	13.10		2.69	-1.84	7.92	0.95

Comments:

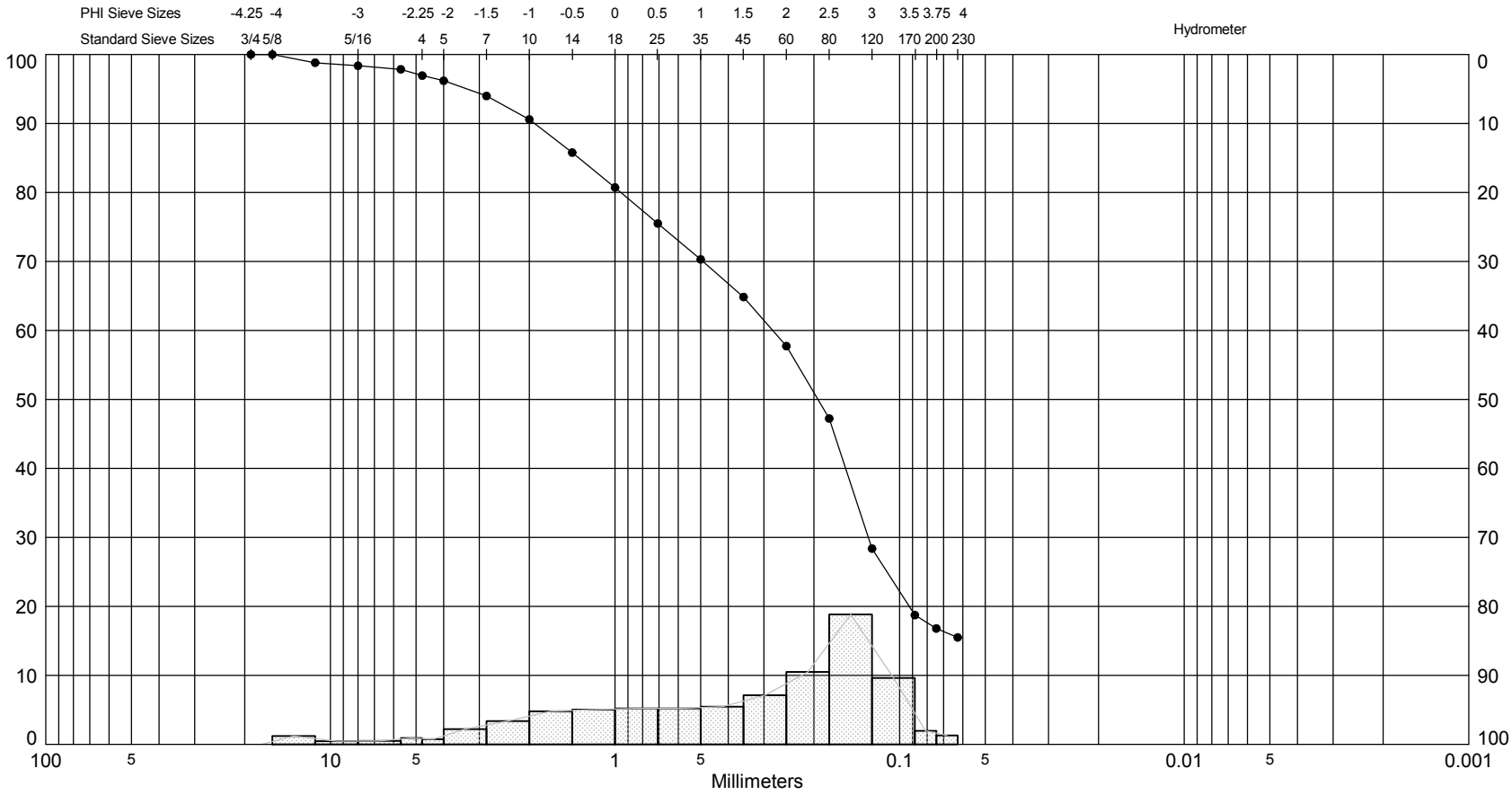
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O55 #3	—●—		SM	#200 - 16.80 #230 - 15.50	1.80	34.50	2.37	1.41	-0.87	2.98	1.74

Comments:

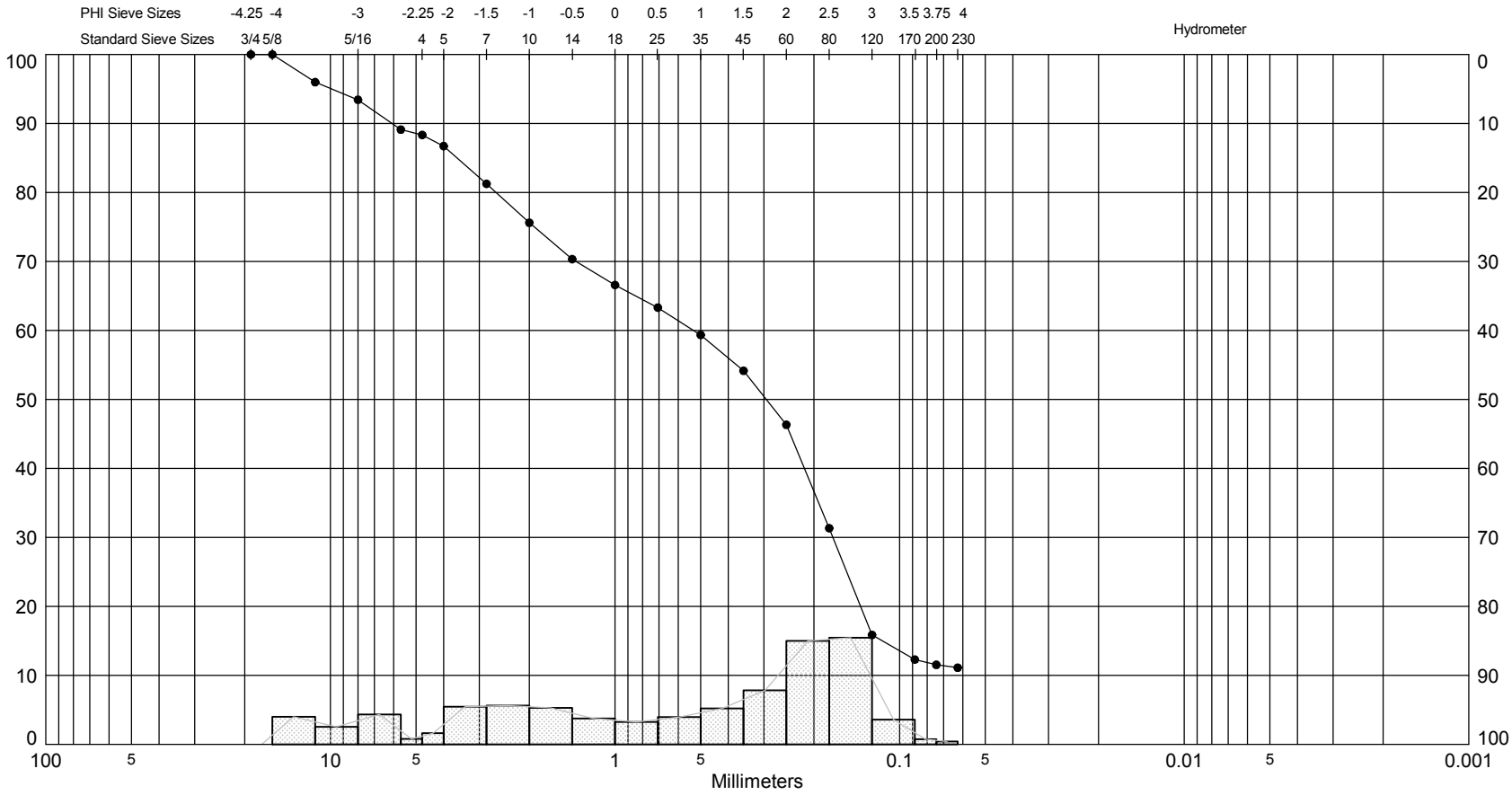
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O55 #4	—●—		SW-SM	#200 - 11.53 #230 - 11.11	2.20	38.60	1.77	0.61	-0.57	2.01	2.13

Comments:

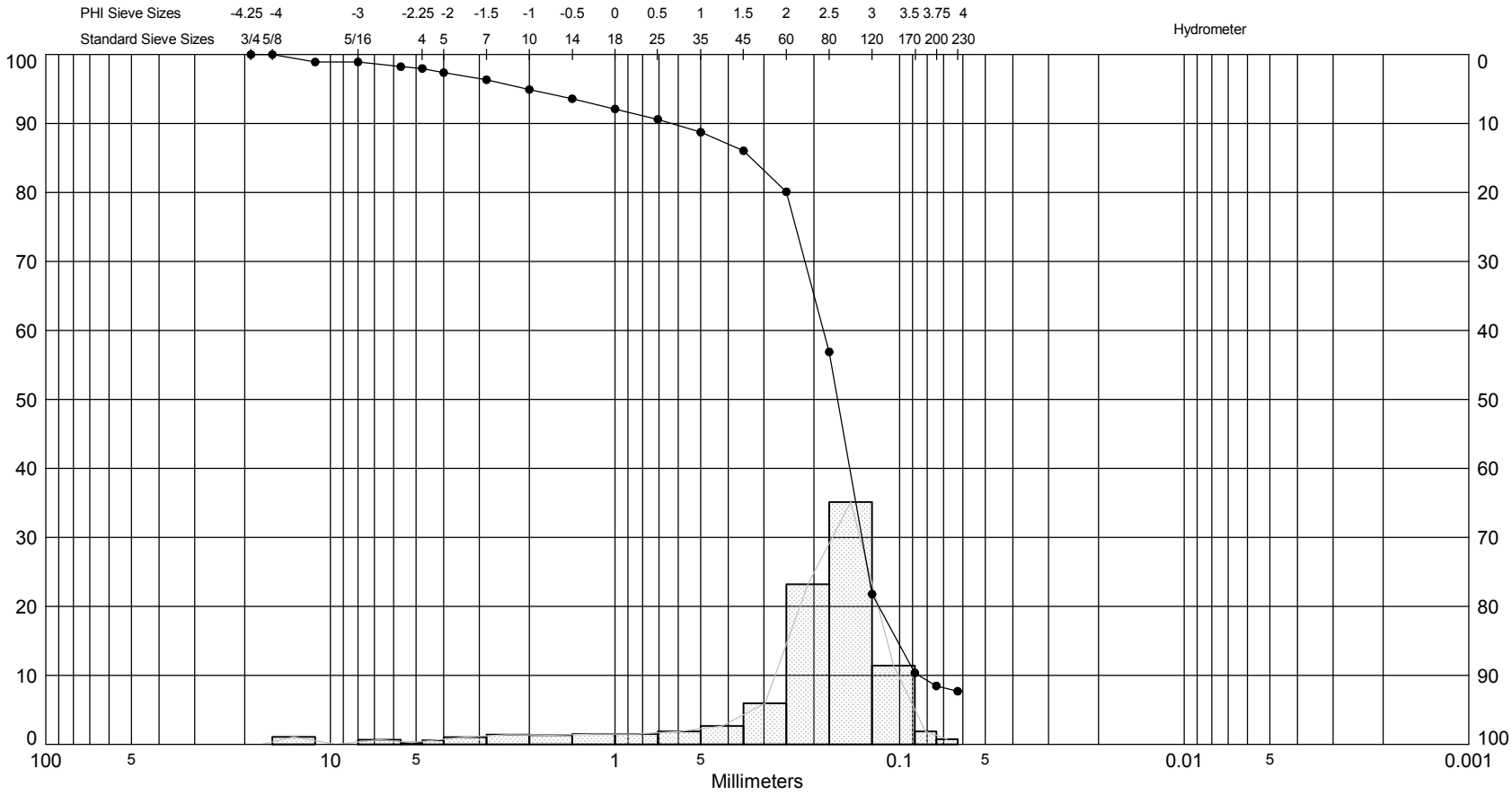
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O56 #1	—●—		SW-SM	#200 - 8.47 #230 - 7.70	1.90	12.20	2.6	2.15	-2.34	8.72	1.35

Comments:

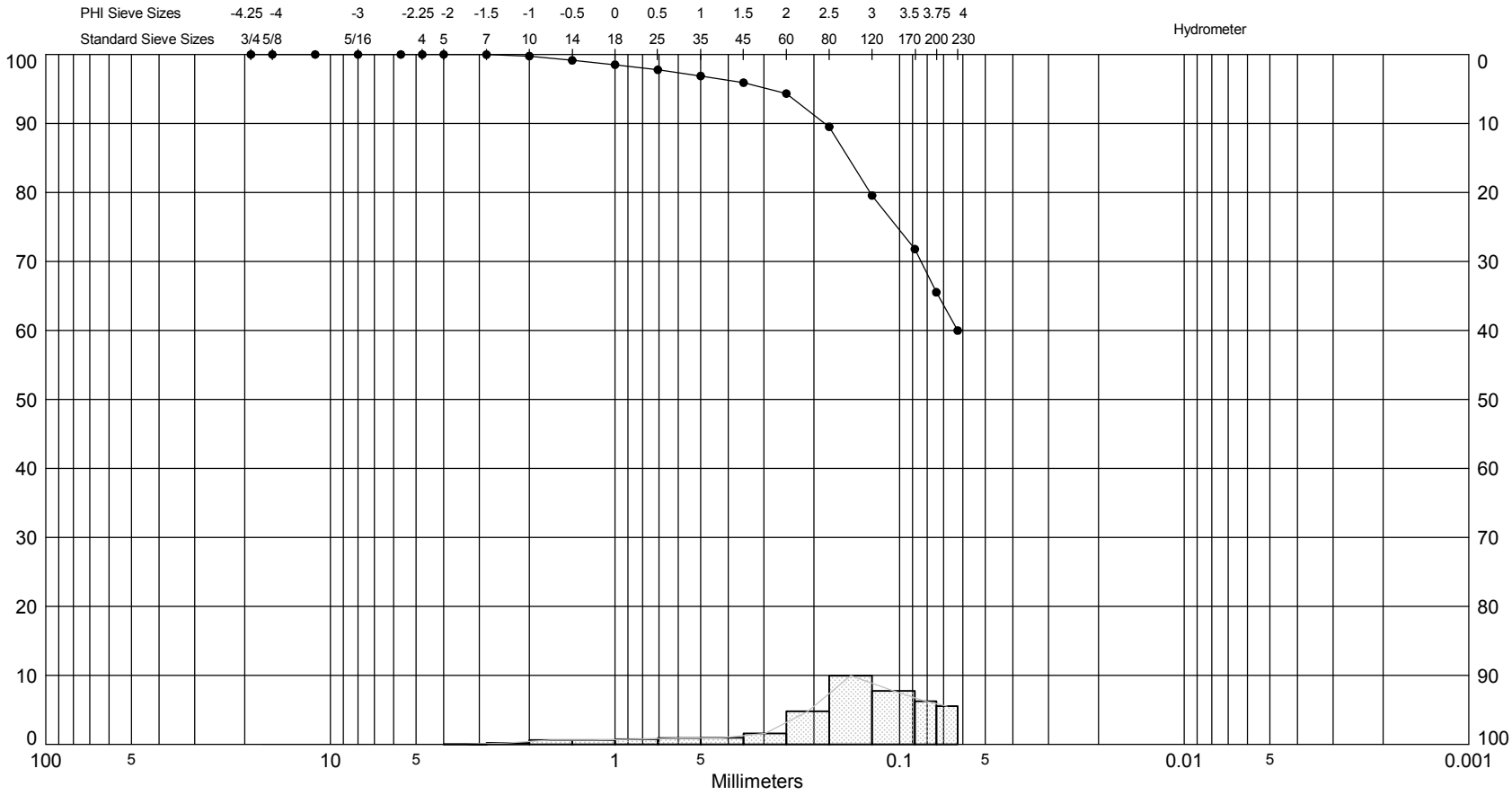
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O56 #2	—●—		ML-CL	#200 - 65.53 #230 - 59.98	1.70	11.60		2.79	-1.63	5.81	1.05

Comments:

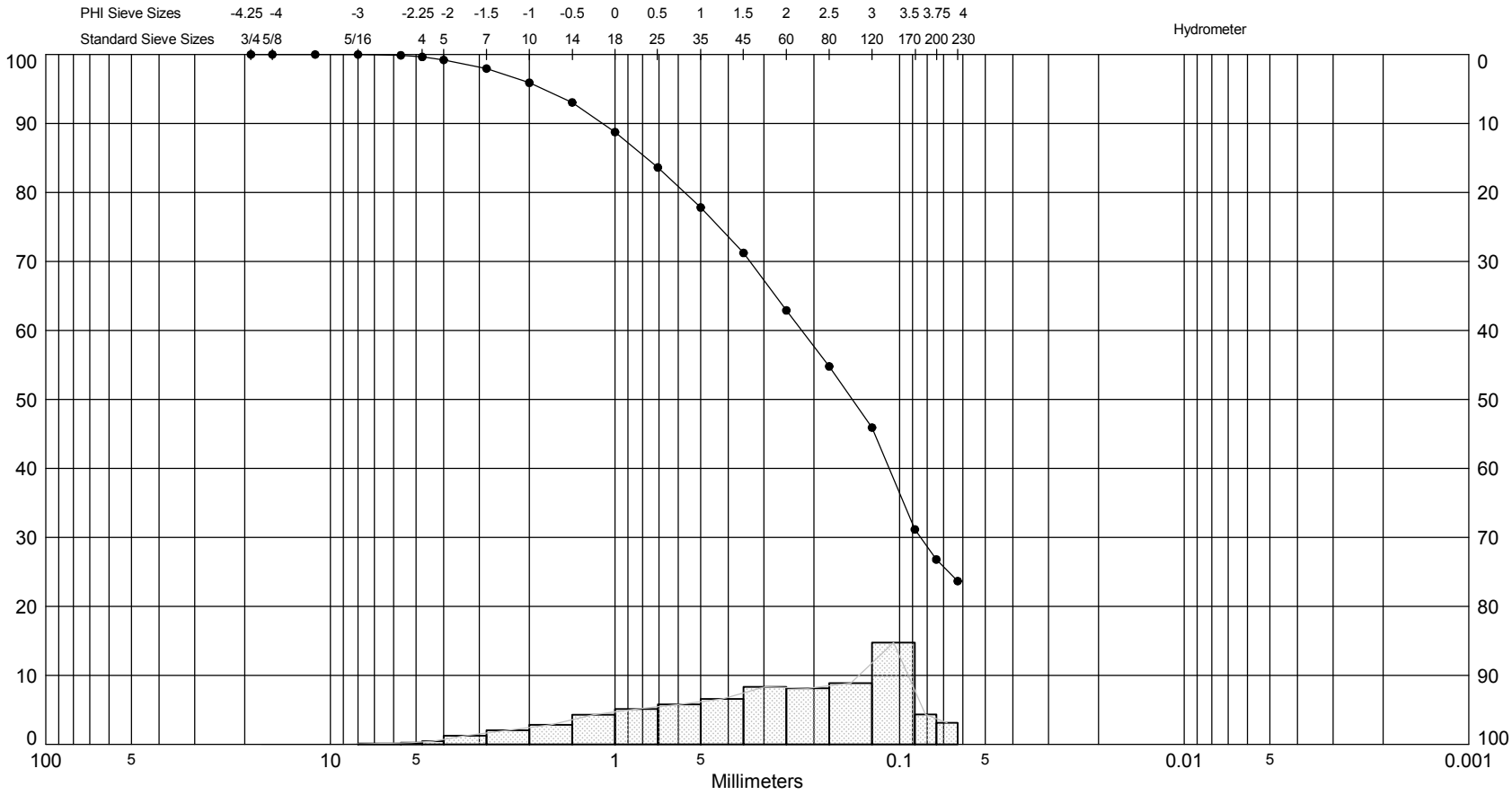
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O56 #3	—●—		SM	#200 - 26.80 #230 - 23.67	2.10	42.50	2.77	1.8	-0.65	2.55	1.51

Comments:

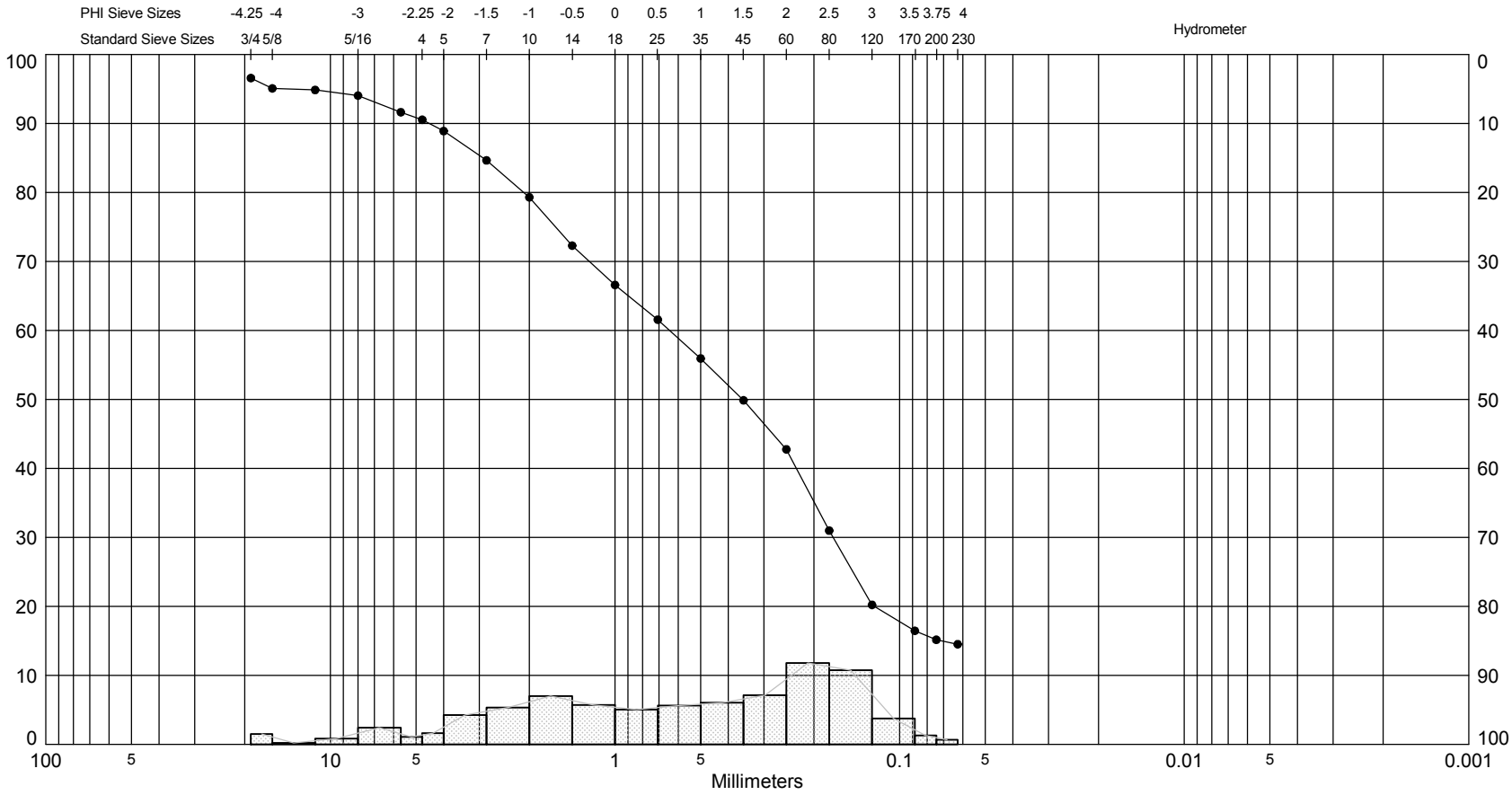
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O56 #4	—●—		SM	#200 - 15.16 #230 - 14.51	2.40	42.30	1.49	0.5	-0.17	2.24	1.87

Comments:

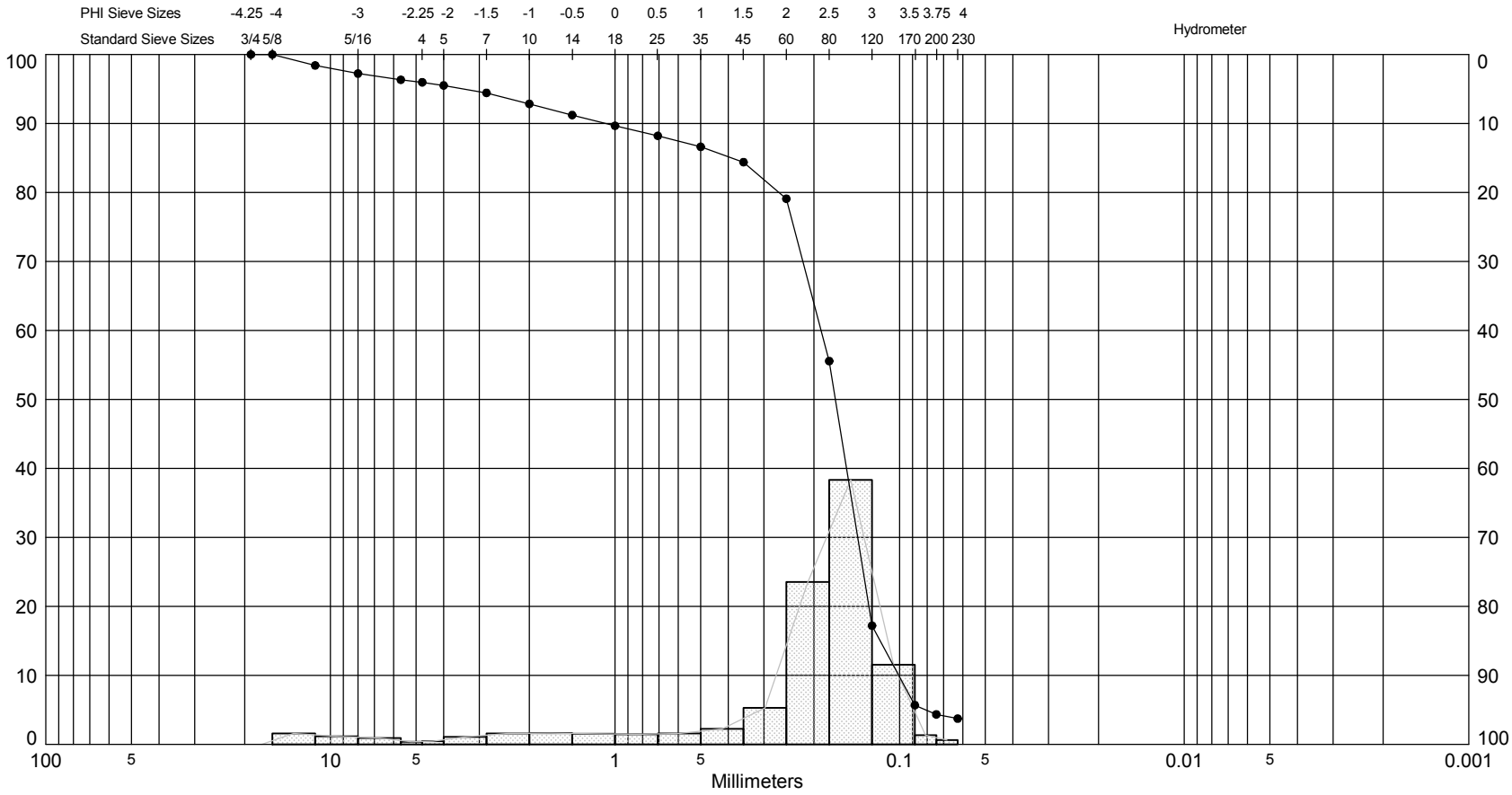
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O57 #1	—●—		SW	#200 - 4.34 #230 - 3.73	1.20	18.40	2.57	2.05	-2.26	7.66	1.54

Comments:

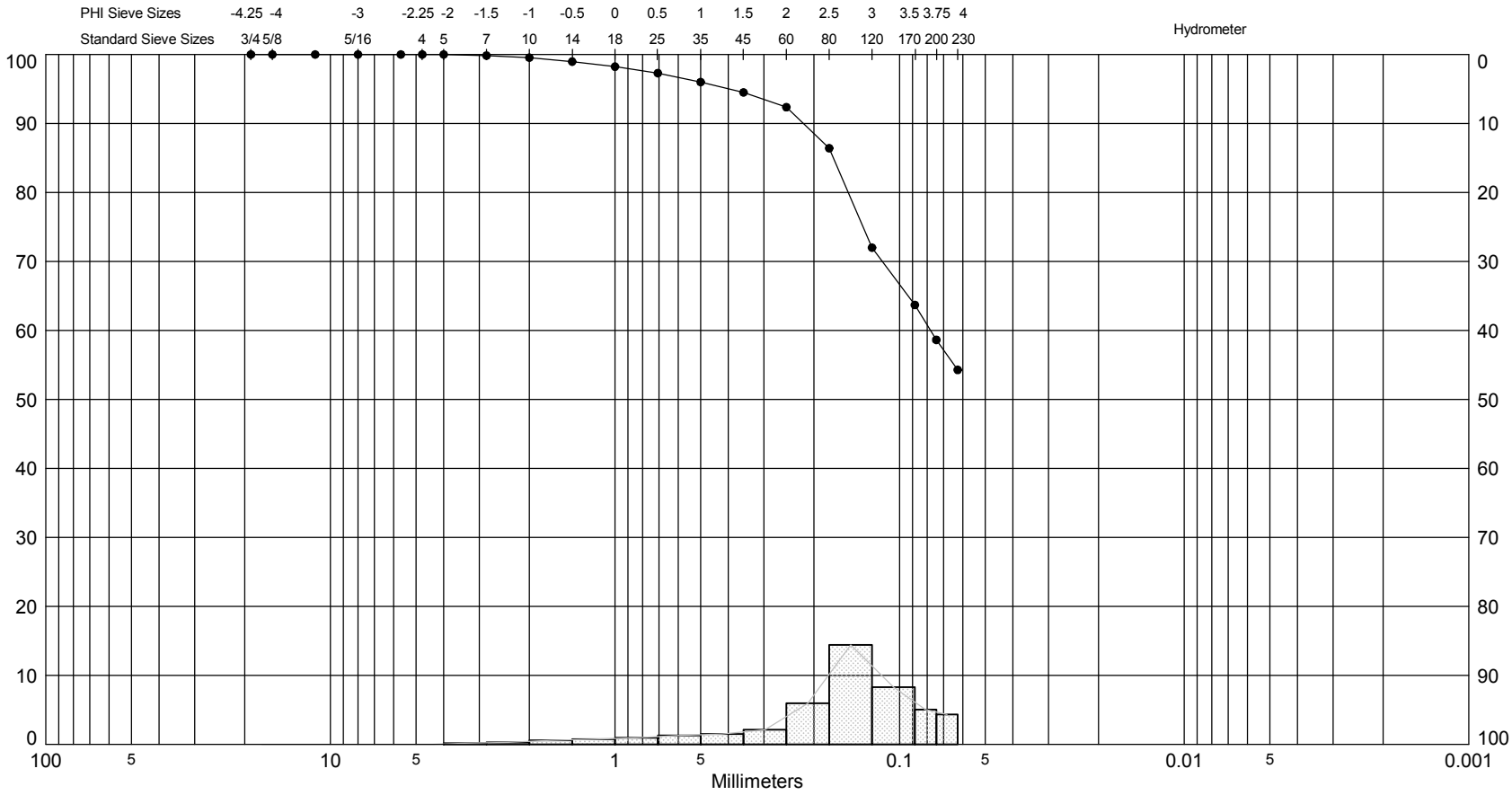
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O57 #2	—●—		ML-CL	#200 - 58.63 #230 - 54.28	2.20	11.60		2.64	-1.58	5.81	1.05

Comments:

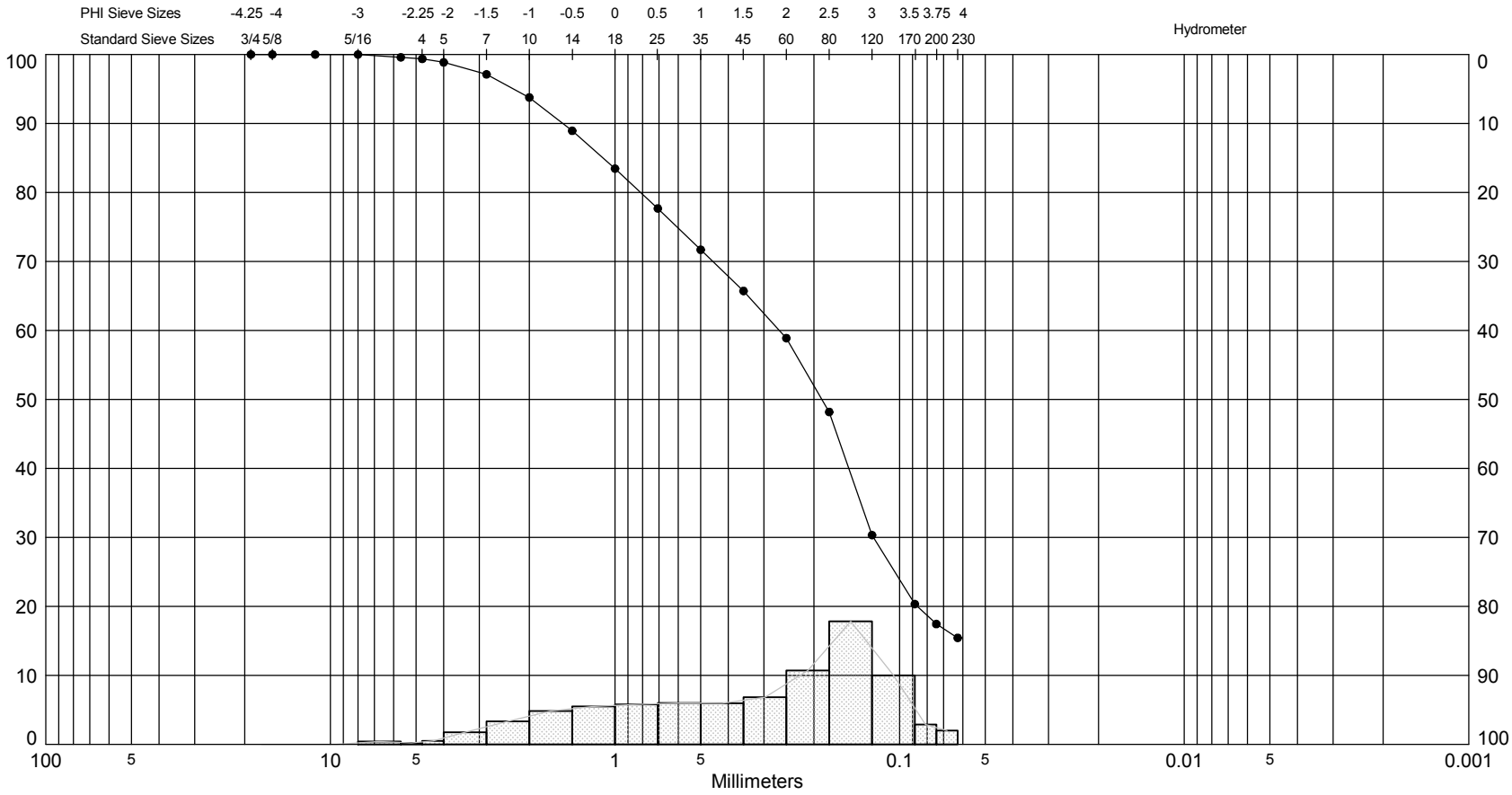
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Fax (321) 751-2343

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O57 #3	—●—		SM	#200 - 17.44 #230 - 15.43	1.90	33.50	2.41	1.59	-0.64	2.39	1.55

Comments:

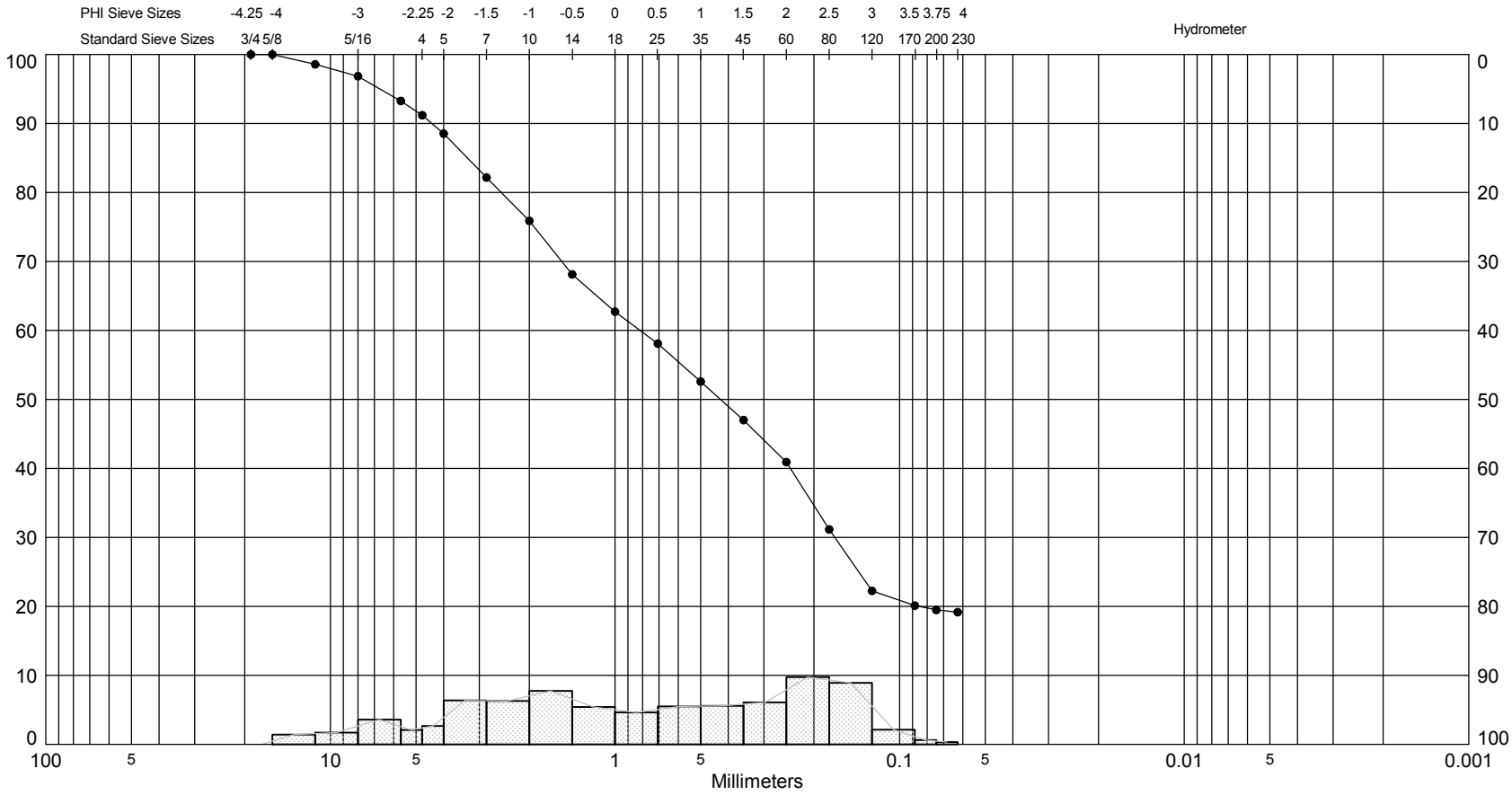
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O57 #4	—●—		SM	#200 - 19.49 #230 - 19.16	1.80	44.80	1.23	0.28	-0.17	1.88	1.93

Comments:

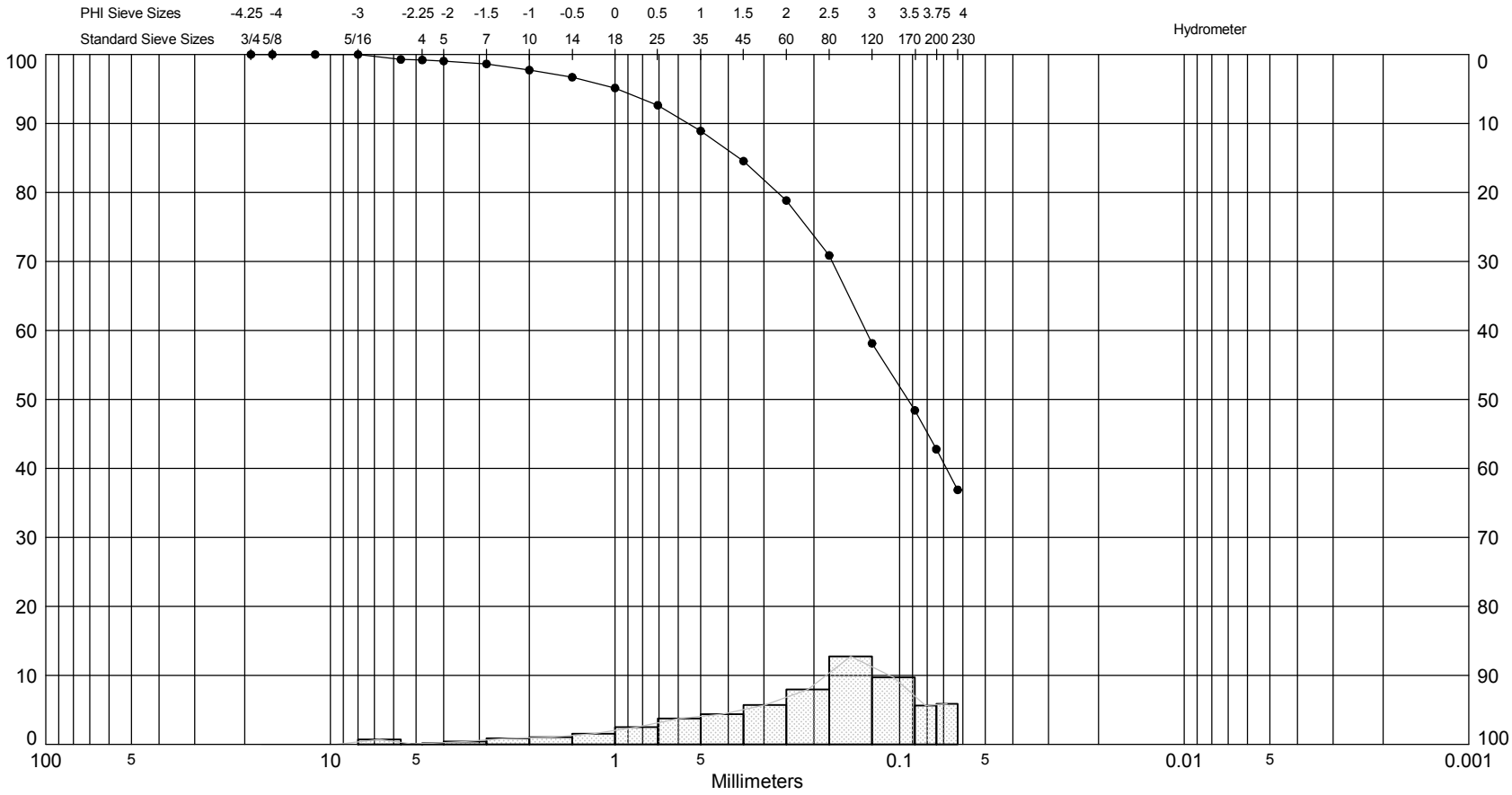
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O58 #1	—●—		SM	#200 - 42.78 #230 - 36.89	2.10	25.40	3.42	2.24	-1.22	4.41	1.39

Comments:

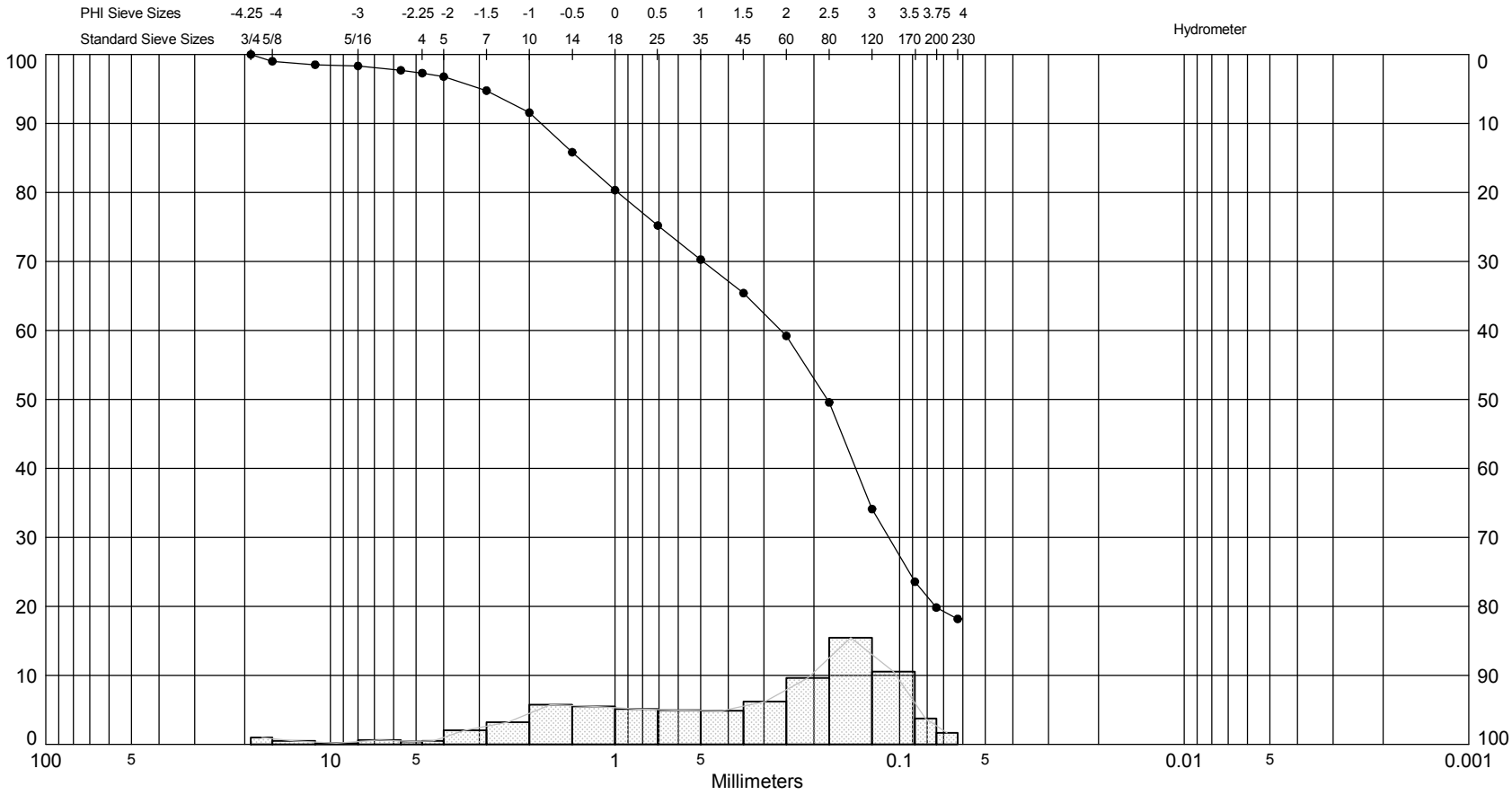
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O58 #2	—●—		SM	#200 - 19.83 #230 - 18.18	1.60	26.00	2.48	1.43	-0.84	3.07	1.8

Comments:

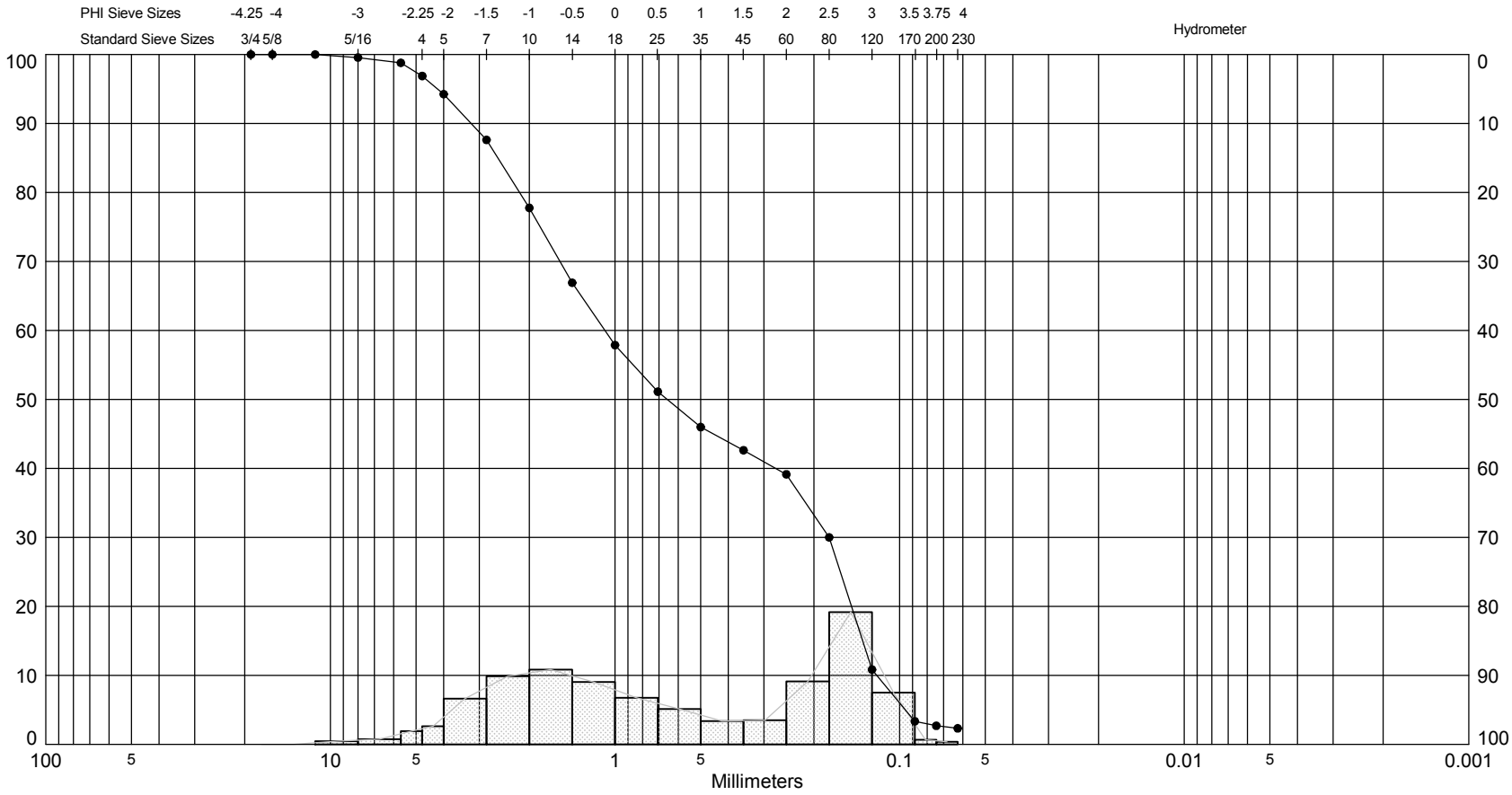
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O59 #1	—●—		SW	#200 - 2.69 #230 - 2.32	1.30	55.30	0.61	0.71	-0.06	1.6	1.84

Comments:

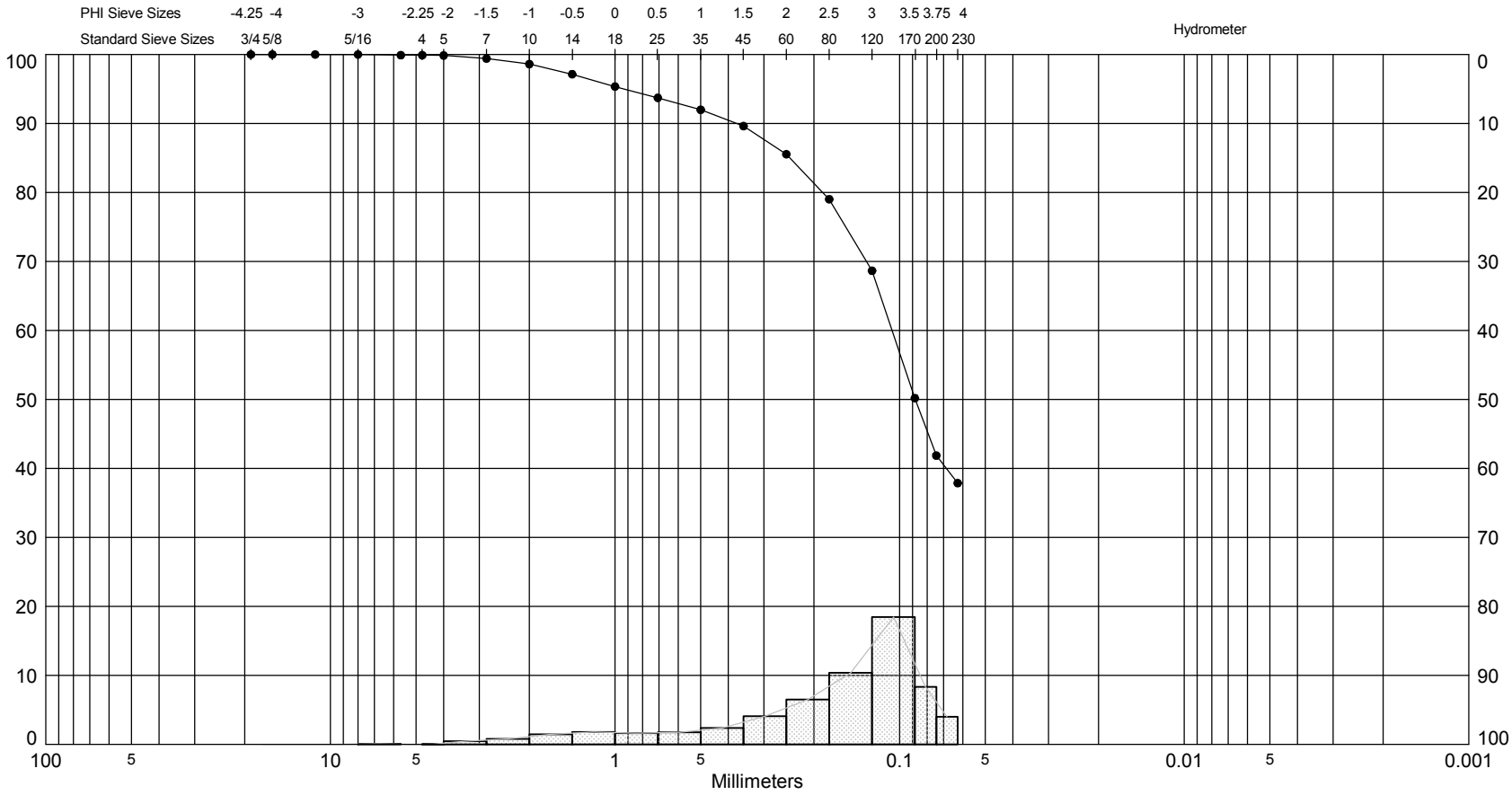
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O59 #2	—●—		SM	#200 - 41.86 #230 - 37.87	2.00	13.80	3.51	2.53	-1.51	4.76	1.27

Comments:

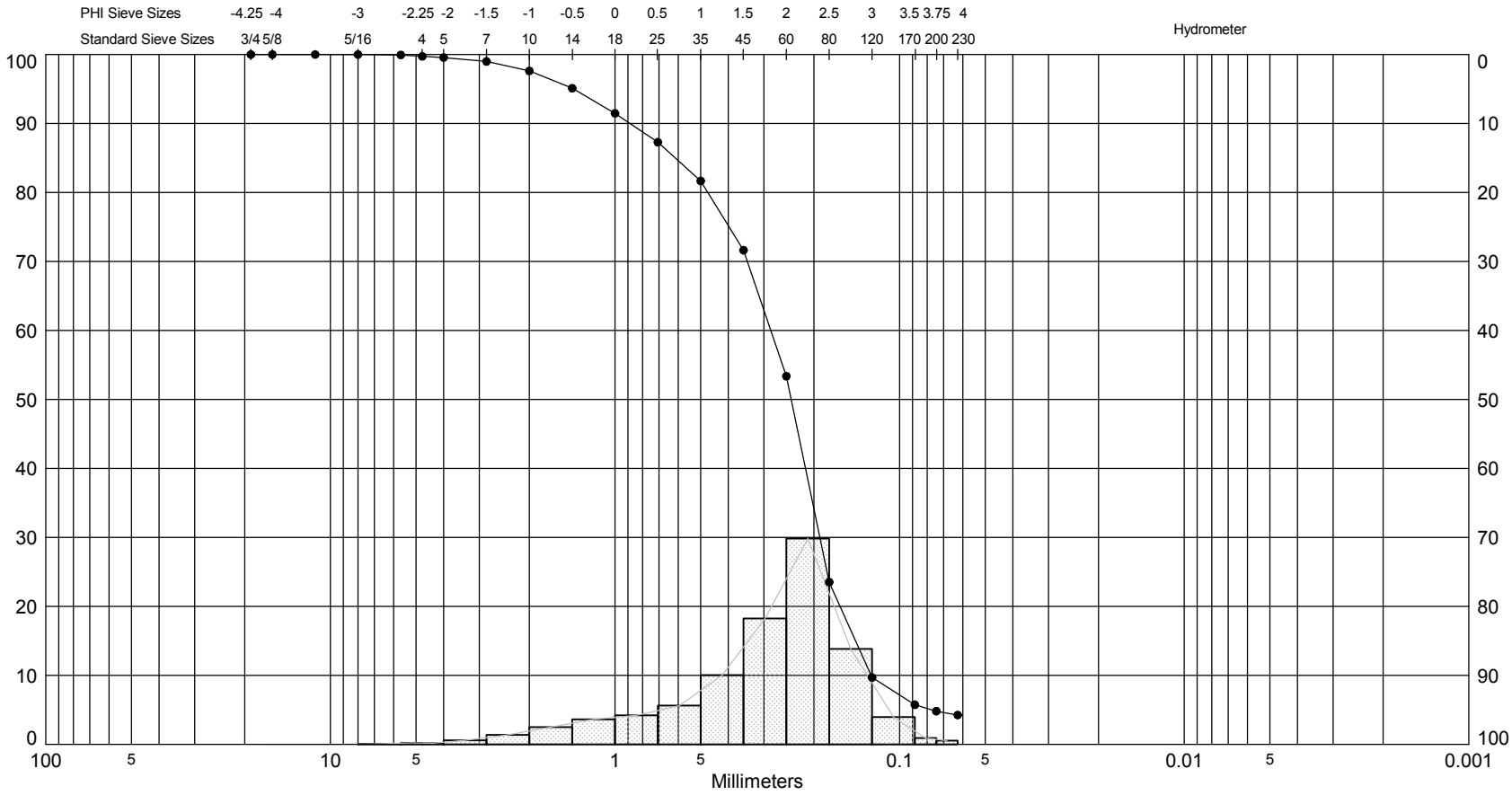
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O59 #3	—●—		SW	#200 - 4.81 #230 - 4.25	1.30	34.80	2.06	1.74	-1.15	4.39	1.07

Comments:

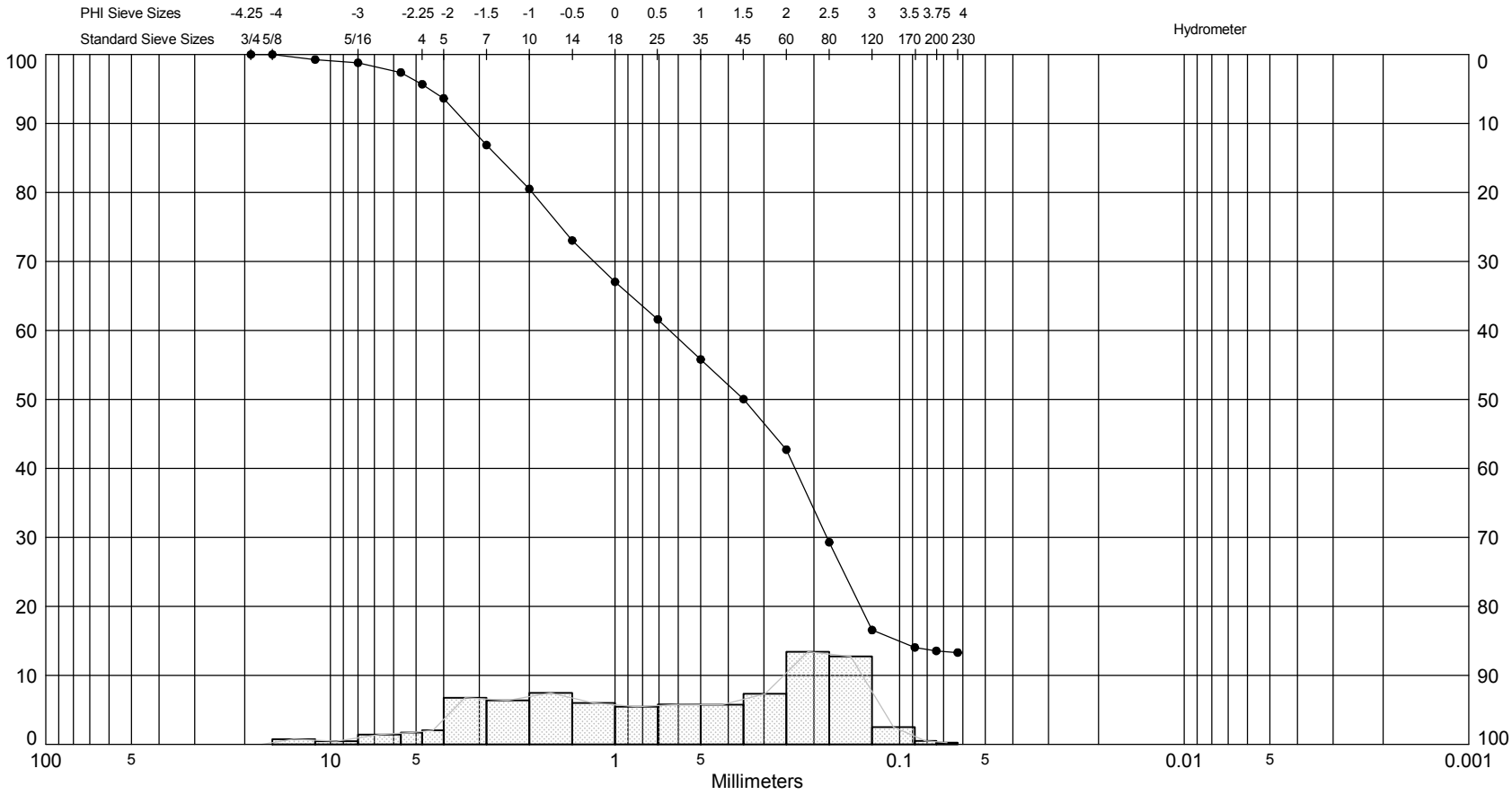
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O59 #4	—●—		SM	#200 - 13.55 #230 - 13.31	1.80	42.00	1.5	0.67	-0.34	1.95	1.79

Comments:

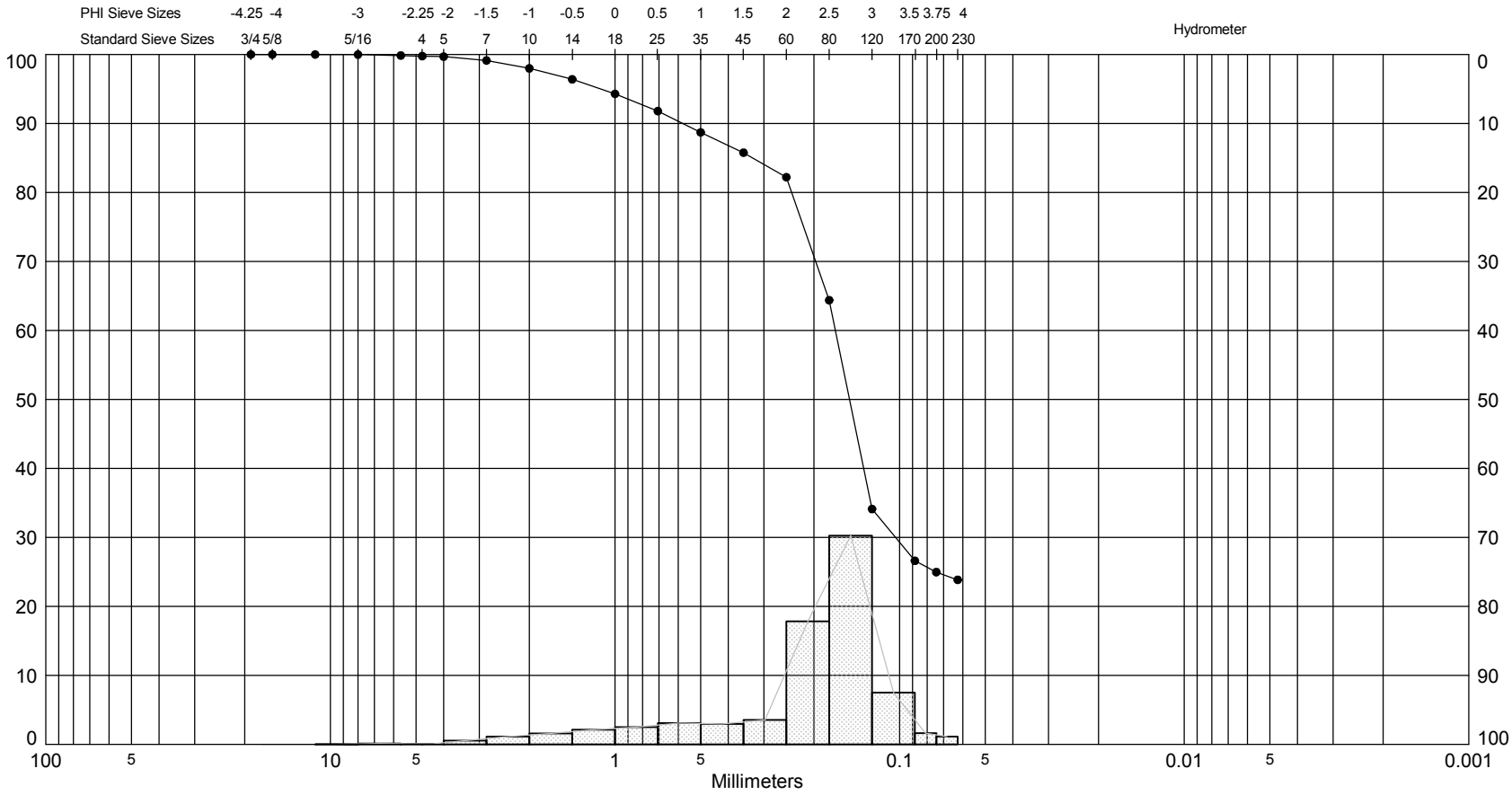
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O60 #1	—●—		SM	#200 - 24.97 #230 - 23.85	1.70	19.60	2.74	2.18	-1.65	5.54	1.14

Comments:

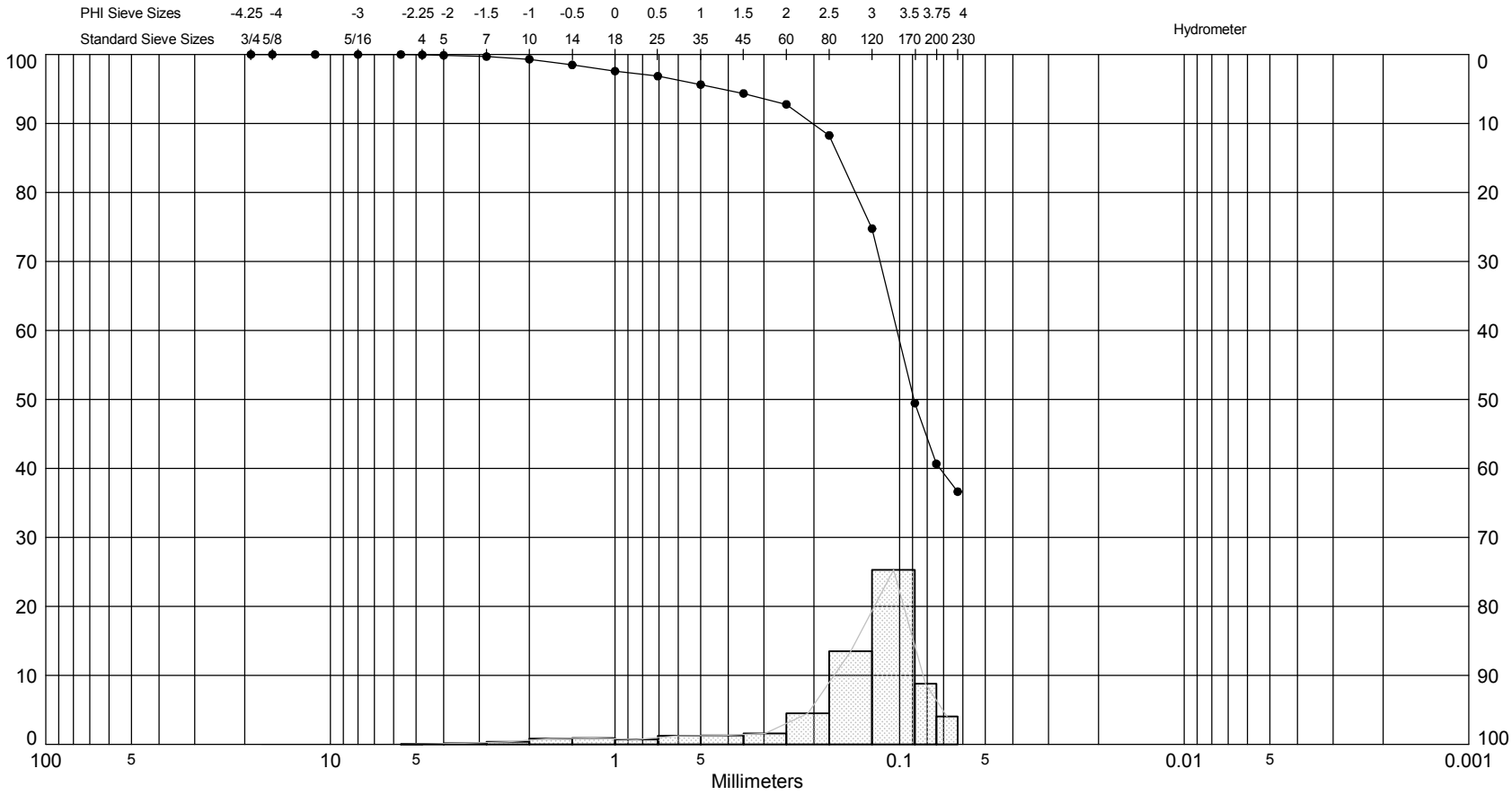
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 5/31/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O60 #2	—●—		SM	#200 - 40.66 #230 - 36.63	2.20	7.60	3.49	2.85	-2.32	8.9	1

Comments:

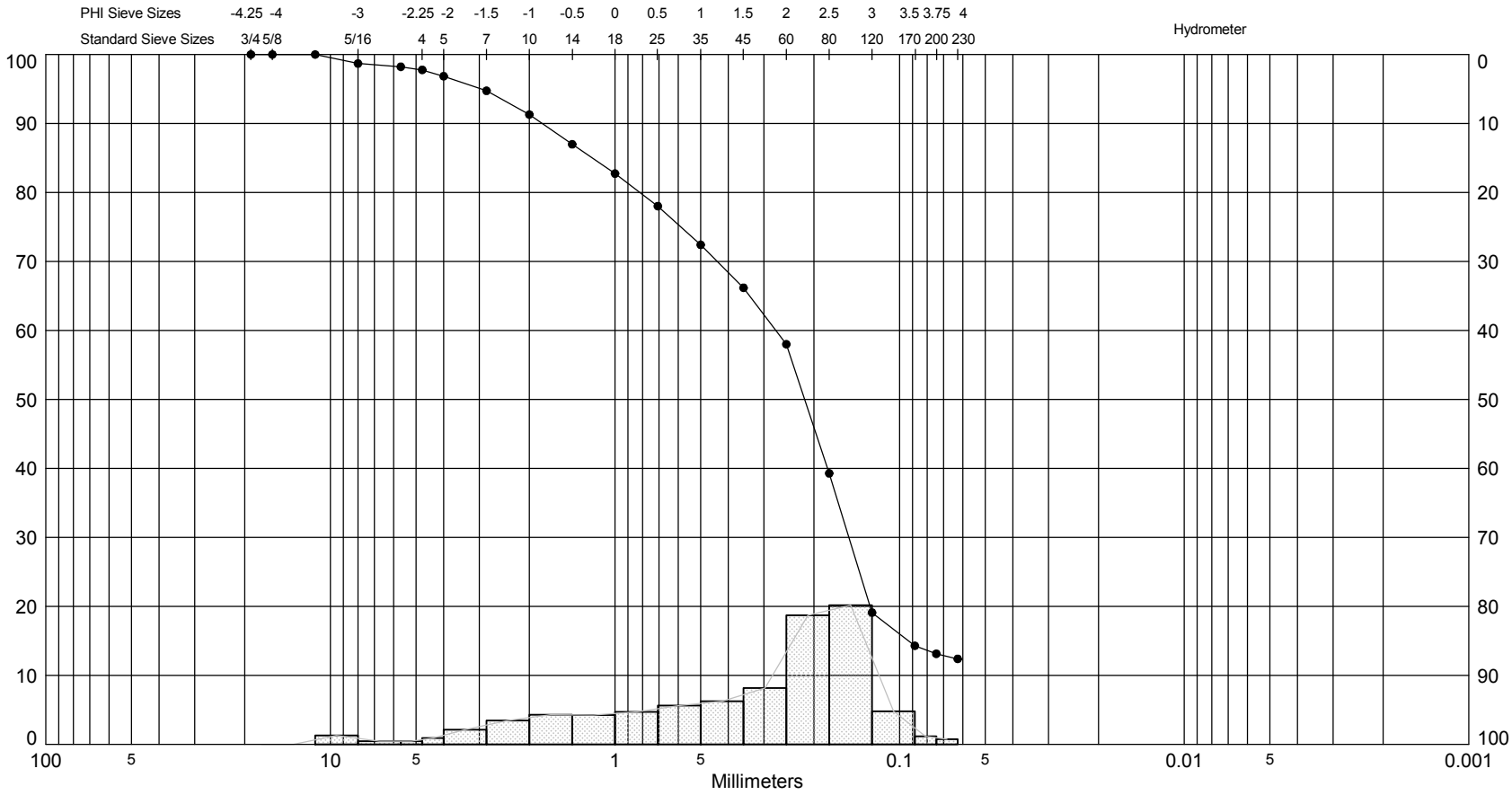
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 5/31/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O60 #3	—●—		SM	#200 - 13.13 #230 - 12.39	1.60	30.90	2.21	1.45	-1.01	3.24	1.58

Comments:

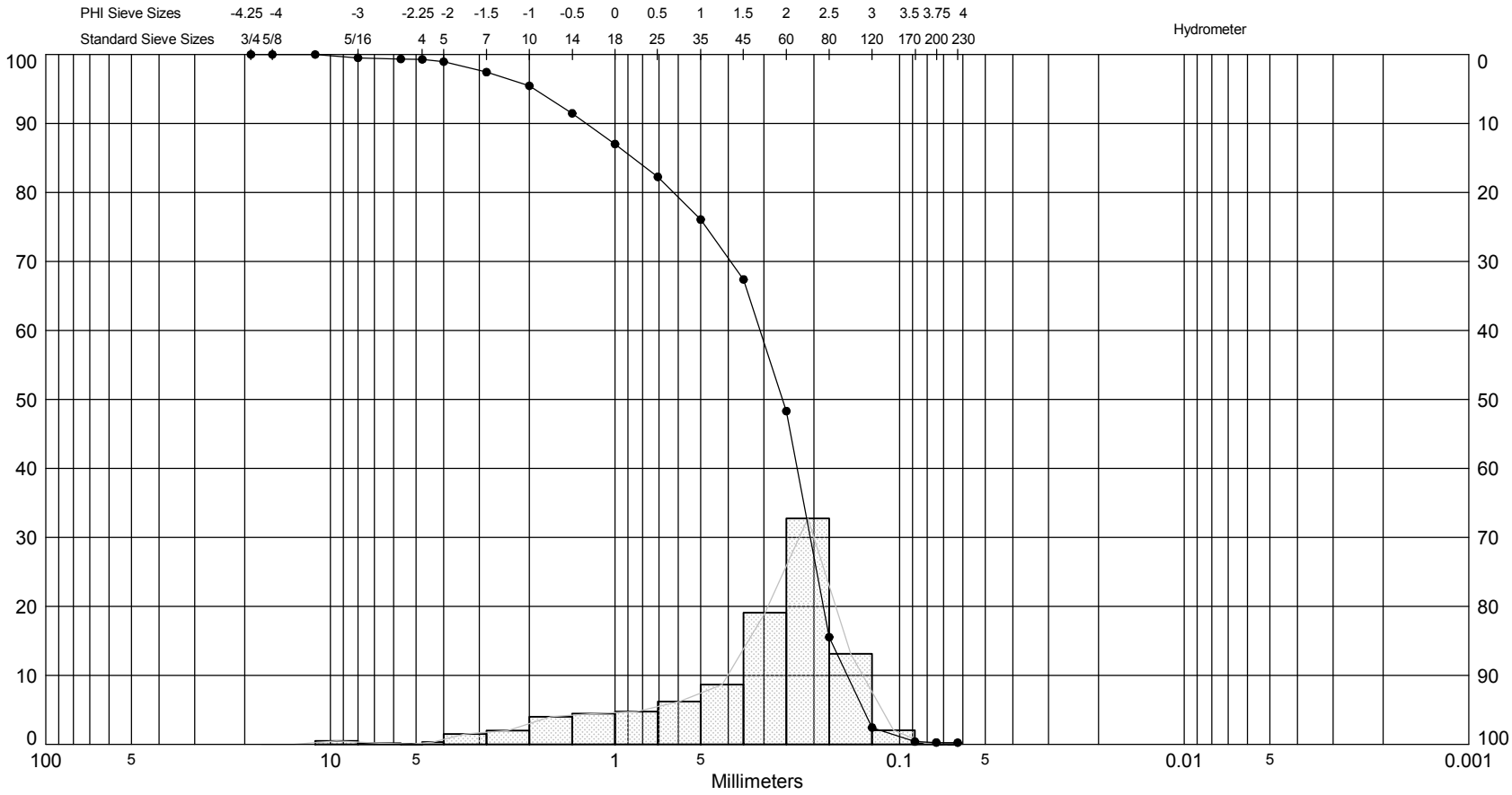
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 5/31/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O192 #1	—●—		SW	#200 - 0.27 #230 - 0.25	0.40	15.91	1.96	1.55	-1.35	4.55	1.19

Comments:

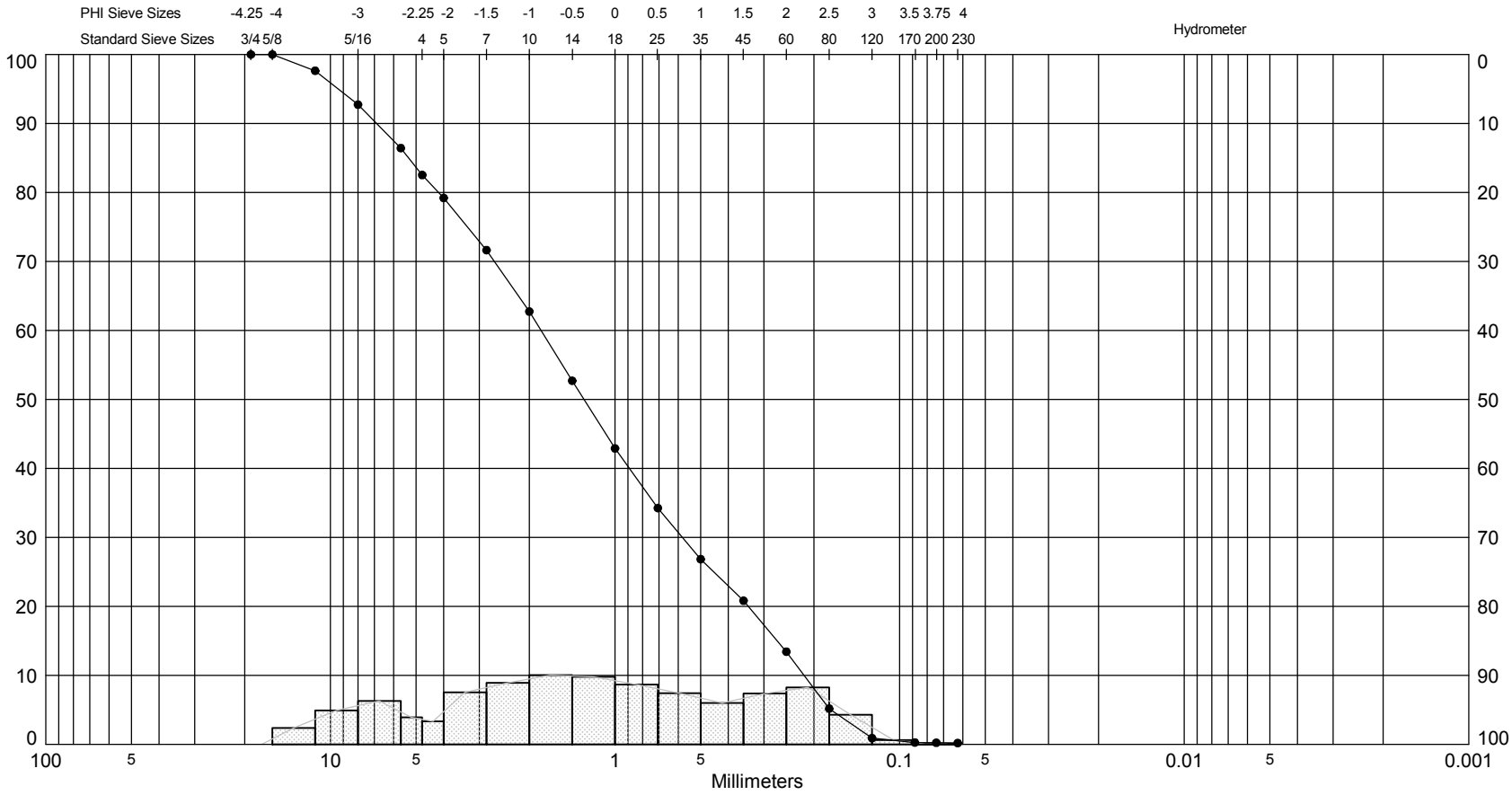
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O192 #2	—●—		SW	#200 - 0.23 #230 - 0.19	0.75	44.23		-0.32	0.01	2.03	1.8

Comments:

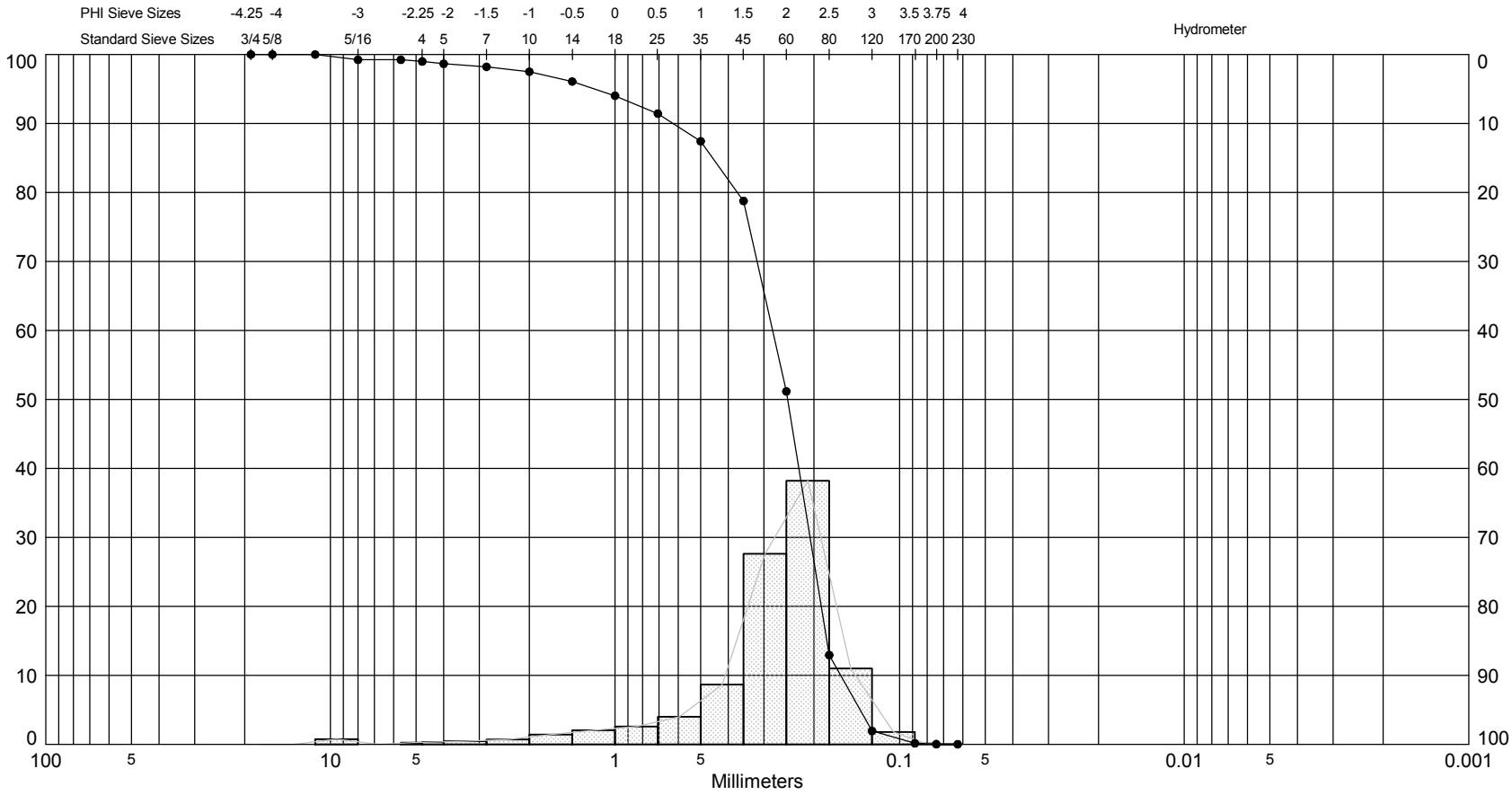
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O192 #3	—●—		SW	#200 - 0.03 #230 - 0.02	0.31	10.62	2.02	1.78	-2.3	10.22	0.97

Comments:

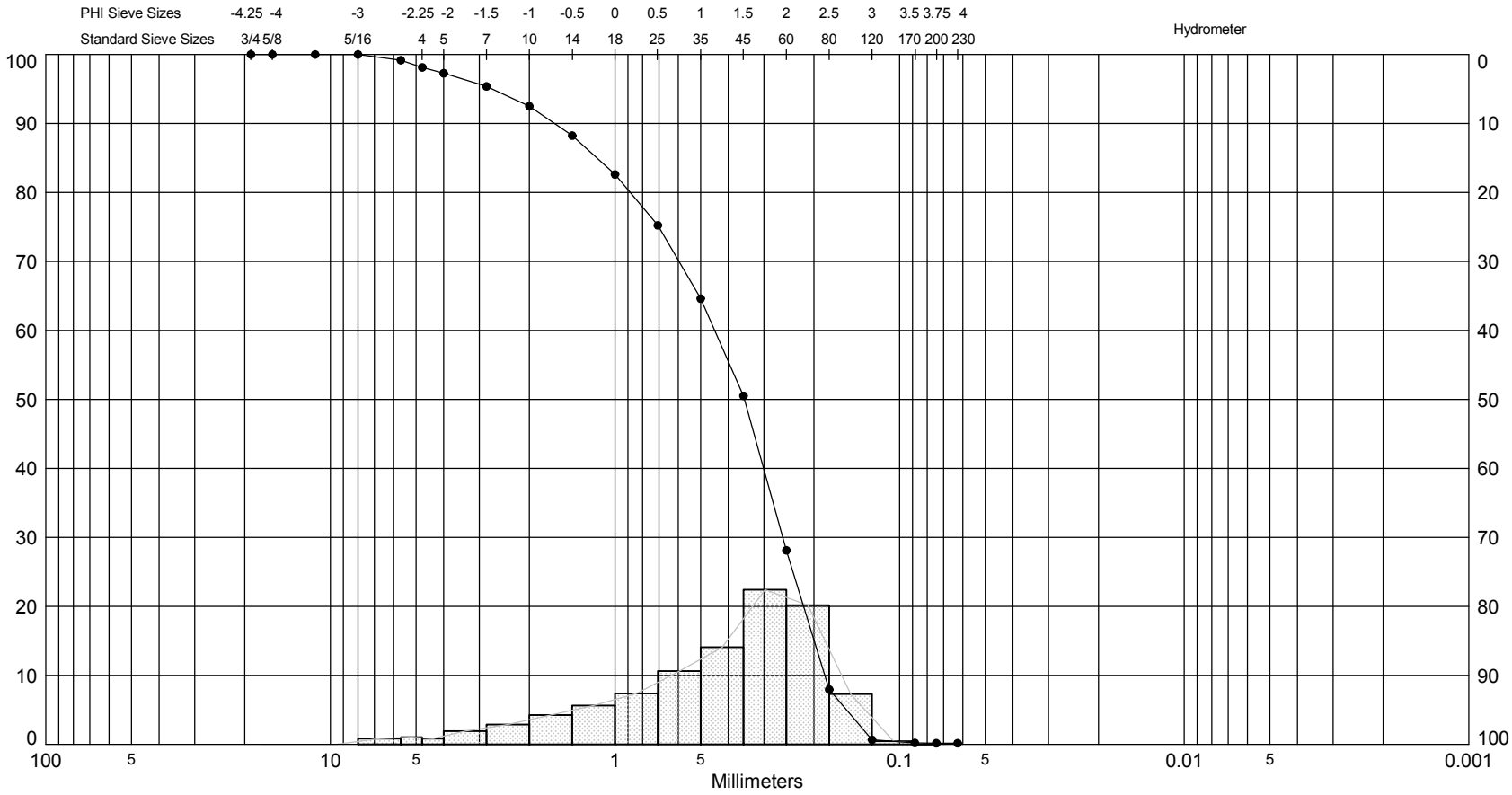
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O192 #4	—●—		SW	#200 - 0.16 #230 - 0.16	0.48	23.56	1.51	1.16	-1.03	3.58	1.25

Comments:

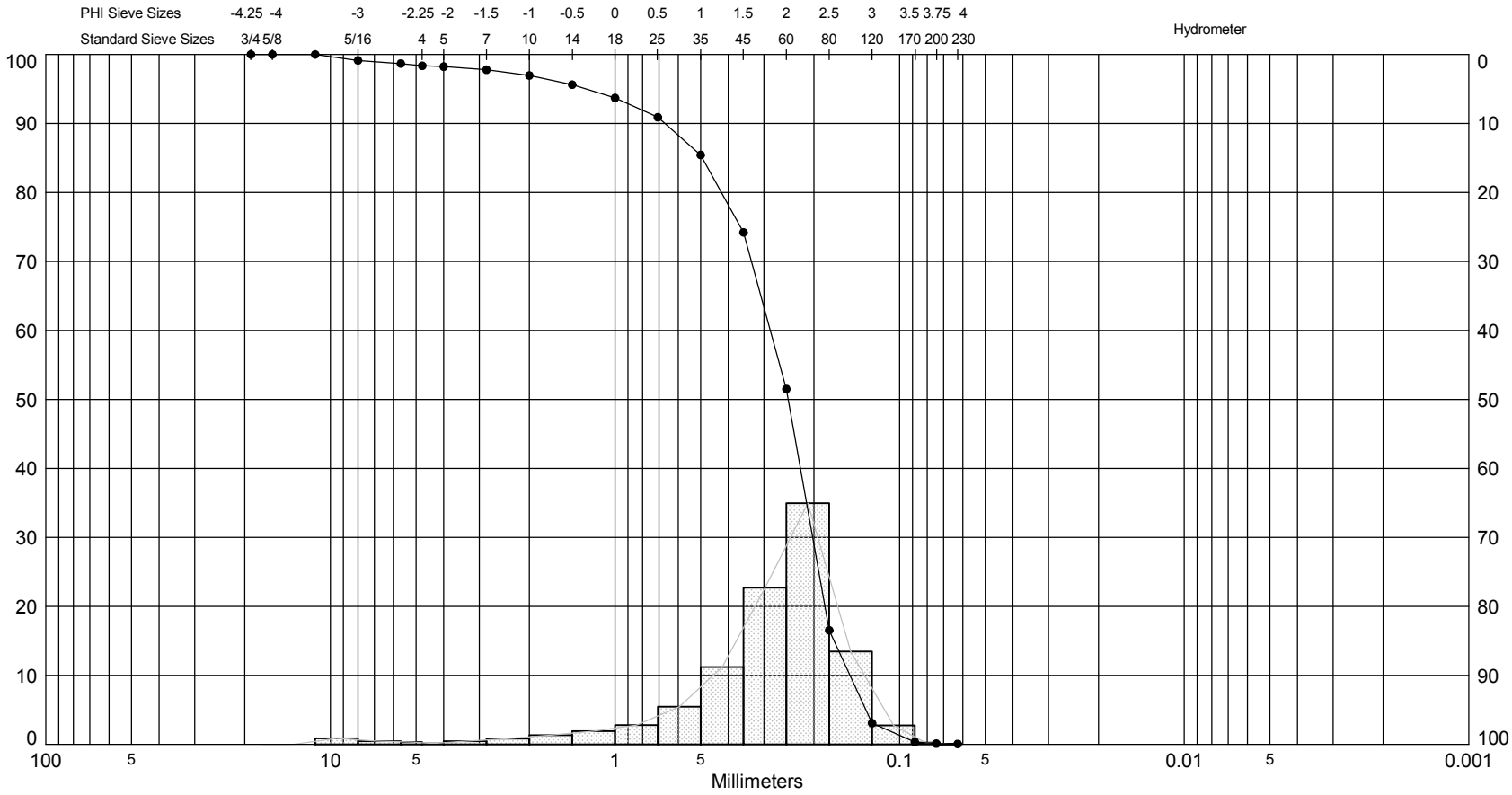
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
O192 #5	—●—		SW	#200 - 0.11 #230 - 0.06	0.38	12.48	2.02	1.76	-2.11	9.12	1.05

Comments:

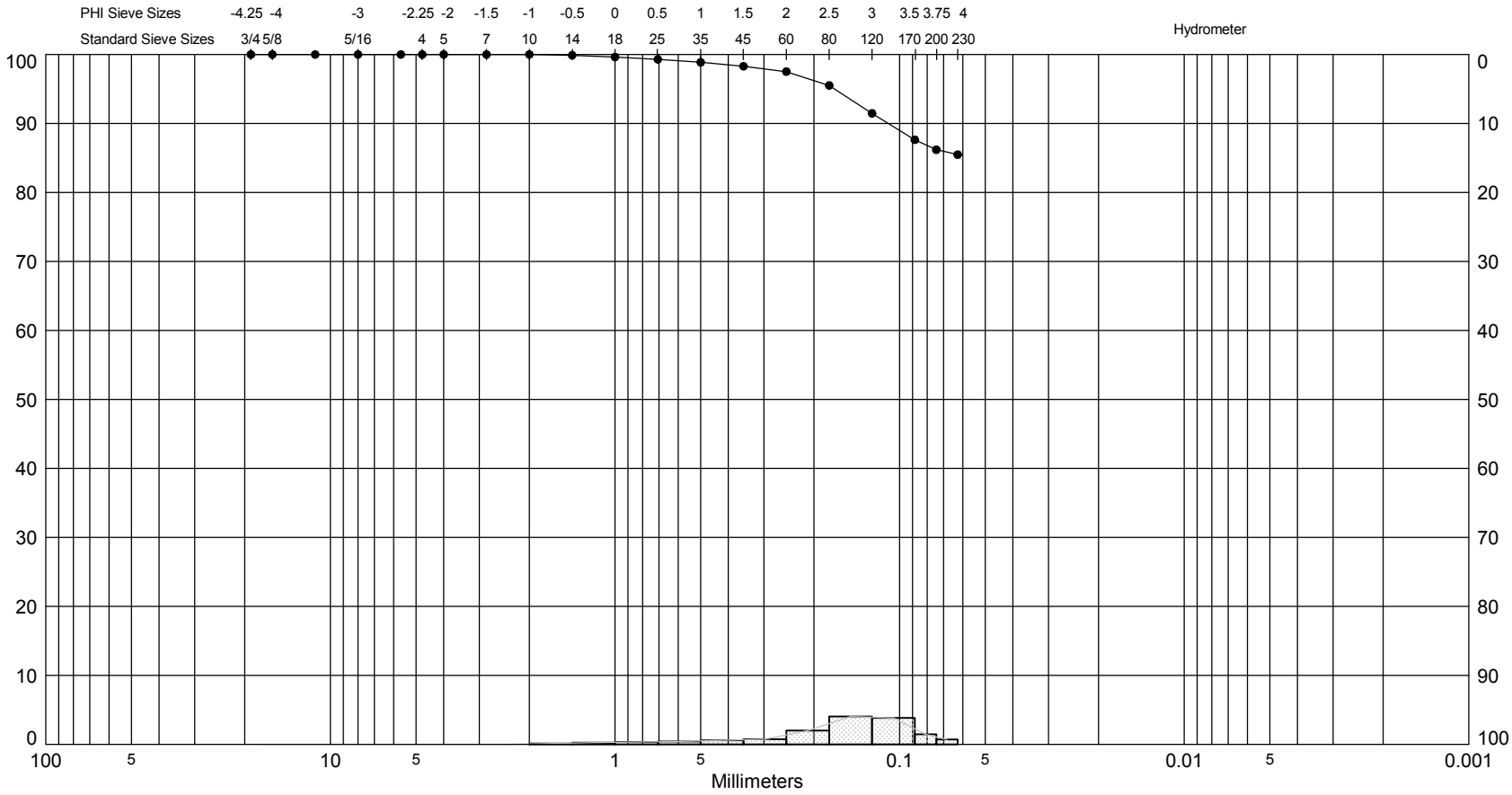
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y66 #1	—●—		ML-CL	#200 - 86.19 #230 - 85.48	9.20	11.50		2.65	-1.39	4.86	0.94

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

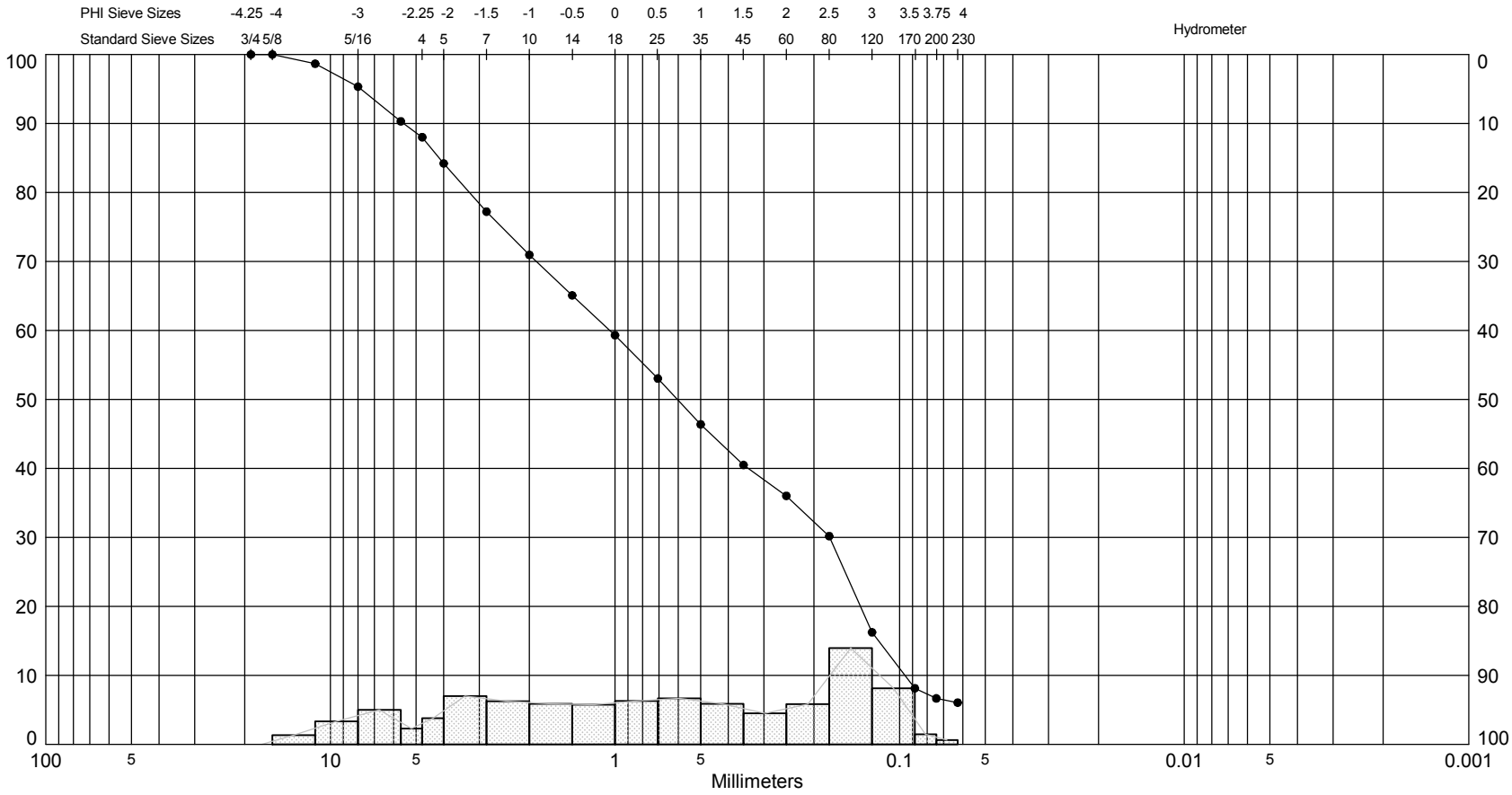
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y66 #2	—●—		SW-SM	#200 - 6.66 #230 - 6.05	2.80	20.20	0.73	0.41	-0.17	1.77	2.11

Comments: Gravel portion contains rocks

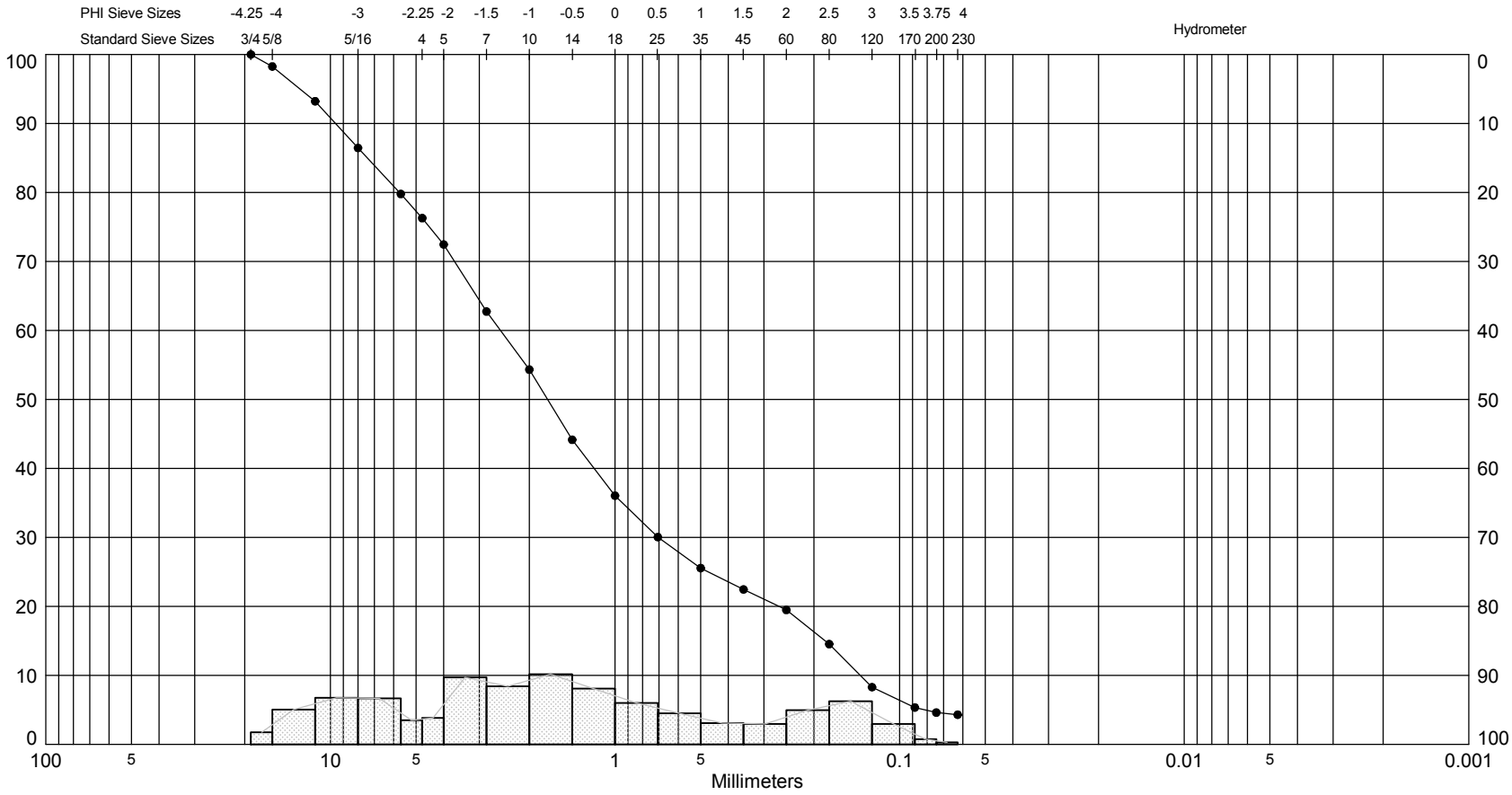
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y66 #3	—●—		SW	#200 - 4.61 #230 - 4.30	2.30	46.70		-0.67	0.35	2.18	2.04

Comments: Gravel portion contains rock and shell

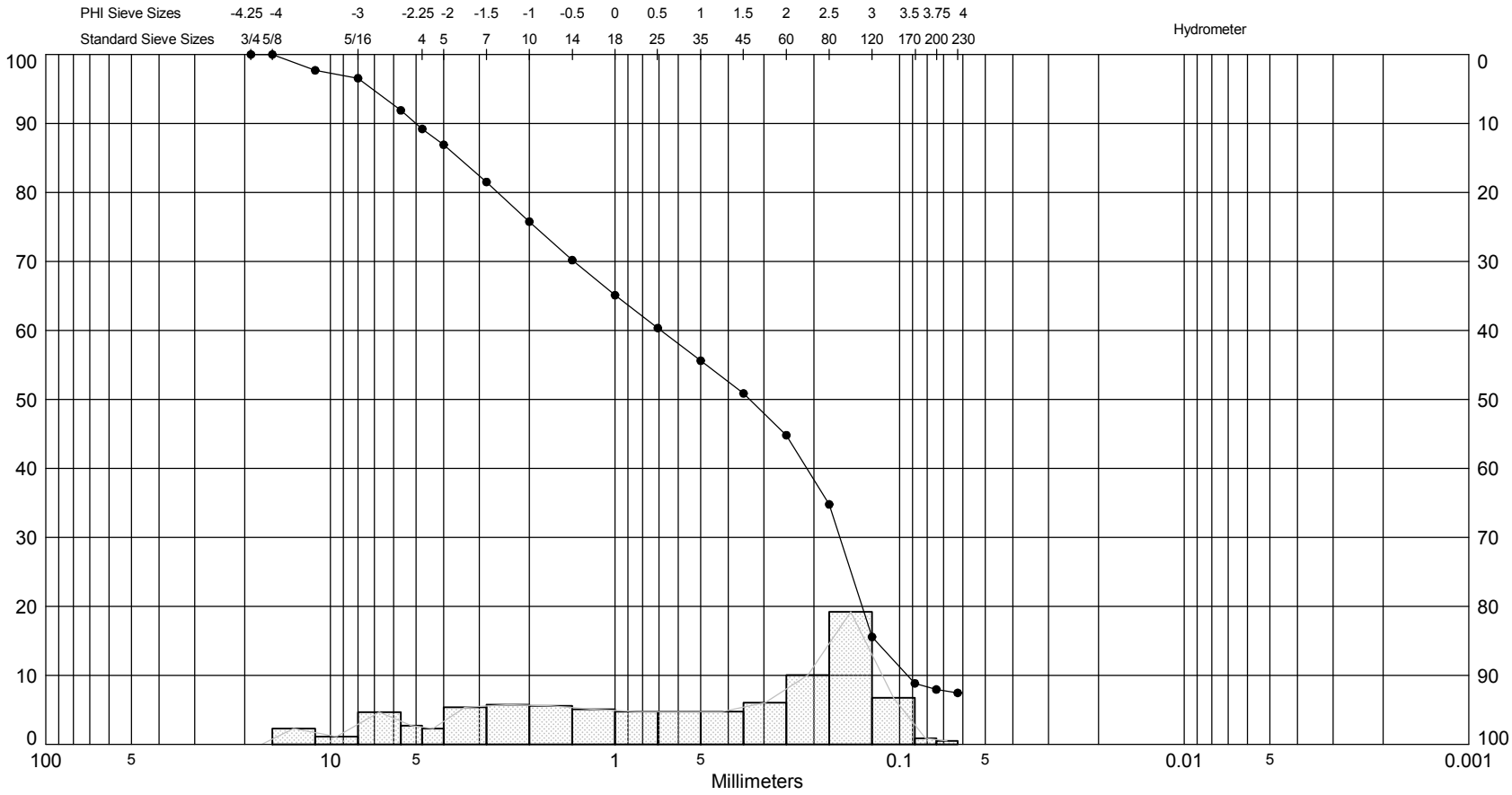
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y66 #4	—●—		SW-SM	#200 - 7.95 #230 - 7.46	2.20	18.70	1.57	0.7	-0.46	1.9	2.09

Comments:

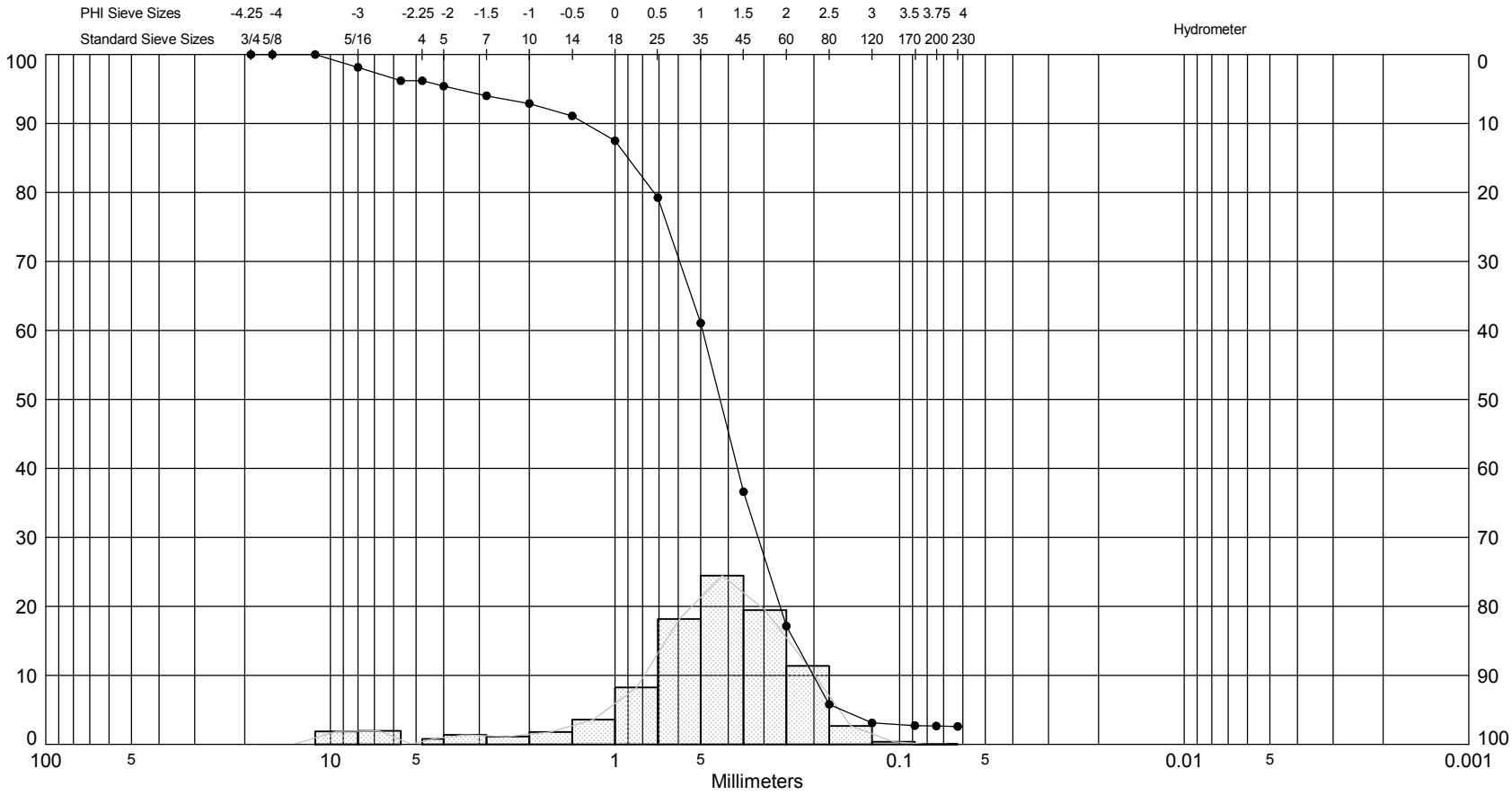
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y66 #5	—●—		SW	#200 - 2.66 #230 - 2.60	0.70	2.30	1.23	0.98	-1.57	6.01	1.21

Comments: Gravel portion contains rocks

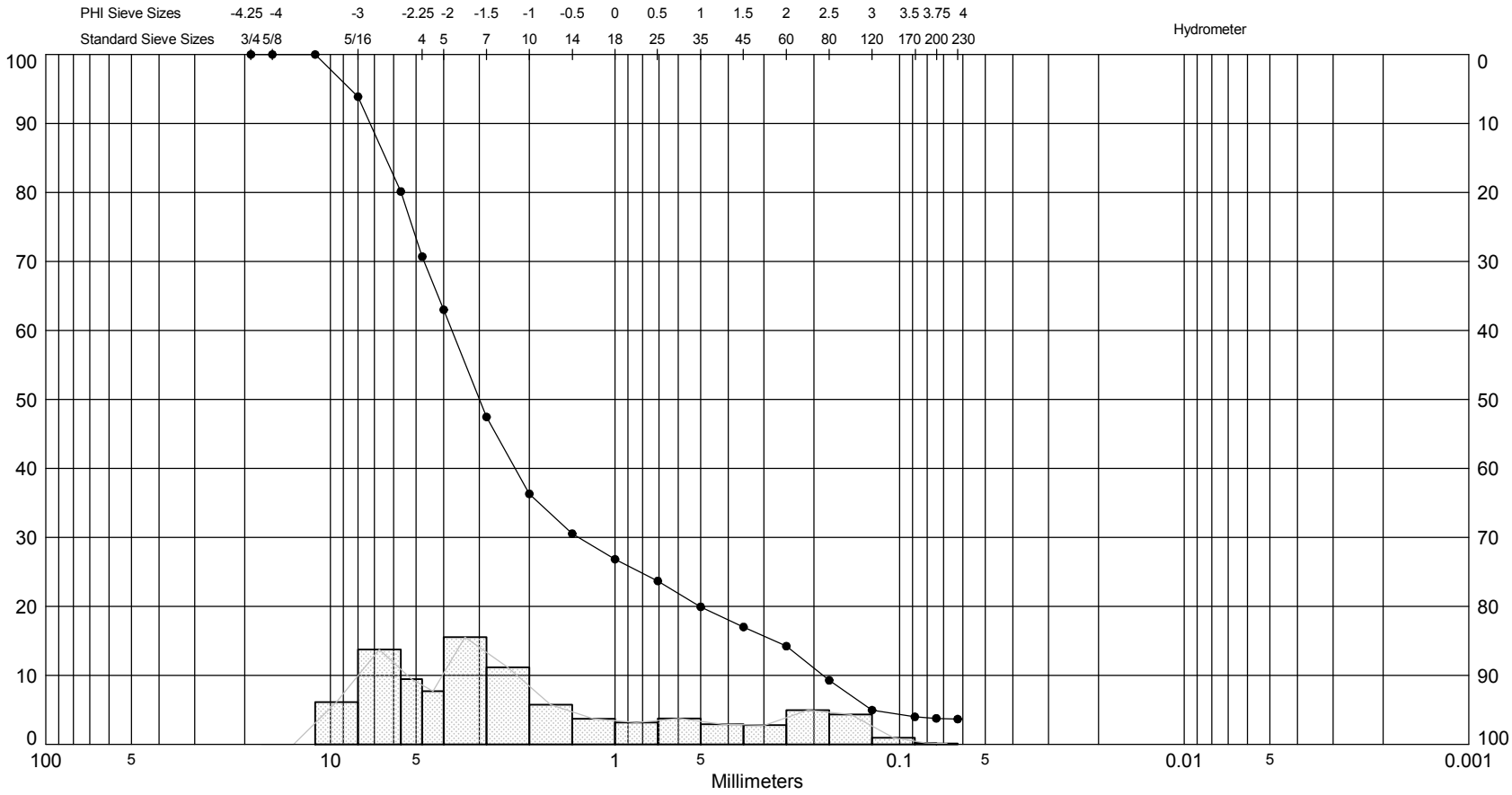
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y66 #6	—●—		SW	#200 - 3.77 #230 - 3.66	0.20	0.90		-1.07	0.95	2.78	1.77

Comments: Gravel portion contains rocks

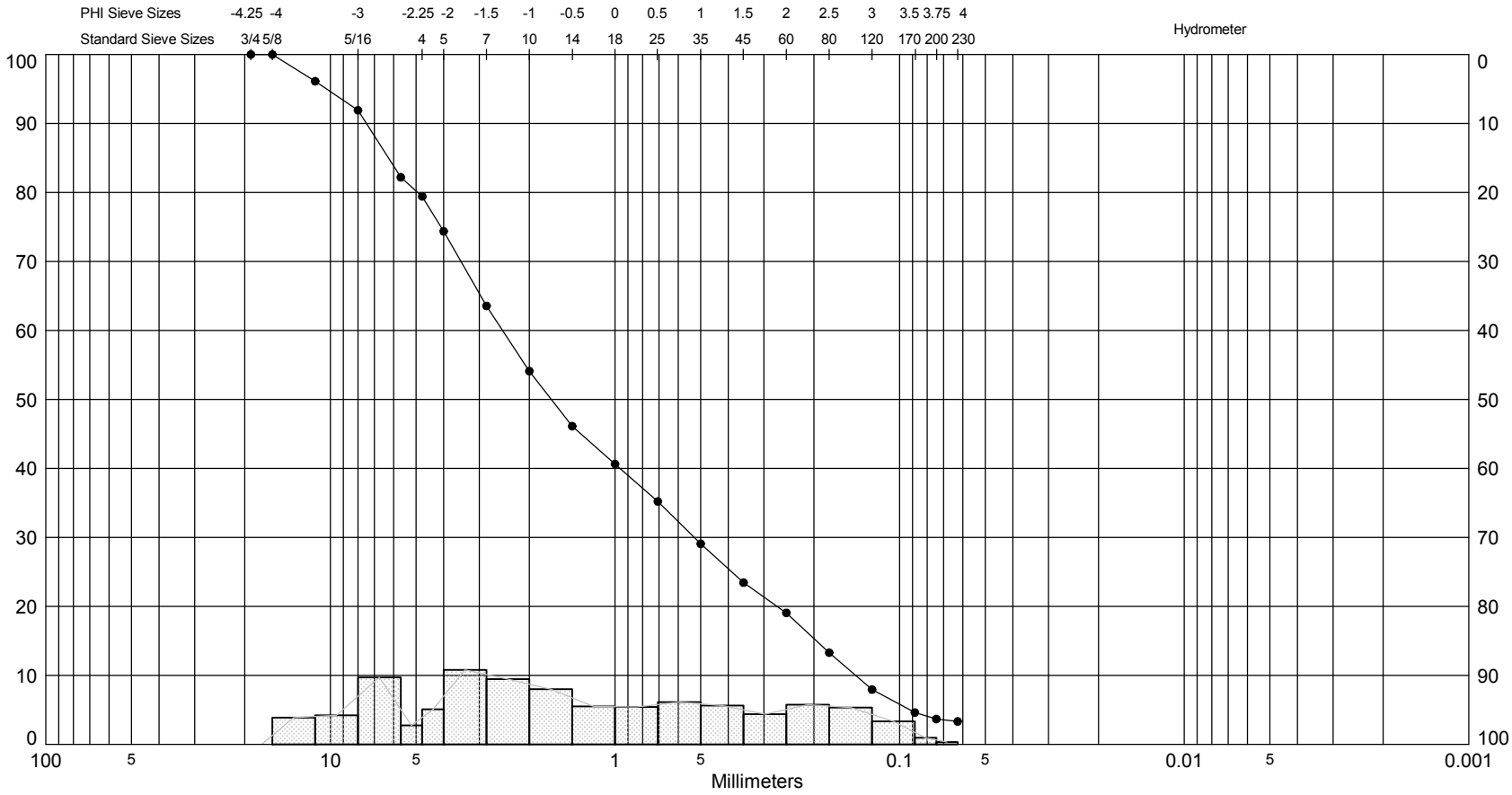
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y67 #1	—●—		SW	#200 - 3.67 #230 - 3.32	4.60	41.30		-0.48	0.32	2.02	2.01

Comments:

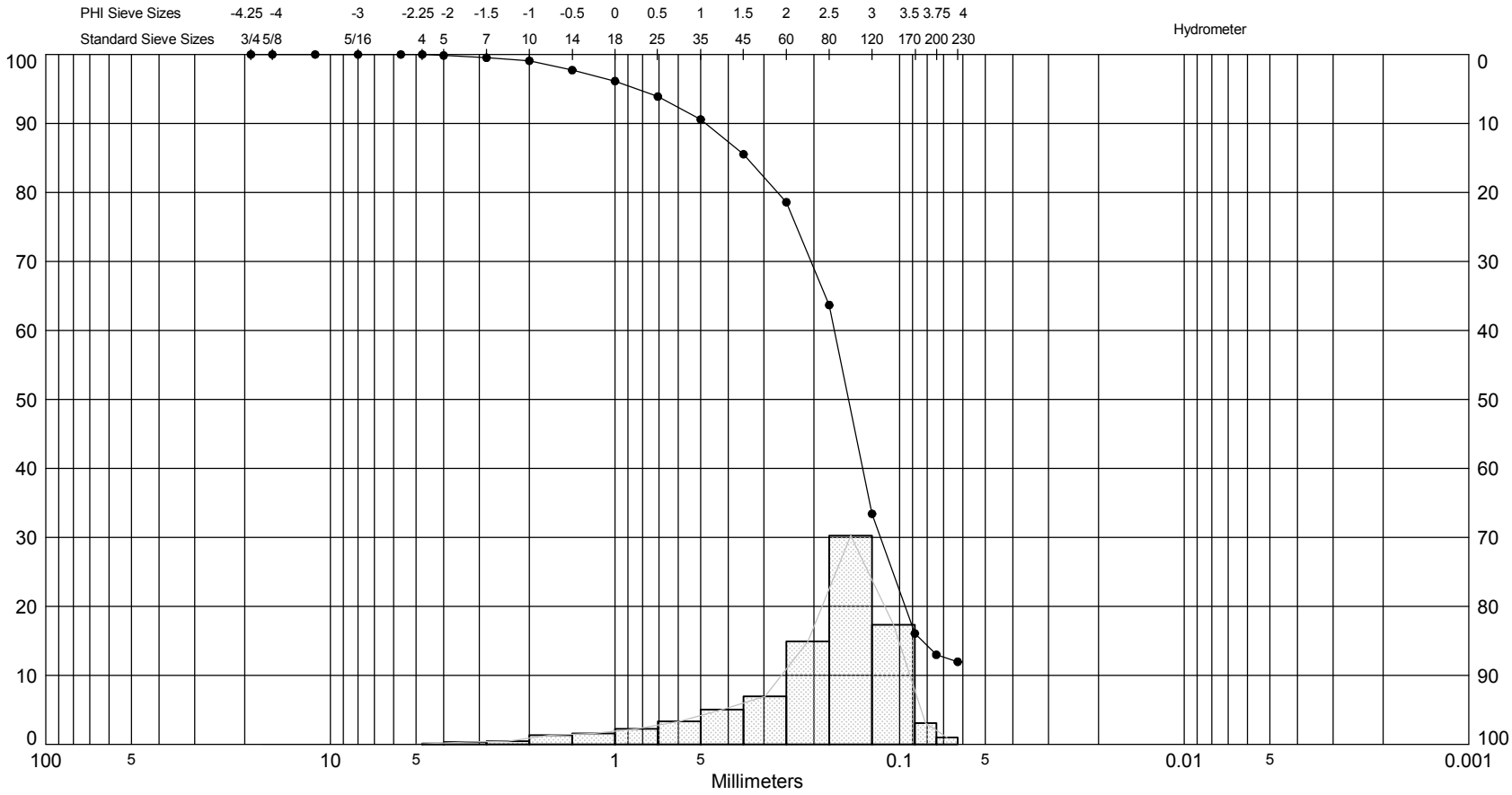
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y67 #2	—●—		SW-SM	#200 - 12.98 #230 - 11.97	1.60	18.20	2.73	2.35	-1.53	5.5	1.02

Comments:

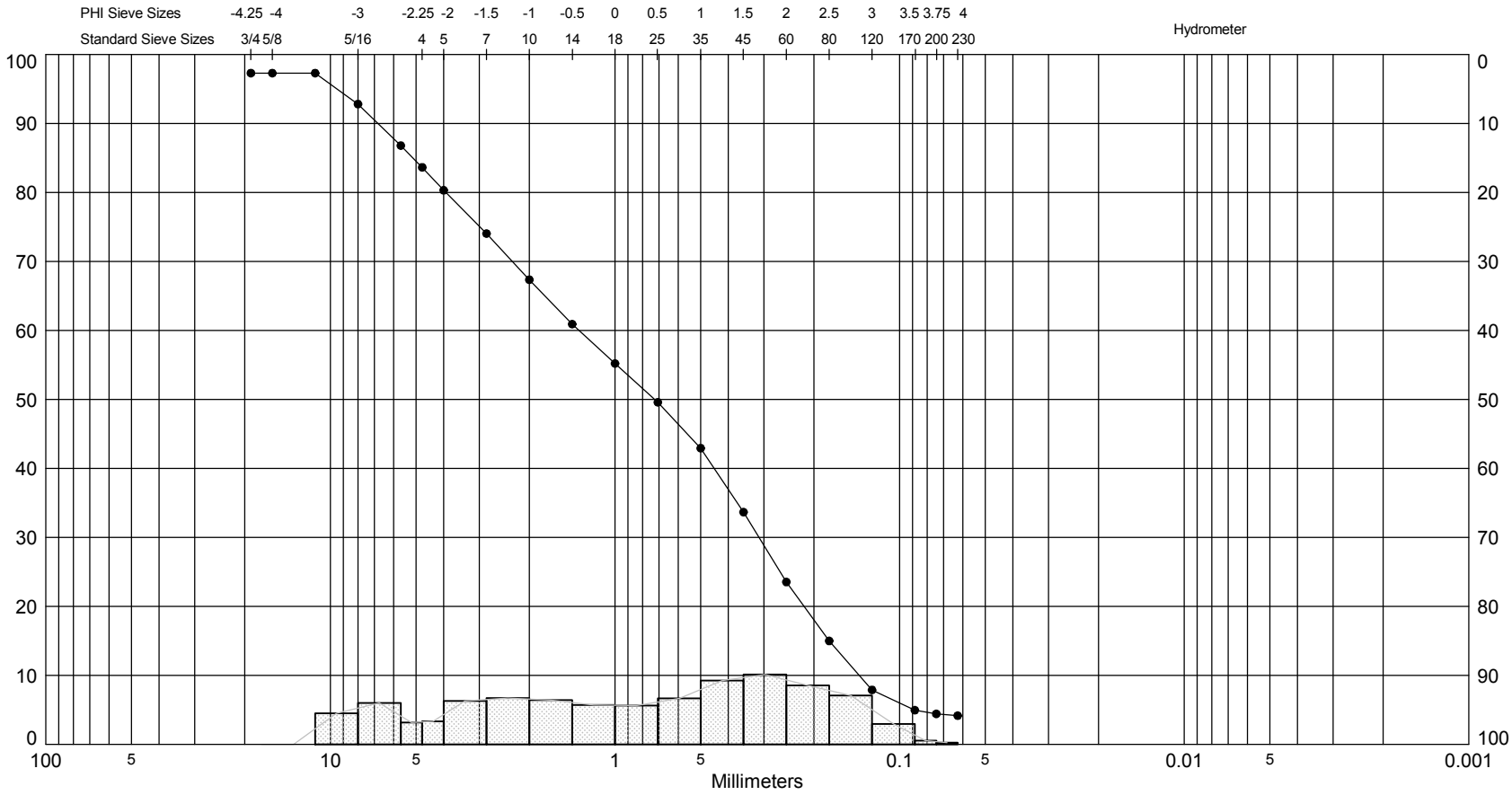
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y67 #3	—●—	SW WITH GRAVEL		#200 4.42 #230 4.16	1.90	24.30	0.46	0.04	0.03	1.84	1.9

Comments:

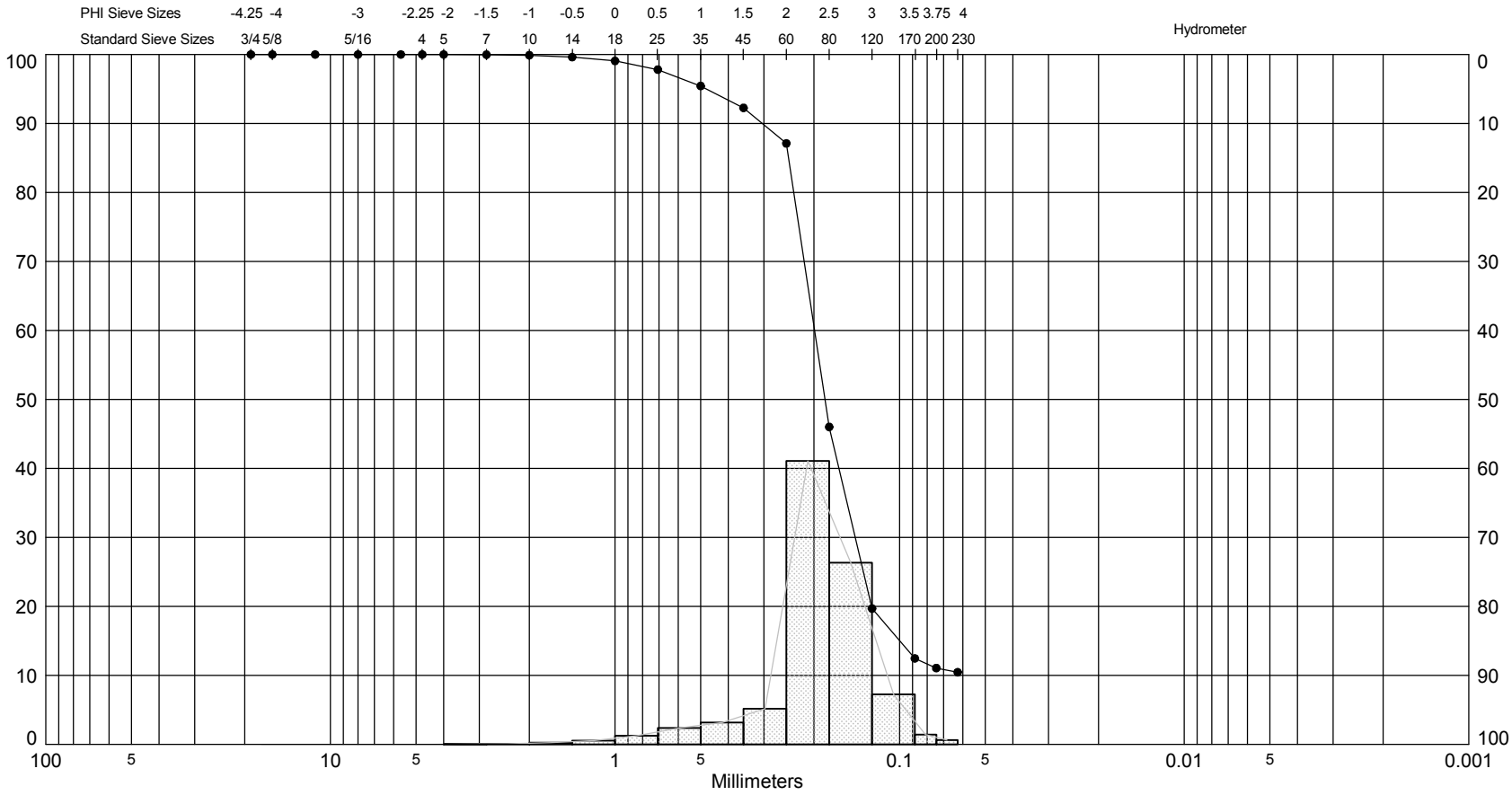
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y67 #4	—●—		SP-SM	#200 - 11.06 #230 - 10.45	1.20	2.20	2.45	2.35	-1.46	7.47	0.66

Comments:

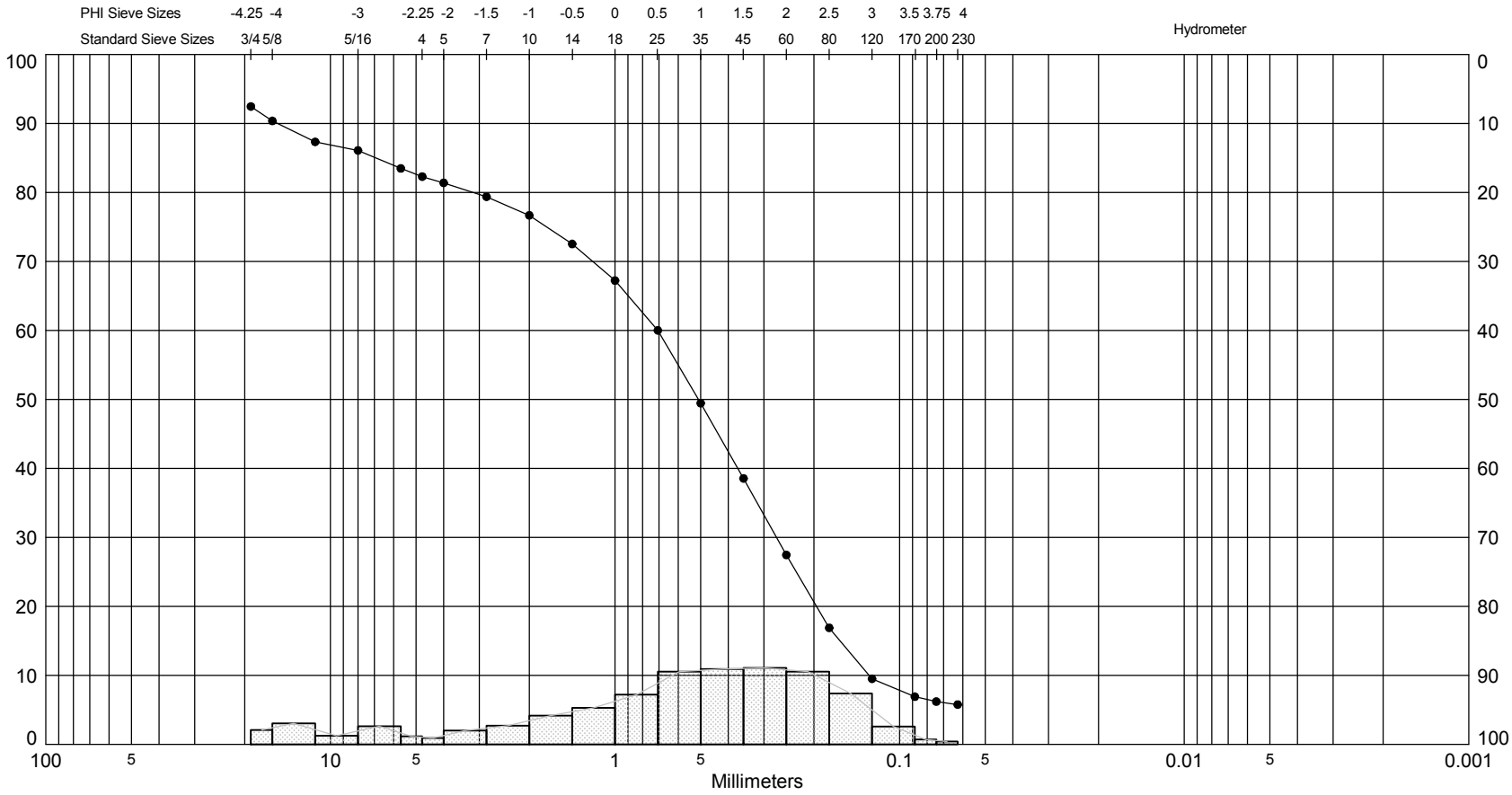
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y68 #1	—●—		SW-SM	#200 - 6.20 #230 - 5.77	1.30	40.50	0.97	0.2	-0.24	2.6	1.86

Comments:

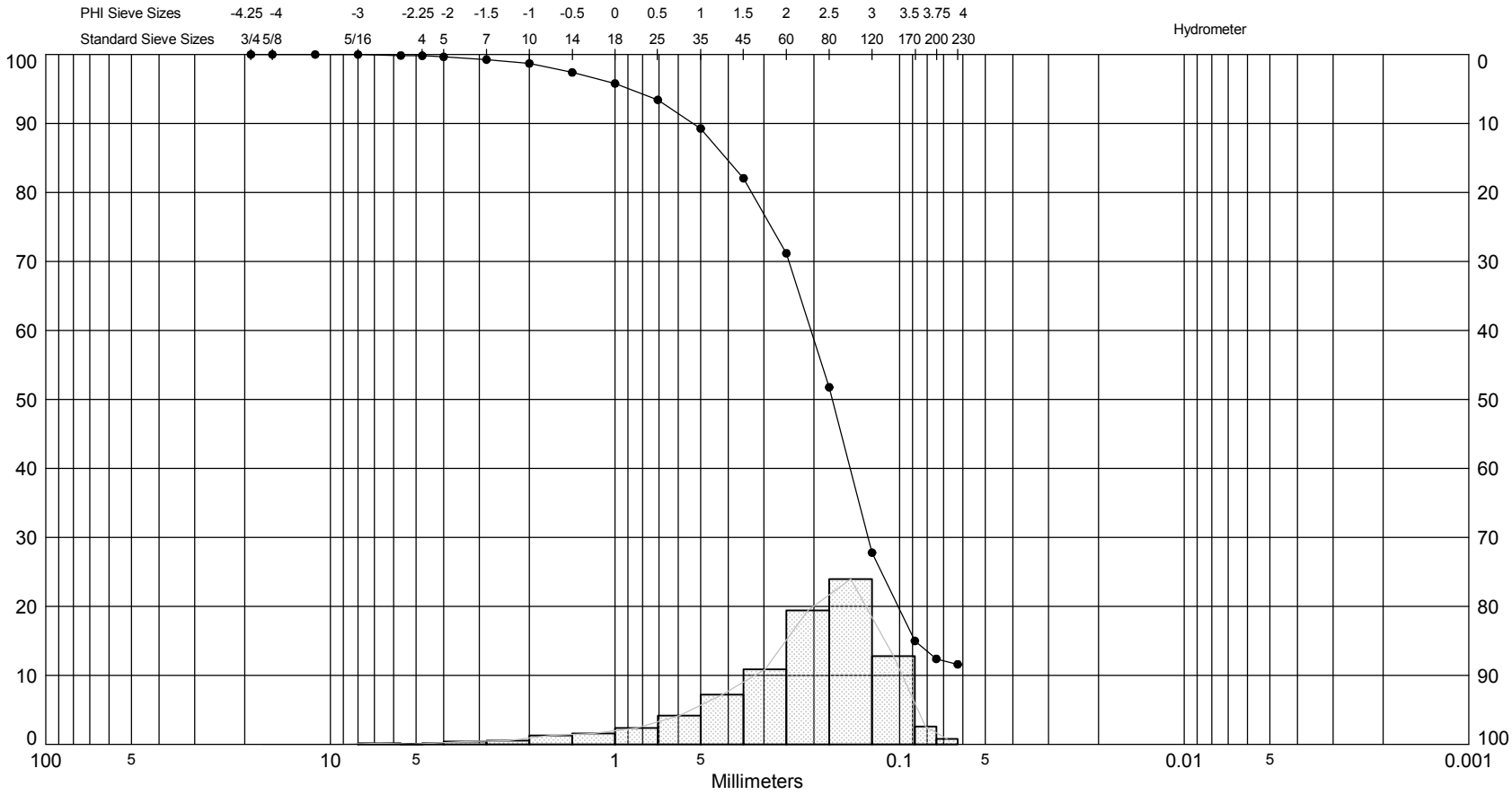
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y68 #2	—●—		SW-SM	#200 - 12.39 #230 - 11.60	2.10	16.40	2.54	2.17	-1.36	5.4	1.04

Comments:

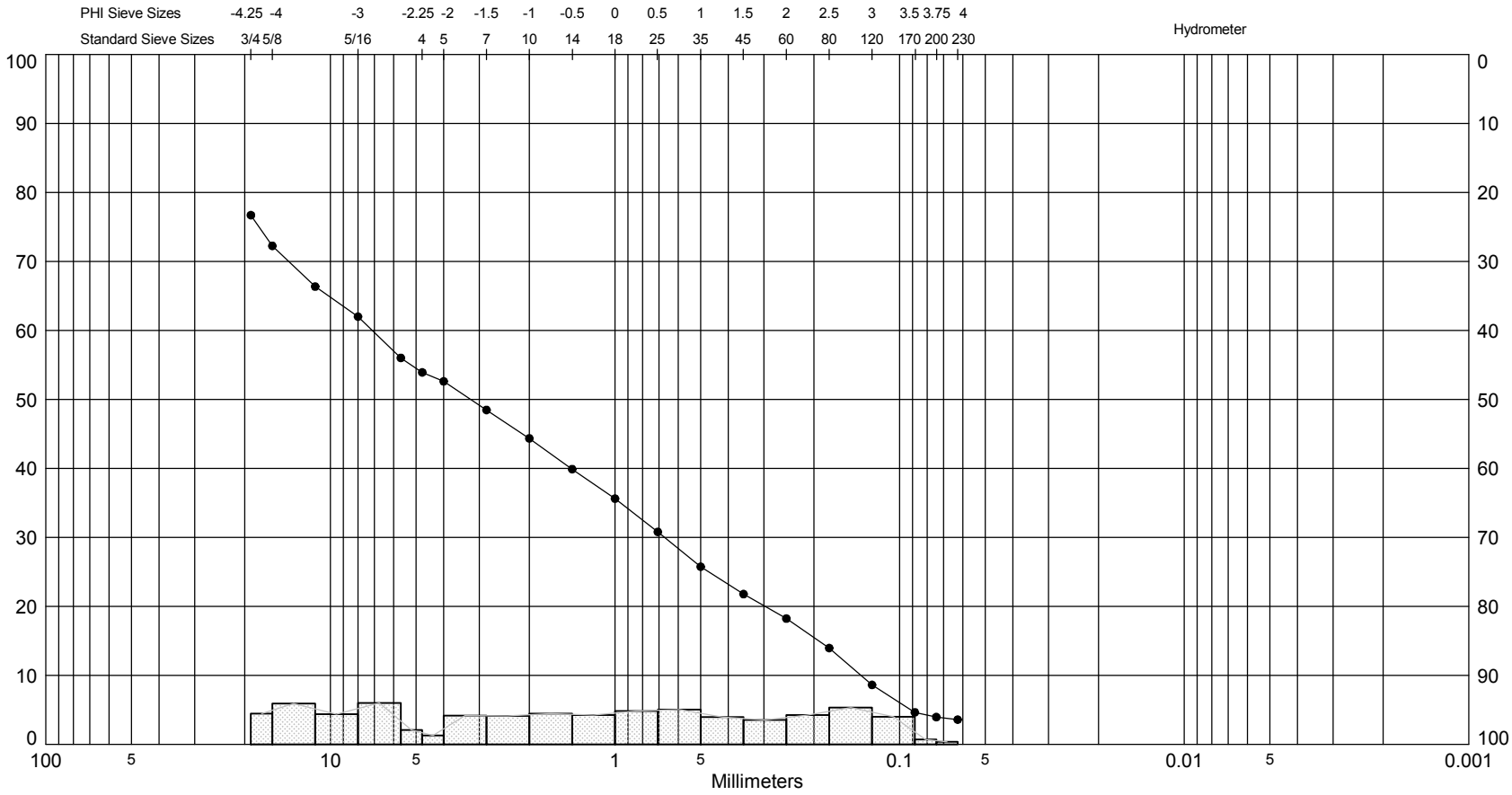
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y68 #3	—●—		SW WITH GRAVEL	#200 3.95 #230 3.58	2.40	30.80		-1.45	1.21	2.77	2.21

Comments:

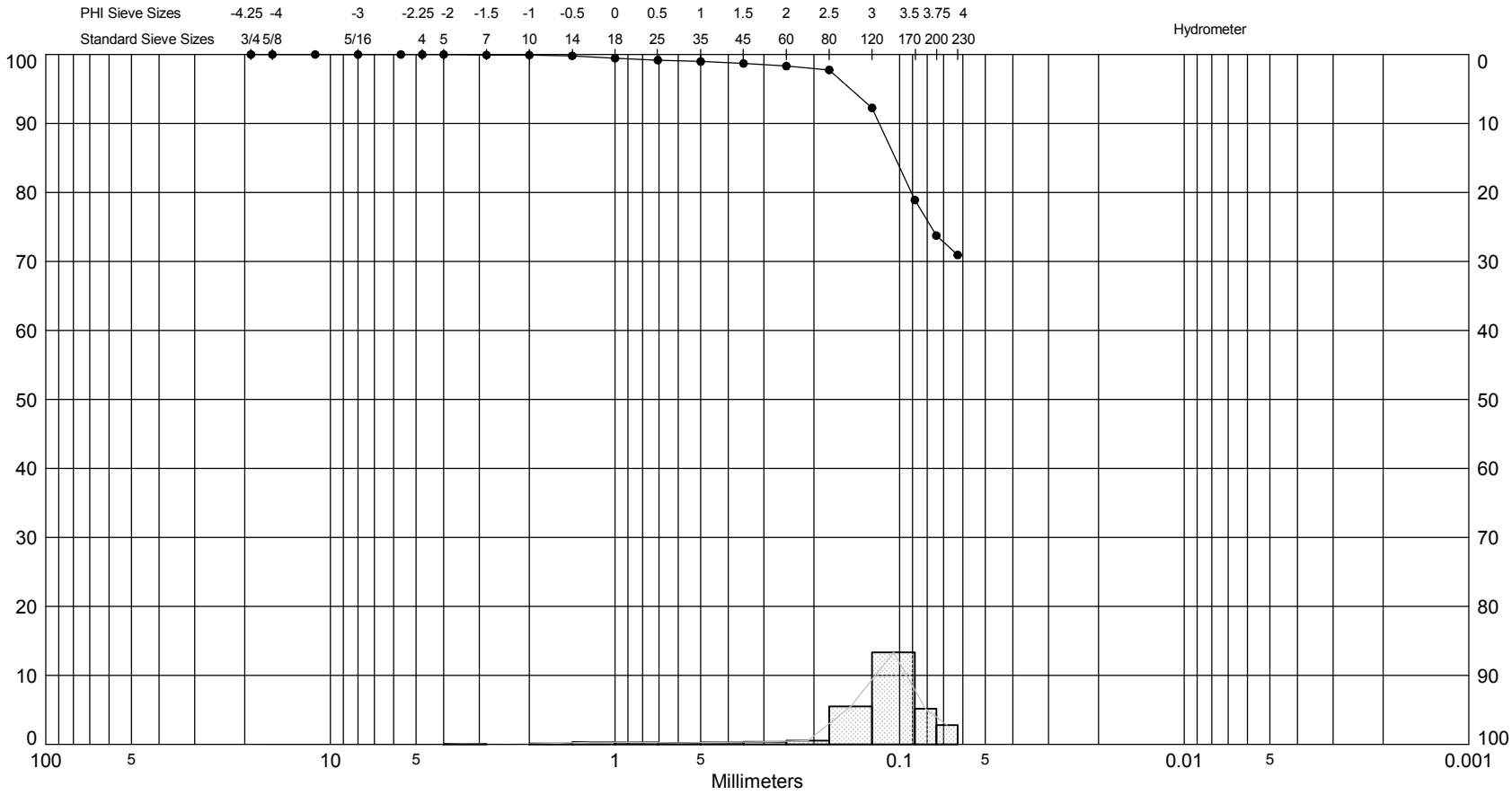
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y68 #4	—●—		ML-CL	#200 - 73.75 #230 - 70.94	4.50	7.60		3.11	-3.02	14.55	0.76

Comments:

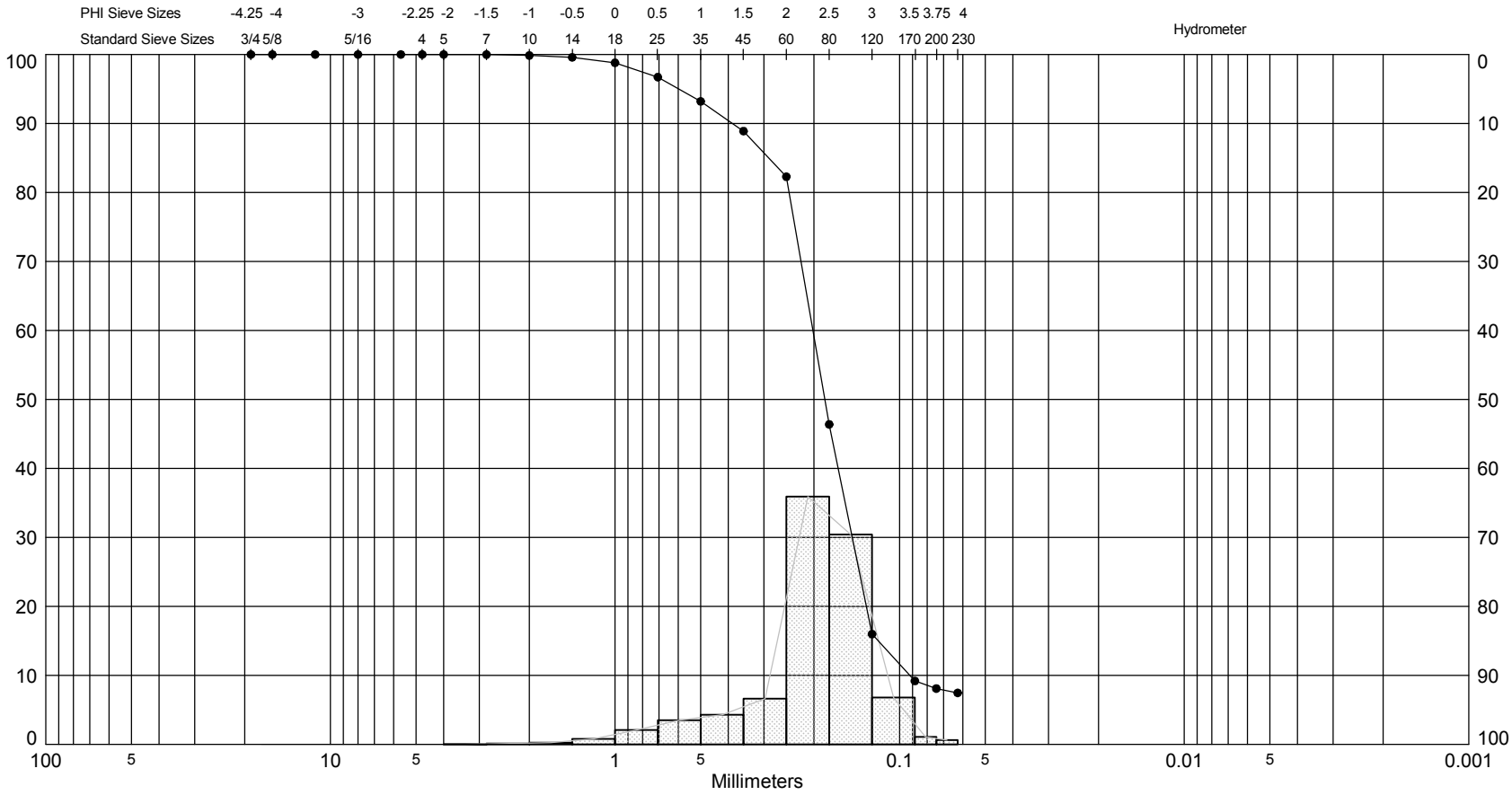
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y68 #5	—●—		SP-SM	#200 - 8.09 #230 - 7.46	0.60	2.20	2.45	2.3	-1.4	5.97	0.73

Comments:

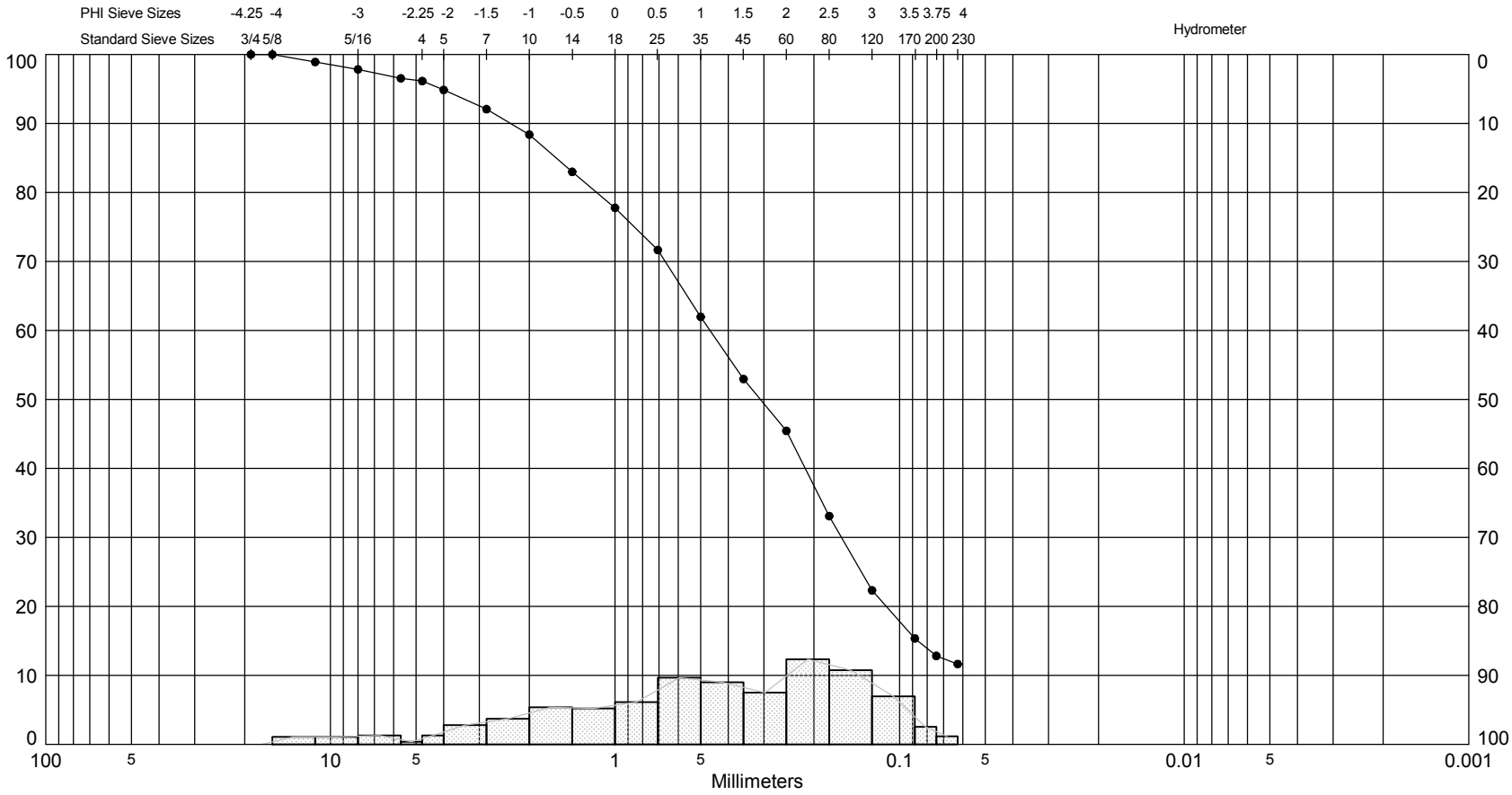
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y69 #1	—●—		SW-SM	#200 - 12.82 #230 - 11.64	2.90	27.10	1.7	1.1	-0.66	2.83	1.74

Comments:

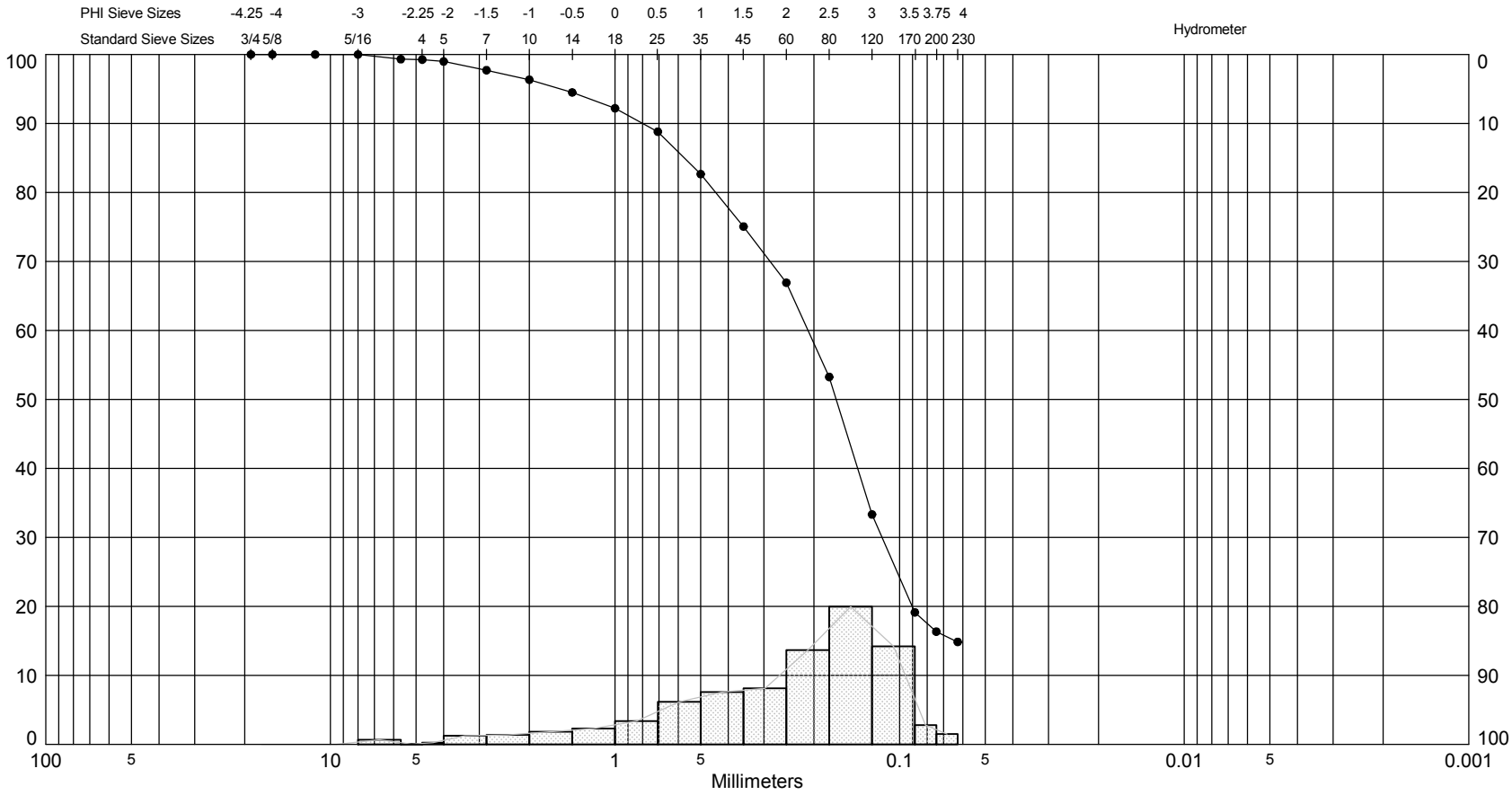
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y69 #2	—●—		SM	#200 - 16.34 #230 - 14.85	1.70	17.60	2.58	1.98	-1.2	4.21	1.33

Comments:

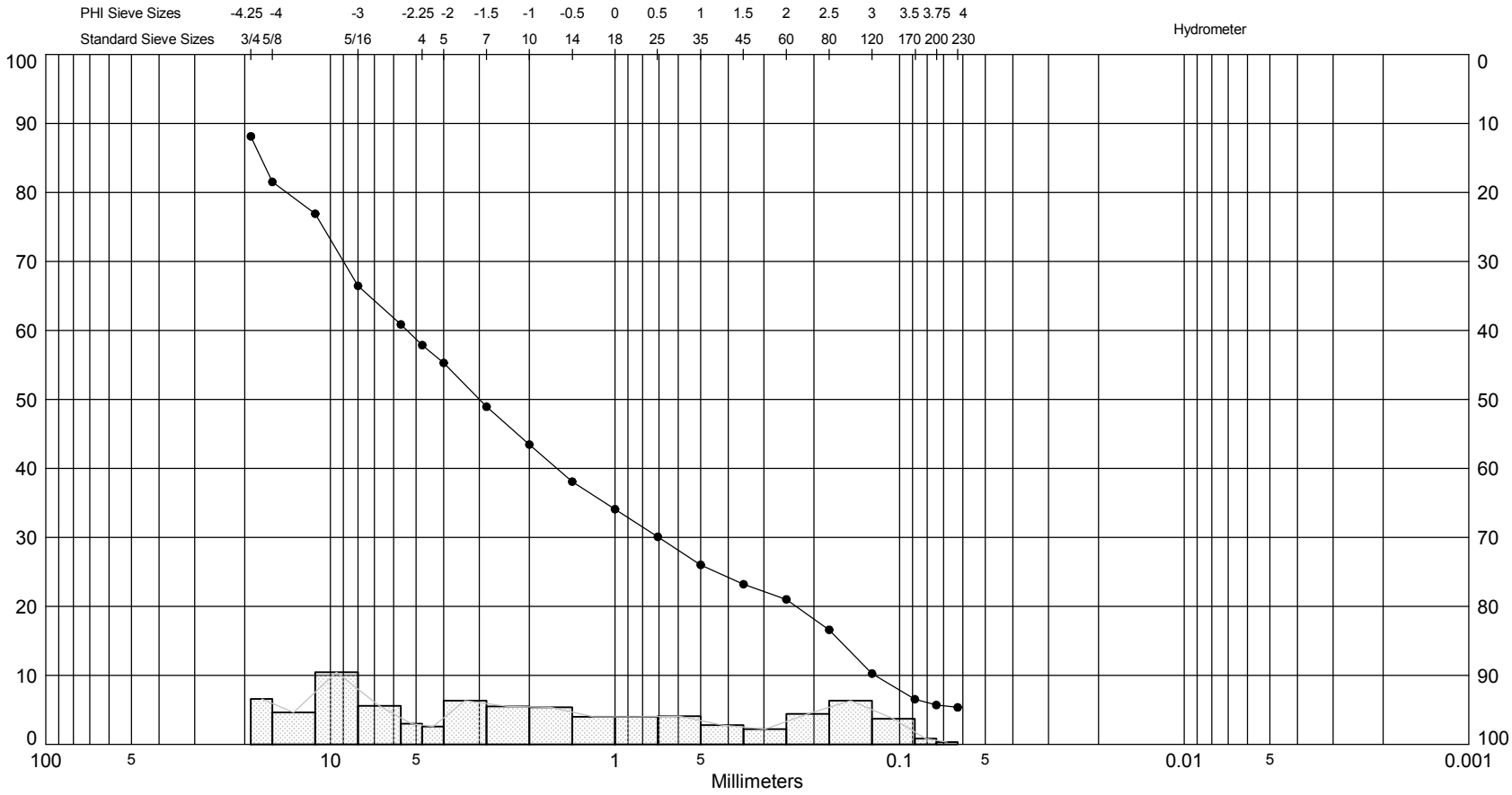
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y69 #3	—●—		SW-SM	#200 - 5.70 #230 - 5.36	2.10	31.00		-1.33	0.94	2.5	2.25

Comments: With Gravel

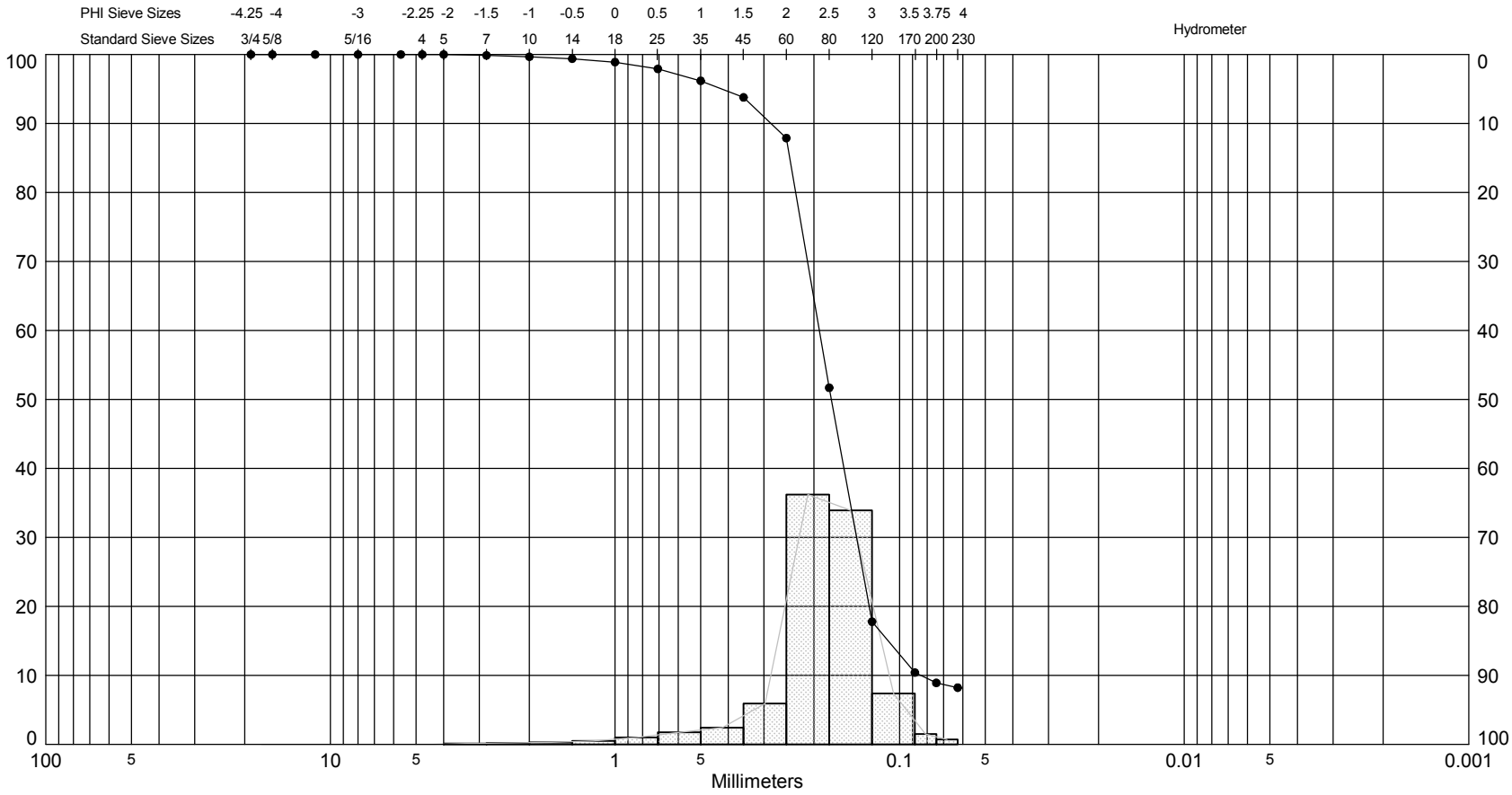
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y69 #4	—●—		SP-SM	#200 - 8.91 #230 - 8.22	0.30	1.90	2.52	2.41	-1.88	10.14	0.66

Comments:

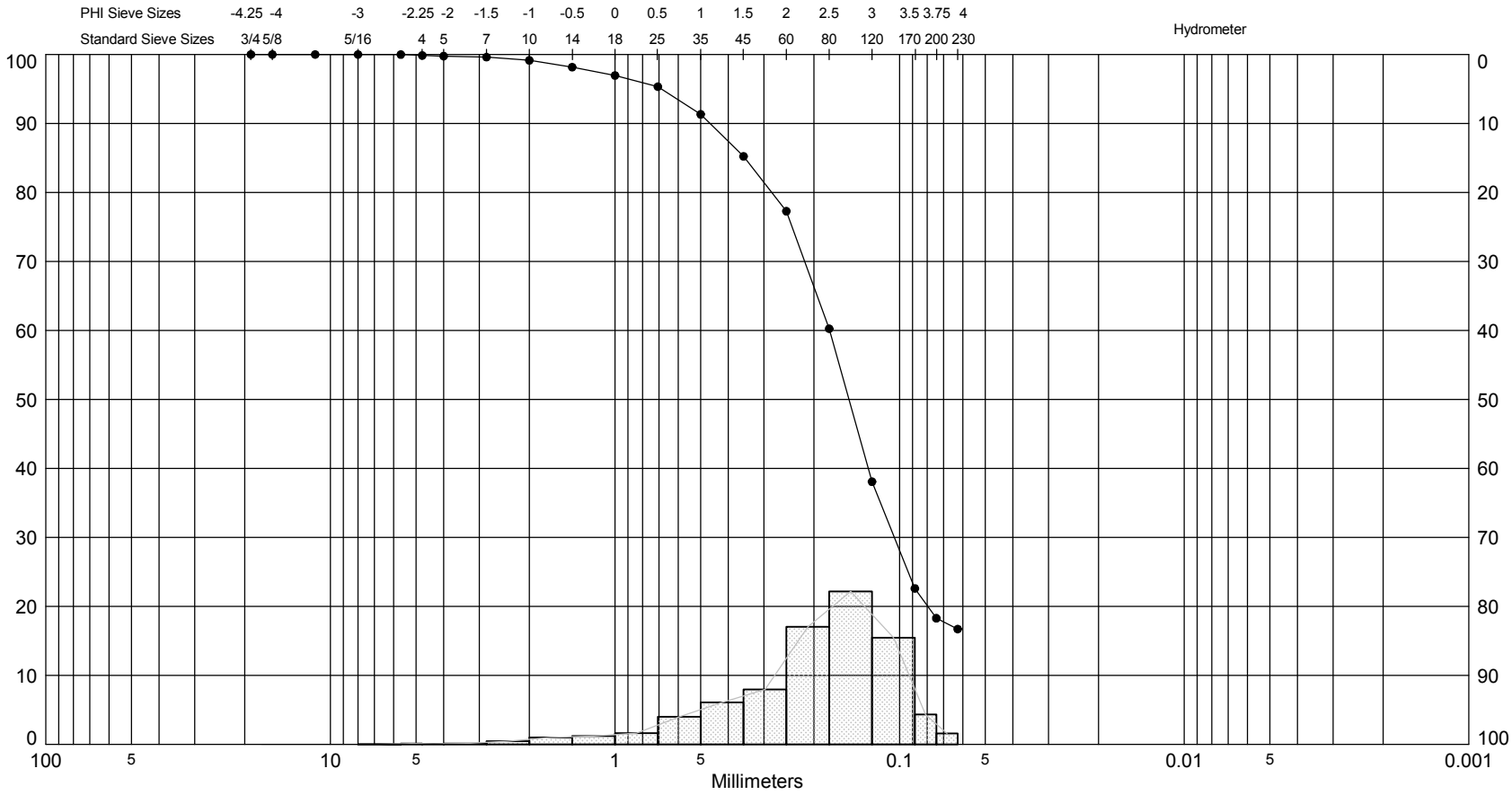
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y70 #1	—●—		SM	#200 - 18.28 #230 - 16.71	2.00	17.60	2.73	2.33	-1.31	5.24	1.01

Comments:

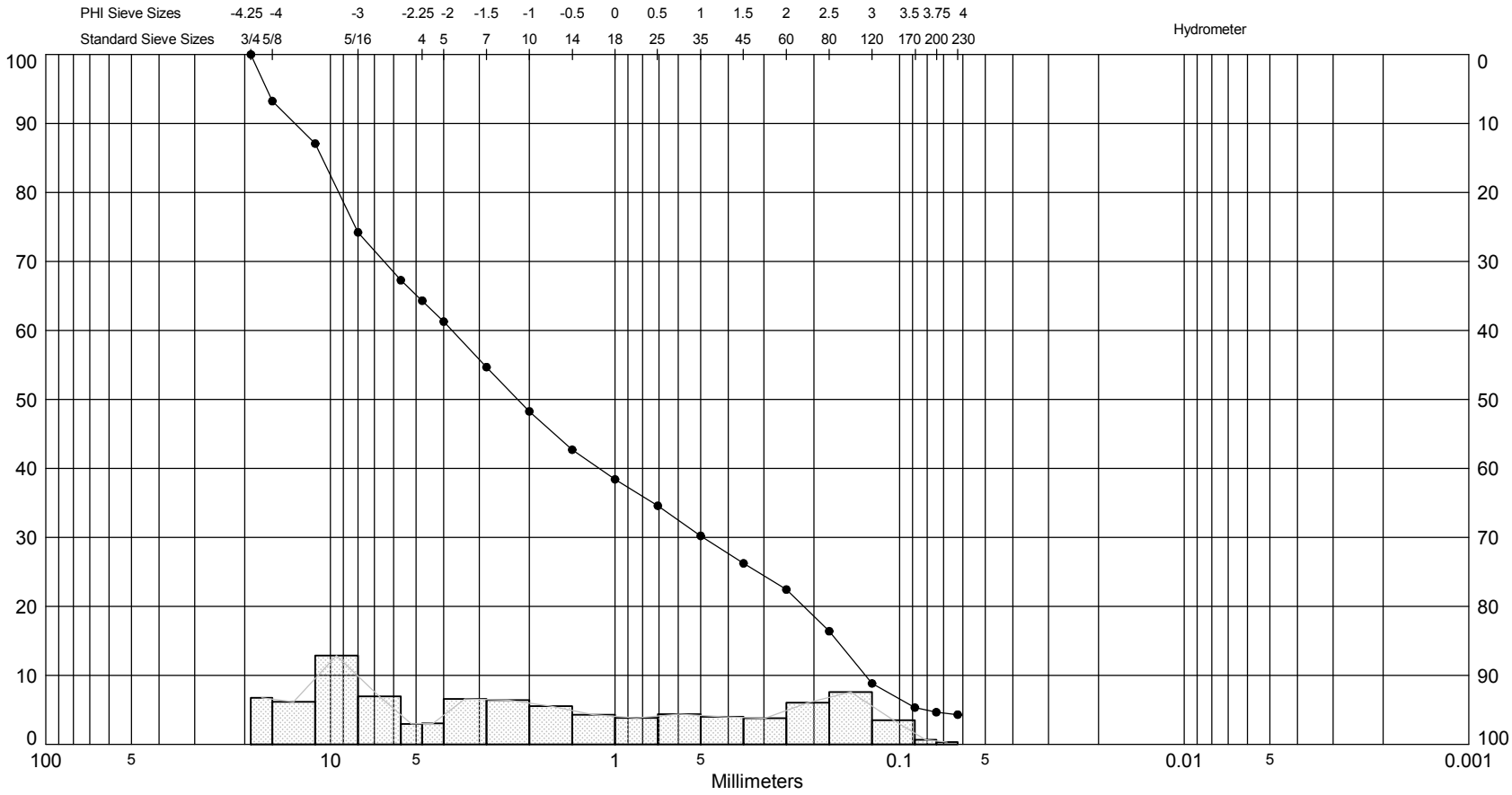
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y70 #2	—●—		SW	#200 - 4.66 #230 - 4.31	3.90	28.60		-0.89	0.33	1.77	2.37

Comments: Gravel portion consists of coral, shell, and rock

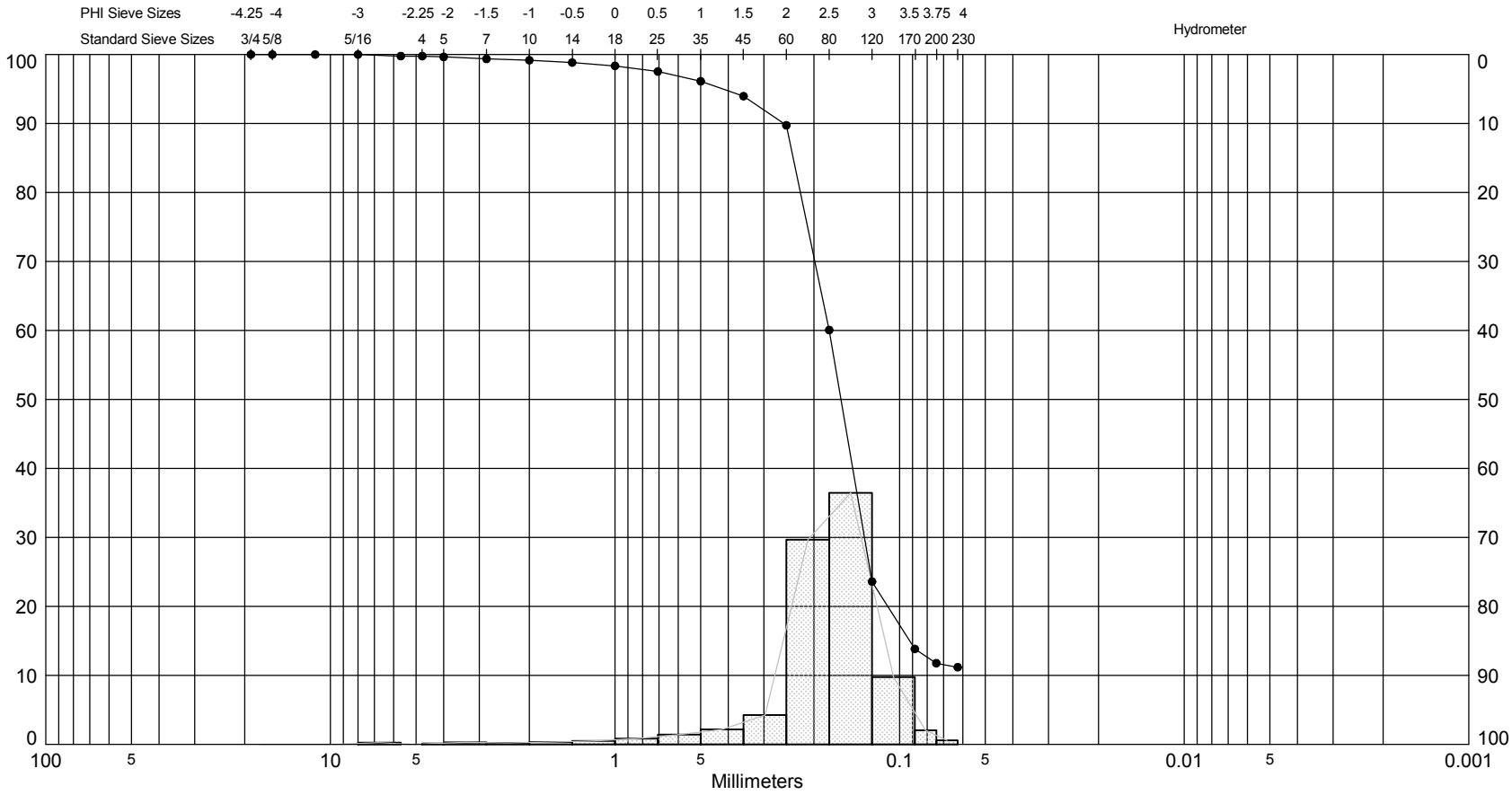
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y70 #3	—●—		SP-SM	#200 - 11.77 #230 - 11.18	1.30	4.20	2.64	2.45	-2.71	15.33	0.76

Comments:

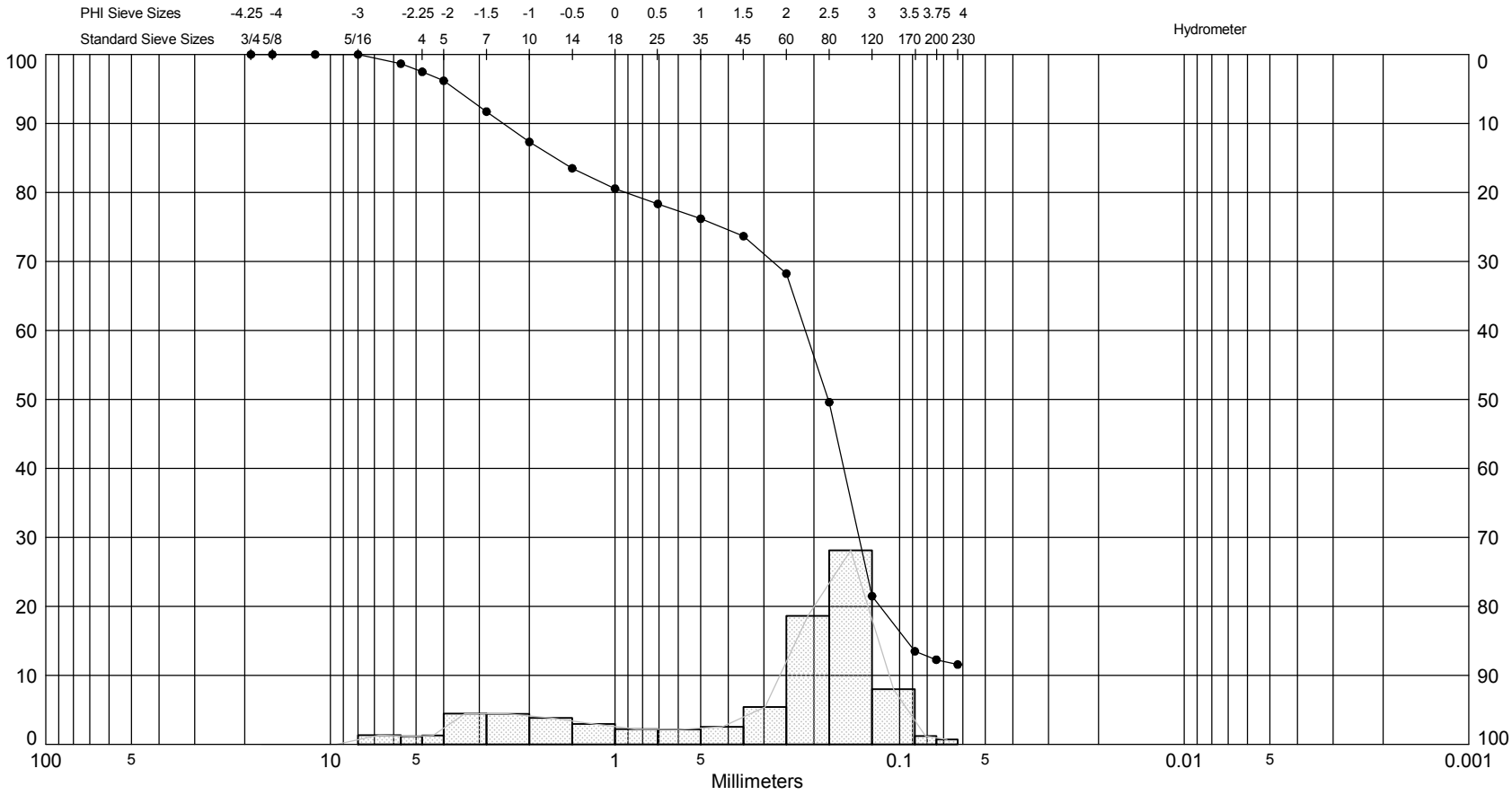
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	02-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y71 #1	—●—		SM	#200 - 12.27 #230 - 11.57	1.50	10.50	2.49	1.6	-1.1	2.84	1.72

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

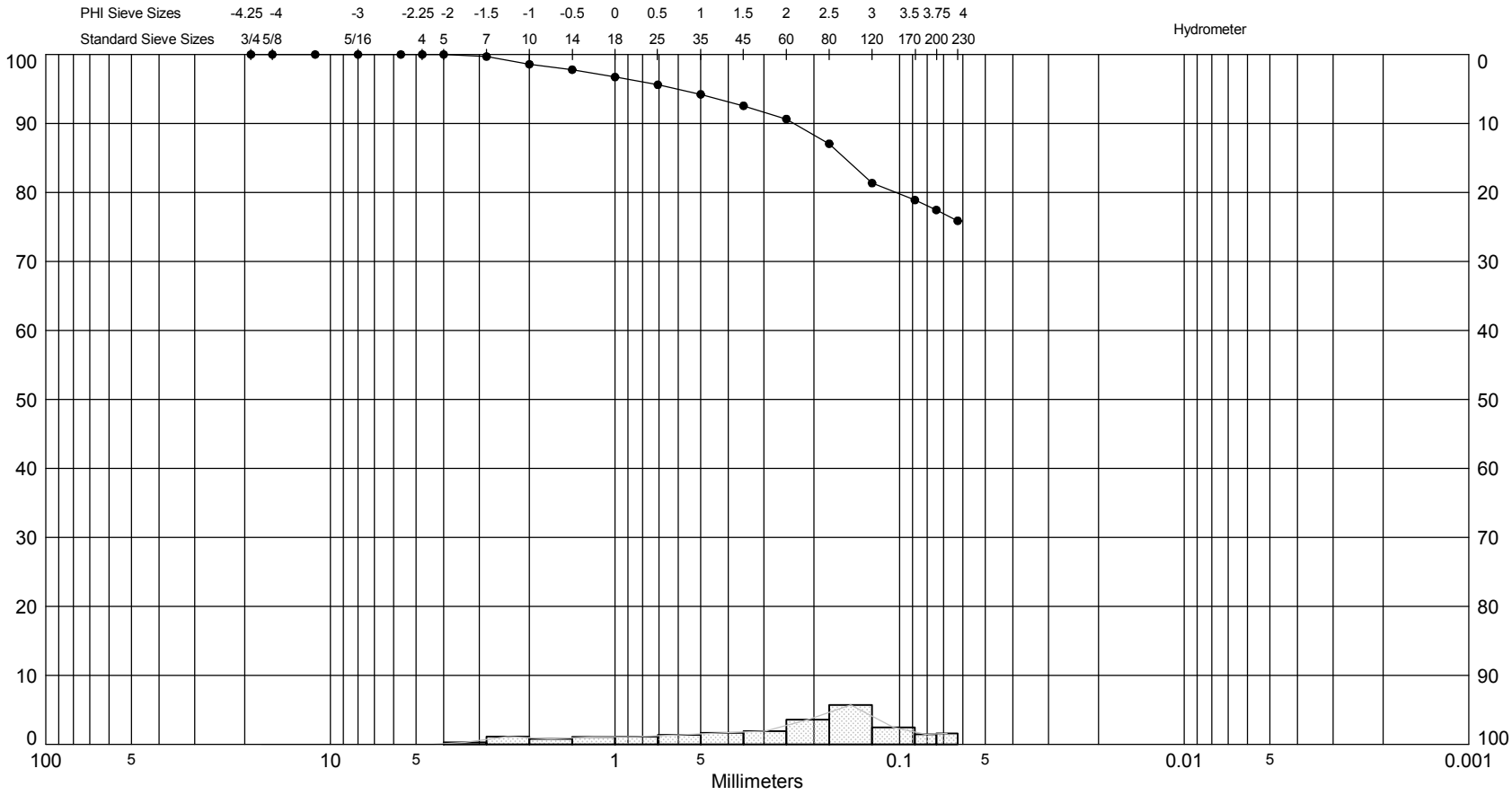
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y71 #2	—●—		ML-CL	#200 - 77.46 #230 - 75.89	11.50	8.70		1.95	-0.83	2.79	1.45

Comments:

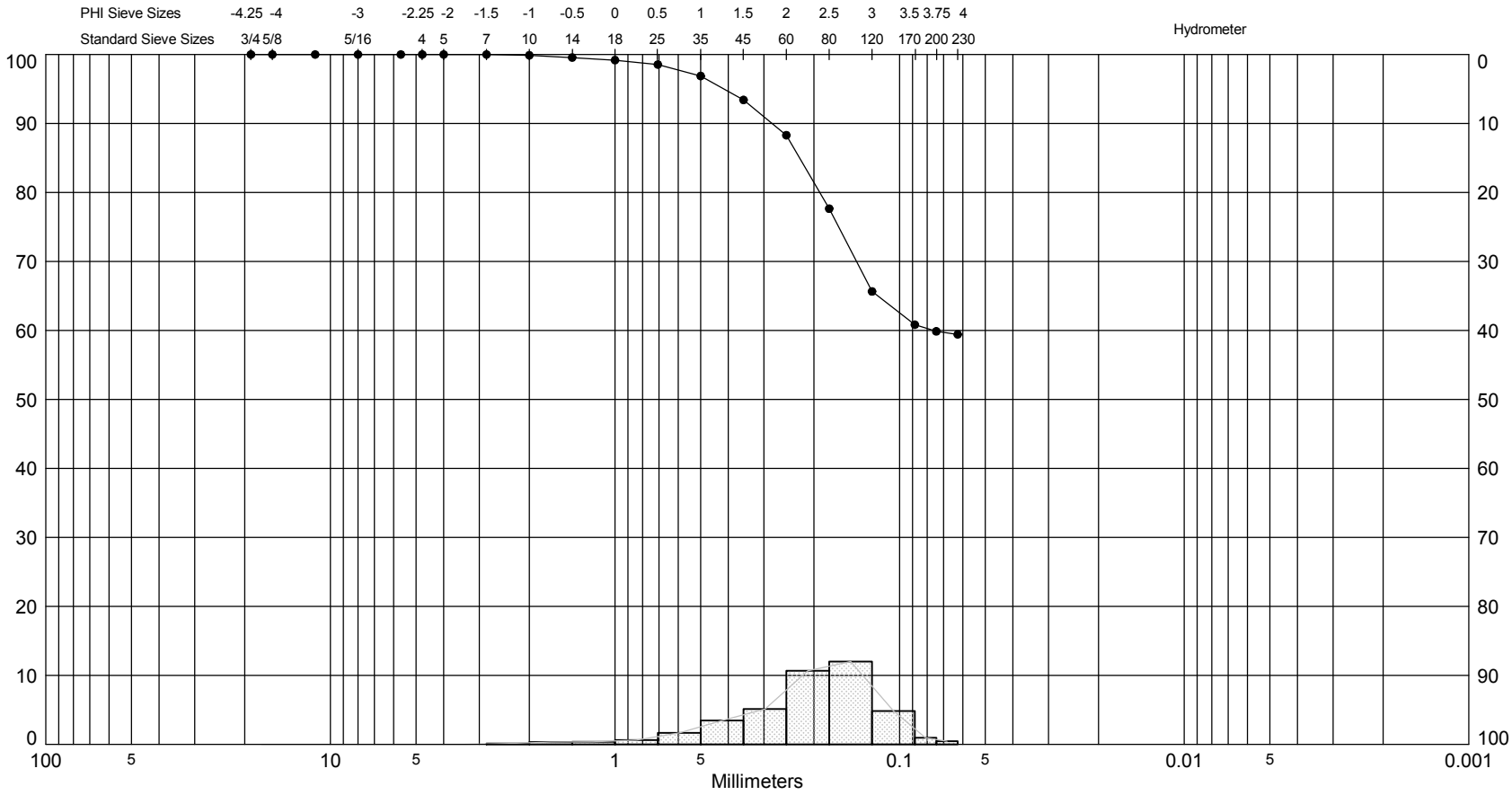
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y72 #1	—●—		ML-CL	#200 - 59.87 #230 - 59.43	3.50	11.80		2.27	-1.06	4.72	0.84

Comments:

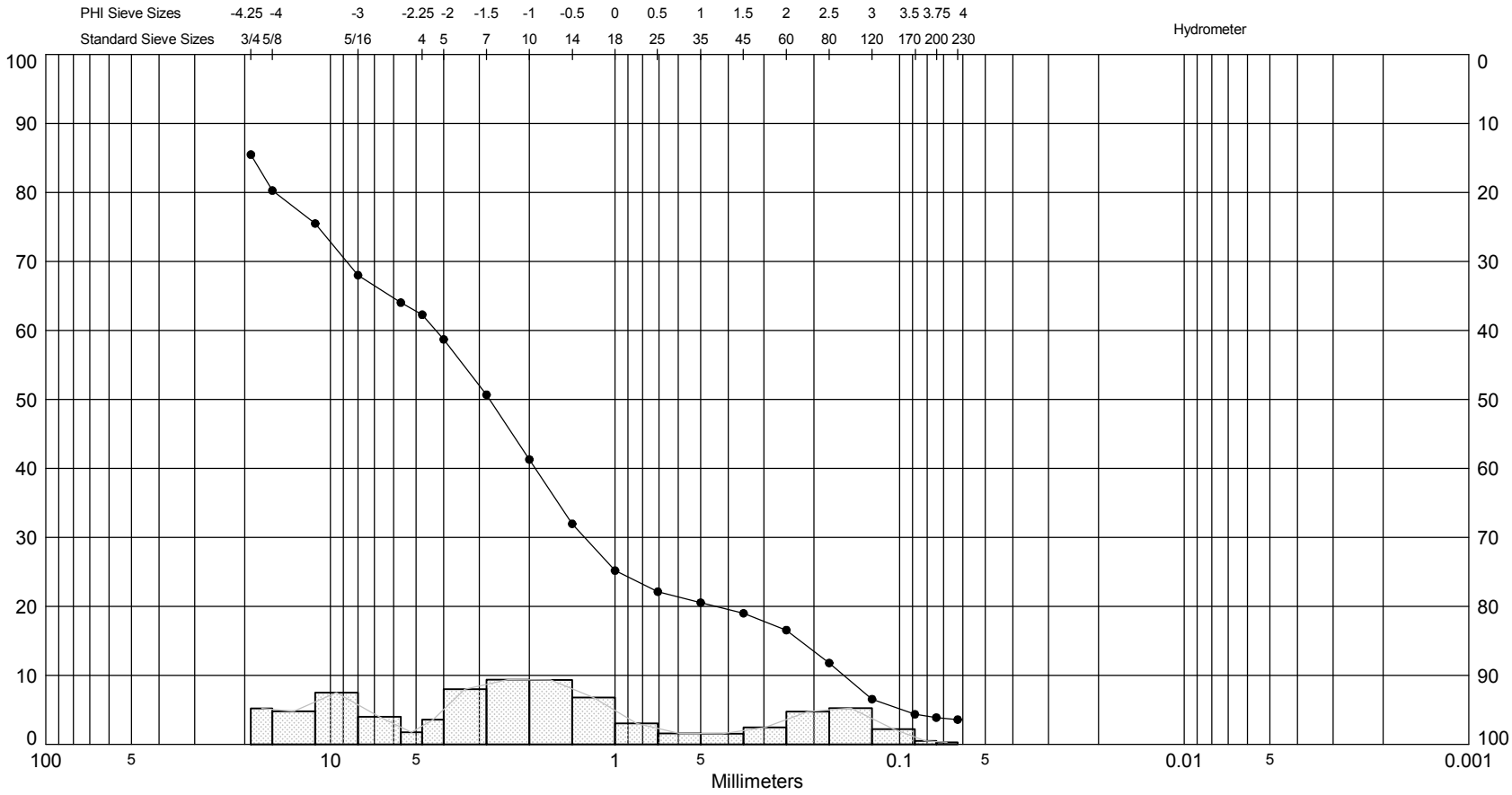
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y72 #2	—●—	SW WITH GRAVEL		#200 3.88 #230 3.59	1.70	25.20		-1.46	1.17	3.19	2.02

Comments:

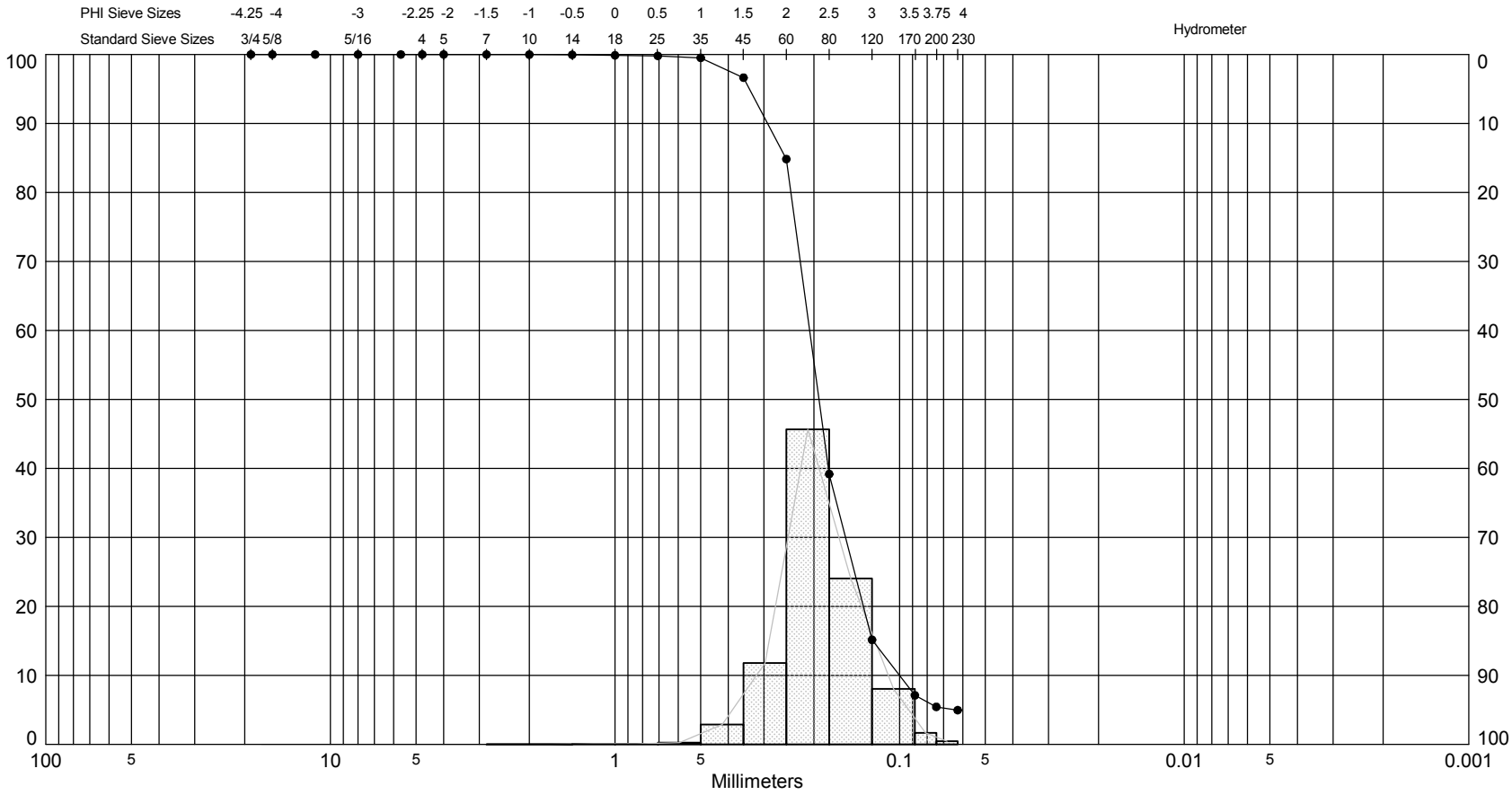
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y72 #3	—●—		SP-SM	#200 - 5.43 #230 - 4.96	1.20	1.00	2.38	2.39	-0.12	4.88	0.5

Comments:

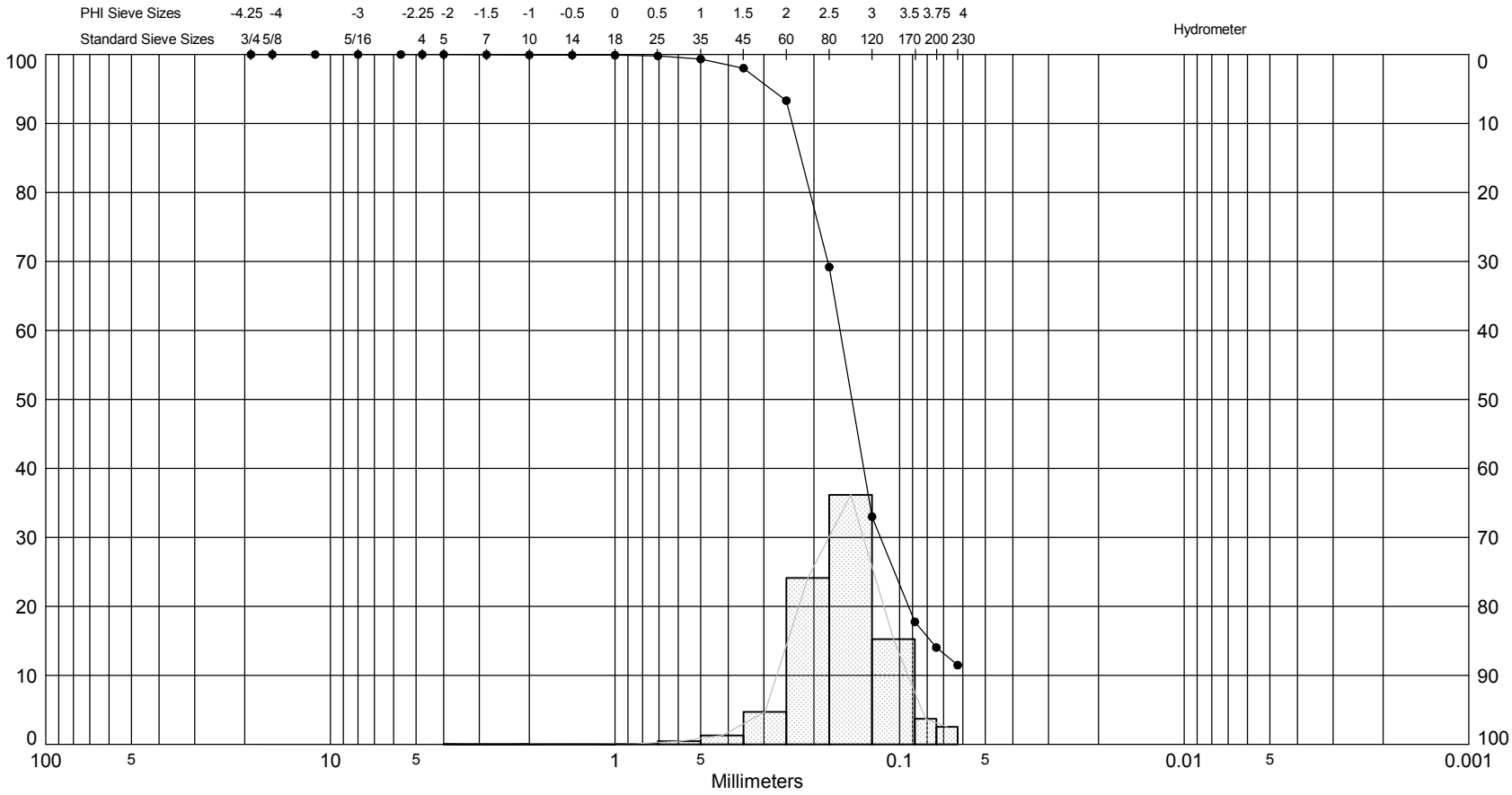
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y72 #4	—●—		SM	#200 - 14.04 #230 - 11.48	1.00	0.40	2.77	2.68	-0.66	6.57	0.55

Comments:

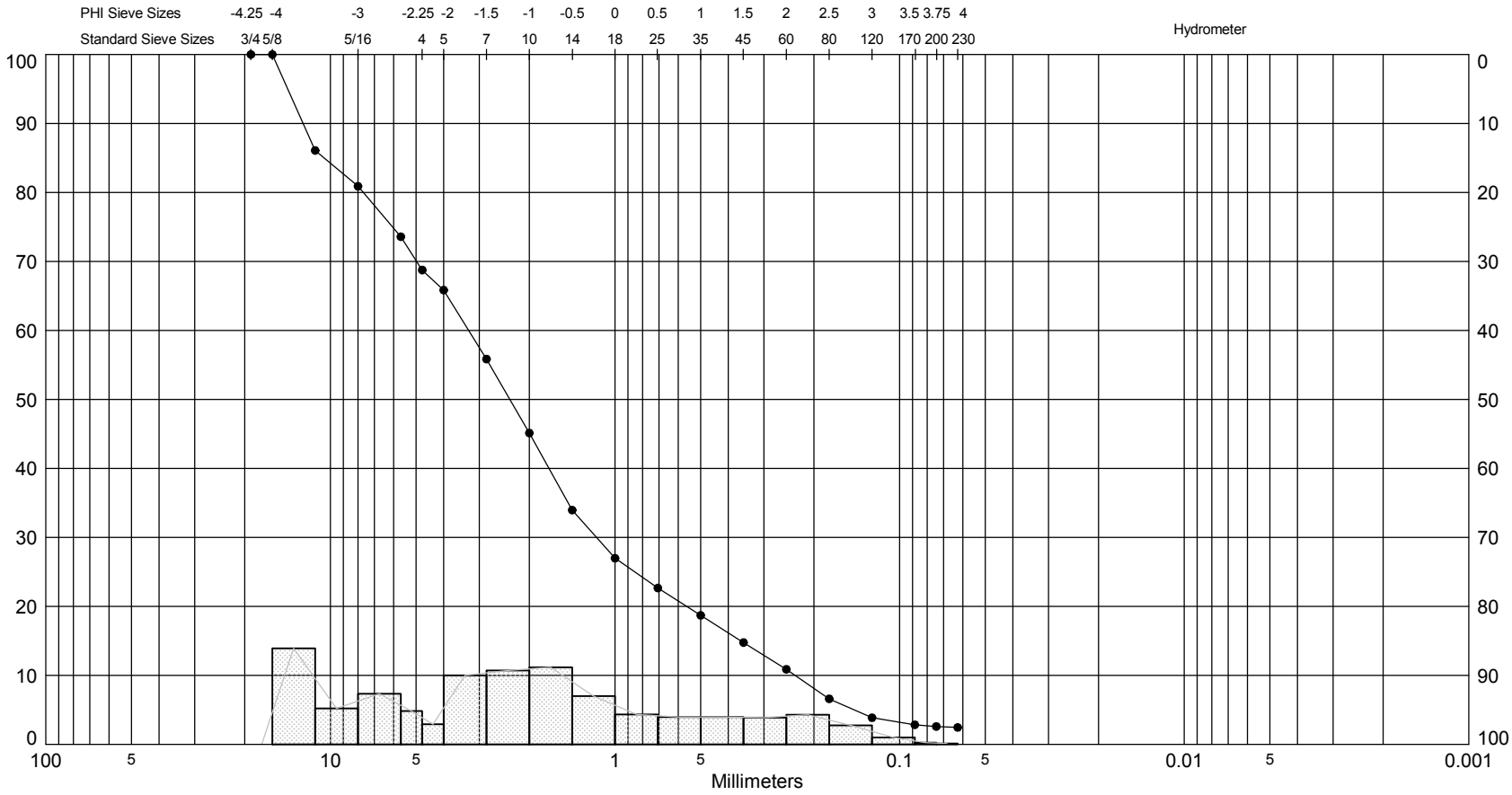
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y73 #1	—●—		SW	#200 - 2.59 #230 - 2.45	1.80	43.70		-1.13	0.44	2.37	1.91

Comments:

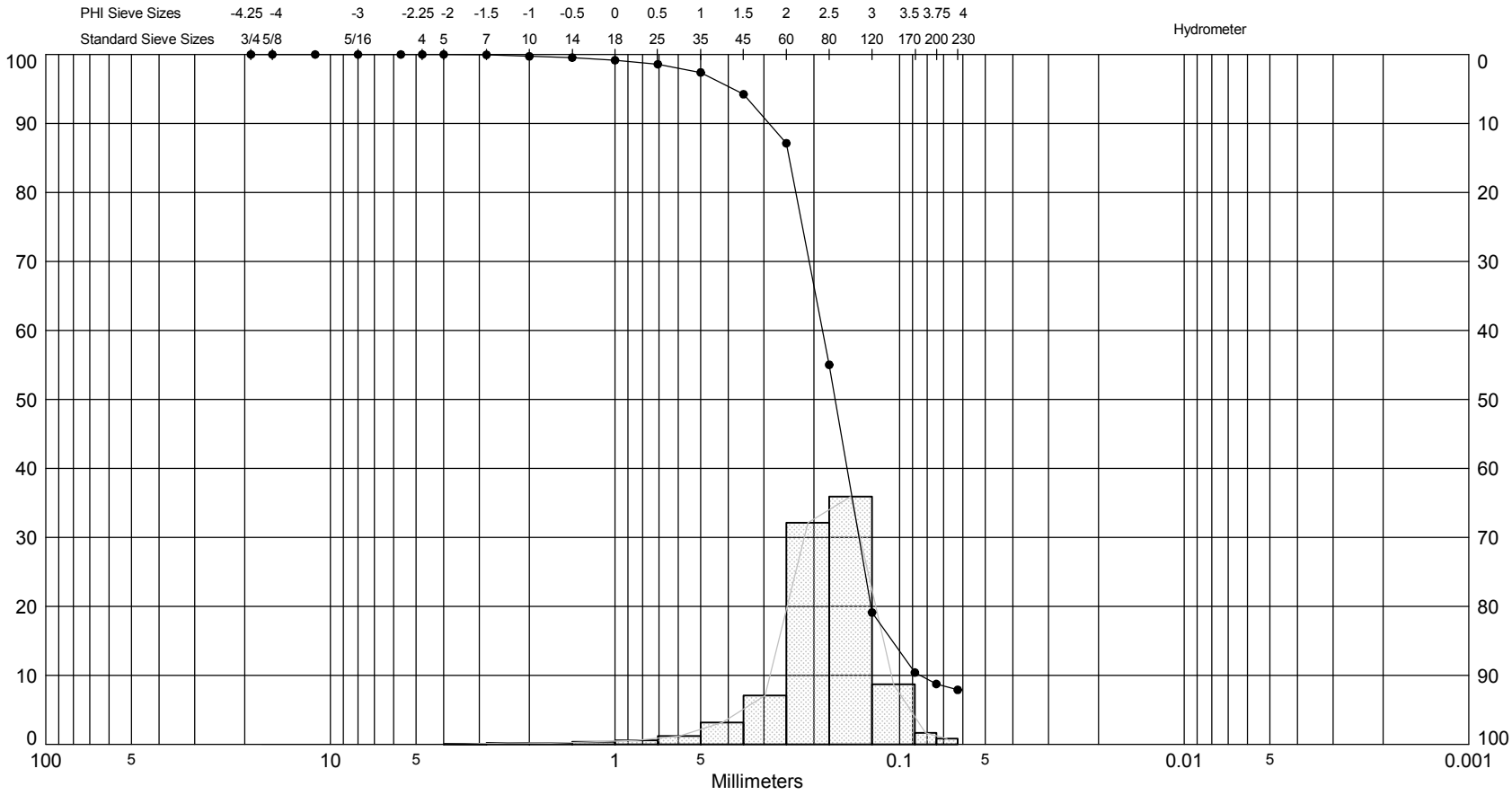
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y73 #2	—●—		SP-SM	#200 - 8.75 #230 - 7.90	1.10	2.60	2.57	2.45	-1.6	9.28	0.63

Comments:

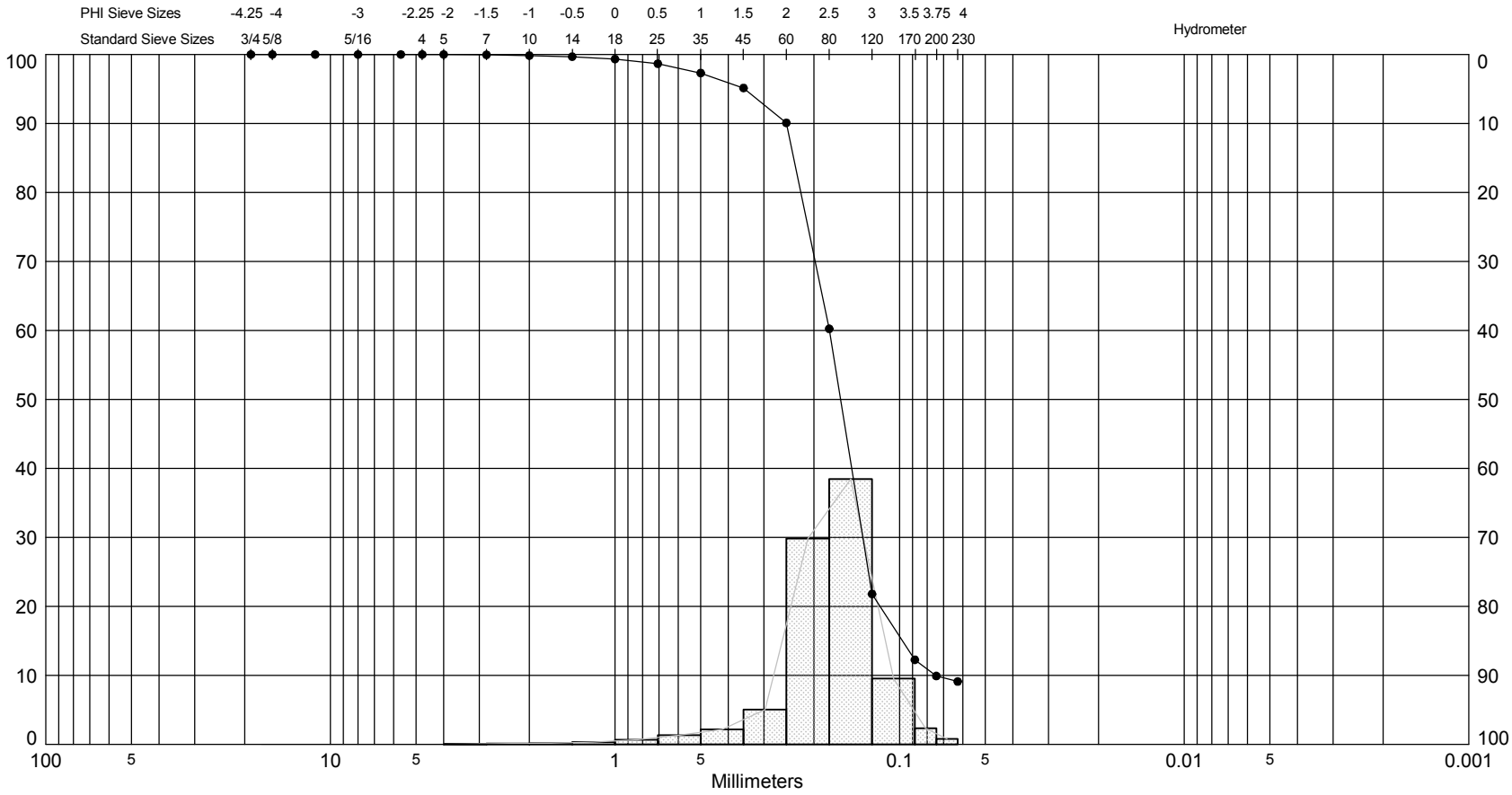
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y73 #3	—●—		SP-SM	#200 - 9.91 #230 - 9.11	0.90	1.80	2.63	2.51	-1.62	9.34	0.62

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

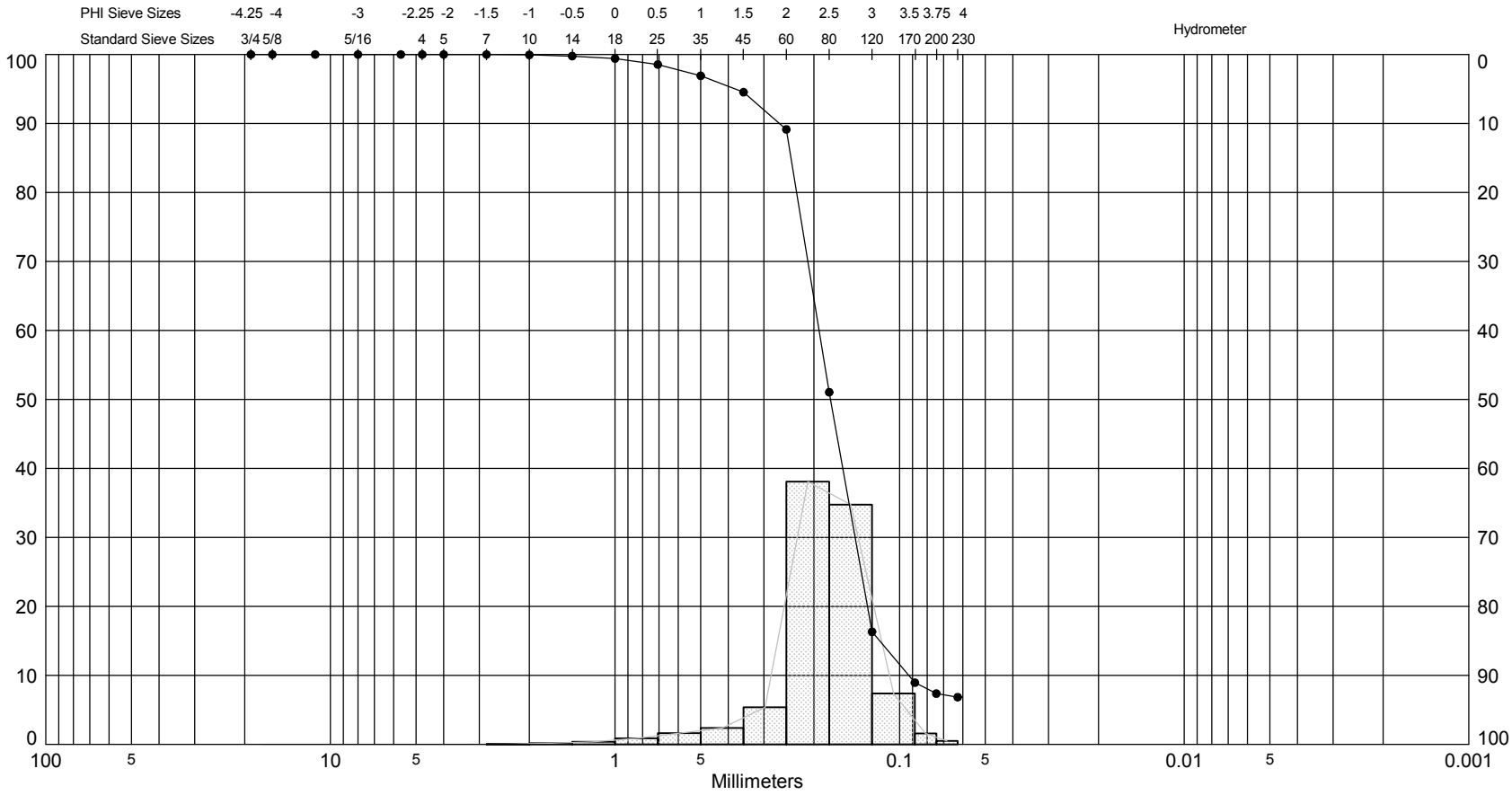
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y73 #4	—●—		SP-SM	#200 - 7.36 #230 - 6.84	0.80	1.70	2.52	2.43	-1.47	8.21	0.59

Comments:

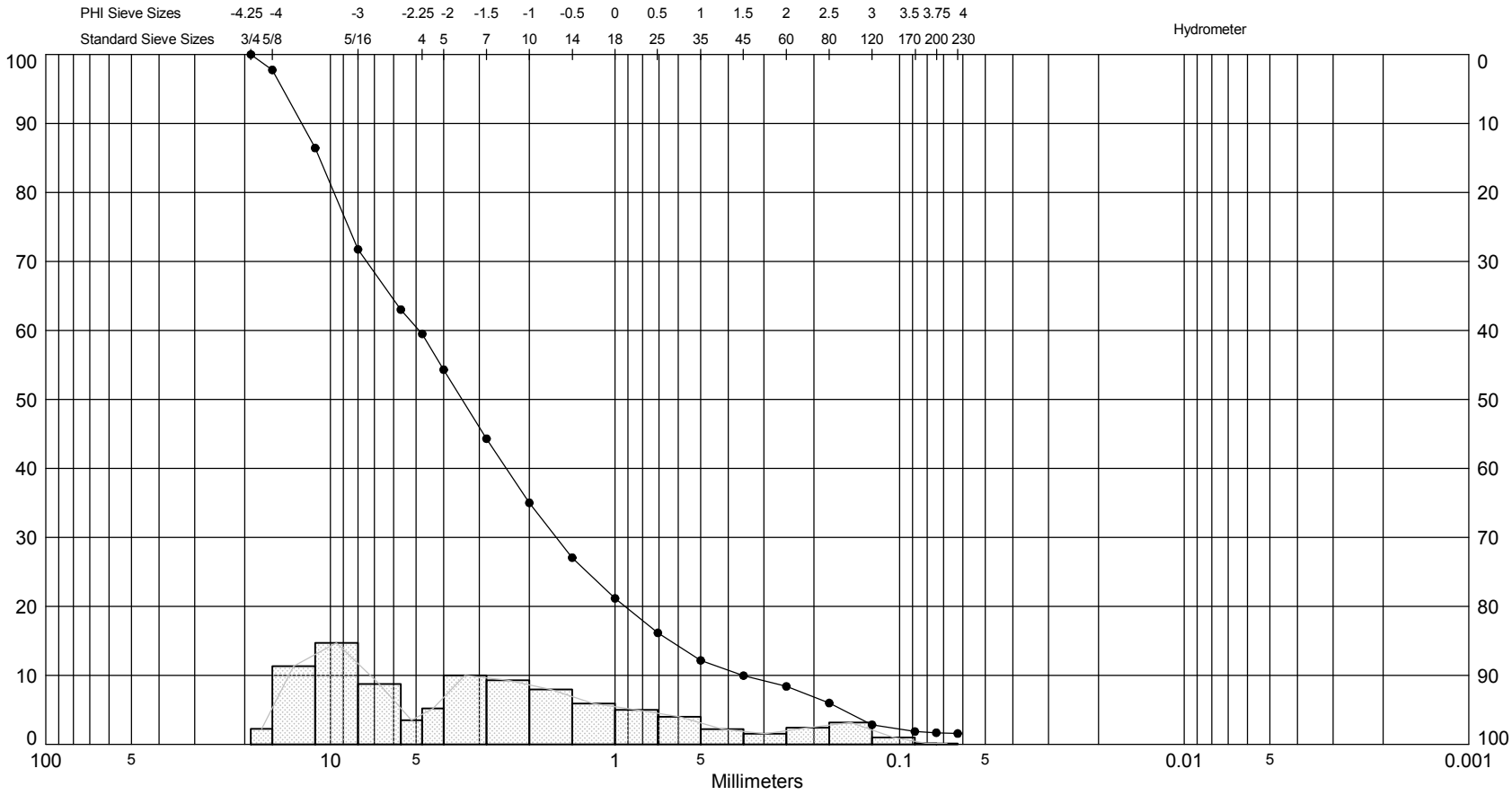
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y74 #1	—●—		SW	#200 - 1.68 #230 - 1.57	1.70	48.00		-1.54	0.74	2.81	1.86

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

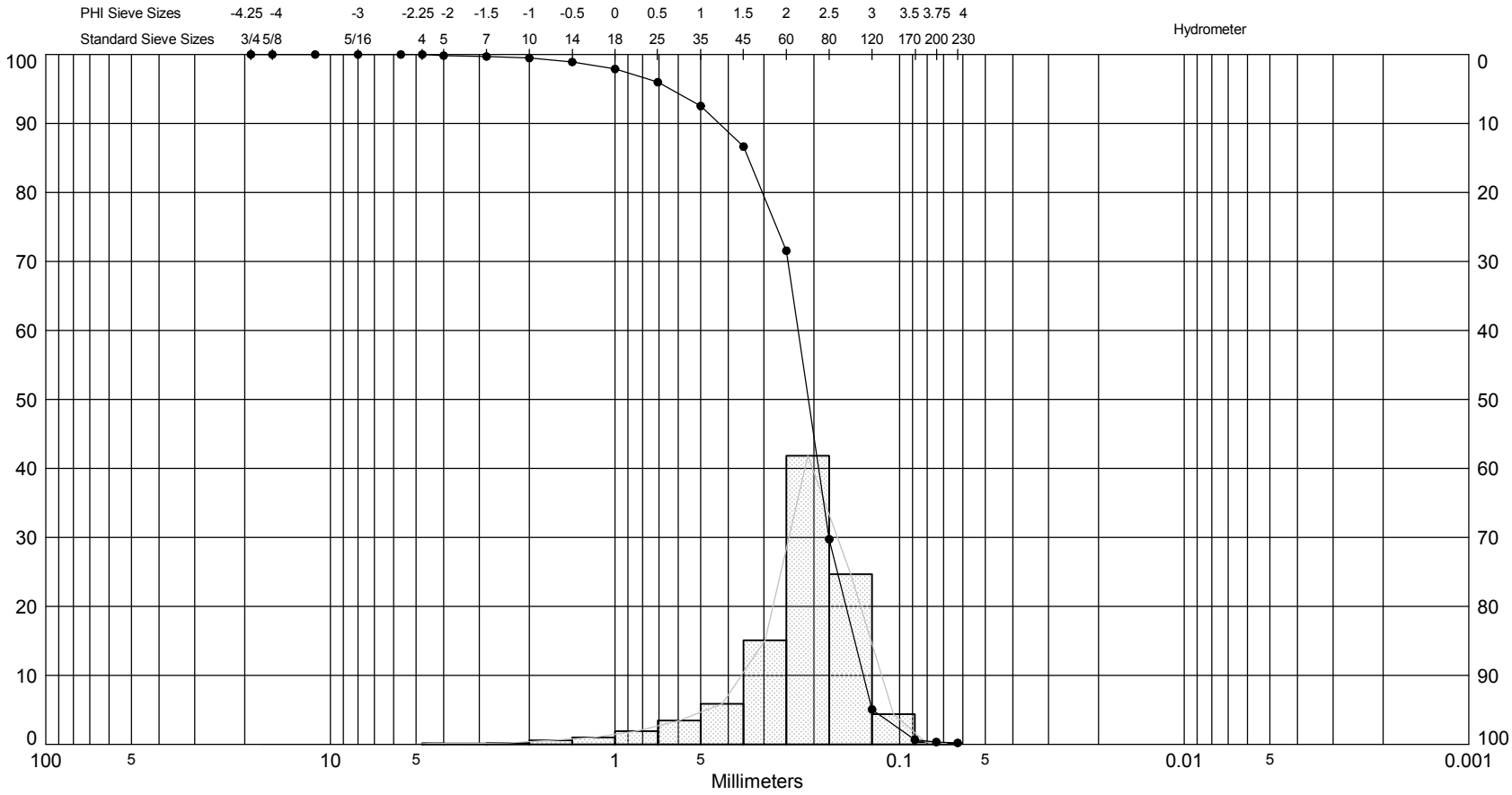
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y74 #2	—●—		SP	#200 - 0.34 #230 - 0.21	0.30	4.50	2.26	2.14	-1.72	7.97	0.74

Comments:

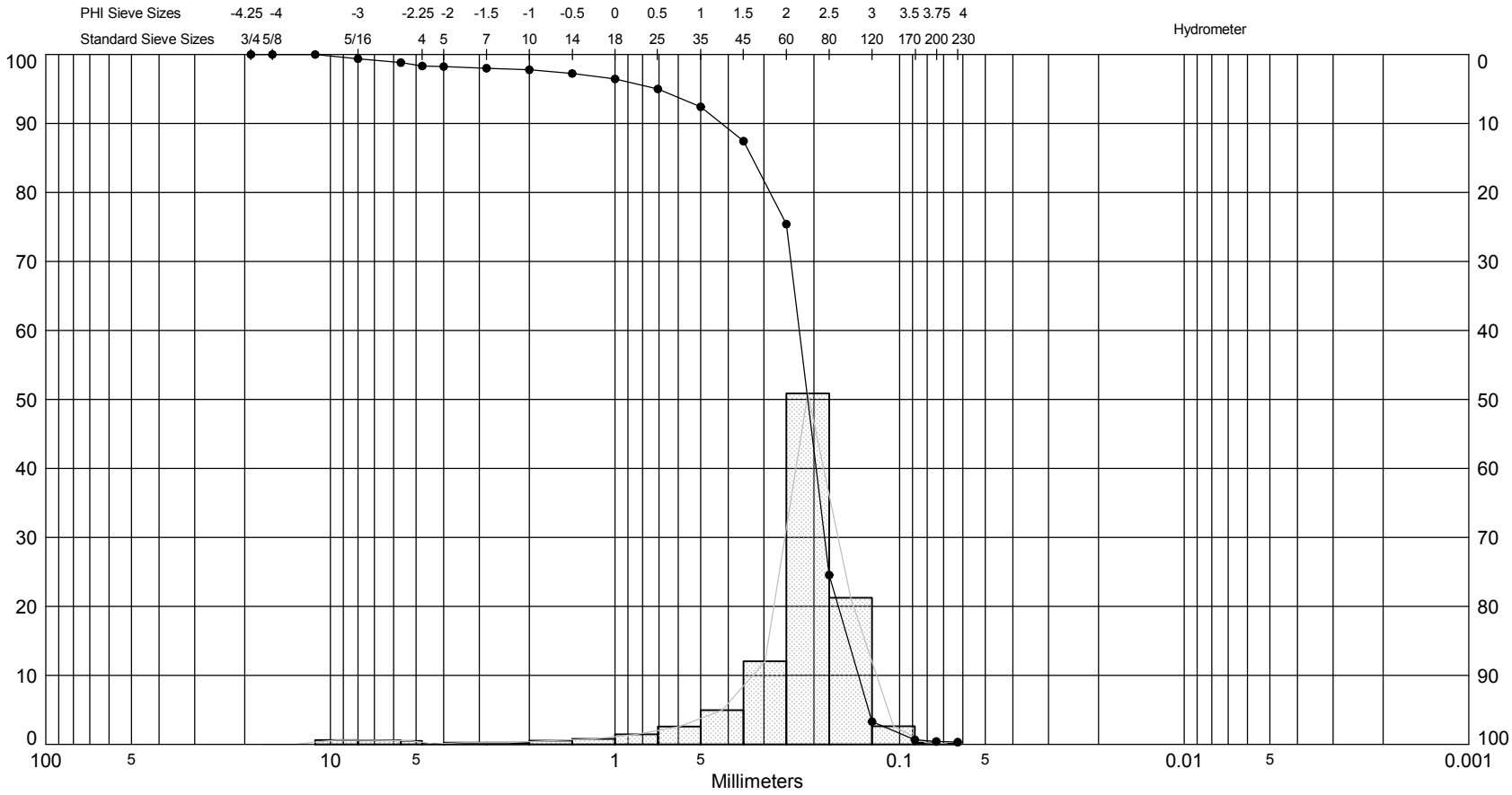
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y74 #3	—●—		SW	#200 - 0.42 #230 - 0.32	0.40	6.20	2.25	2.07	-3.16	15.93	0.93

Comments:

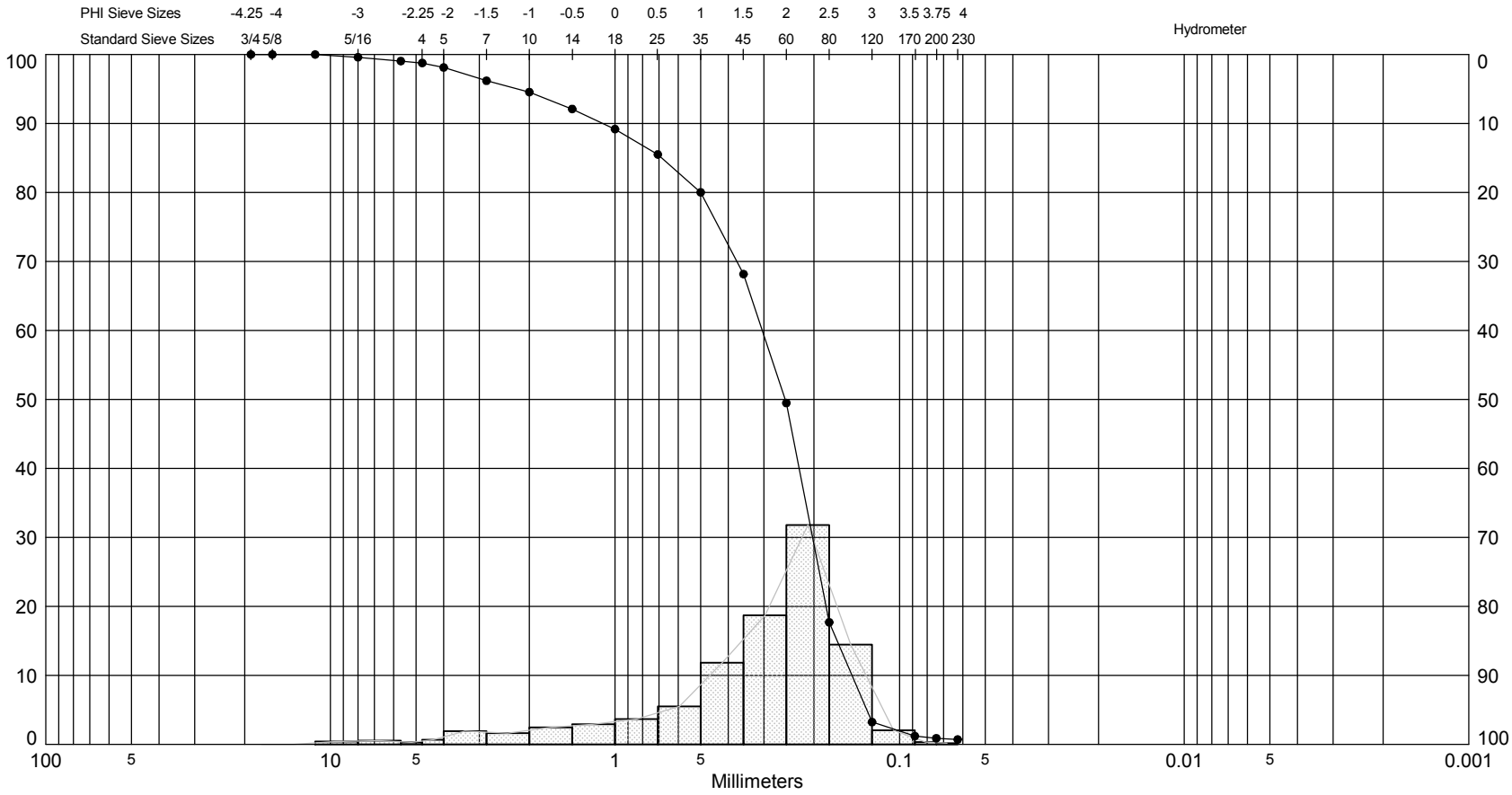
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y74 #4	—●—		SW	#200 - 0.88 #230 - 0.70	0.60	14.00	1.99	1.61	-1.57	5.47	1.21

Comments:

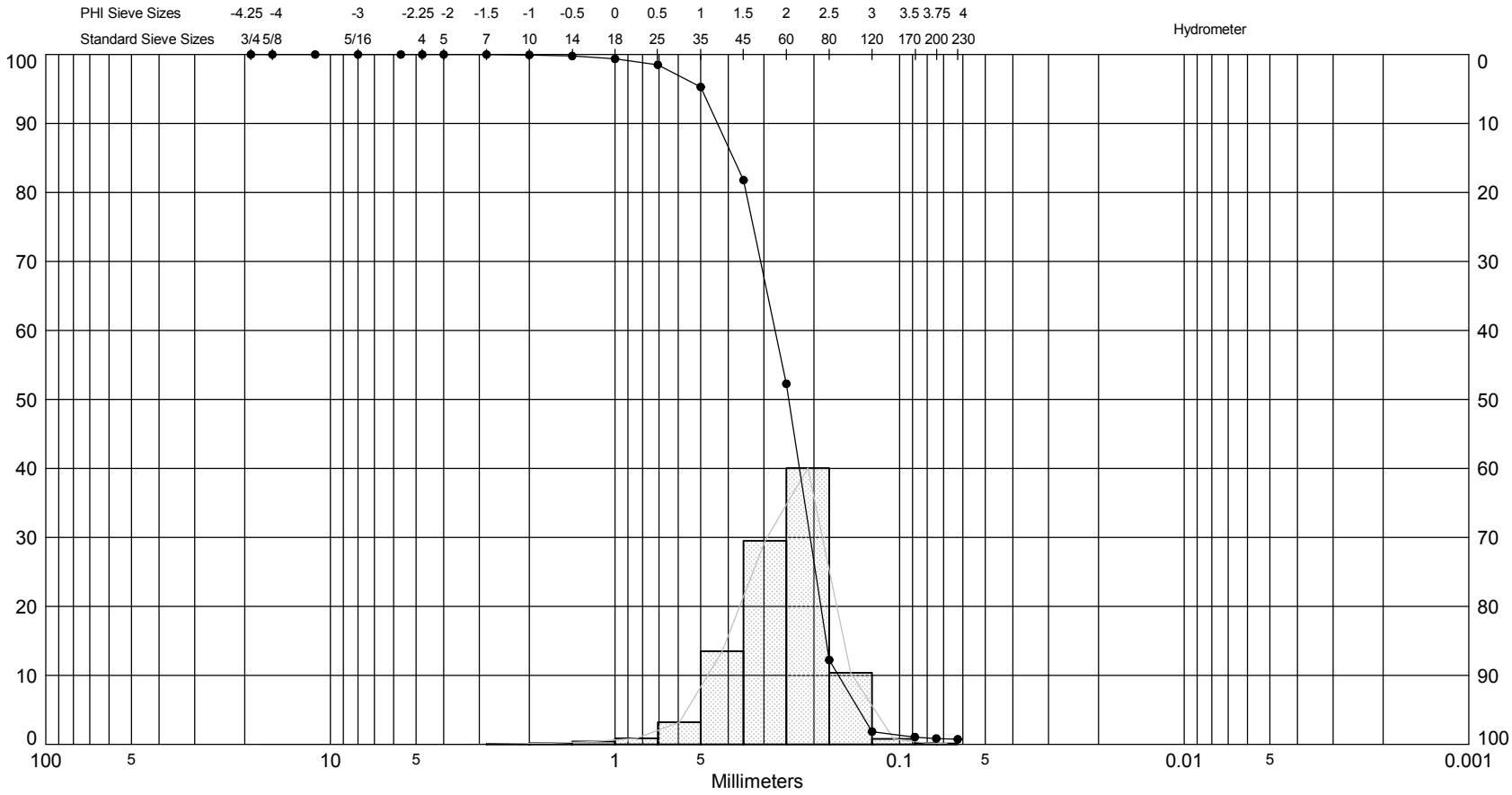
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y75 #1	—●—		SP	#200 - 0.85 #230 - 0.74	0.40	1.50	2.03	1.95	-0.81	5.28	0.56

Comments:

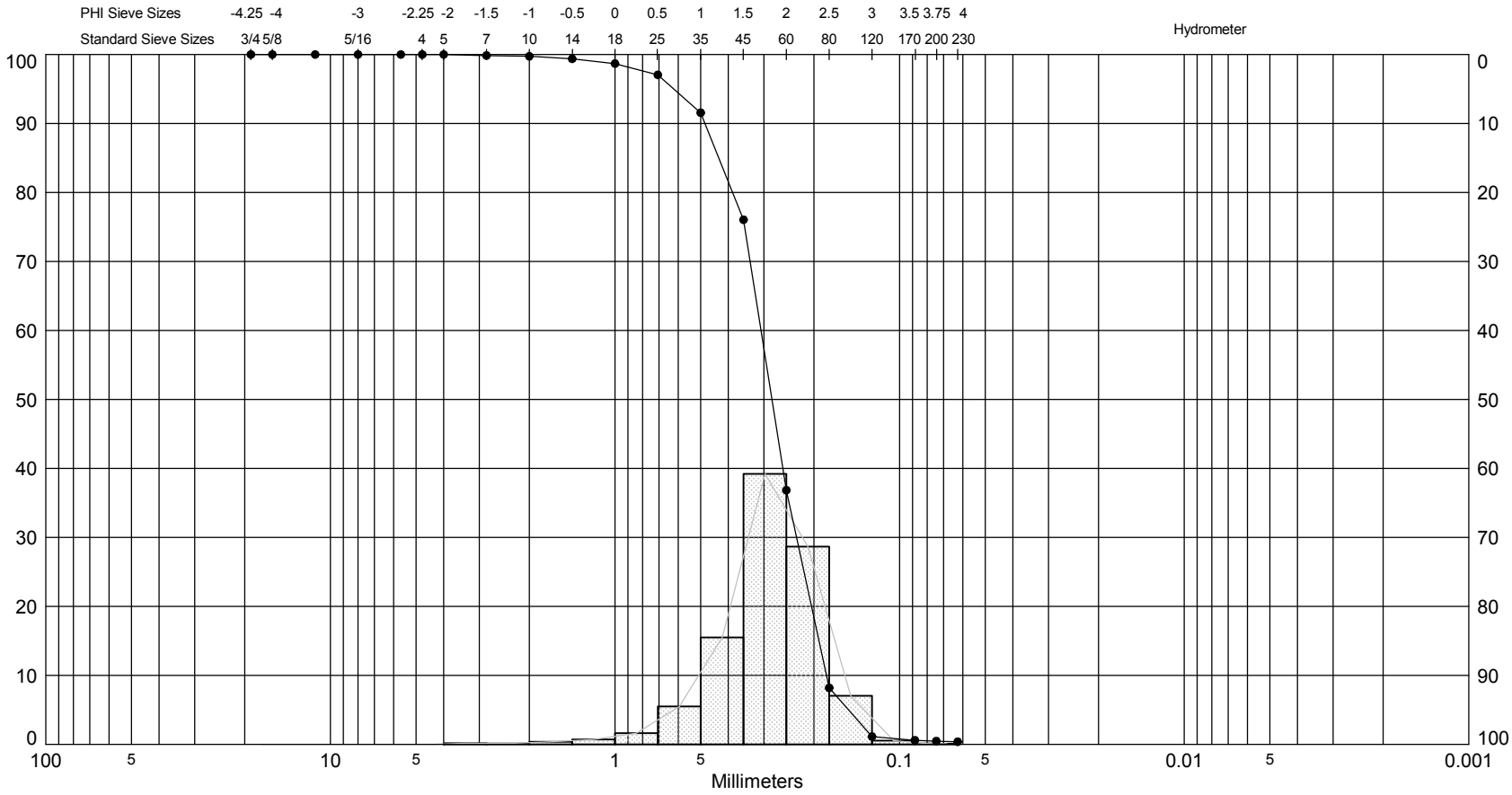
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y75 #2	—●—		SP	#200 - 0.47 #230 - 0.38	0.50	2.00	1.83	1.79	-1.05	6.53	0.61

Comments:

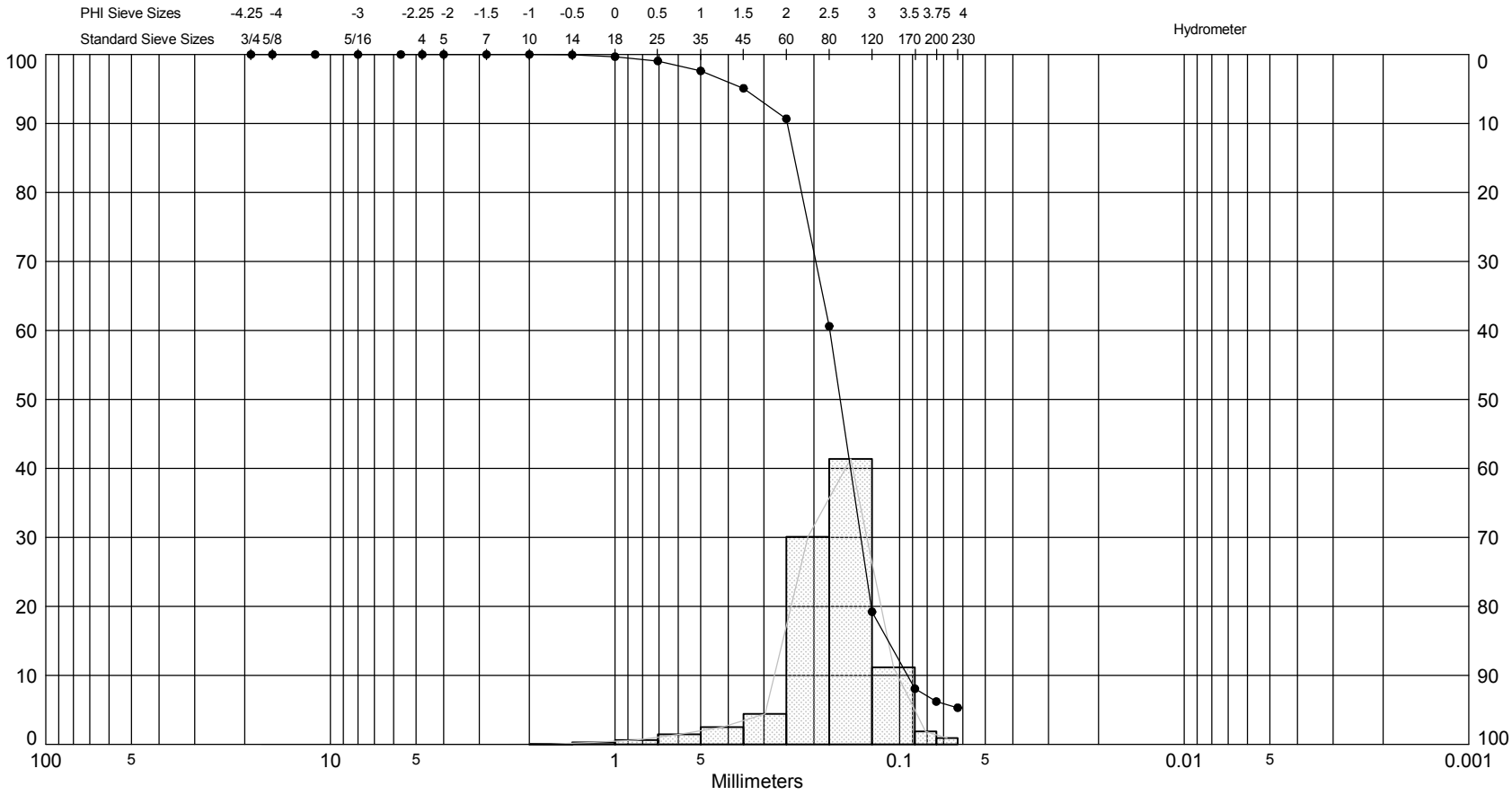
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y75 #3	—●—		SP-SM	#200 - 6.21 #230 - 5.31	0.90	2.10	2.63	2.53	-1.24	6.86	0.57

Comments:

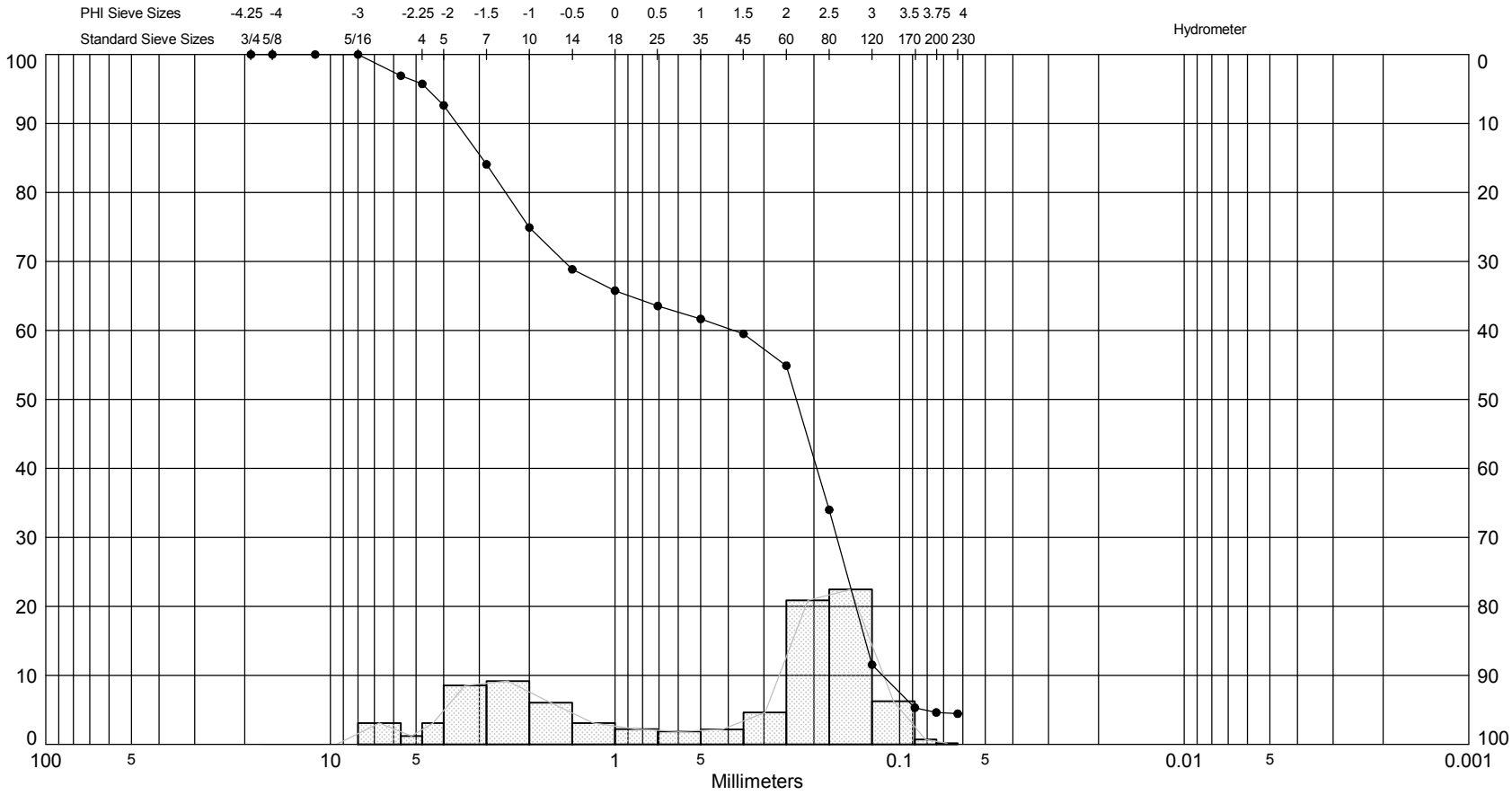
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y76 #1	—●		SW	#200 - 4.62 #230 - 4.44	1.30	10.10	2.12	1	-0.52	1.66	1.95

Comments:

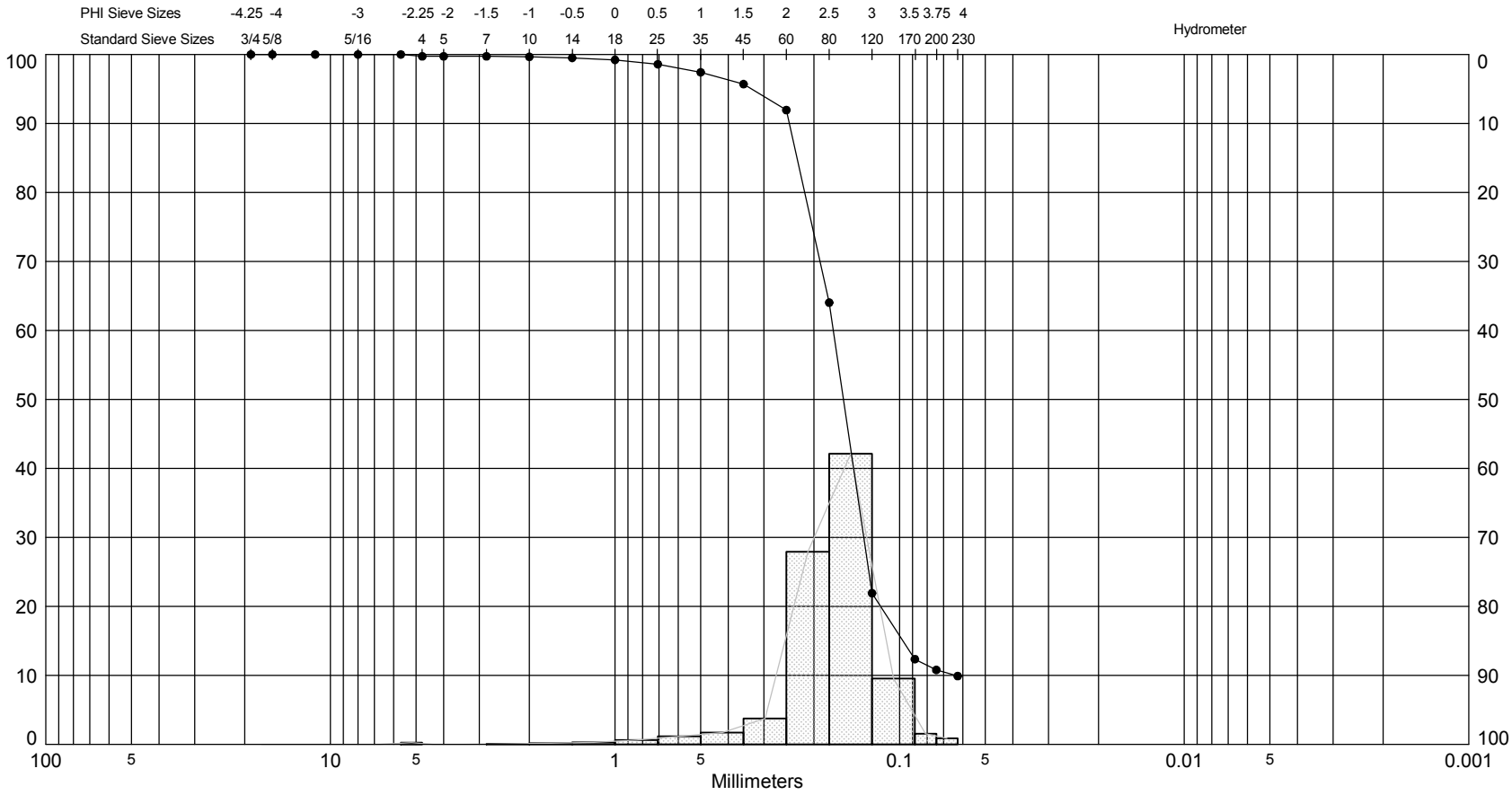
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y76 #2	—●—		SP-SM	#200 - 10.79 #230 - 9.90	1.10	2.20	2.67	2.53	-2.56	17.06	0.63

Comments:

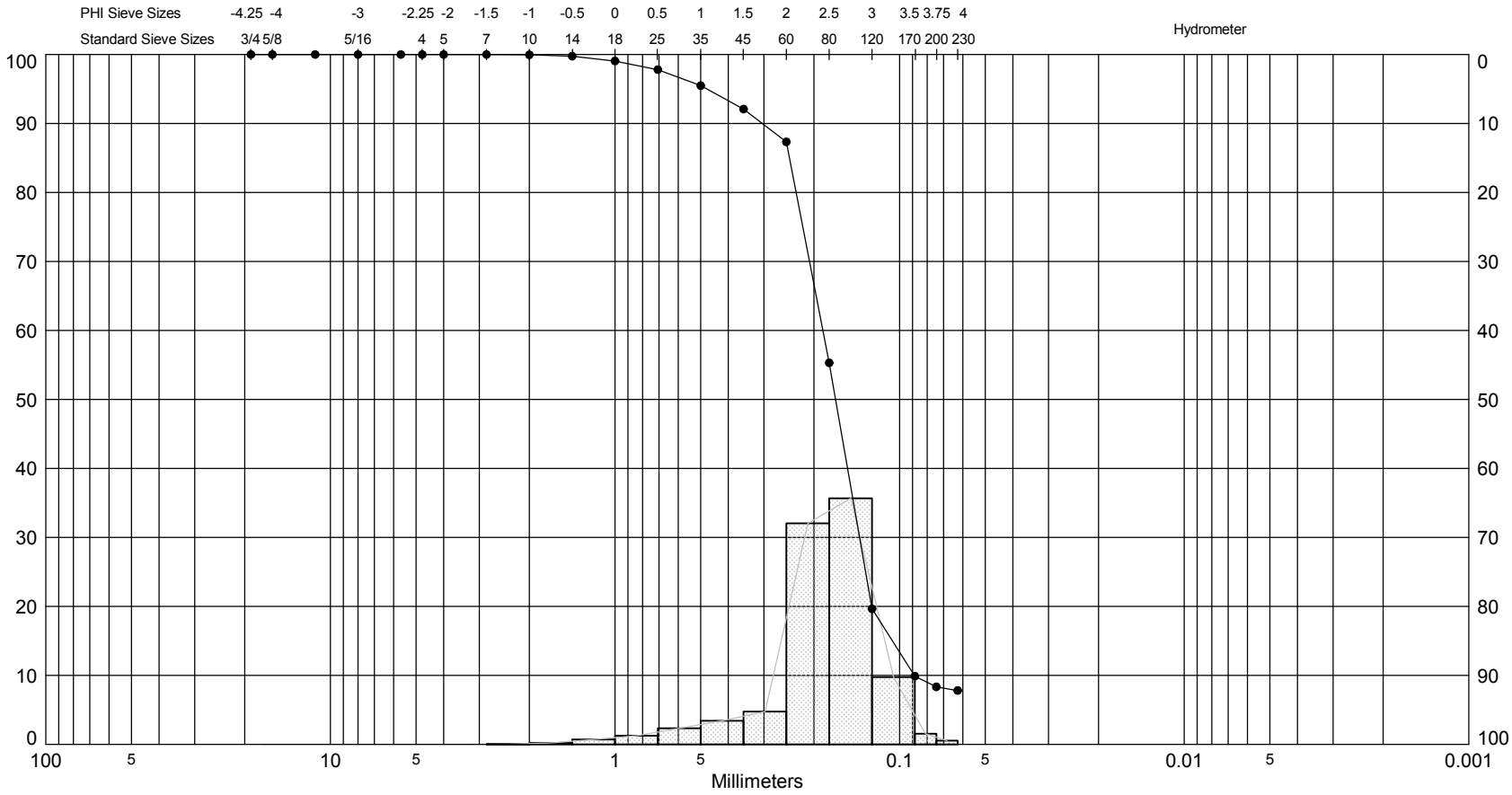
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y76 #3	—●—		SP-SM	#200 - 8.34 #230 - 7.81	0.70	1.90	2.57	2.43	-1.5	6.84	0.67

Comments:

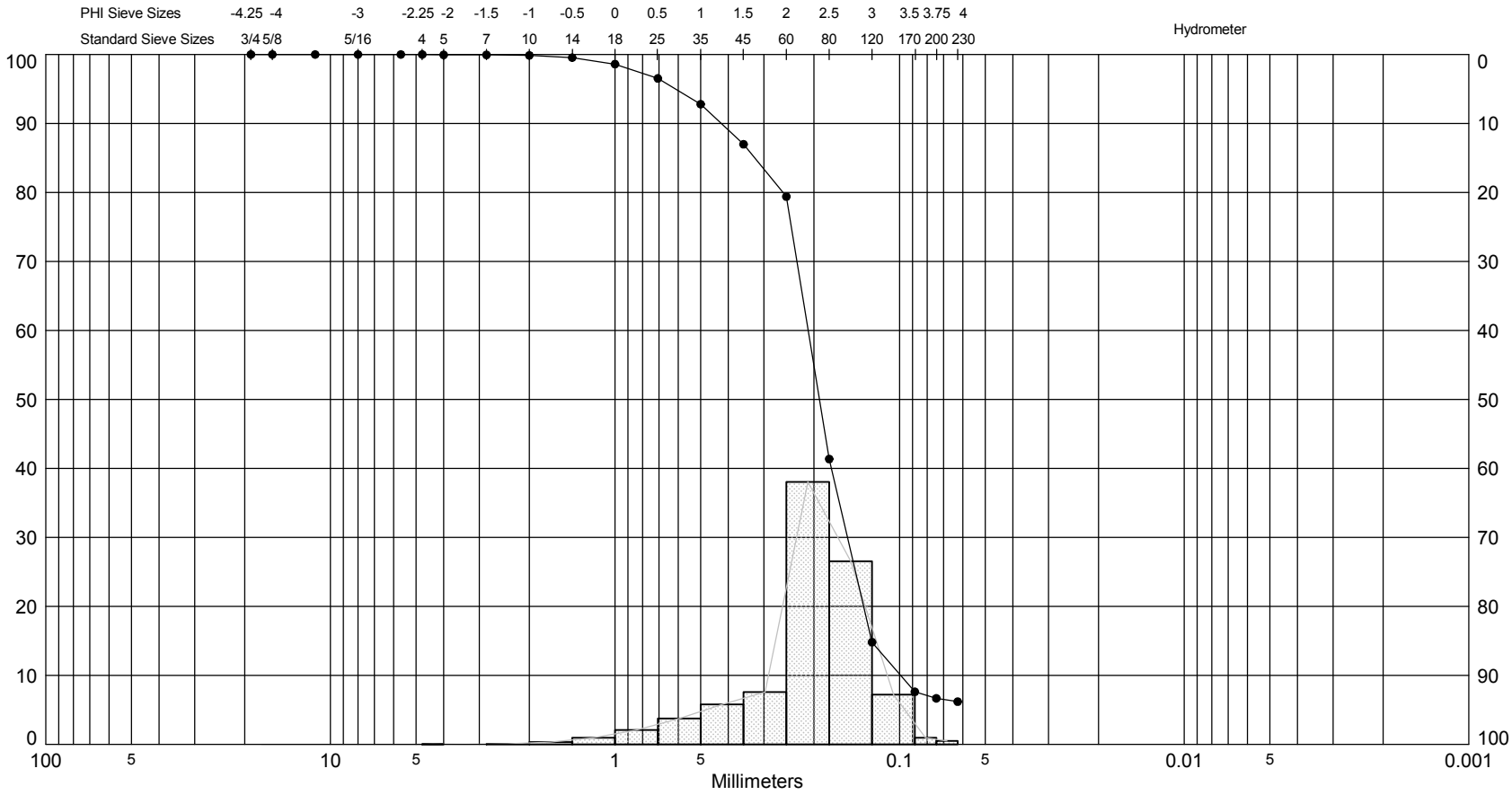
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y76 #4	—●—		SP-SM	#200 - 6.67 #230 - 6.19	1.00	1.90	2.39	2.24	-1.33	5.83	0.75

Comments:

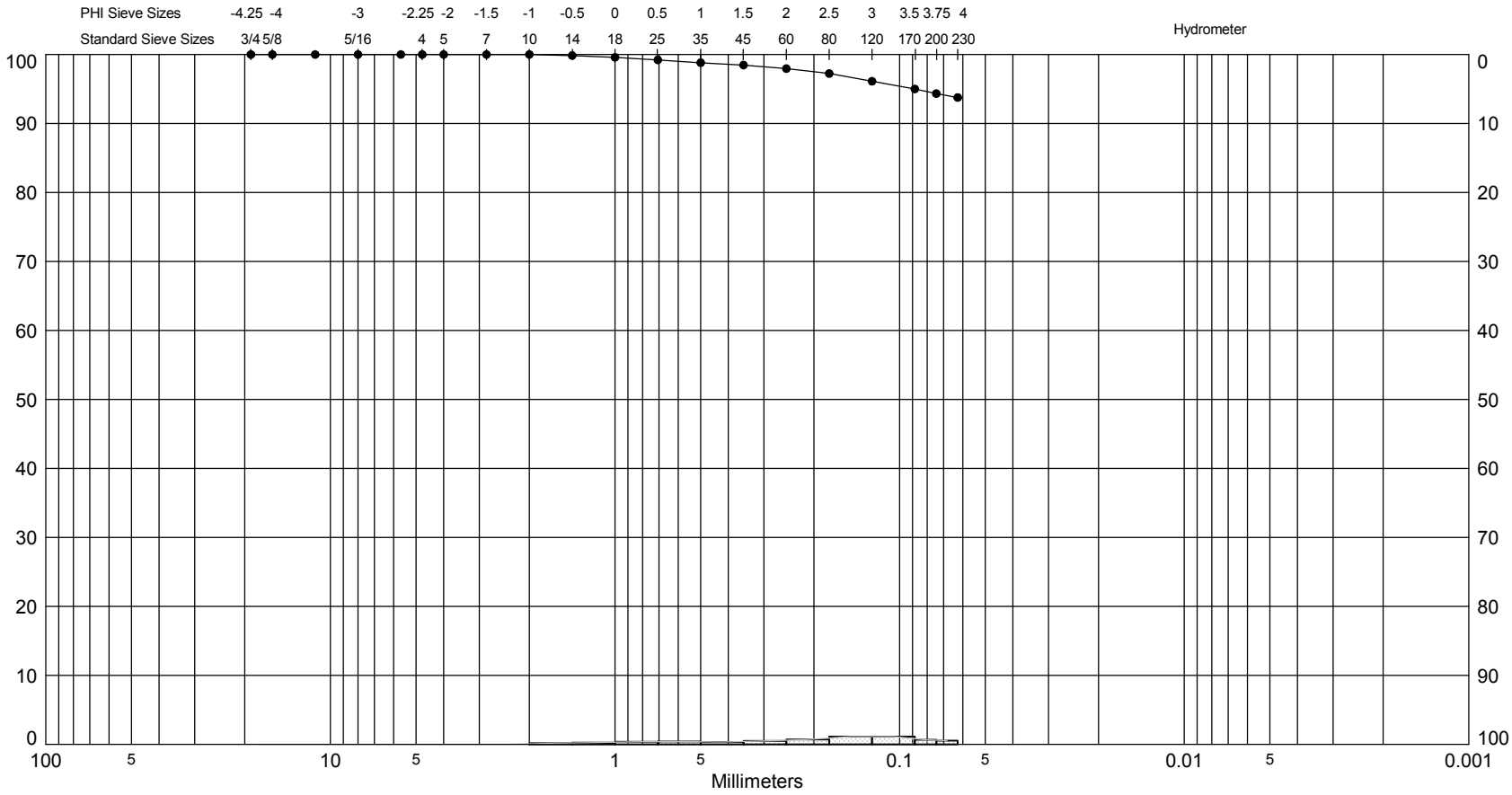
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y77 #1	—●—		ML-CL	#200 - 94.33 #230 - 93.77	15.50	7.40		2.32	-0.76	2.55	1.27

Comments:

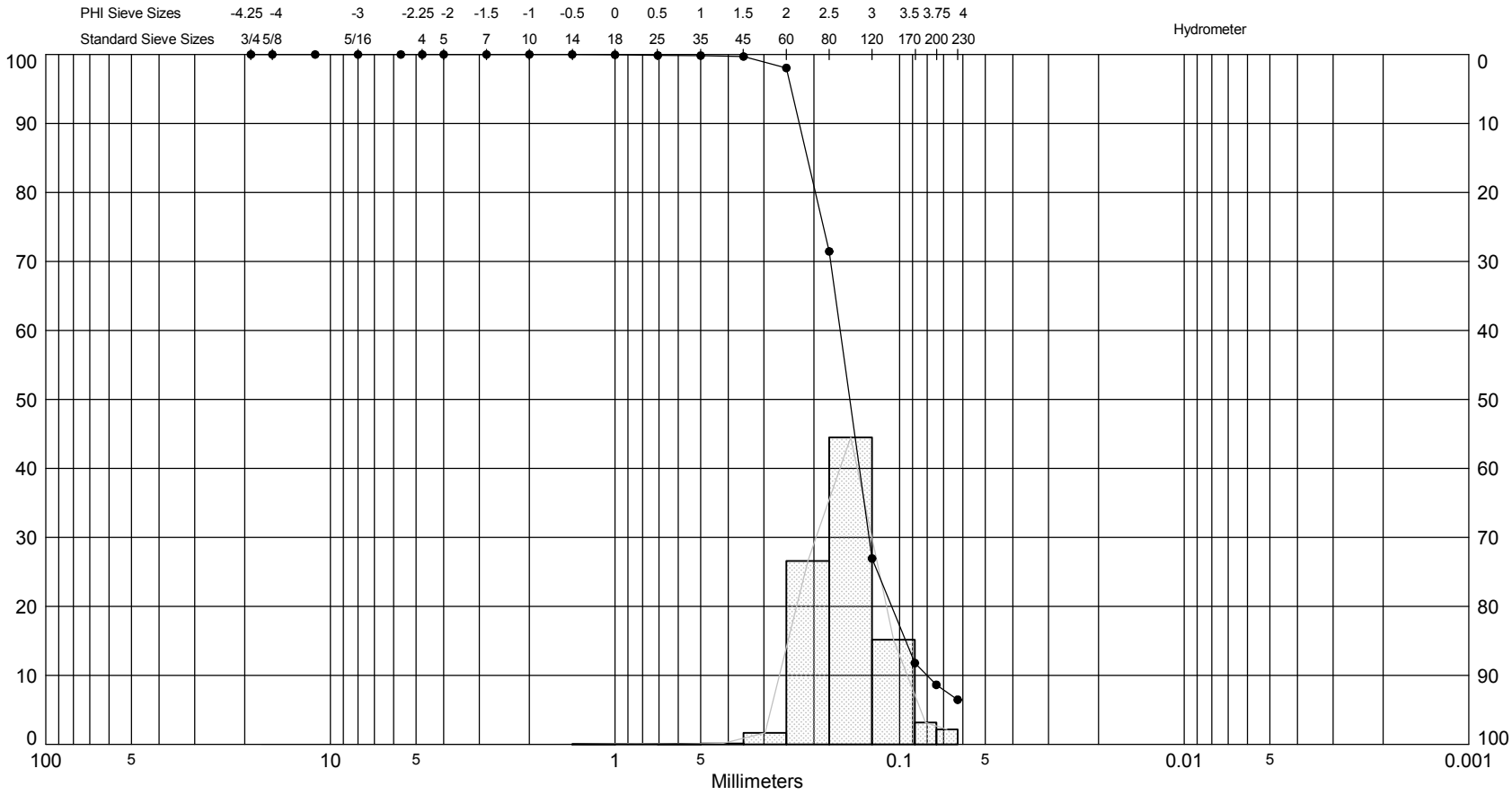
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y77 #2	—●—		SP-SM	#200 - 8.63 #230 - 6.47	0.50	0.60	2.74	2.72	0.06	4.81	0.45

Comments:

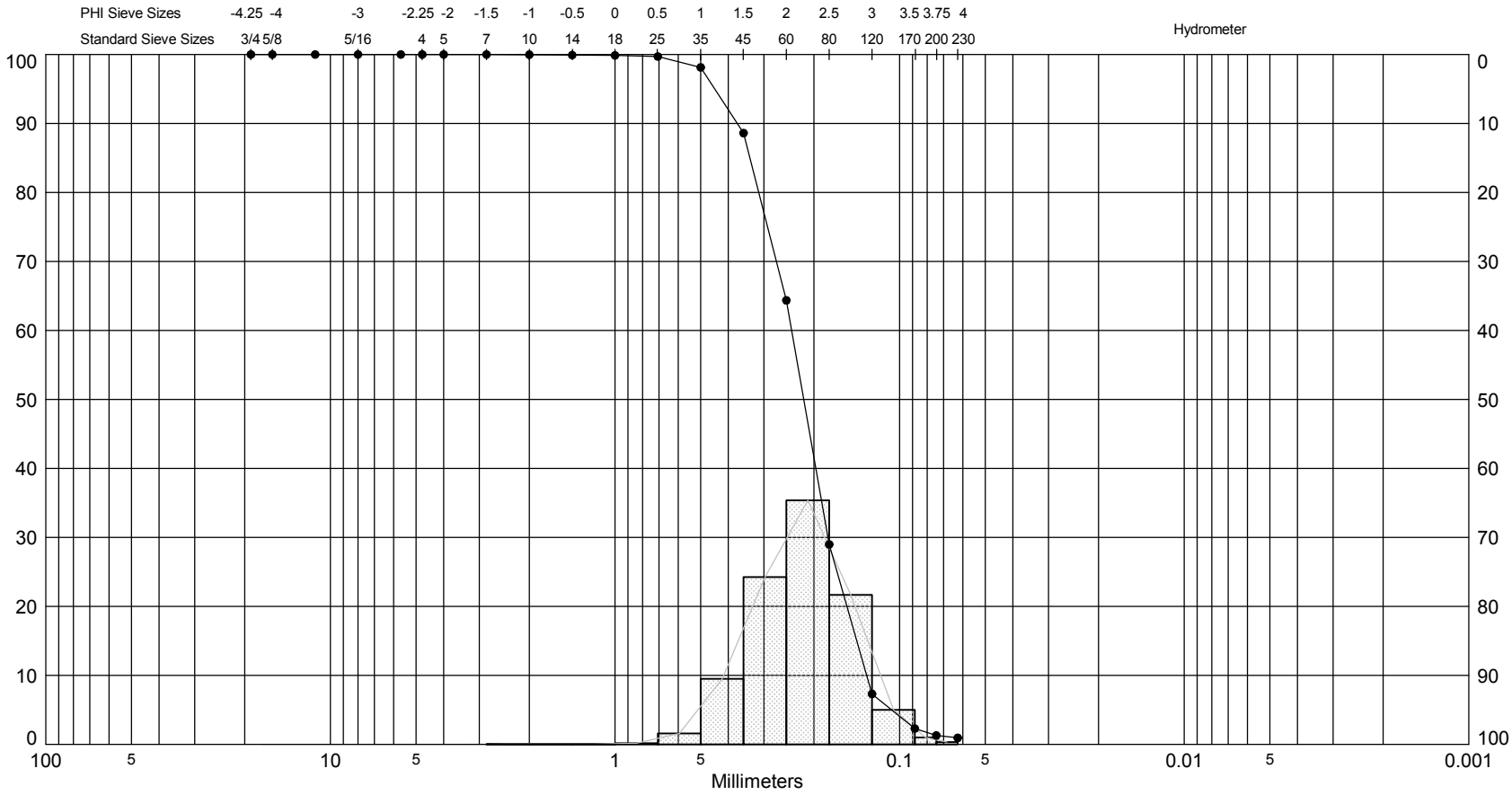
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y77 #3	—●—		SP	#200 - 1.28 #230 - 0.94	0.20	0.30	2.2	2.18	-0.2	3.76	0.58

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

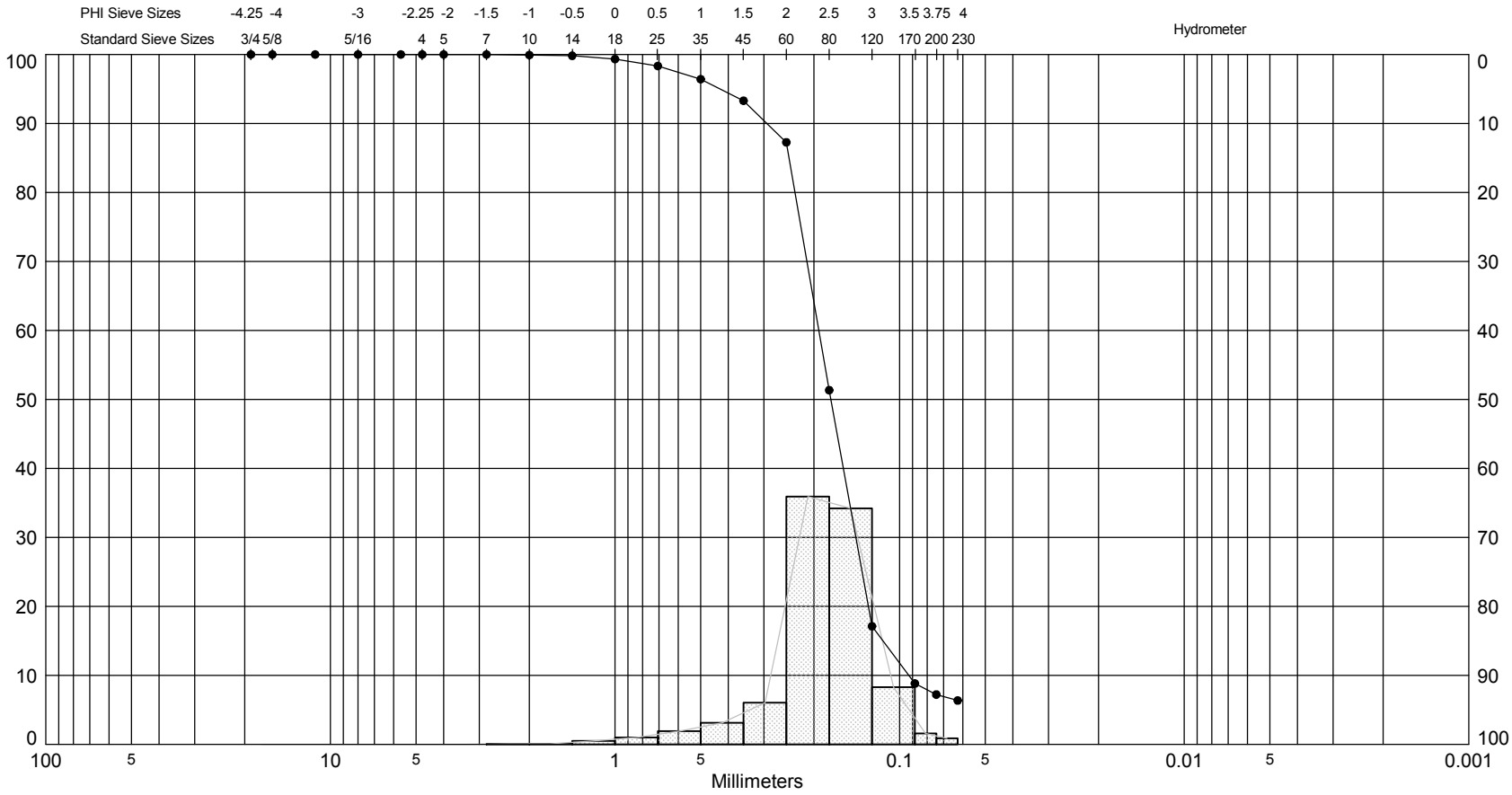
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y77 #4	—●—		SP-SM	#200 - 7.22 #230 - 6.36	0.40	1.10	2.52	2.42	-1.34	7.12	0.63

Comments:

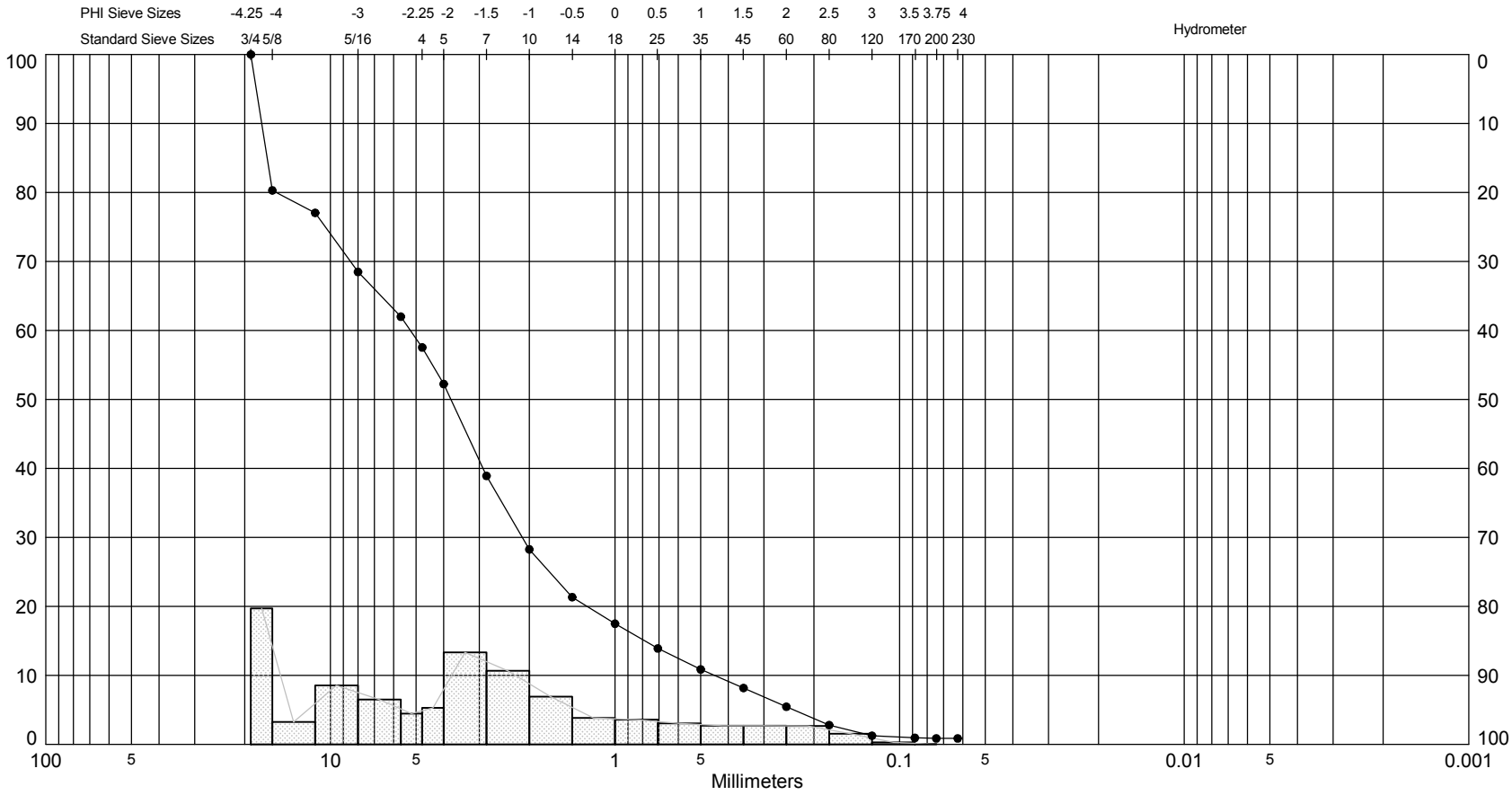
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-05-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y78 #1	—●—		SW	#200 - 0.86 #230 - 0.86	6.10	20.30		-1.83	0.62	2.7	1.86

Comments: ROCKS

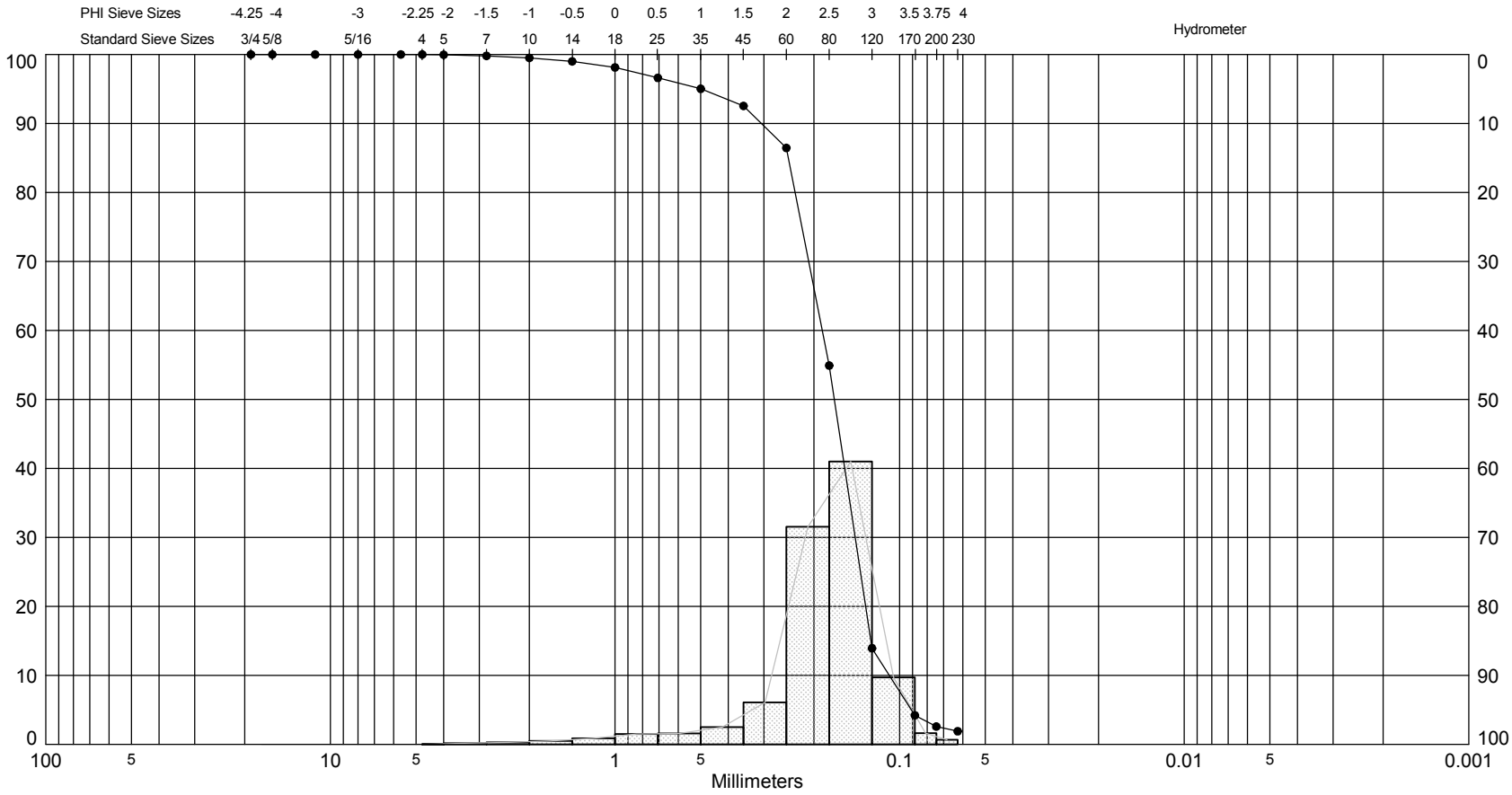
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y78 #2	—●—		SP	#200 - 2.58 #230 - 1.90	1.10	2.50	2.56	2.42	-2.09	9.93	0.73

Comments:

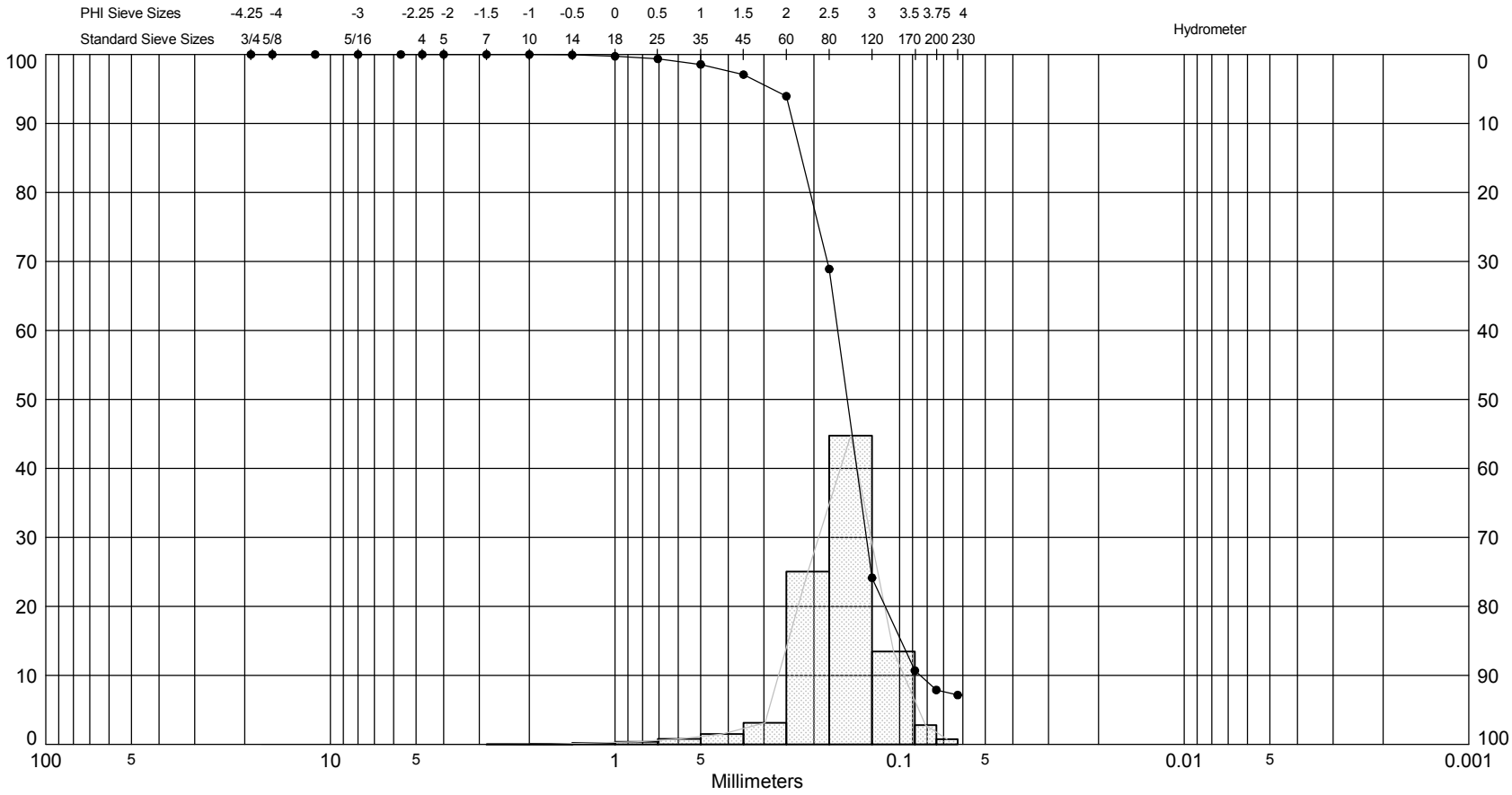
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y78 #3	—●—		SP-SM	#200 - 7.88 #230 - 7.15	0.80	1.70	2.71	2.63	-1.29	8.21	0.53

Comments:

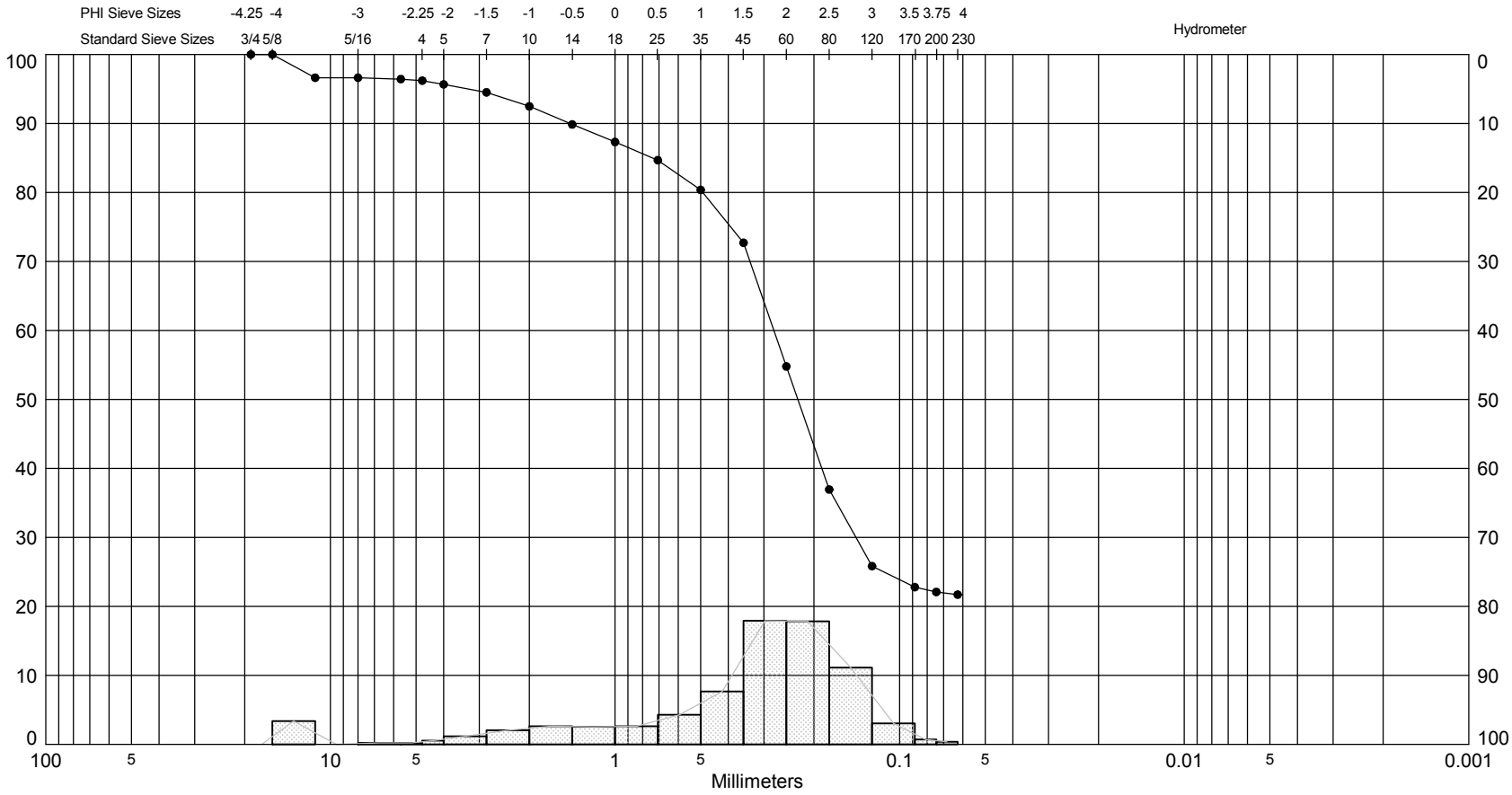
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y79 #1	—●—		SM	#200 - 22.09 #230 - 21.70	0.80	9.70	2.13	1.37	-1.63	5.44	1.62

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

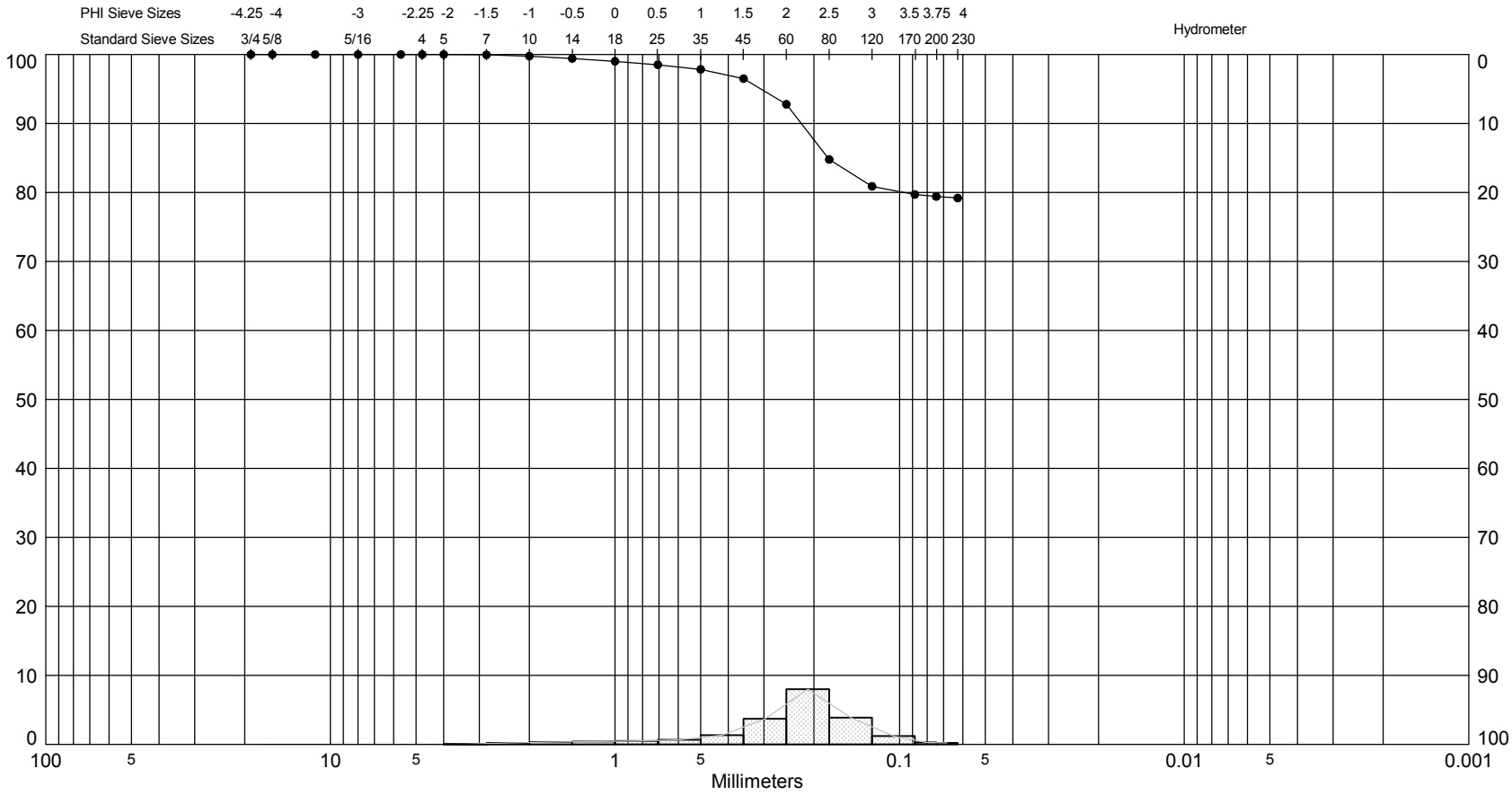
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y79 #2	—●—		ML-CL	#200 - 79.41 #230 - 79.19	4.90	6.40		2.05	-1.38	5.82	0.9

Comments:

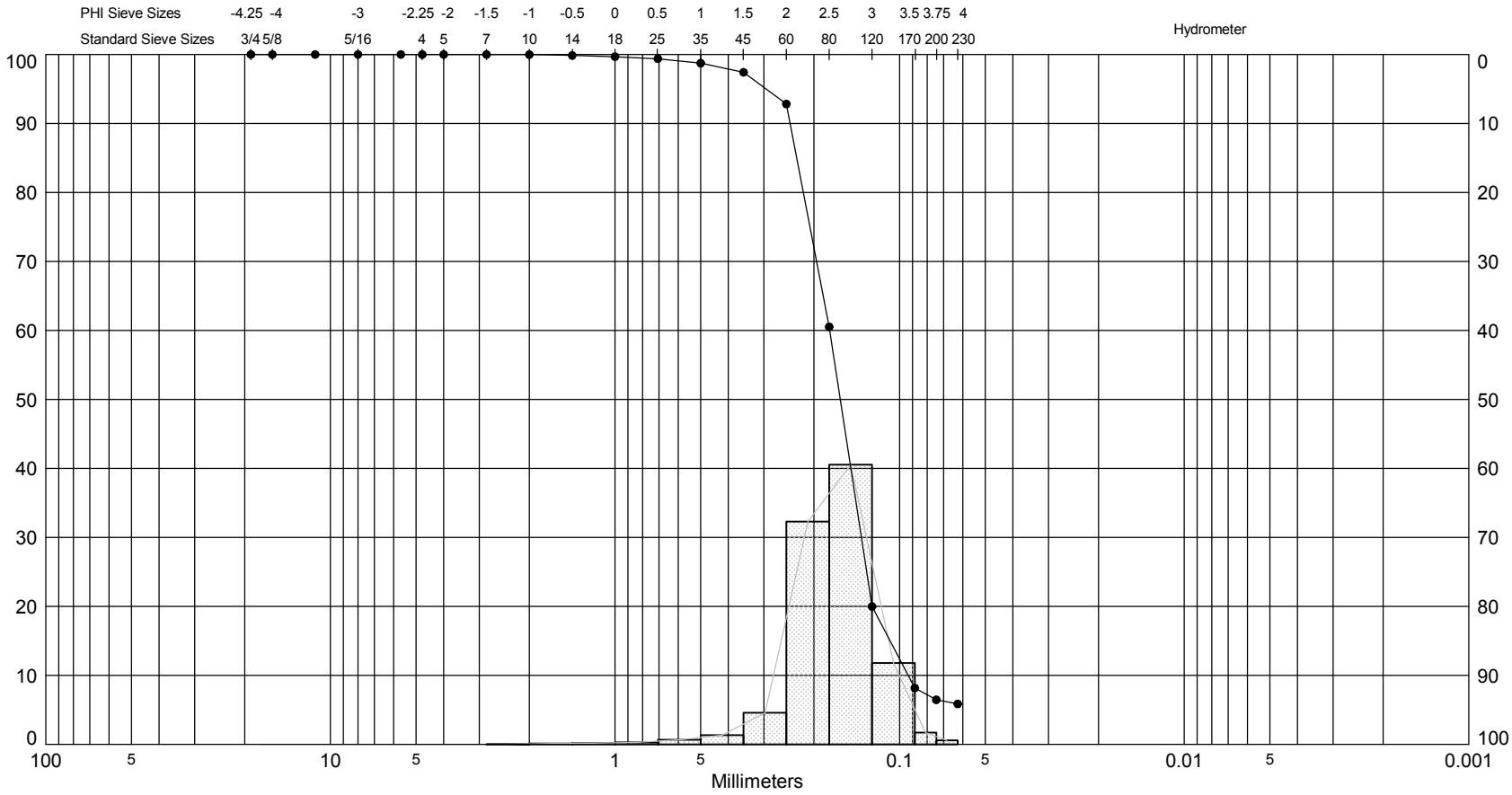
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y79 #3	—●—		SP-SM	#200 - 6.46 #230 - 5.86	1.00	2.30	2.63	2.56	-1.22	8.65	0.52

Comments:

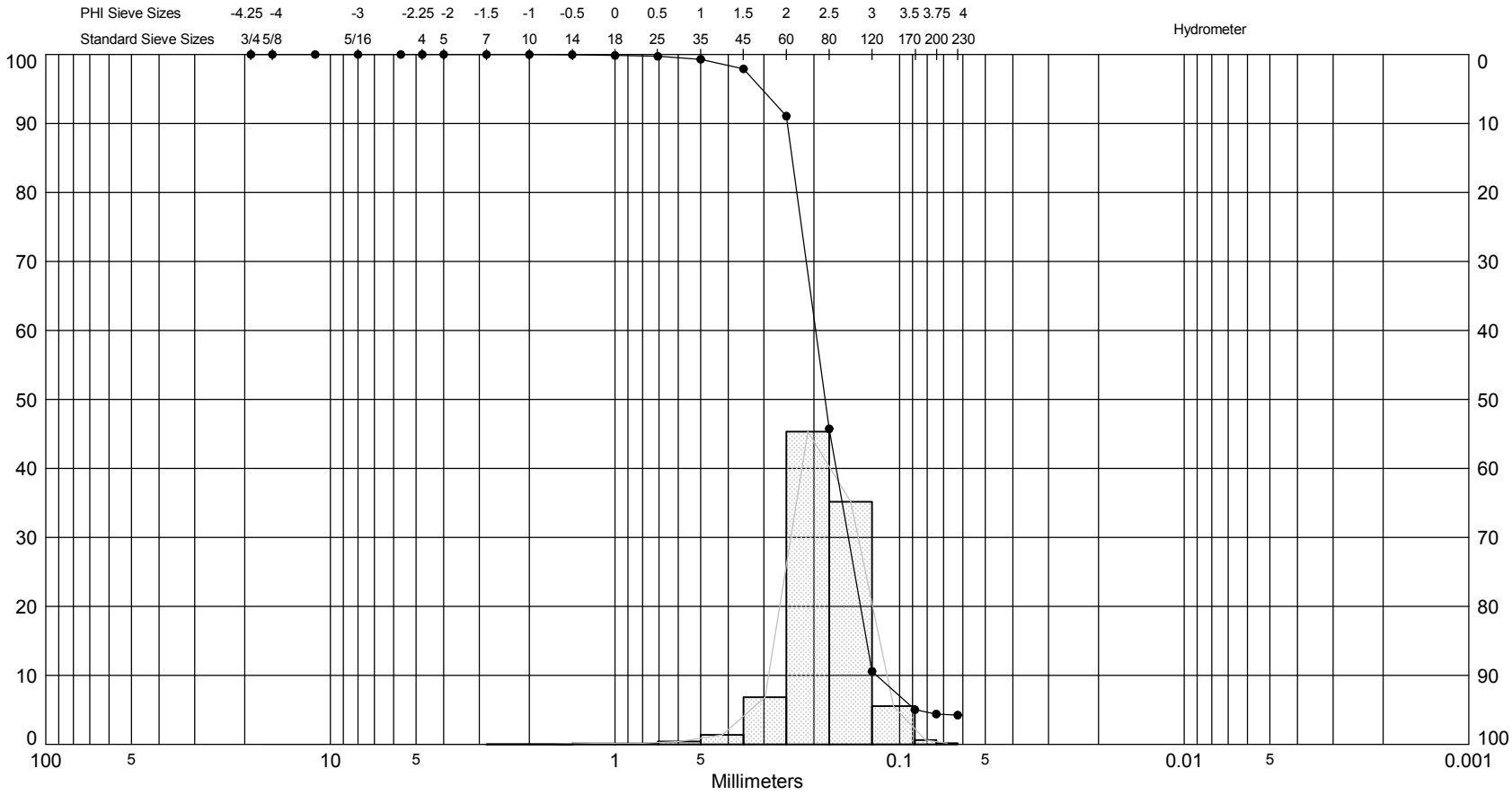
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y80 #1	—●—		SP	#200 - 4.39 #230 - 4.24			2.45	2.44	-0.77	7.33	0.43

Comments:

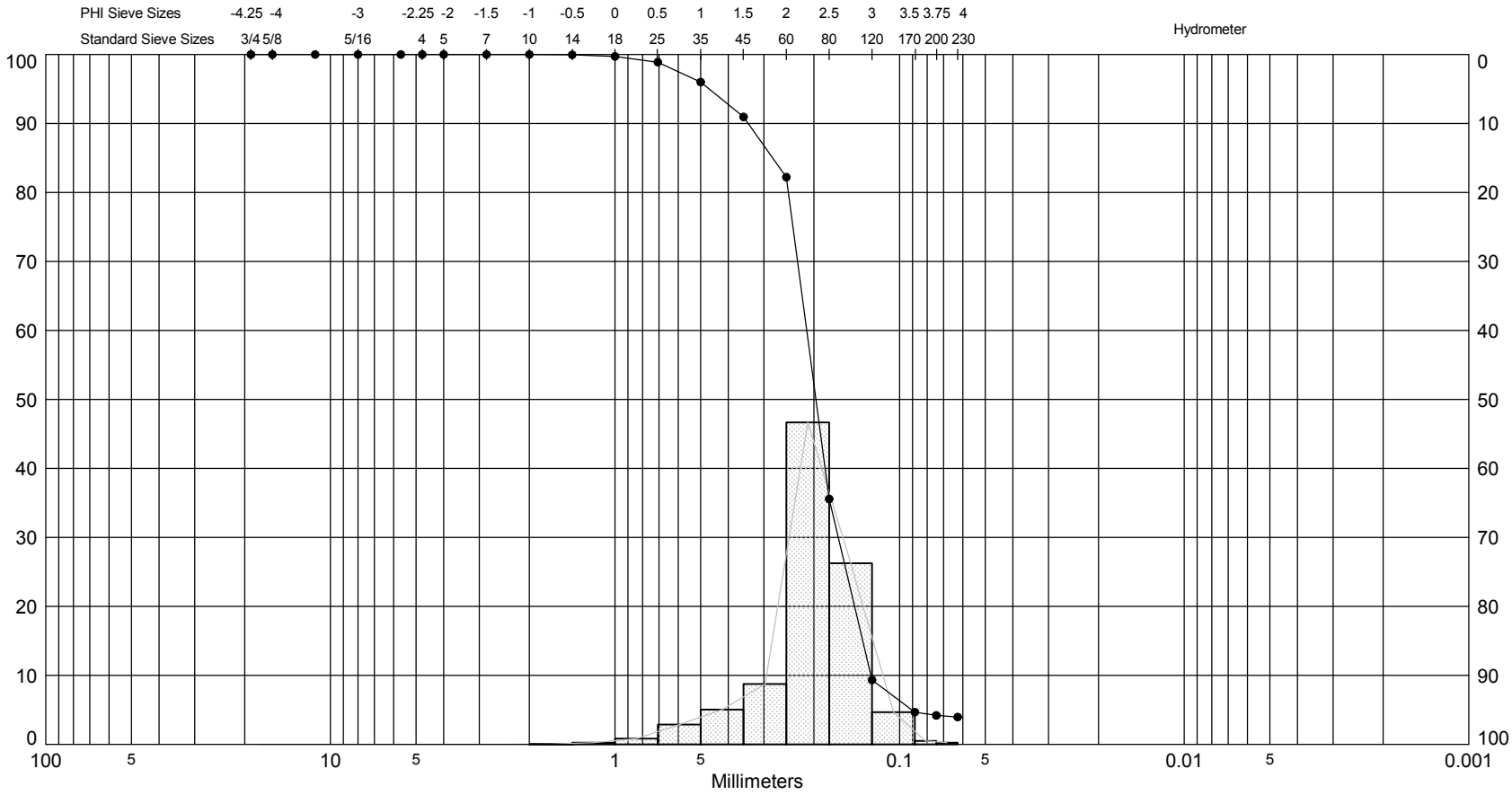
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y80 #2	—●—		SP	#200 - 4.19 #230 - 3.96	0.50	2.00	2.35	2.28	-1.1	5.58	0.57

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

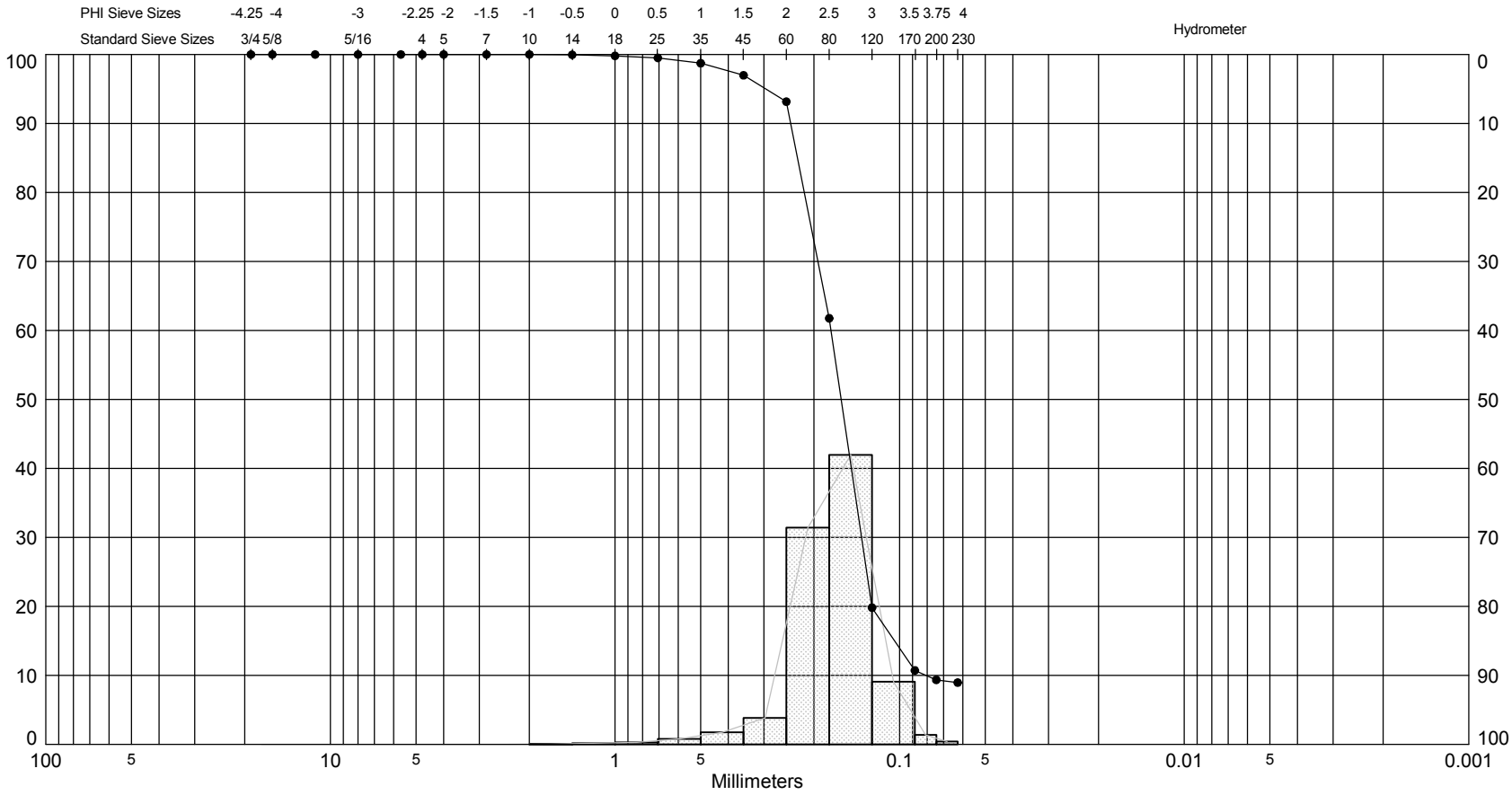
Comments:

Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y80 #3	—●—		SP-SM	#200 - 9.35 #230 - 8.95	1.40	3.10	2.64	2.54	-1.19	7.8	0.5

Comments:

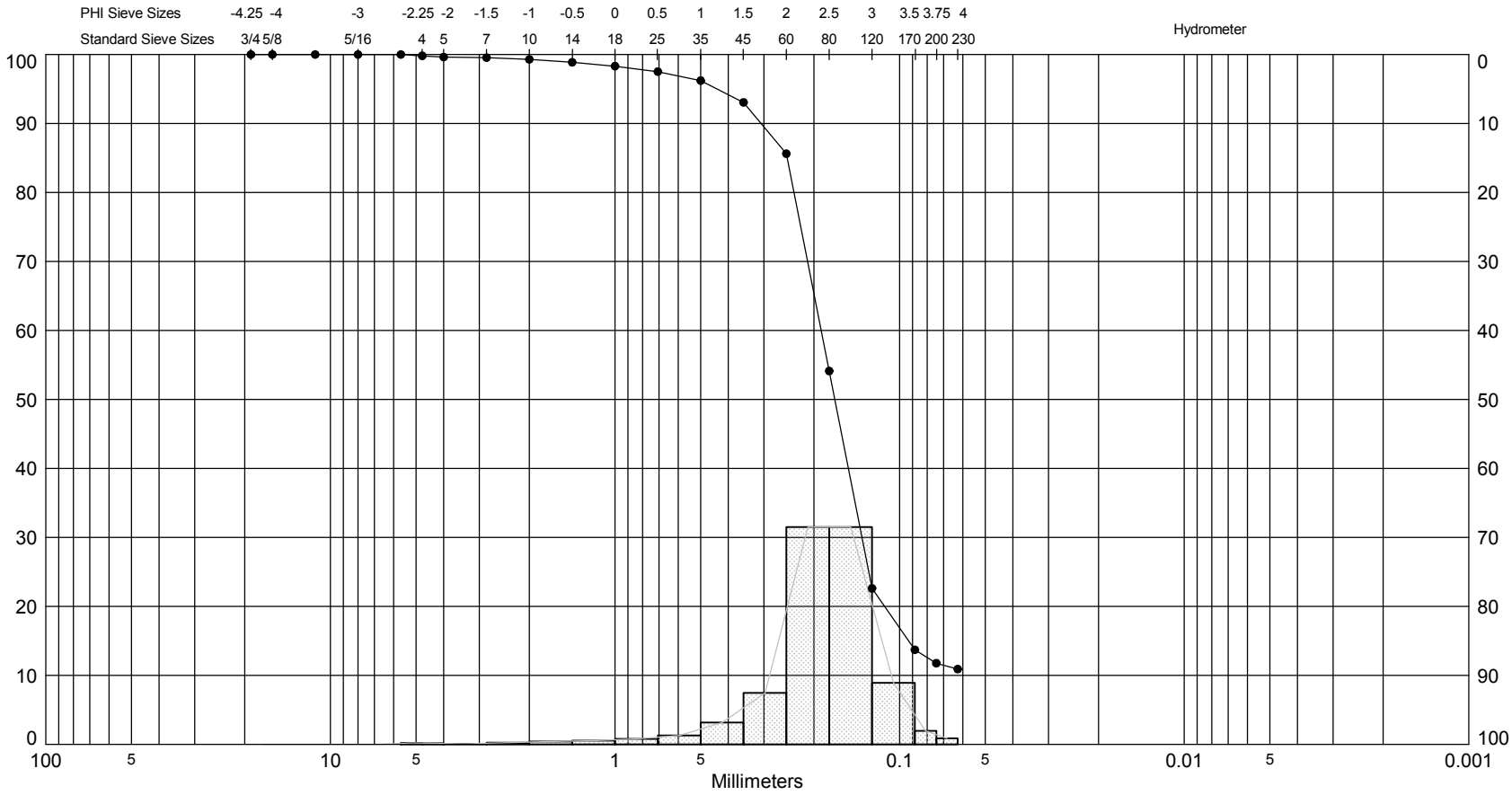
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y81 #1	—●—		SP-SM	#200 - 11.77 #230 - 10.91	1.50	3.20	2.57	2.39	-2.21	12.14	0.76

Comments:

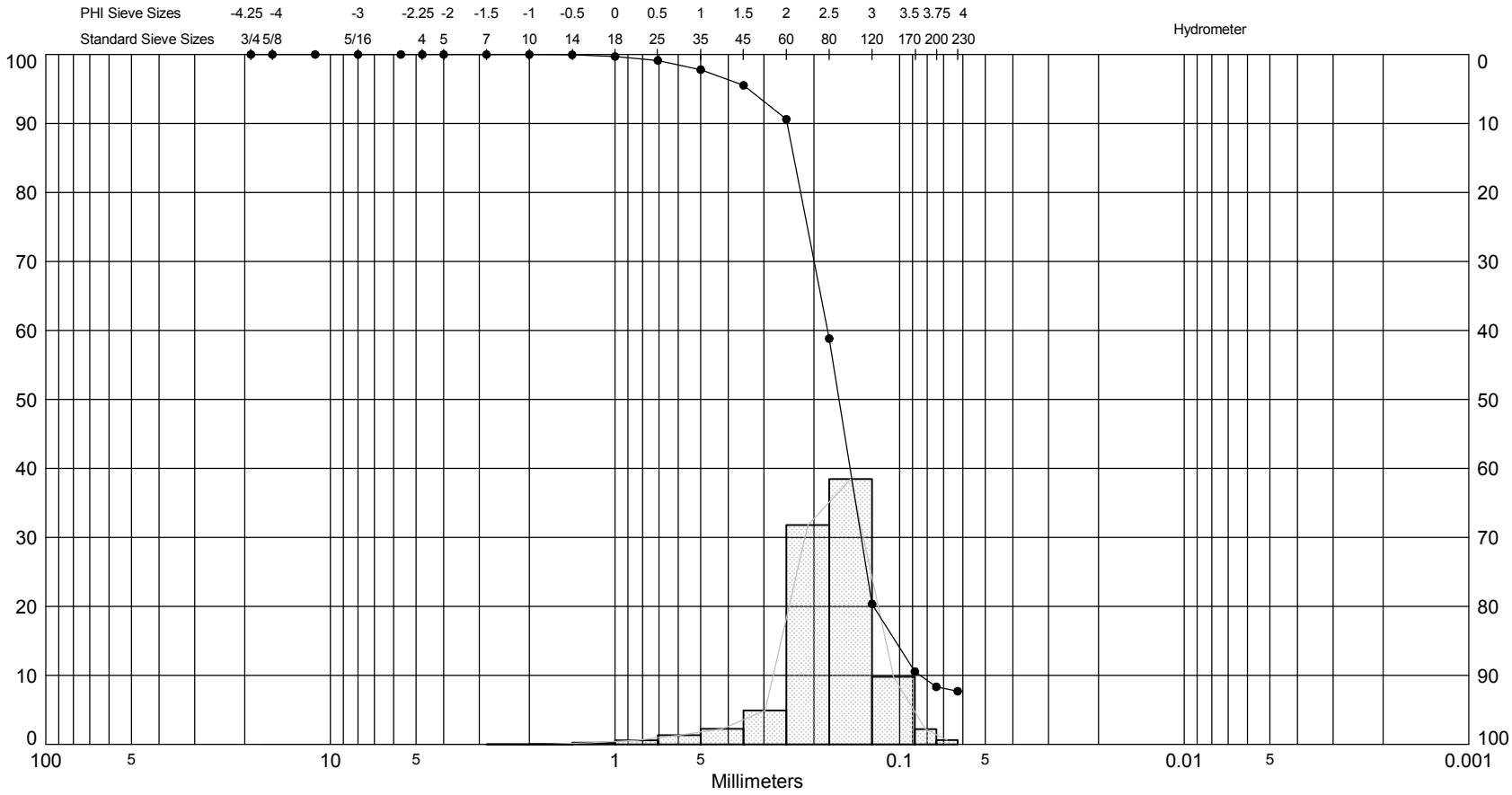
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y81 #2	—●—		SP-SM	#200 - 8.34 #230 - 7.70	1.00	1.90	2.61	2.52	-1.15	6.79	0.57

Comments:

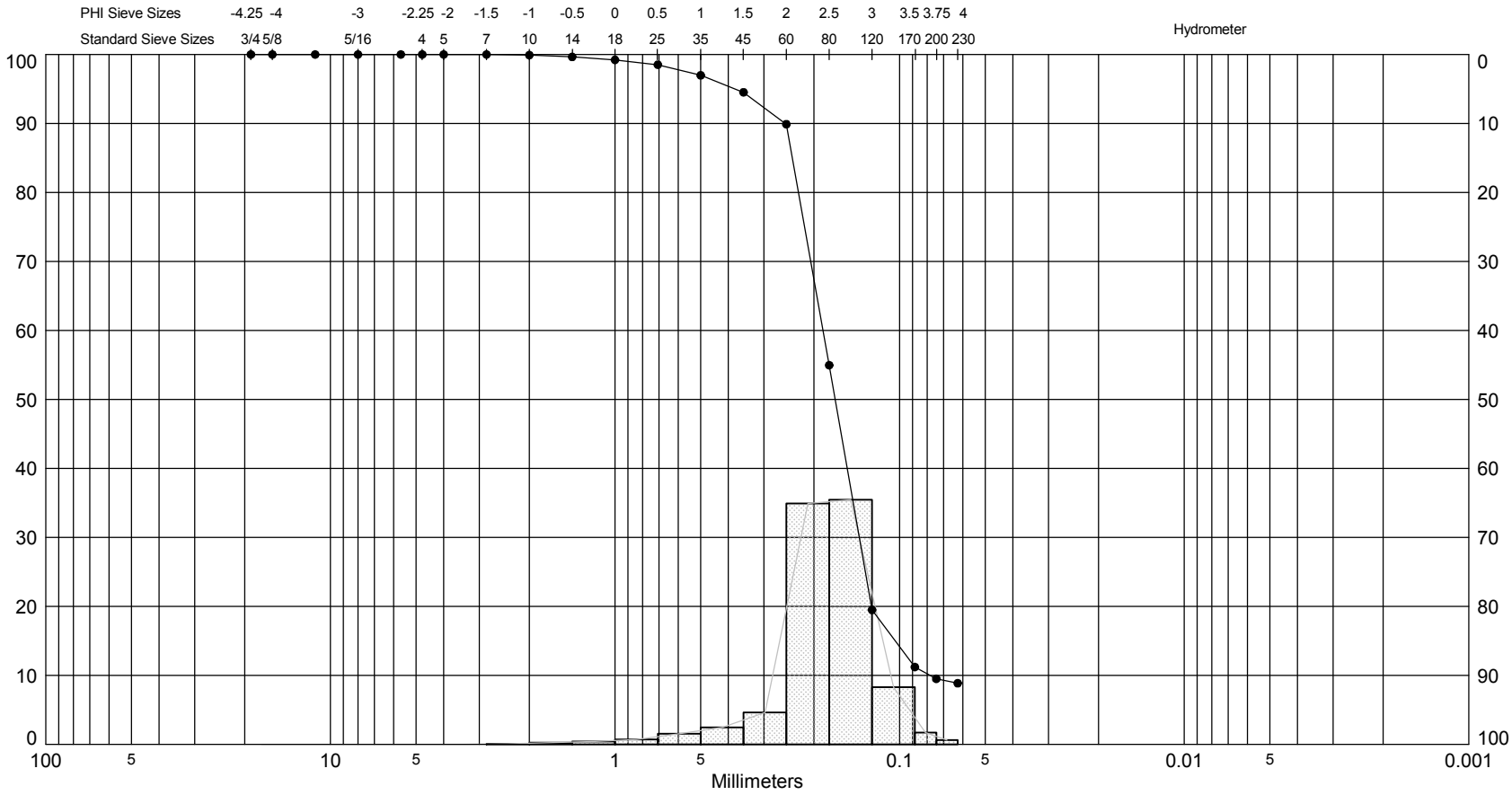
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y81 #3	—●—		SP-SM	#200 - 9.50 #230 - 8.86	1.10	2.00	2.57	2.46	-1.6	8.8	0.61

Comments:

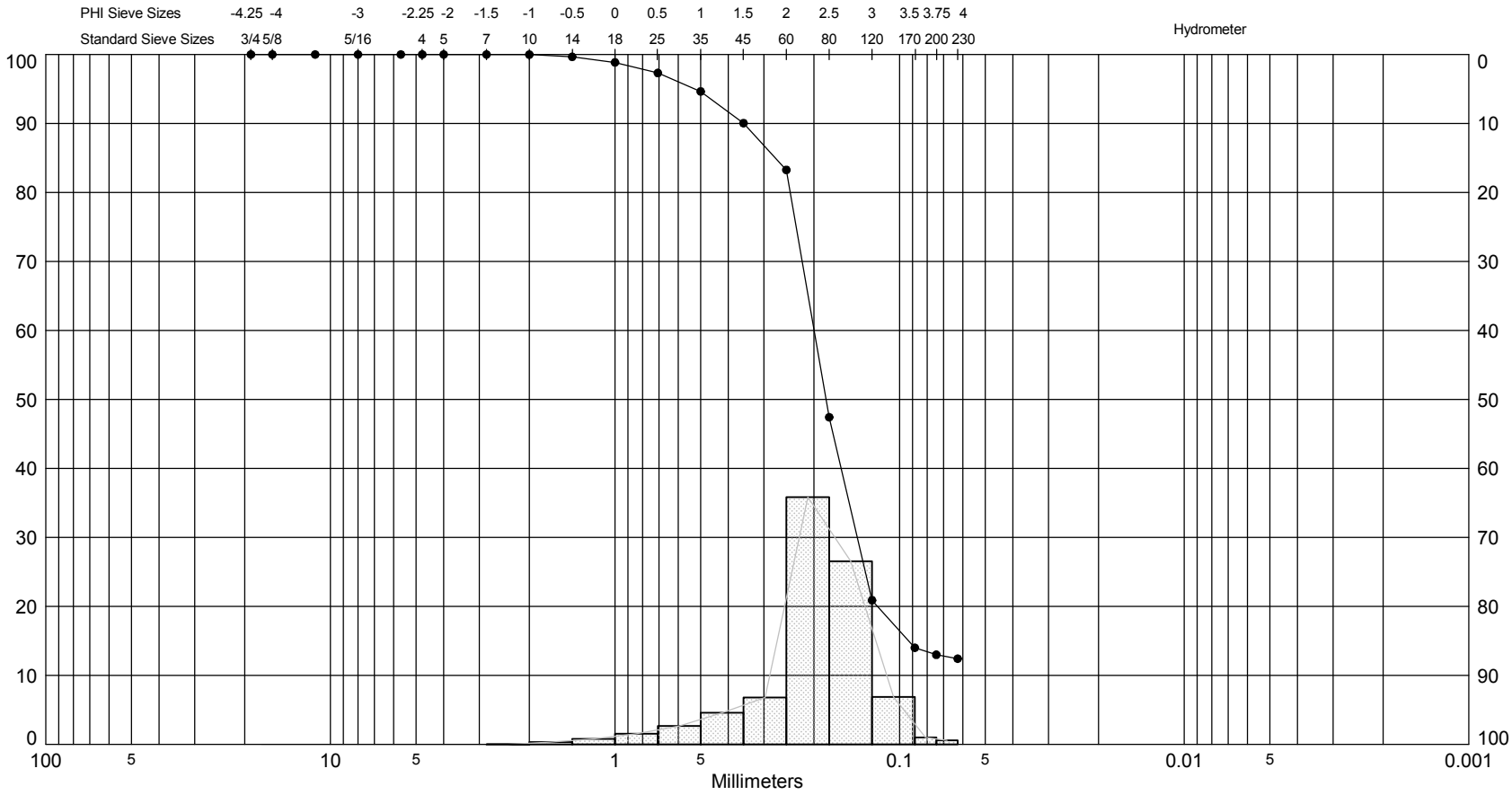
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y81 #4	—●—		SM	#200 - 12.99 #230 - 12.42	1.20	1.90	2.46	2.3	-1.32	5.94	0.7

Comments:

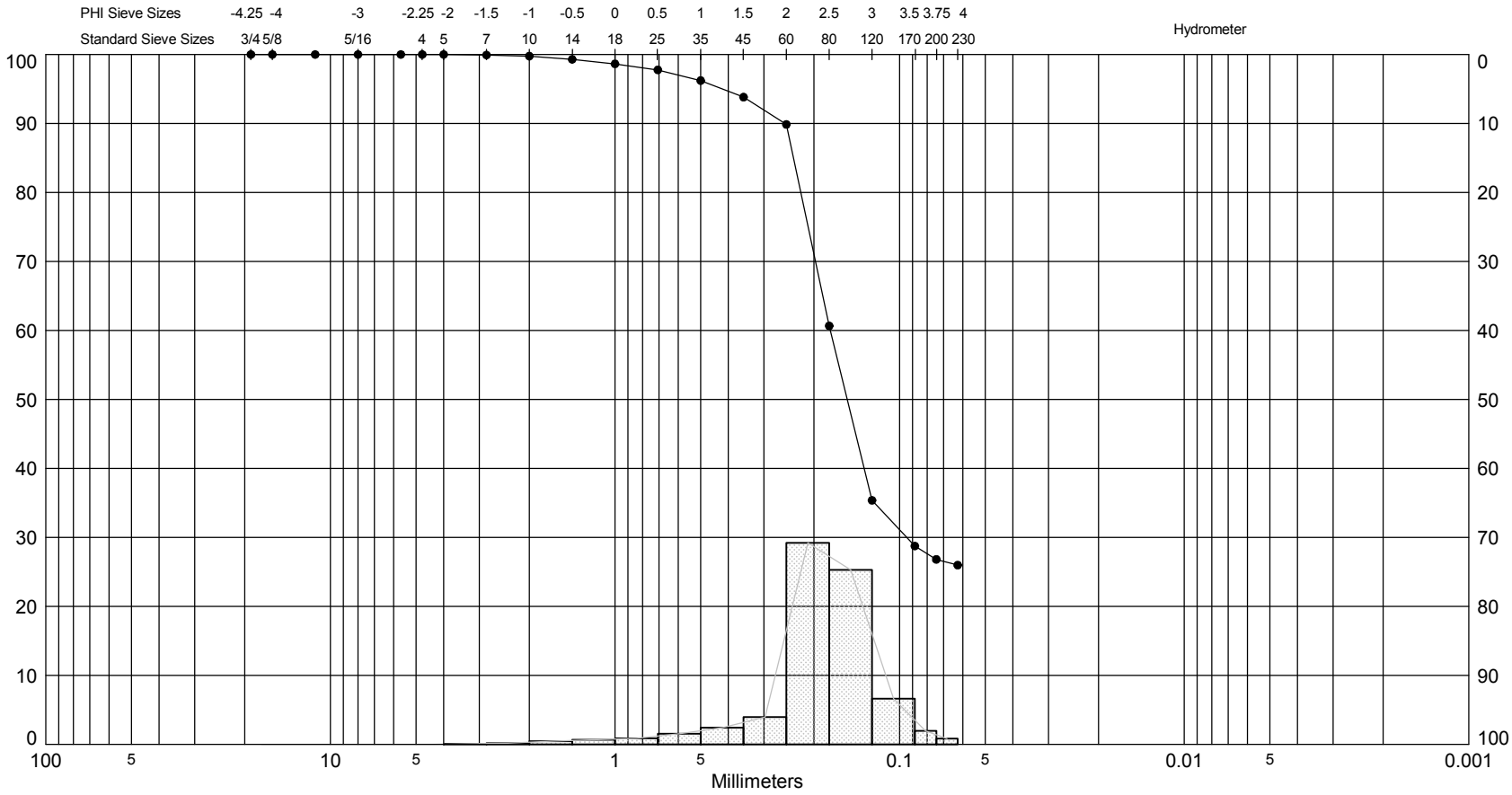
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y82 #1	—●—		SM	#200 - 26.81 #230 - 25.98	2.30	1.80	2.71	2.4	-1.73	8.59	0.73

Comments:

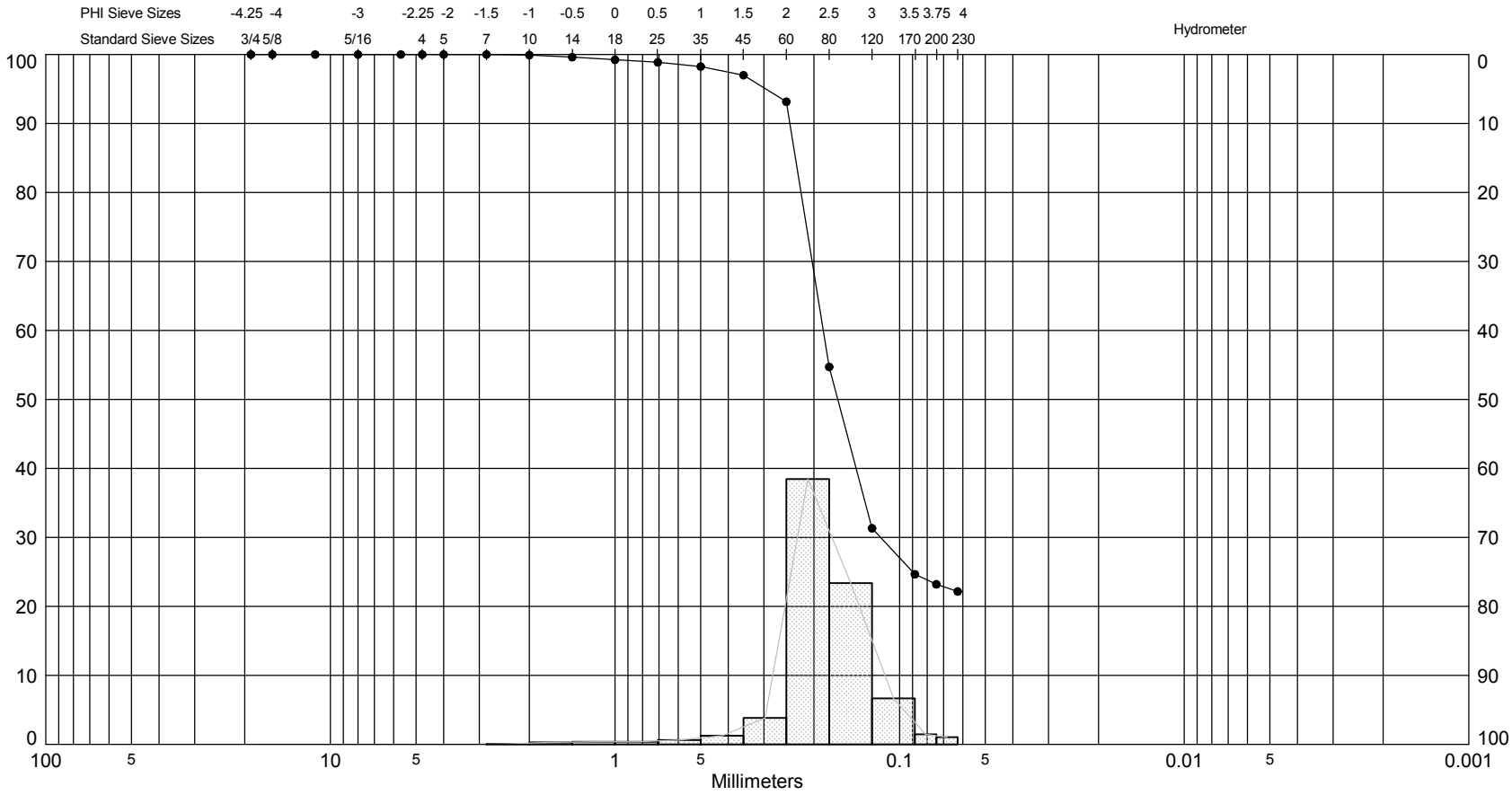
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y82 #2	—●—		SM	#200 - 23.20 #230 - 22.16	3.10	1.20	2.6	2.44	-1.48	10.67	0.58

Comments:

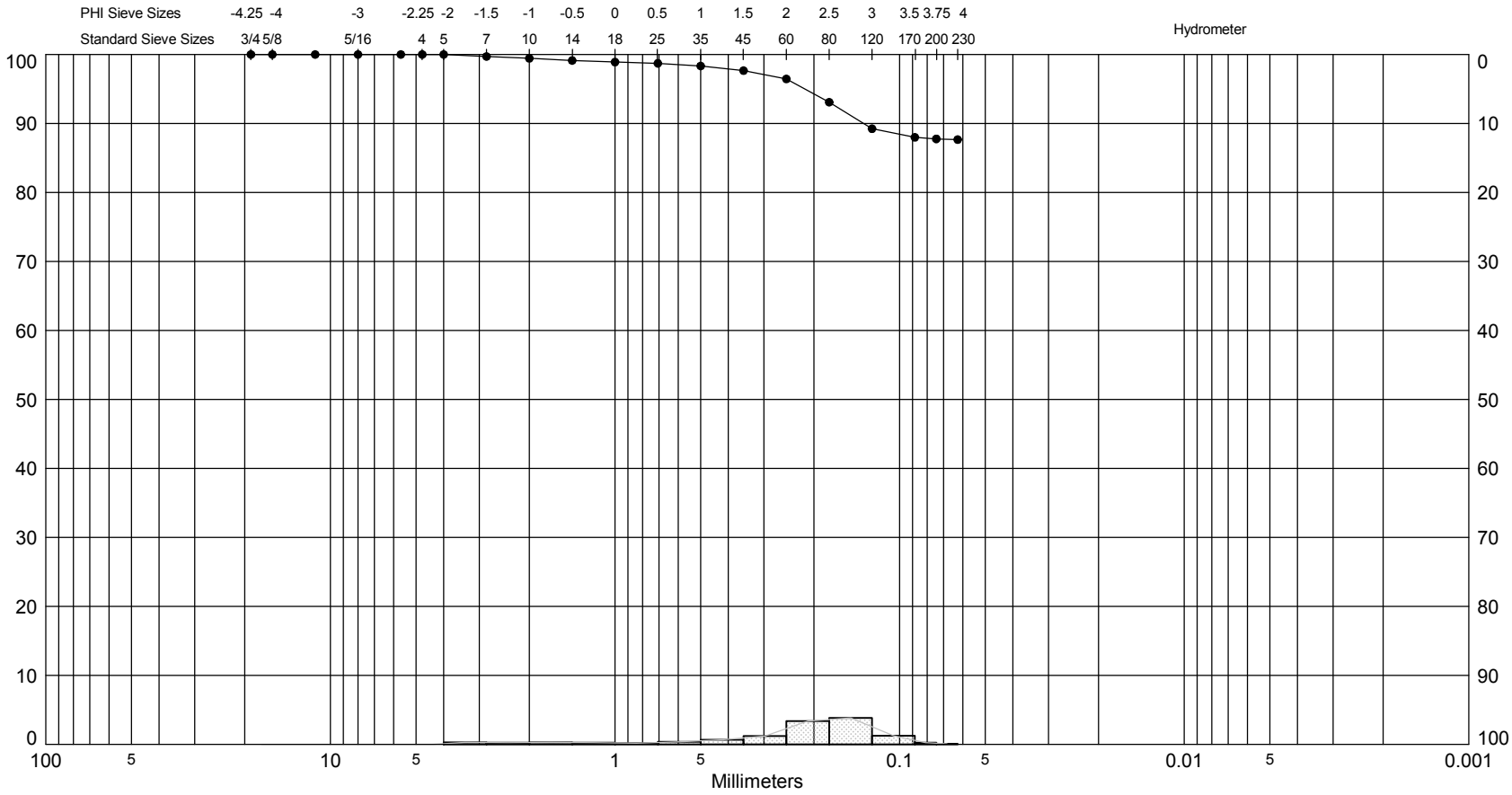
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y83 #1	—●—		ML-CL	#200 - 87.76 #230 - 87.66	12.60	7.50		2.07	-1.64	5.36	1.19

Comments:

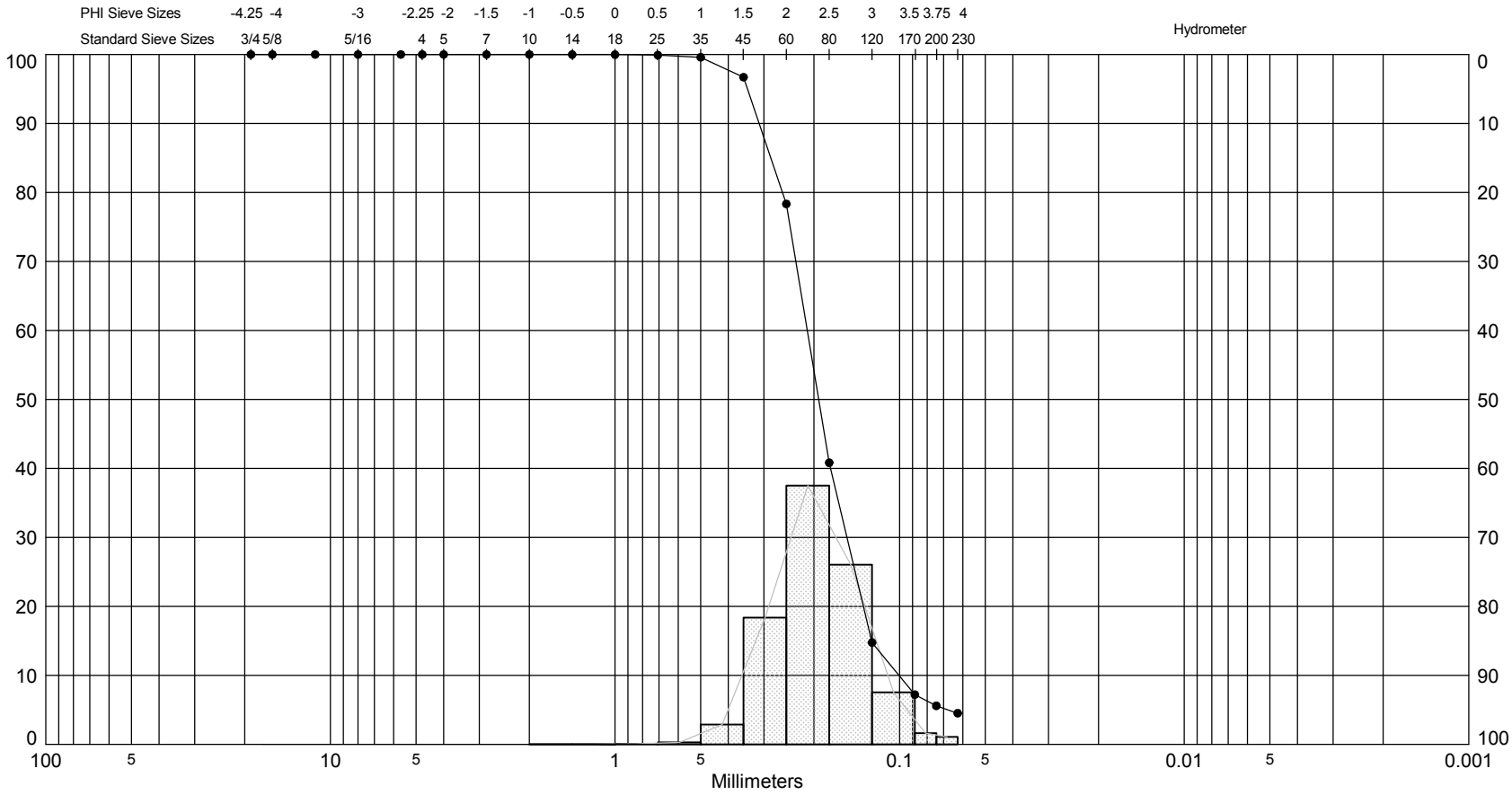
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y83 #2	—●—		SP-SM	#200 - 5.59 #230 - 4.52	0.80	1.00	2.38	2.37	0.15	3.47	0.53

Comments:

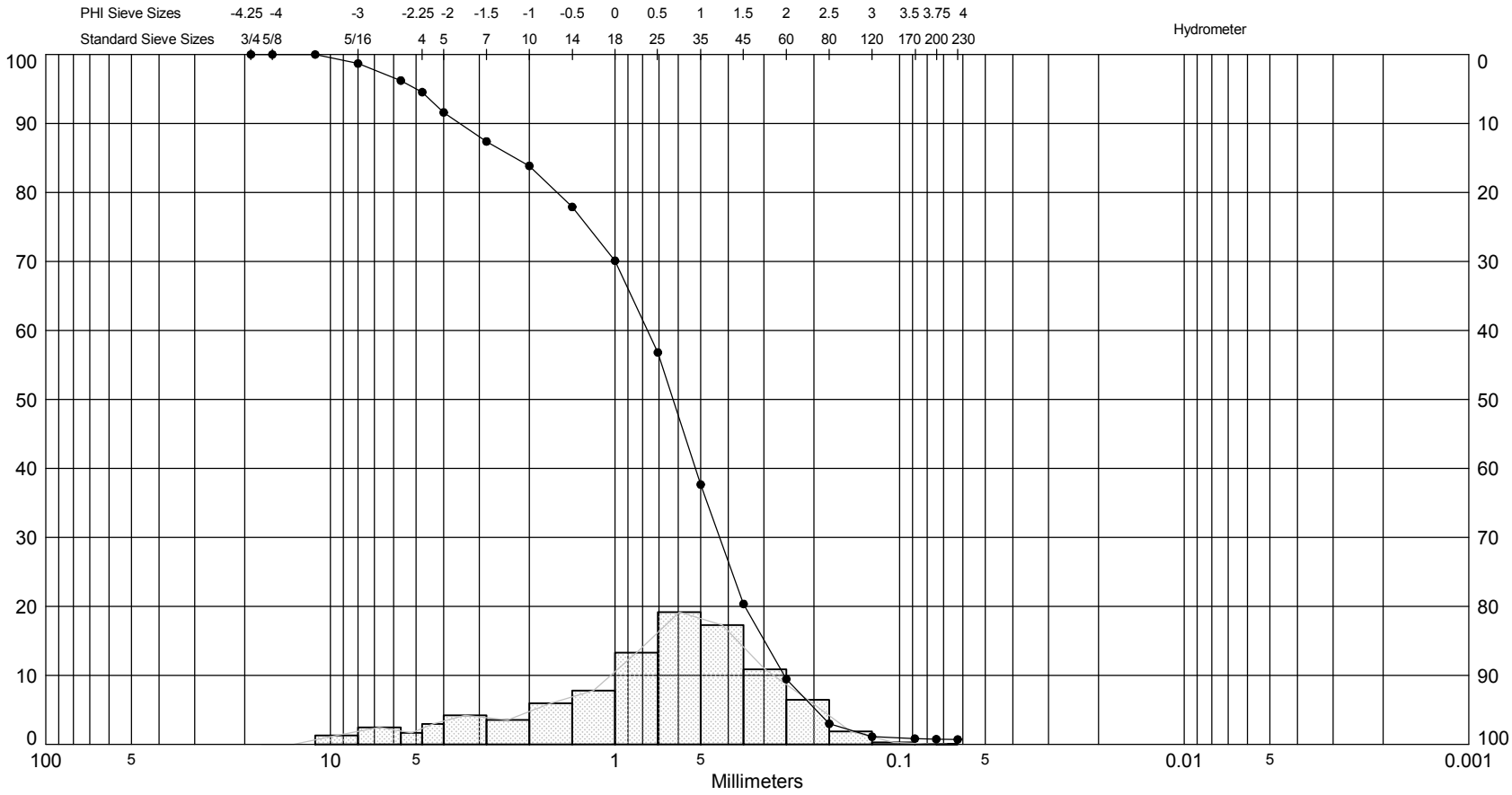
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y83 #3	—●—		SW	#200 - 0.75 #230 - 0.71	0.30	0.90	0.68	0.4	-0.71	3	1.37

Comments:

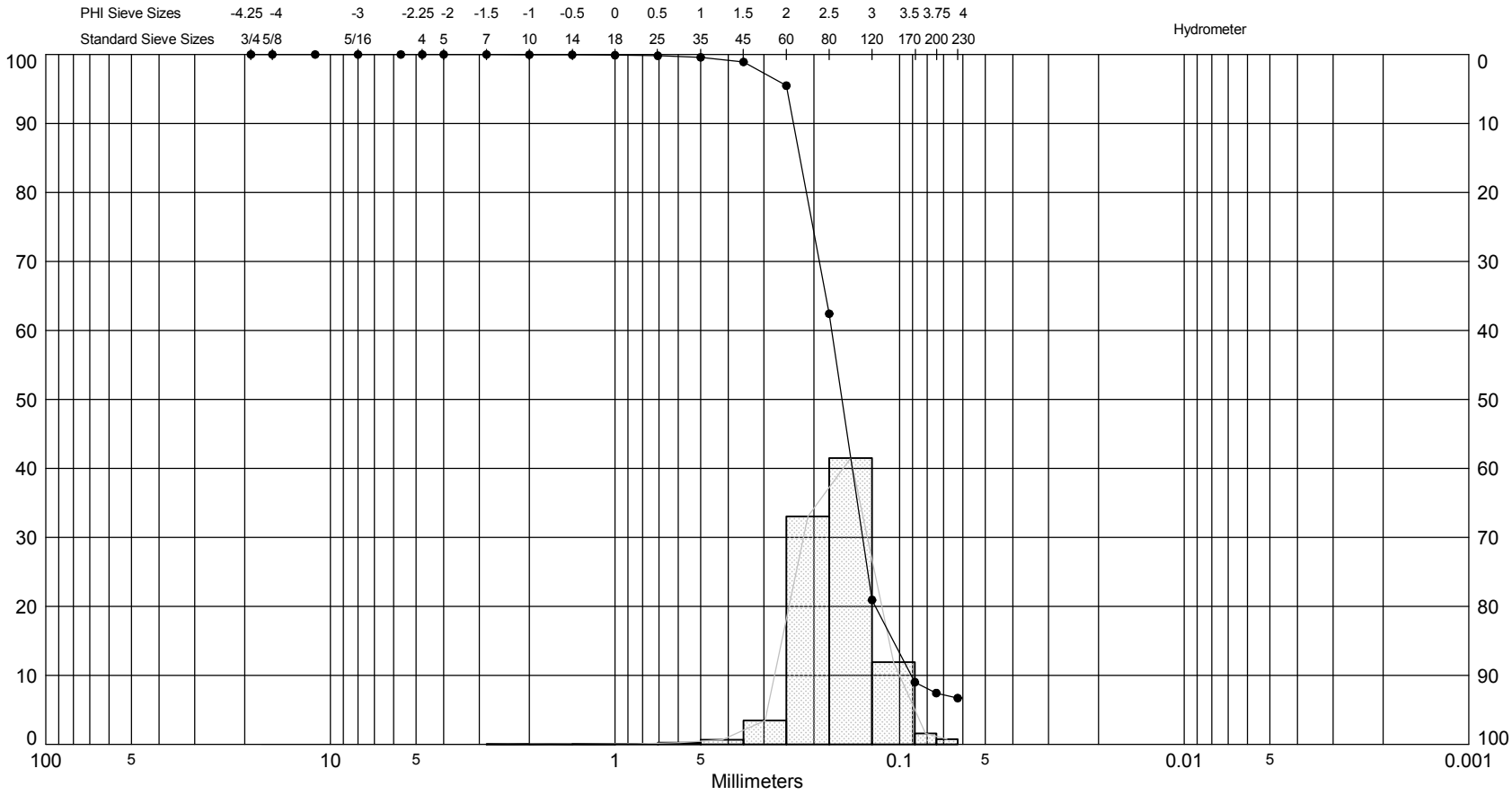
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y83 #4	—●—		SP-SM	#200 - 7.43 #230 - 6.70	1.10	1.80	2.65	2.6	-0.58	7.44	0.45

Comments:

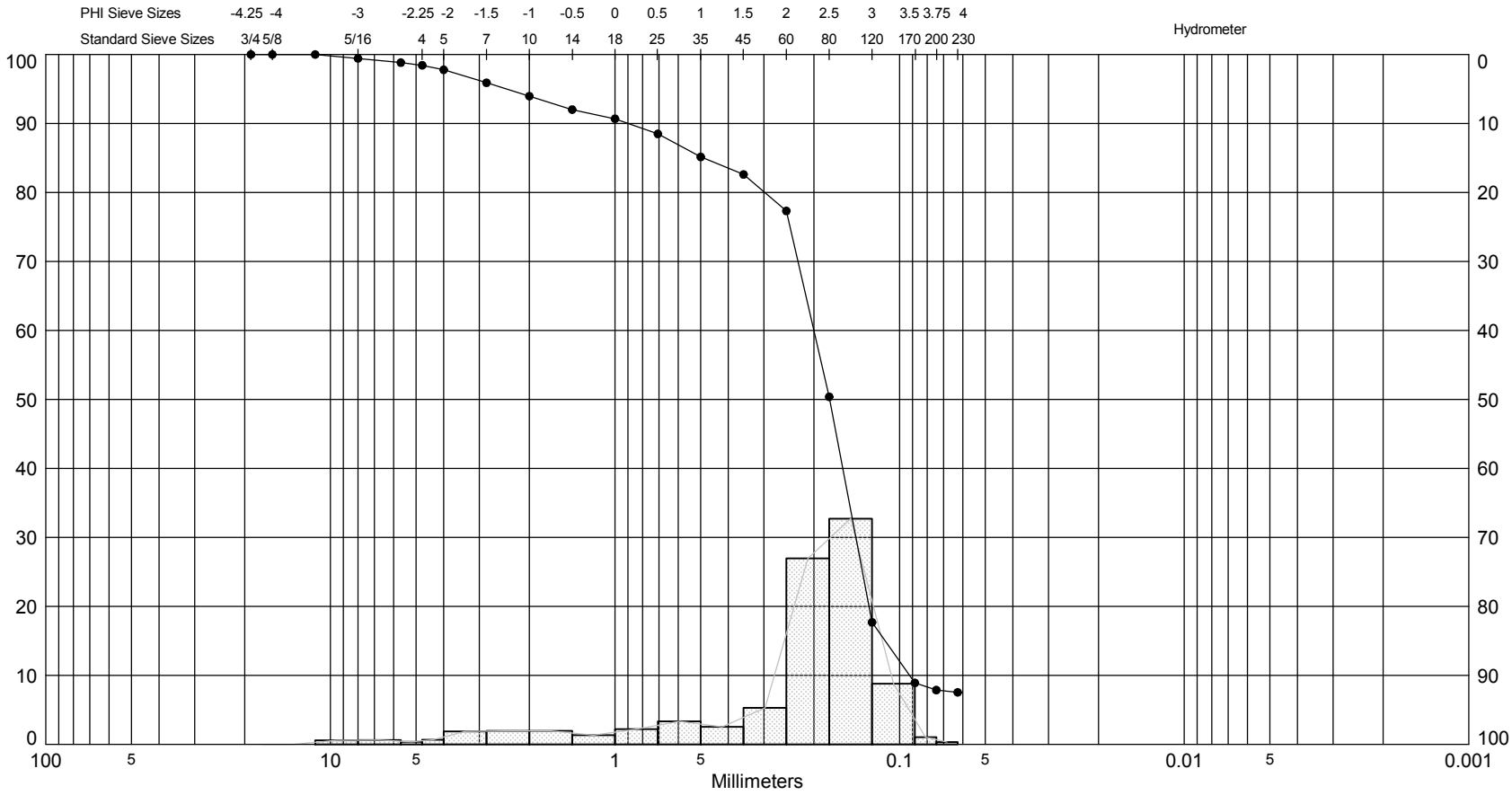
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y84 #1	—●—		SW-SM	#200 - 7.87 #230 - 7.54	1.50	12.50	2.51	2.01	-1.93	6.26	1.35

Comments:

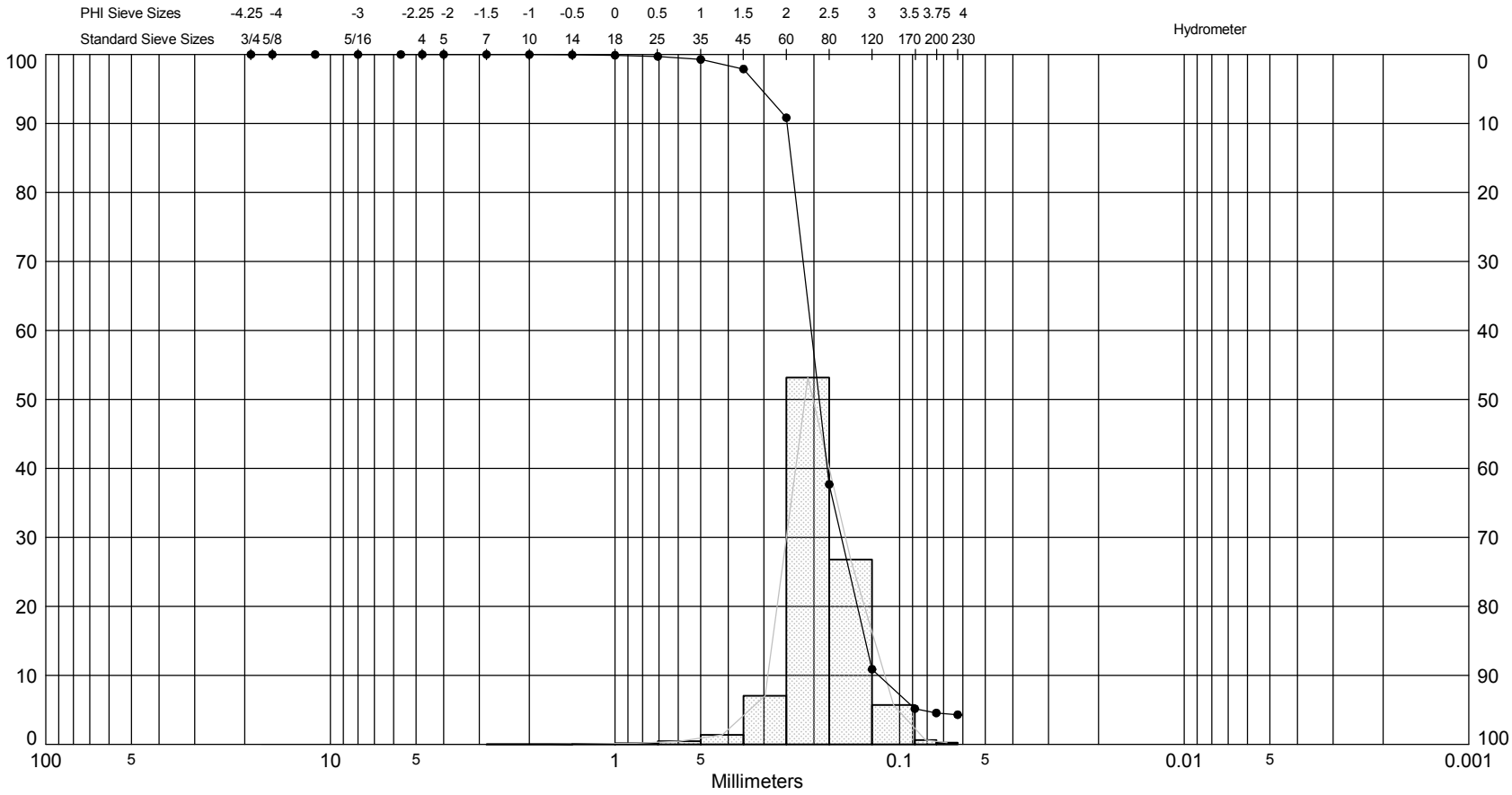
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y84 #2	—●—		SP	#200 - 4.55 #230 - 4.30	0.50	1.90	2.38	2.4	-0.56	7.9	0.43

Comments:

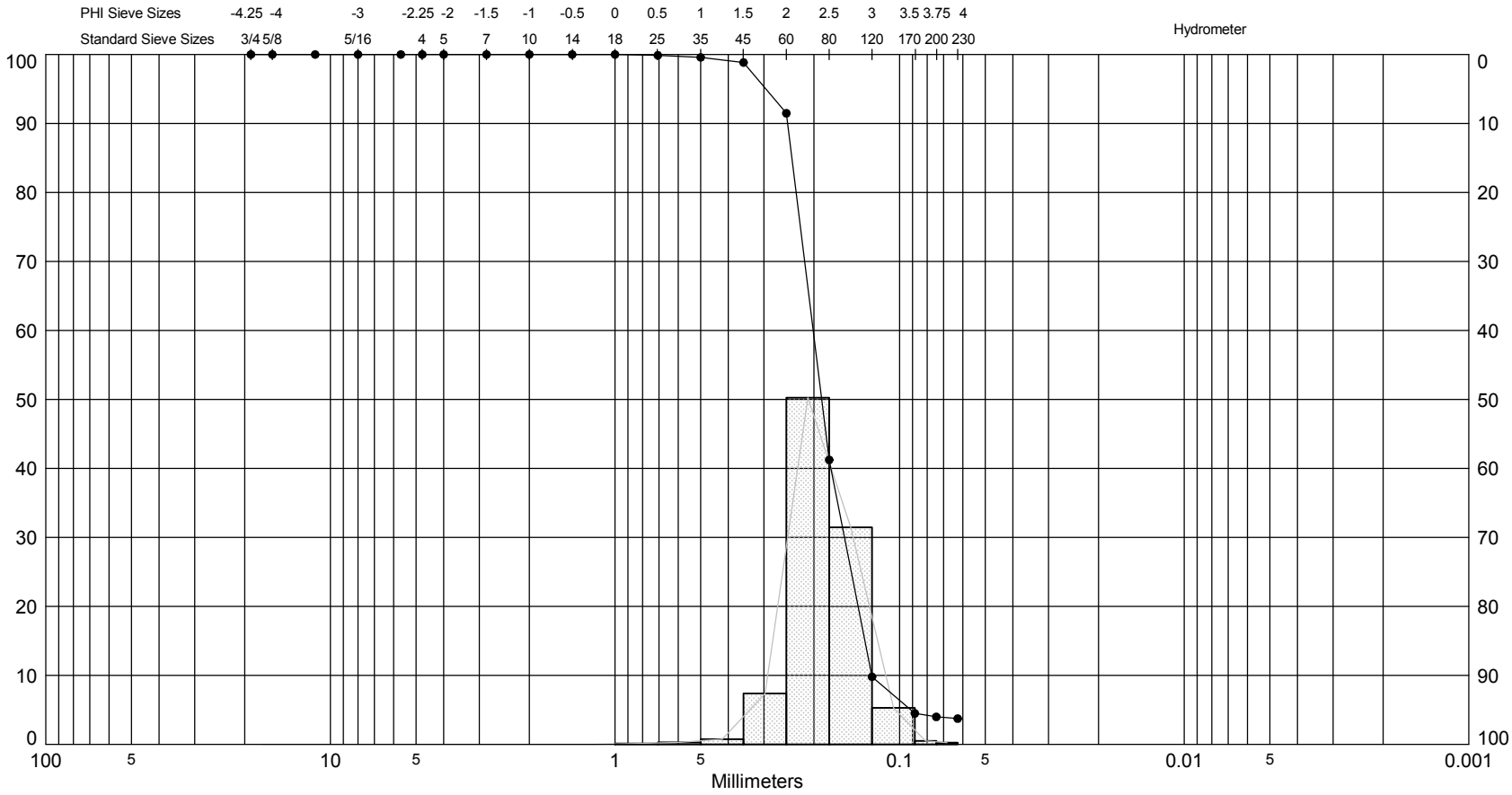
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y84 #3	—●—		SP	#200 - 3.98 #230 - 3.73	0.40	1.60	2.41	2.43	-0.12	5.19	0.4

Comments:

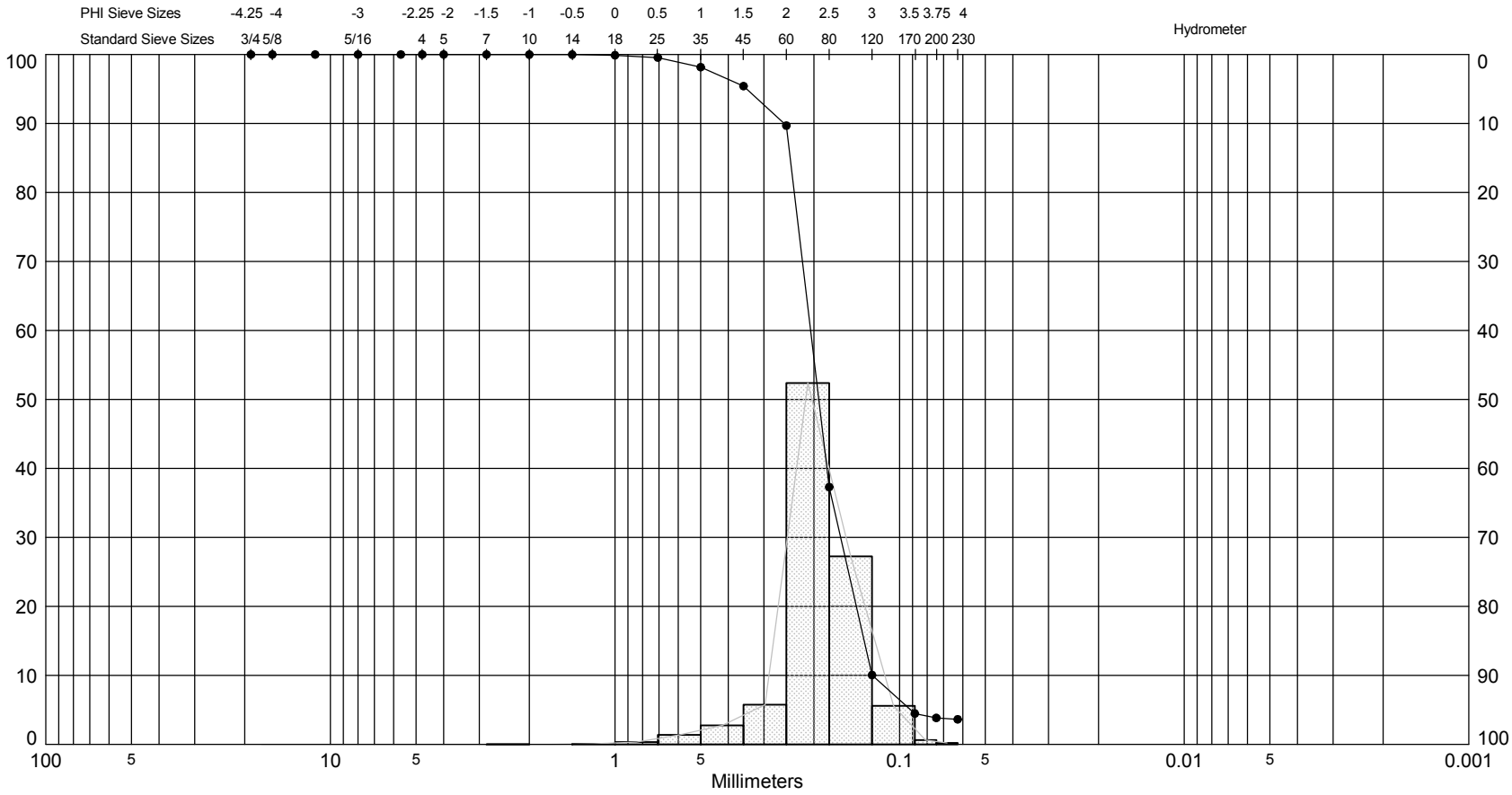
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y84 #4	—●—		SP	#200 - 3.83 #230 - 3.63	0.40	1.70	2.38	2.37	-0.91	6.9	0.48

Comments:

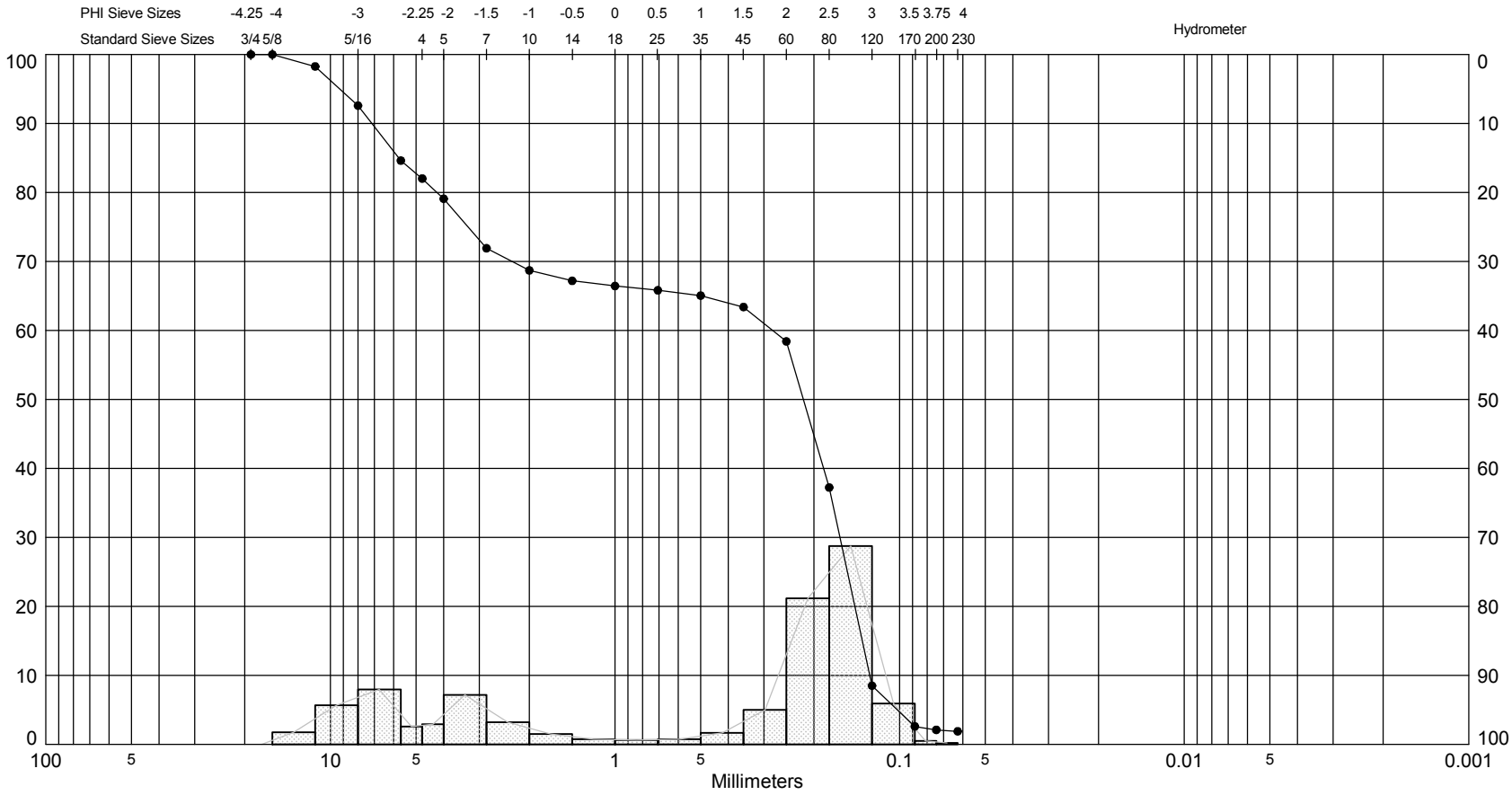
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y85 #1	—●—		SW	#200 - 2.10 #230 - 1.89	1.00	7.80	2.2	0.84	-0.69	1.75	2.36

Comments:

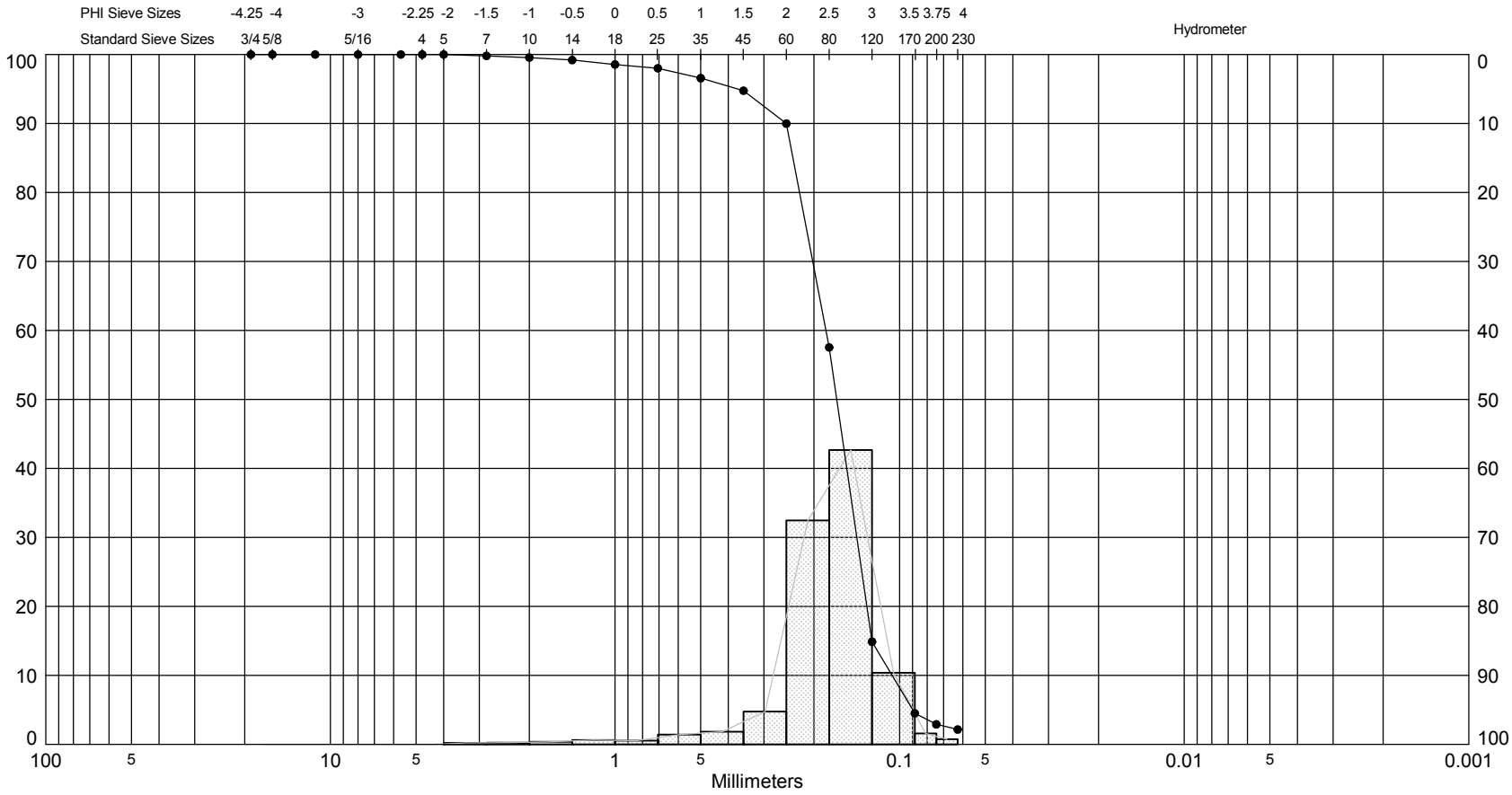
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y85 #2	—●—		SP	#200 - 2.90 #230 - 2.15	1.30	5.70	2.59	2.49	-2.27	12.53	0.66

Comments:

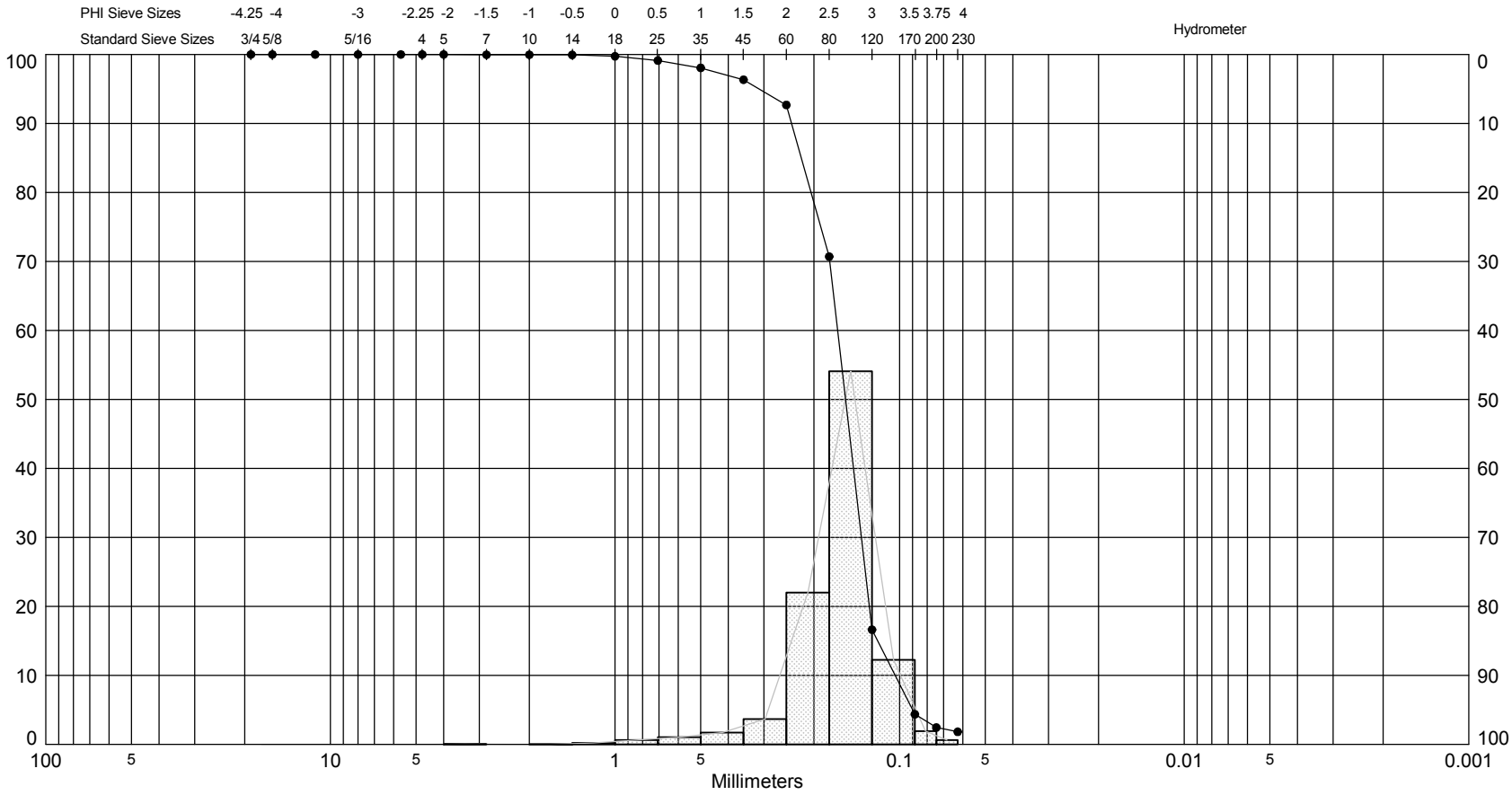
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y85 #3	—●—		SP	#200 - 2.44 #230 - 1.82	0.80	1.90	2.69	2.62	-1.73	9.91	0.53

Comments:

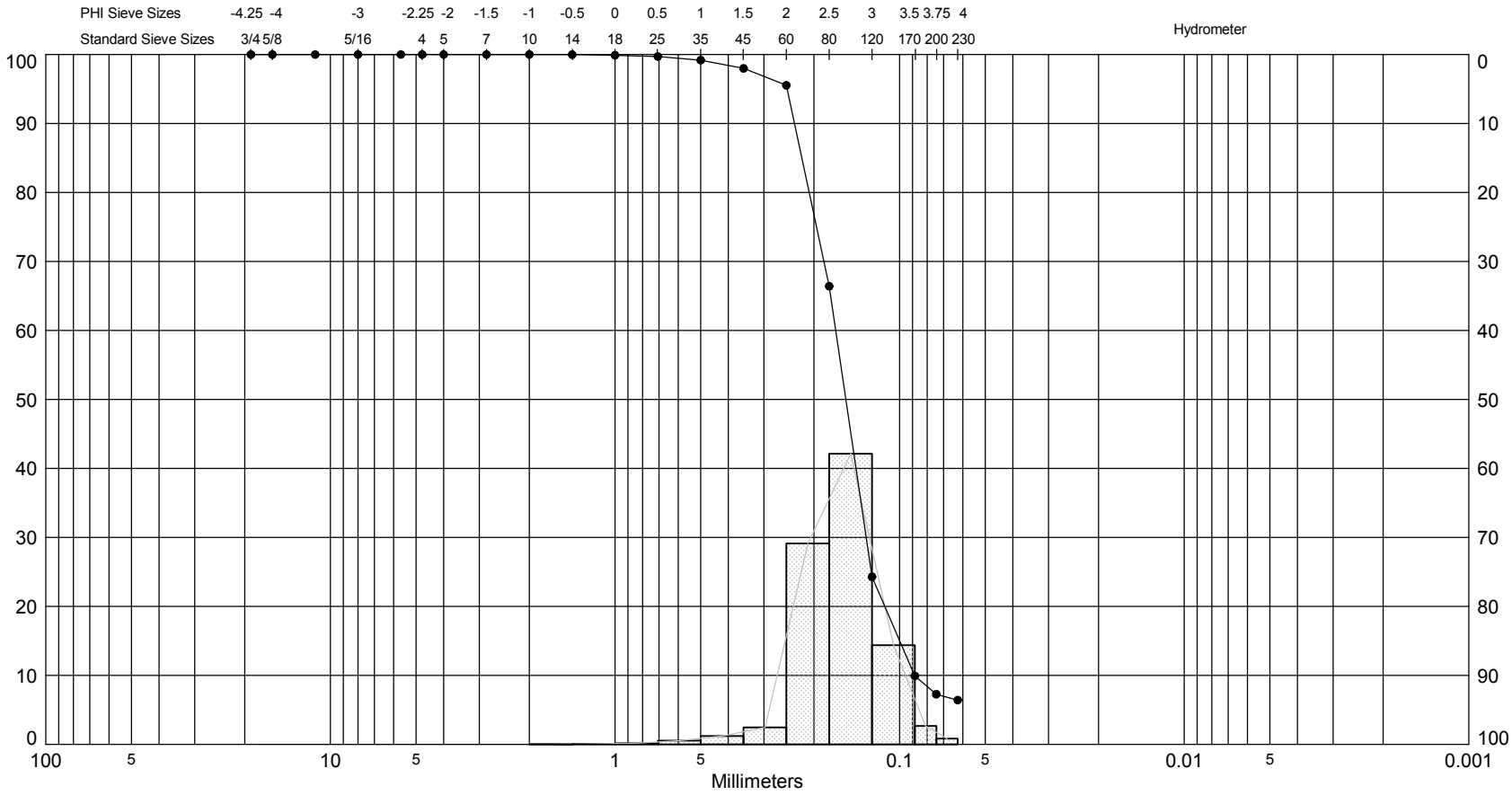
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y85 #4	—●—		SP-SM	#200 - 7.27 #230 - 6.42	1.00	2.10	2.69	2.64	-0.76	6.51	0.49

Comments:

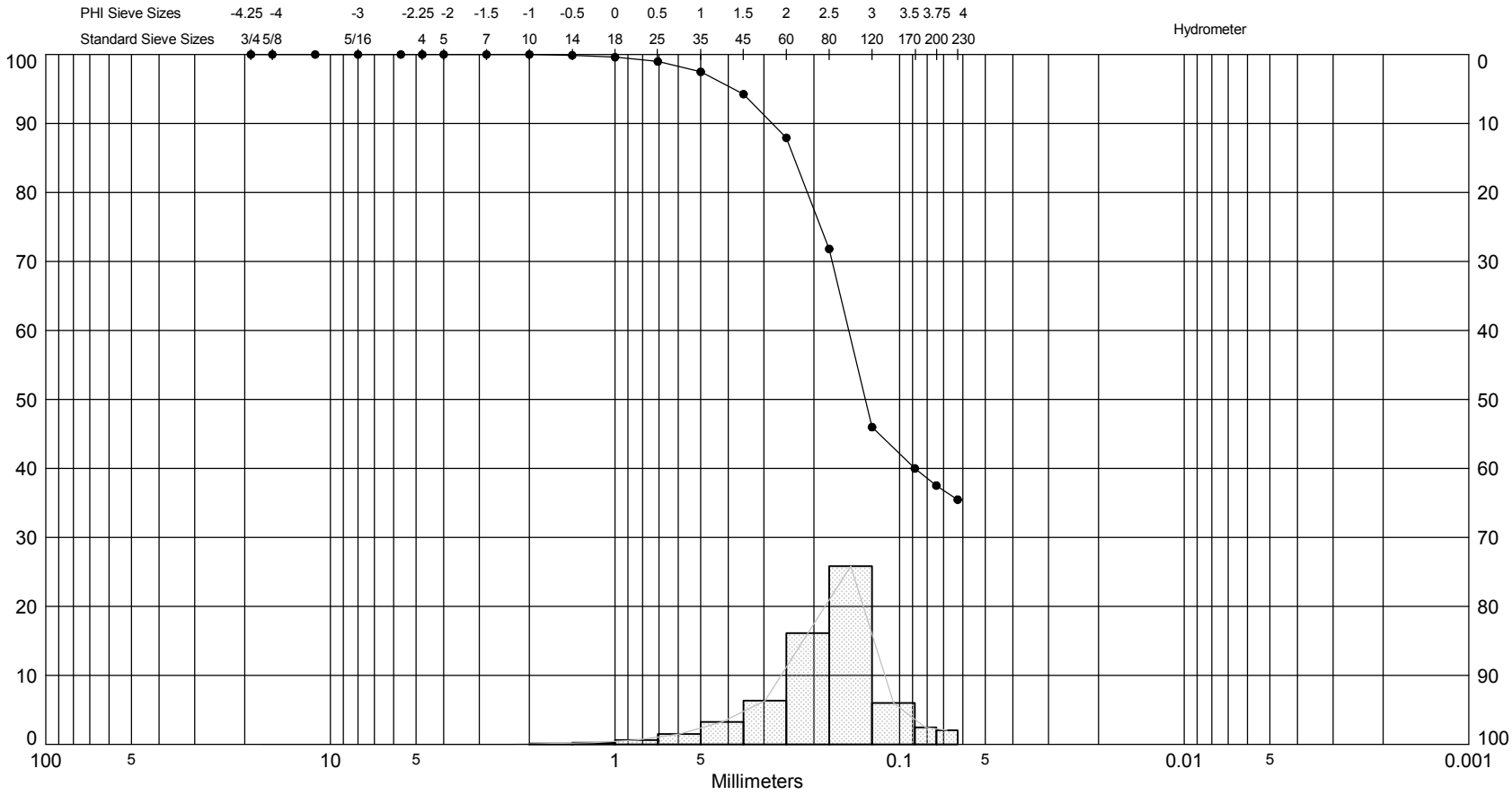
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y86 #1	—●—		SM	#200 - 37.52 #230 - 35.47	4.20	3.20	2.92	2.48	-0.87	4.86	0.71

Comments: PEATY SAND

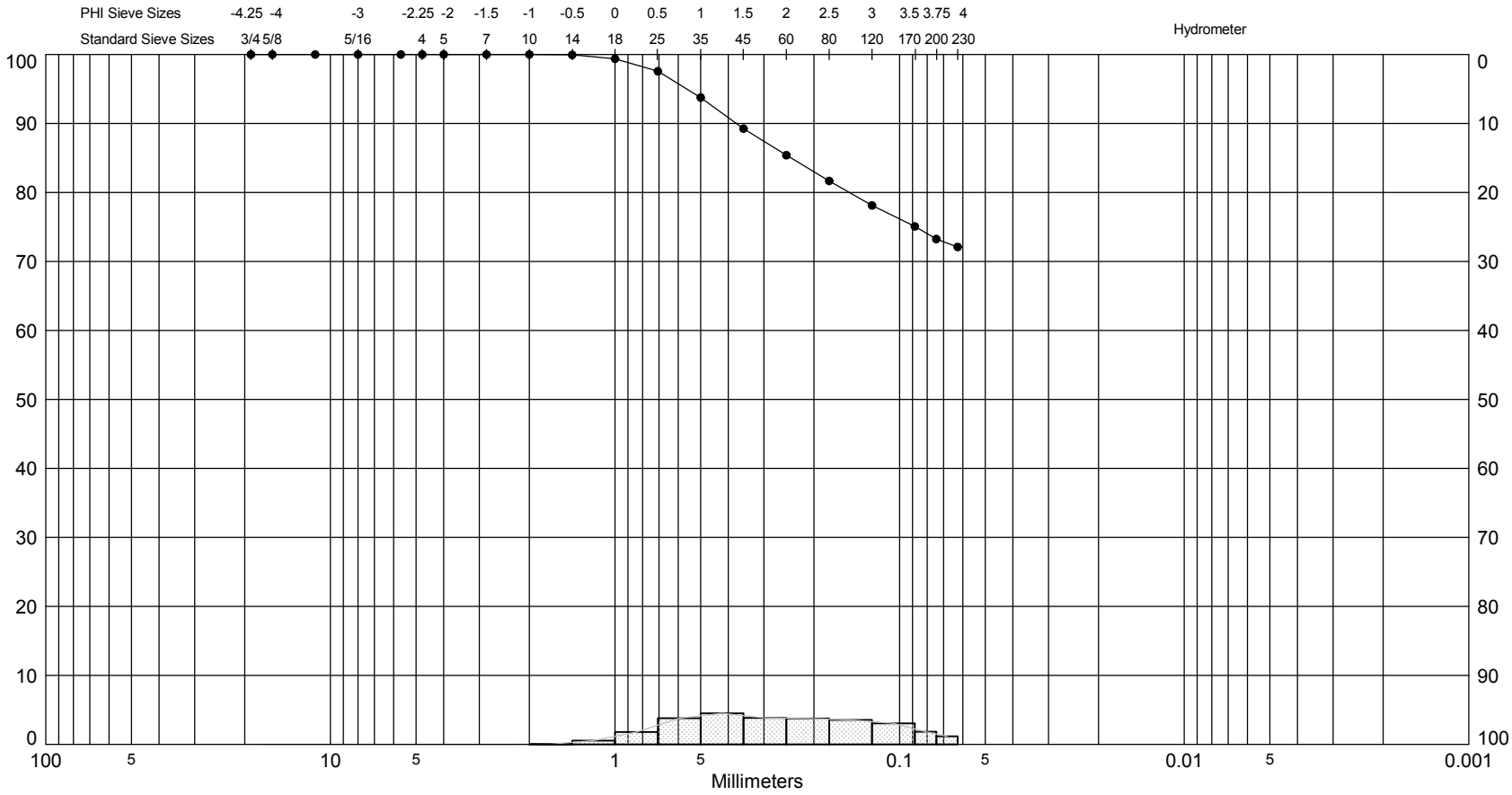
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y86 #2	—●—		ML-CL	#200 - 73.25 #230 - 72.10	19.90	9.80		1.96	0.01	2.02	1.09

Comments:

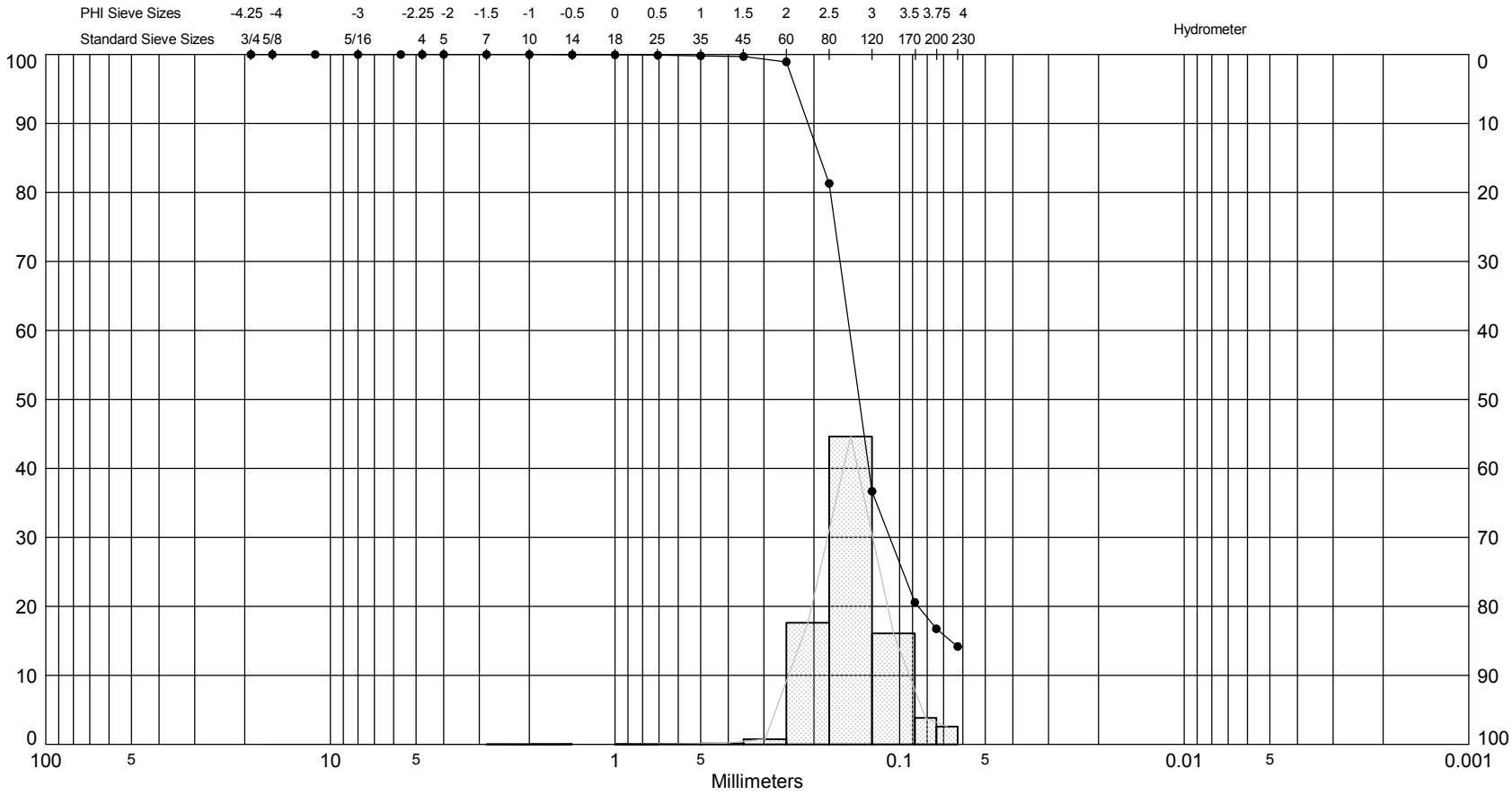
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y86 #3	—●—		SM	#200 - 16.75 #230 - 14.18	1.50	0.90	2.85	2.8	-0.19	6.65	0.44

Comments: PEATY SAND

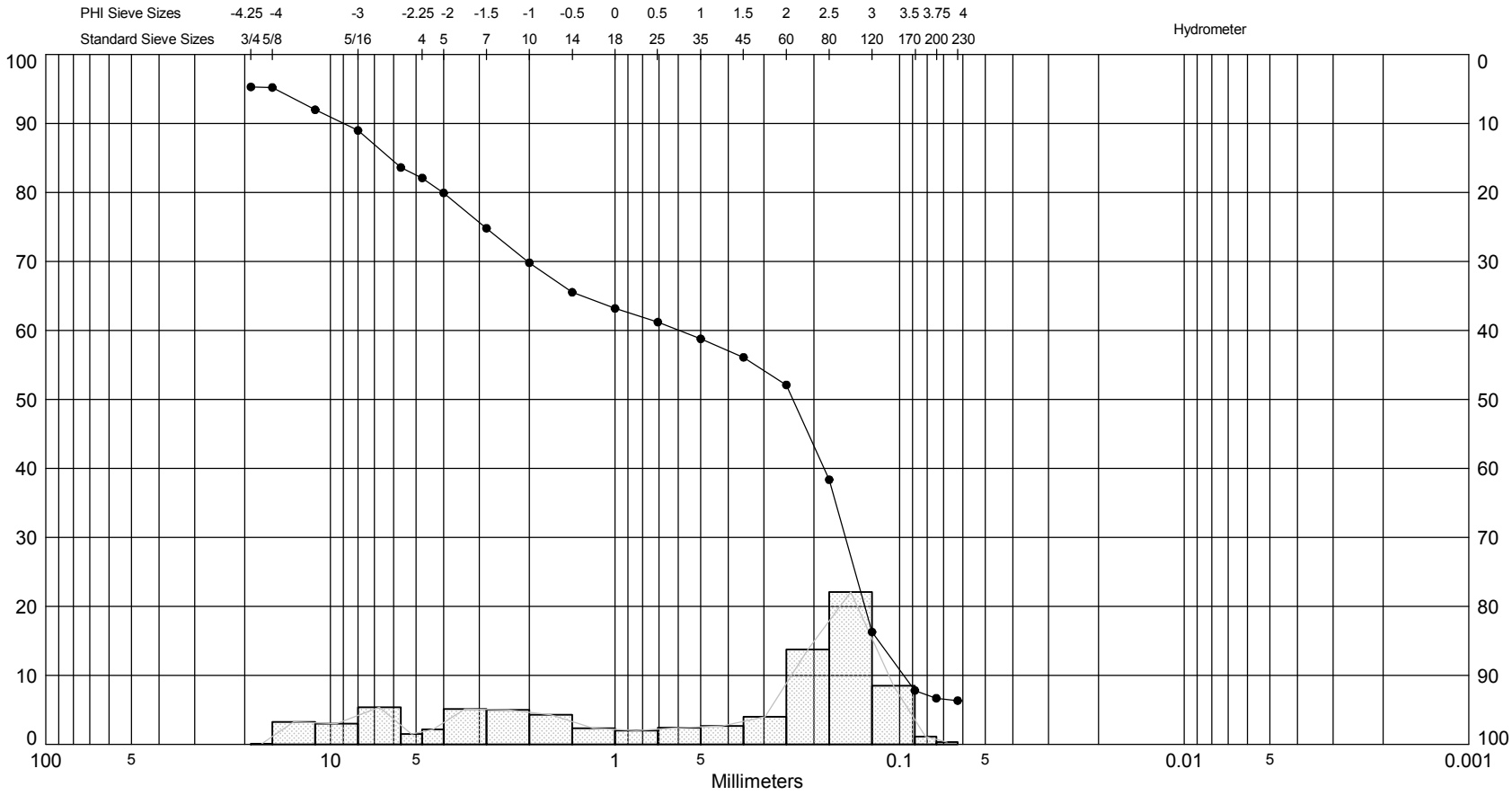
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y87 #1	—●—	SW-SM	W/ GRAVEL	#200 - 6.68 #230 - 6.34	3.90	35.80	2.08	0.56	-0.28	1.71	2.25

Comments: BROWN SAND, WHITE SHELL

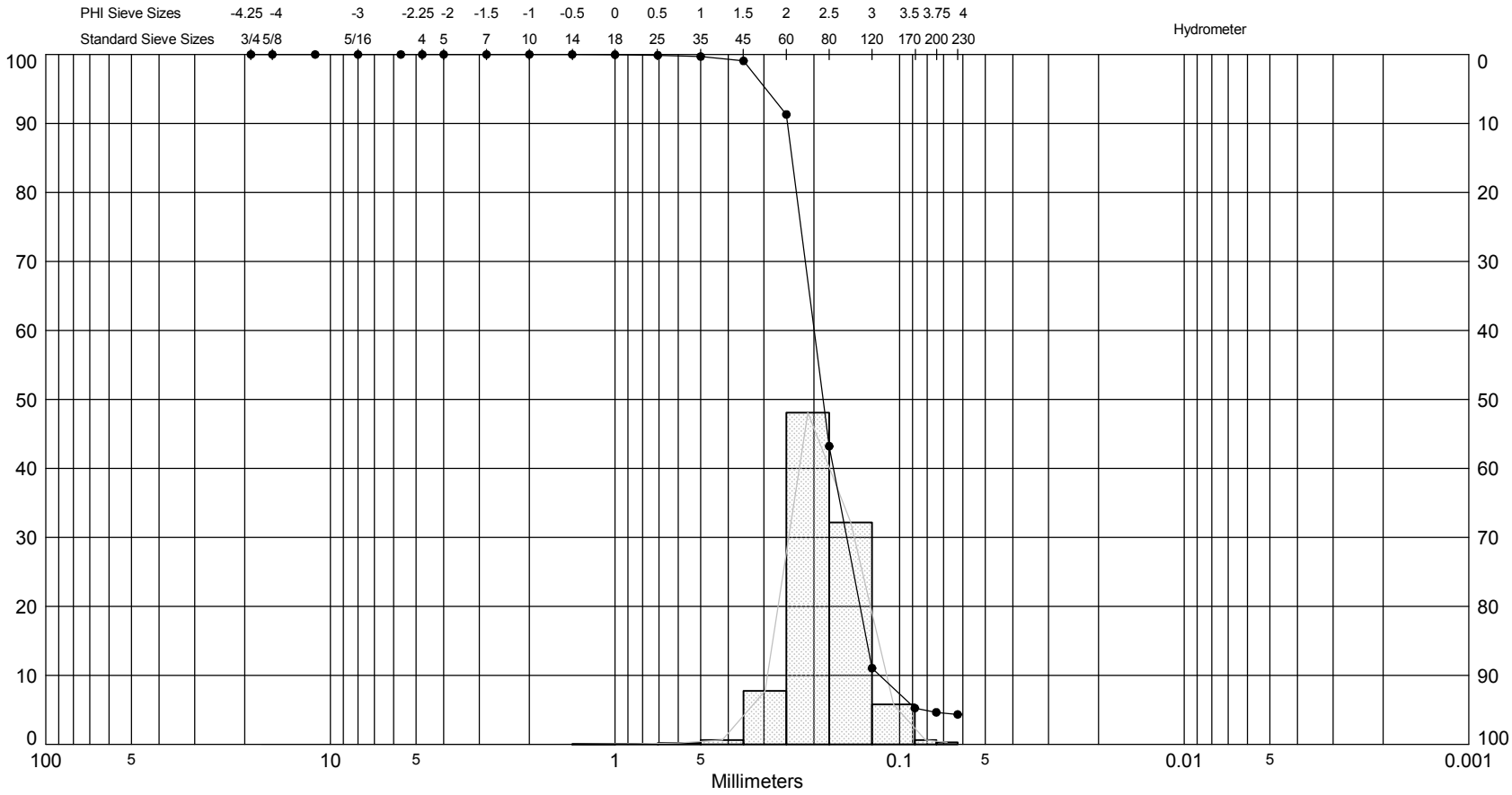
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y87 #2	—●—		SP	#200 - 4.64 #230 - 4.33	0.50	1.80	2.43	2.44	-0.04	5.02	0.41

Comments: PEATY SAND

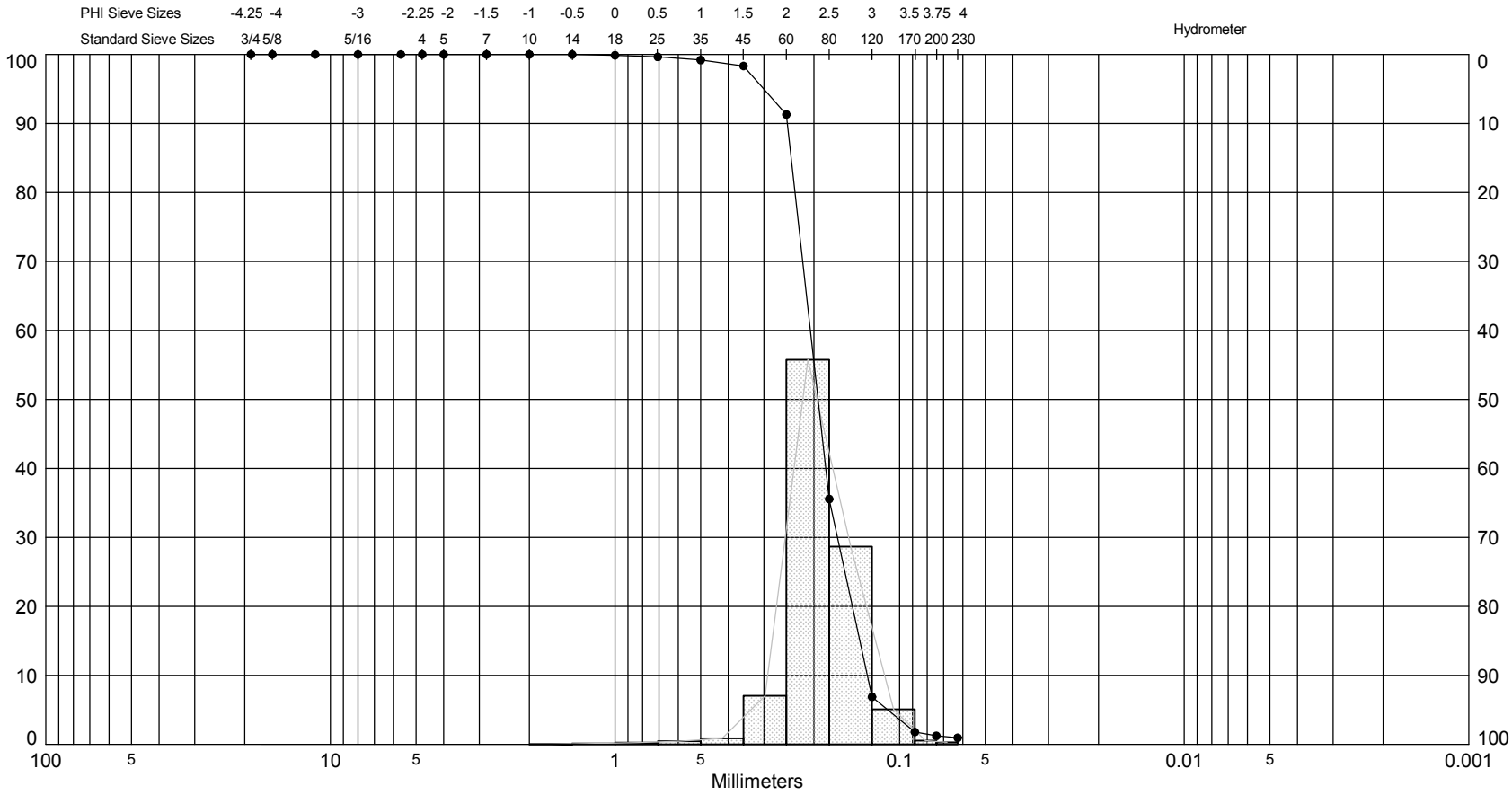
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y87 #3	—●—		SP	#200 - 1.23 #230 - 0.95	0.50	1.20	2.37	2.4	-0.53	7.73	0.42

Comments: FINE SAND

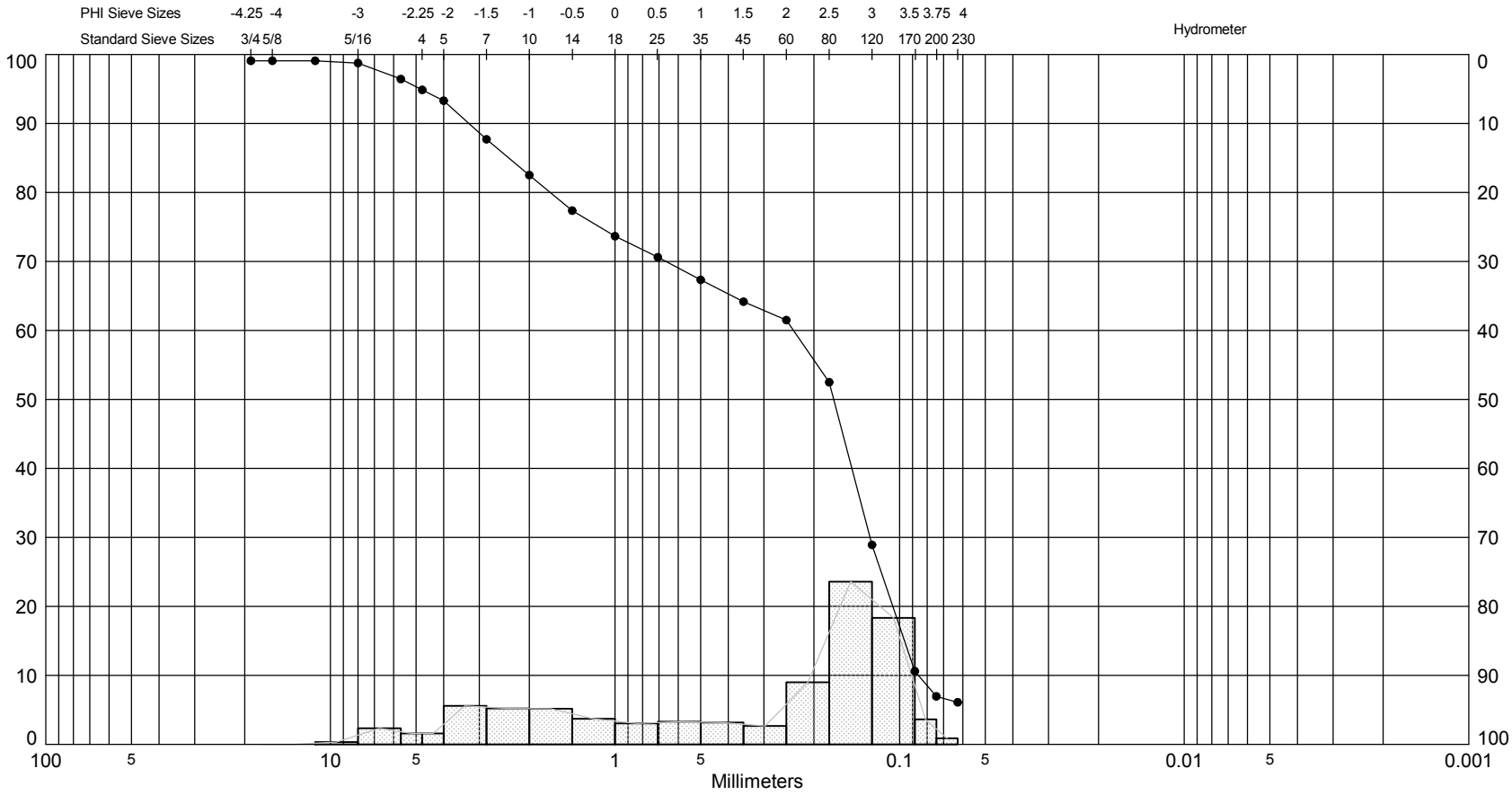
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y88 #1	—●—		SW-SM	#200 - 6.96 #230 - 6.10	0.70	36.50	2.55	1.42	-0.7	2.09	1.95

Comments: BROWN SAND, WHITE SHELL

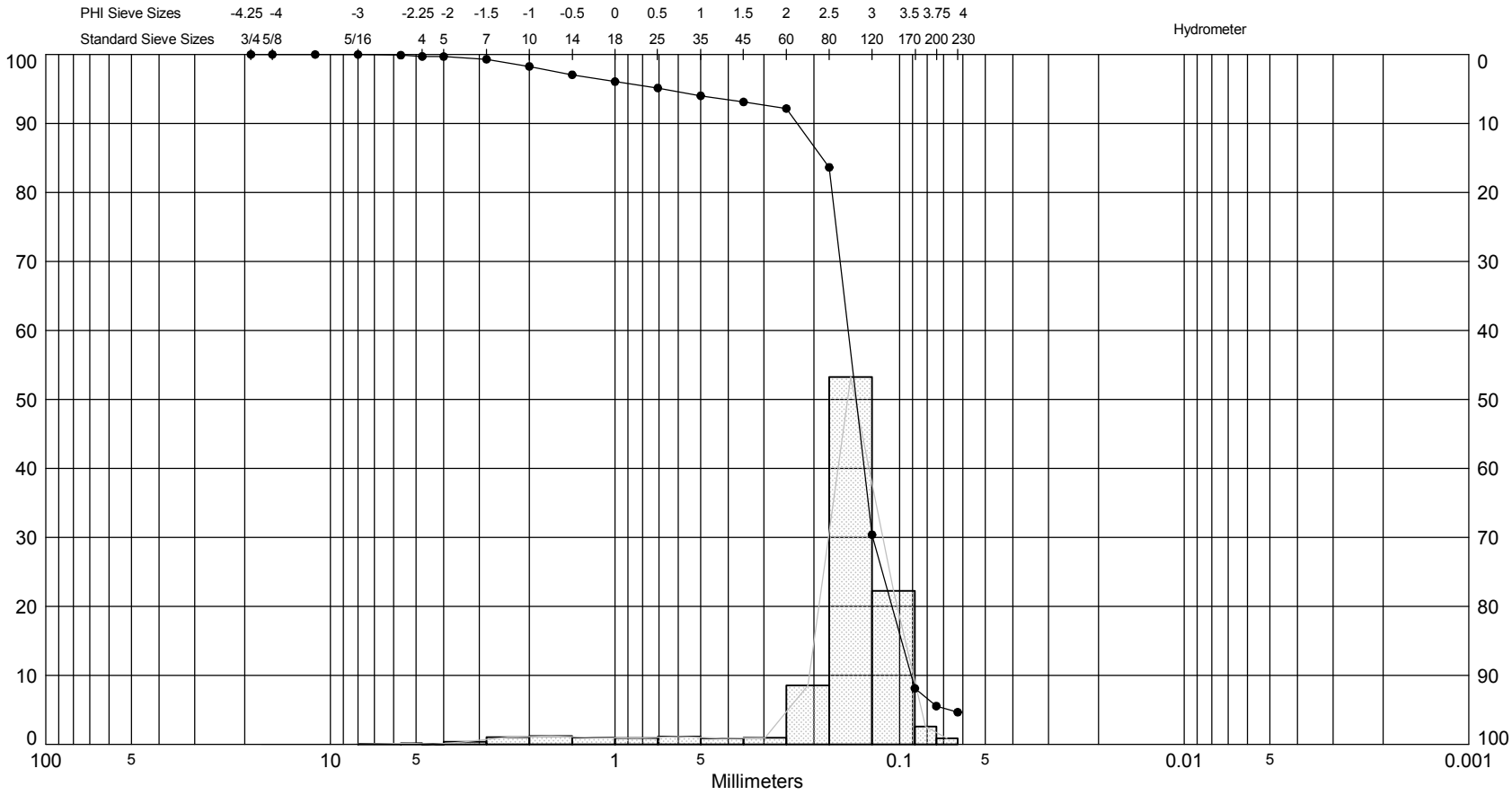
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y88 #2	—●—		SP-SM	#200 - 5.55 #230 - 4.66	0.50	8.20	2.82	2.63	-3.02	13.19	0.91

Comments: BROWN SAND, WHITE SHELL

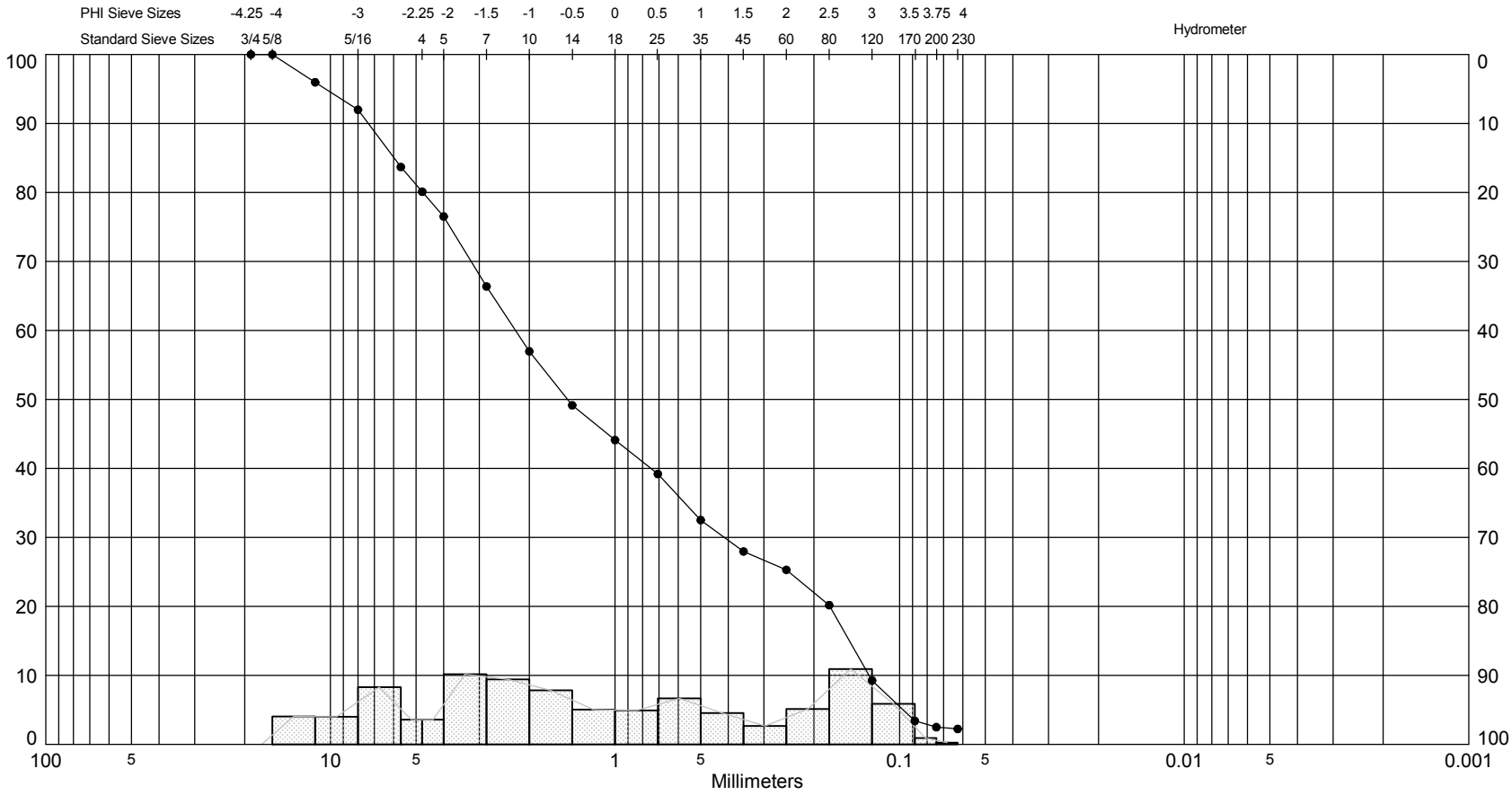
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y88 #3	—●—		SW	#200 - 2.49 #230 - 2.23	0.80	21.20		-0.23	0.21	1.81	2.14

Comments: TRACE BRN SAND, MOSTLY WHITE SHELL

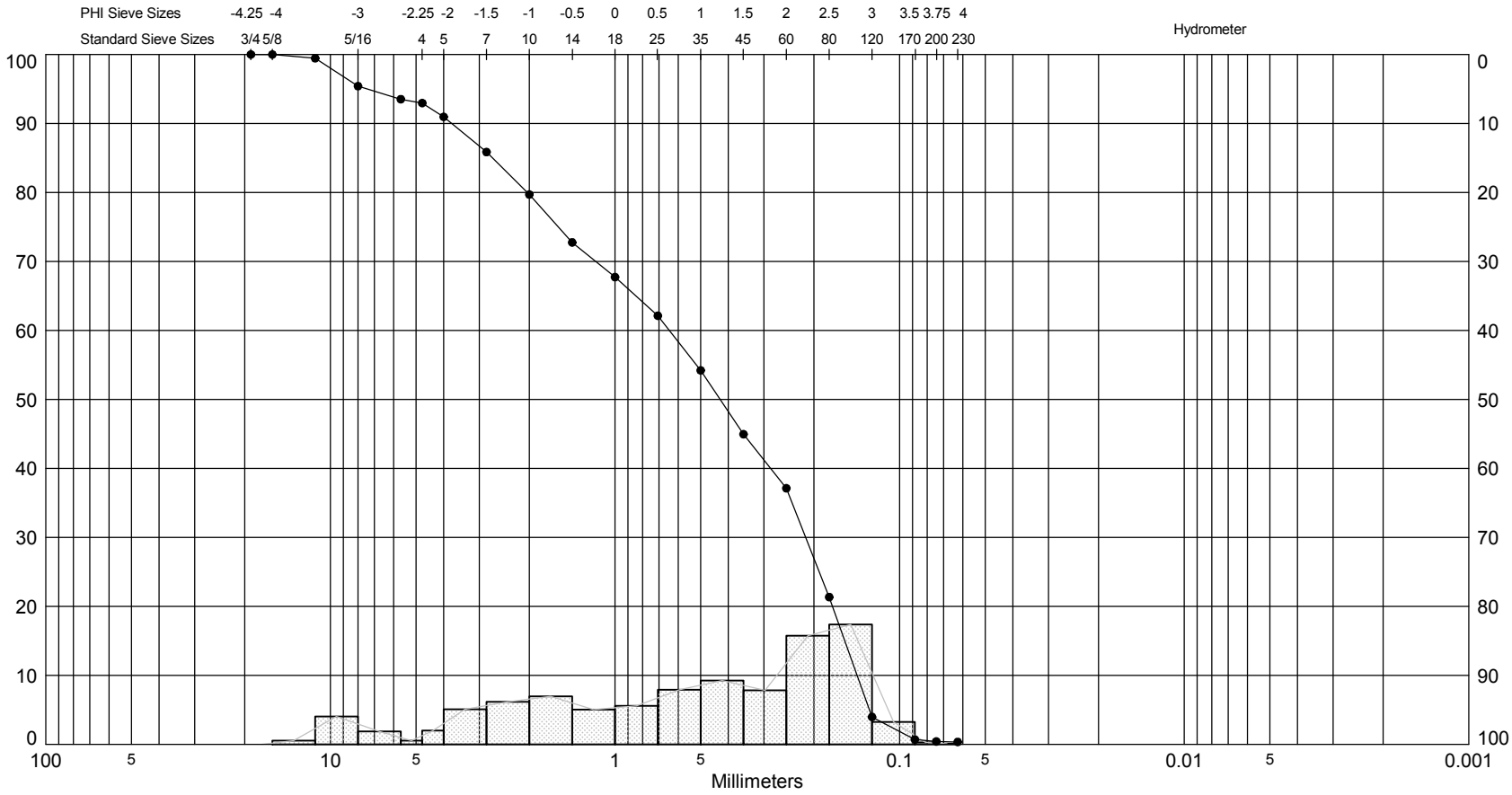
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y89 #1	—●—		SW	#200 - 0.42 #230 - 0.35	1.20	14.70	1.23	0.79	-0.63	2.31	1.84

Comments: GRAY SAND AND SHELL

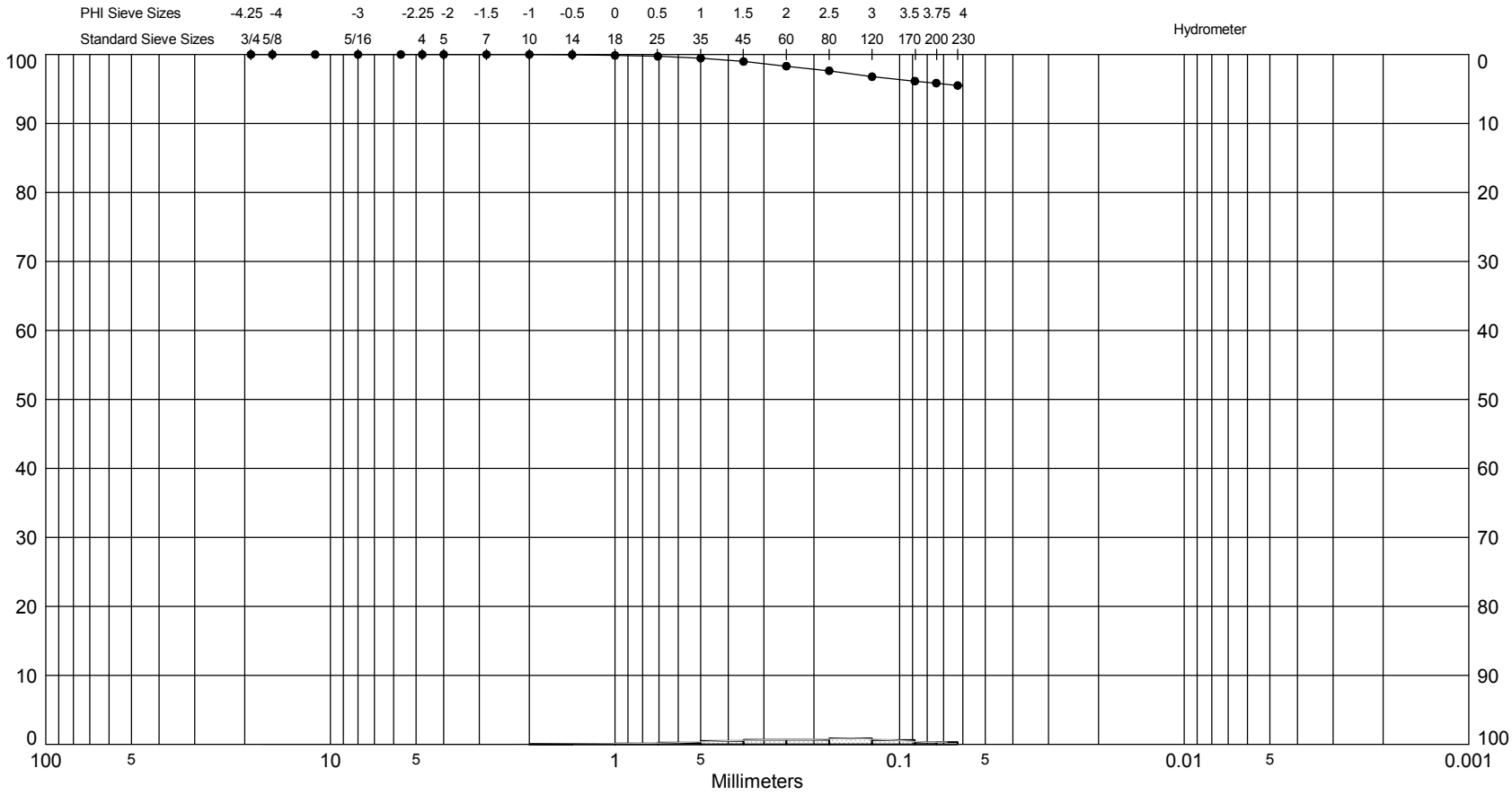
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y89 #2	—●—		PT	#200 - 95.85 #230 - 95.50	29.60	9.30		2.29	-0.5	2.7	1.06

Comments: PEAT

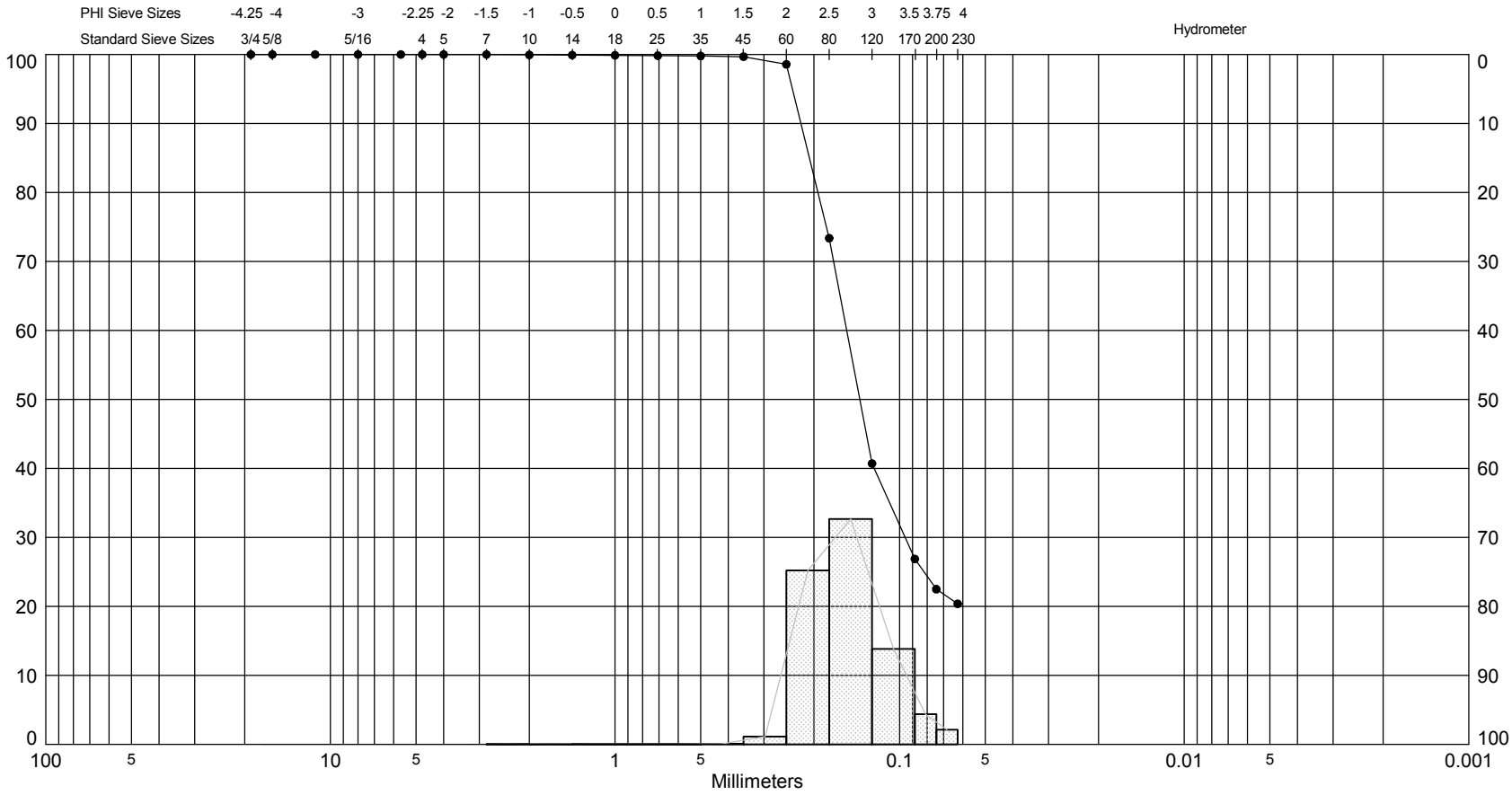
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y89 #3	—●—		SM	#200 - 22.49 #230 - 20.37	1.00	1.00	2.86	2.73	-0.31	7.46	0.49

Comments: BROWN SILT, FINE WHITE SAND

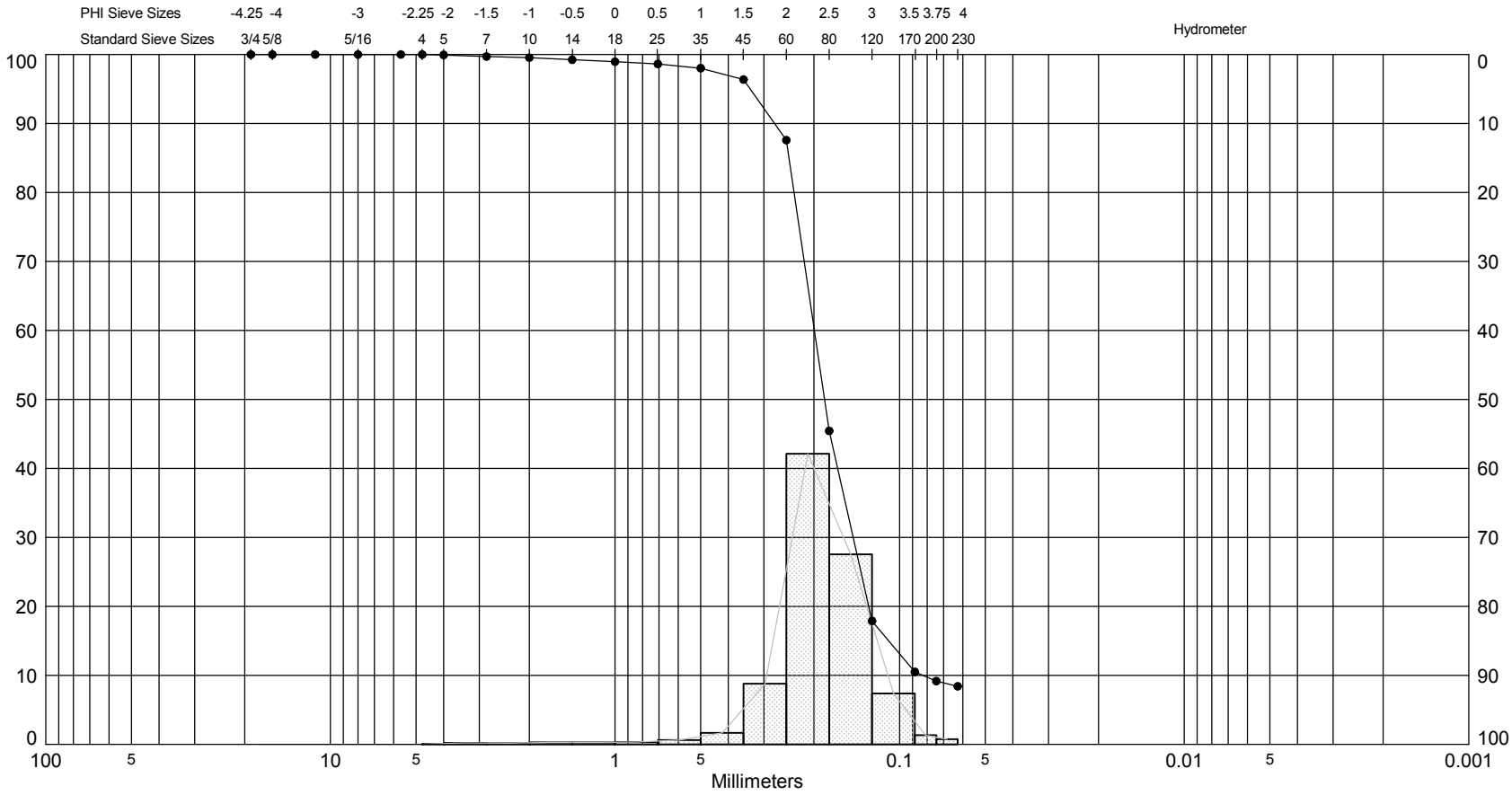
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y90 #1	—●—		SP-SM	#200 - 9.17 #230 - 8.42	1.00	1.60	2.45	2.39	-2.1	14.68	0.62

Comments: SAND AND SILT

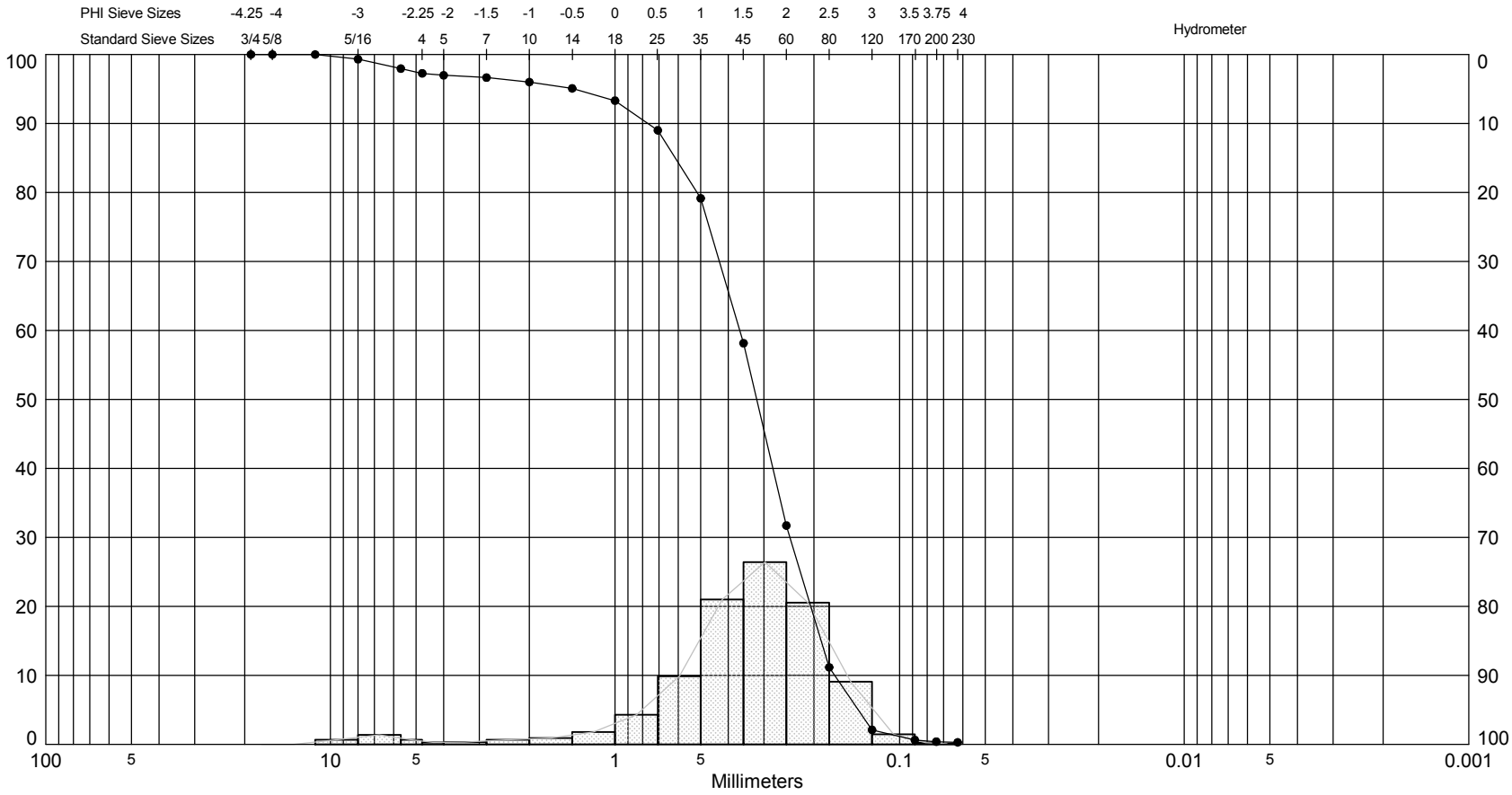
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y90 #2	—●—		SW	#200 - 0.39 #230 - 0.29	0.30	0.80	1.65	1.48	-1.86	8.05	1.1

Comments: SAND AND PEBBLES

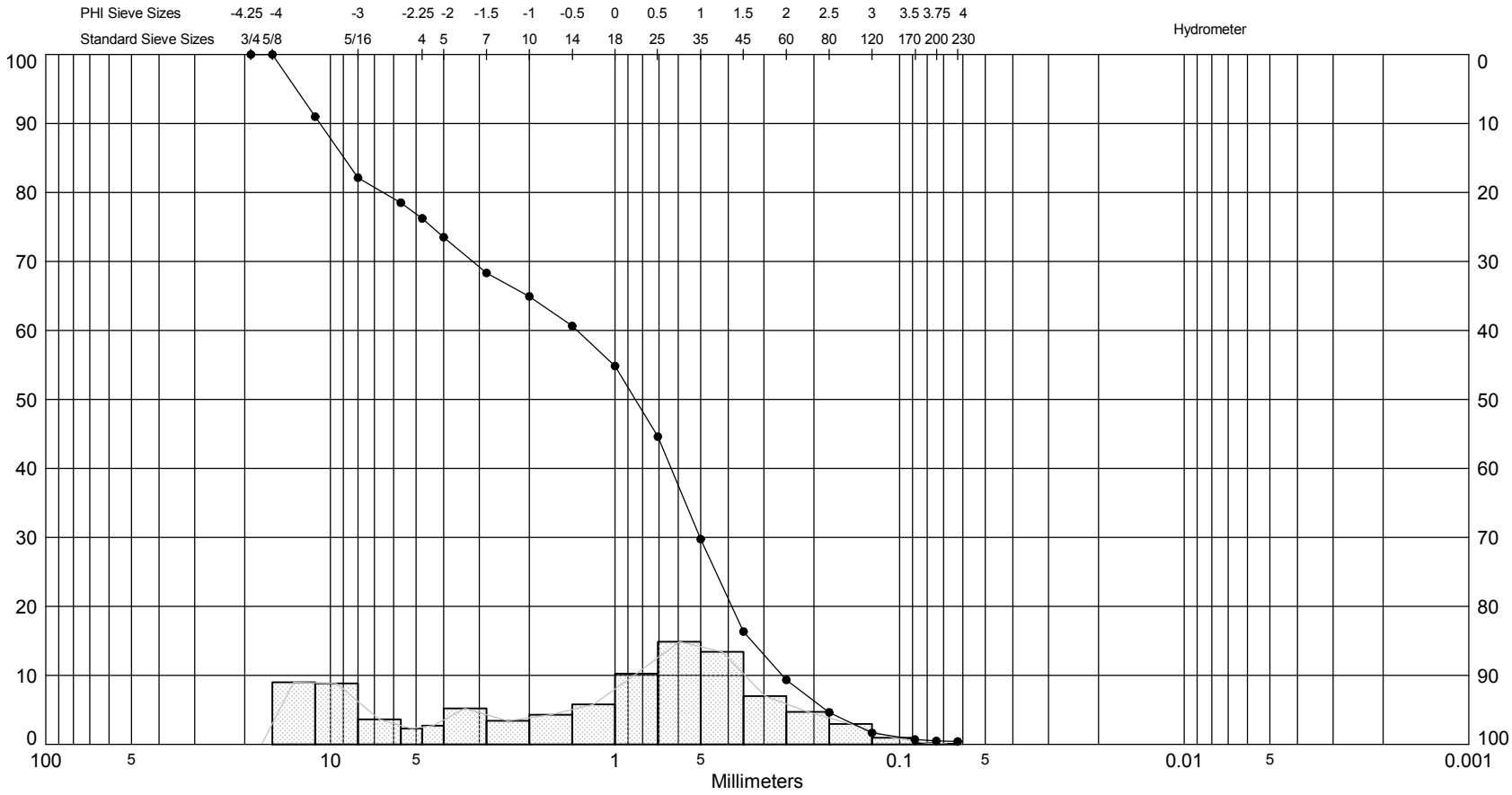
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y90 #3	—●—		SW	#200 - 0.50 #230 - 0.42	0.40	0.70	0.24	-0.36	-0.36	1.91	1.99

Comments: COARSE SAND, ABUNDANT PEBBLES

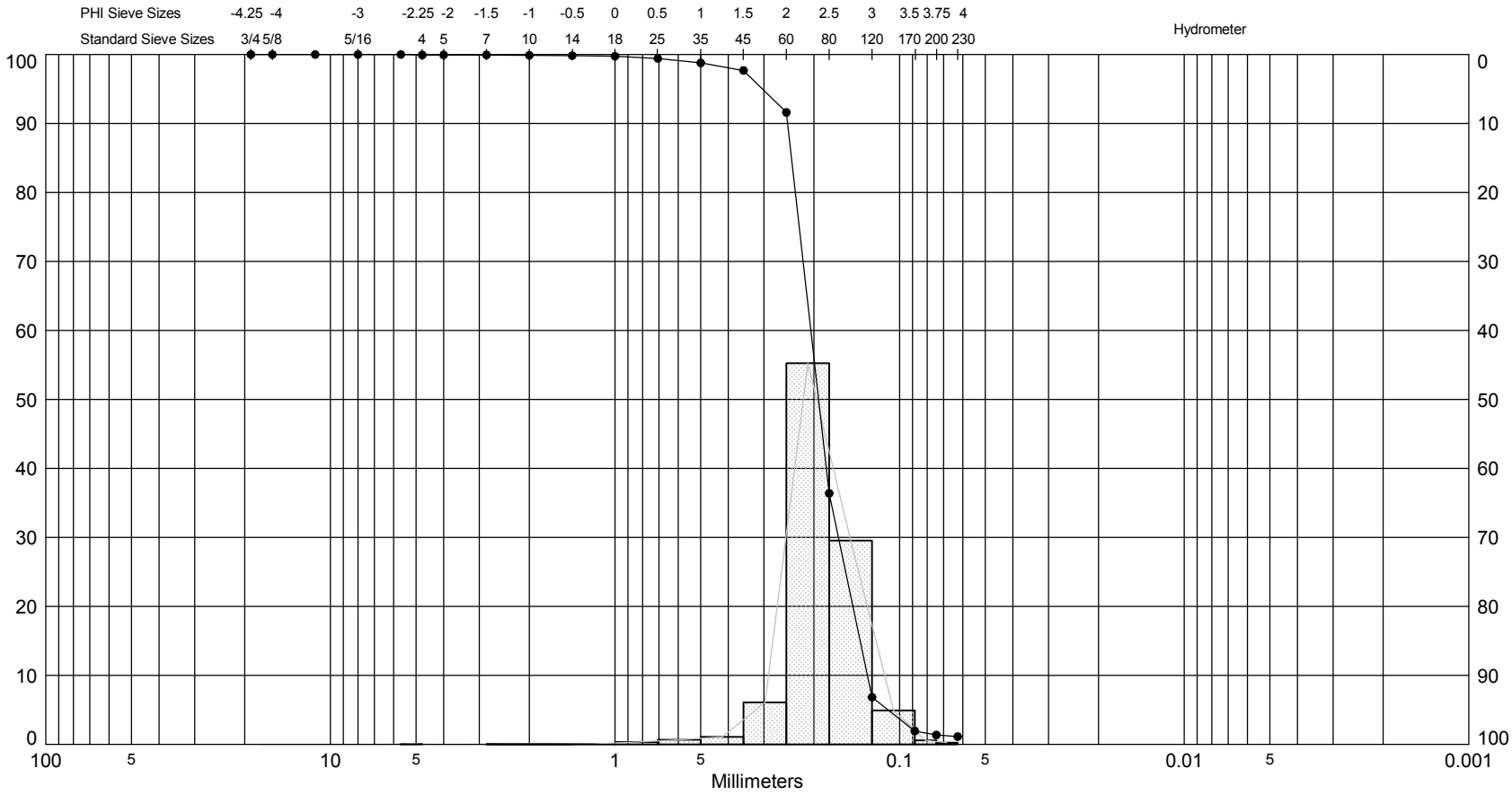
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y90 #4	—●—		SP	#200 - 1.36 #230 - 1.13	0.40	1.20	2.38	2.39	-1.72	17.27	0.45

Comments: SAND

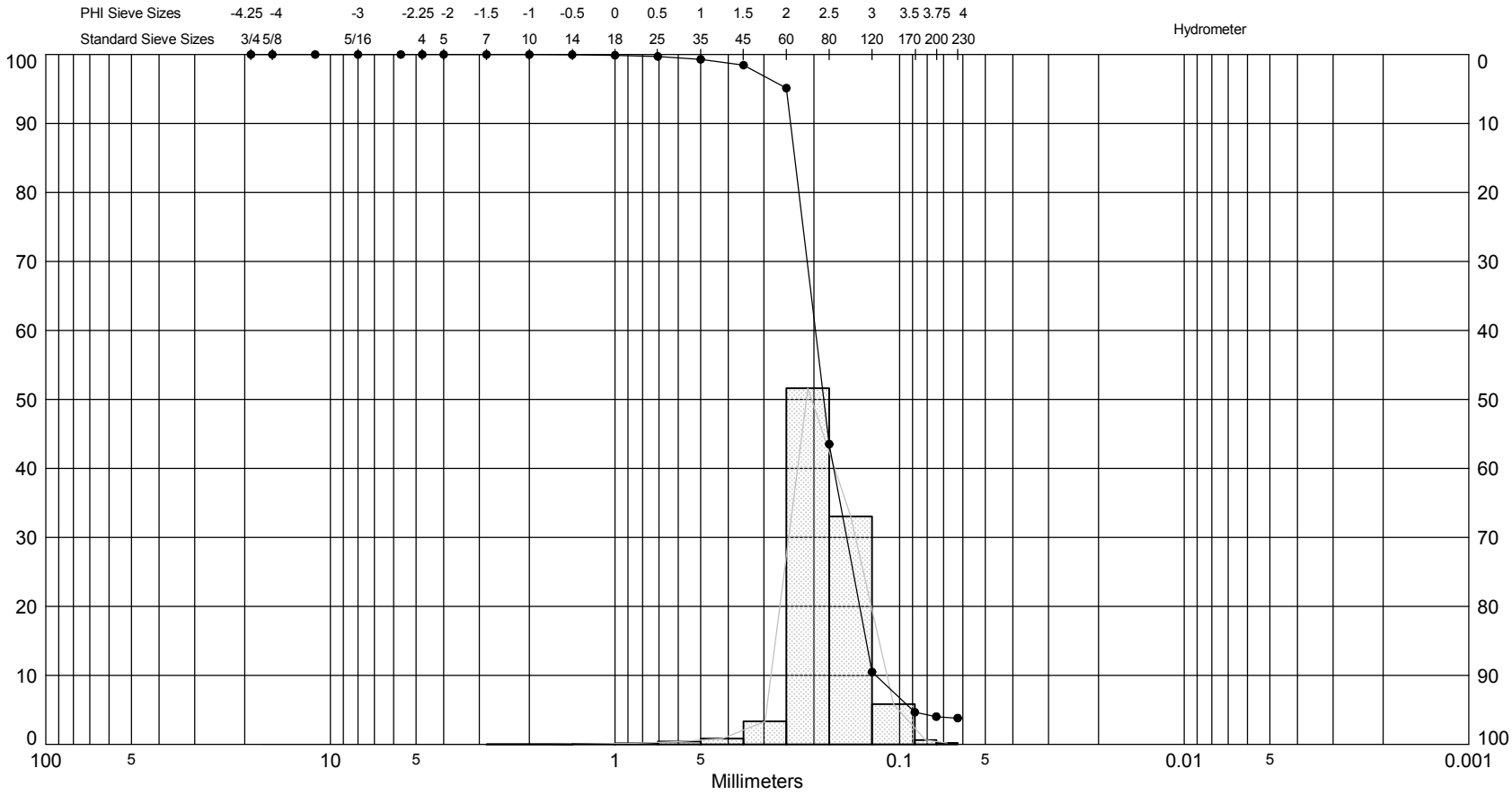
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y90 #5	—●—		SP	#200 - 4.02 #230 - 3.81	0.30	1.40	2.44	2.46	-0.67	8.83	0.41

Comments: SAND, TRACE SILT

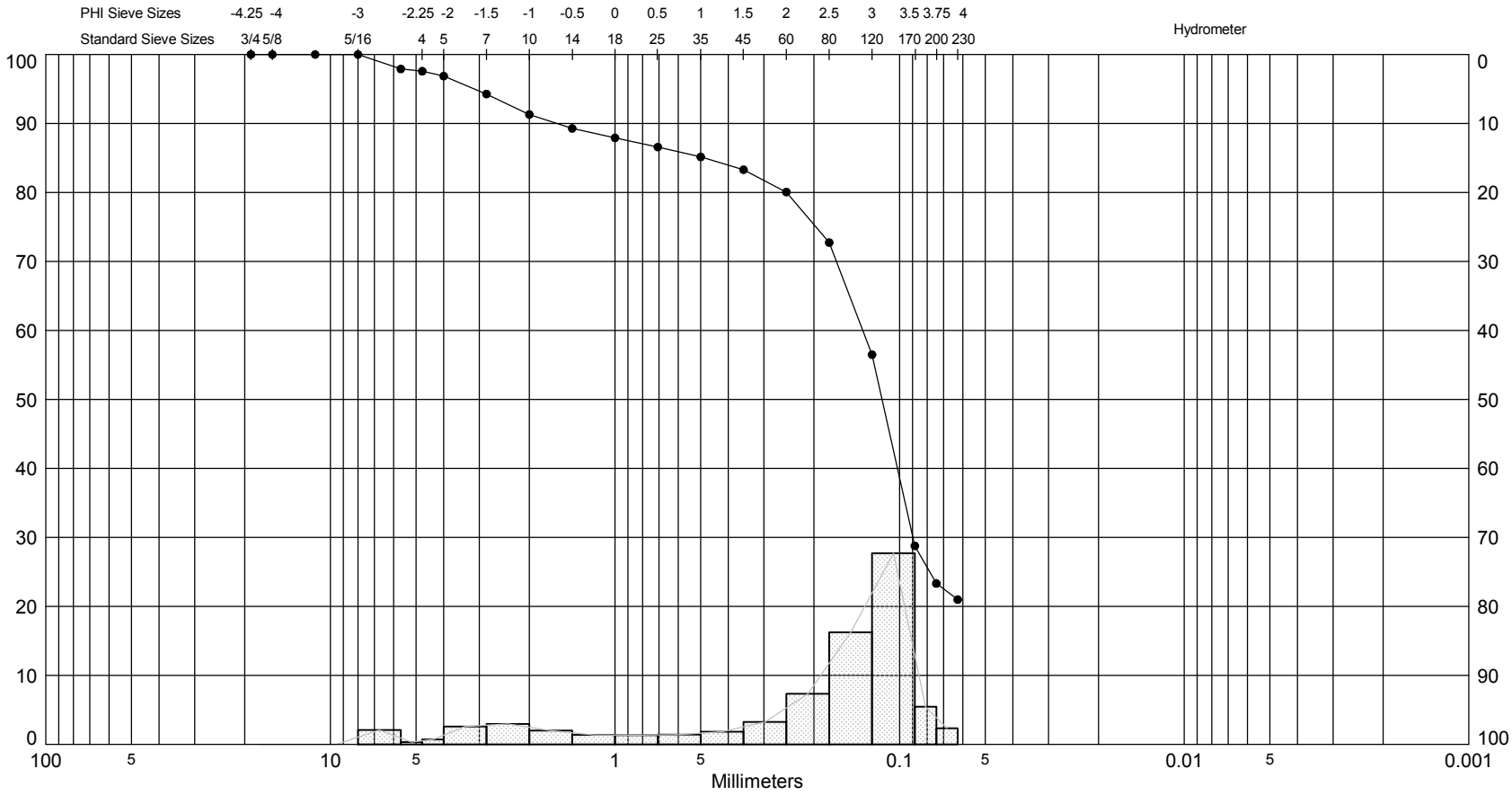
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y91 #1	—●—		SM	#200 - 23.32 #230 - 20.98	2.00	20.20	3.12	2.17	-1.54	4.13	1.73

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

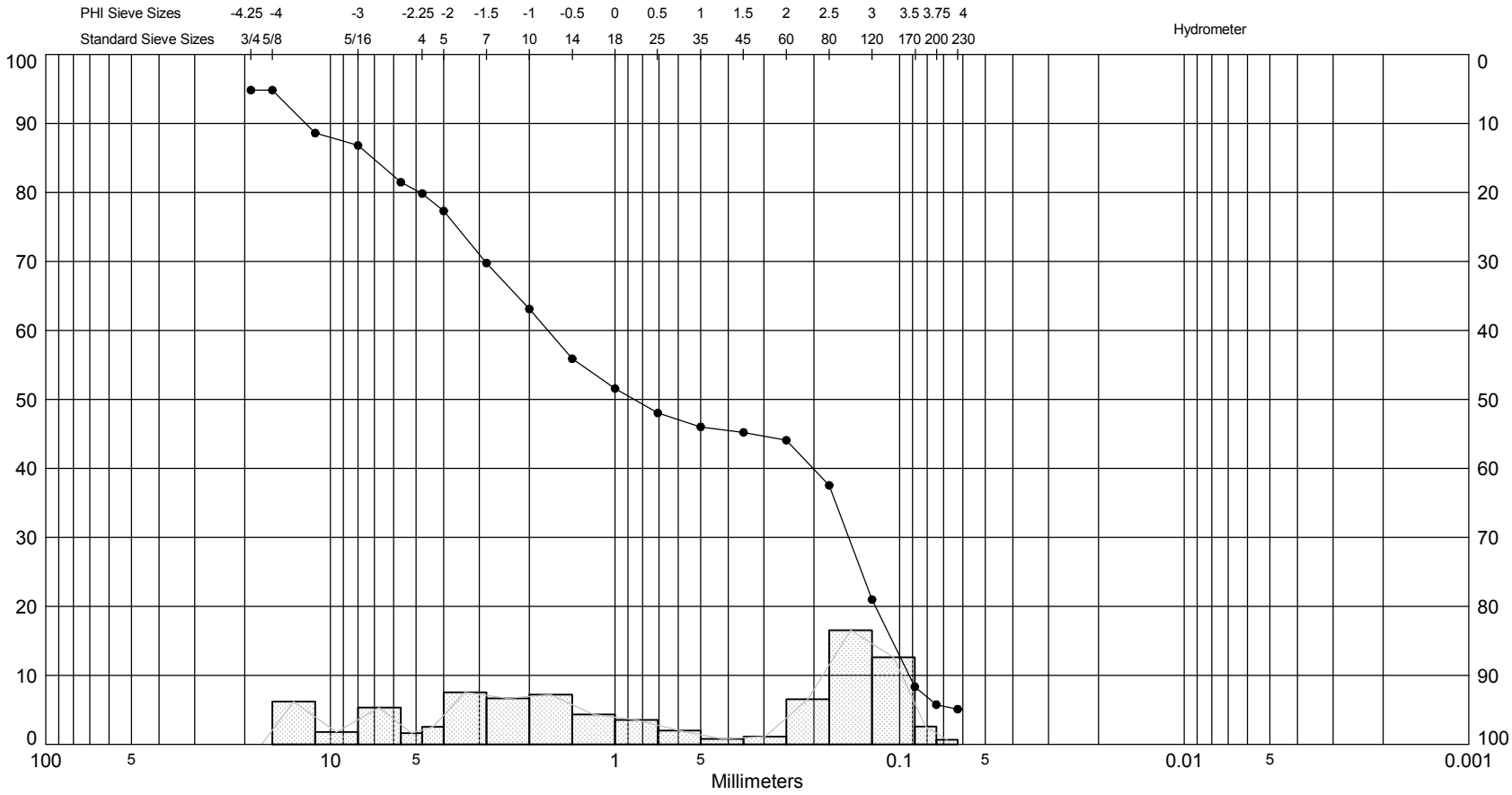
Comments:

Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y91 #2	—●—		SW-SM W/ GRAVEL	#200 - 5.76 #230 - 5.10	1.20	30.80	0.22	0.16	0.13	1.6	2.38

Comments: BROWN SAND, WHITE SHELL

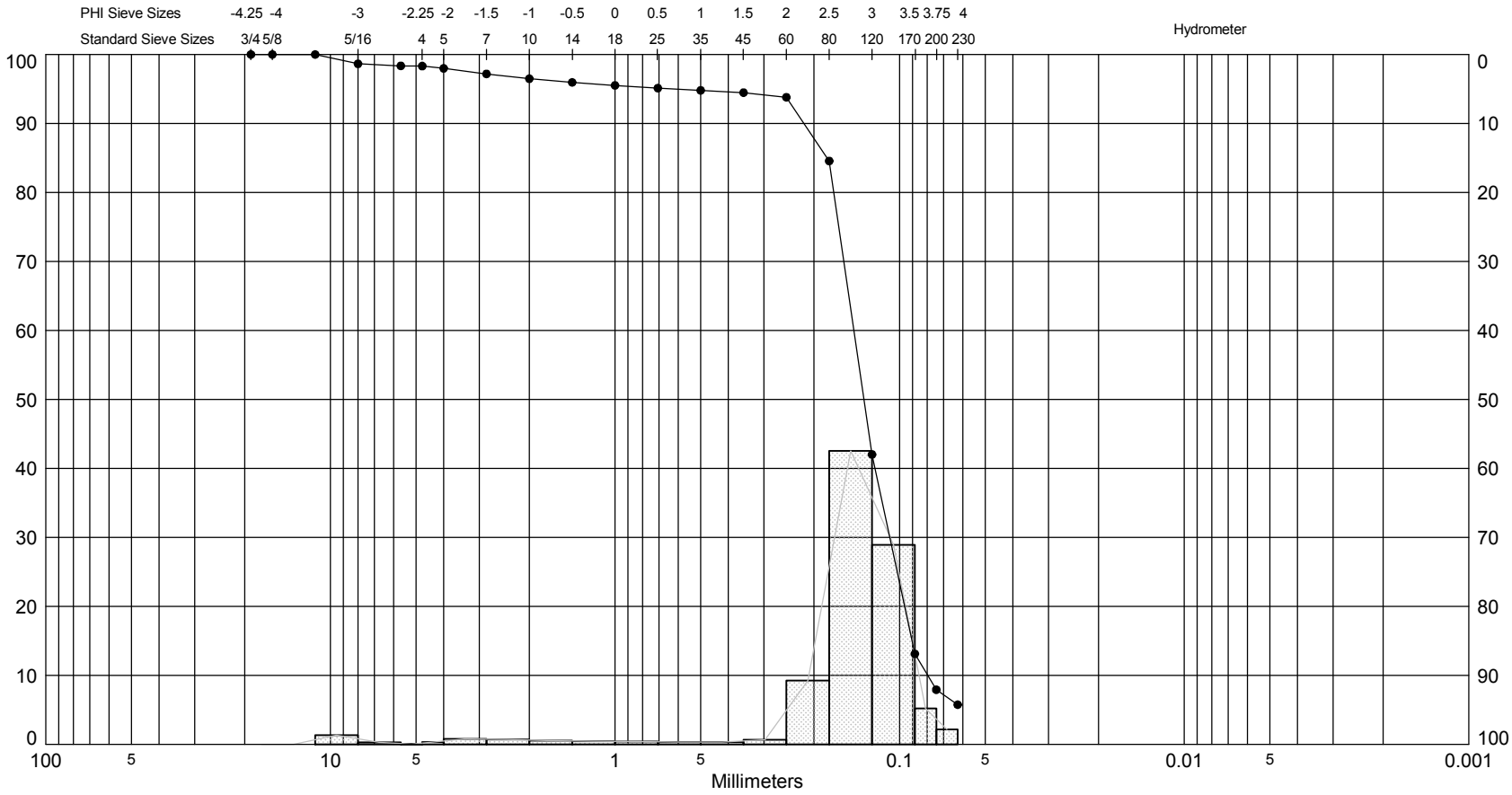
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y91 #3	—●—		SW-SM	#200 - 7.92 #230 - 5.75	0.30	7.70	2.91	2.68	-3.54	16.43	1.15

Comments: BROWN SAND, LITTLE WHITE SHELL

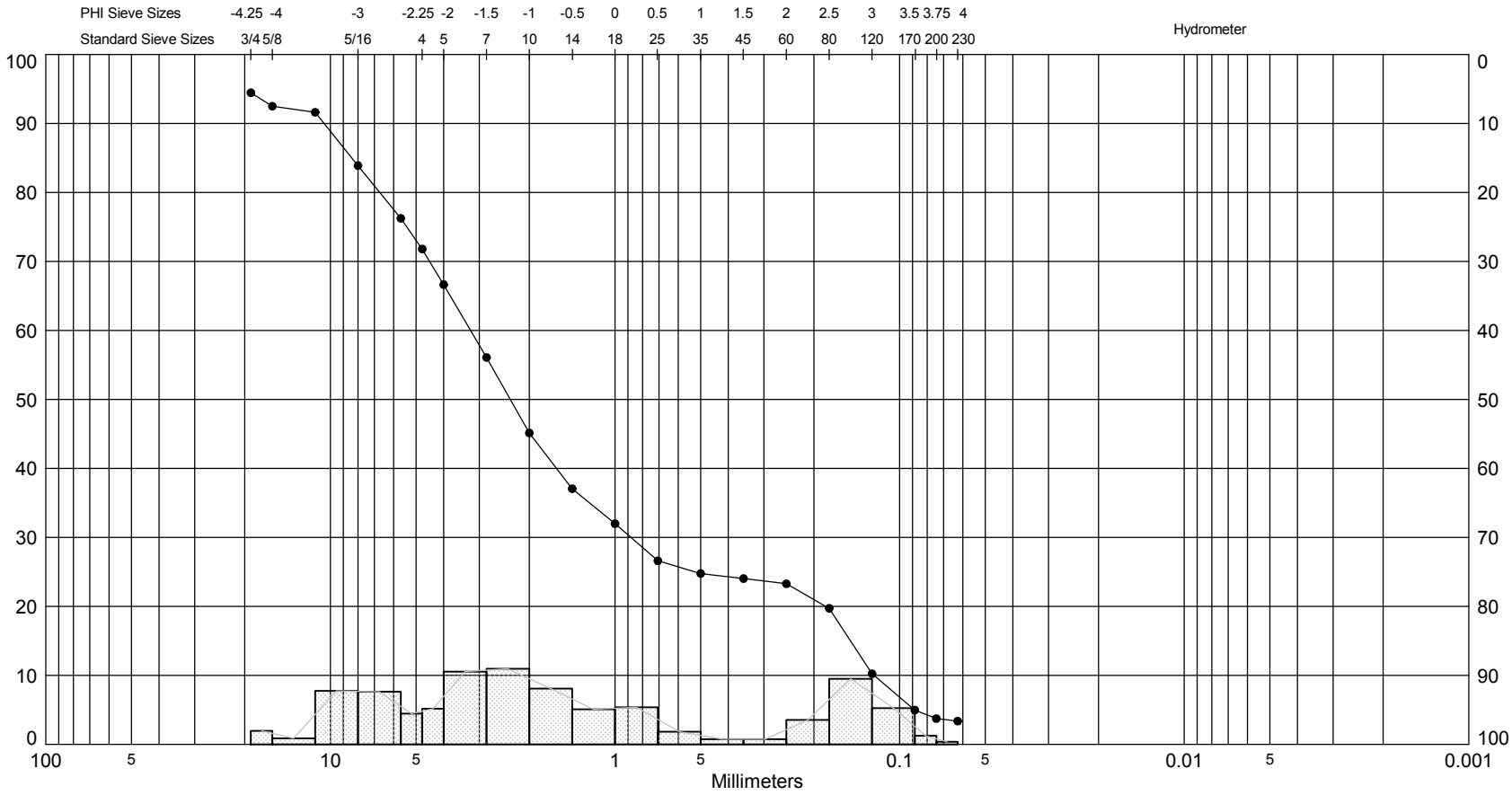
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y91 #4	—●—	SW WITH GRAVEL		#200 3.73 #230 3.37	1.50	64.70		-0.84	0.88	2.52	2.11

Comments: WHITE SHELL

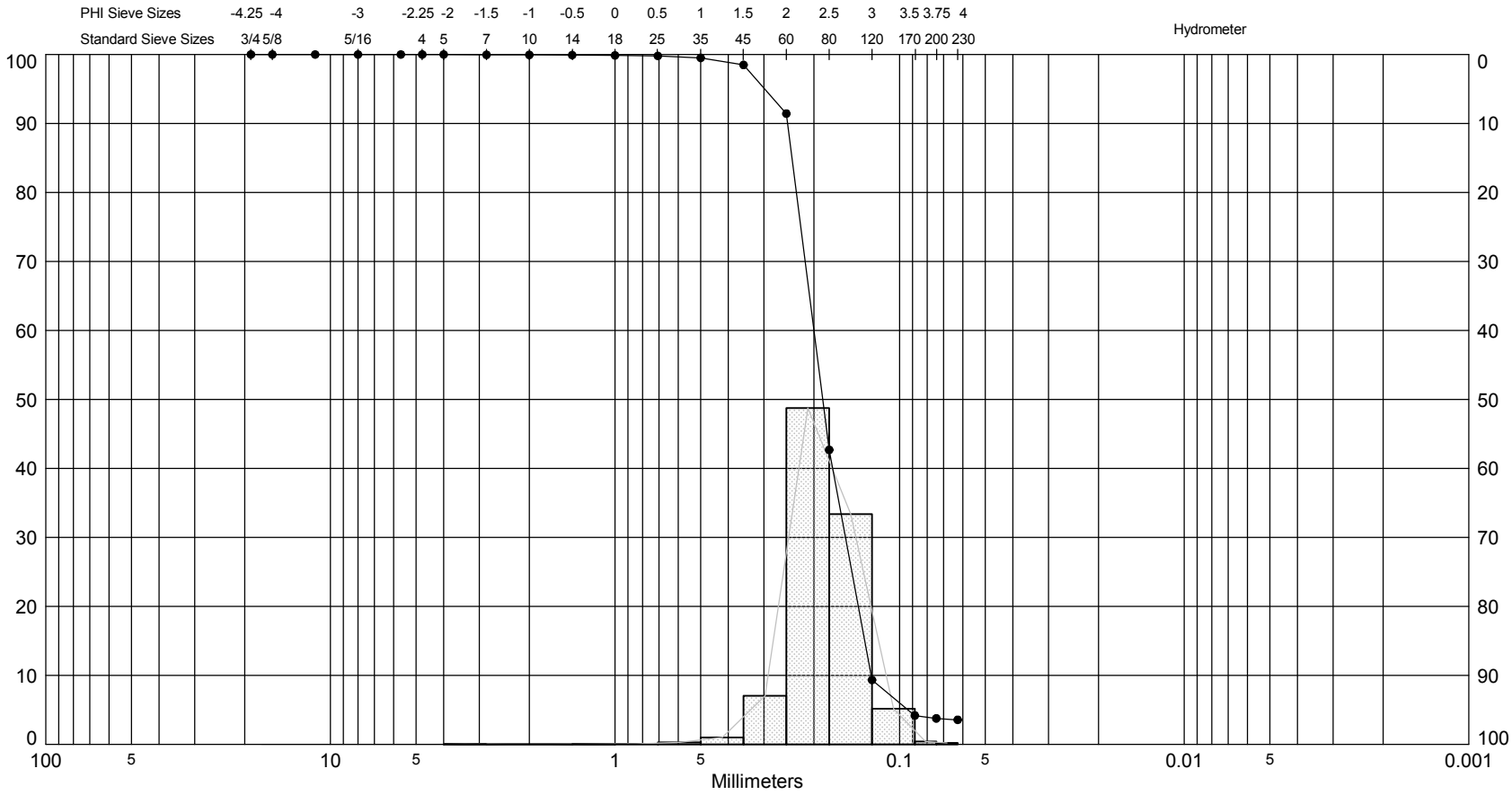
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y91 #5	—●—		SP	#200 - 3.76 #230 - 3.56	0.60	1.60	2.43	2.43	-0.95	11.31	0.42

Comments: SAND, TRACE SILT

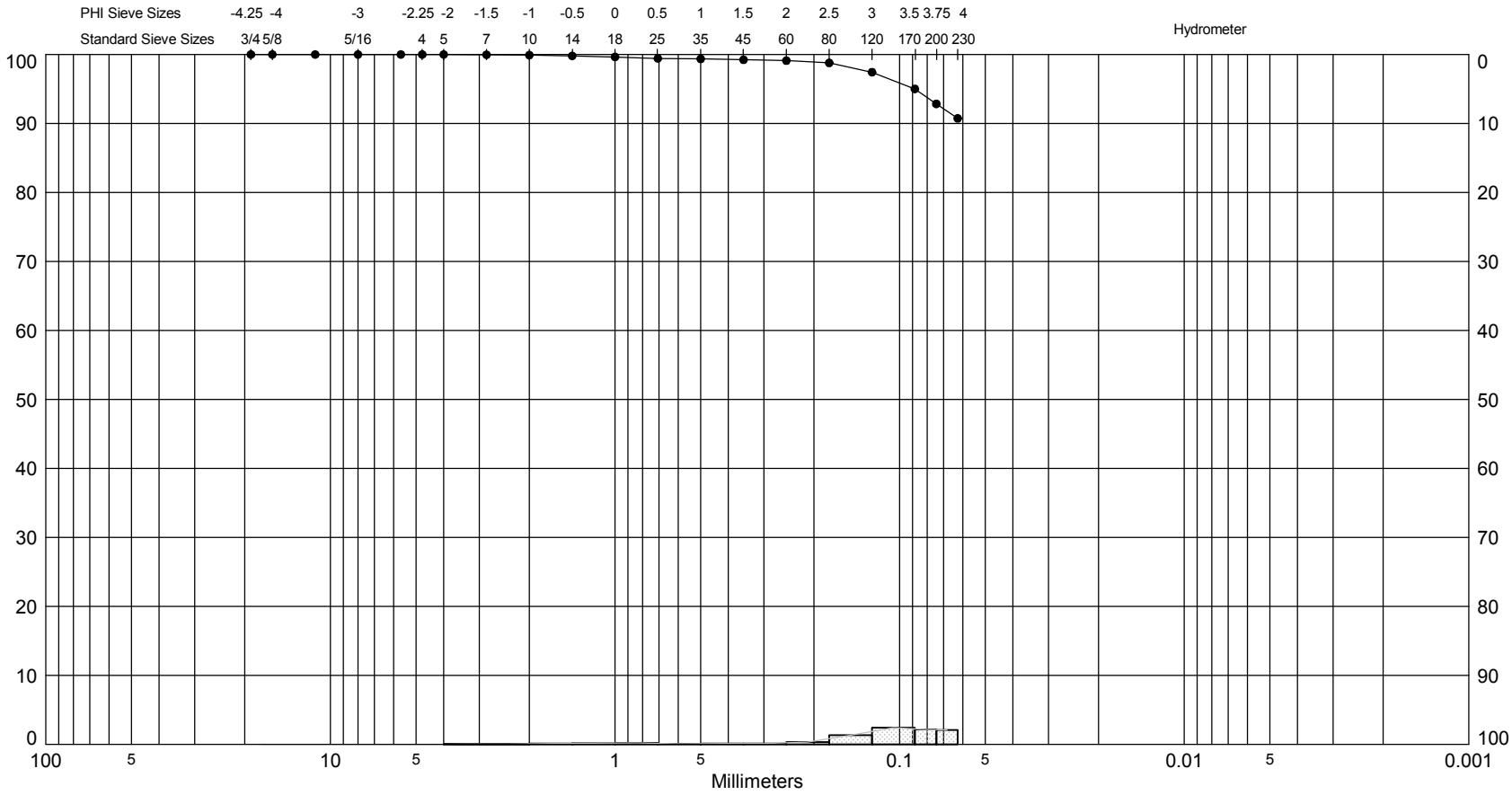
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y92 #1	—●—		ML-CL	#200 - 92.84 #230 - 90.74	7.20	5.20		3.08	-2.37	8.62	1.06

Comments: SILT

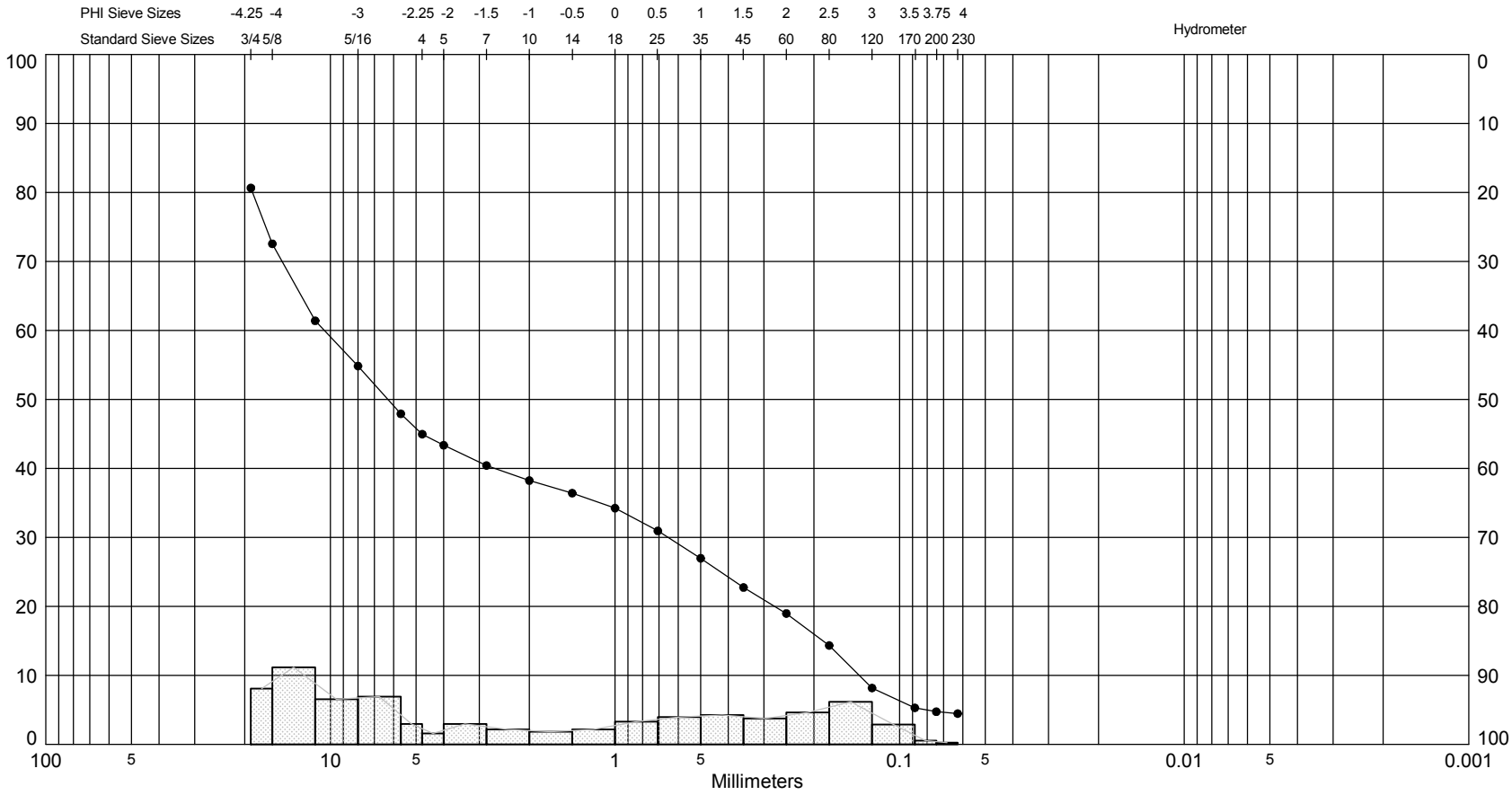
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y92 #2	—●—		GW	#200 - 4.73 #230 - 4.46	1.00	1.40		-1.73	1.15	2.56	2.37

Comments: ROCKS AND SAND

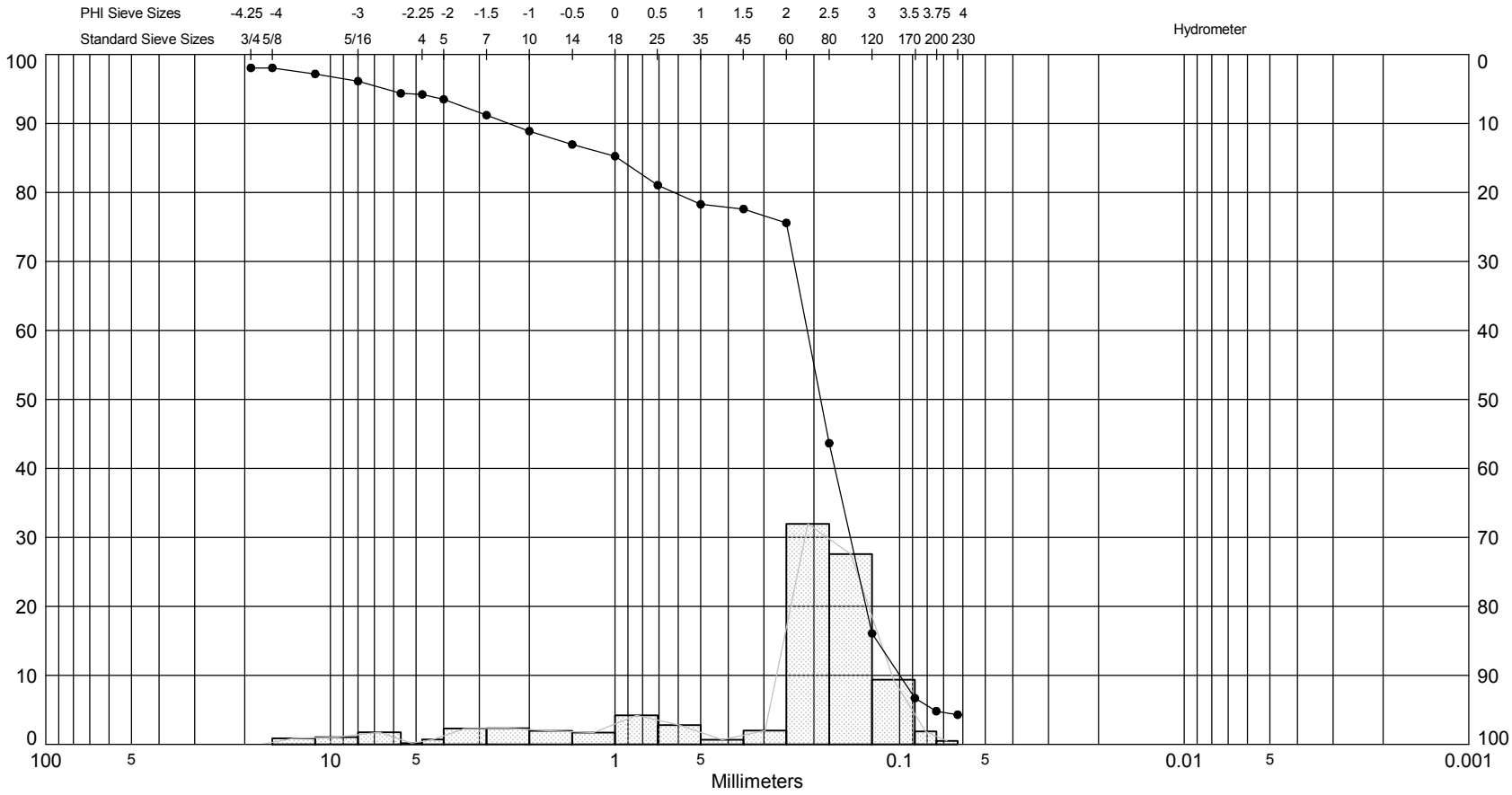
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y92 #3	—●—		SW	#200 - 4.81 #230 - 4.30	0.60	12.80	2.4	1.71	-1.51	4.75	1.61

Comments: BROWN SILT, GRAY SAND, WHITE SHELL

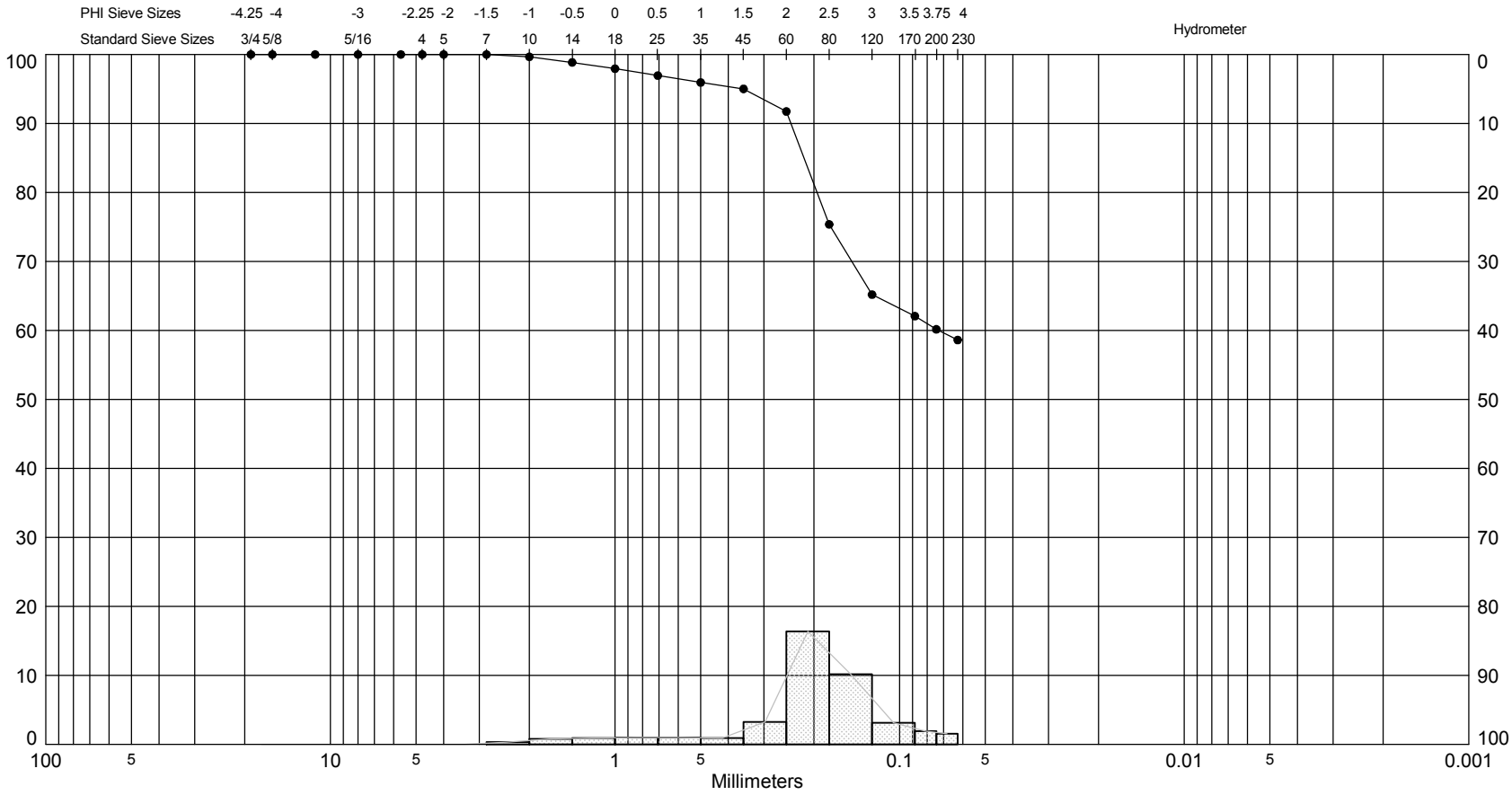
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y93 #1	—●—		ML-CL	#200 - 60.16 #230 - 58.61	6.10	4.80		2.28	-1.38	5.66	0.96

Comments: PEAT

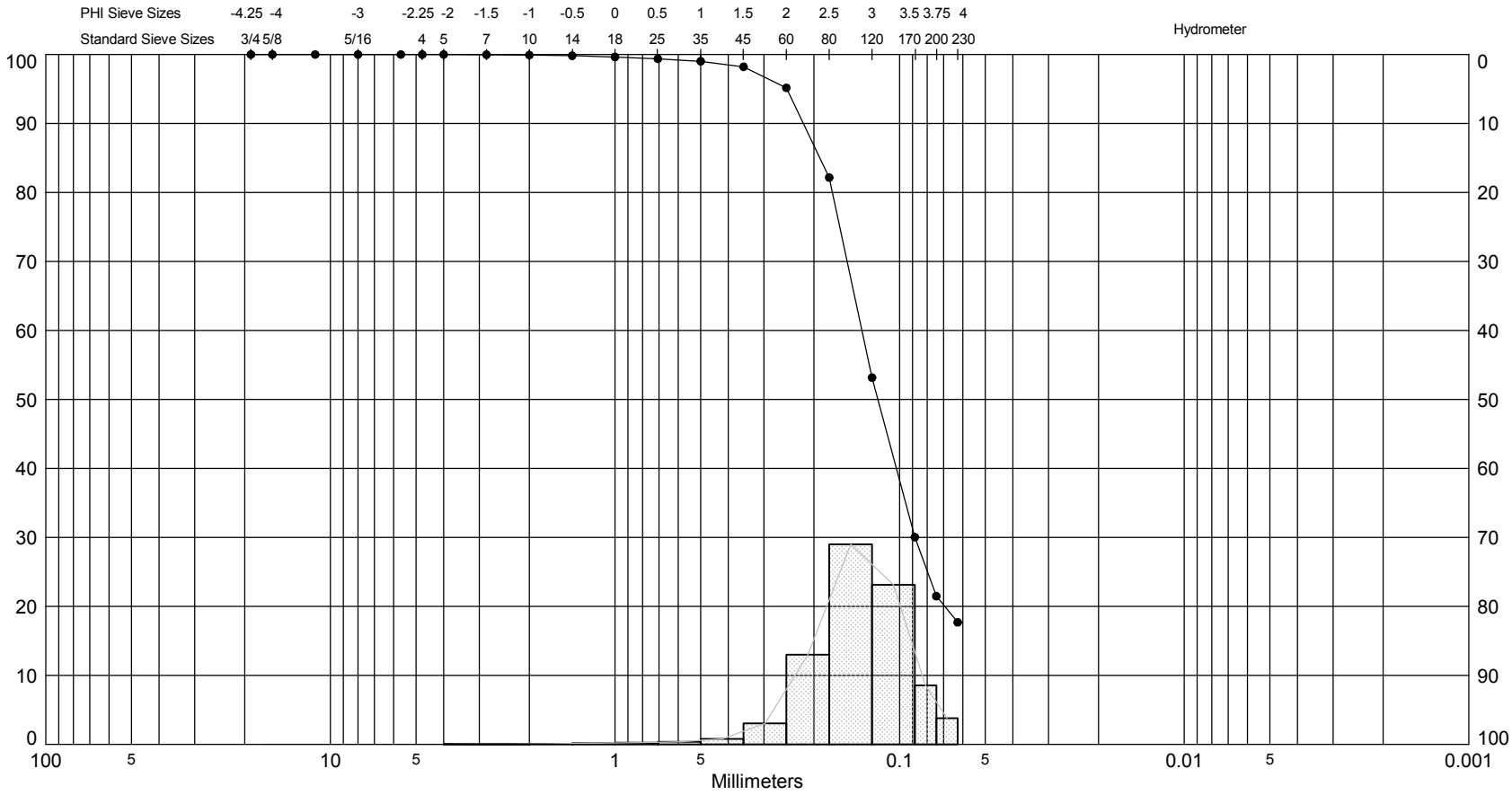
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y93 #2	—●—		SM	#200 - 21.48 #230 - 17.69	2.80	1.20	3.07	2.87	-1.4	8.52	0.62

Comments: PEATY SAND

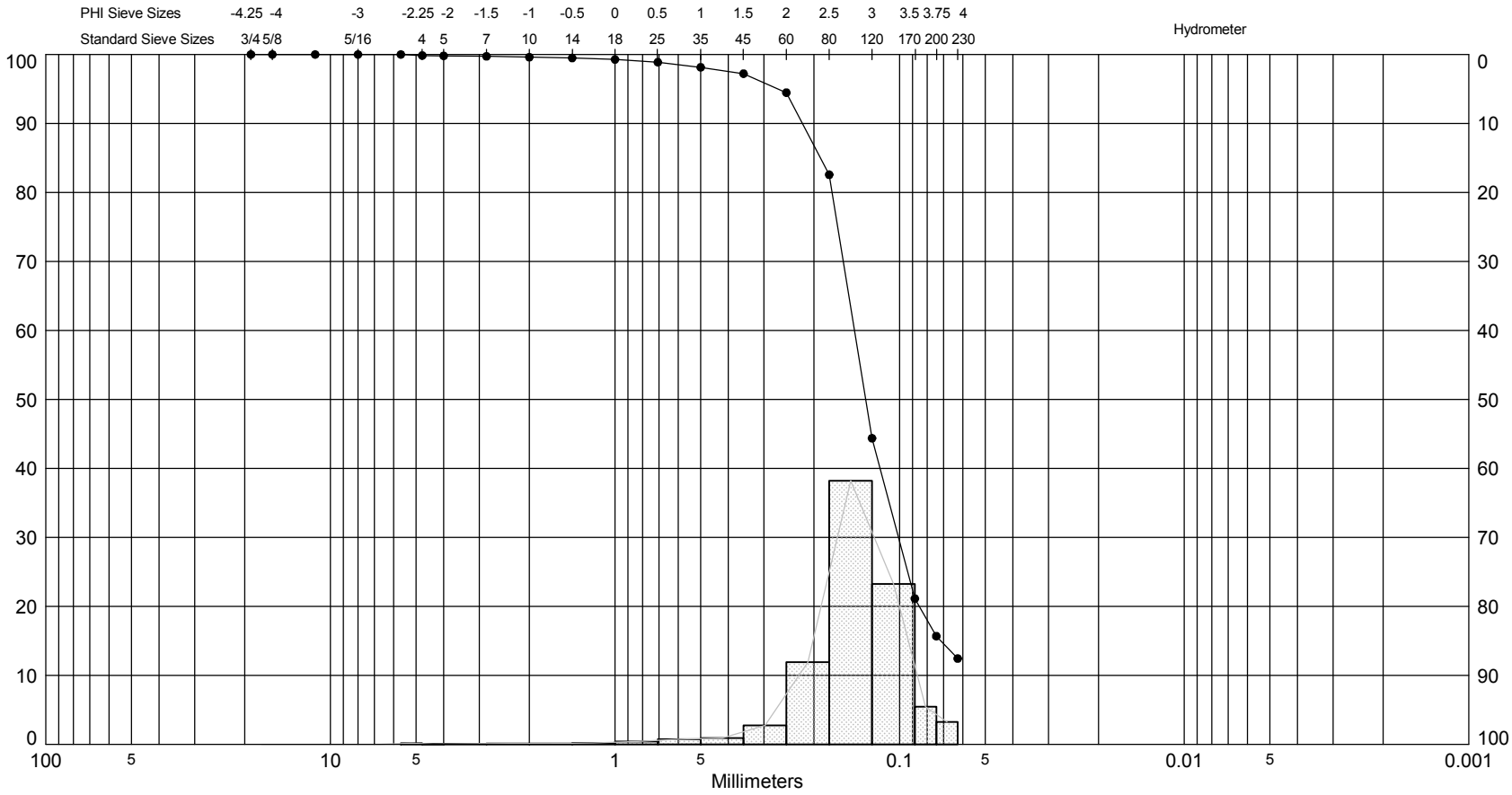
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y93 #3	—●—		SM	#200 - 15.68 #230 - 12.44	0.80	0.80	2.93	2.8	-2.51	16.44	0.67

Comments: SILTY SAND

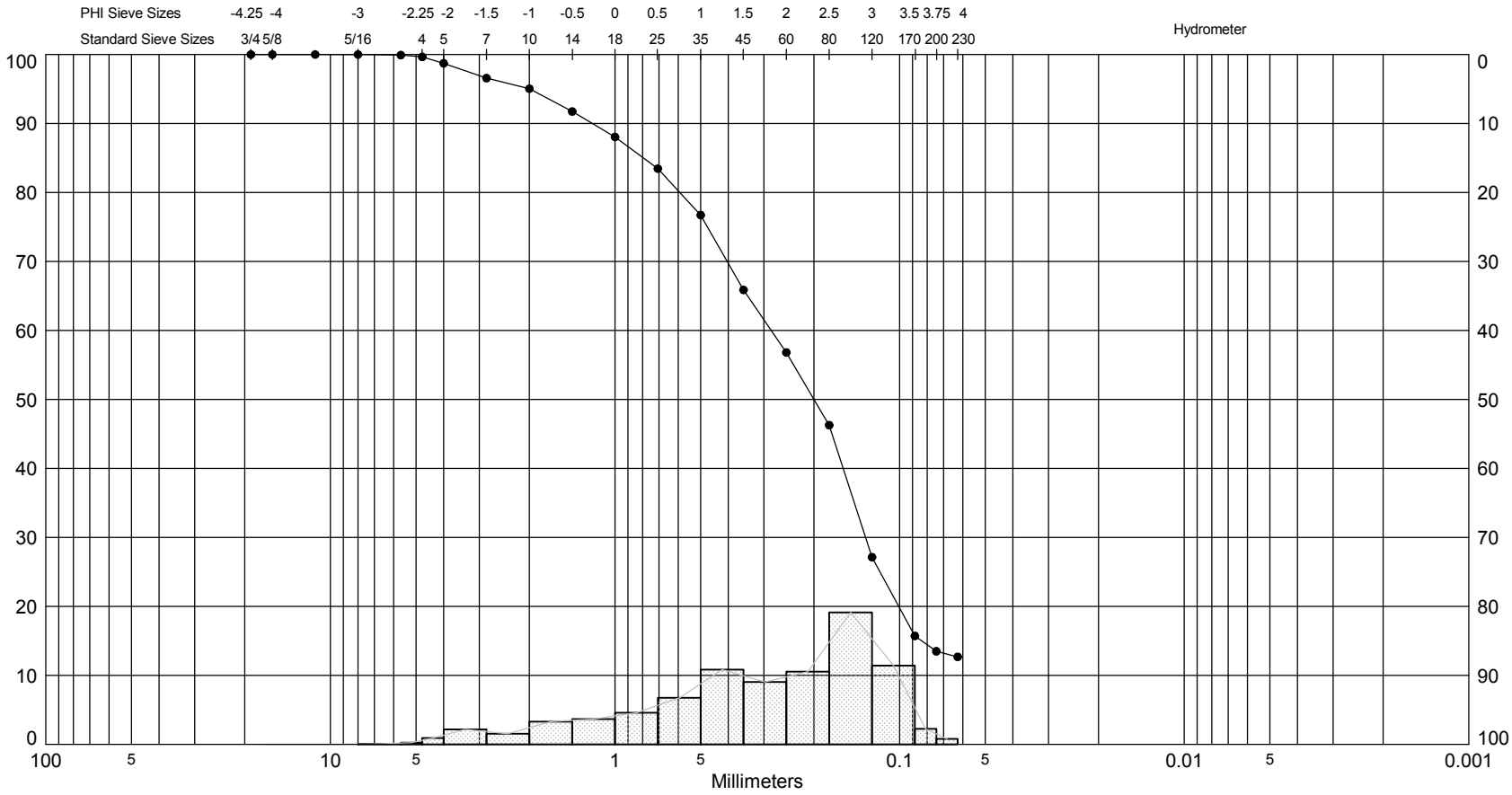
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y94 #1	—●—		SM	#200 - 13.49 #230 - 12.68	1.90	13.80	2.32	1.7	-0.86	3.06	1.41

Comments: SILTY SAND W/ SMALL ROCKS AND SHELL

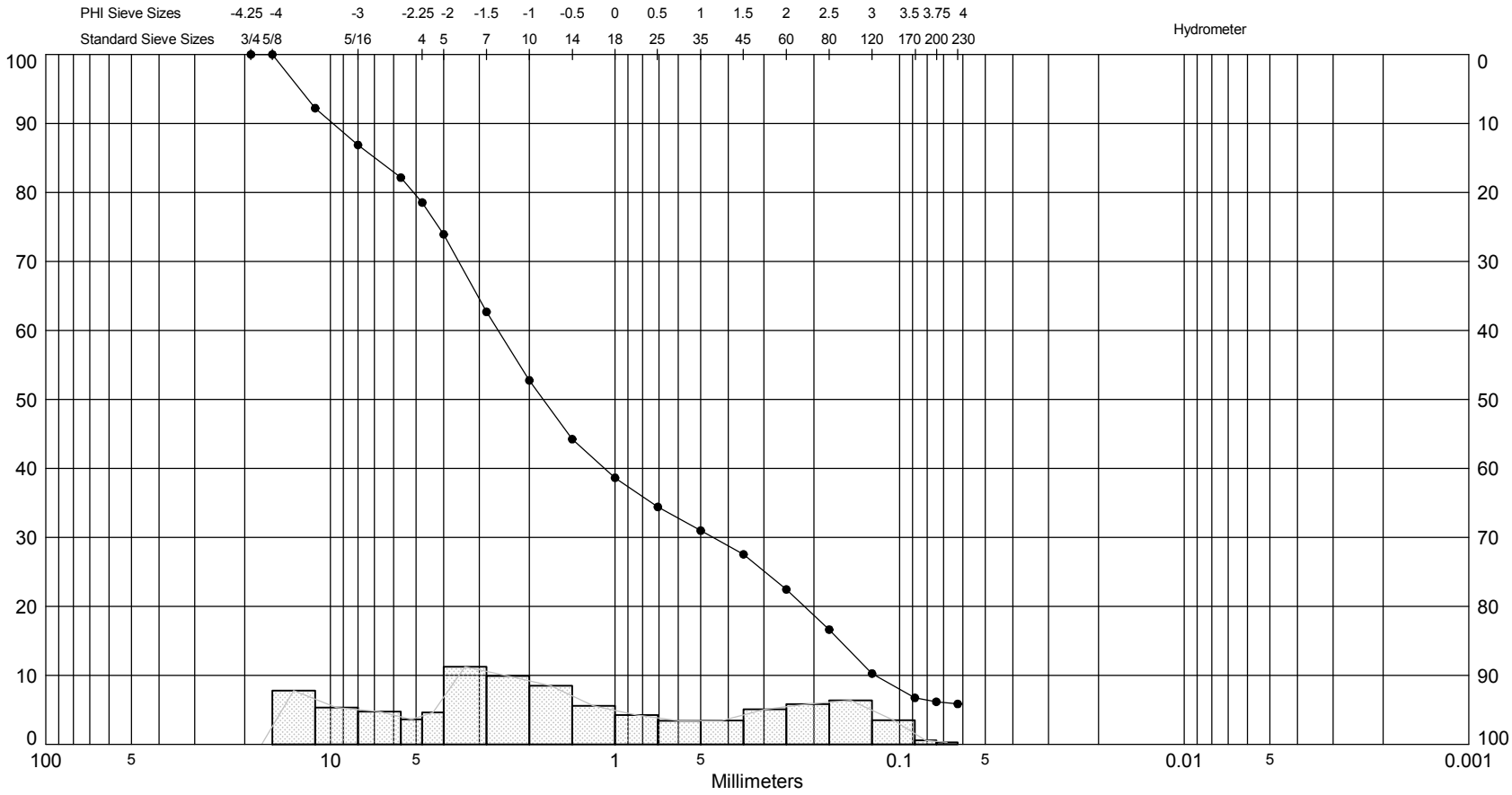
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y94 #2	—●—	SW-SM W/ GRAVEL		#200 - 6.17 #230 - 5.86	1.70	22.30		-0.59	0.33	2.01	2.1

Comments: ROCKS, SILT, SHELL

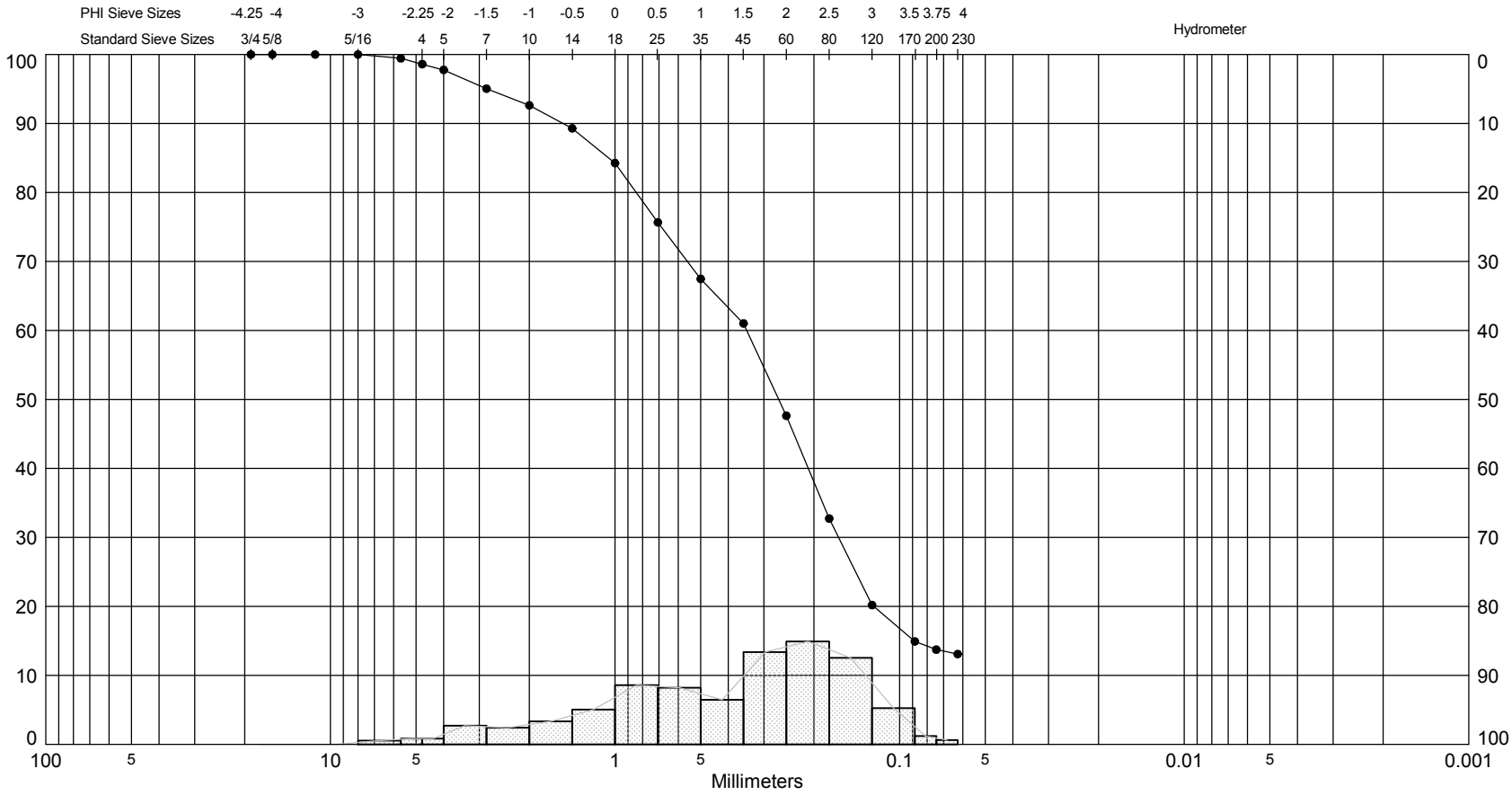
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y94 #3	—●—		SM	#200 - 13.73 #230 - 13.09	1.00	5.50	1.91	1.32	-0.69	2.81	1.45

Comments: SILTY SAND, SMALL PEBBLES

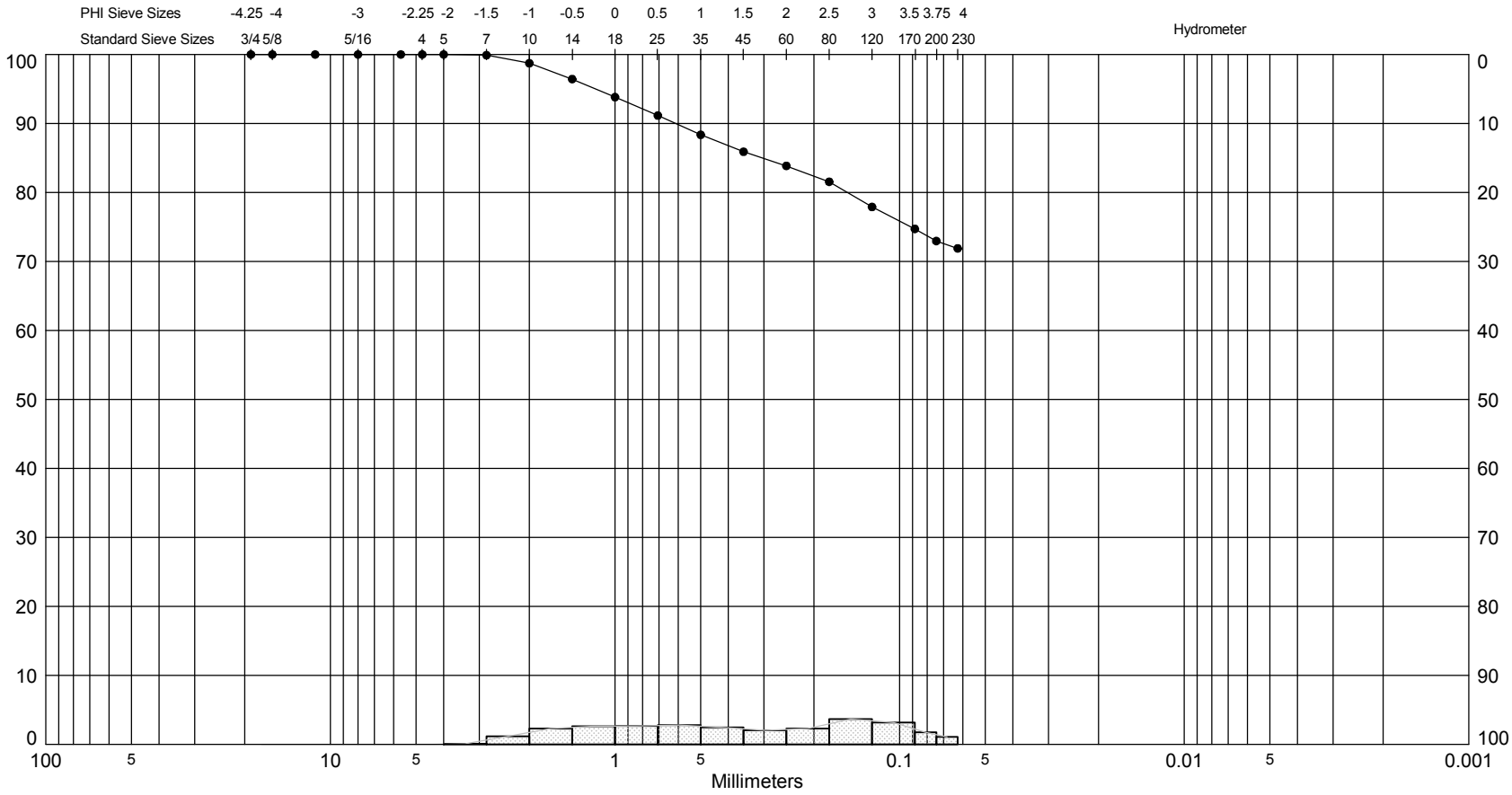
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y94 #4	—●—		ML-CL	#200 - 72.96 #230 - 71.89	12.10	7.70		1.48	-0.13	1.77	1.54

Comments: PEAT

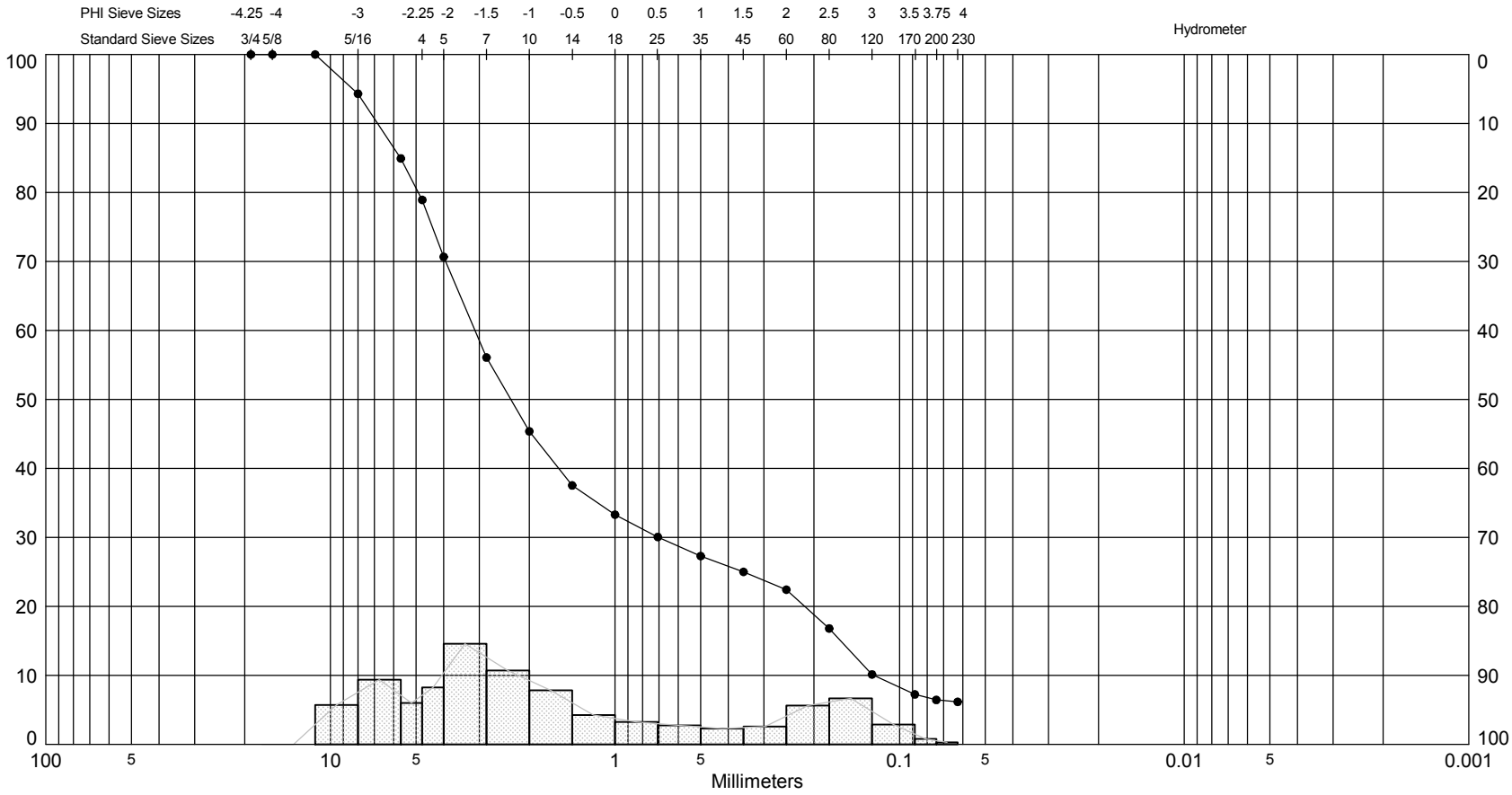
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y95 #1	—●—	SW-SM	W/ GRAVEL	#200 - 6.44 #230 - 6.16	2.90	10.90		-0.72	0.76	2.32	1.95

Comments: SILTY ROCKS, LITTLE SAND

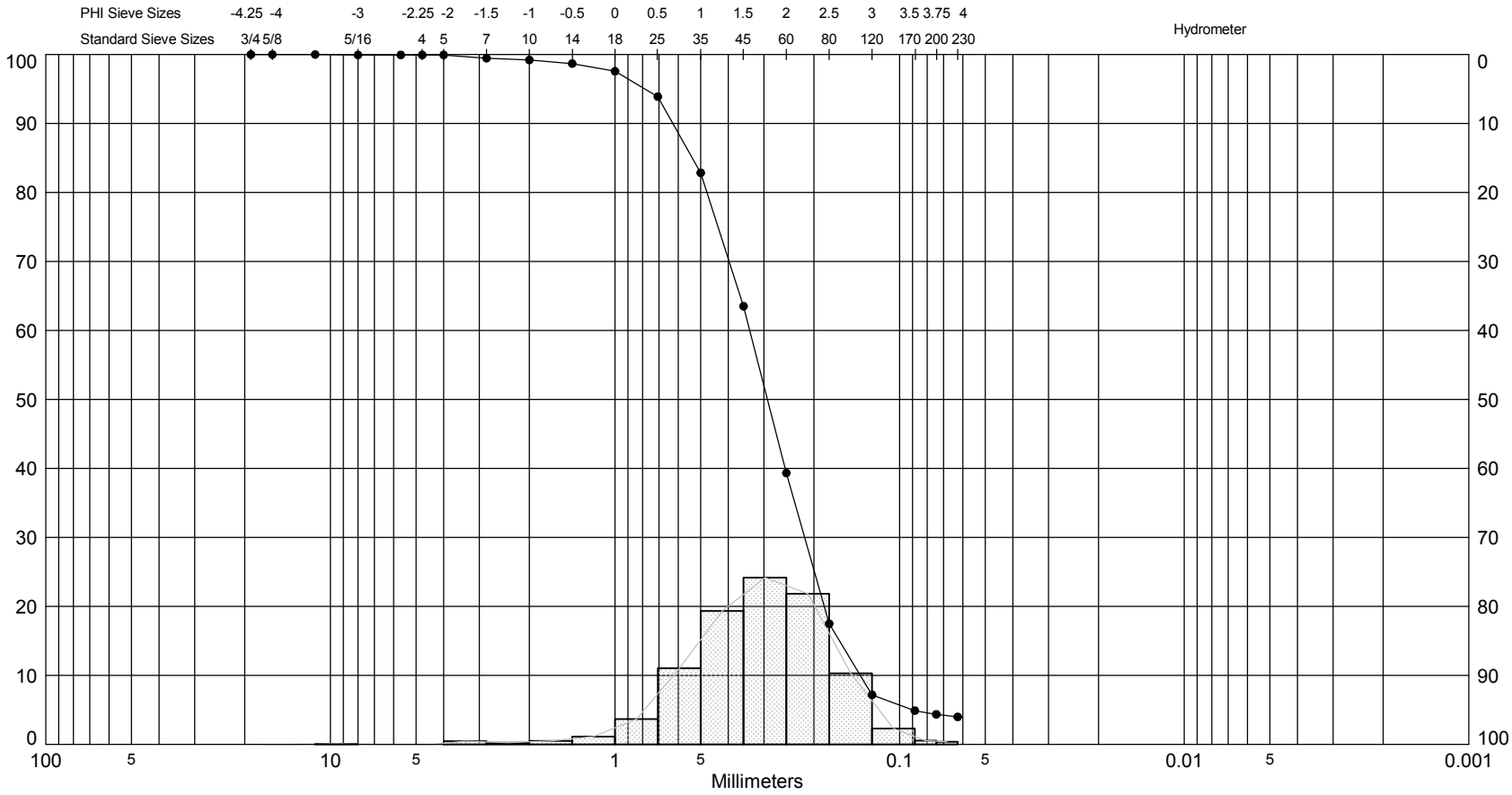
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y95 #2	—●—		SP	#200 - 4.35 #230 - 3.98	1.80	0.90	1.78	1.69	-0.7	5.1	0.83

Comments: MEDIUM QUARTZ, FEW ANGULAR PEBBLES, DARK FINES

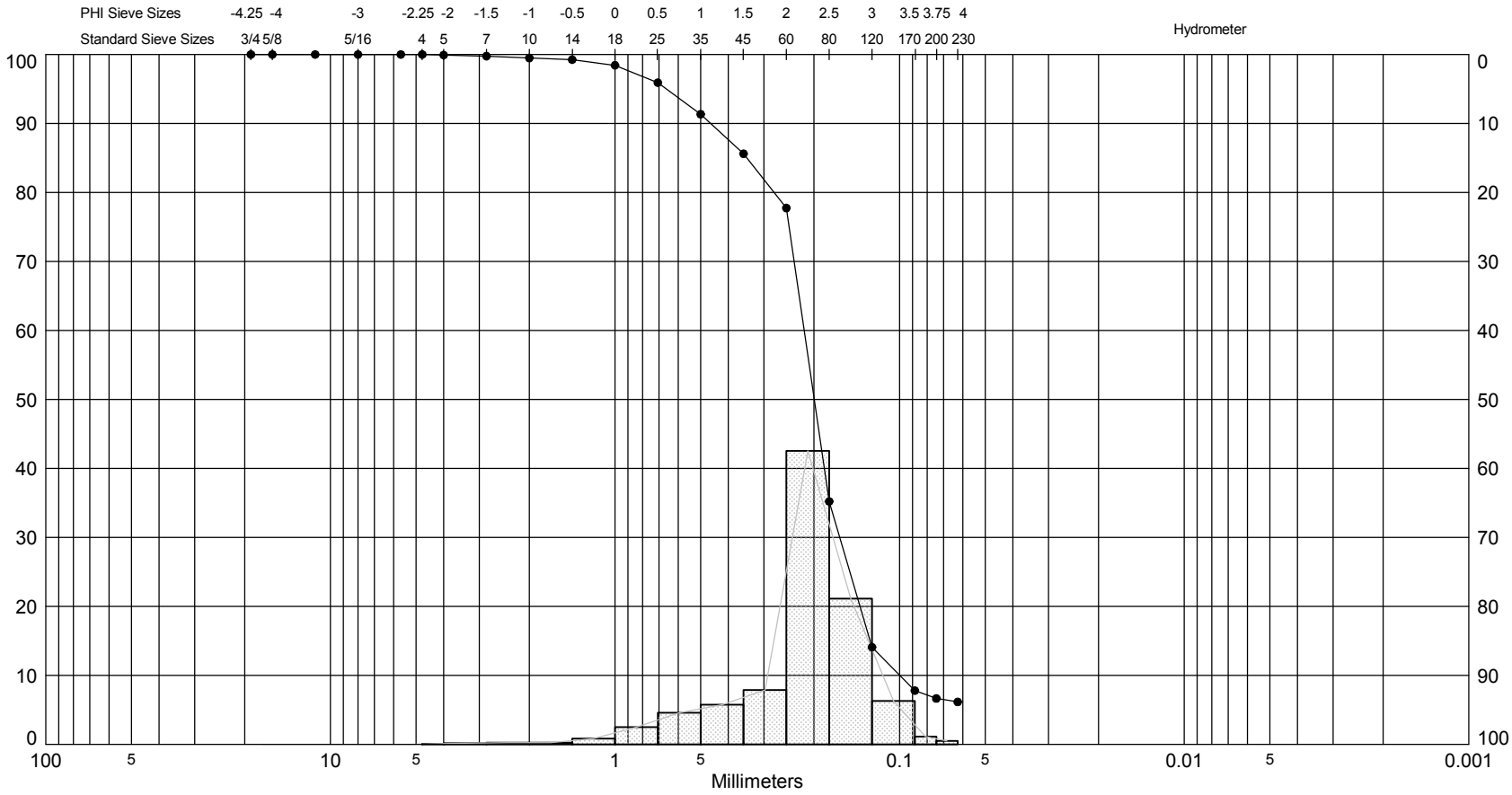
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y95 #3	—●—		SP-SM	#200 - 6.65 #230 - 6.15	1.00	1.40	2.33	2.18	-1.41	6.46	0.78

Comments: QUARTZ, FEW ANGULAR PEBBLES, MORE DARK FINES

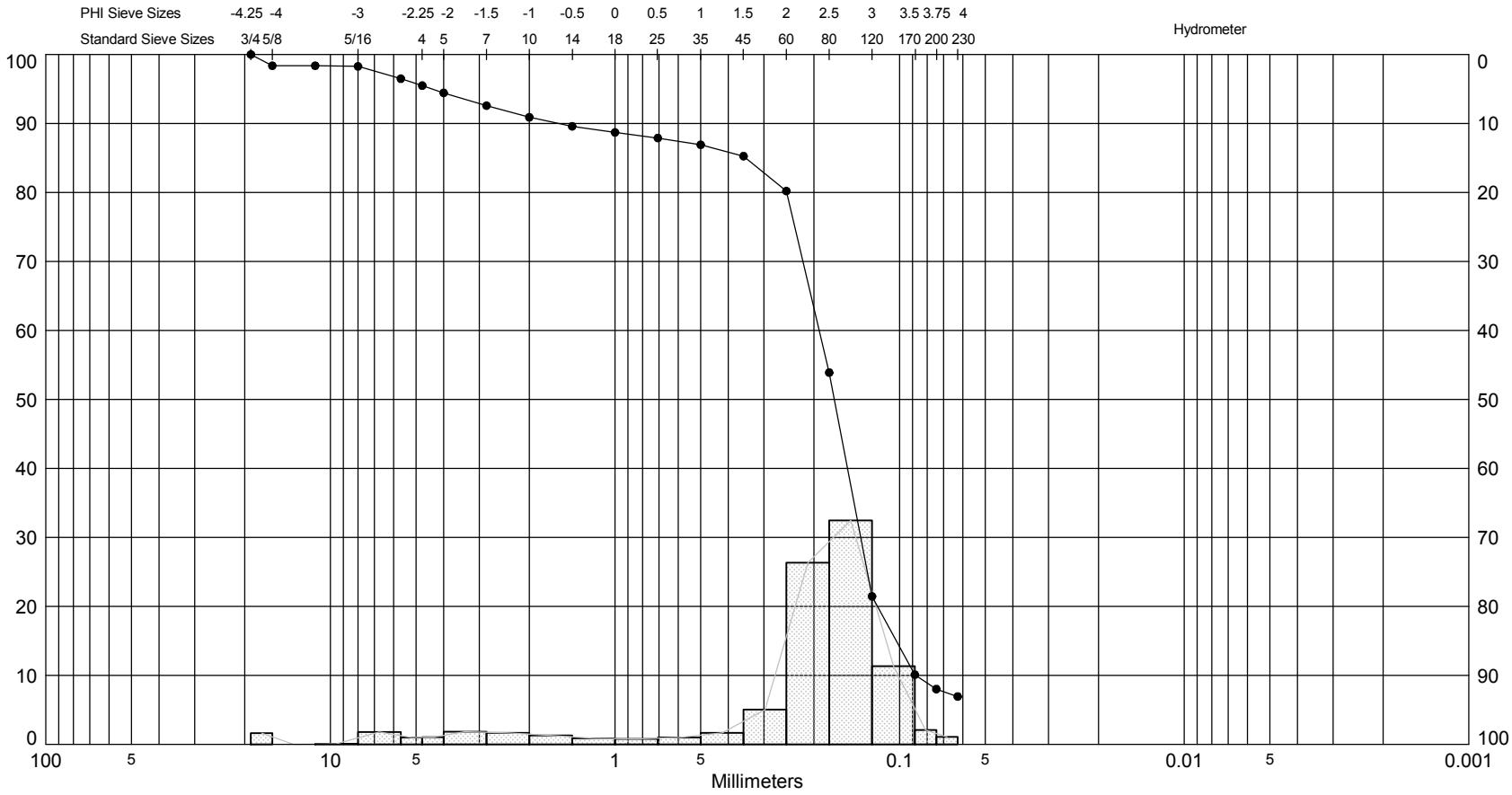
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y95 #4	—●—		SW-SM	#200 - 8.01 #230 - 6.93	1.00	10.90	2.56	2	-2.13	6.85	1.64

Comments: BROWN SAND, WHITE SHELL, SHARK TOOTH

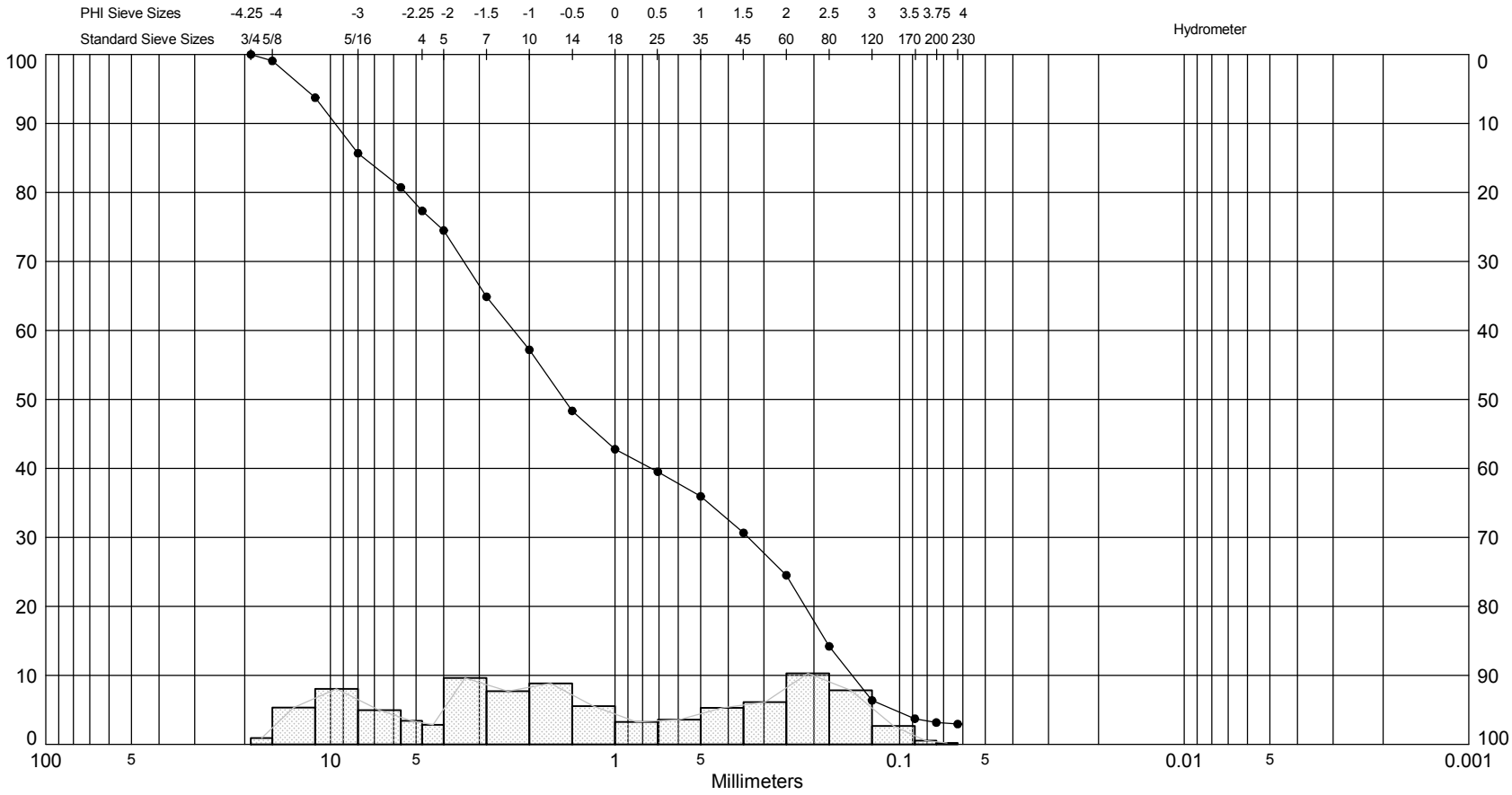
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y96 #1	—●—		SW	#200 - 3.16 #230 - 2.94	4.80	13.30		-0.36	0.09	1.74	2.17

Comments: SILTY SAND/PEBBLES

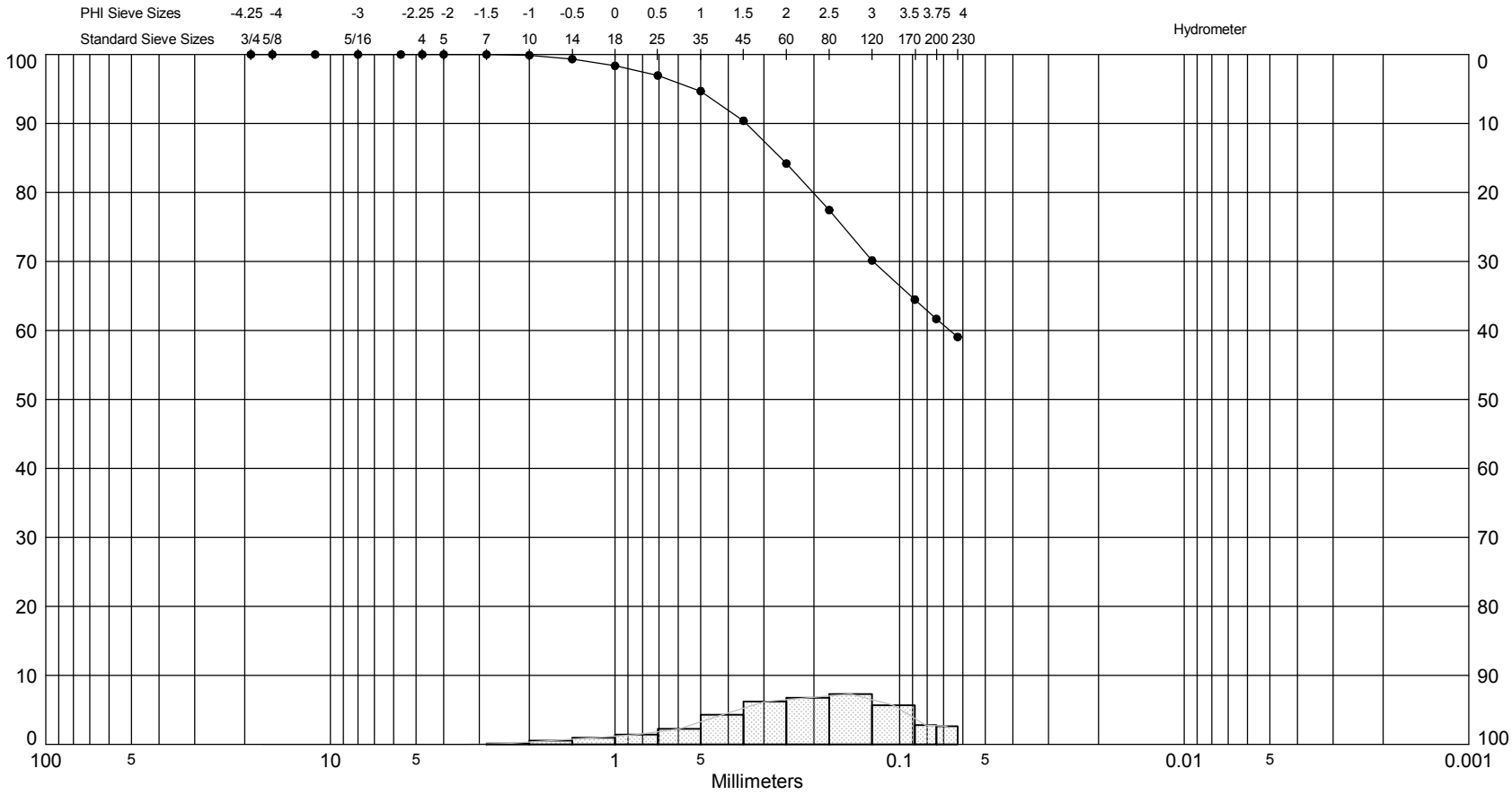
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y96 #2	—●—		ML-CL	#200 - 61.67 #230 - 59.05	6.30	4.10		2.23	-0.59	2.95	1.09

Comments: PEAT

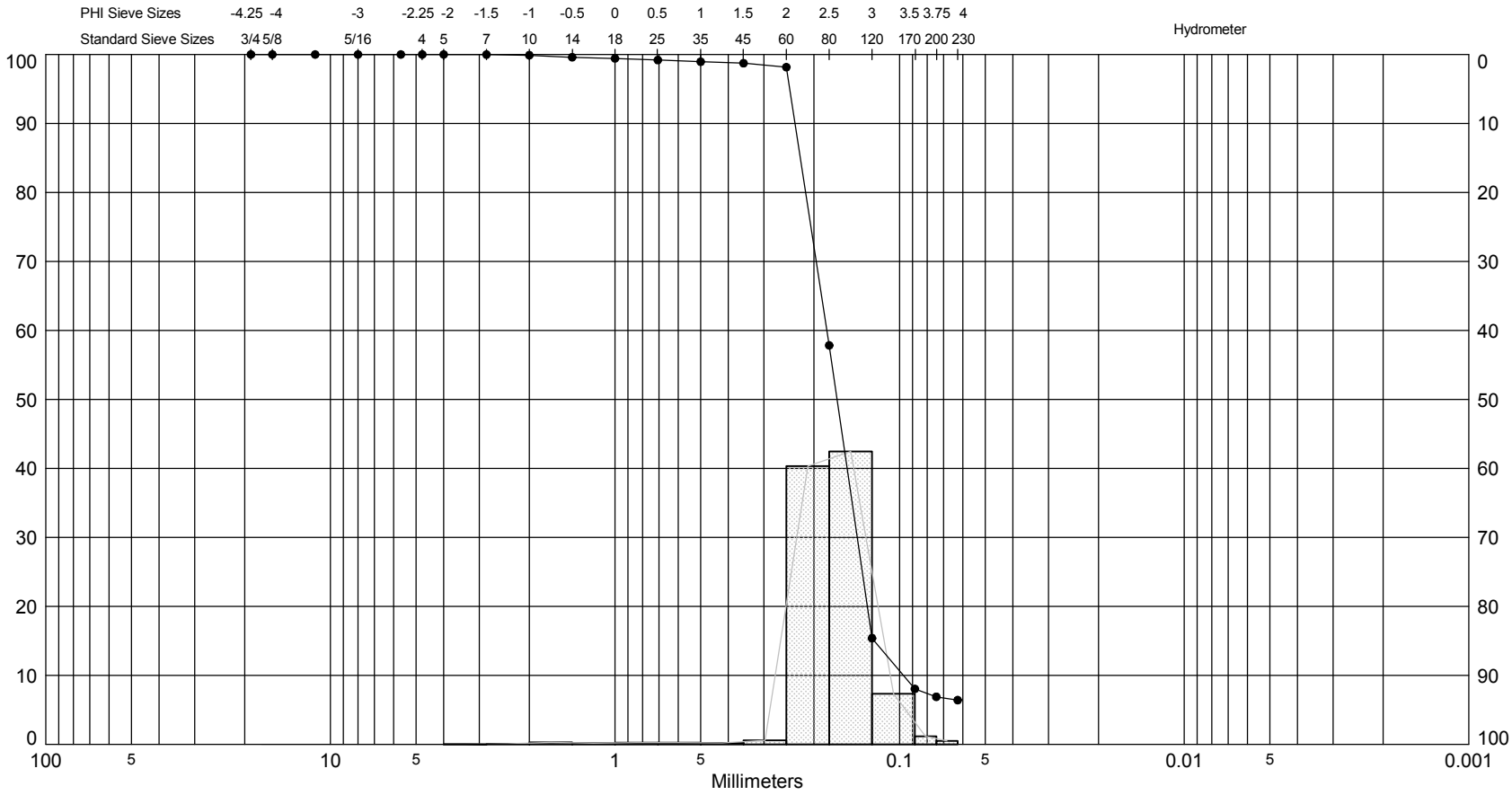
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y96 #3	—●—		SP-SM	#200 - 6.89 #230 - 6.41	1.00	1.00	2.59	2.55	-2.3	19.86	0.46

Comments: PEATY SAND

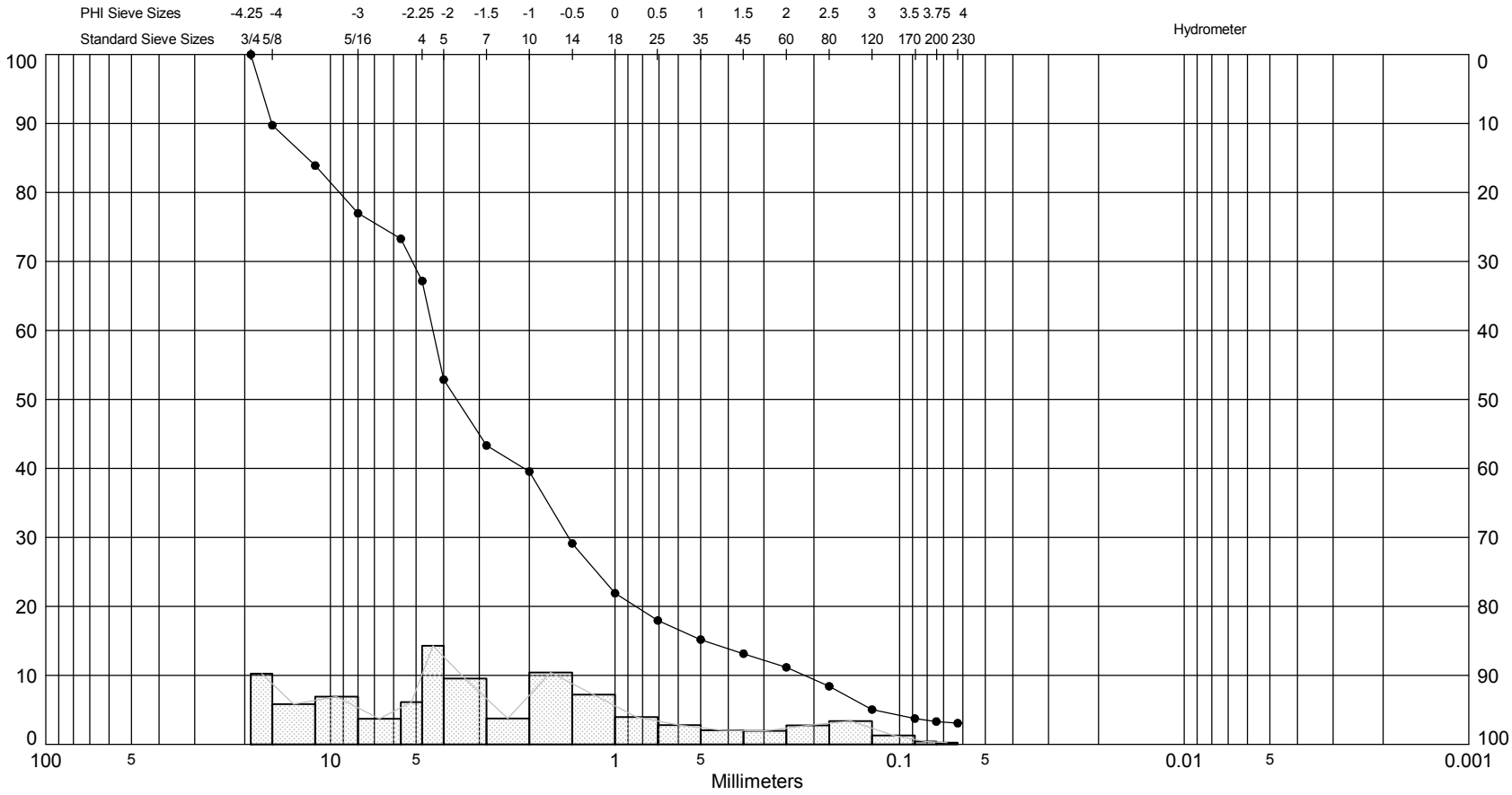
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y97 #1	—●—		SW	#200 - 3.31 #230 - 3.07	2.20	34.30		-1.46	0.67	2.84	1.94

Comments: SILTY ROCKS AND SHELL

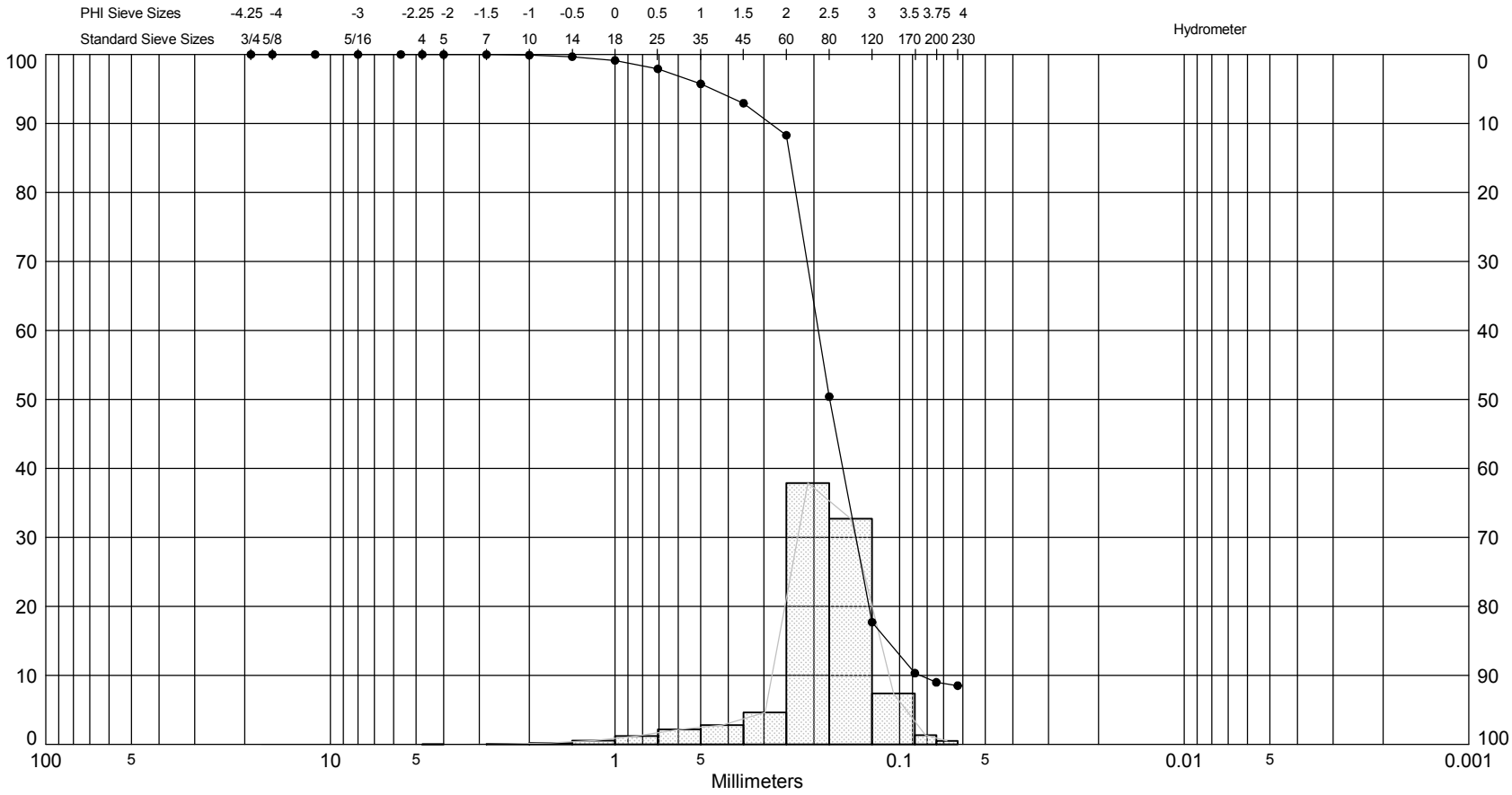
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y97 #2	—●—		SP-SM	#200 - 8.99 #230 - 8.51	1.10	1.80	2.51	2.39	-1.62	8.09	0.64

Comments:

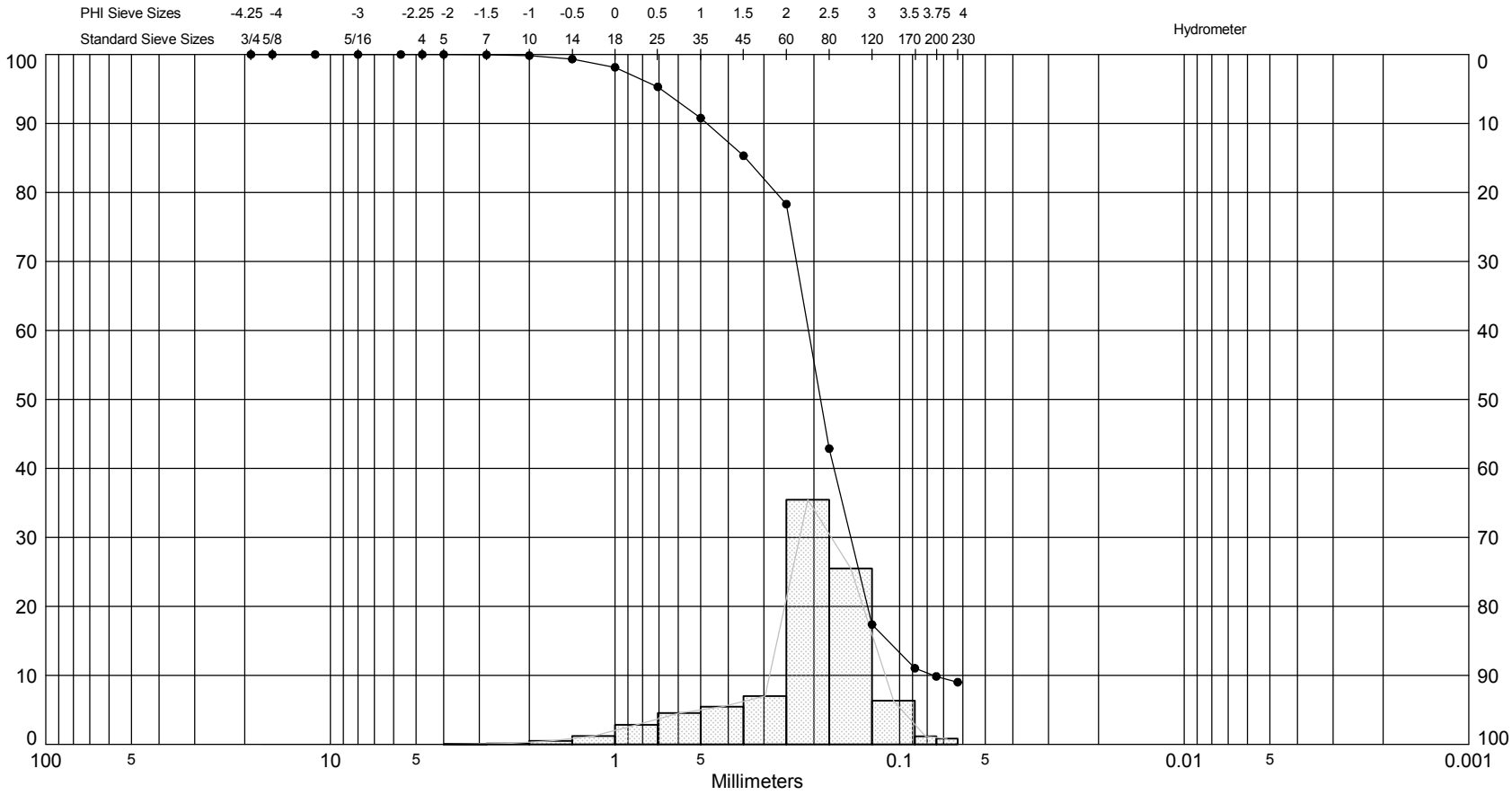
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y97 #3	—●—		SP-SM	#200 - 9.85 #230 - 9.01	1.00	2.40	2.4	2.2	-1.23	5	0.81

Comments: PEATY SAND

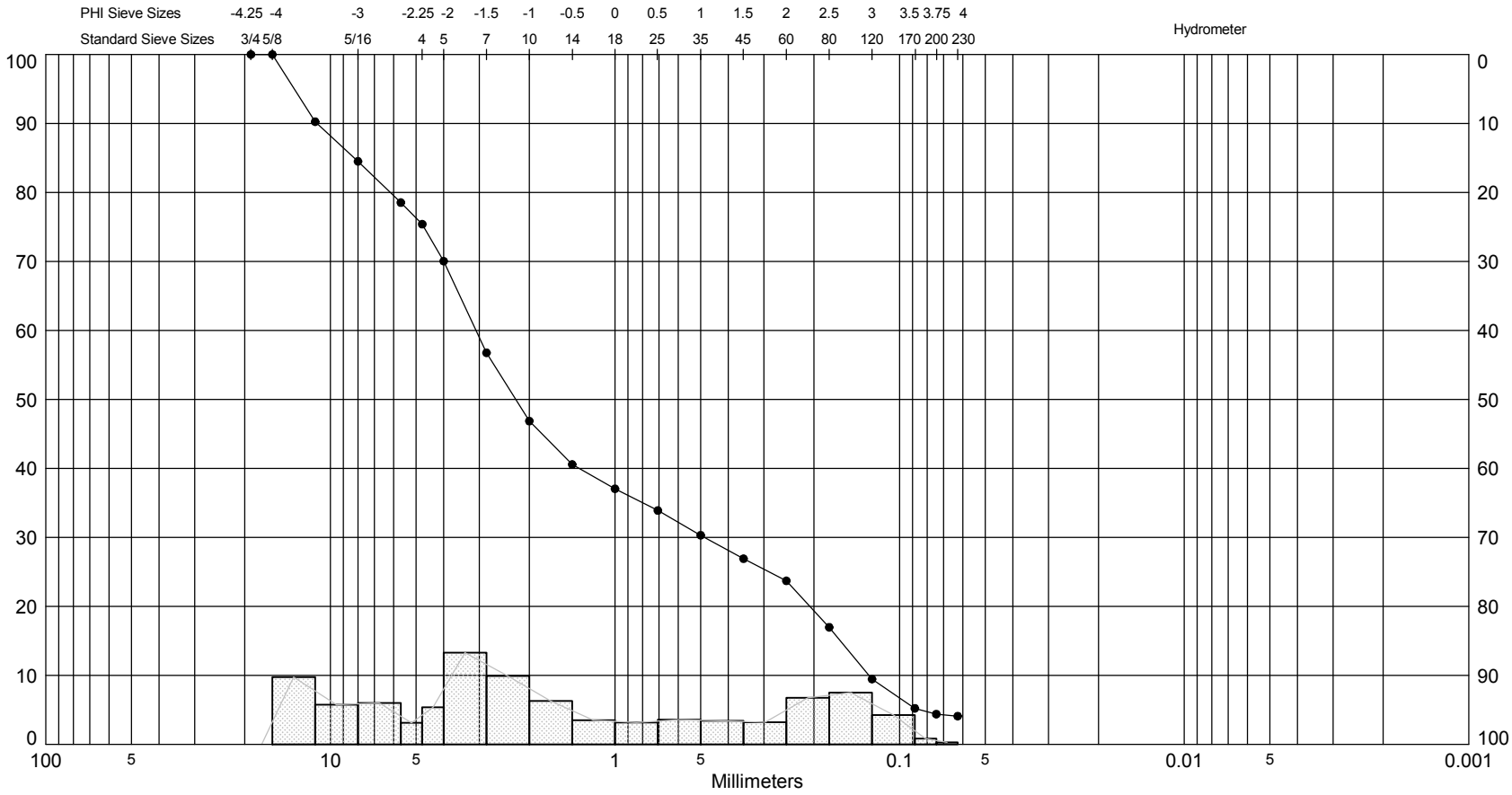
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y98 #1	—●—		SW	#200 - 4.38 #230 - 4.09	2.70	17.50		-0.67	0.4	1.92	2.21

Comments: ROCKS

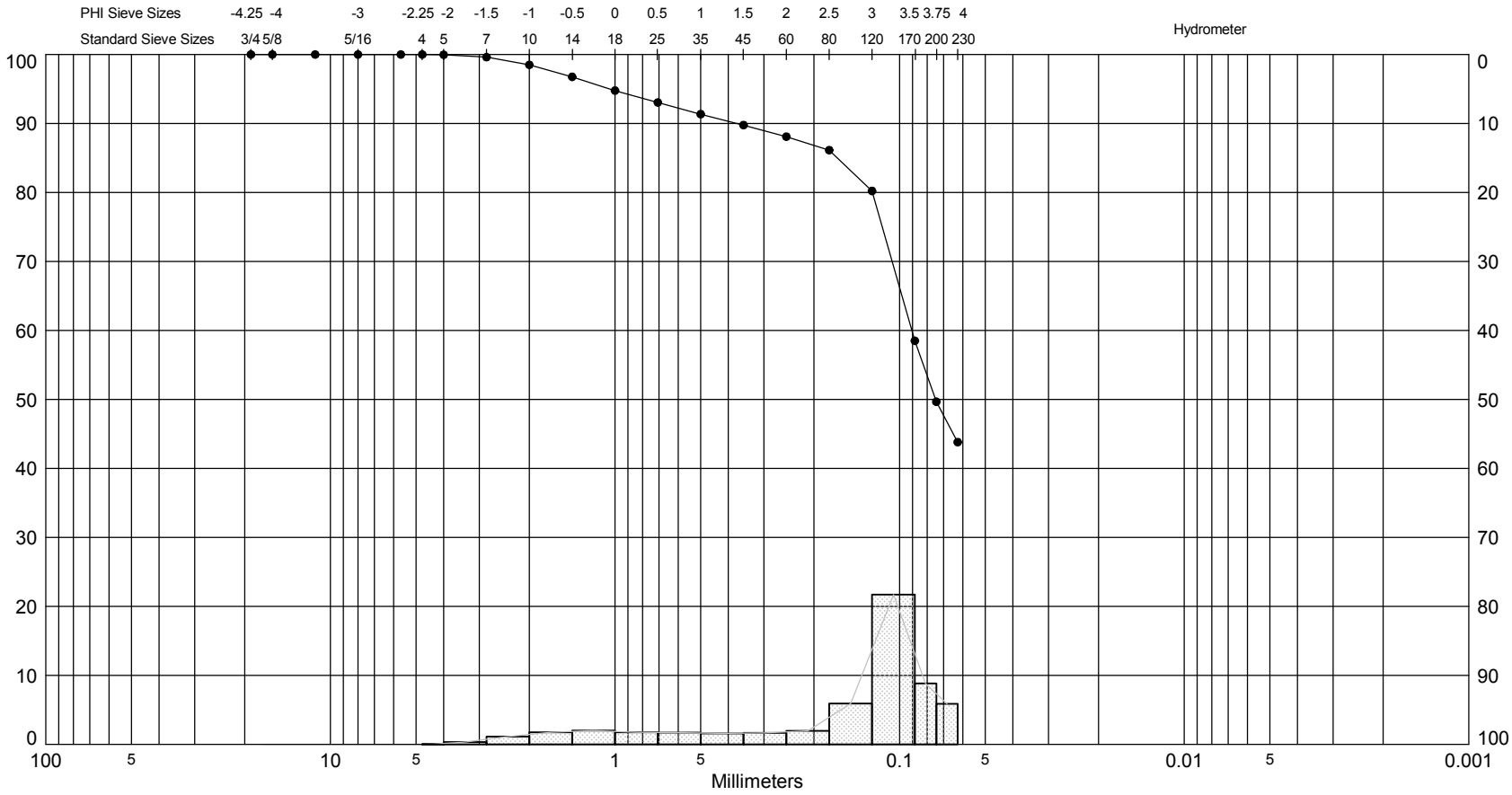
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y98 #2	—●—		SM	#200 - 49.67 #230 - 43.81	7.60	5.20	3.74	2.65	-1.57	4.33	1.38

Comments: SANDY PEAT

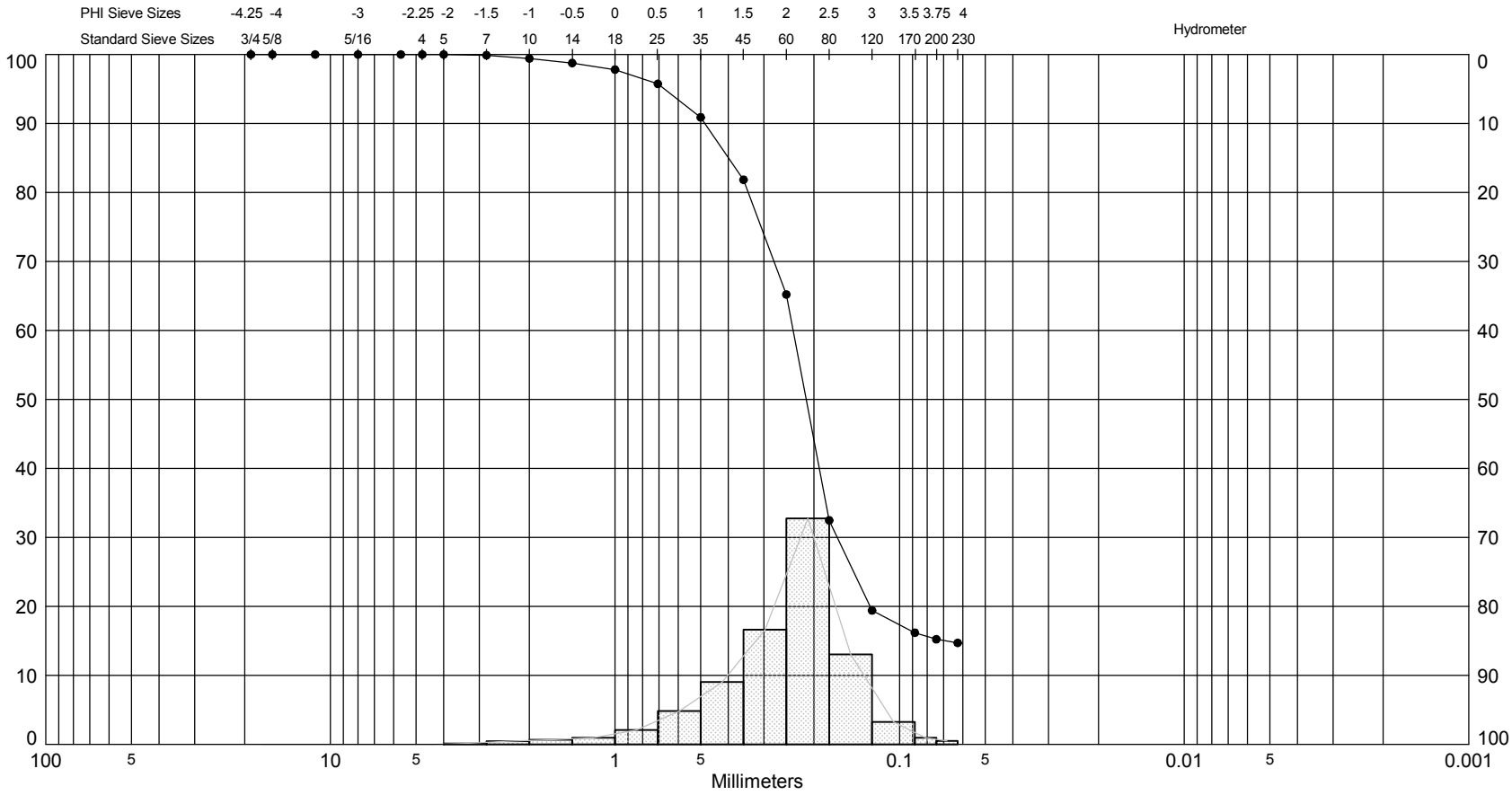
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y98 #3	—●—		SM	#200 - 15.23 #230 - 14.71	6.30	2.60	2.23	1.98	-1.07	5.36	0.8

Comments: PEATY SAND

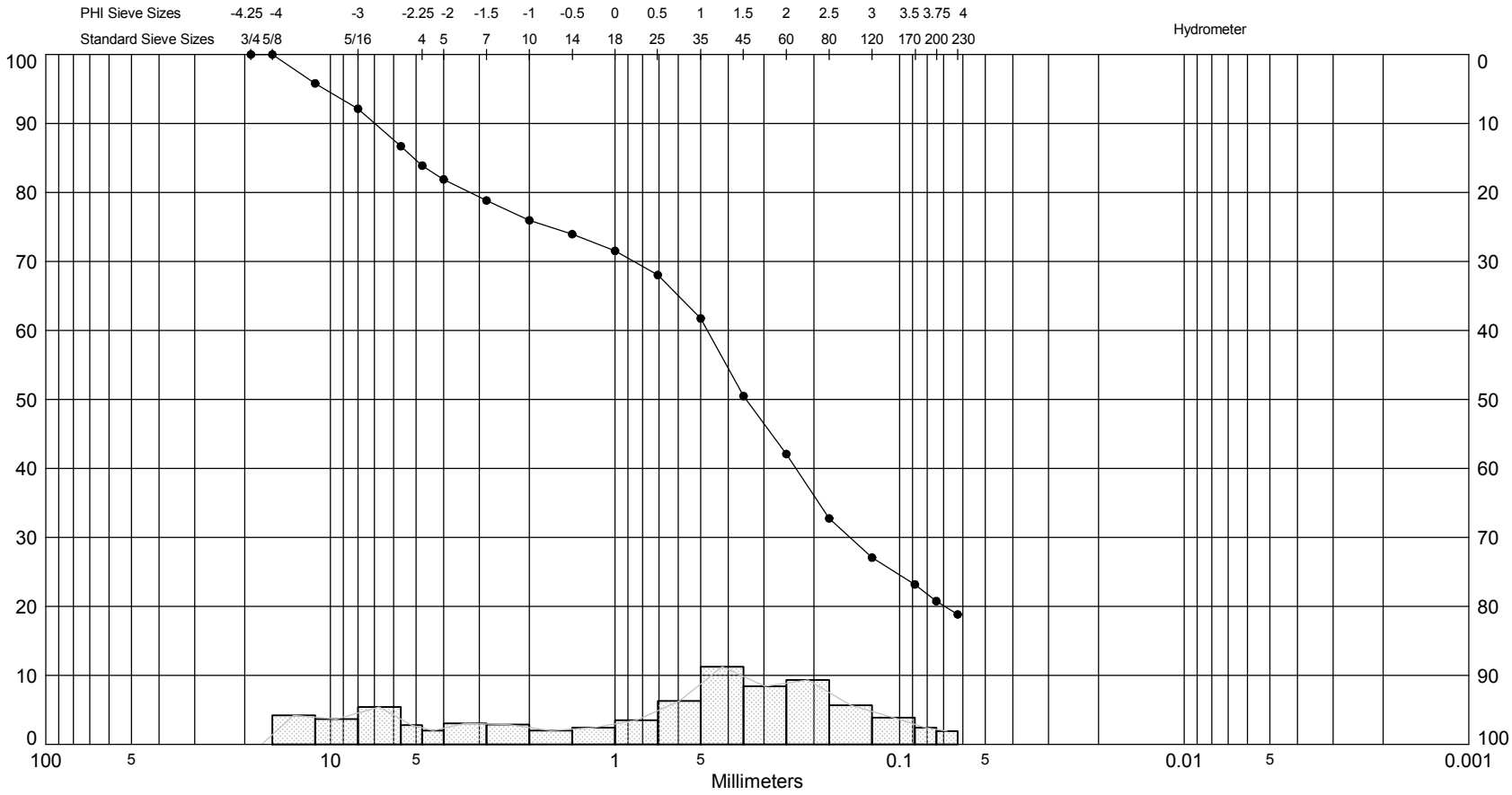
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y101 #1	—●—		SM	W/ GRAVEL #200 - 20.76 #230 - 18.83	7.50	6.00	1.53	0.43	-0.46	1.97	2.23

Comments: PEATY SAND, ROCKS, WOOD, EGGSHELL?

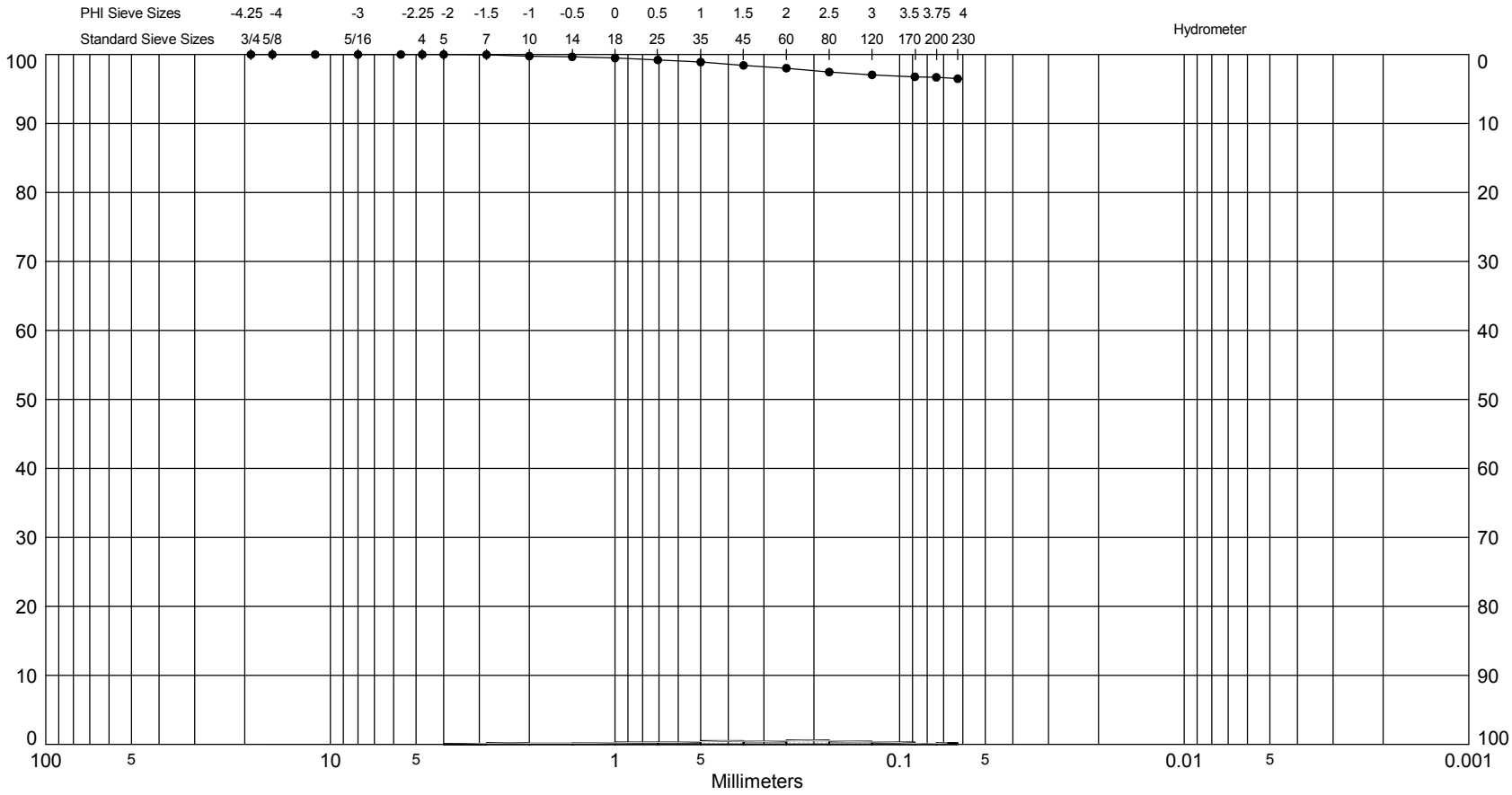
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y101 #2	—●—		ML-CL	#200 - 96.69 #230 - 96.49	13.10	11.70		1.58	-0.37	2.43	1.4

Comments: PEAT

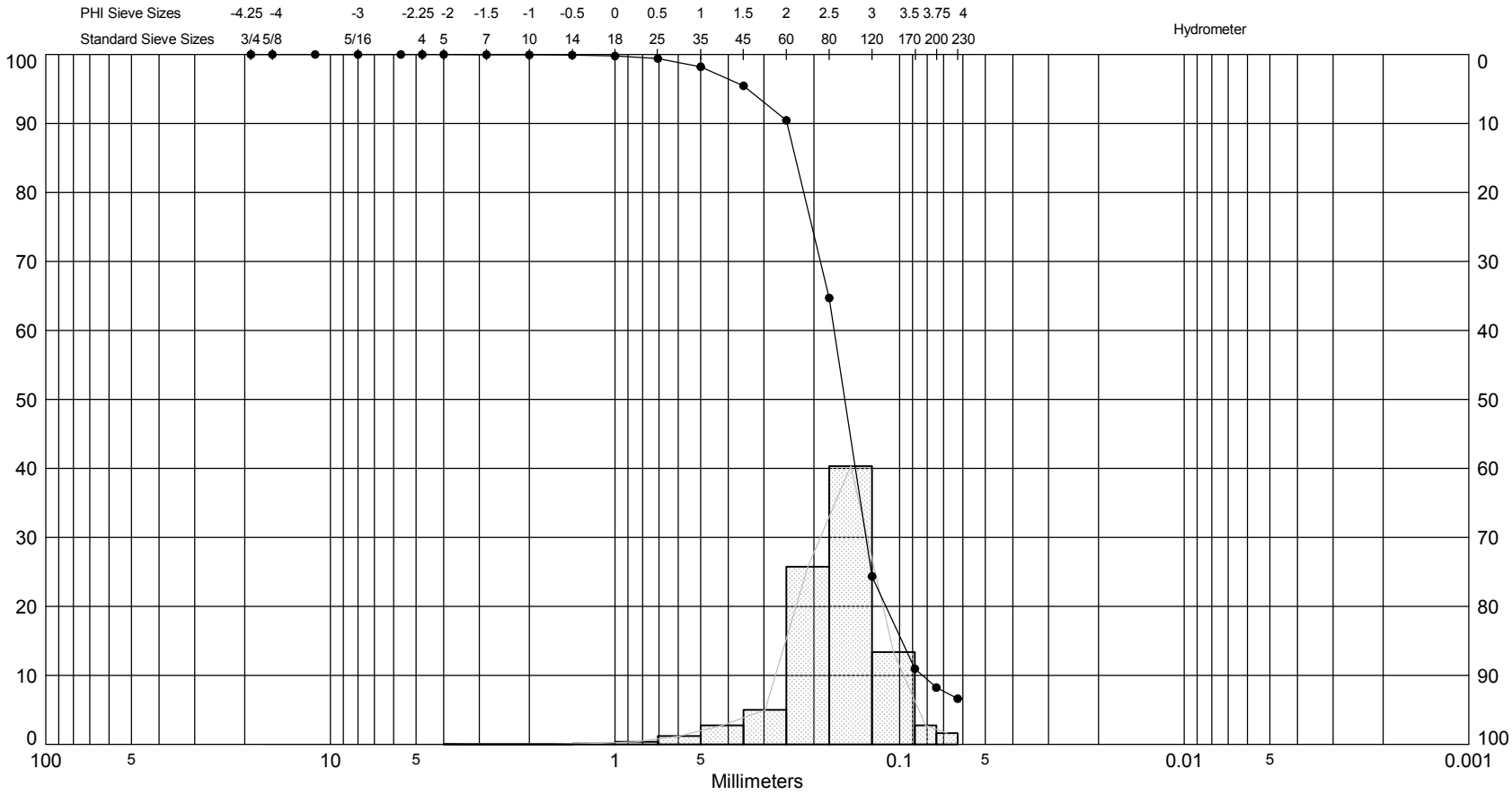
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y101 #3	—●—		SP-SM	#200 - 8.23 #230 - 6.62	0.80	0.80	2.68	2.59	-1.06	6.7	0.59

Comments: SAND, LITTLE PEAT

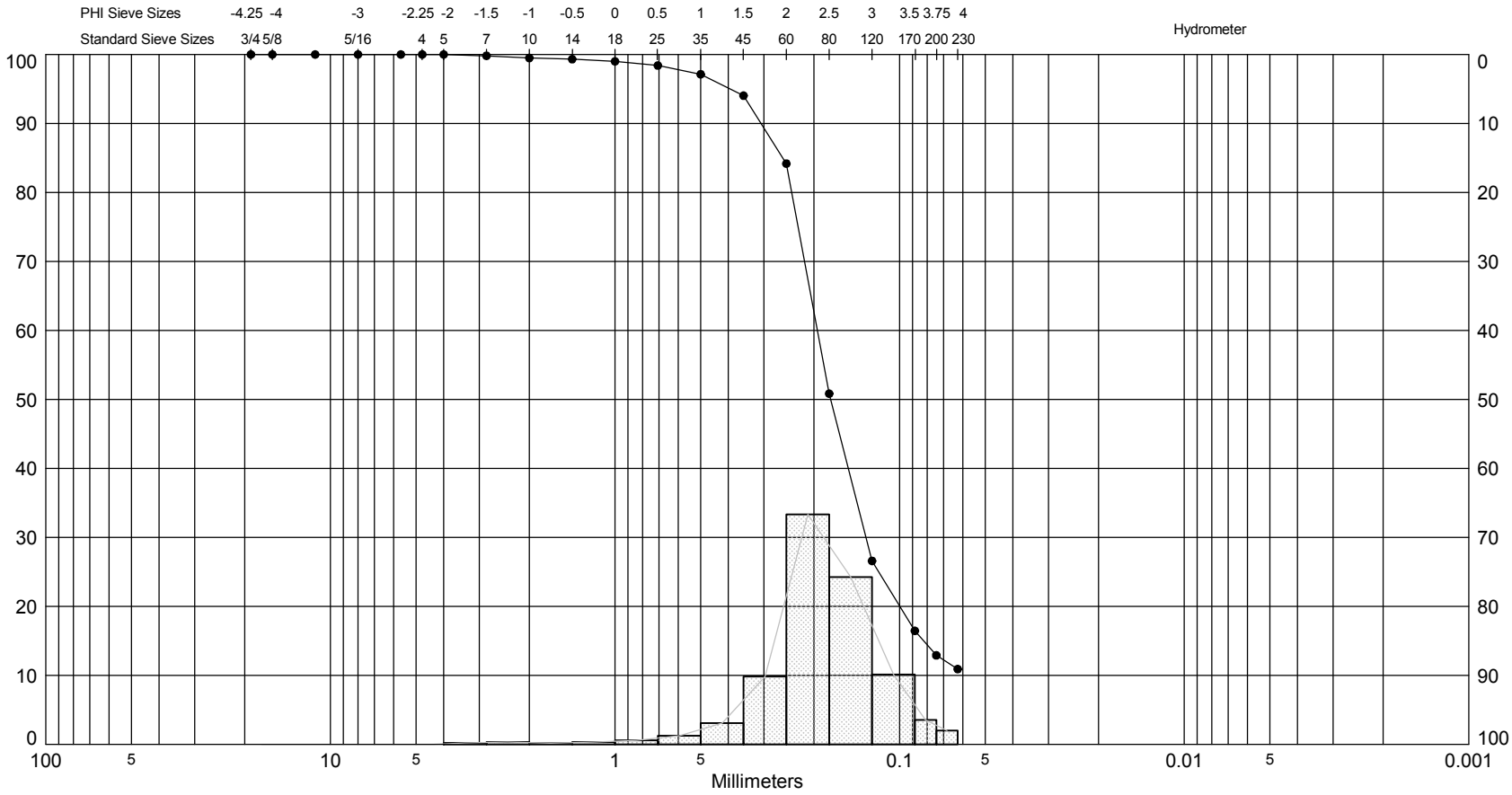
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y103 #1	—●—		SM	#200 - 12.90 #230 - 10.91	0.00	1.20	2.52	2.43	-1.3	8.36	0.72

Comments: SAND, FEW FINES

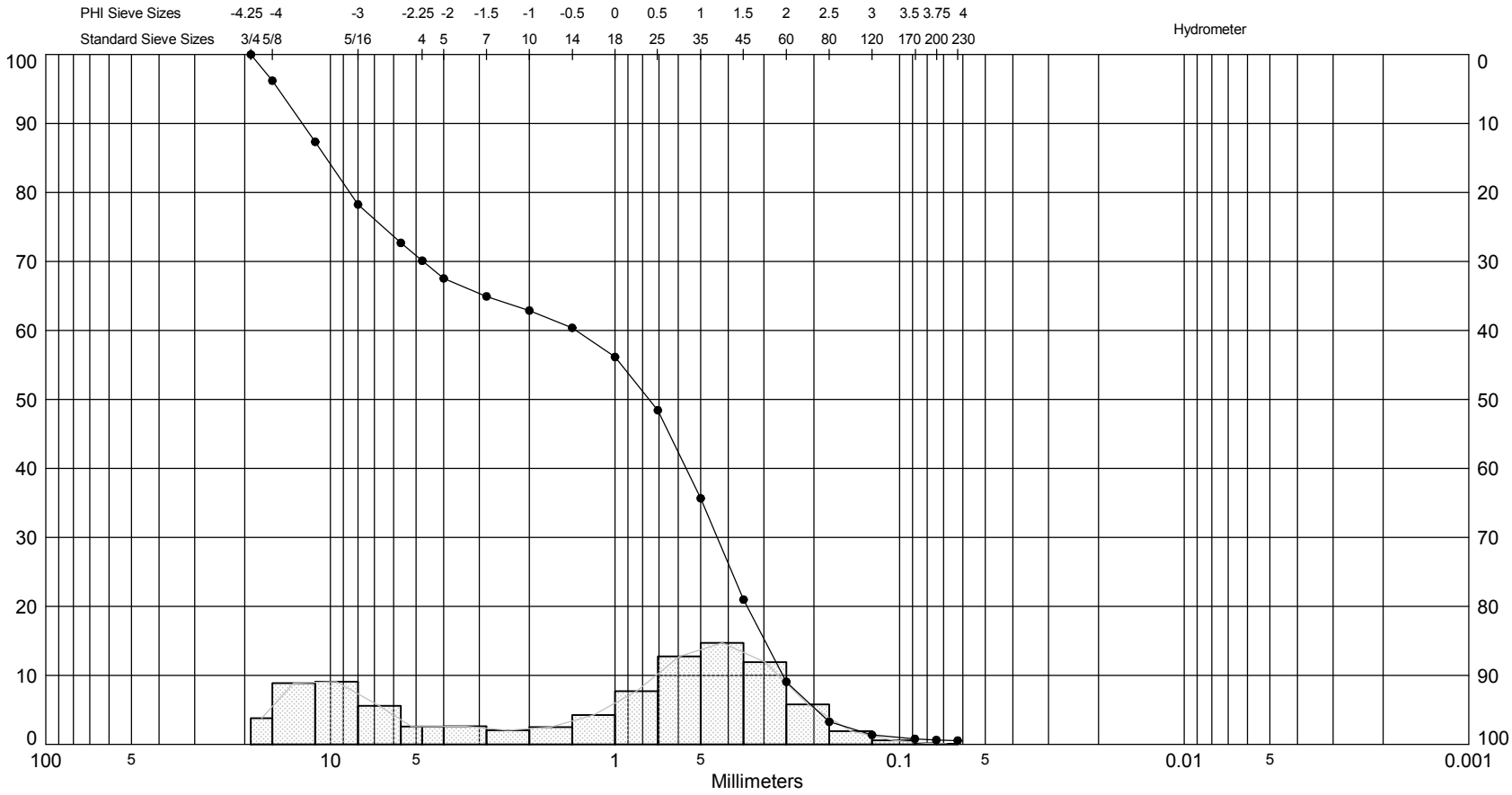
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y103 #2	—●—		SW	#200 - 0.63 #230 - 0.55	0.30	0.60	0.4	-0.44	-0.38	1.66	2.17

Comments: ROCKS, COARSE QUARTZ SAND

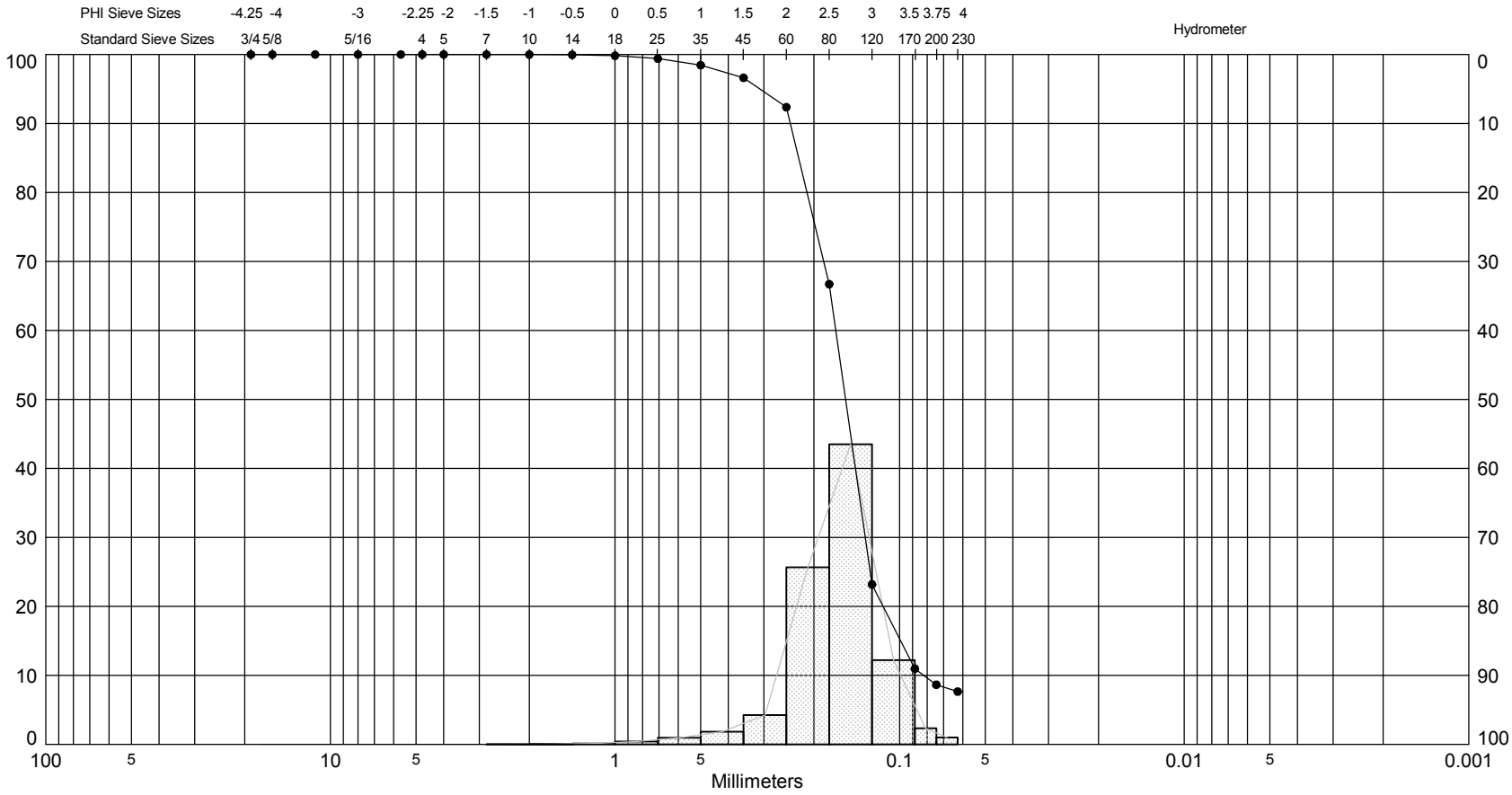
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y103 #3	—●—		SP-SM	#200 - 8.64 #230 - 7.65	0.80	1.20	2.69	2.6	-1.11	6.94	0.54

Comments: WHITE MEDIUM SAND, SOME DARK FINES

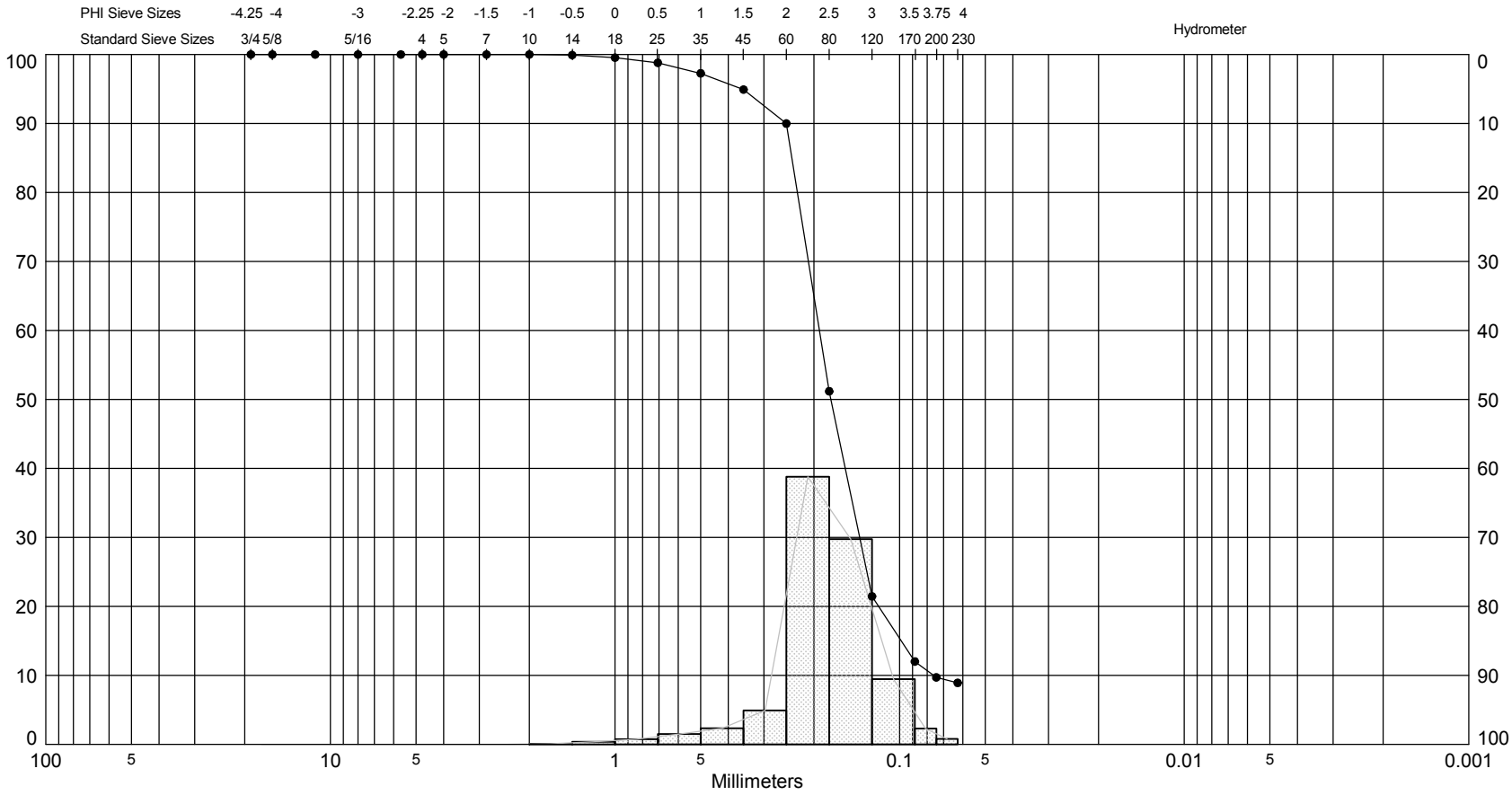
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y103 #4	—●—		SP-SM	#200 - 9.71 #230 - 8.91	1.00	1.50	2.52	2.46	-1.07	6.67	0.6

Comments: SAND, DARK FINES

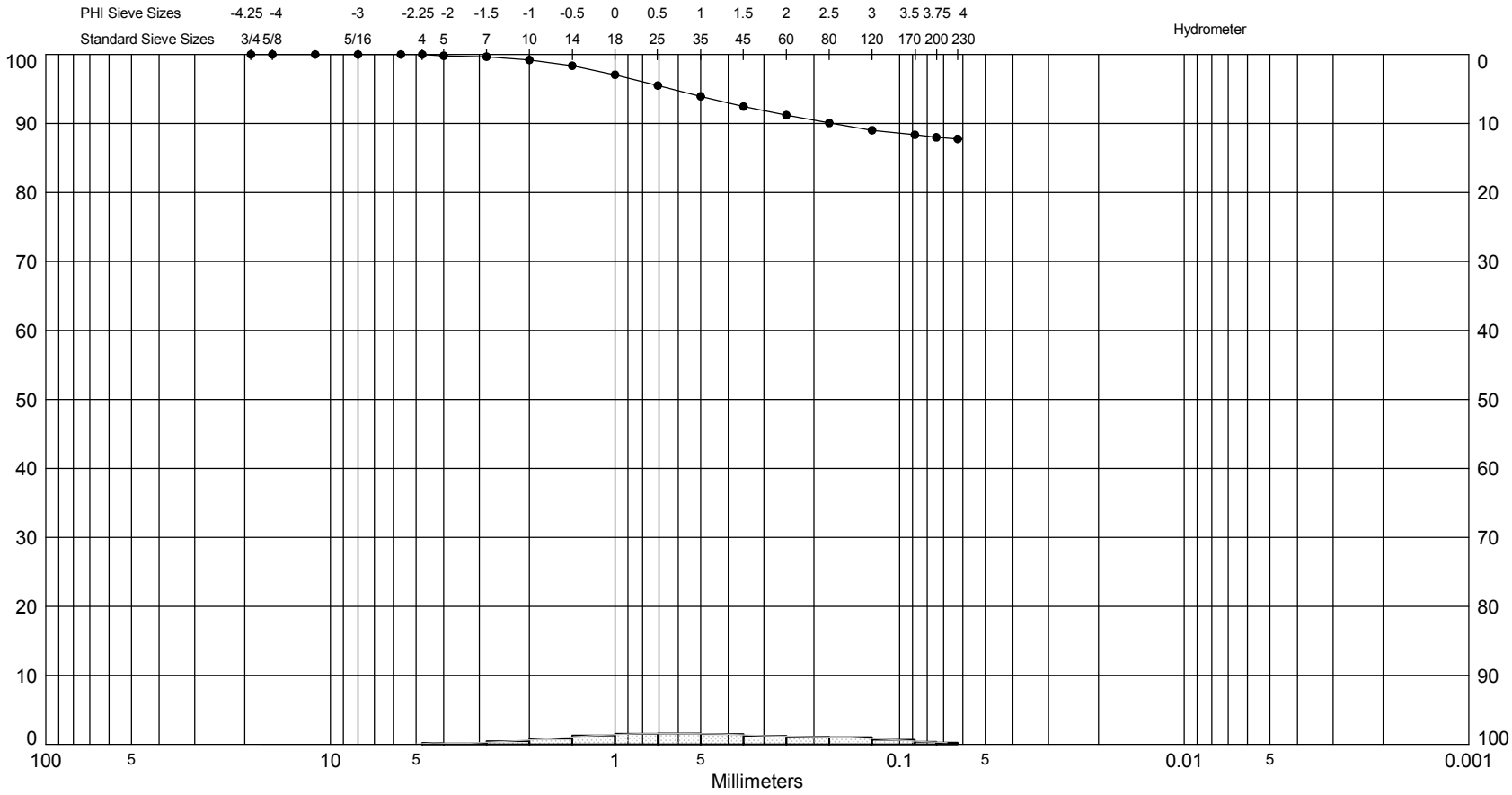
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y107 #1	—●—		ML-CL	#200 - 87.99 #230 - 87.76	10.80	9.40		1.08	0.01	2.3	1.41

Comments: PEAT

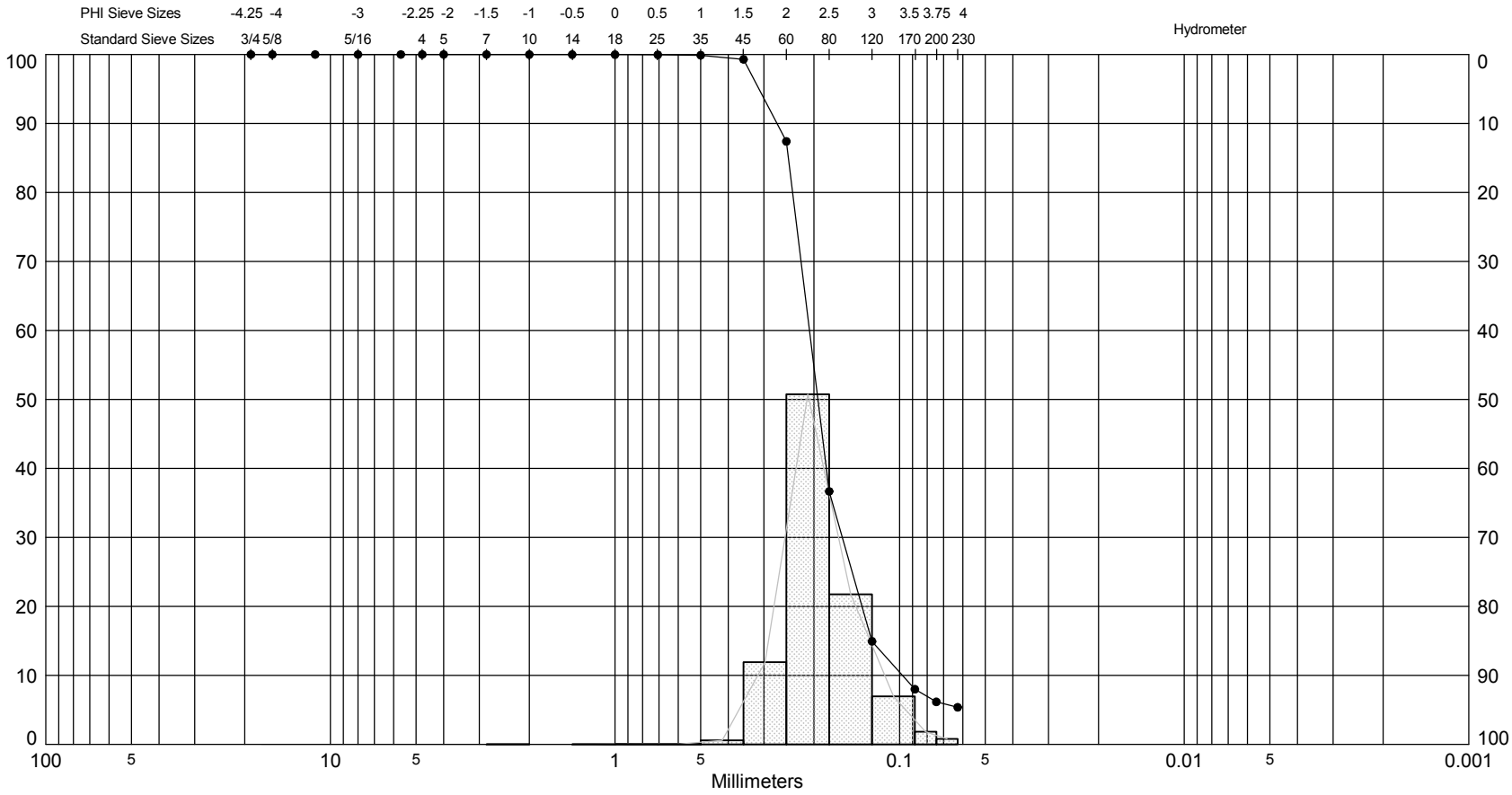
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y107 #2	—●—		SP-SM	#200 - 6.16 #230 - 5.37	1.50	0.60	2.37	2.41	0.58	4.42	0.46

Comments: SAND, TRACE FINES

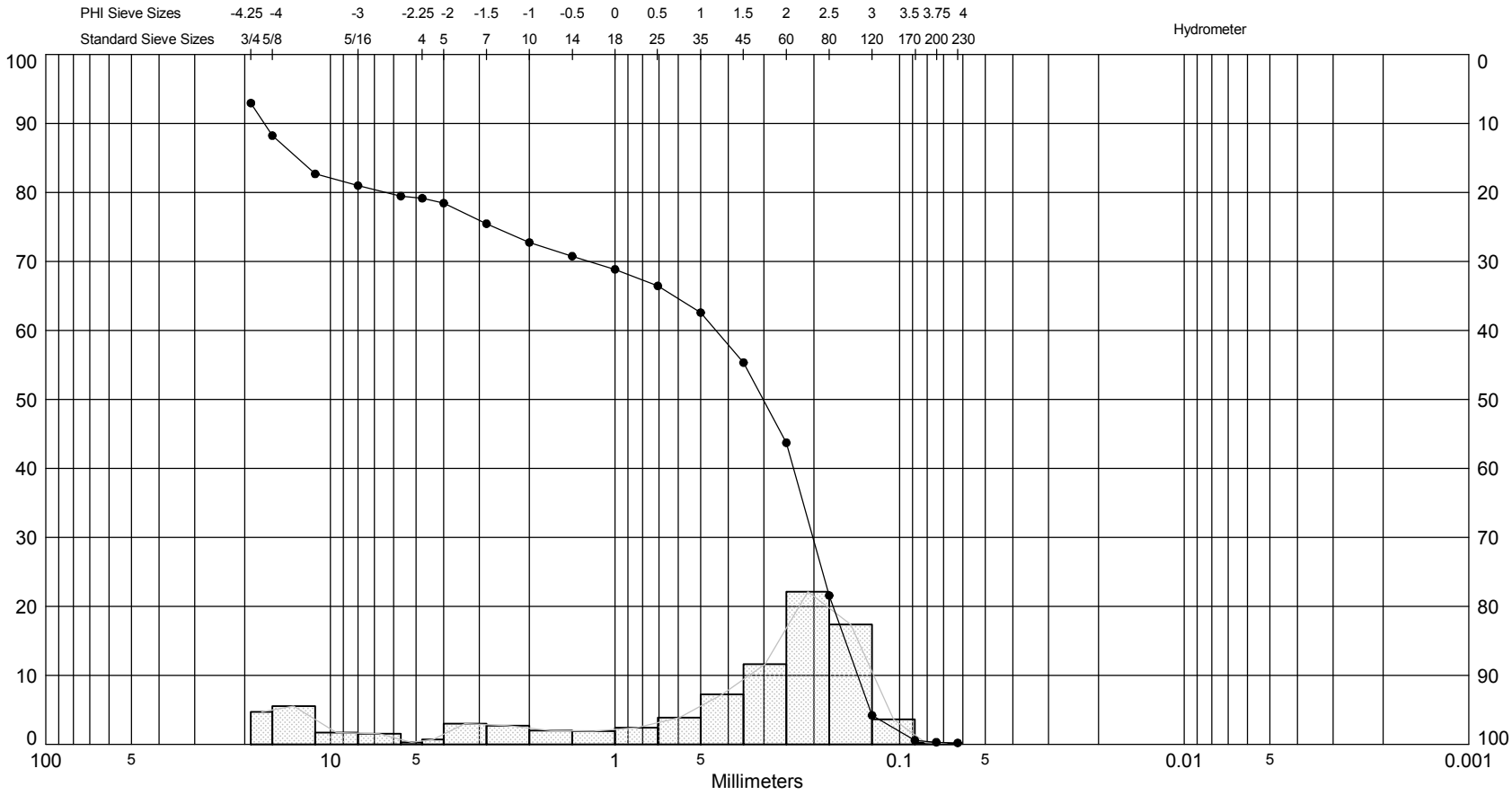
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y110 #1	—●—	SW WITH GRAVEL		#200 0.31 #230 0.21	1.10	13.50	1.73	0.5	-0.63	2.36	2.21

Comments: SAND AND SHELL

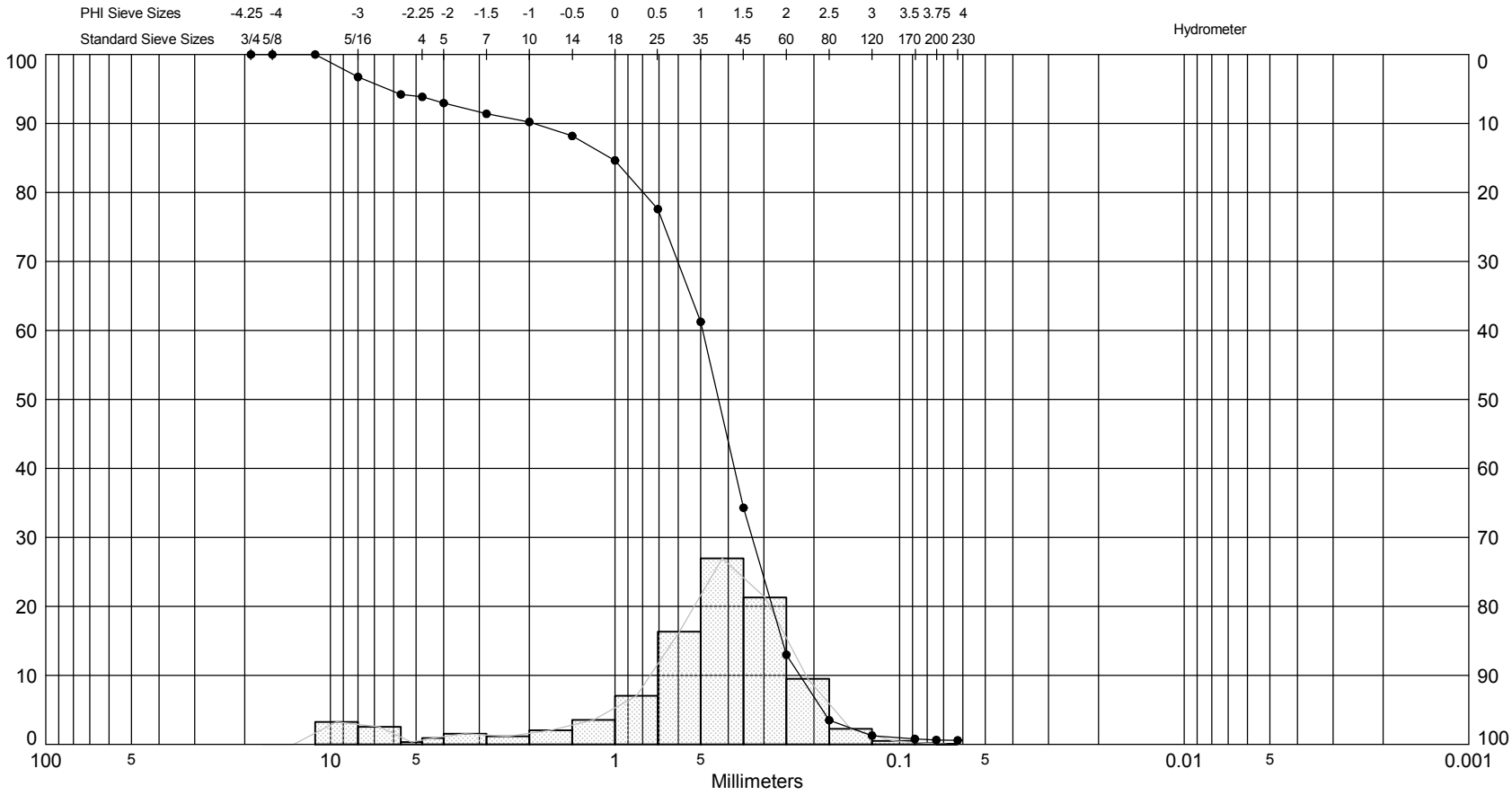
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y110 #2	—●—		SW	#200 - 0.63 #230 - 0.58	0.40	1.00	1.21	0.88	-1.57	5.32	1.34

Comments: COARSE QUARTZ SAND, FEW PEBBLES

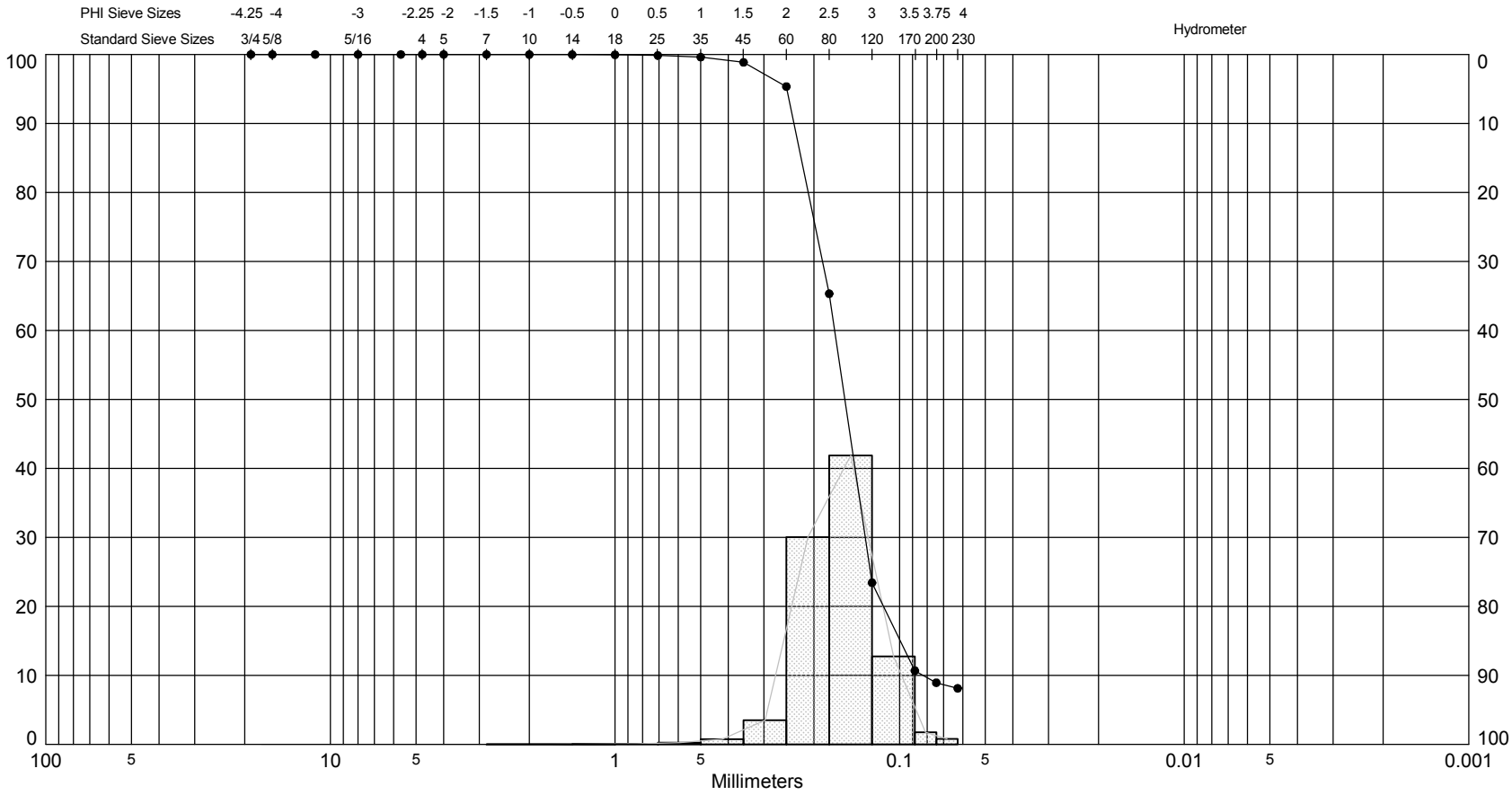
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y110 #3	—●—		SP-SM	#200 - 8.93 #230 - 8.12	0.60	1.60	2.68	2.62	-0.45	5.96	0.45

Comments: SAND, SOME YELLOW FINES

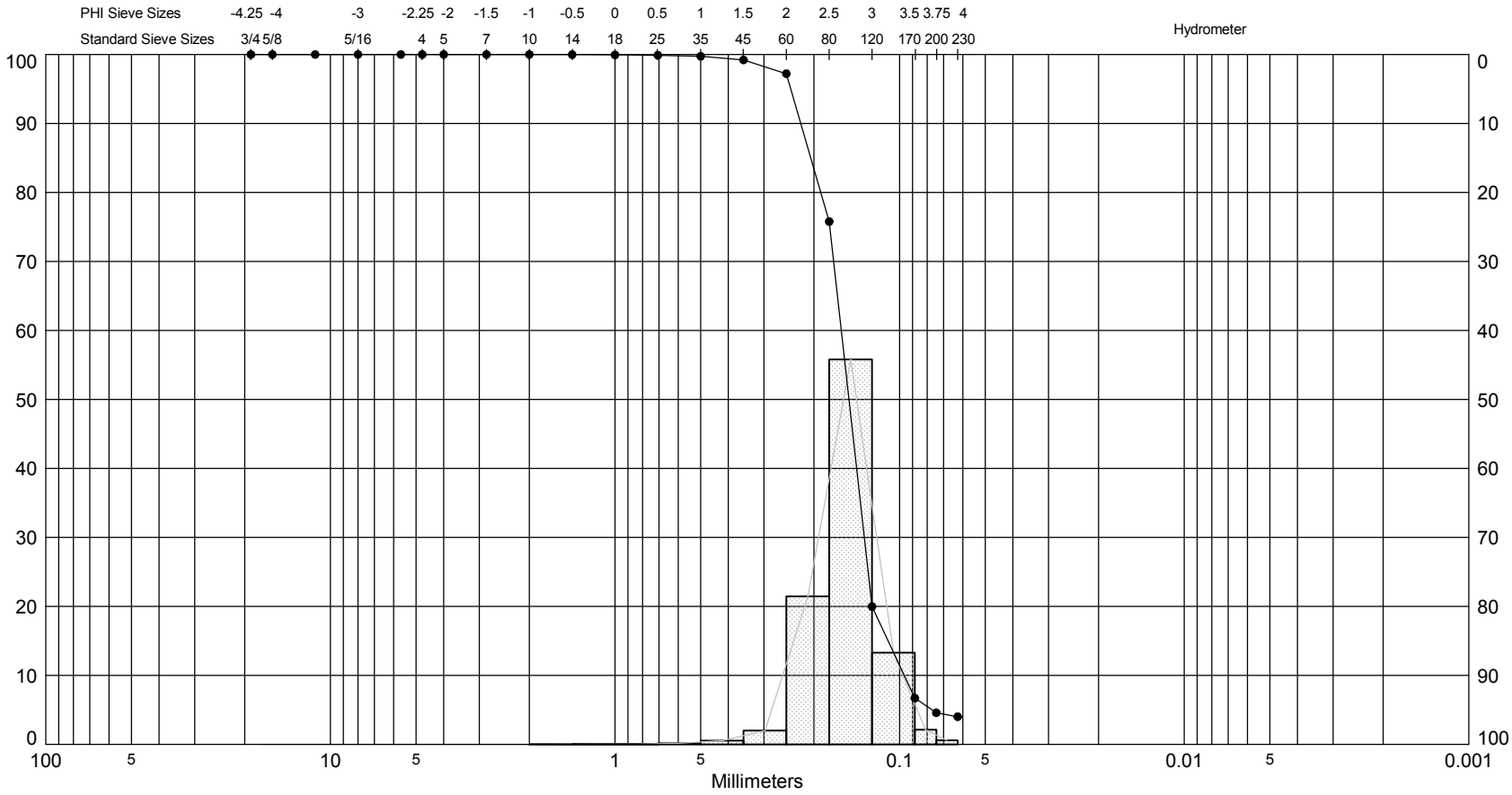
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y110 #4	—●—		SP	#200 - 4.58 #230 - 4.01	0.70	1.80	2.73	2.7	-0.63	7.25	0.4

Comments: SAND, SOME YELLOW FINES

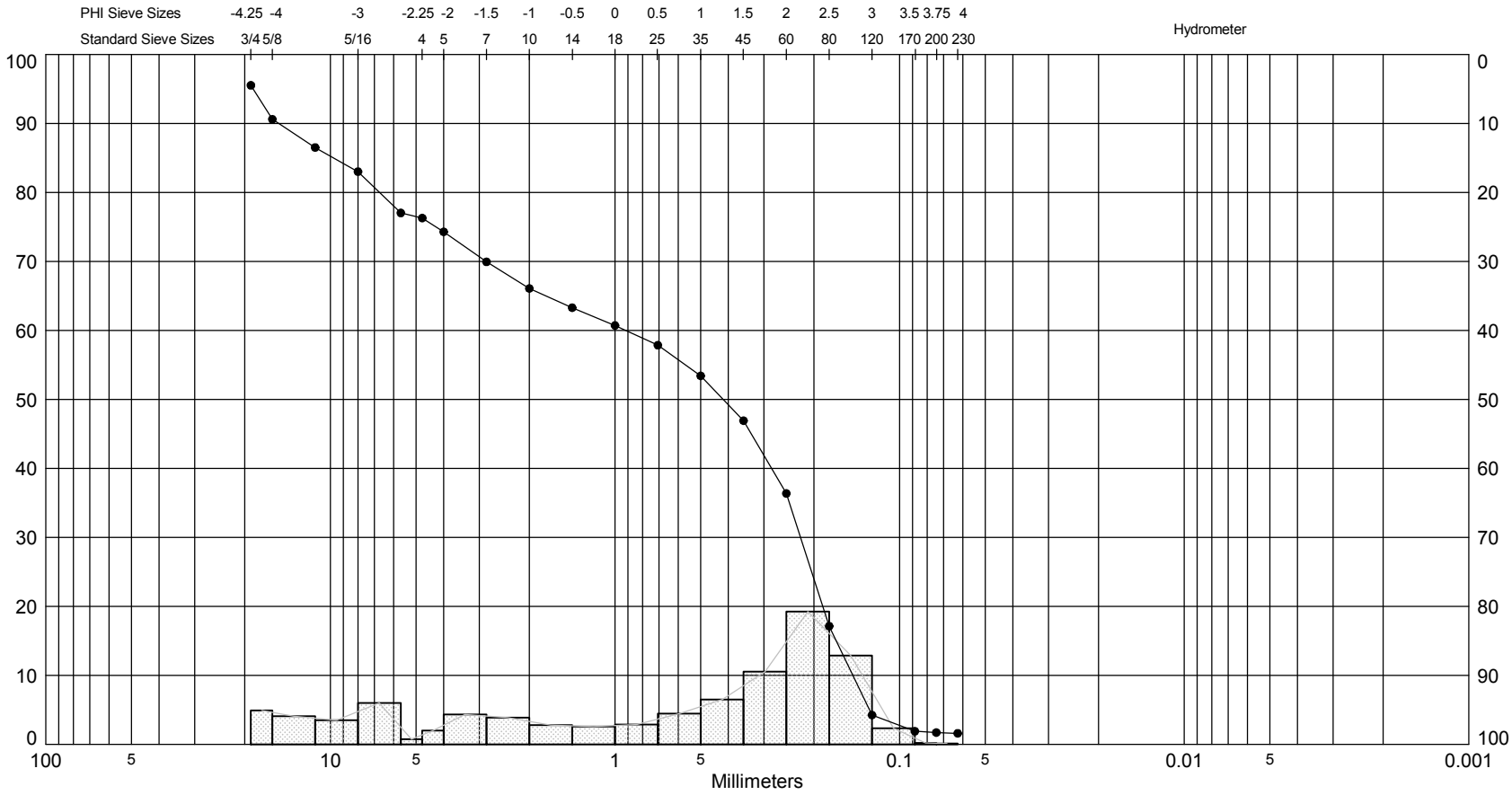
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y114 #1	—●—		SW WITH GRAVEL	#200 1.71 #230 1.60	1.40	23.30	1.26	0.14	-0.36	1.8	2.3

Comments: SAND, ROCKS, SHELL, FINES

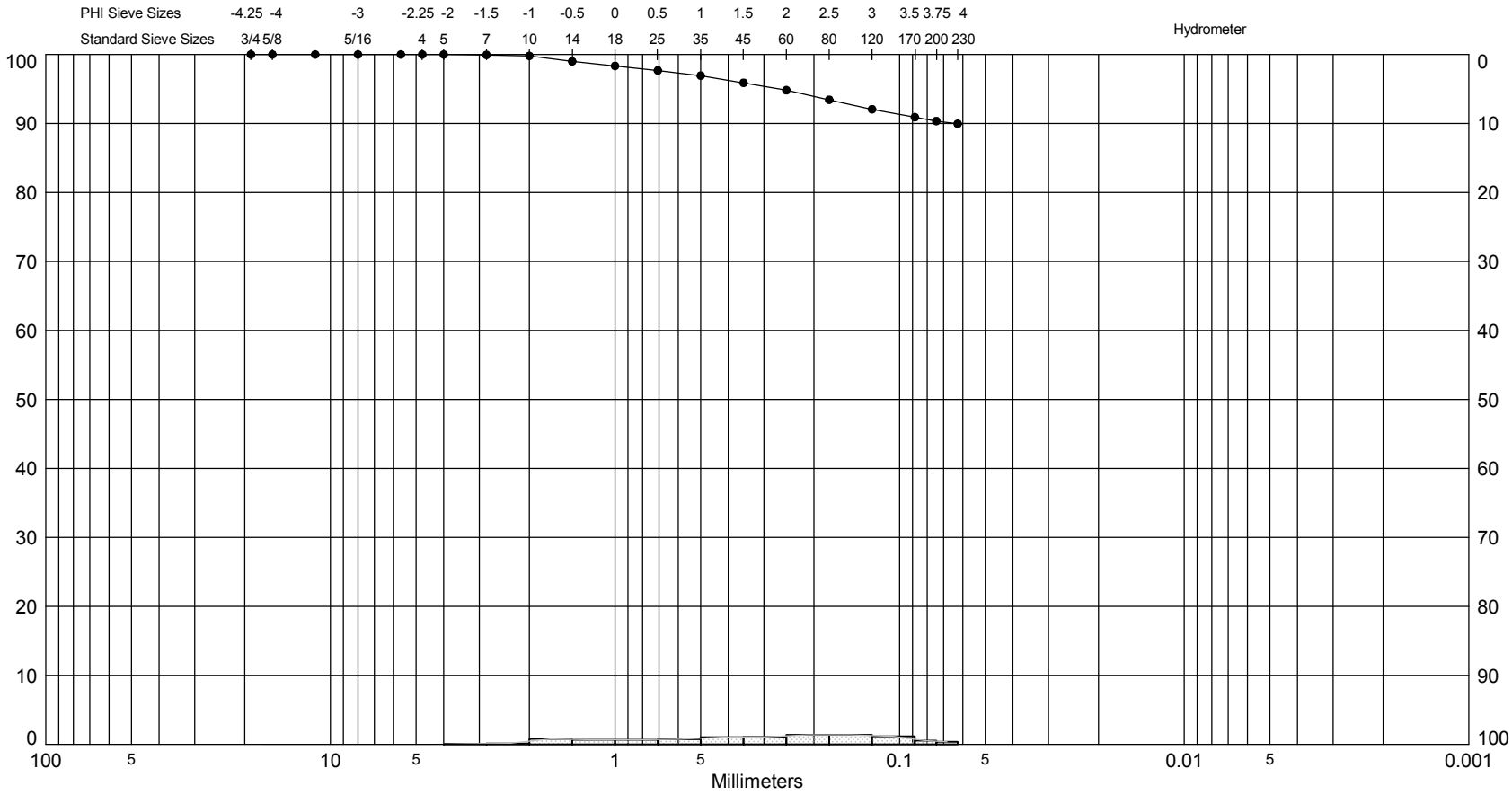
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y114 #2	—●—		ML-CL	#200 - 90.35 #230 - 89.96	15.60	11.30		1.7	-0.4	2.14	1.42

Comments: PEAT

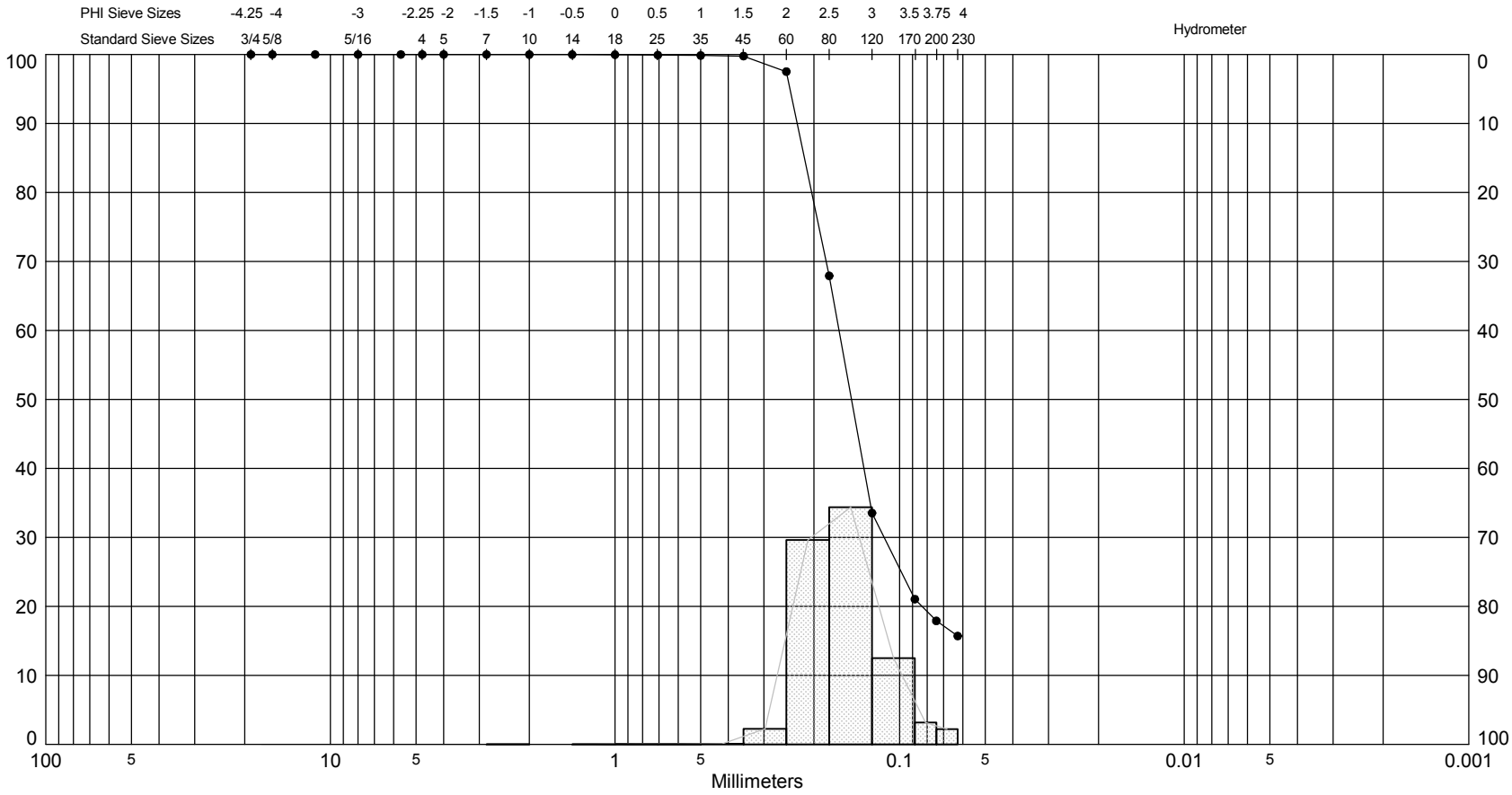
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
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Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y115 #1	—●—		SM	#200 - 17.90 #230 - 15.70	0.80	0.90	2.76	2.68	0.28	4.12	0.47

Comments: FINE WHITE SAND, DARK FINES, LITTLE PEAT

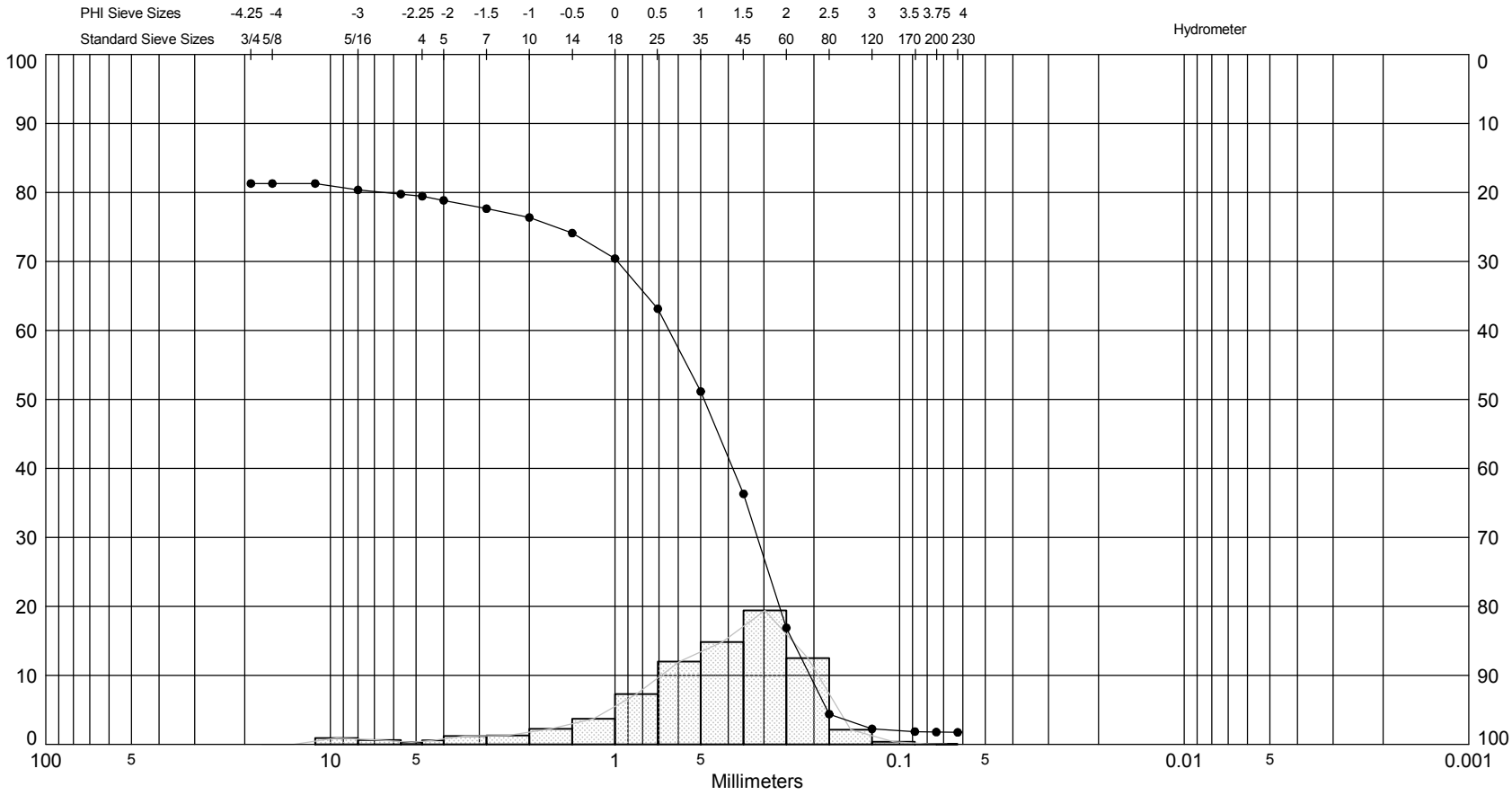
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y115 #2	—●—		SW WITH GRAVEL	#200 1.78 #230 1.74	0.40	0.70	1.04	0.04	0.93	2.25	1.4

Comments: 1 BIG ROCK, COARSE QUARTZ SAND, PEBBLES, DARK FINES

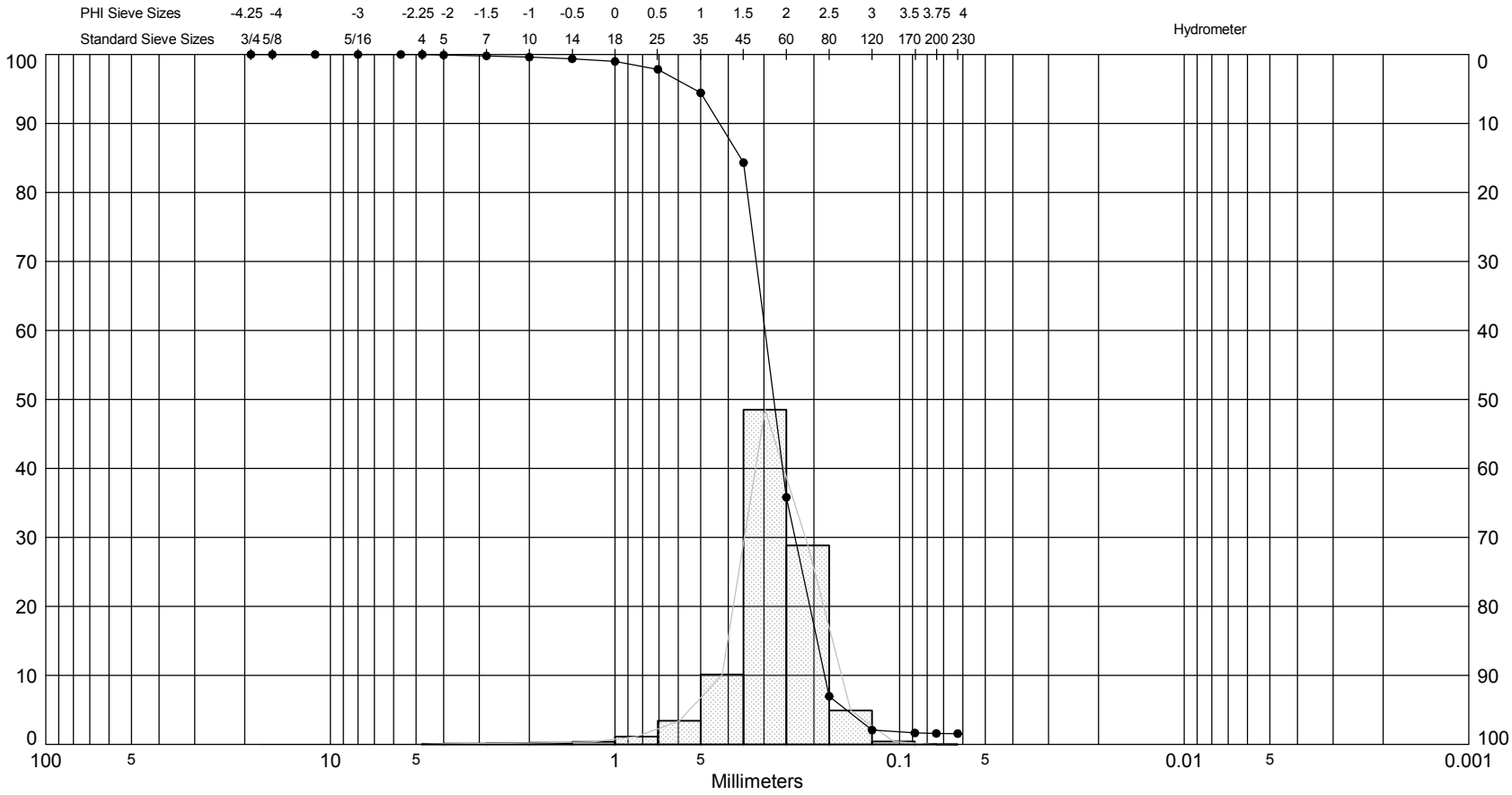
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
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Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y115 #3	—●—		SP	#200 - 1.58 #230 - 1.56	0.30	0.60	1.85	1.82	-1.66	11.05	0.54

Comments: QUARTZ SAND, DARK PEATY FINES

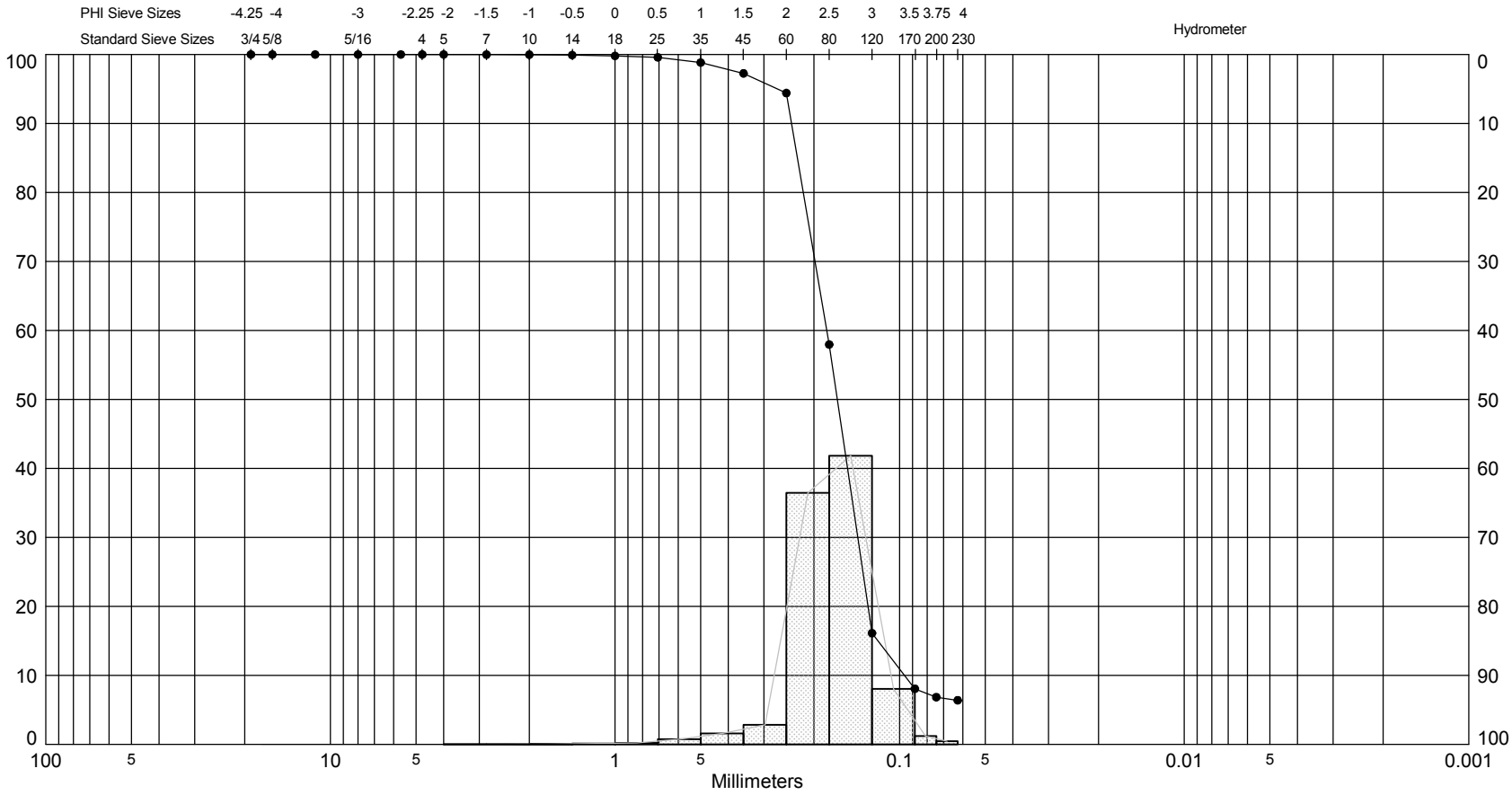
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y115 #4	—●—		SP-SM	#200 - 6.84 #230 - 6.39	0.40	1.70	2.6	2.53	-1.3	10.02	0.48

Comments: QUARTZ SAND, DARK FINES

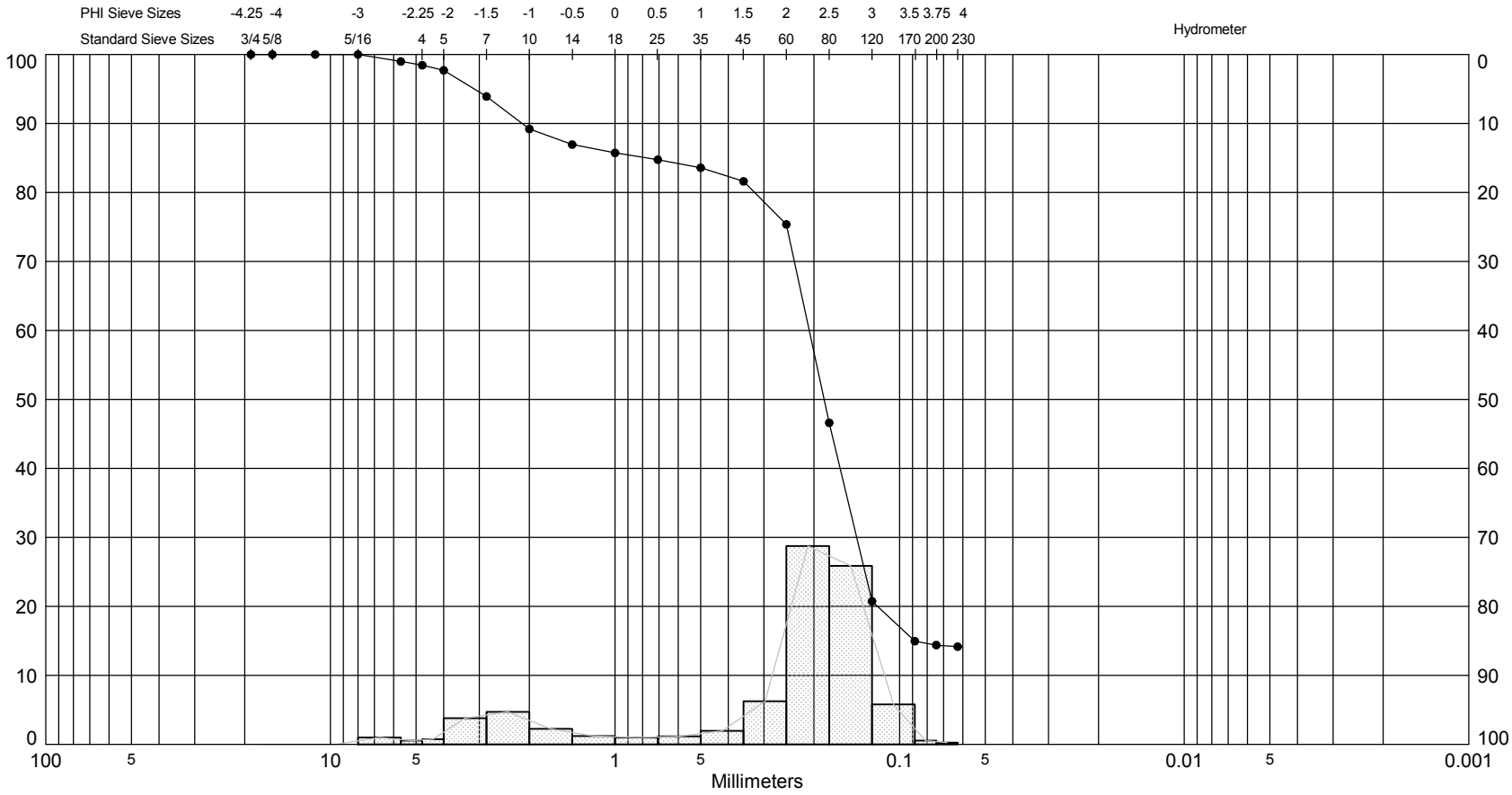
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y119 #1	—●—		SM	#200 - 14.39 #230 - 14.16	4.90	9.50	2.44	1.77	-1.52	4.04	1.53

Comments: COARSE QUARTZ SAND, PEBBLES, CLAYBALLS

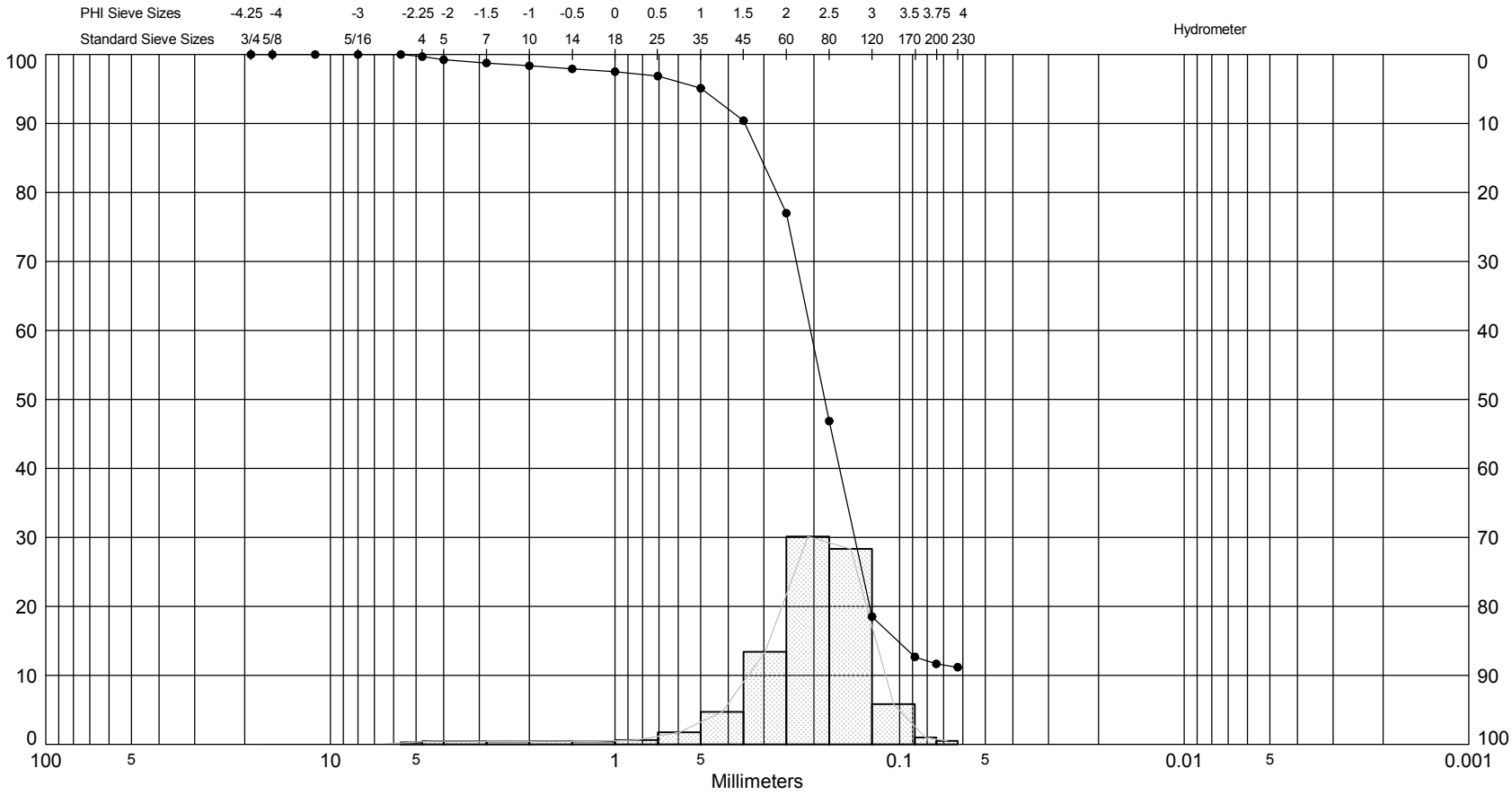
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y119 #2	—●—		SW-SM	#200 - 11.67 #230 - 11.18	1.30	1.30	2.45	2.23	-2.39	11.93	0.86

Comments: PEATY MEDIUM SAND, TRACE PEBBLES

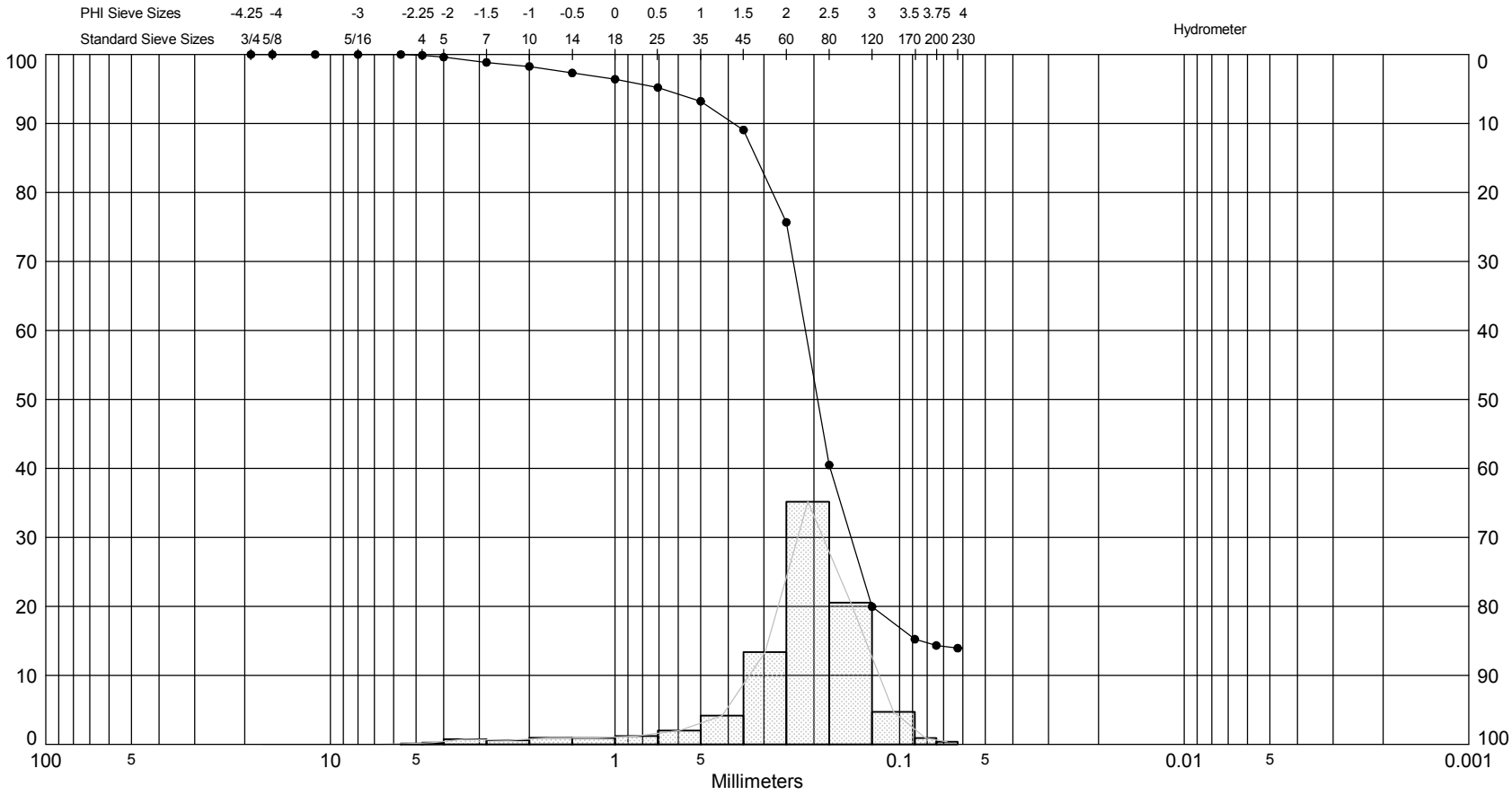
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y119 #3	—●—		SM	#200 - 14.33 #230 - 13.94	4.10	2.10	2.36	2.12	-2.12	9.3	0.9

Comments: PEATY SAND

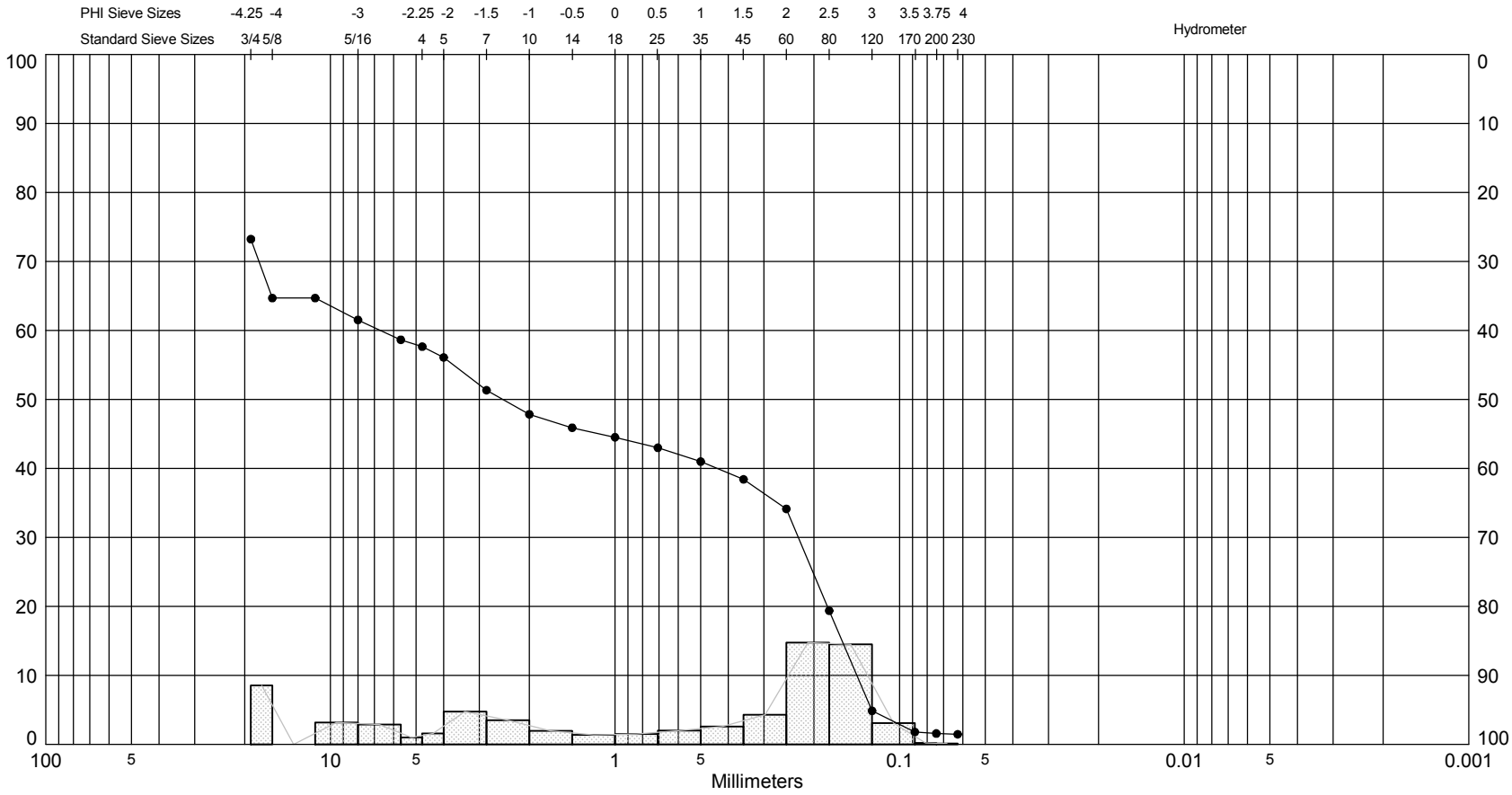
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y120 #1	—●—	SW WITH GRAVEL		#200 1.57 #230 1.46	2.00	8.00		-0.95	0.9	1.94	2.43

Comments: SHELL AND ROCK

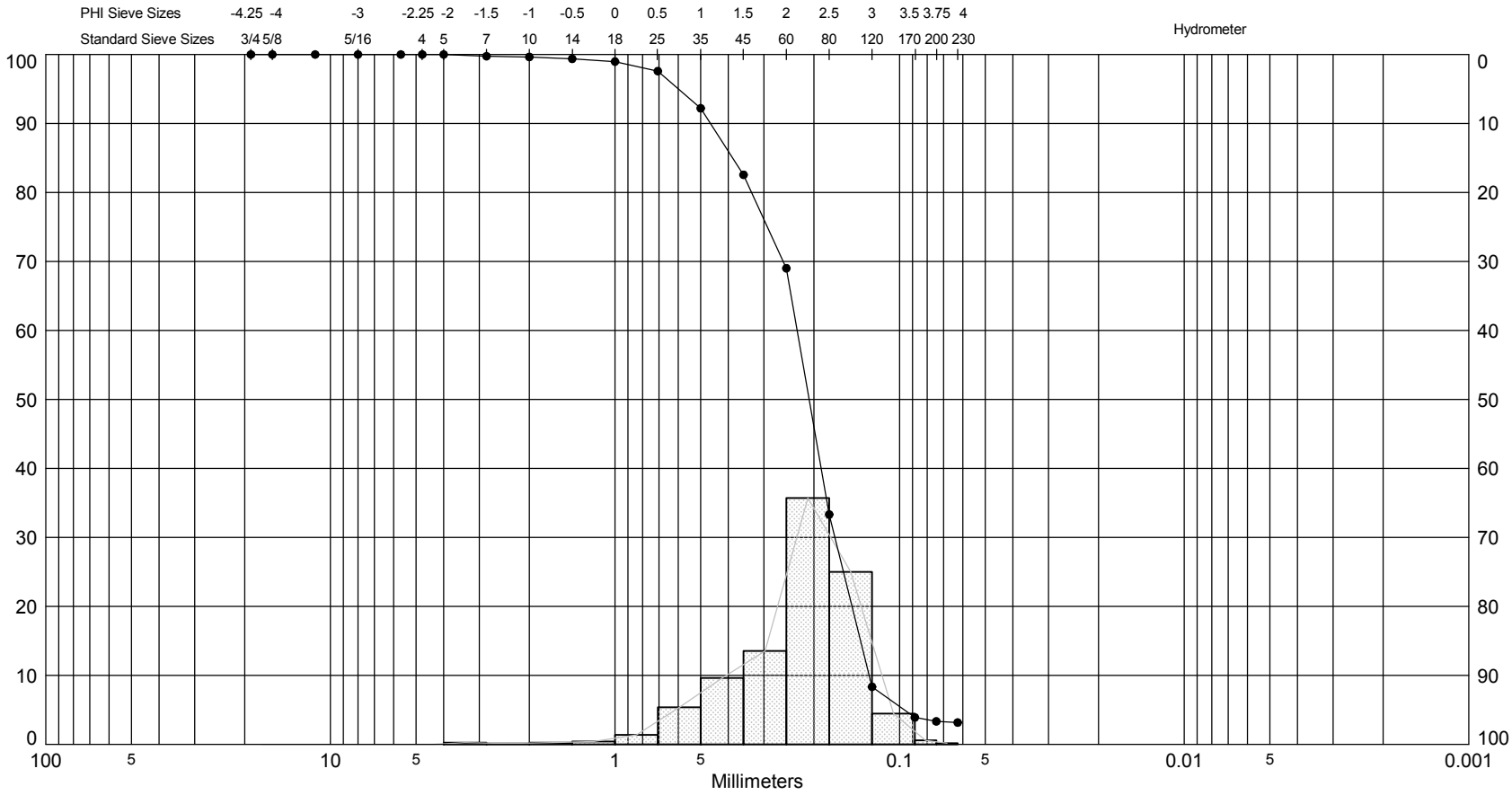
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y120 #2	—●—		SP	#200 - 3.33 #230 - 3.16	0.30	1.50	2.27	2.12	-1.19	5.78	0.73

Comments:

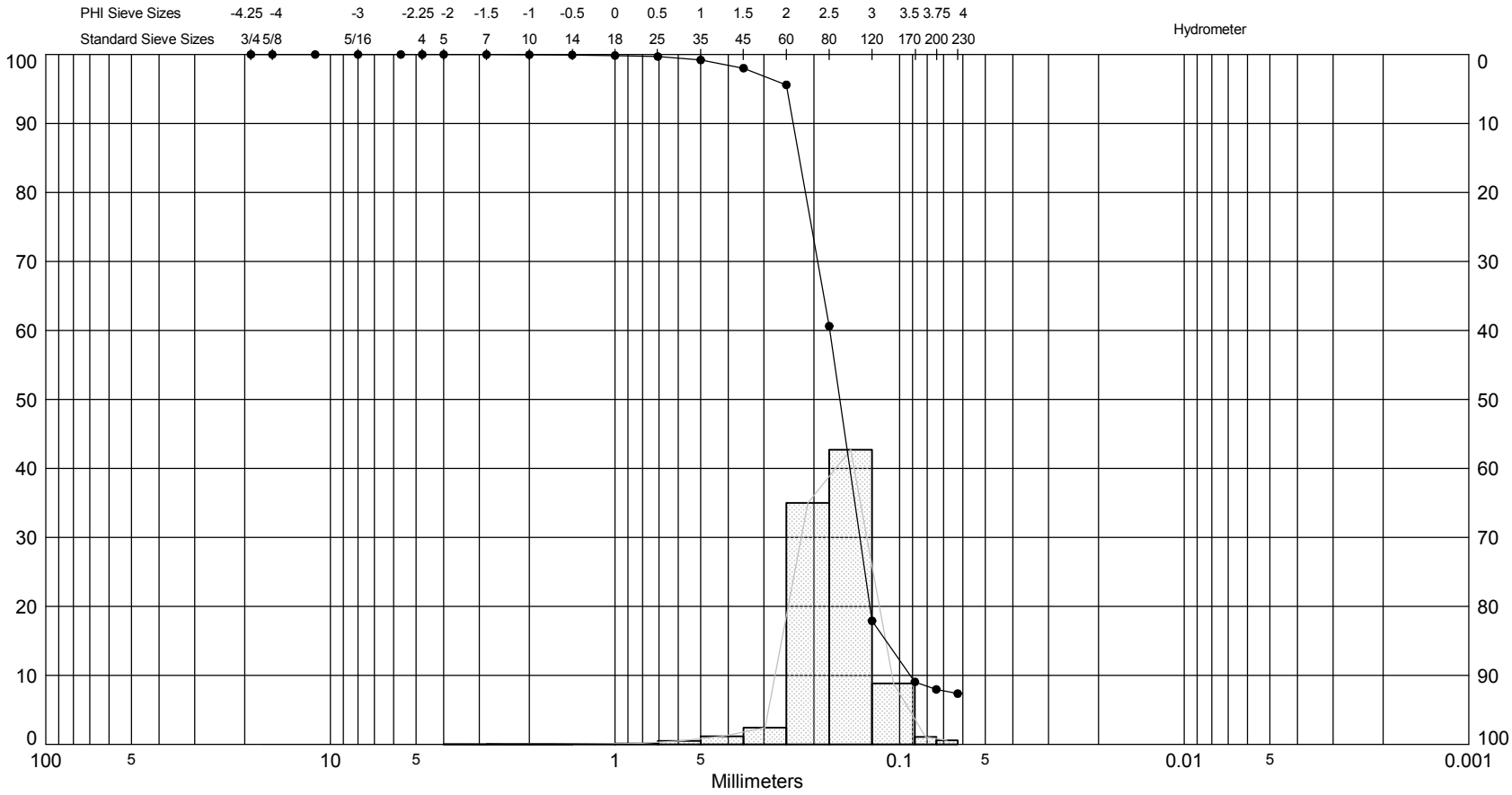
Depths and elevations based on measured values

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Sample Information	
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Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y120 #3	—●—		SP-SM	#200 - 7.96 #230 - 7.36	0.90	2.10	2.62	2.56	-1	9.19	0.45

Comments:

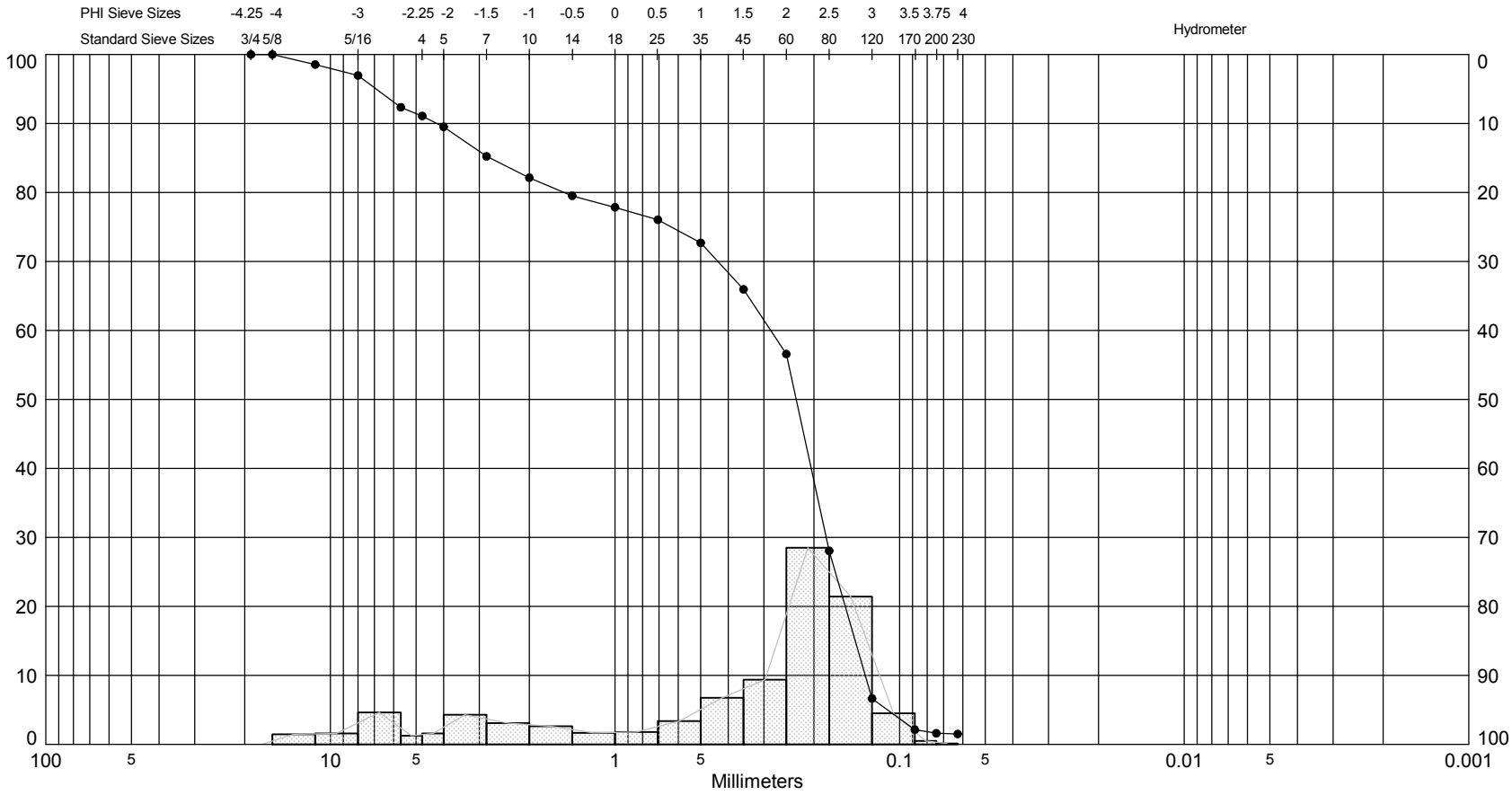
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y121 #1	—●—		SW	#200 - 1.61 #230 - 1.50	0.70	8.30	2.12	1.26	-1.2	3.14	1.89

Comments: SAND, PEBBLES

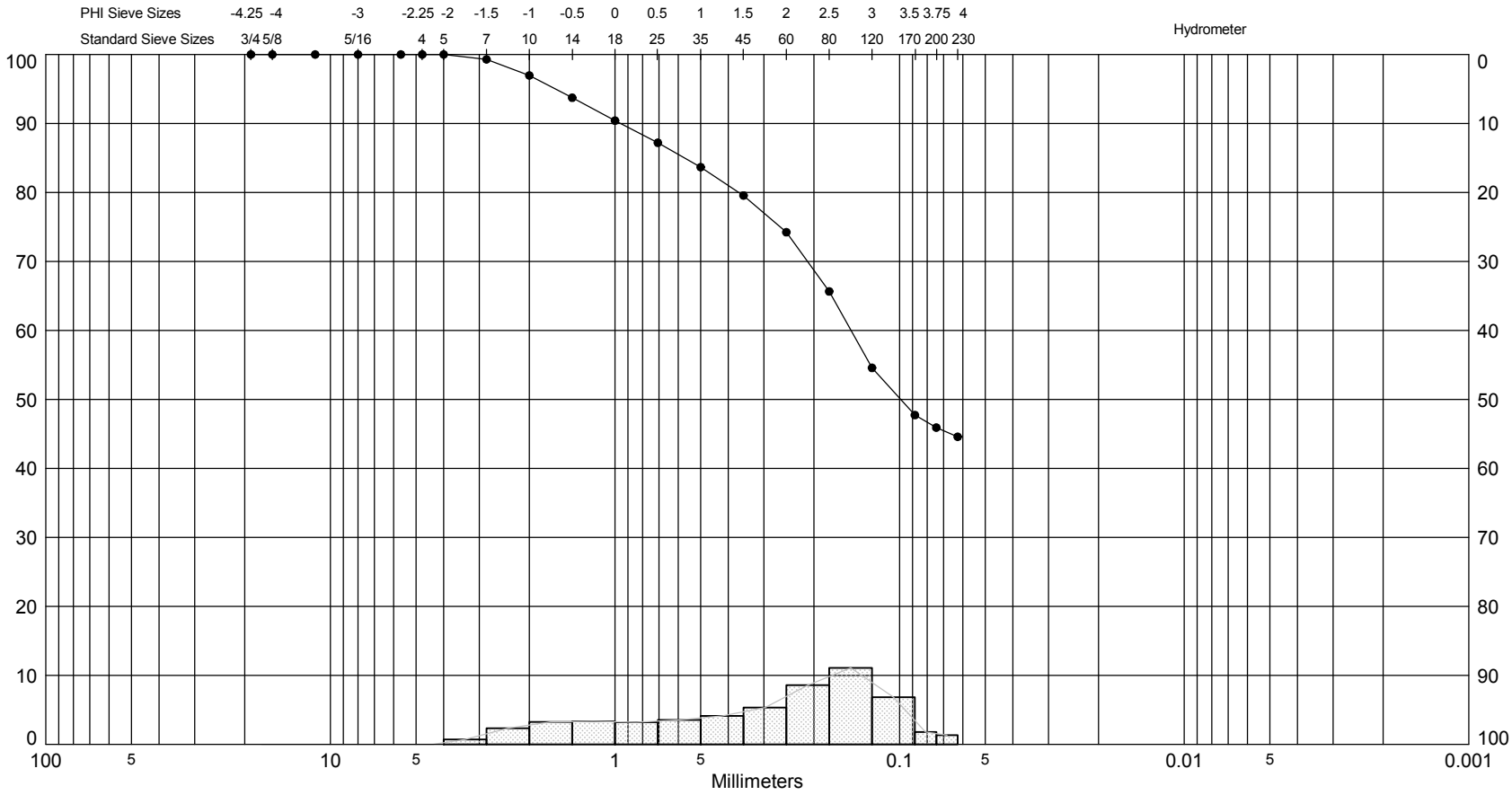
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y121 #2	—●—		SM	#200 - 45.92 #230 - 44.58	12.90	6.50	3.33	1.7	-0.65	2.35	1.45

Comments: PEAT

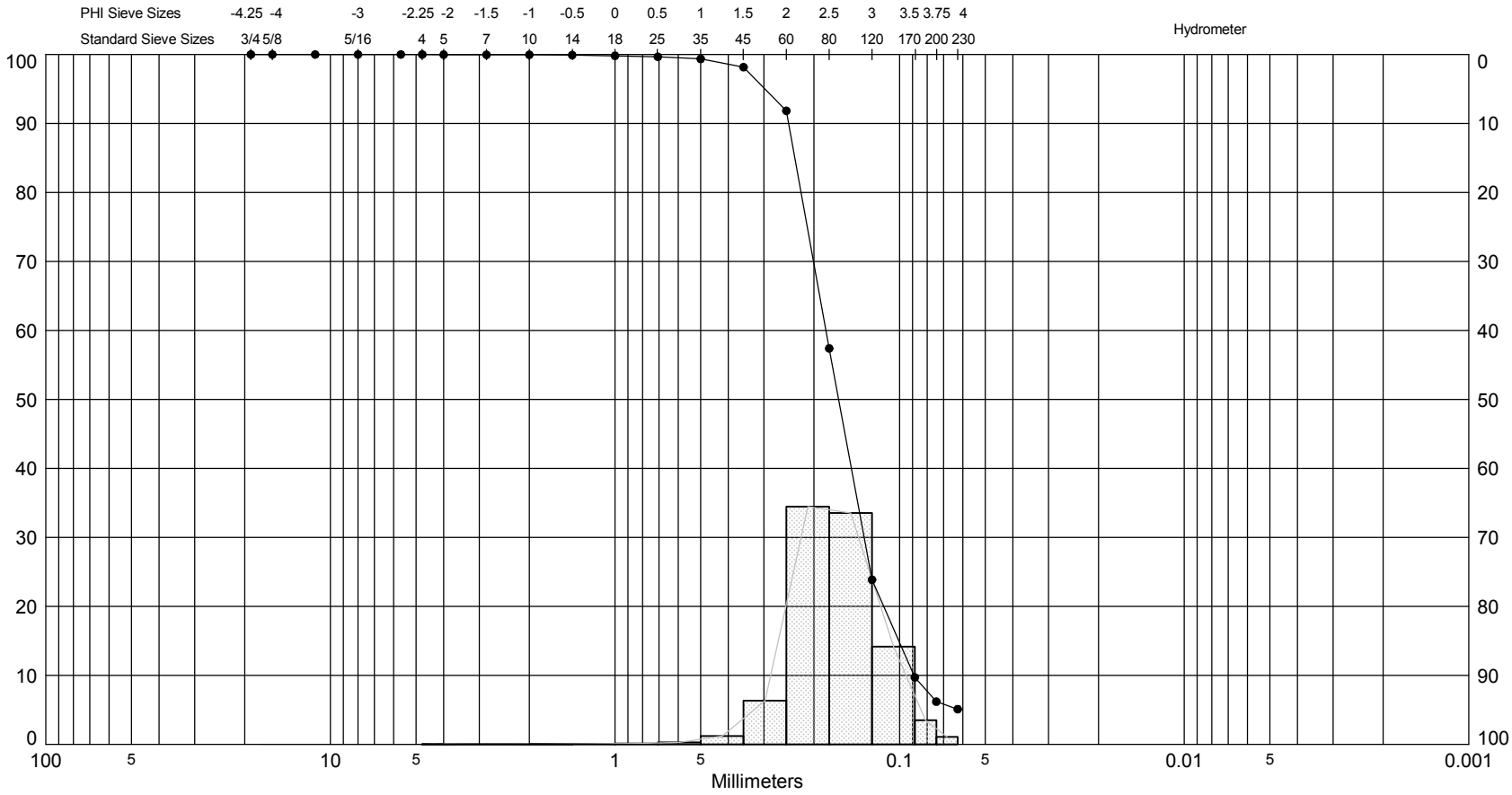
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y121 #3	—●—		SP-SM	#200 - 6.19 #230 - 5.10	1.00	1.00	2.61	2.59	-0.64	7.34	0.54

Comments: MEDIUM SAND, DARK FINES, TRACE PEAT

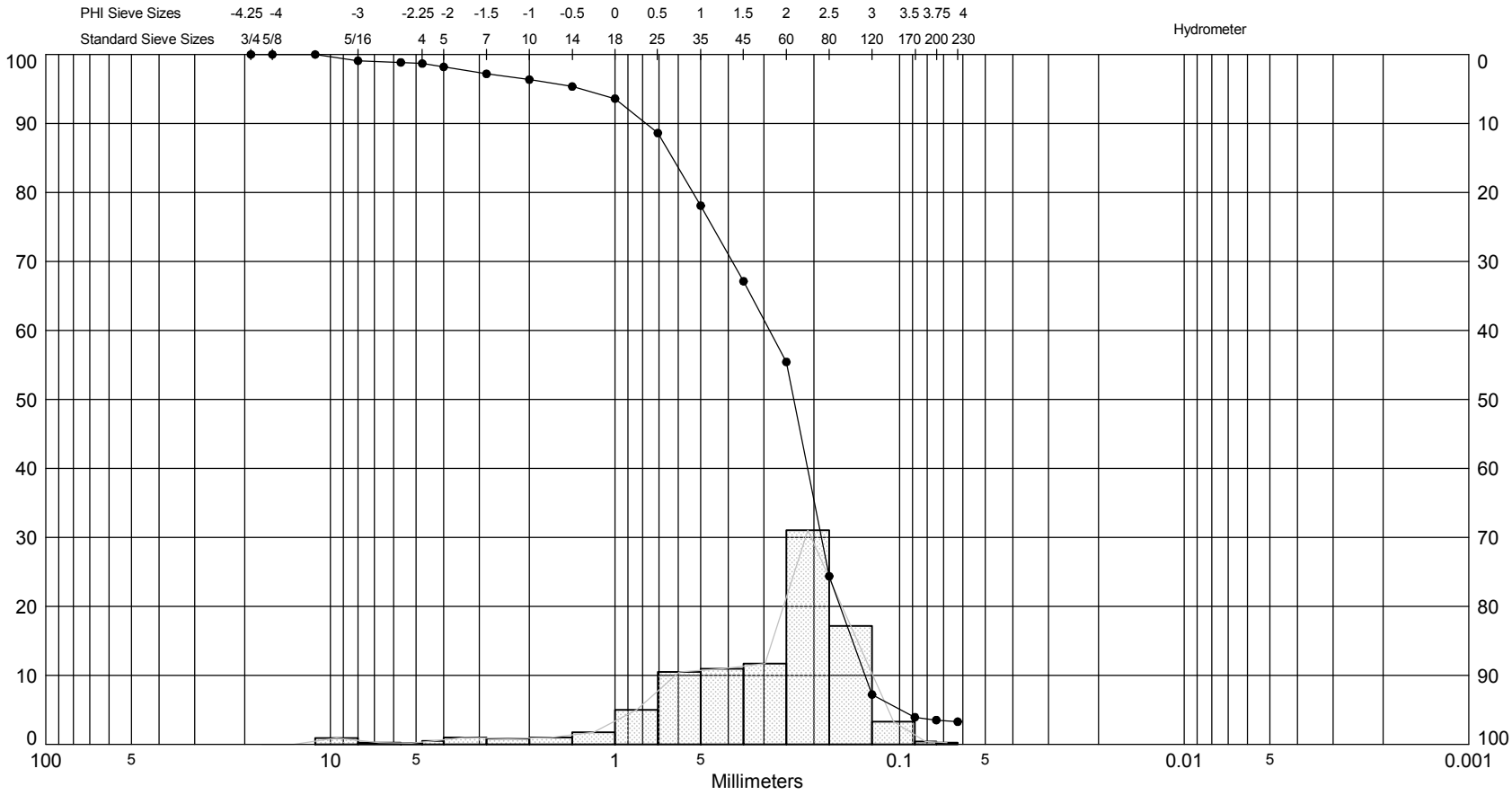
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y121 #4	—●—		SW	#200 - 3.52 #230 - 3.28	0.80	0.80	2.09	1.7	-1.61	6.55	1.16

Comments: COARSE SAND, DARK FINES

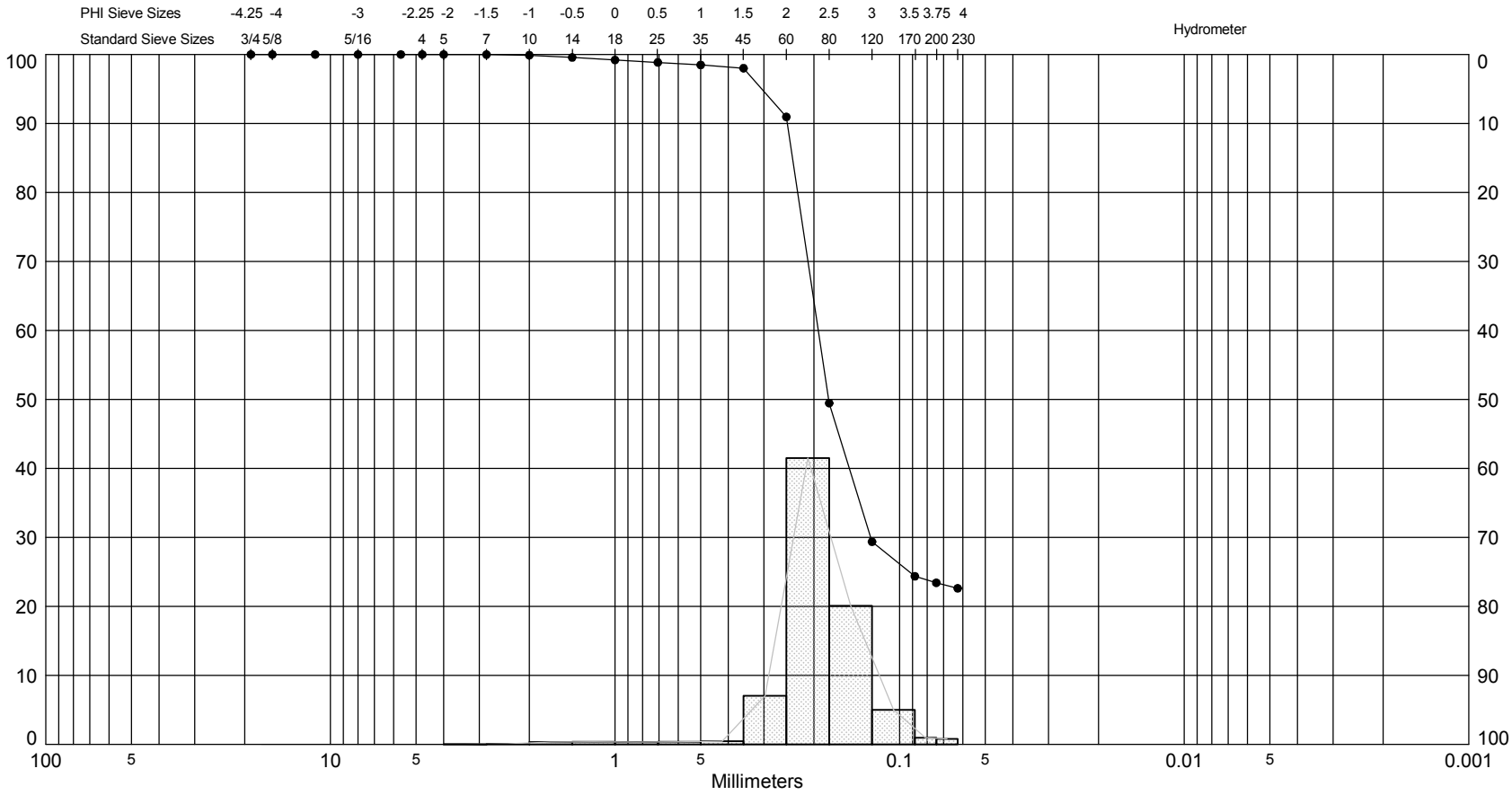
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y122 #1	—●—		SM	#200 - 23.42 #230 - 22.62	2.50	2.20	2.49	2.38	-1.57	12.38	0.55

Comments: VERY PEATY SAND

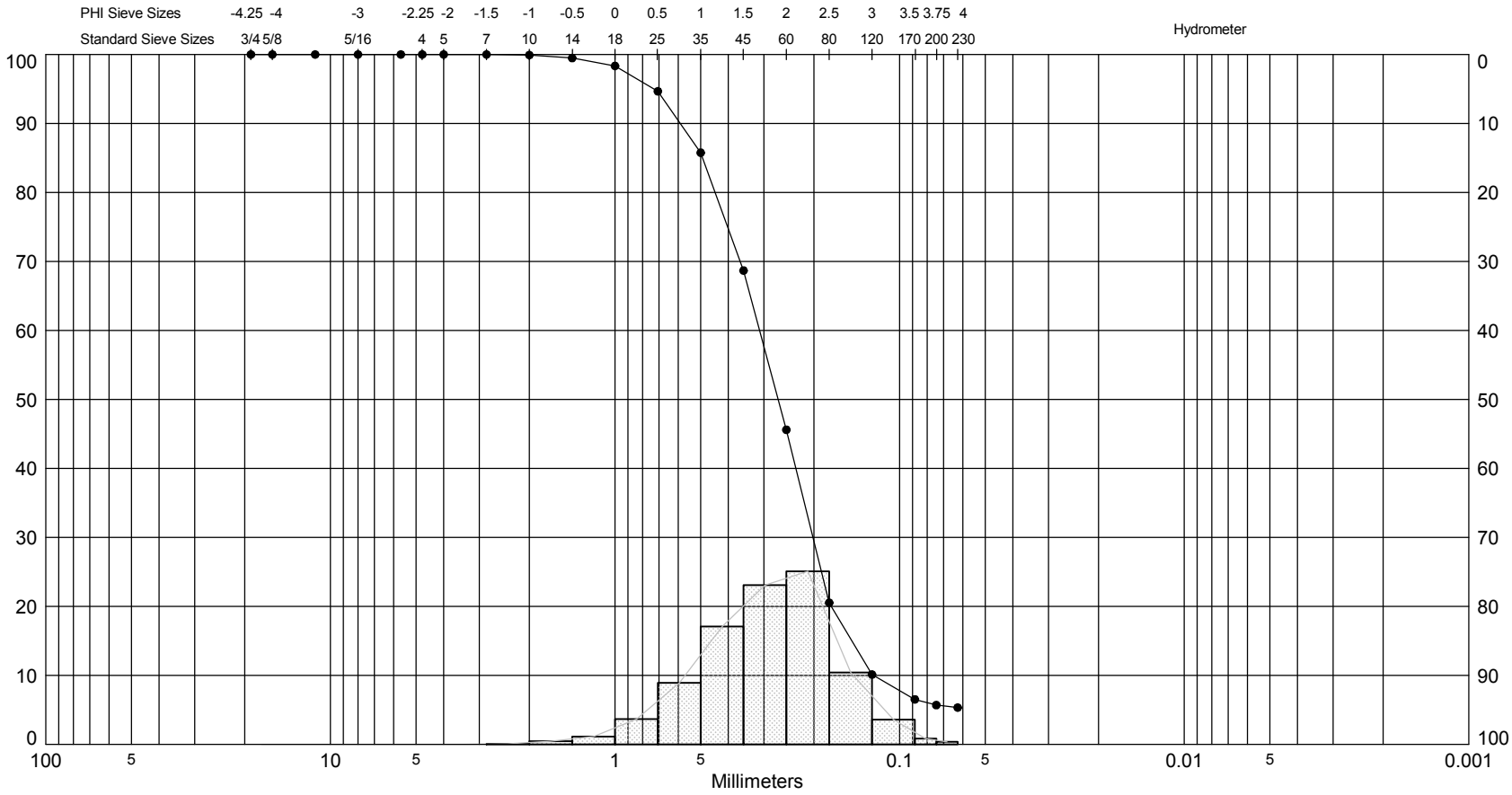
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y122 #2	—●—		SP-SM	#200 - 5.69 #230 - 5.33	0.60	0.70	1.9	1.79	-0.32	3.31	0.79

Comments:

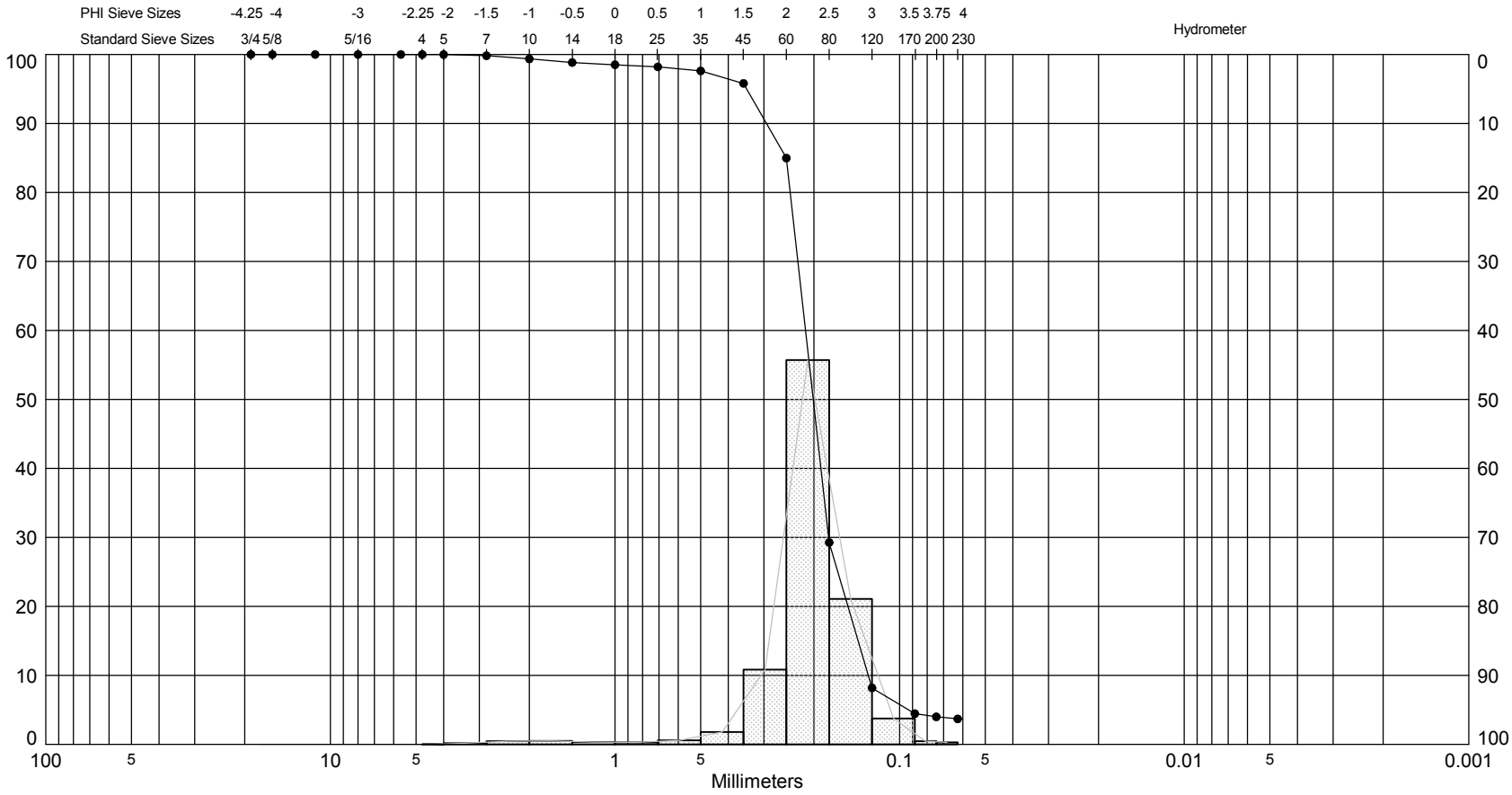
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y122 #3	—●—		SP	#200 - 3.99 #230 - 3.69	0.50	0.80	2.31	2.27	-2.67	17.3	0.59

Comments: QUARTZ SAND, SOME PEAT

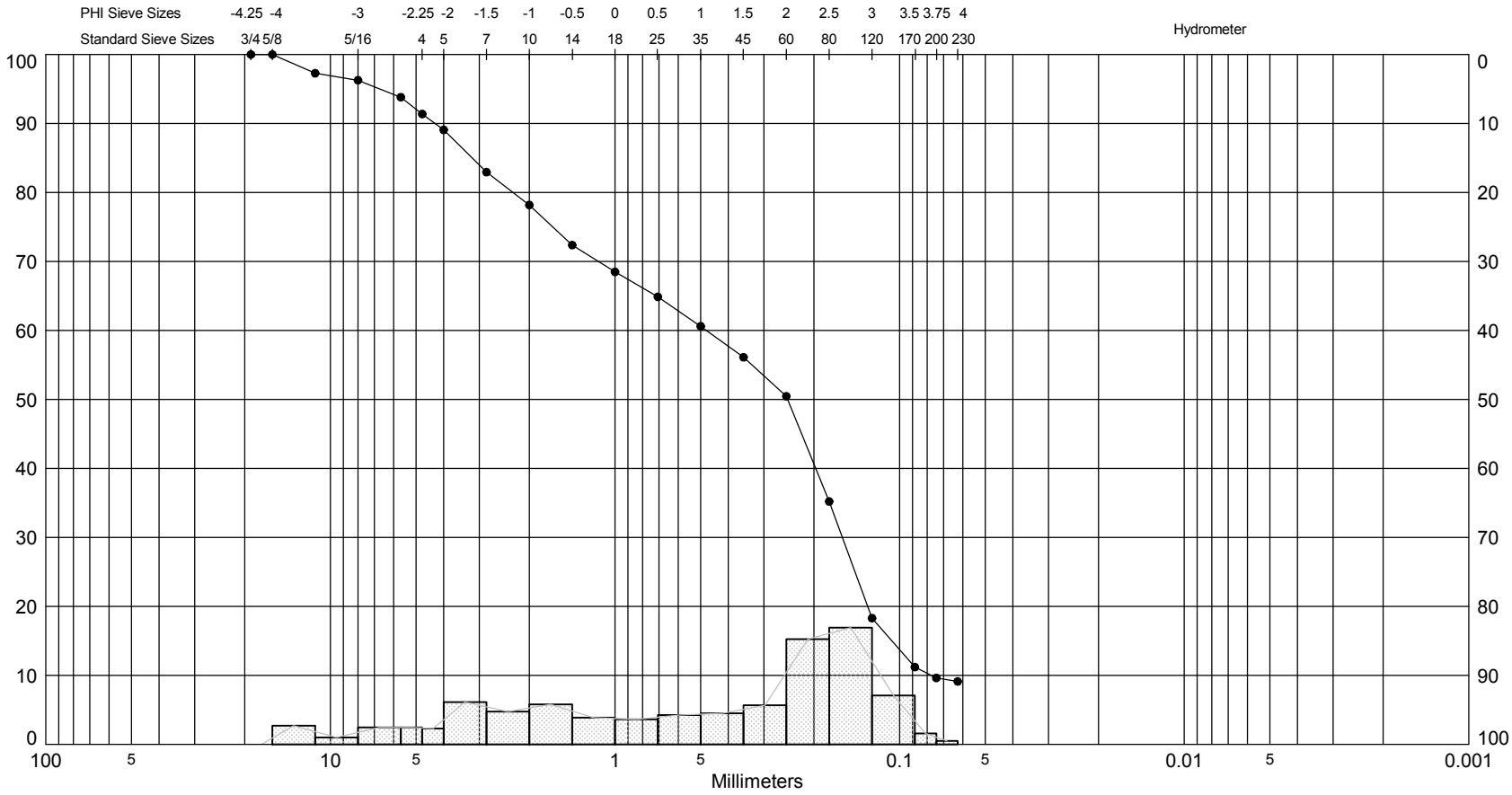
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y126 #1	—●—		SW-SM	#200 - 9.63 #230 - 9.12	2.60	20.50	2.01	0.86	-0.59	2.07	2.07

Comments: BLUE/GRAY SHELL, PEBBLES, SILT, SAND

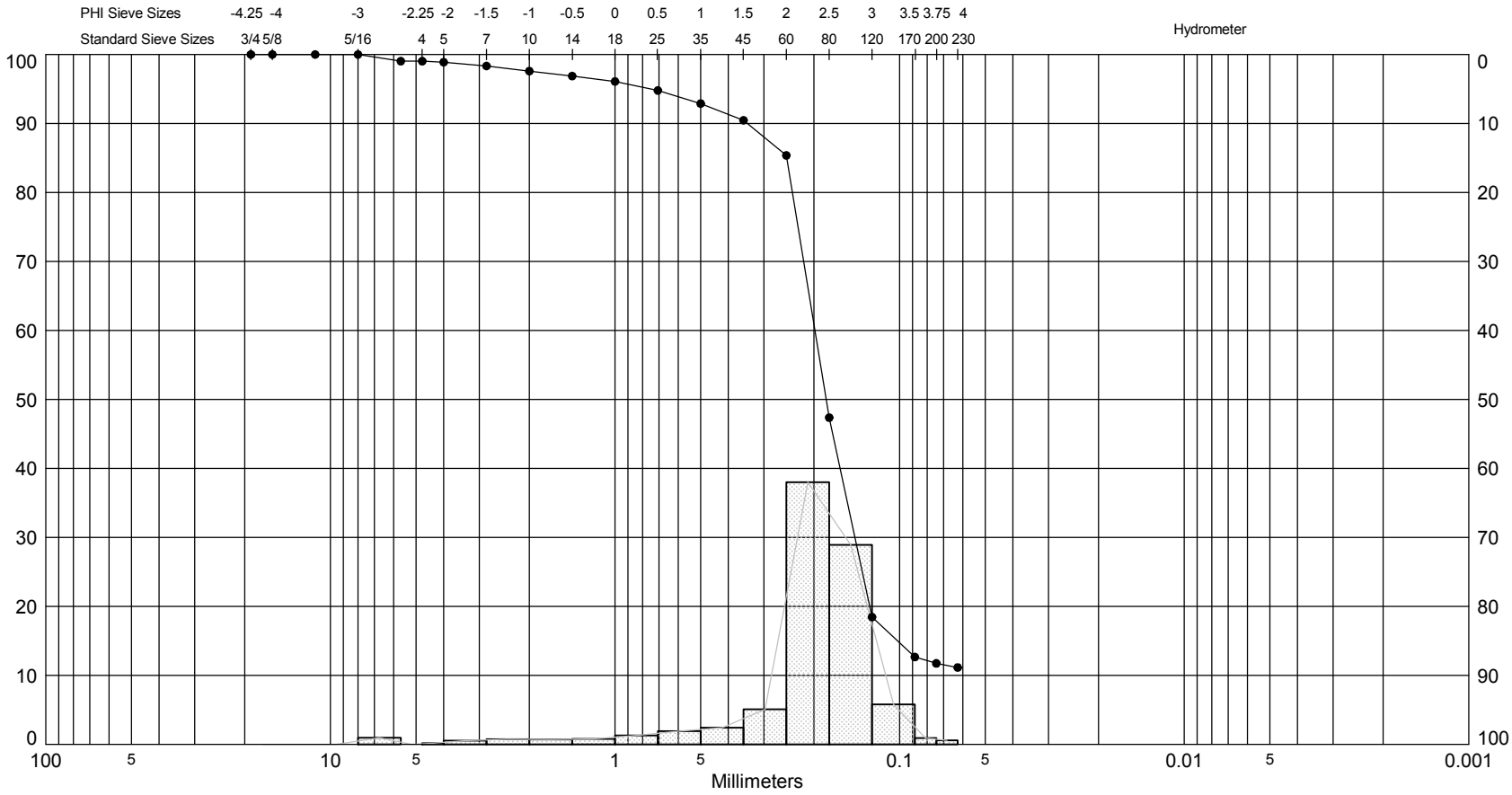
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y126 #2	—●—		SW-SM	#200 - 11.74 #230 - 11.14	1.20	2.00	2.47	2.22	-2.74	12.39	0.98

Comments: PEATY SAND

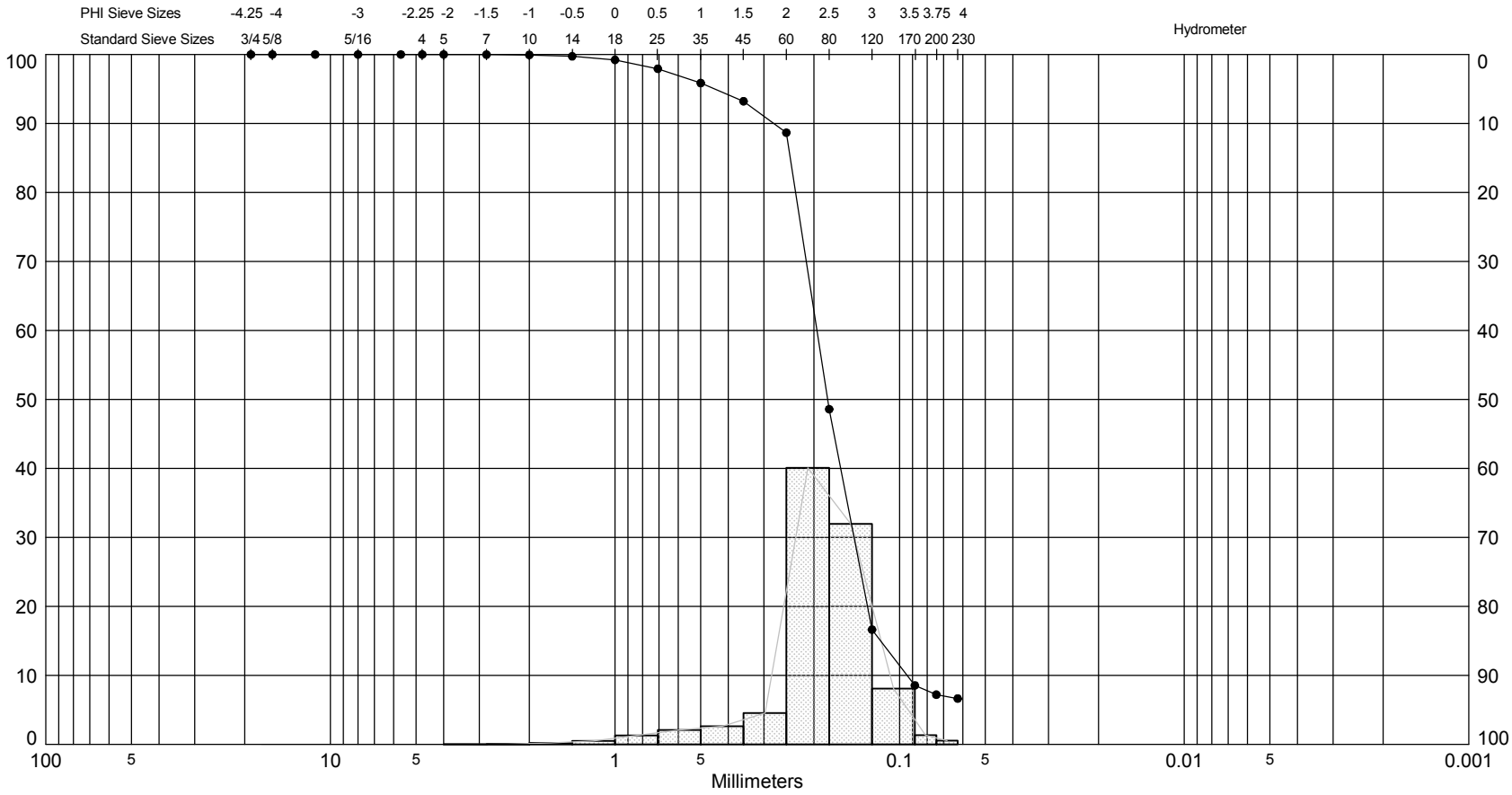
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y126 #3	—●—		SP-SM	#200 - 7.20 #230 - 6.64	1.00	1.70	2.48	2.4	-1.54	7.86	0.63

Comments:

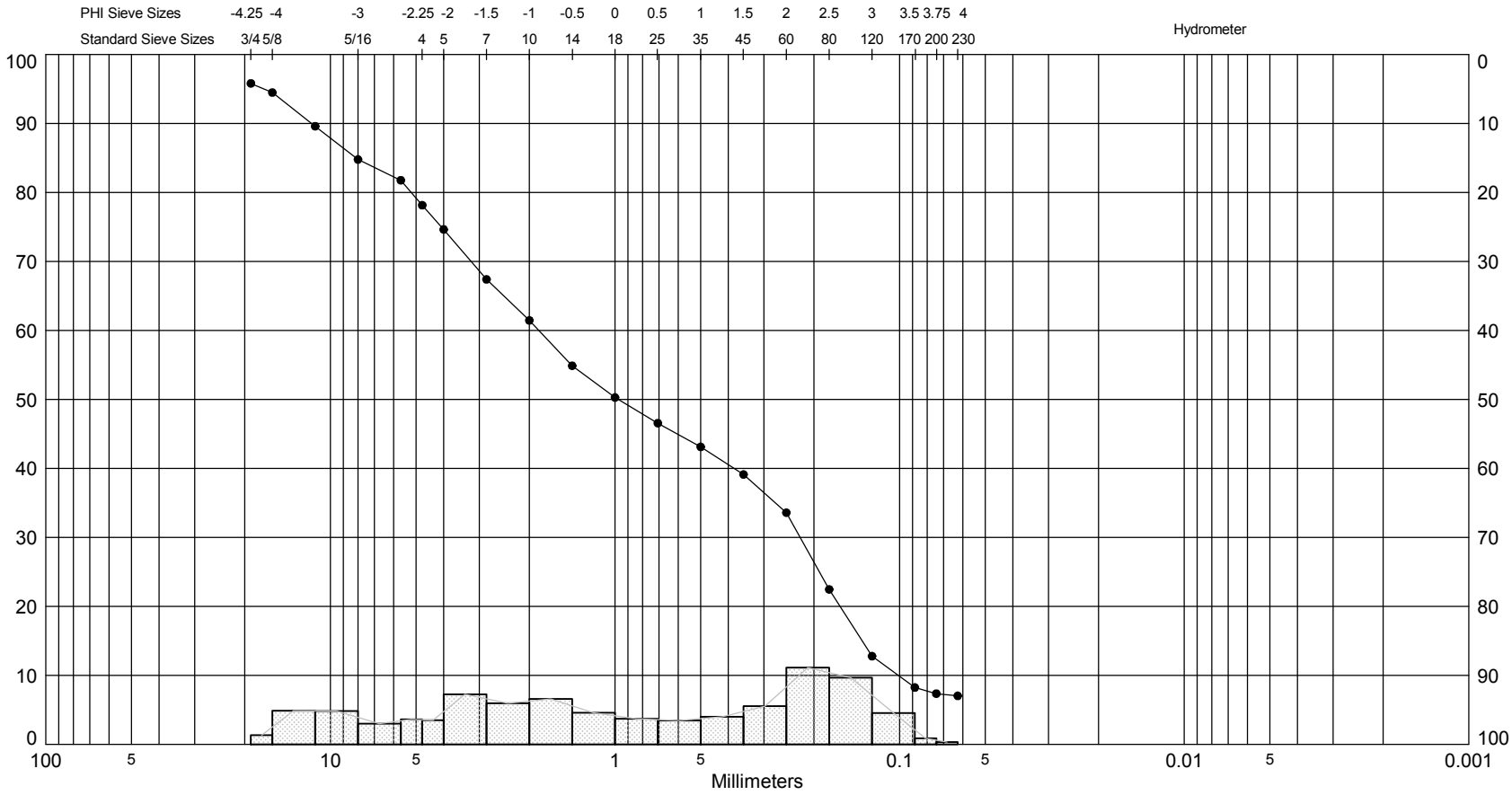
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y129 #1	—●—	SW-SM	W/ GRAVEL	#200 - 7.35 #230 - 7.03	2.00	25.80	0.04	-0.21	0.15	1.75	2.22

Comments: BLUE/GRAY OYSTER SHELLS, SAND, PEBBLES

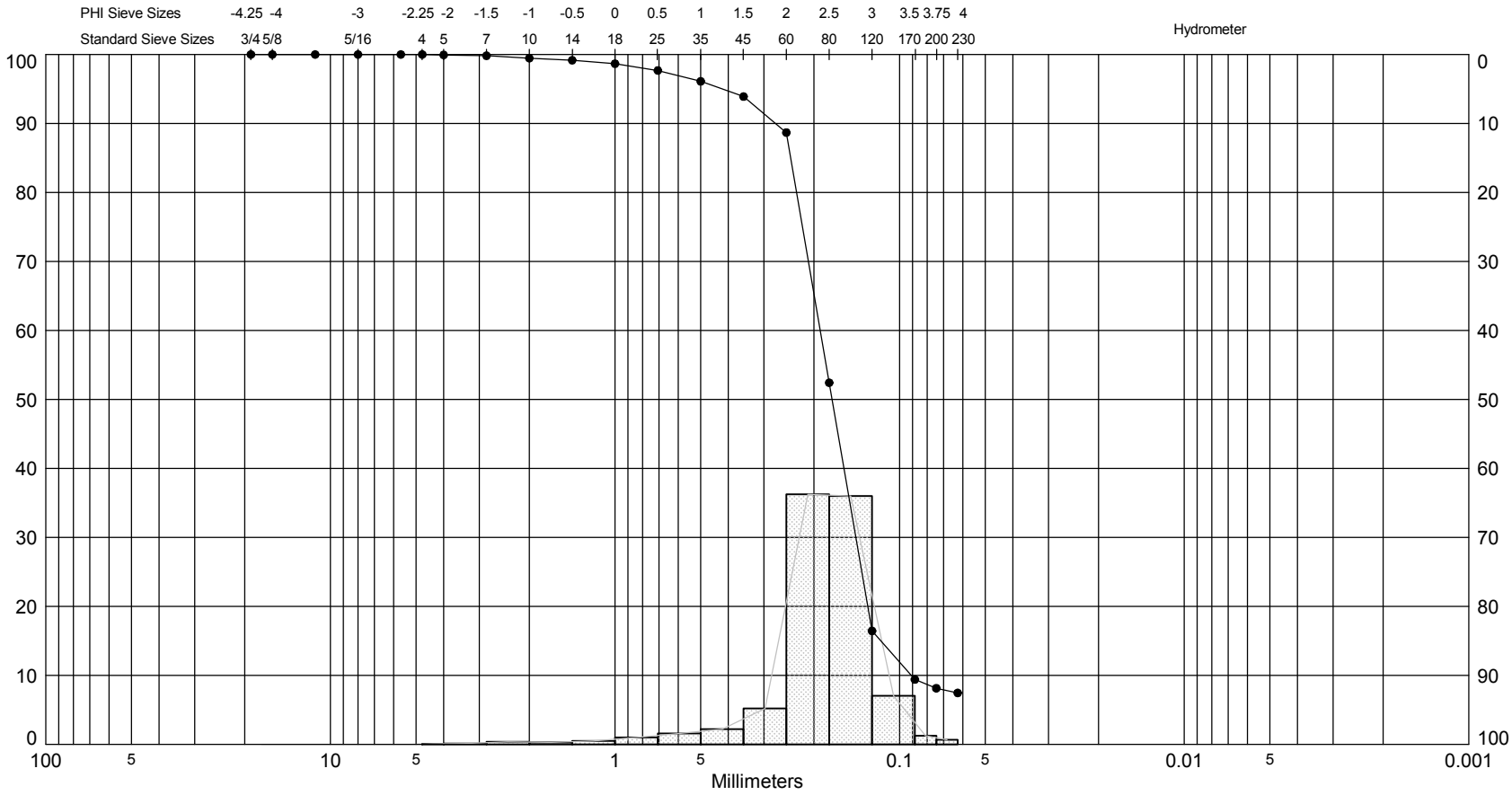
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y129 #2	—●—		SP-SM	#200 - 8.13 #230 - 7.45	1.10	1.90	2.53	2.41	-2.19	11.86	0.68

Comments: PEATY SAND, DARK FINES

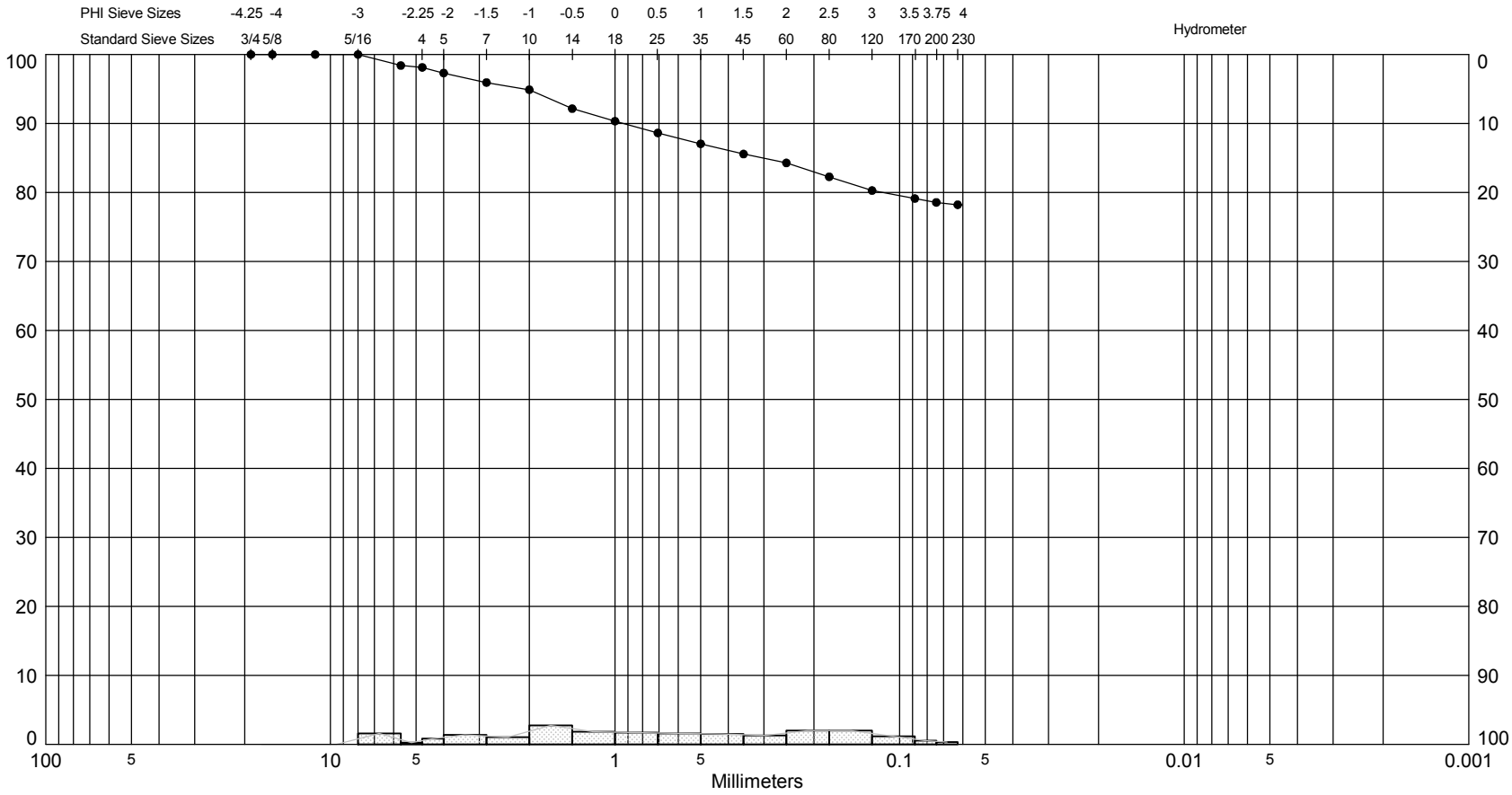
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y132 #1	—●—		CL	#200 - 78.56 #230 - 78.22	16.80	18.10		0.45	-0.01	1.89	1.89

Comments: CLAY

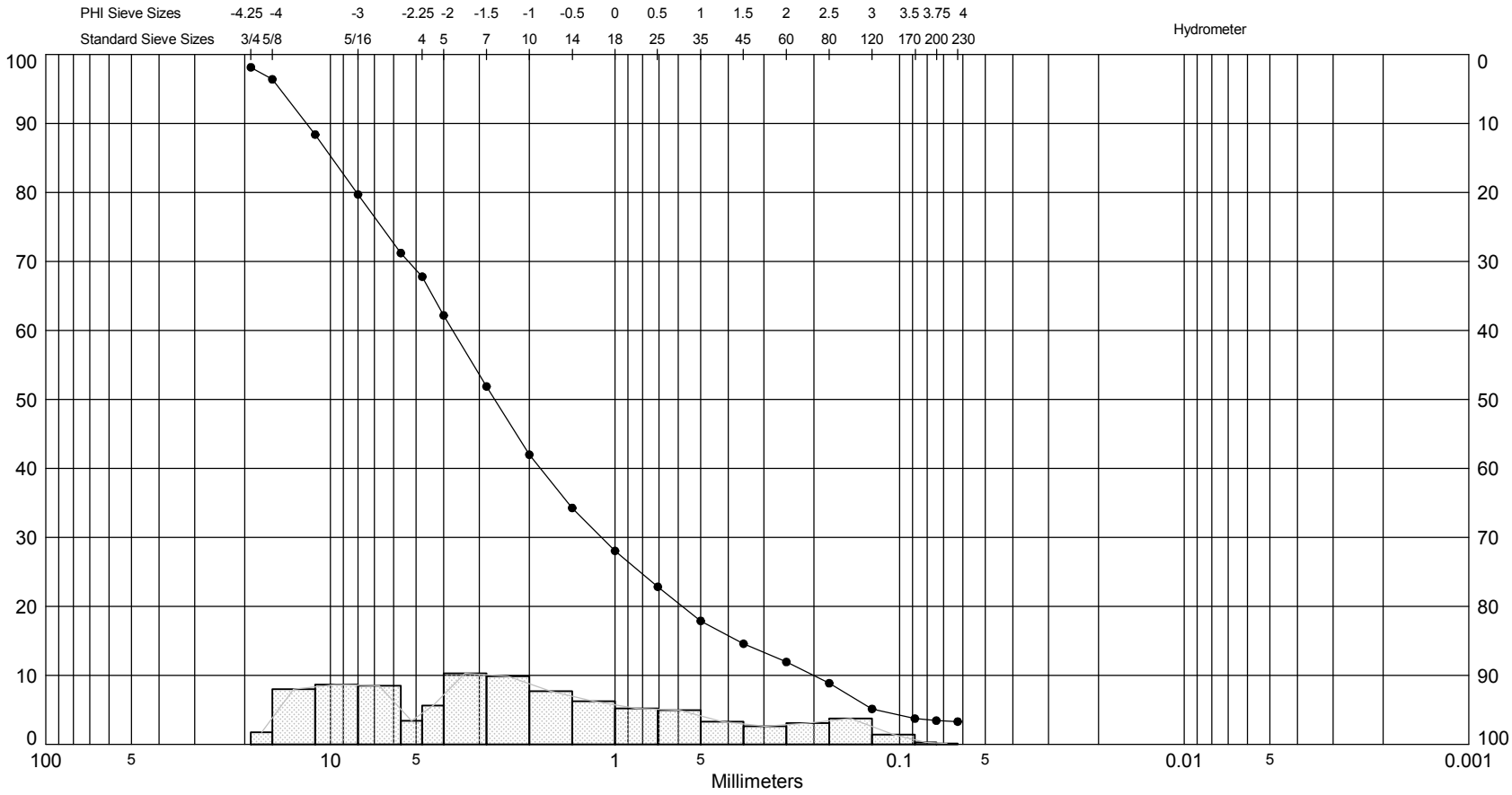
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y132 #2	—●—	SW WITH GRAVEL		#200 3.44 #230 3.30	2.20	37.90		-1.22	0.64	2.59	1.9

Comments: BLUE/GRAY OYSTER SHELLS, SAND, PEBBLES

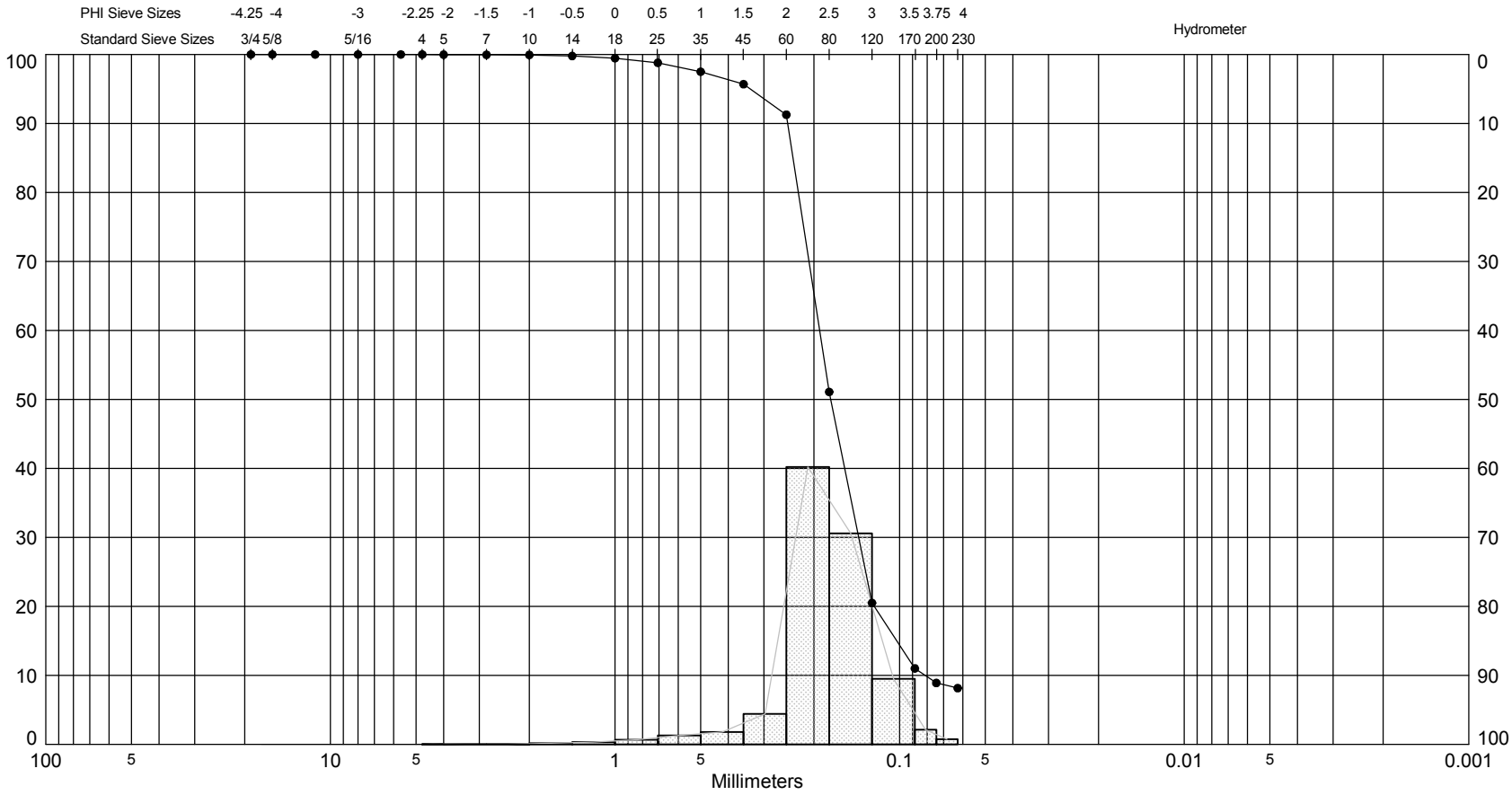
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Fax (321) 751-2343

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y132 #3	—●—		SP-SM	#200 - 8.90 #230 - 8.15	1.20	2.30	2.52	2.47	-1.36	9.1	0.59

Comments: SILTY SAND, DARK FINES

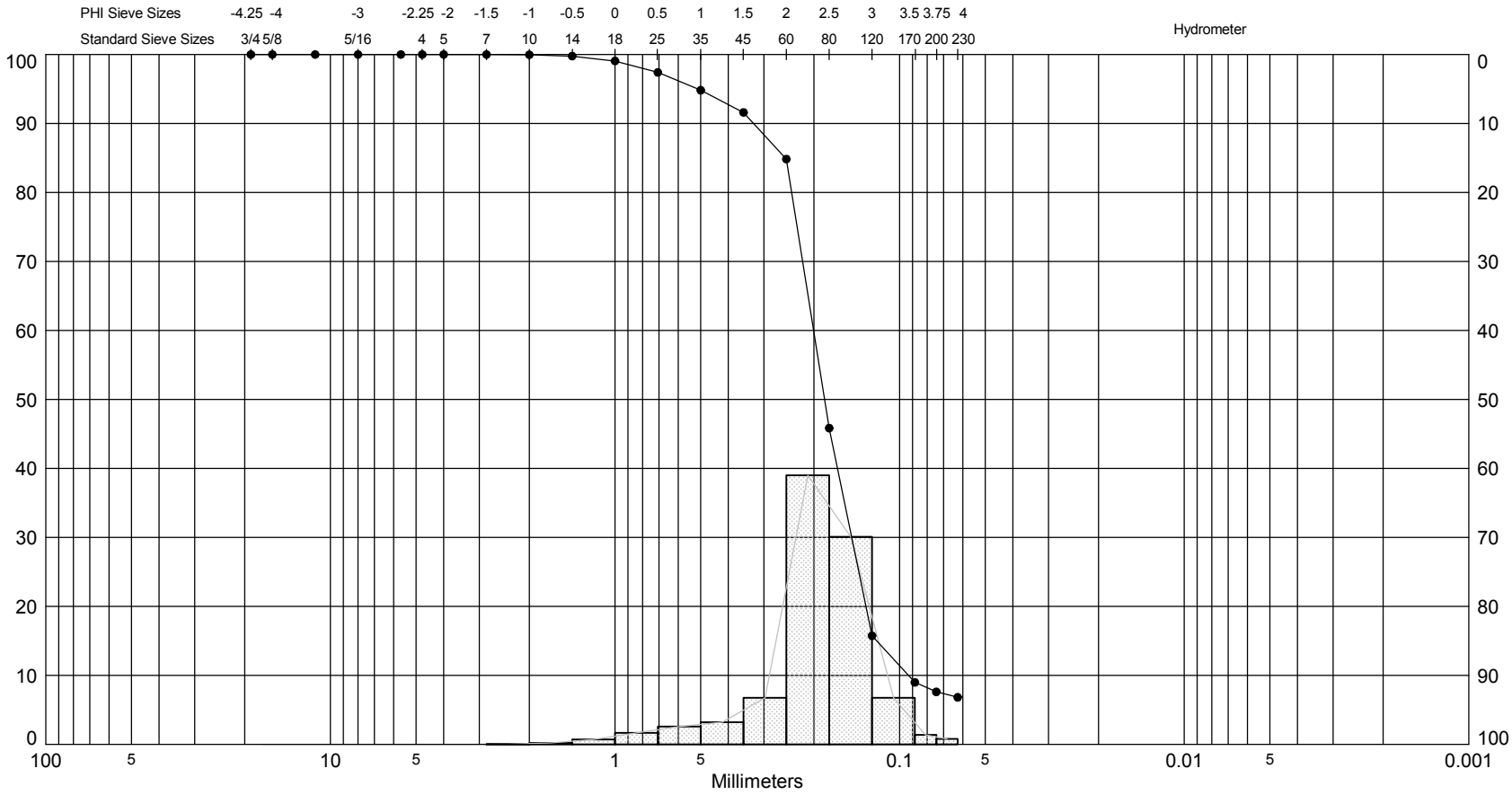
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y132 #4	—●—		SP-SM	#200 - 7.61 #230 - 6.82	1.00	2.10	2.45	2.34	-1.36	6.5	0.67

Comments: SILTY SAND

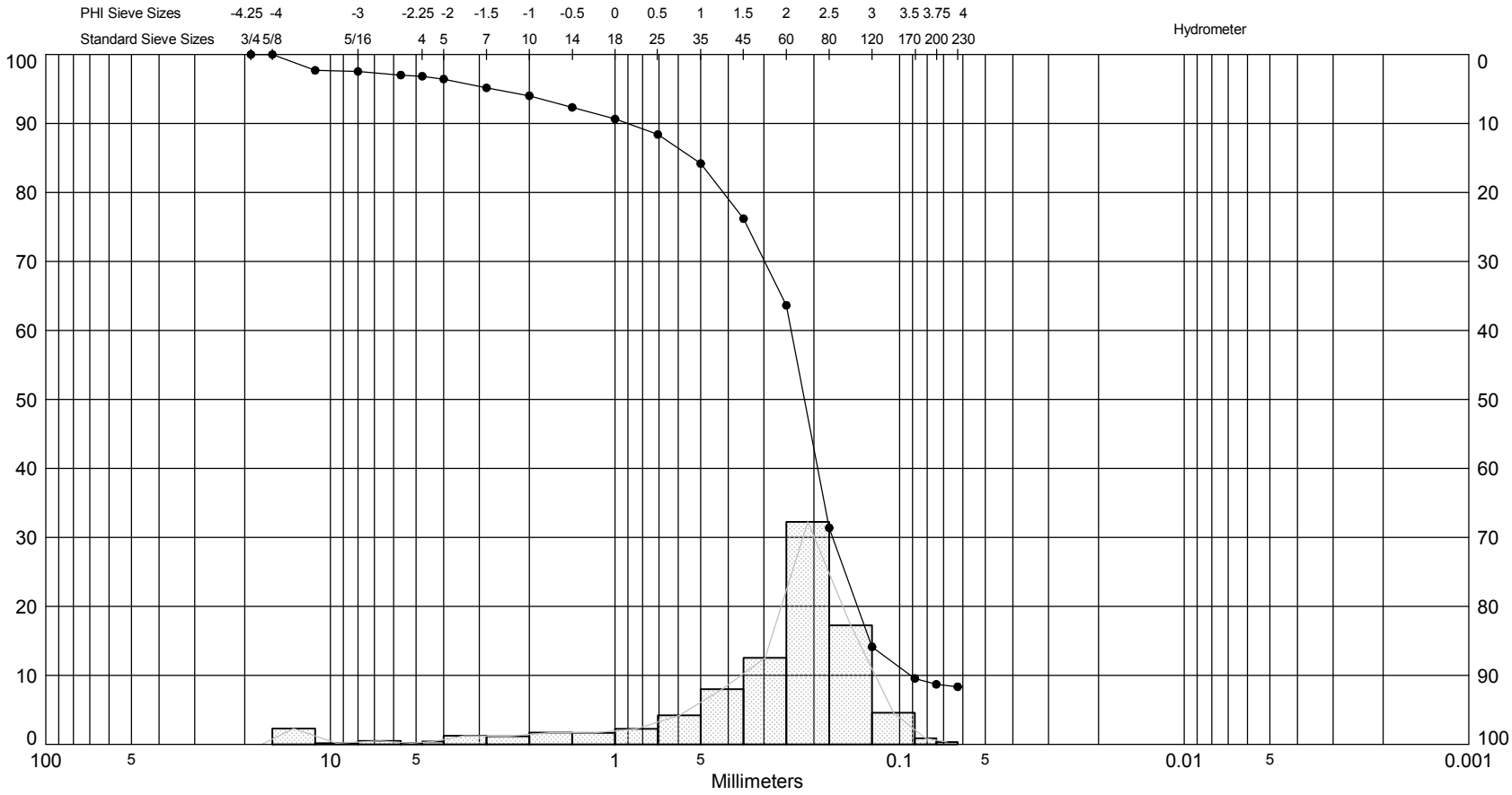
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y135 #1	—●—		SW-SM	#200 - 8.70 #230 - 8.35	1.50	15.30	2.21	1.72	-2.09	7.66	1.43

Comments: SAND, CLAY BALLS

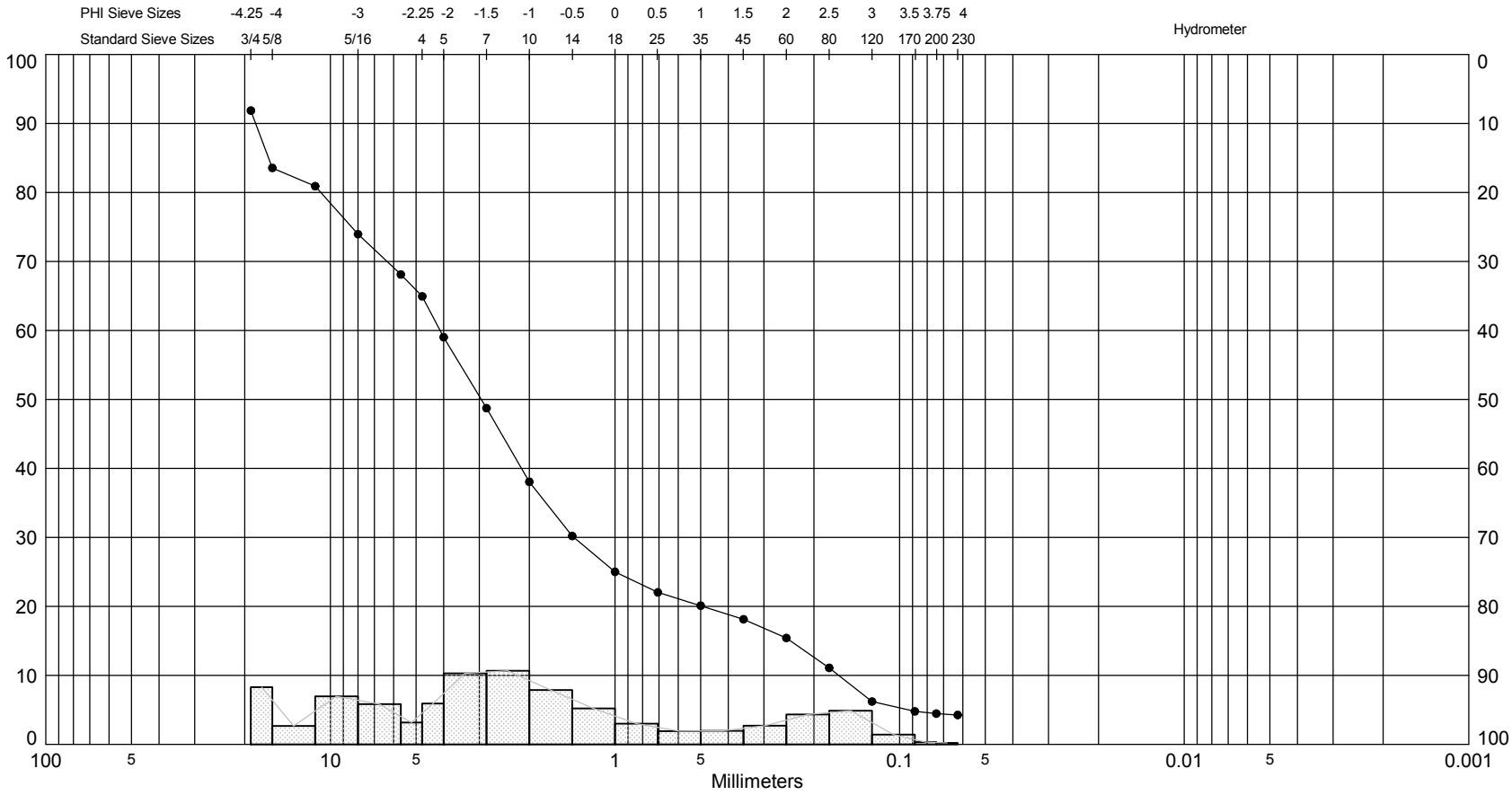
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y135 #2	—●—	SW WITH GRAVEL		#200 4.46 #230 4.26	1.80	19.80		-1.44	0.97	3.03	1.98

Comments: BLUE/GRAY SHELL, LARGE ROCKS, PEBBLES, LITTLE SAND

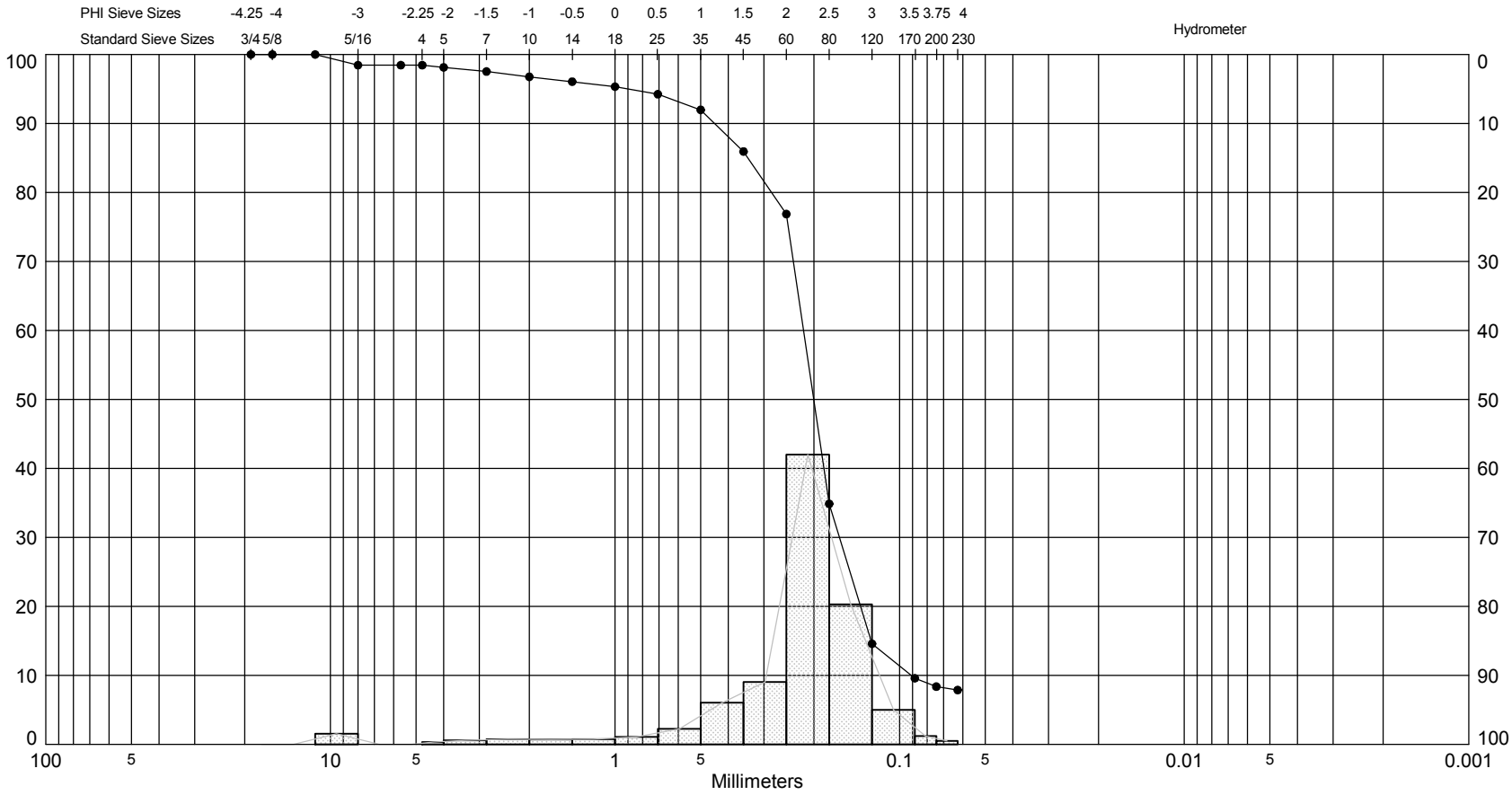
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y135 #3	—●—		SW-SM	#200 - 8.37 #230 - 7.87	1.10	2.70	2.32	2.06	-2.73	12.42	1.1

Comments: SILTY SAND

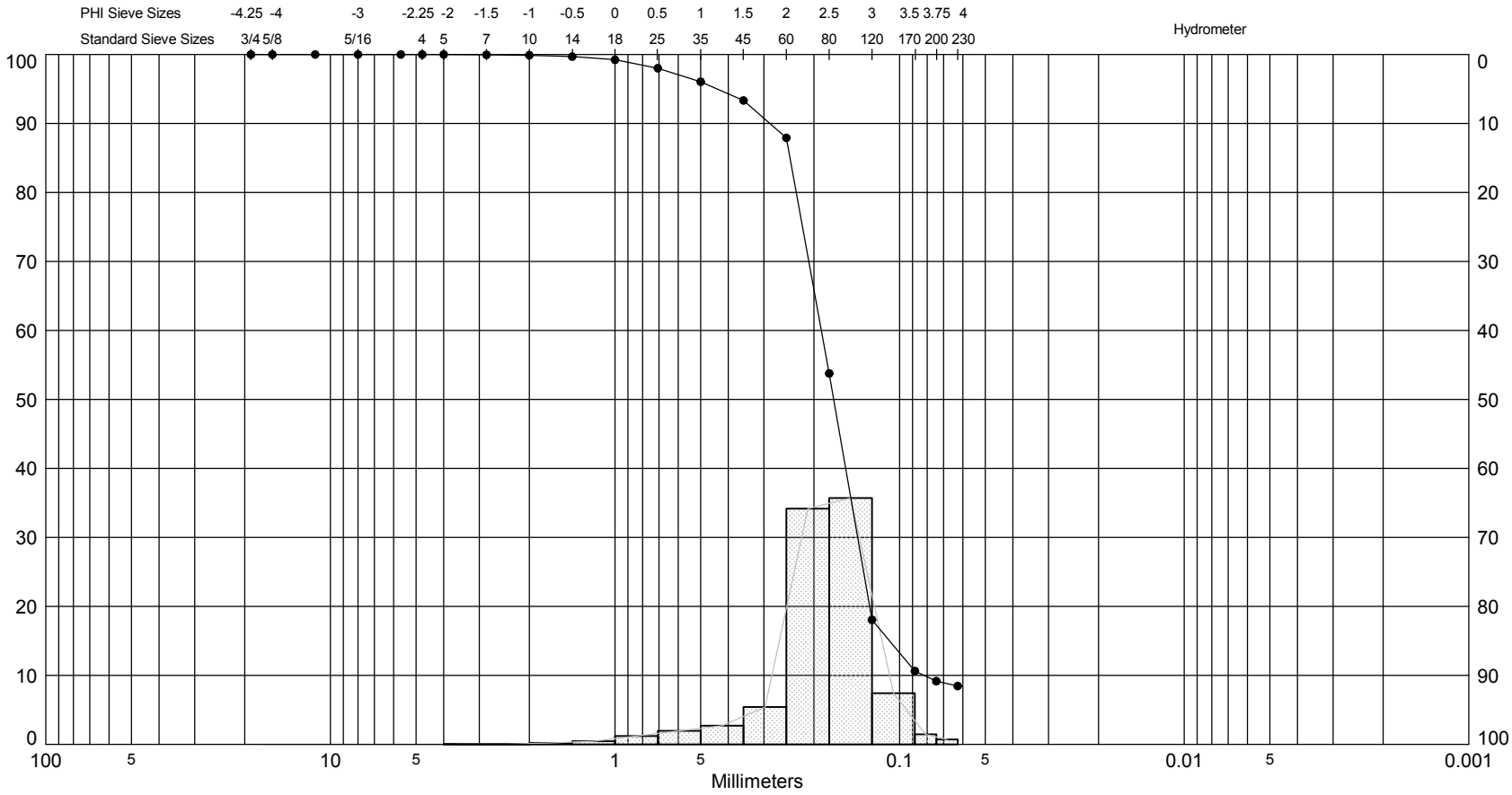
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y135 #4	—●—		SP-SM	#200 - 9.16 #230 - 8.46	1.00	1.80	2.55	2.42	-1.61	8.18	0.64

Comments: SLIGHTLY SILTY/PEATY SAND

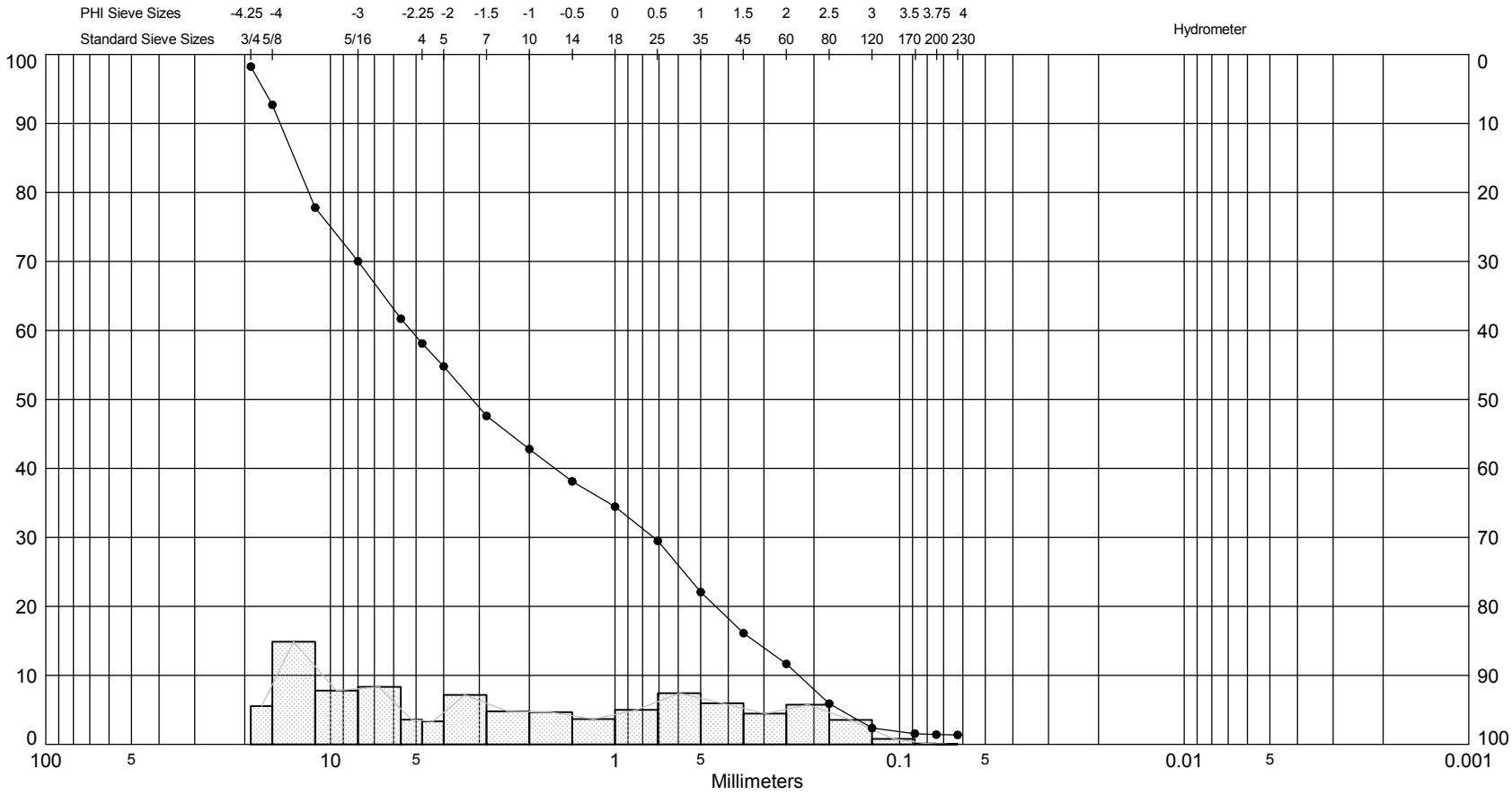
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y136 #1	—●—		SW WITH GRAVEL	#200 1.42 #230 1.37	1.70	31.00		-1.27	0.42	1.85	2.18

Comments: BIG ROCKS, SHELLS, PEBBLES, LITTLE SAND

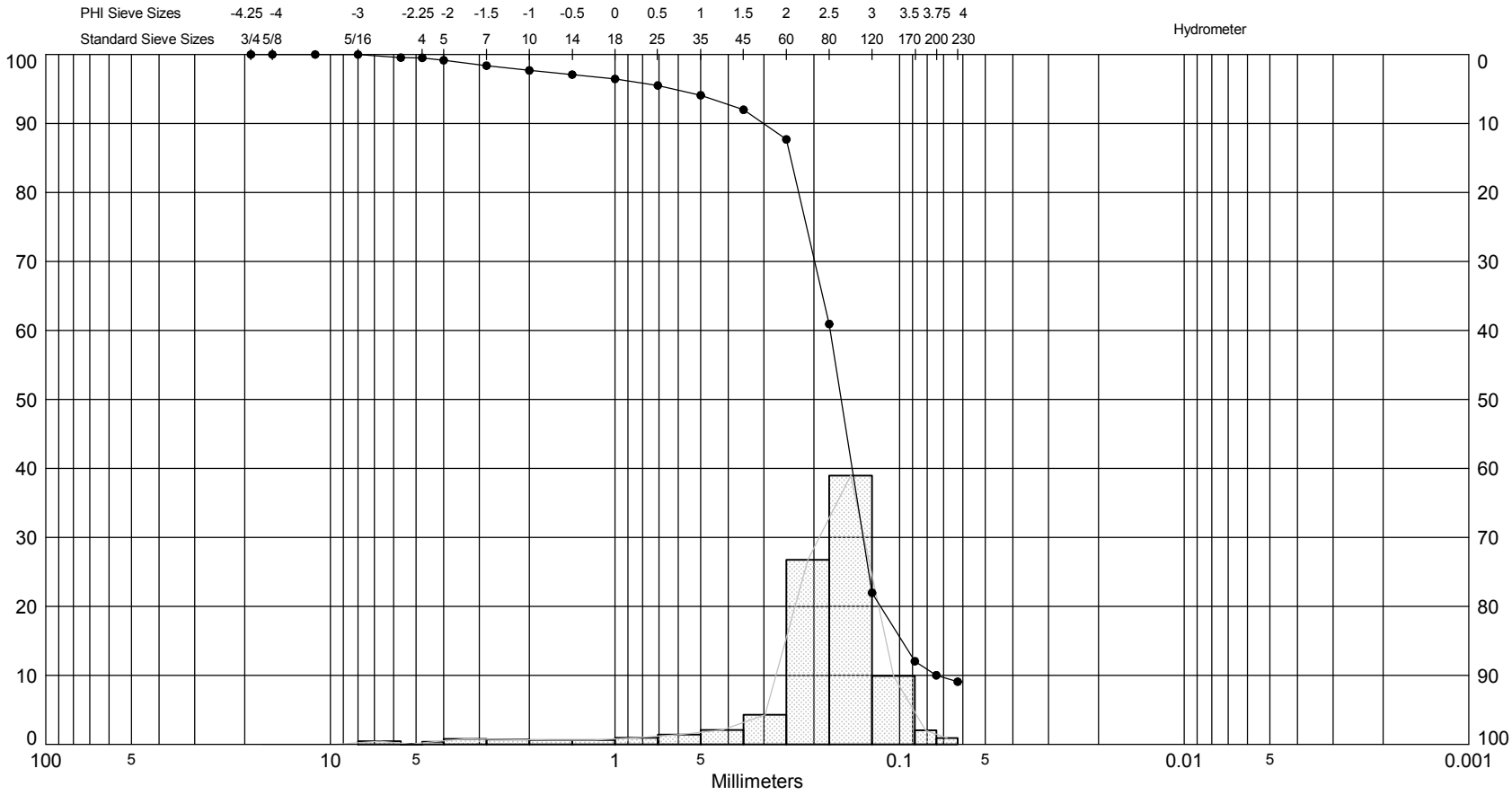
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y136 #2	—●—		SW-SM	#200 - 10.01 #230 - 9.08	2.10	6.60	2.64	2.39	-2.76	12.61	0.96

Comments: SAND, LITTLE FINES, TRACE SHELL/PEBBLES

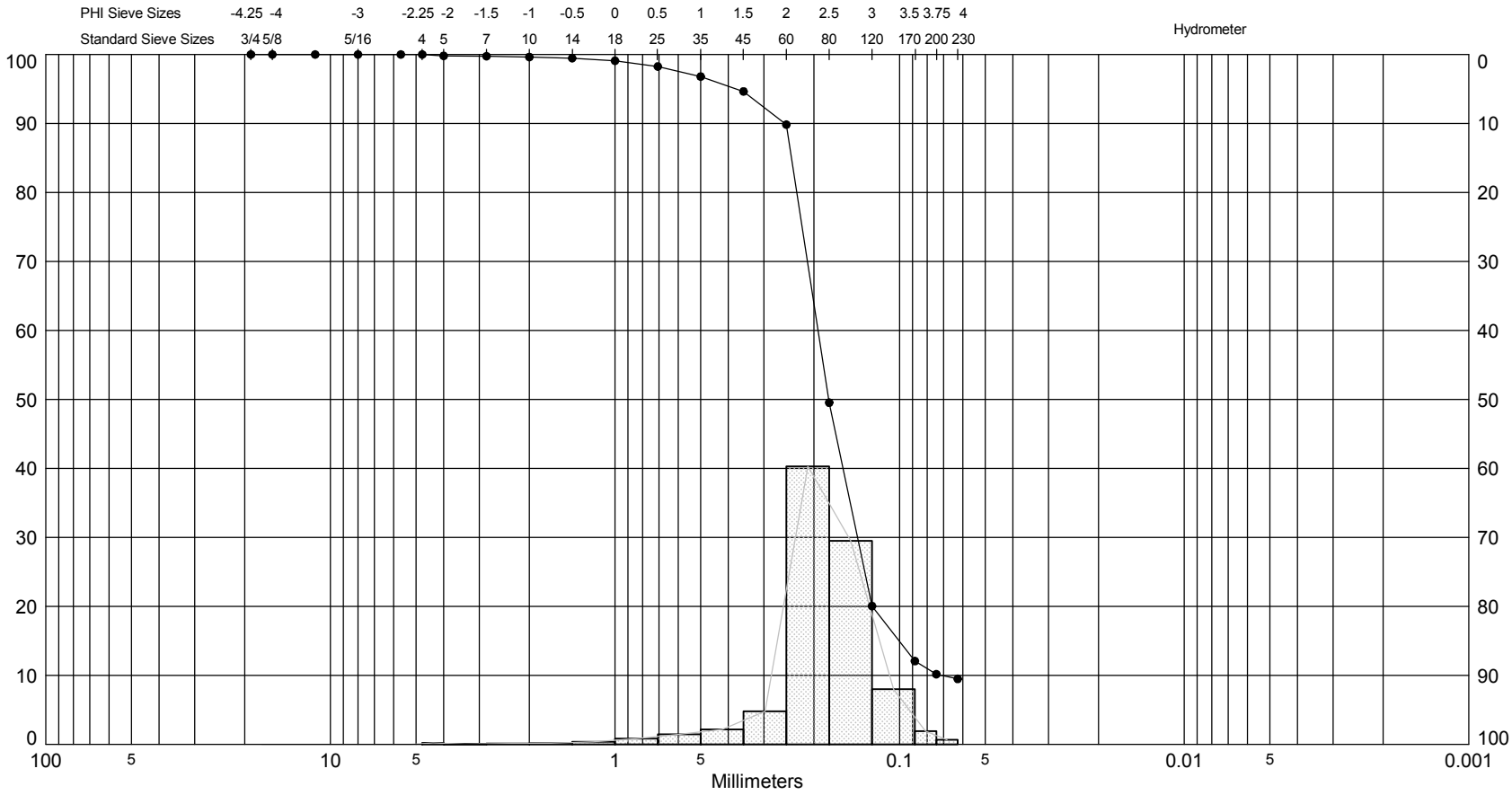
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y136 #3	—●—		SP-SM	#200 - 10.17 #230 - 9.49	1.10	2.00	2.49	2.42	-2	12.62	0.65

Comments: SAND, LITTLE PEAT, DARK FINES

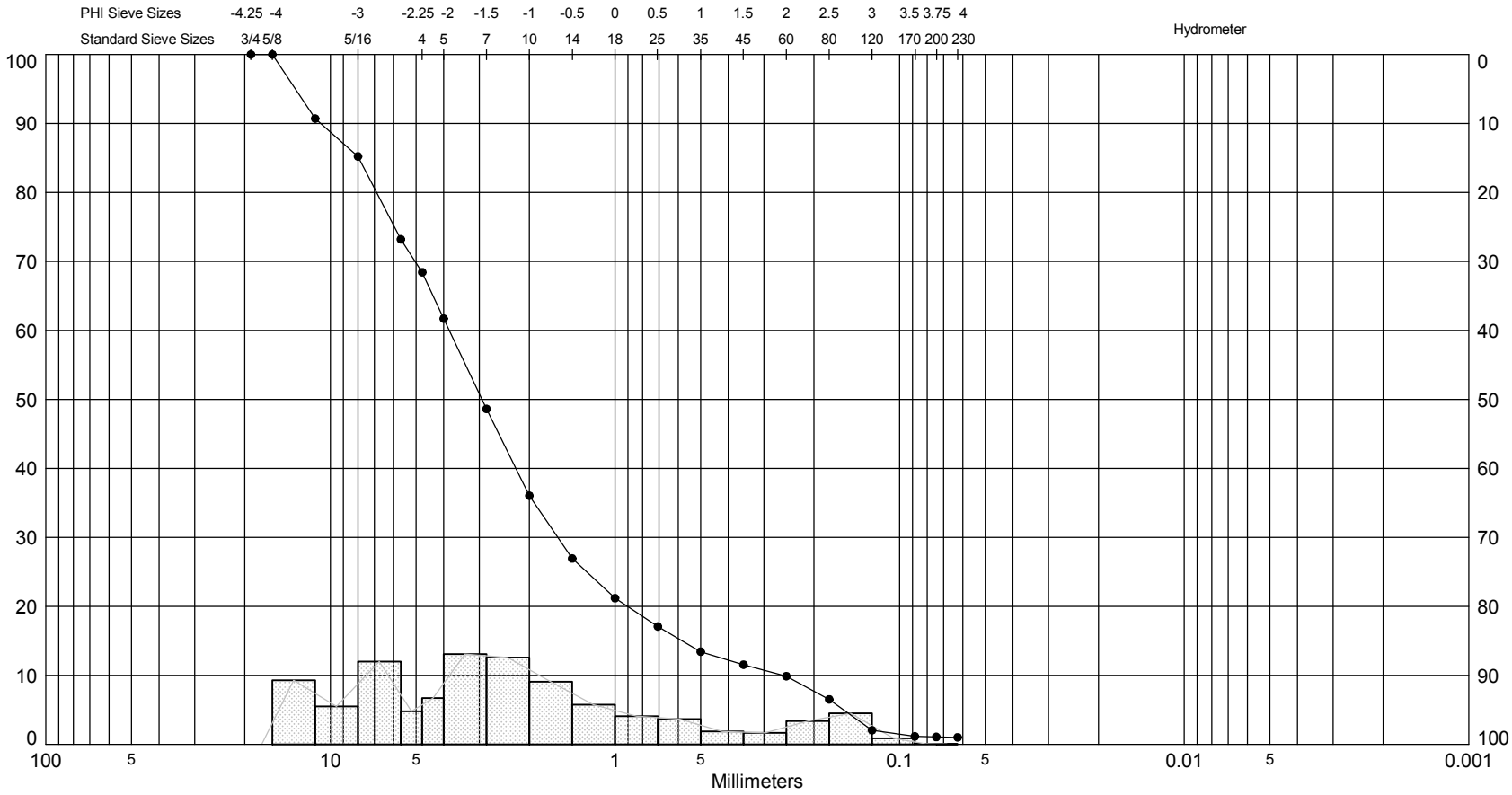
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	WD
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y141 #1	—●—		SW	#200 - 1.07 #230 - 1.02	1.30	39.40		-1.27	0.77	2.96	1.78

Comments: LARGE ROCKS, PEBBLES, LITTLE SHELL, TRACE SAND

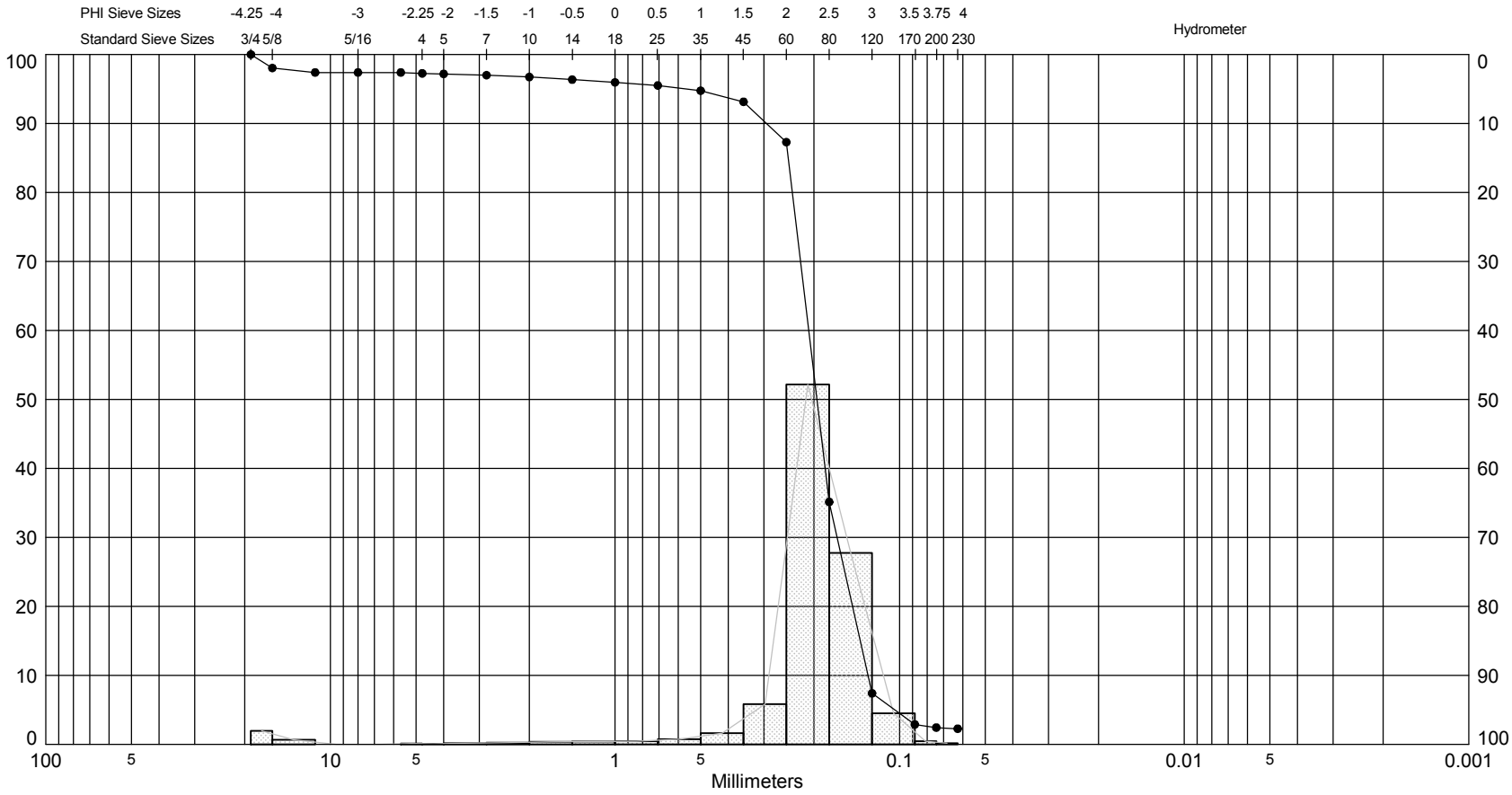
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y141 #2	—●—		SW	#200 - 2.43 #230 - 2.27	0.50	9.50	2.36	2.16	-4.09	20.99	1.19

Comments: GRAY MEDIUM SAND, TRACE SILT

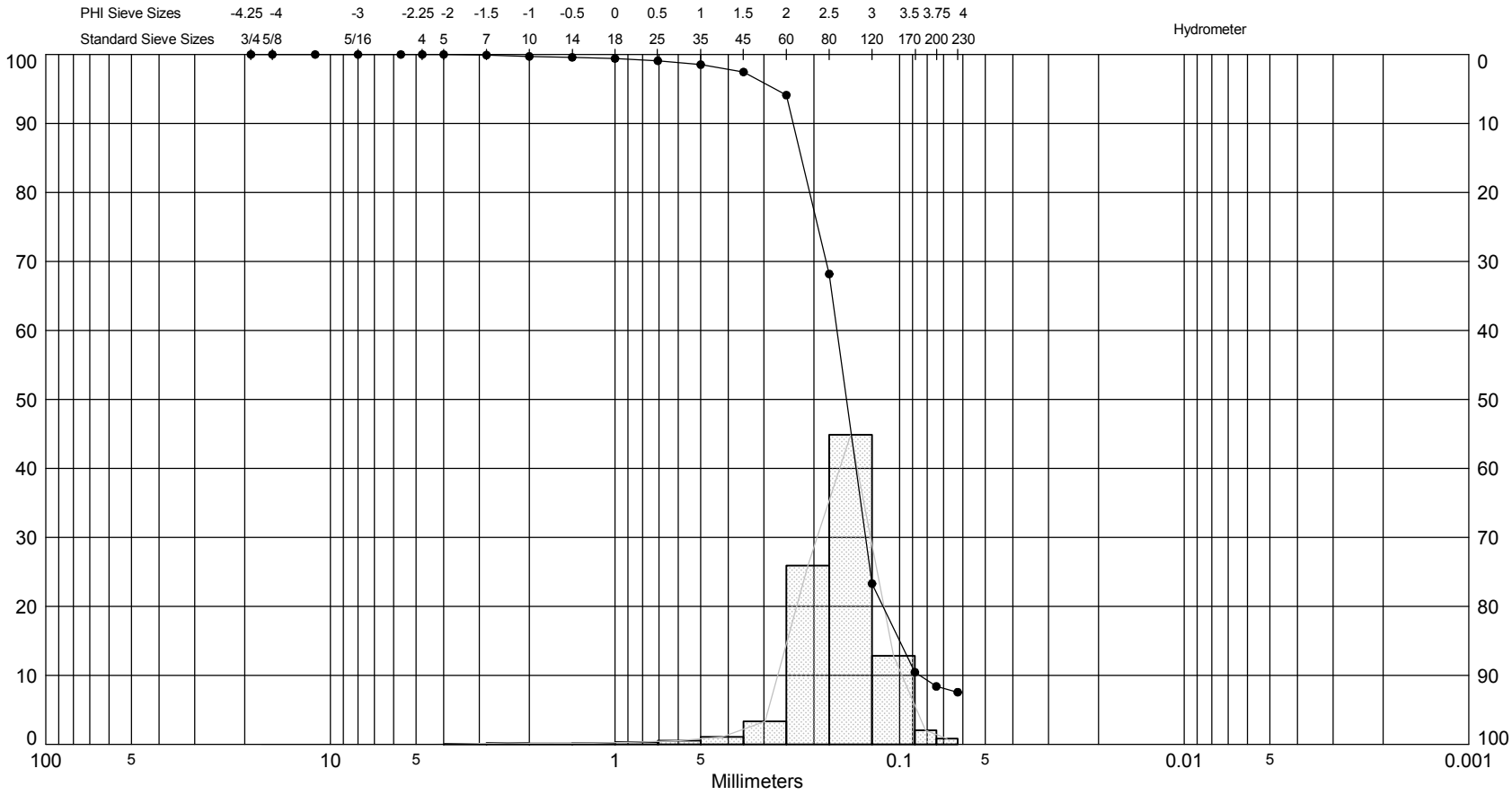
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y141 #3	—●—		SP-SM	#200 - 8.40 #230 - 7.56	0.80	1.90	2.7	2.61	-2.16	15.08	0.56

Comments: PEATY SAND , DARK FINES

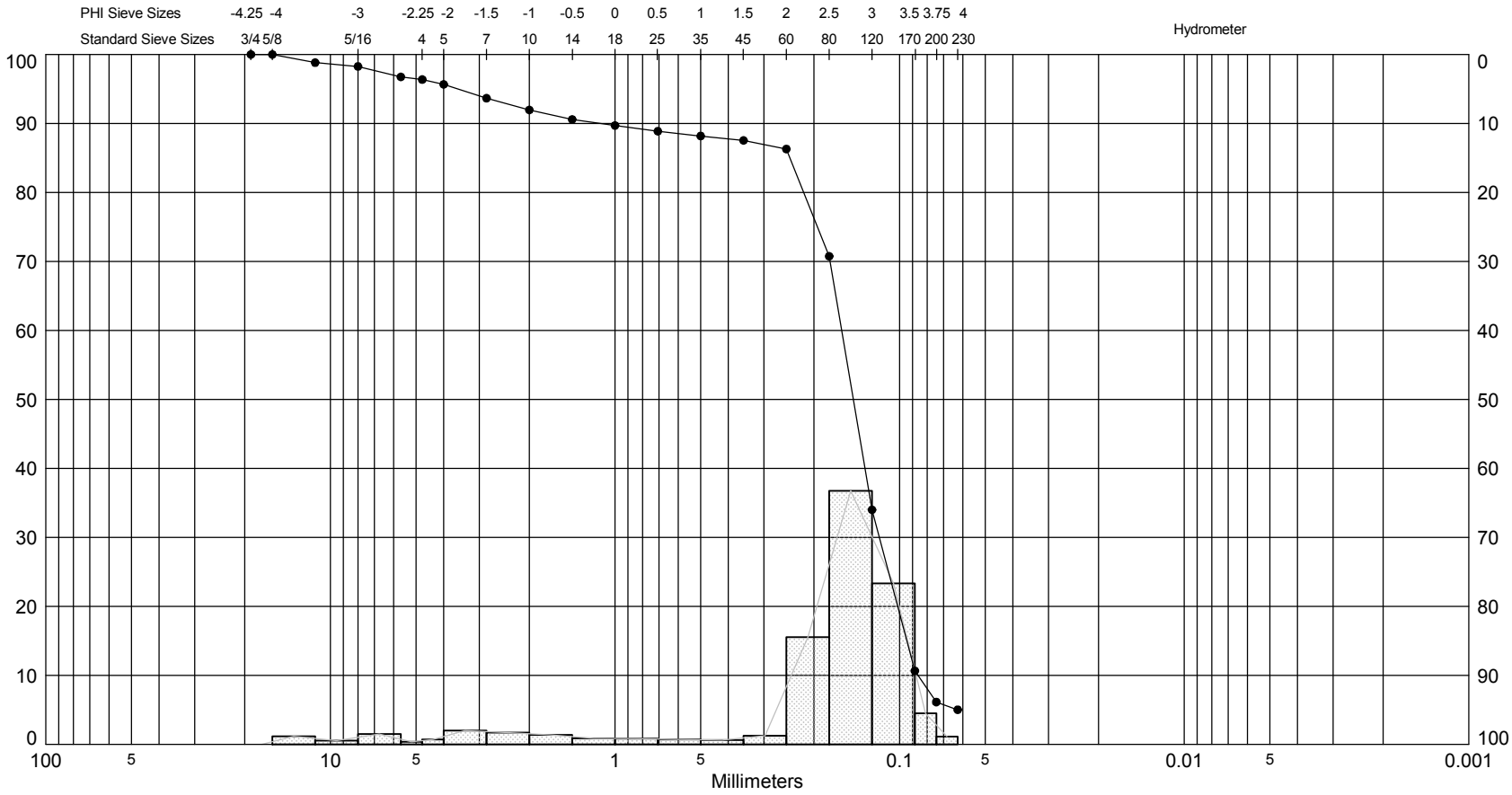
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-15-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y153 #1	—●—		SW-SM	#200 - 6.13 #230 - 5.02	0.50	16.30	2.78	2.28	-2.3	7.47	1.59

Comments: BROWN SAND, WHITE SHELL

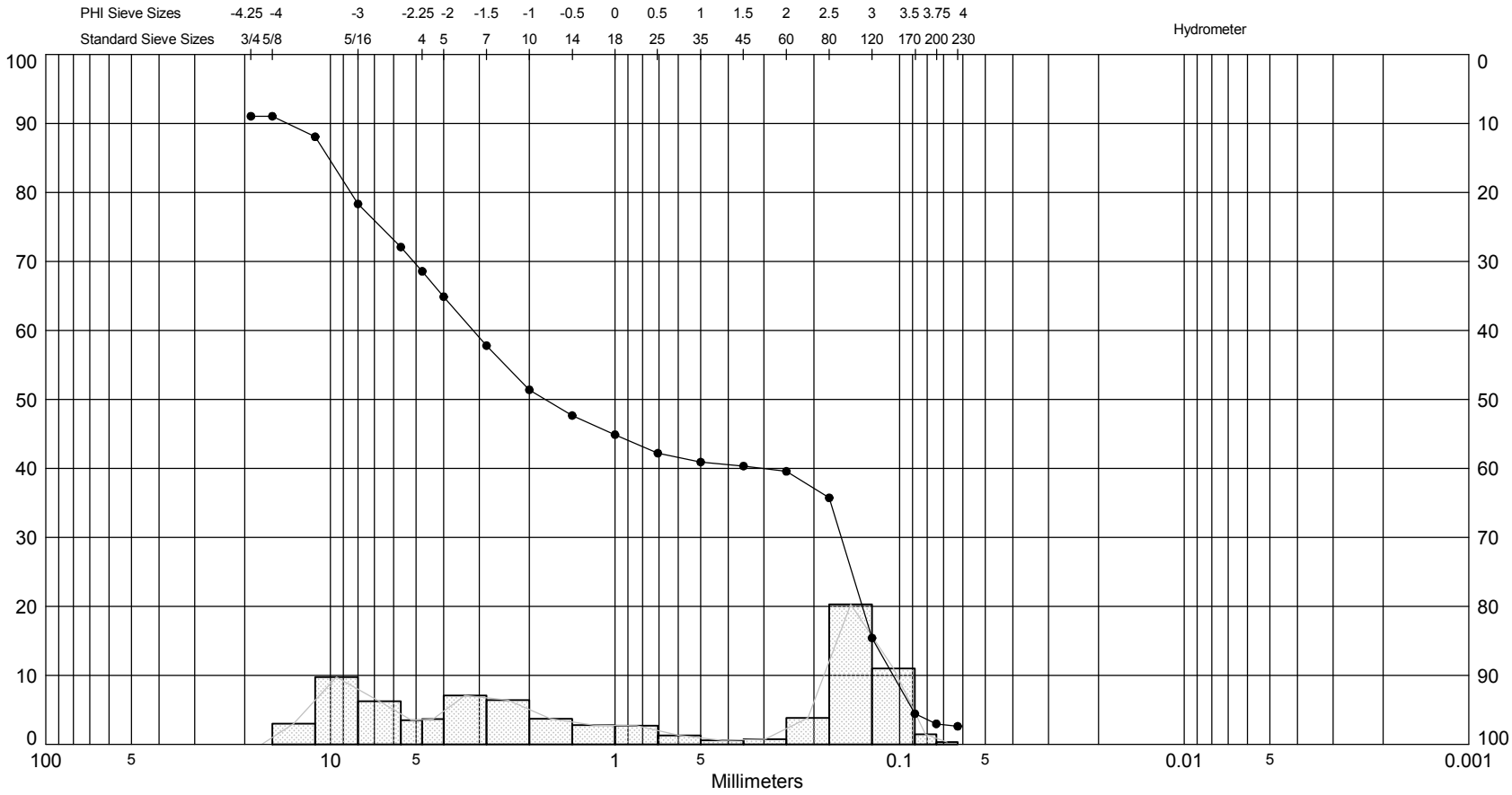
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y153 #2	—●—	SW WITH GRAVEL		#200 2.97 #230 2.62	1.00	48.00		-0.29	0.48	1.56	2.47

Comments: WHITE SHELL

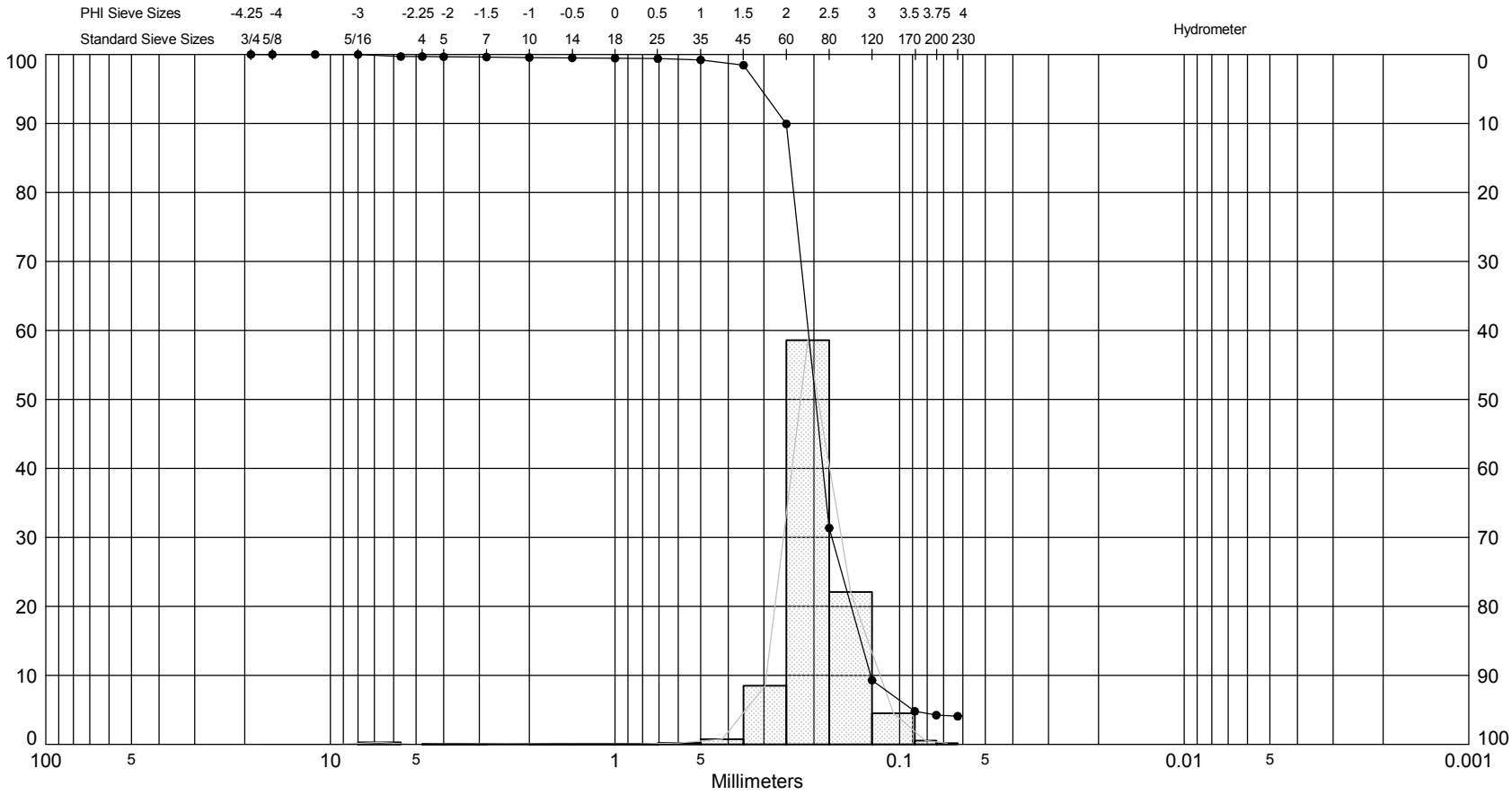
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y153 #3	—●—		SP	#200 - 4.23 #230 - 4.07	0.60	2.10	2.34	2.34	-3.85	40.14	0.51

Comments: BROWN SAND

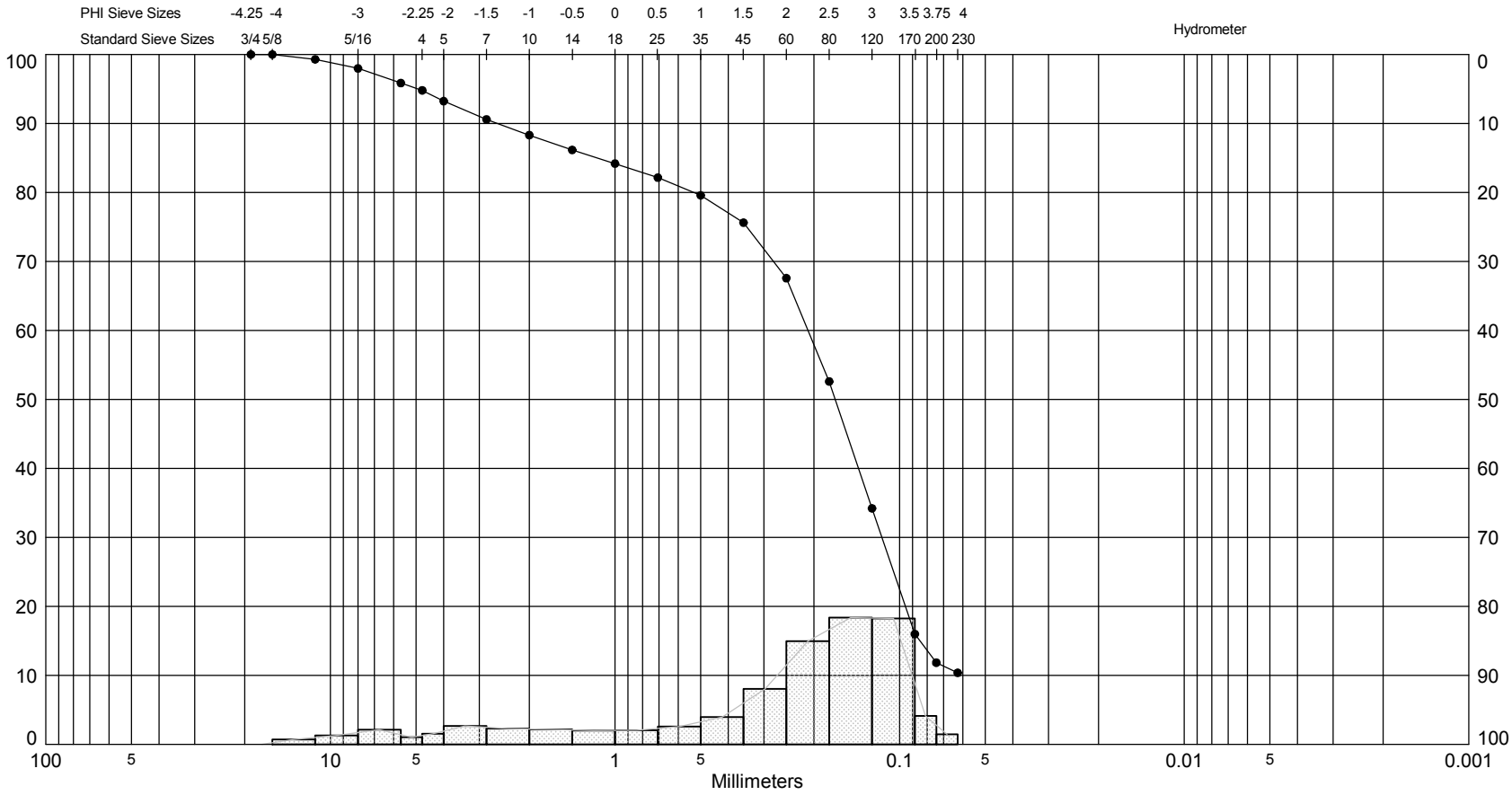
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y154 #1	—●—		SW-SM	#200 - 11.84 #230 - 10.37	0.90	20.30	2.57	1.76	-1.34	3.77	1.85

Comments: BROWN SAND, WHITE SHELL

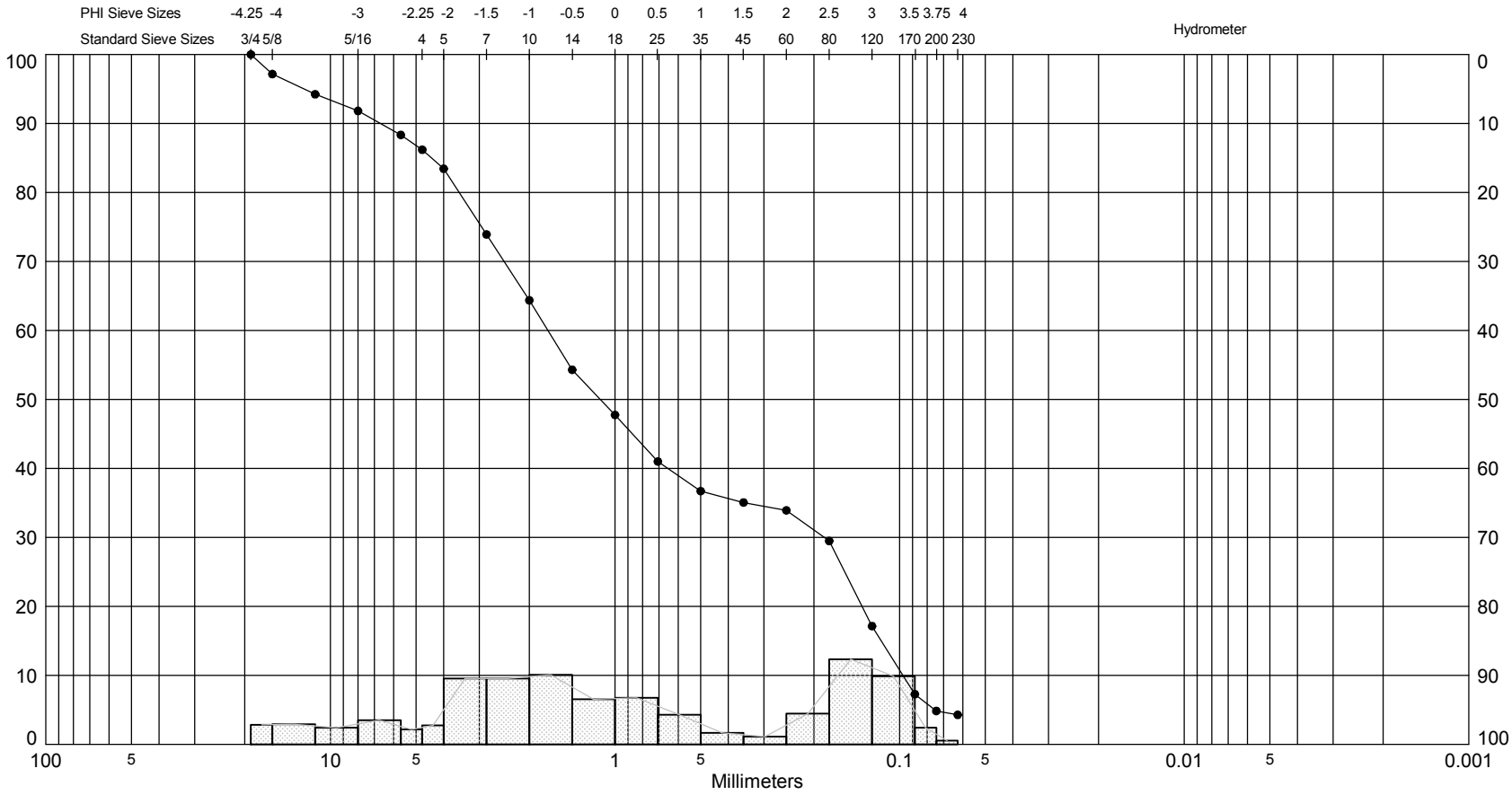
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y154 #2	—●—		SW	#200 - 4.84 #230 - 4.28	1.00	64.20		0.07	0.05	1.86	2.25

Comments: WHITE SHELL

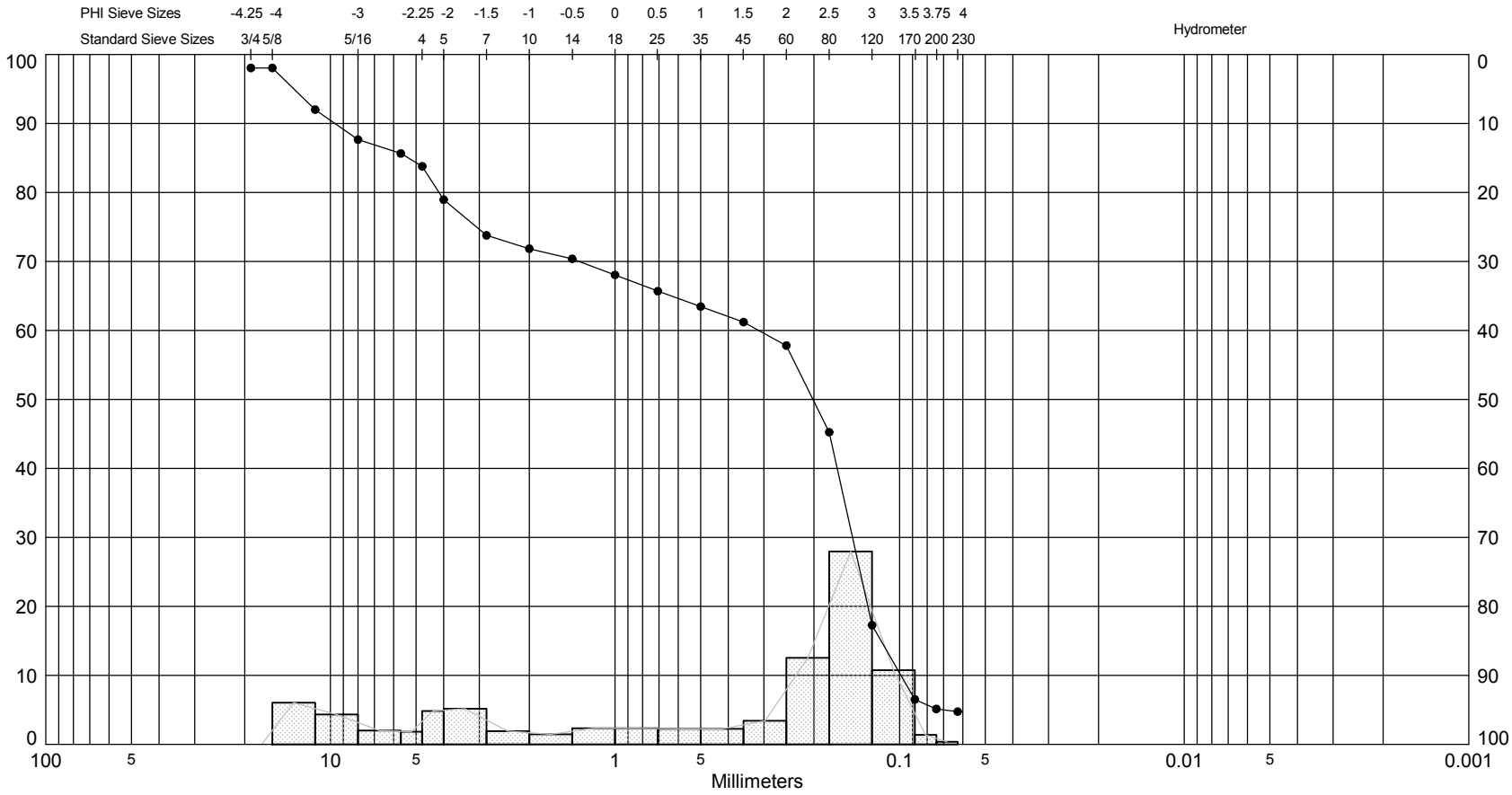
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y154 #3	—●—	SW-SM W/ GRAVEL		#200 - 5.13 #230 - 4.75	1.80	14.20	2.31	0.83	-0.64	1.91	2.39

Comments: BROWN SAND, WHITE SHELL

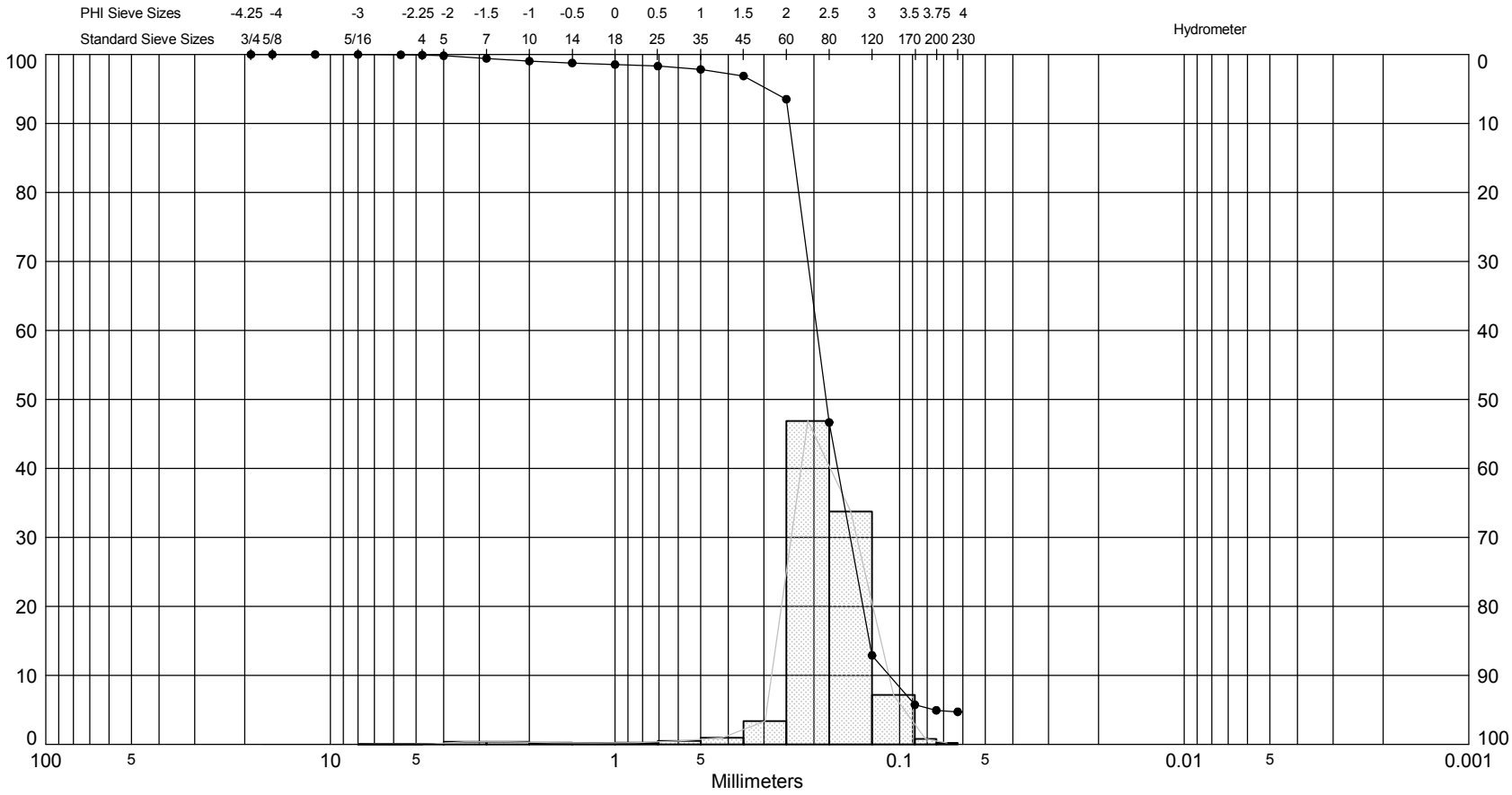
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y154 #4	—●—		SP	#200 - 4.93 #230 - 4.72	0.50	2.50	2.46	2.42	-3.46	23.4	0.63

Comments: FINE SAND, SILT

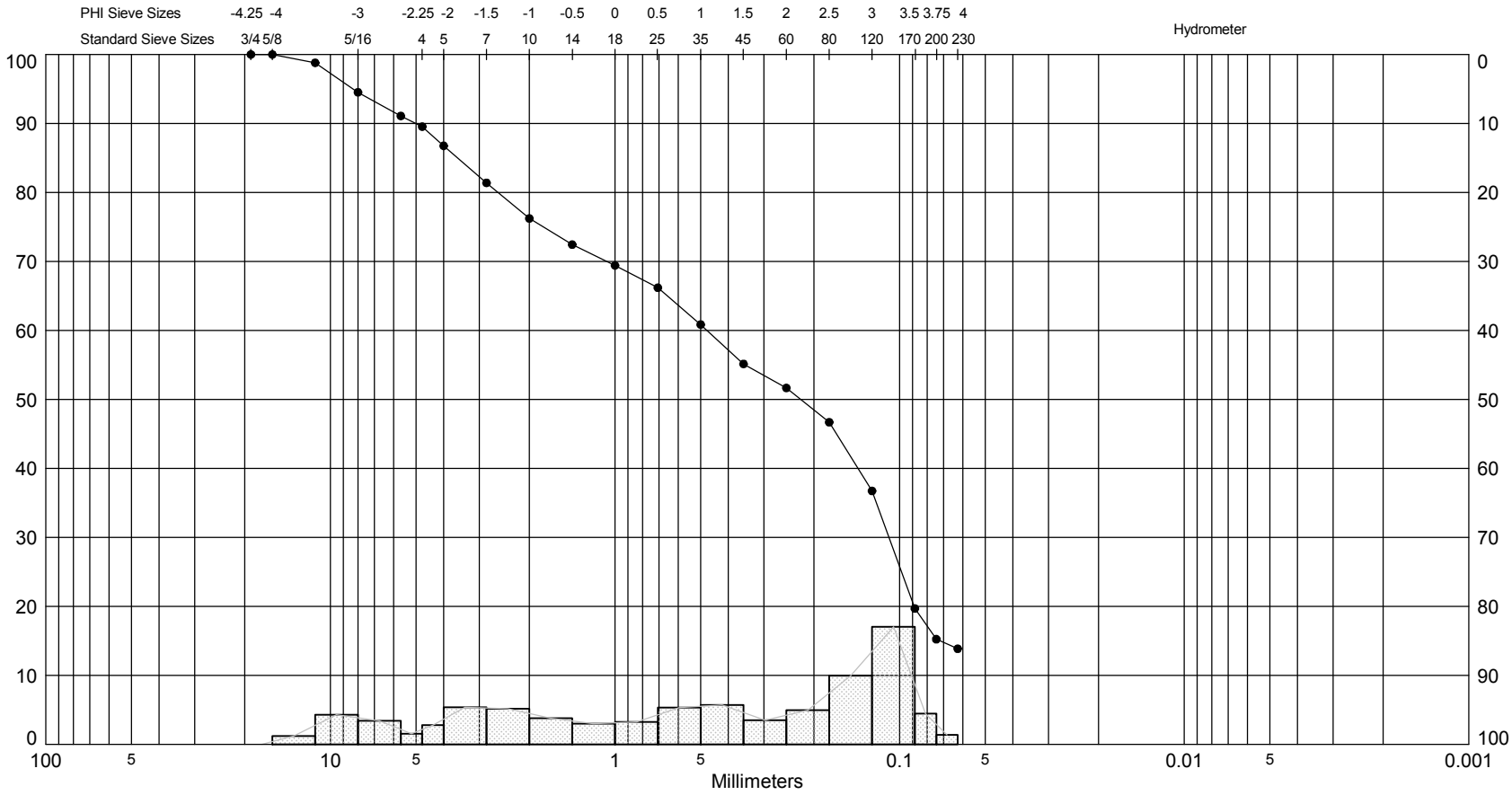
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y156 #1	—●—		SM	#200 - 15.24 #230 - 13.86	1.40	48.70	2.17	0.89	-0.45	1.8	2.29

Comments: BROWN SAND, SHELL AND ROCK

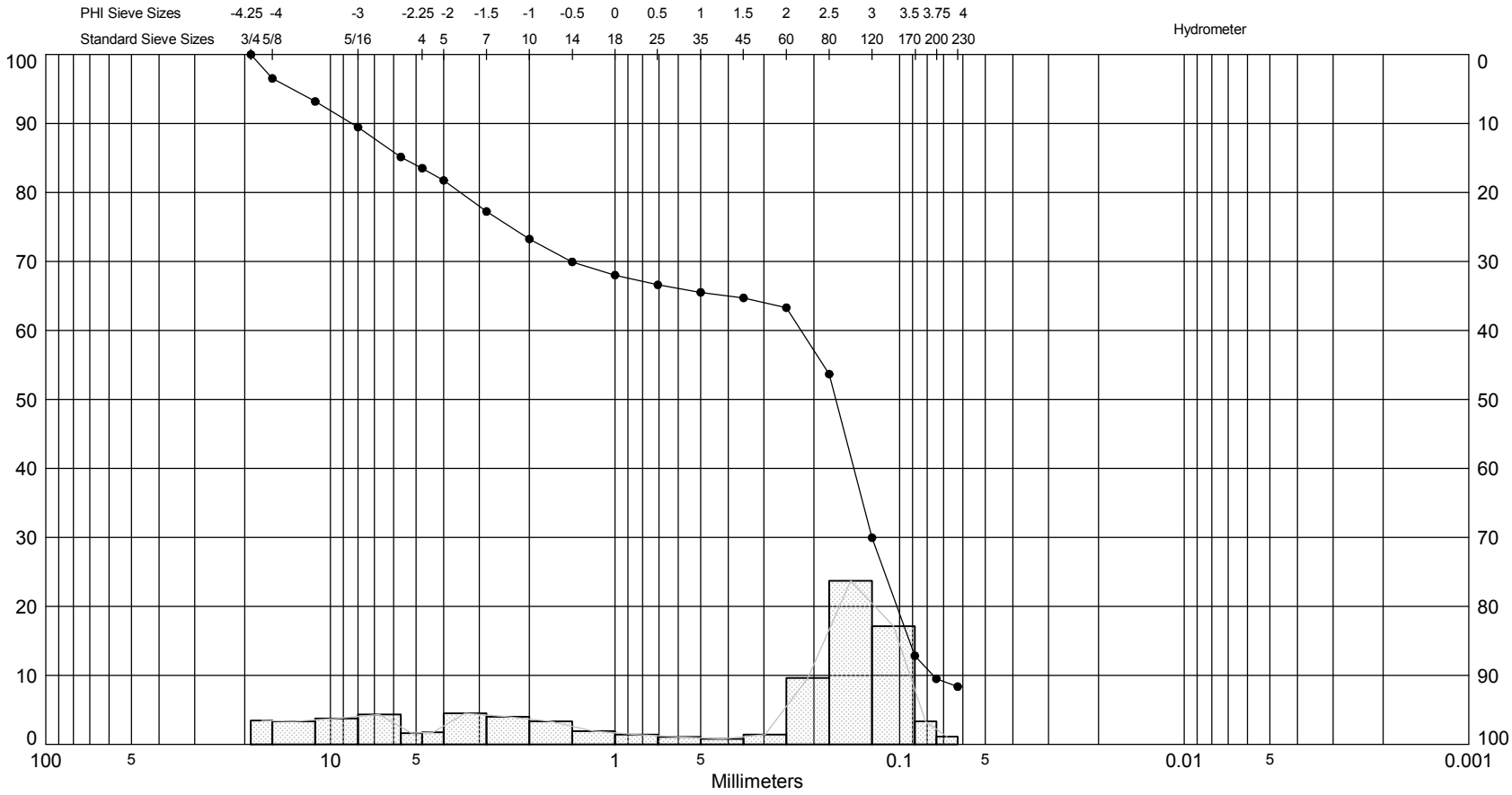
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y156 #2	—●—		SW-SM W/ GRAVEL	#200 - 9.51 #230 - 8.37	1.00	30.70	2.58	0.98	-0.73	1.93	2.57

Comments: BROWN SAND, WHITE SHELL

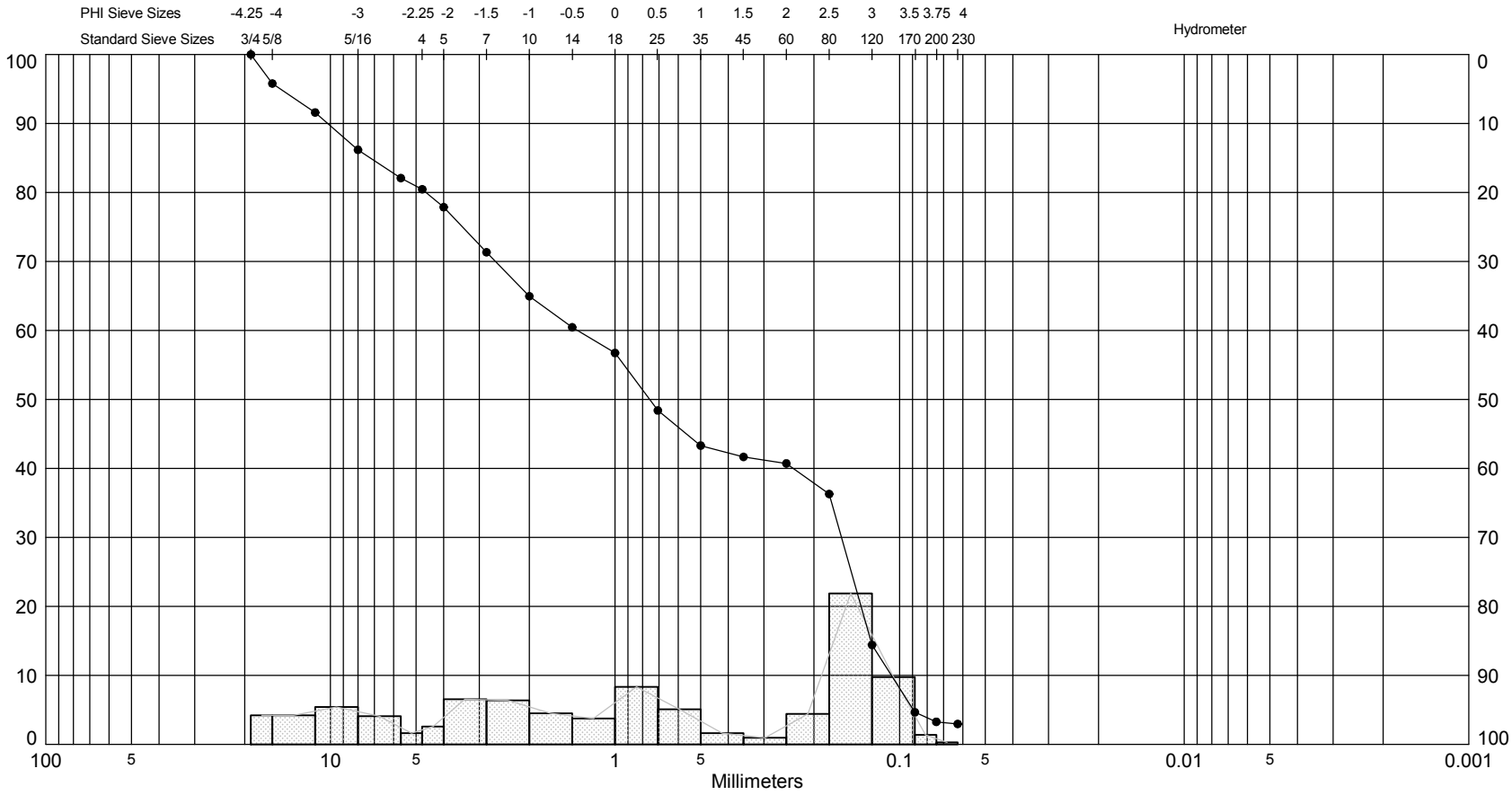
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y156 #3	—●—		SW	#200 - 3.27 #230 - 2.96	1.00	46.70	0.4	0.23	-0.25	1.67	2.47

Comments: BROWN SAND, WHITE SHELL

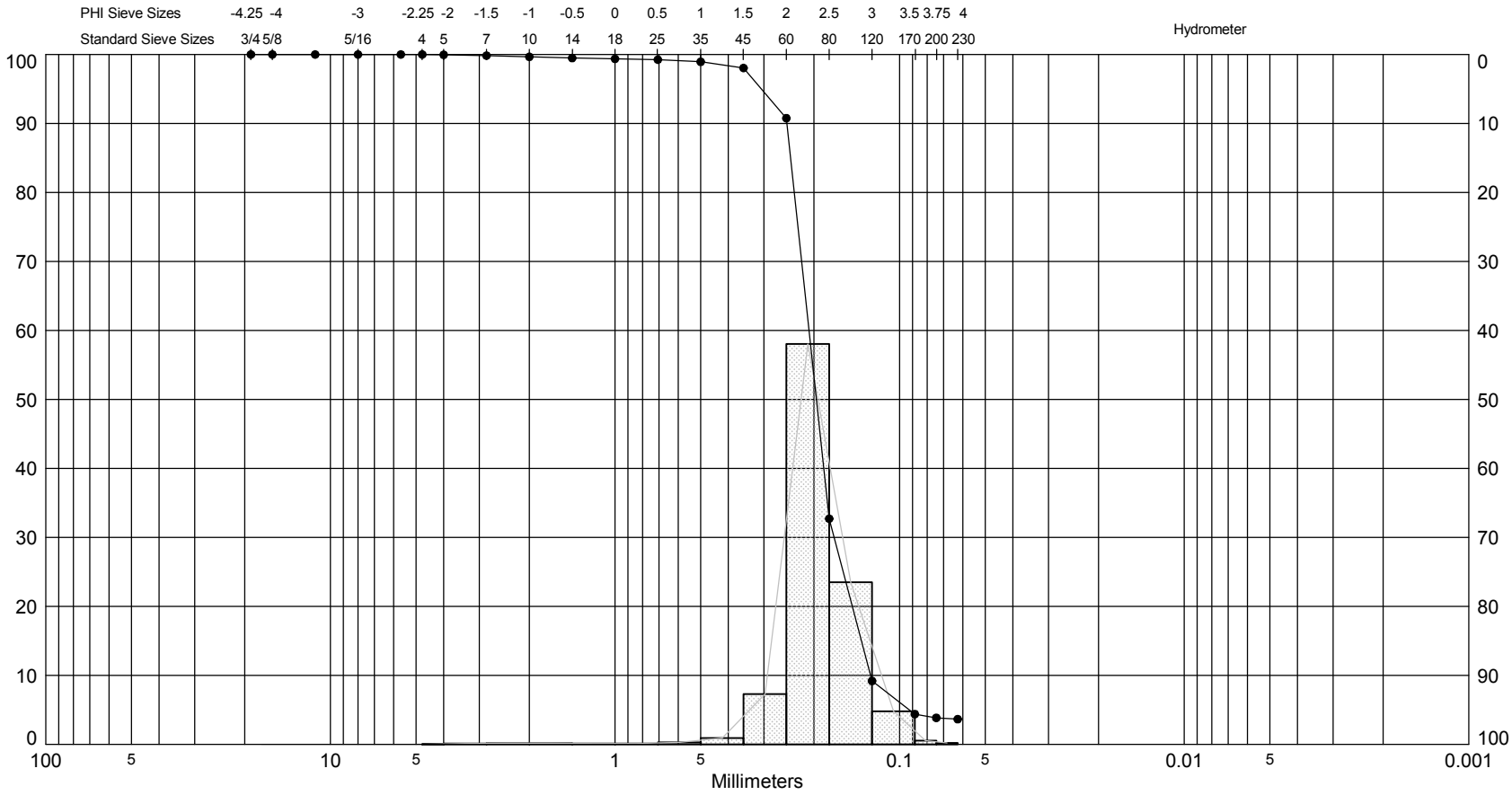
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y156 #4	—●—		SP	#200 - 3.84 #230 - 3.65	0.50	3.80	2.35	2.36	-2.49	22.73	0.48

Comments: FINE SAND, TRACE SILT

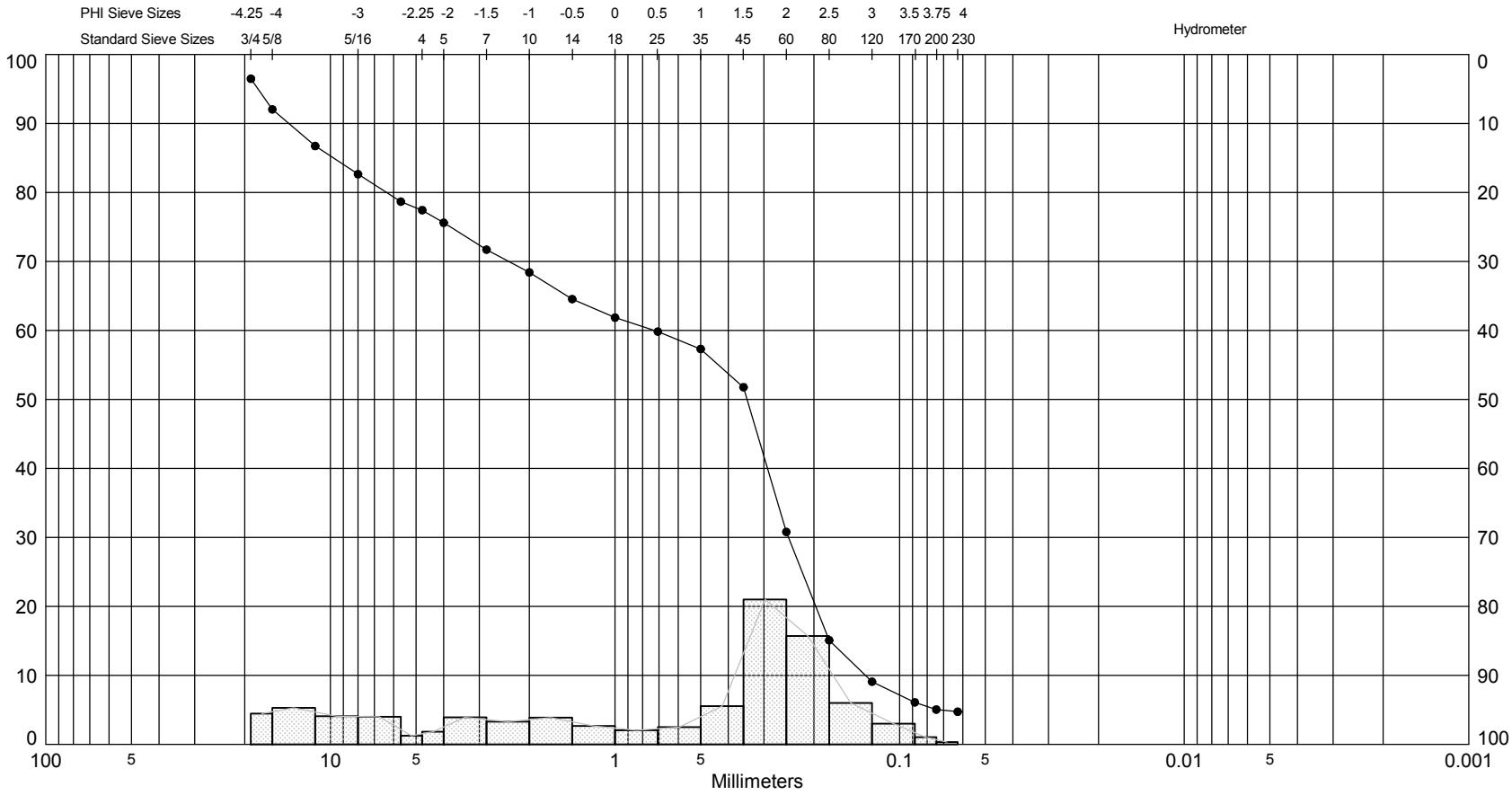
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y157 #1	—●—		SW-SM	W/ GRAVEL #200 - 5.05 #230 - 4.73	0.90	46.00	1.54	0.14	-0.43	1.86	2.29

Comments: BROWN SAND, SOME WHITE SHELL

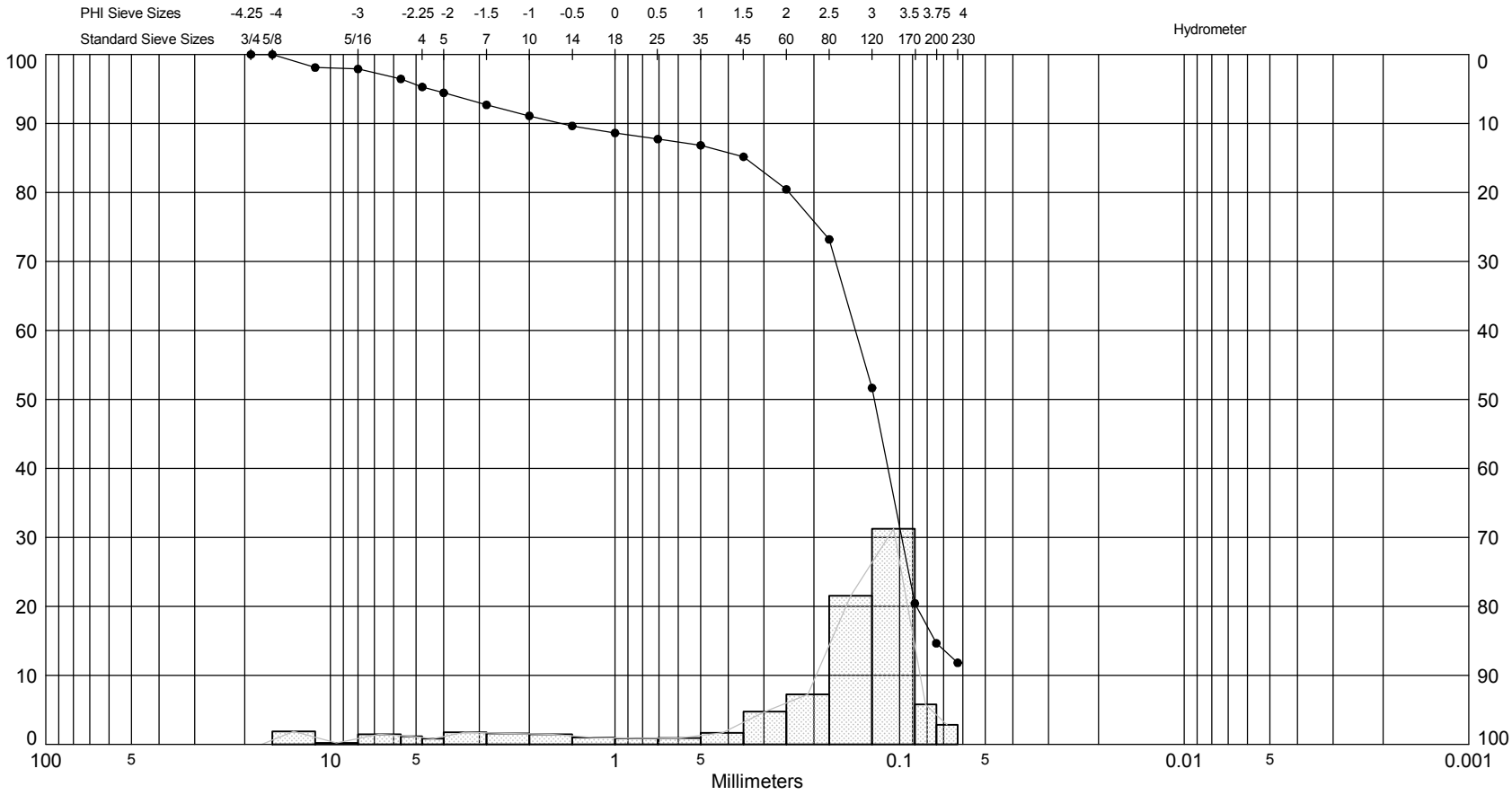
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y157 #2	—●—		SM	#200 - 14.65 #230 - 11.82	1.40	11.10	3.03	2.24	-1.96	5.85	1.79

Comments: SILTY BROWN SAND, WHITE SHELL

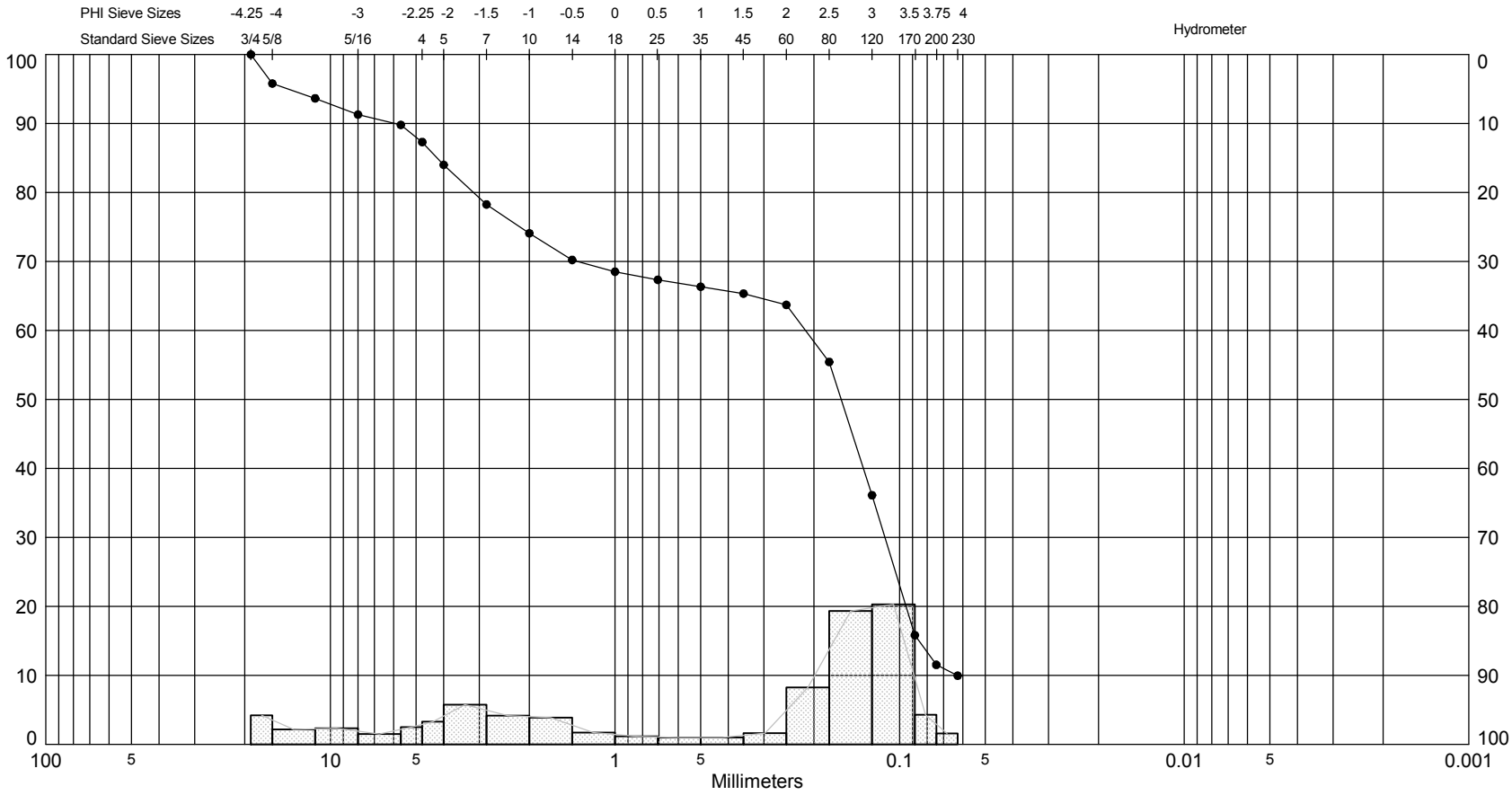
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y157 #3	—●—		SW-SM	#200 - 11.53 #230 - 9.95	1.50	33.50	2.64	1.06	-0.74	1.99	2.54

Comments: BROWN SAND, SOME WHITE SHELL

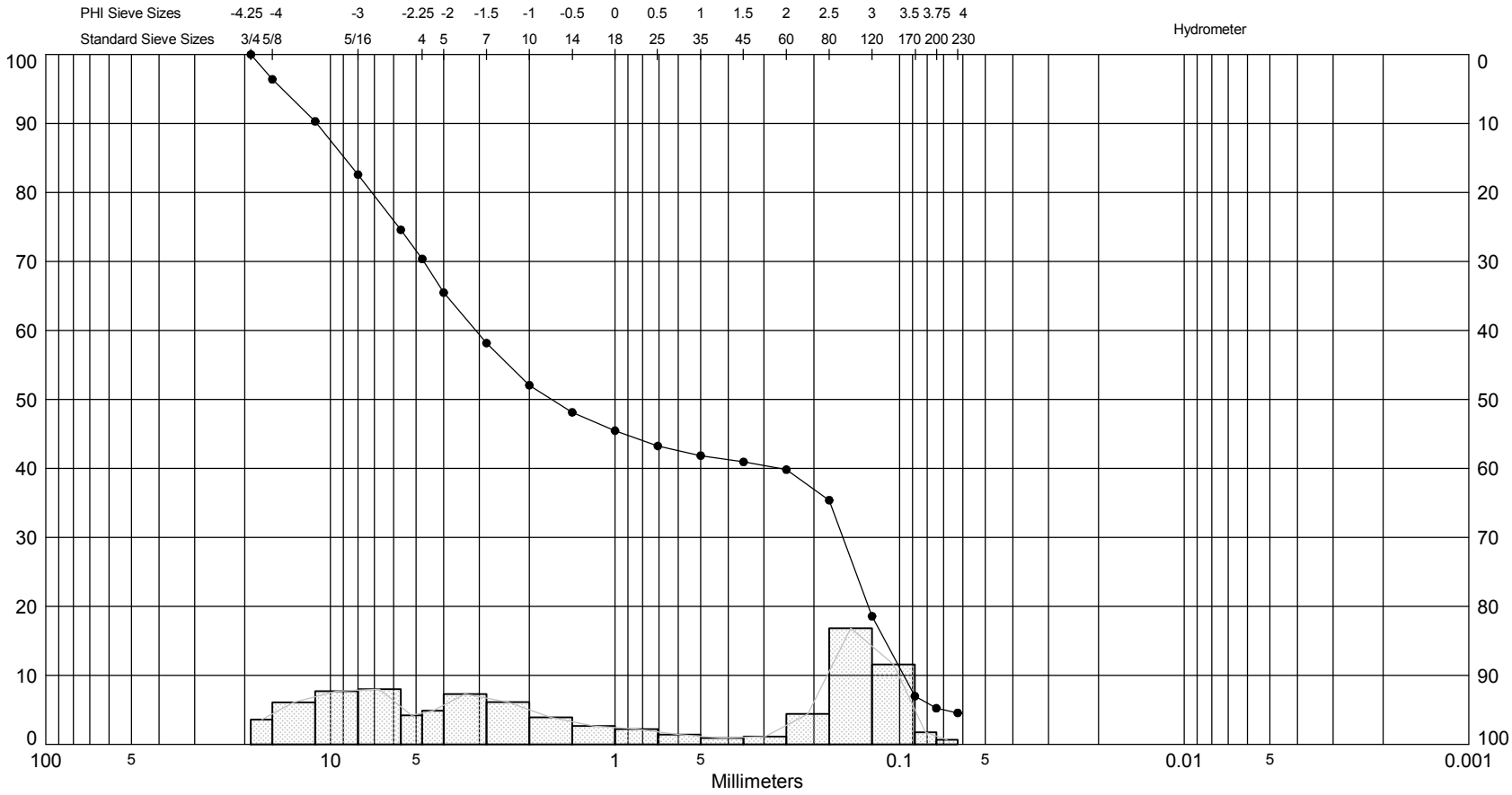
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y157 #4	—●—		SW-SM	W/ GRAVEL #200 - 5.23 #230 - 4.56	1.00	42.60		-0.23	0.13	1.41	2.66

Comments: WHITE SHELL, FEW BLACK PEBBLES

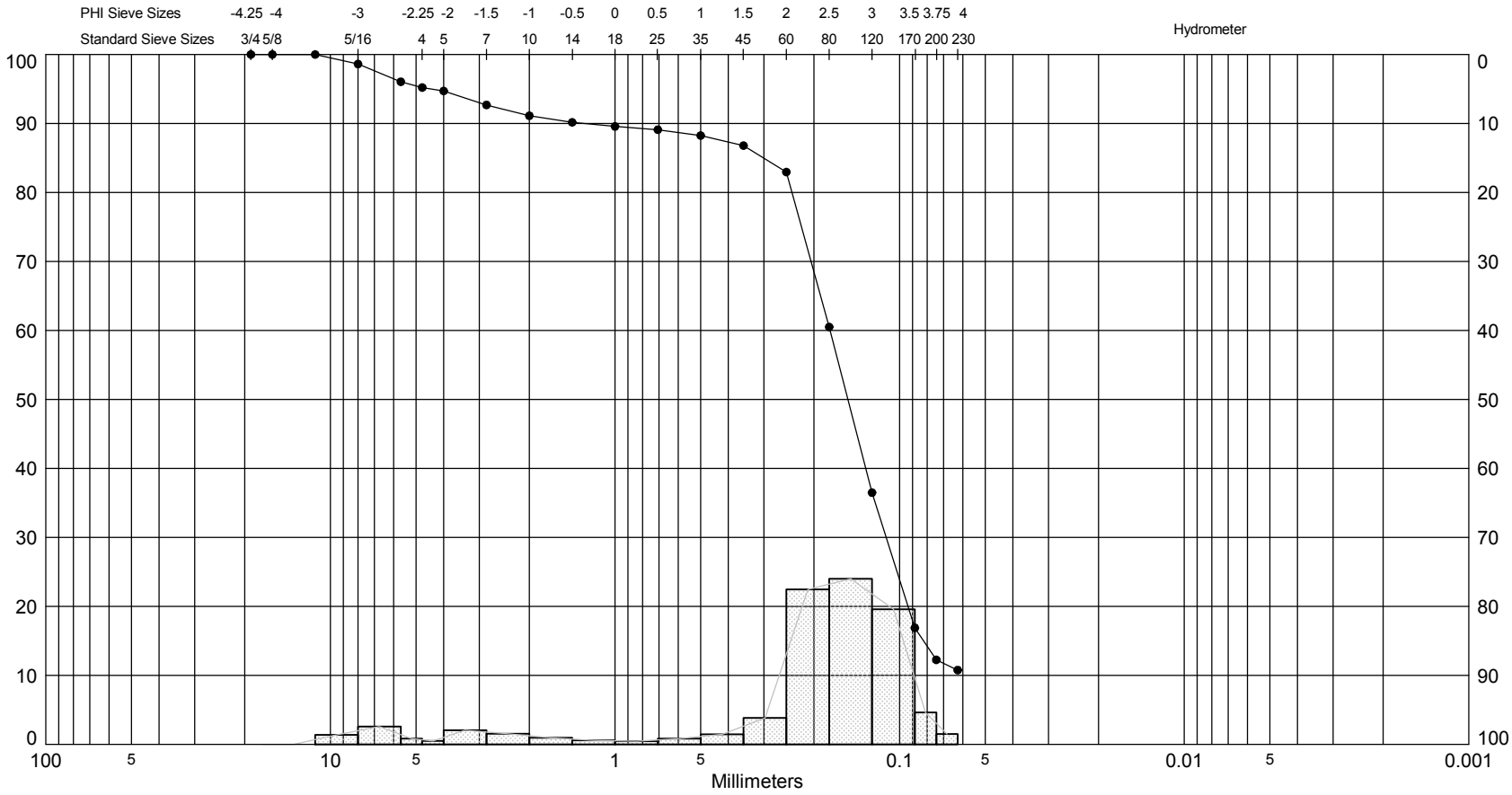
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y158 #1	—●—		SM	#200 - 12.25 #230 - 10.77	0.70	4.80	2.72	2.14	-2.01	6.13	1.64

Comments: GRAY SILTY SAND, PEBBLES

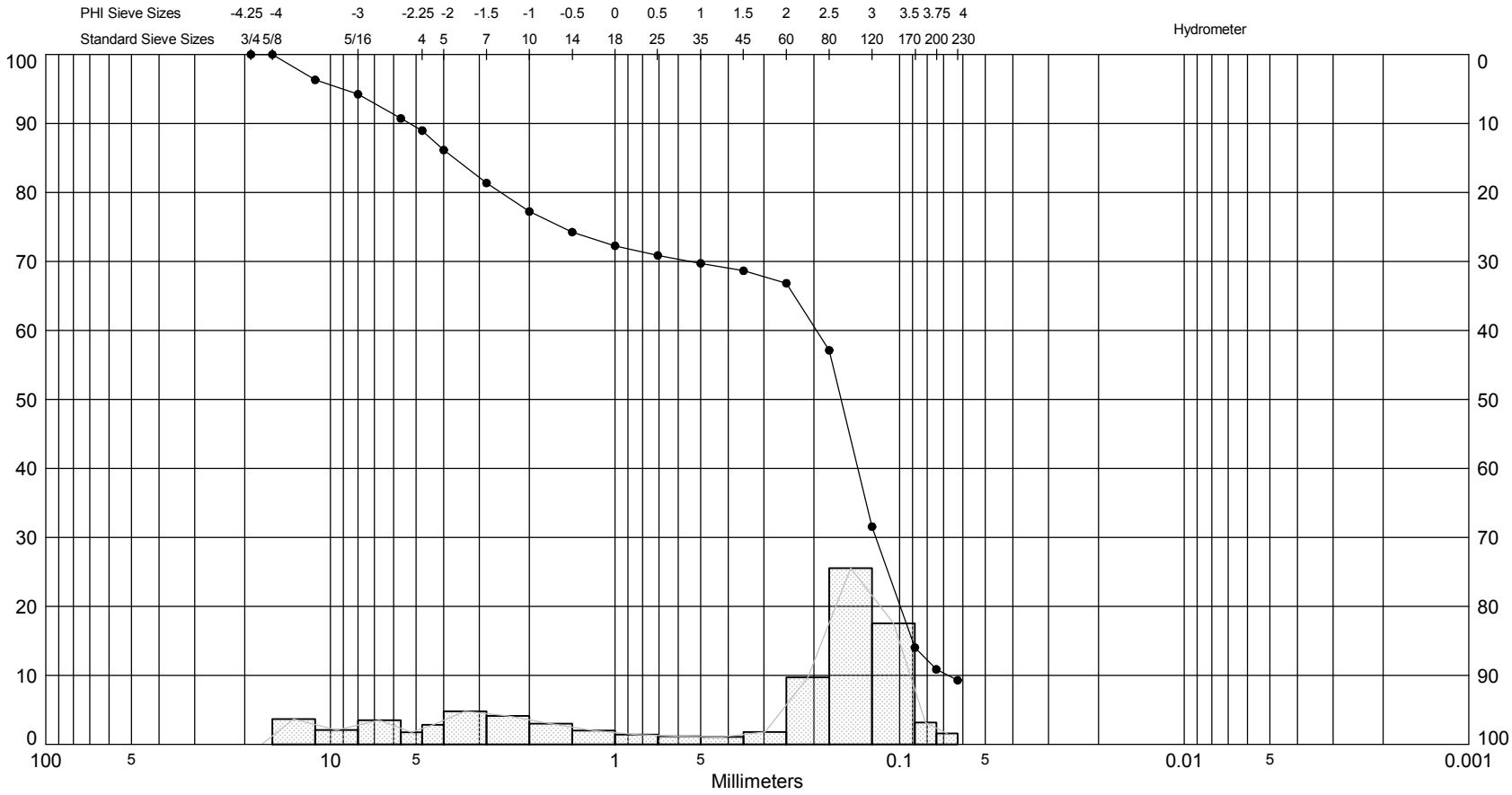
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y158 #2	—●—		SW-SM	#200 - 10.87 #230 - 9.29	1.20	29.40	2.64	1.28	-0.88	2.2	2.35

Comments: GRAY SAND, WHITE SHELL

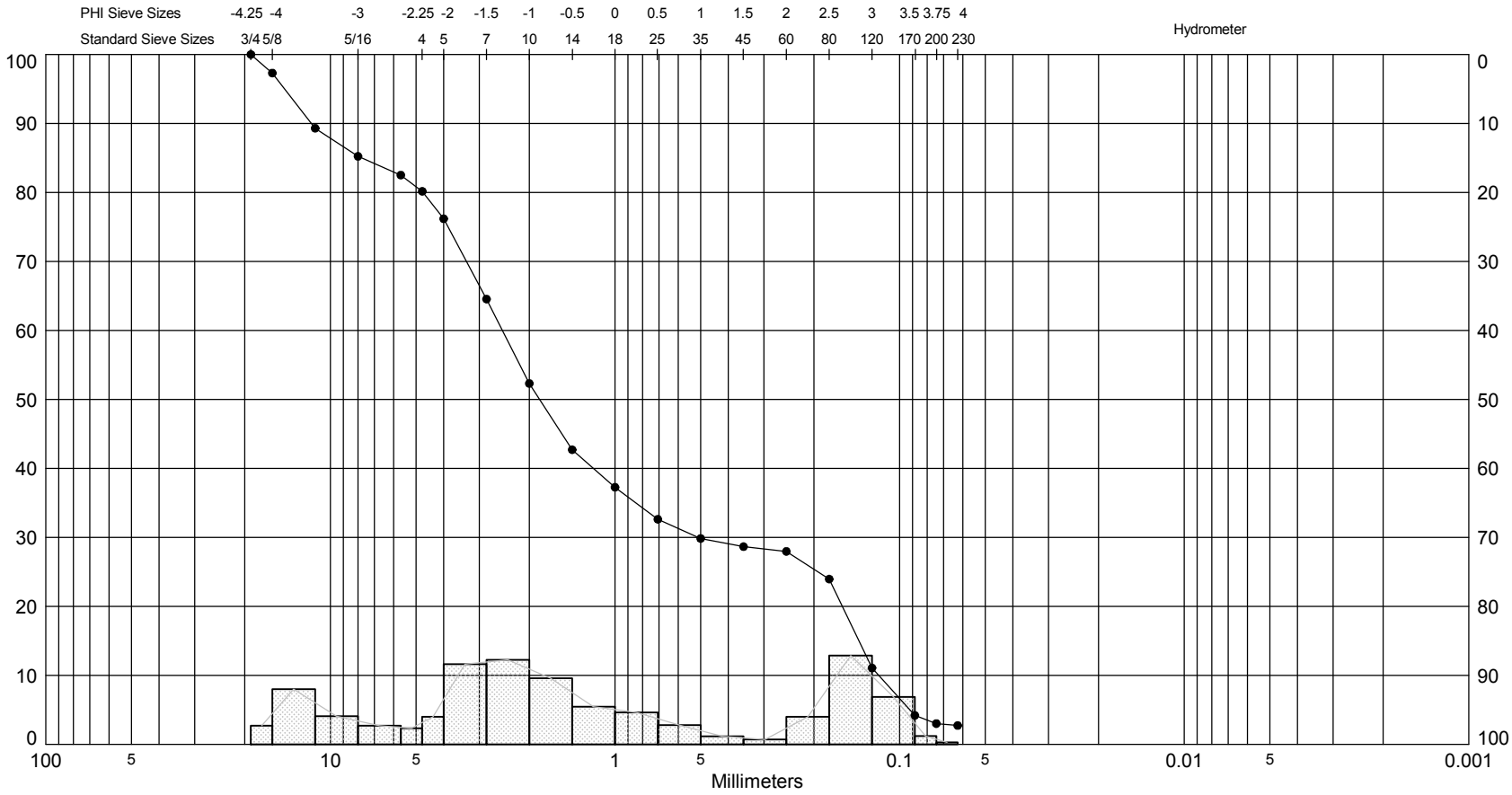
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y158 #3	—●—		SW	#200 - 3.01 #230 - 2.73	1.30	59.20		-0.43	0.28	1.92	2.29

Comments: WHITE SHELL

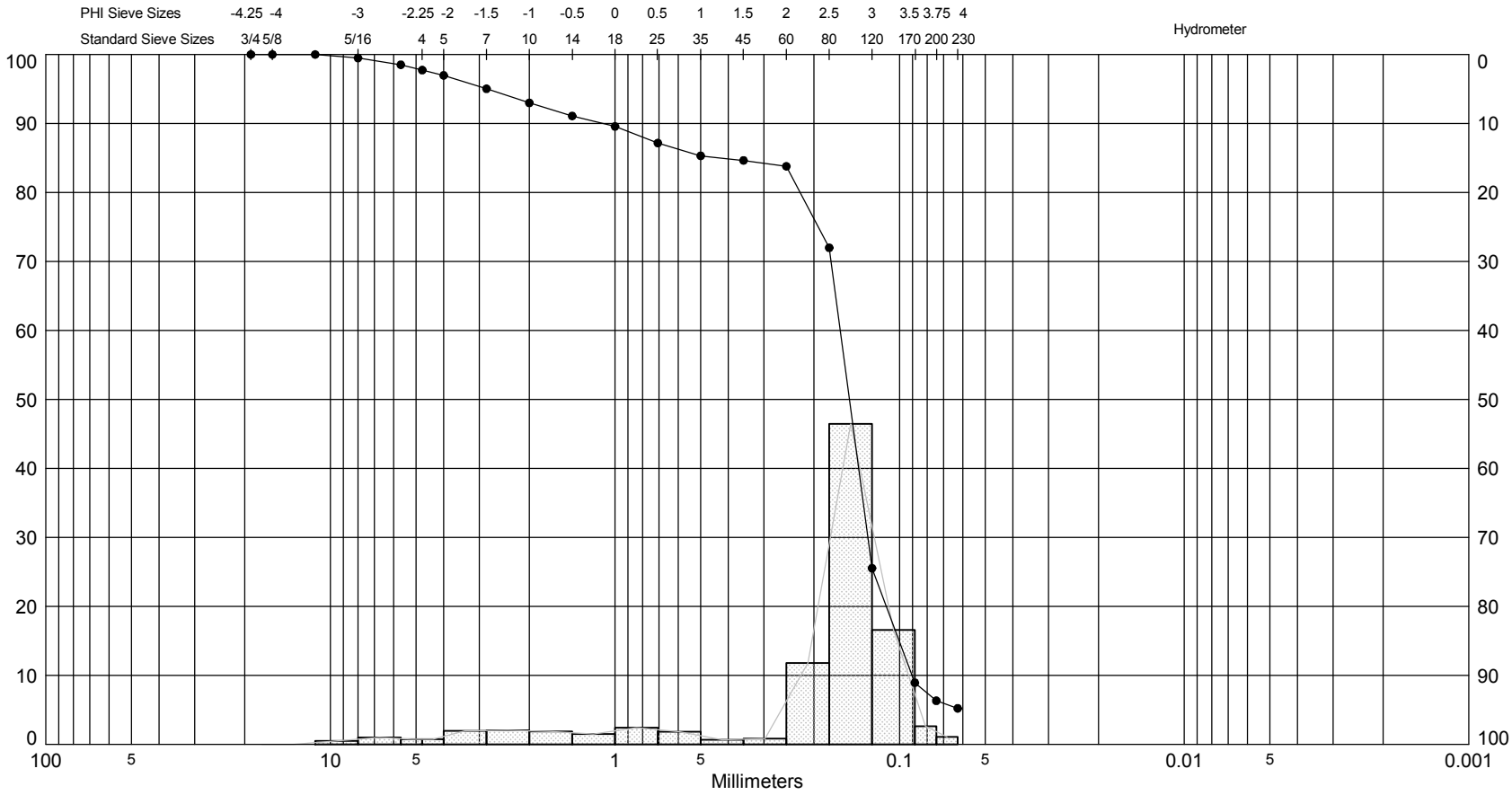
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y158 #4	—●—		SW-SM	#200 - 6.32 #230 - 5.22	0.60	8.50	2.74	2.22	-2.03	6.24	1.47

Comments: BROWN SILTY SAND, WHITE SHELL

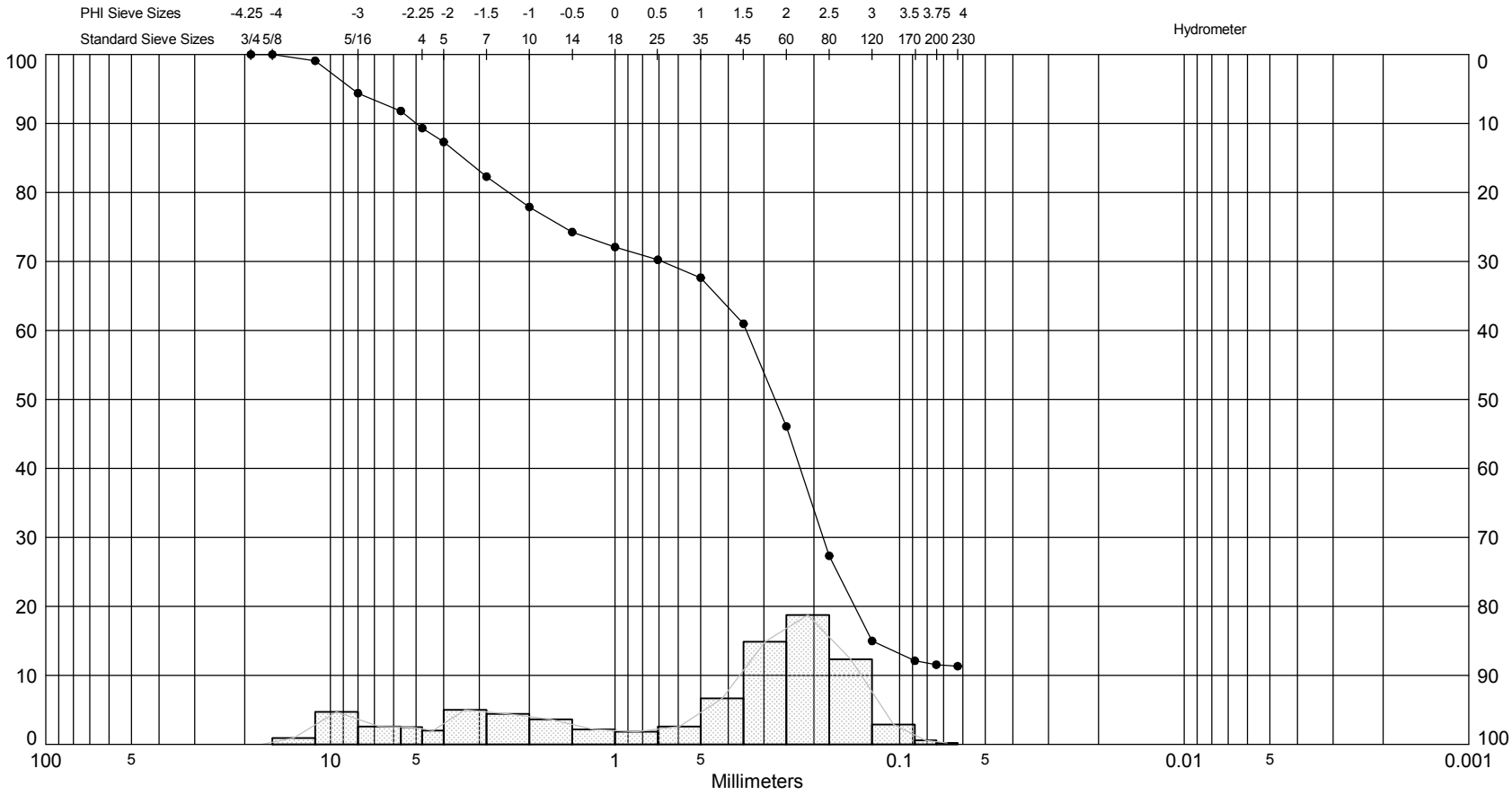
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y160 #1	—●—		SW-SM	#200 - 11.55 #230 - 11.33	3.70	27.50	1.87	0.81	-0.79	2.23	2.01

Comments: GRAY SILTY SAND, PEBBLES, SHELL

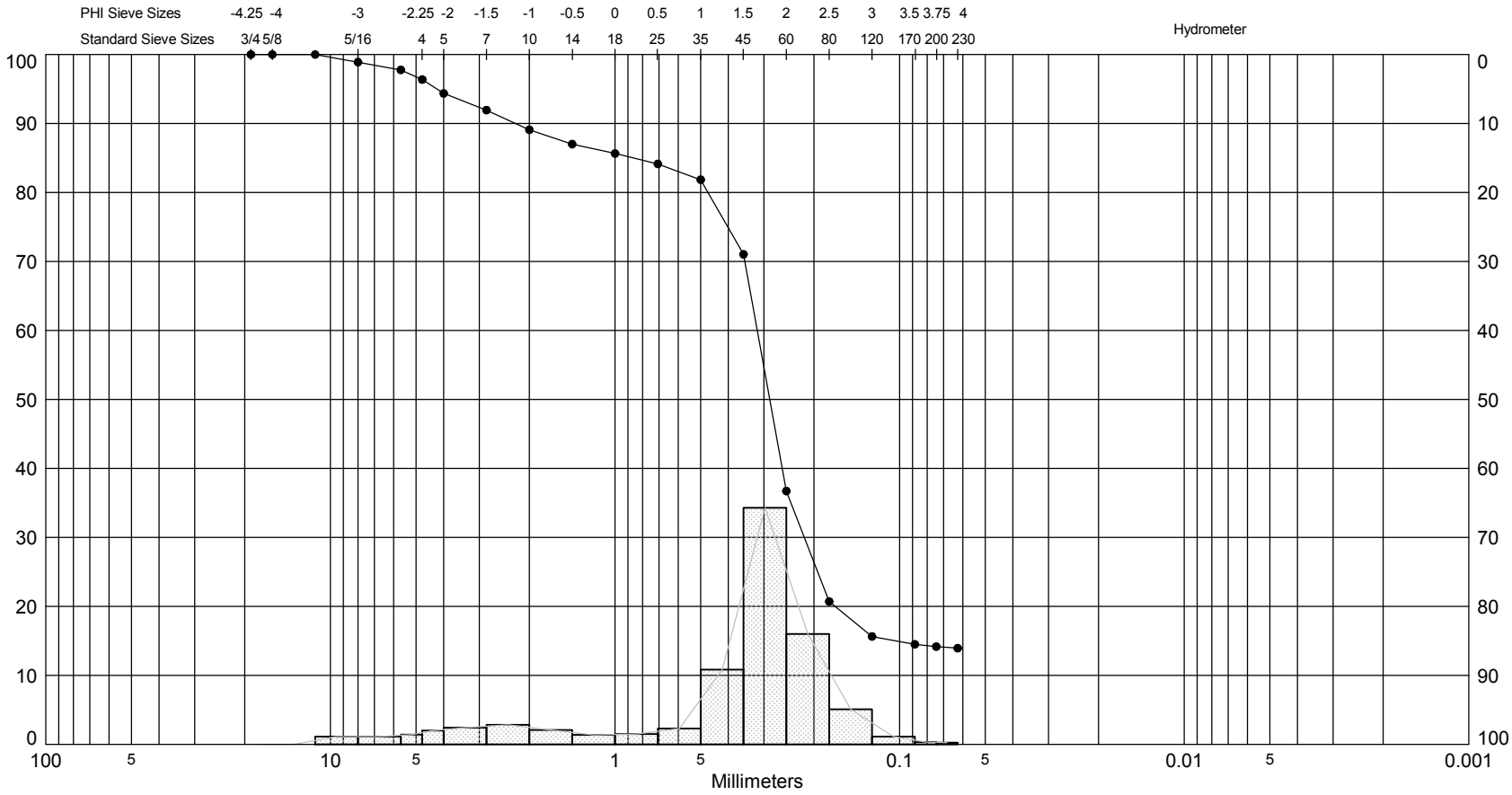
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y160 #2	—●—		SM	#200 - 14.17 #230 - 13.94	1.60	18.20	1.81	1.25	-1.53	4.51	1.44

Comments: GRAY SILTY SAND, PEBBLES, SHELL

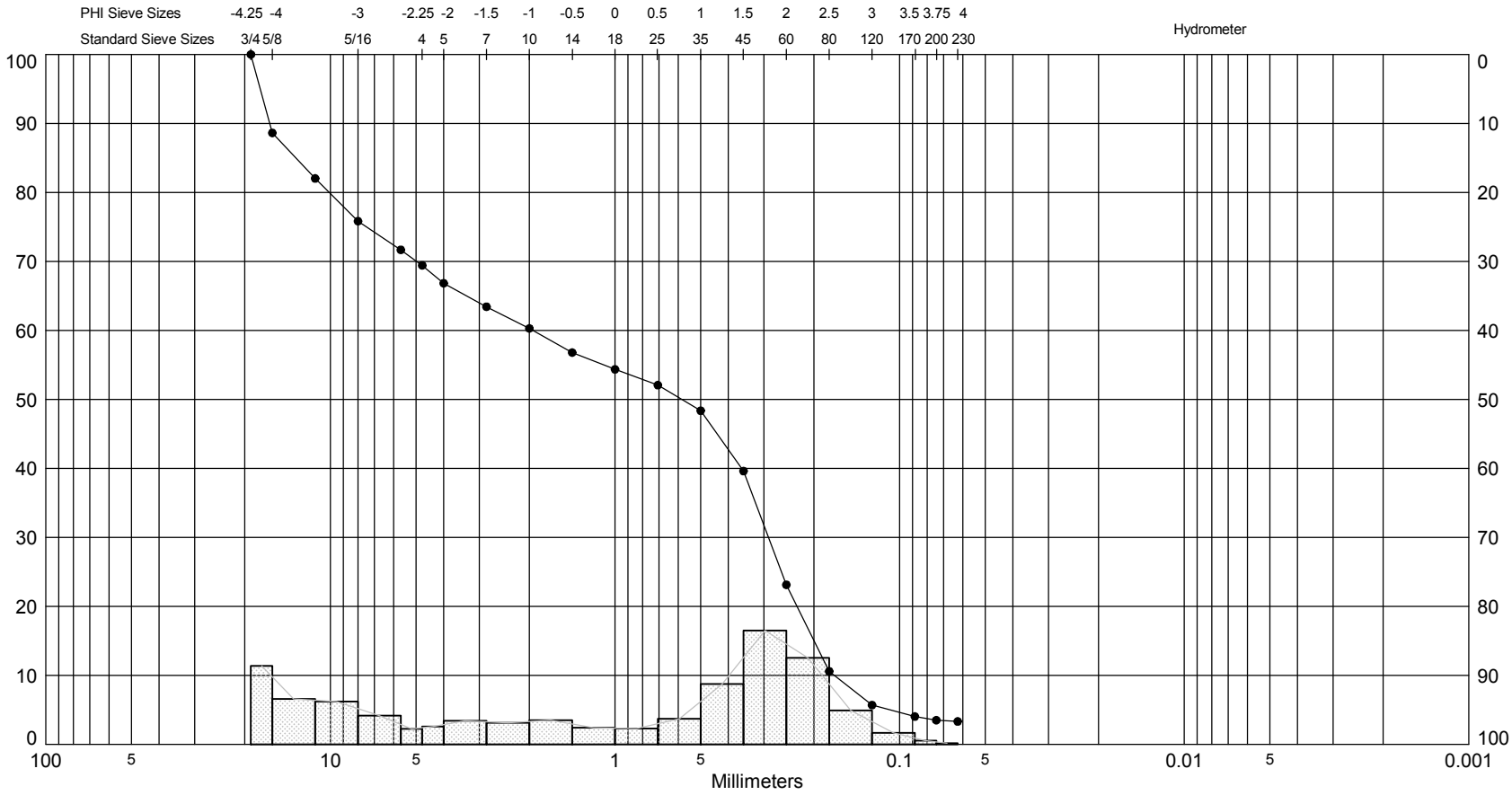
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y160 #3	—●—		SW	#200 - 3.50 #230 - 3.32	0.80	29.40	0.78	-0.35	-0.28	1.5	2.51

Comments: WHITE SHELL, GRAY SAND

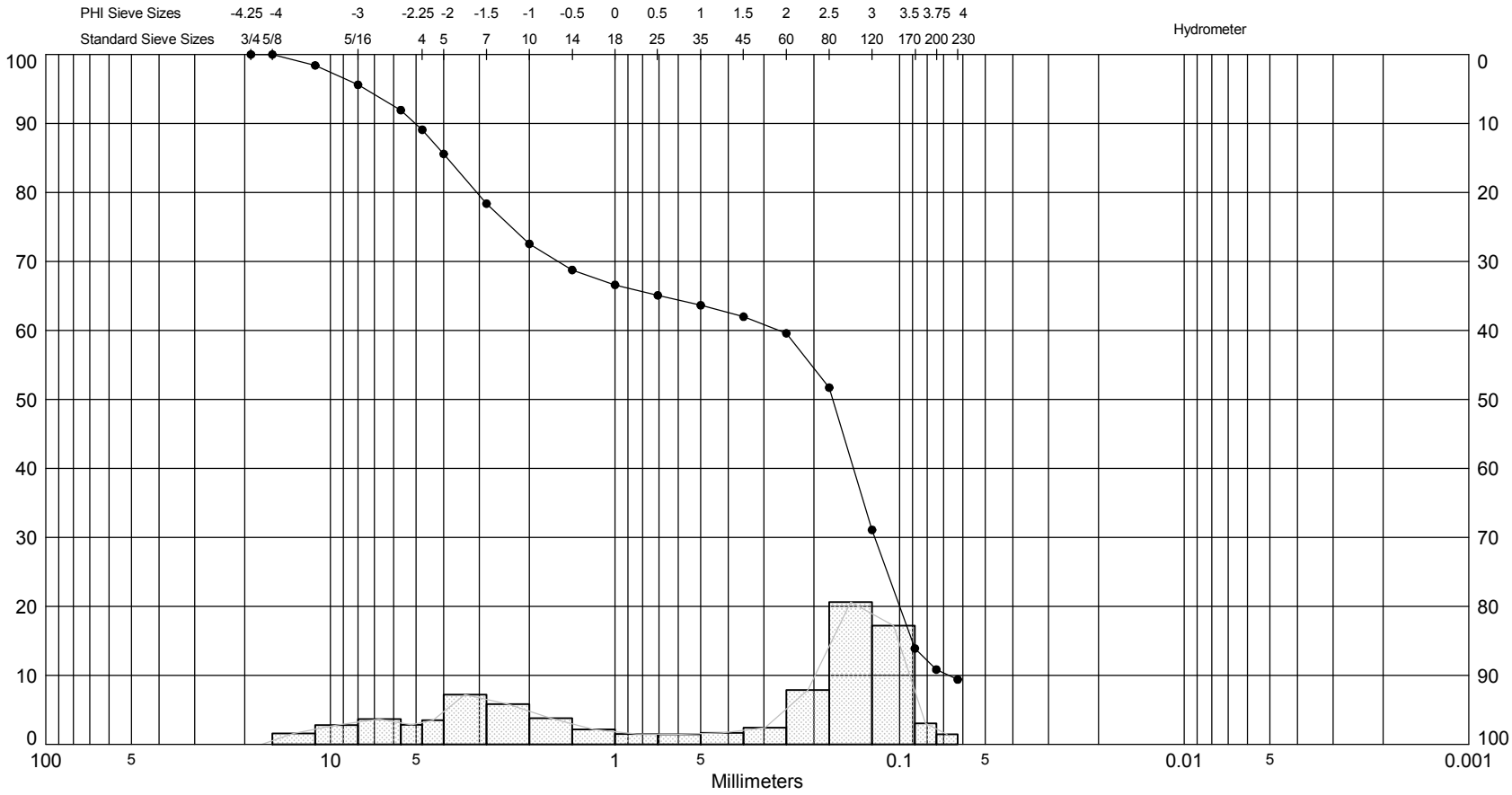
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Y160 #4	—●—		SW-SM	#200 - 10.84 #230 - 9.40	1.30	36.20	2.54	1.02	-0.55	1.69	2.35

Comments: SILTY BROWN SAND, WHITE SHELL

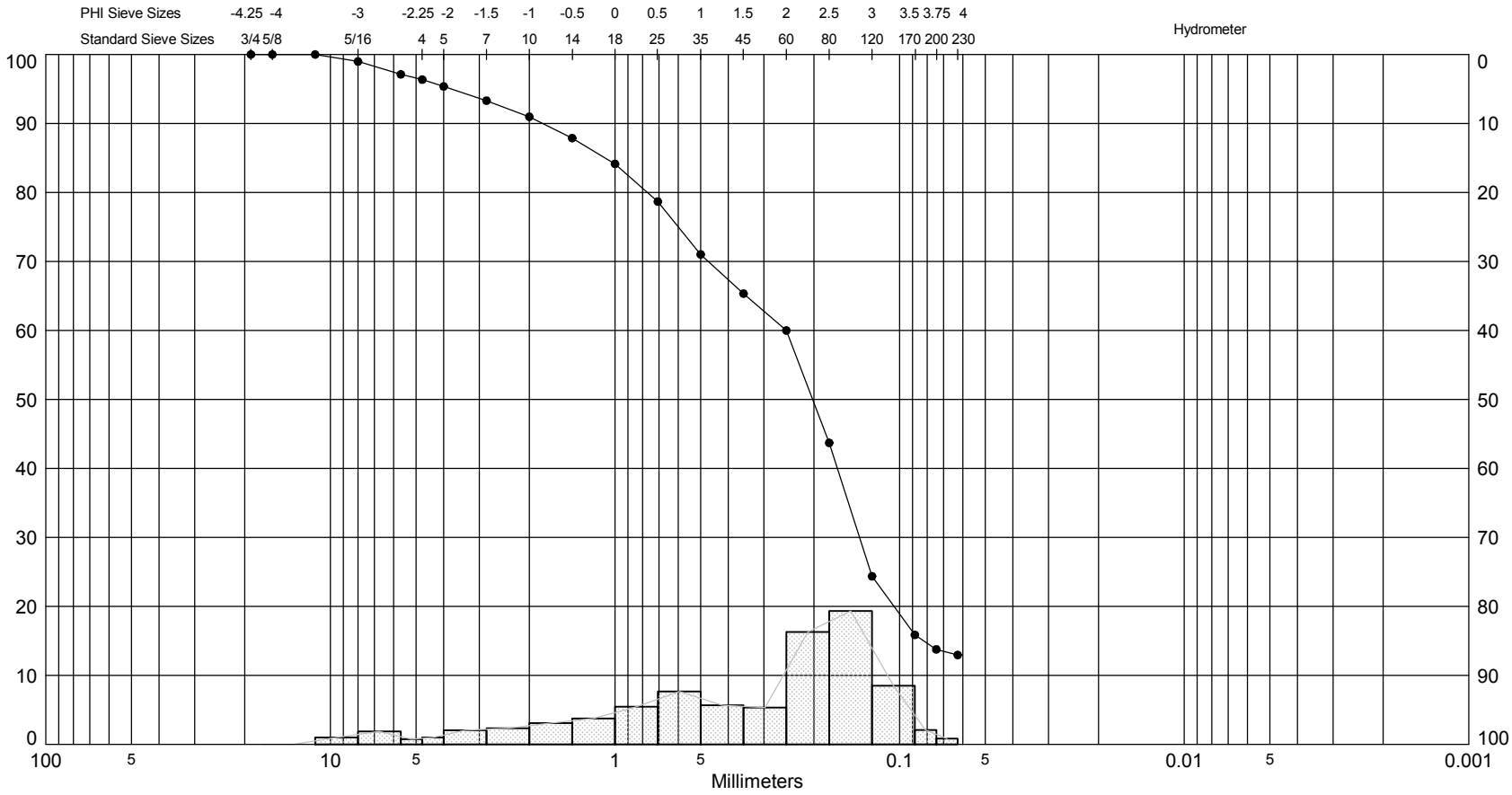
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	03-20-12
Analyzed By:	LA
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z165 #1	—●—		SM	#200 - 13.77 #230 - 12.95	2.80	22.40	2.31	1.49	-1.01	3.23	1.66

Comments: Silty gray sand/shell

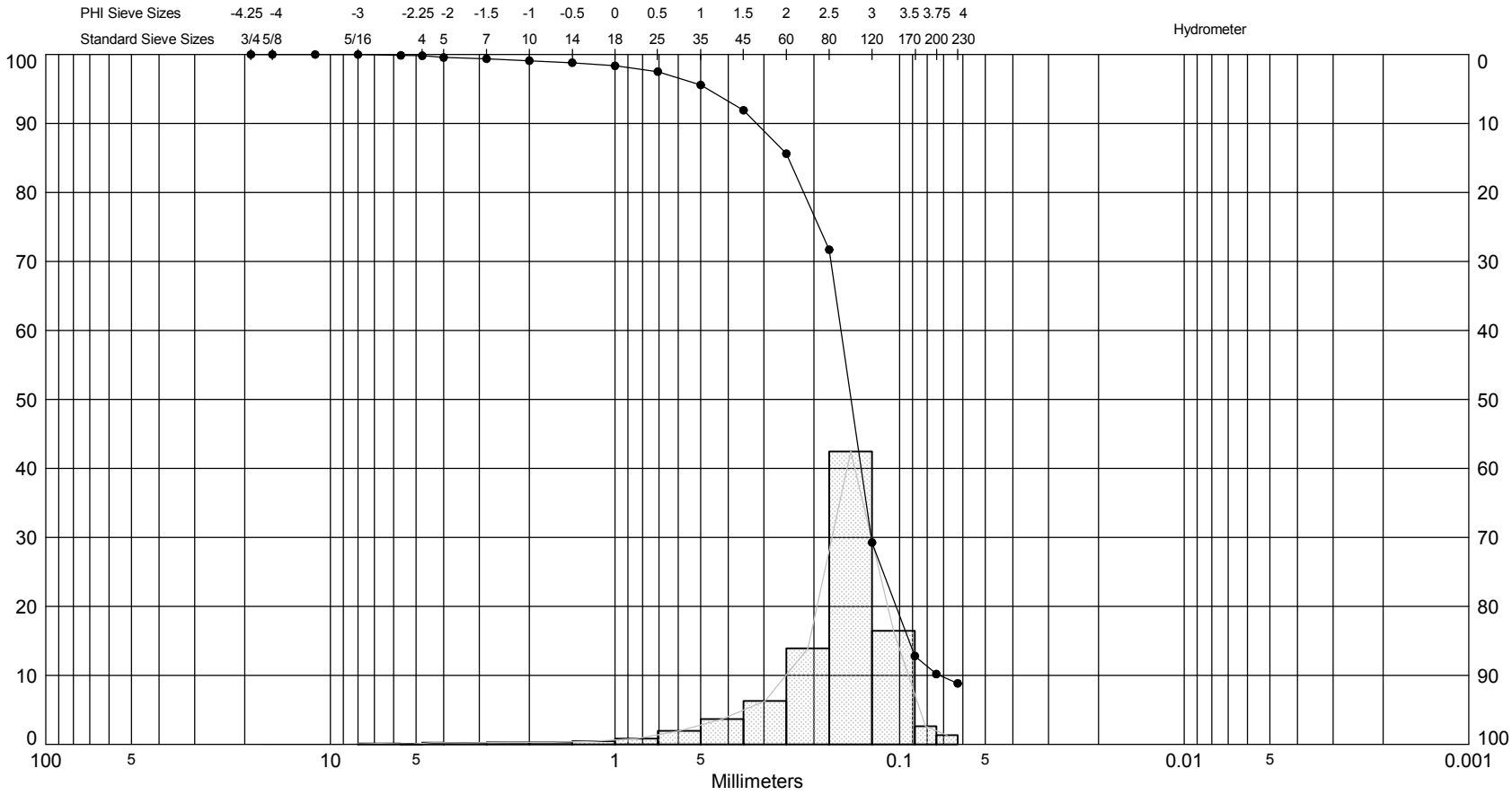
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z165 #2	—●—		SP-SM	#200 - 10.19 #230 - 8.84	1.40	5.50	2.76	2.54	-2.36	11.9	0.82

Comments: Silty gray sand

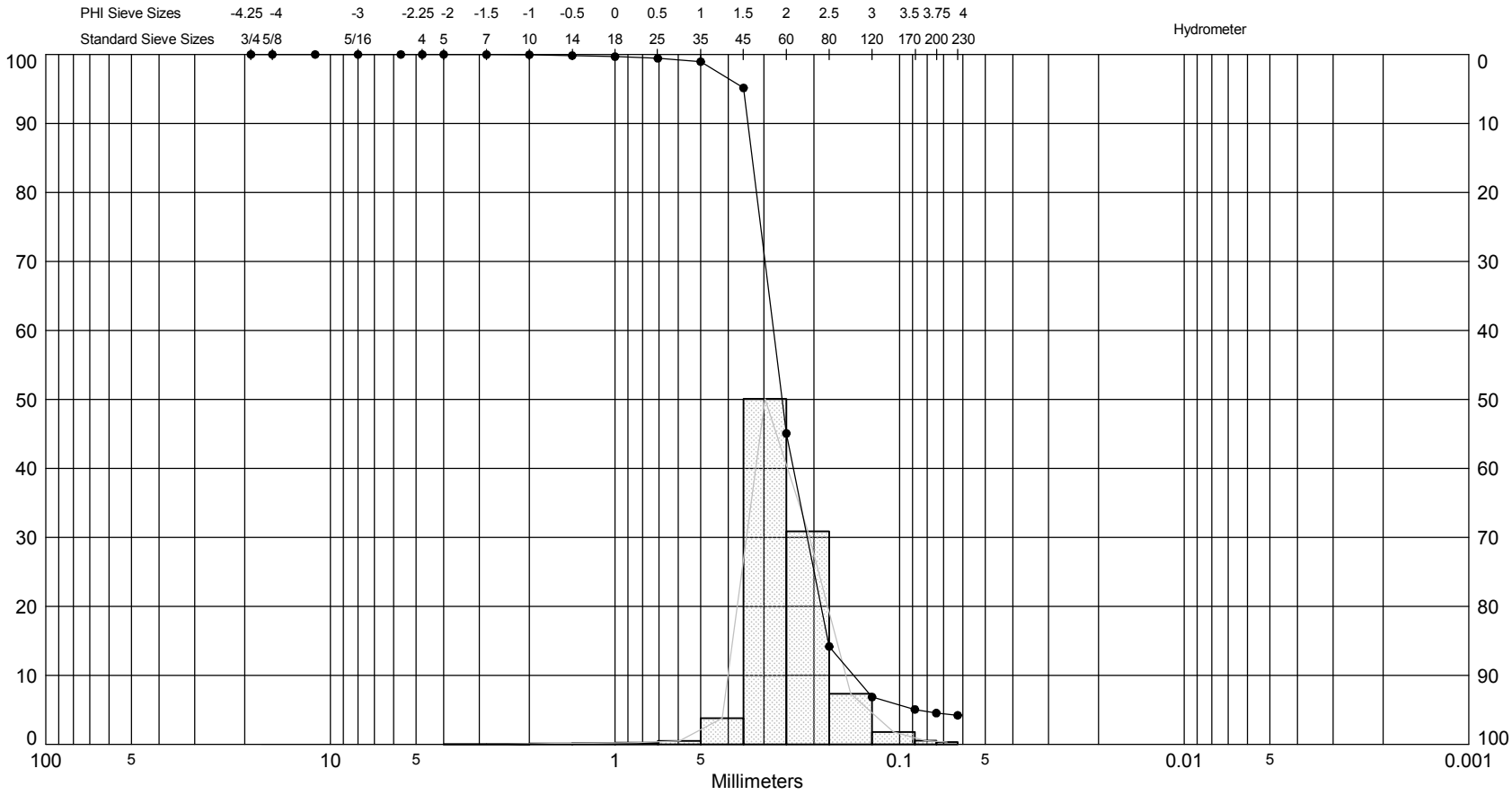
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z165 #3	—●—		SP	#200 - 4.53 #230 - 4.21	0.30	1.10	1.95	2	0.12	8.33	0.46

Comments: Tan sand, little tan silt

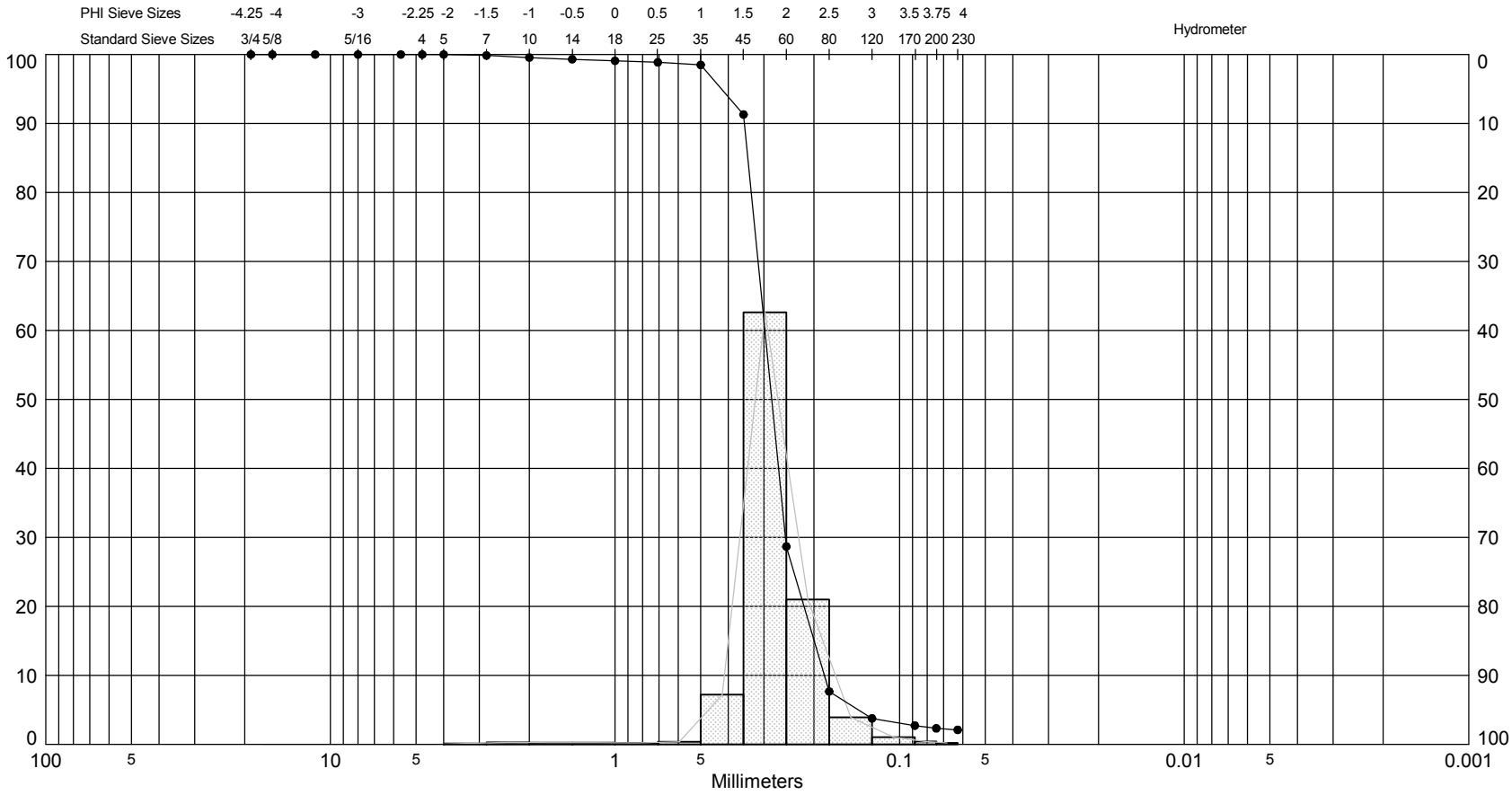
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z165 #4	—●—		SP	#200 - 2.32 #230 - 2.10	1.20	1.50	1.83	1.86	-1.35	16.7	0.48

Comments: Tan sand, woody peat

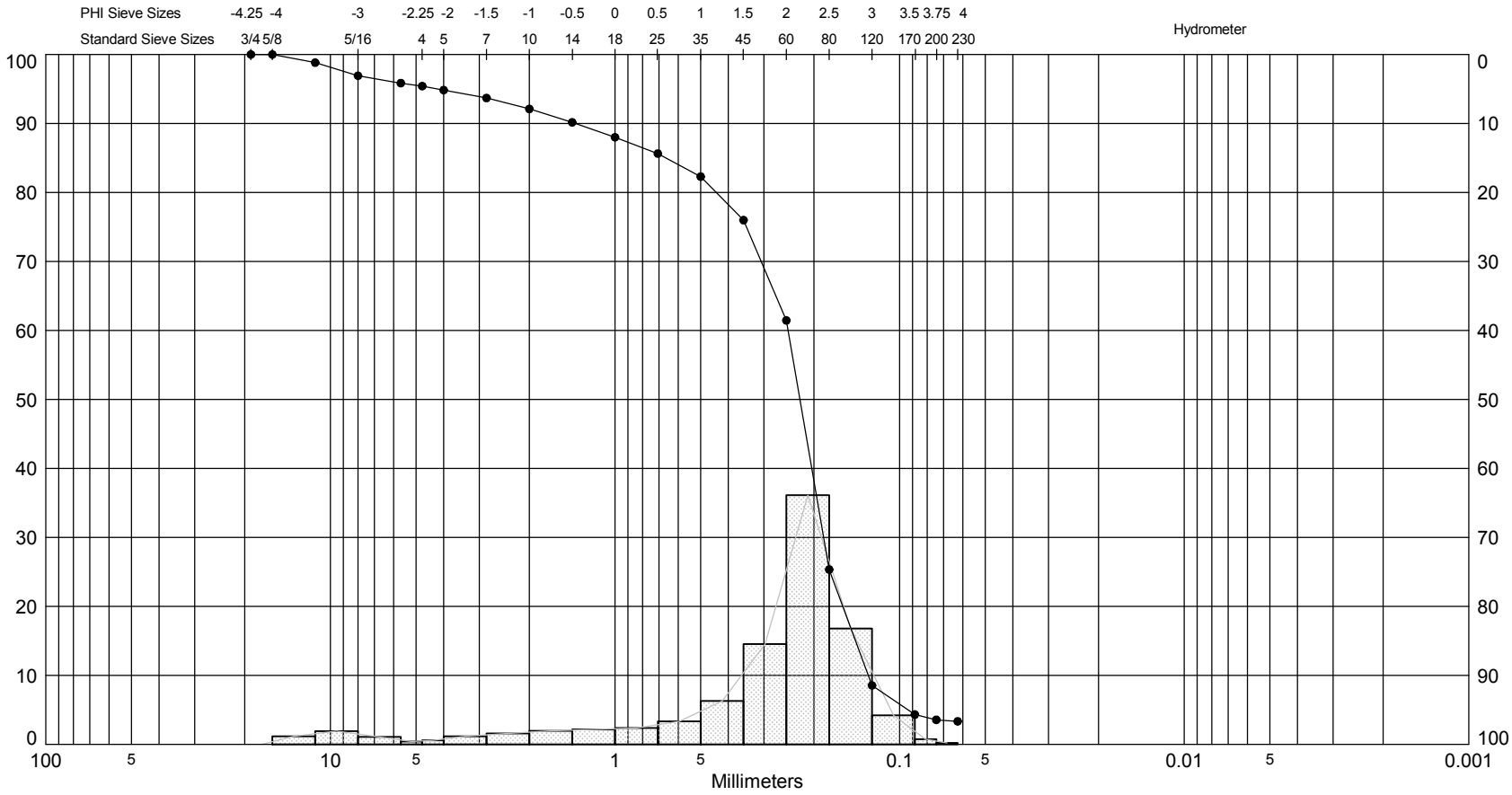
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z166 #1	—●—		SW	#200 - 3.56 #230 - 3.34	1.10	10.60	2.16	1.65	-1.95	6.44	1.5

Comments: tan sand, few rocks/shell fragments

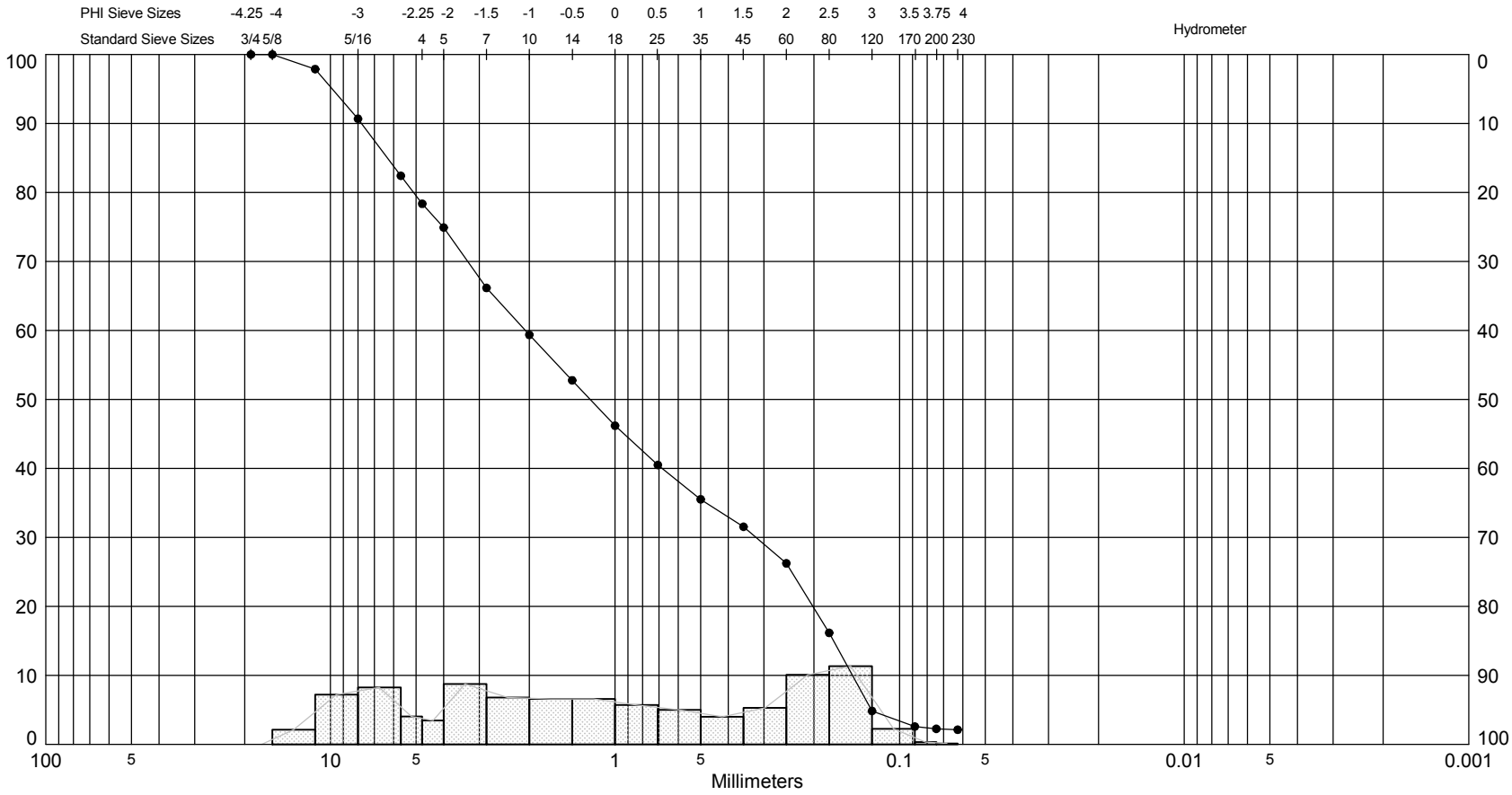
Depths and elevations based on measured values

Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z166 #2	—●—		SW	#200 - 2.25 #230 - 2.12	1.20	27.80		-0.2	0.07	1.67	2.11

Comments: gray/blue sand, shell, rocks

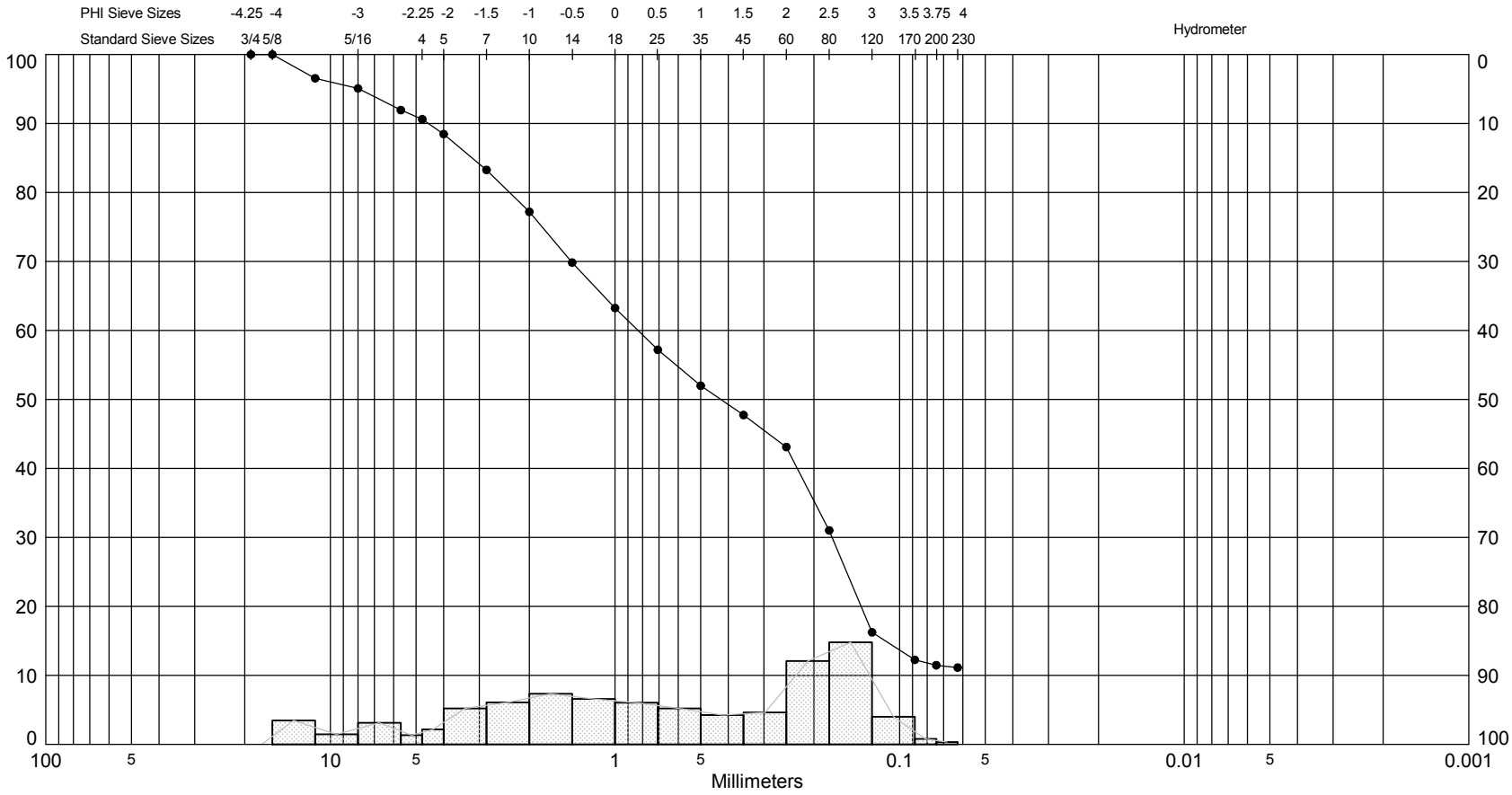
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z166 #3	—●—		SP-SM	#200 - 11.47 #230 - 11.13	2.10	28.80	1.23	0.52	-0.38	2.02	2.03

Comments: gray/blue sand, shell, rocks

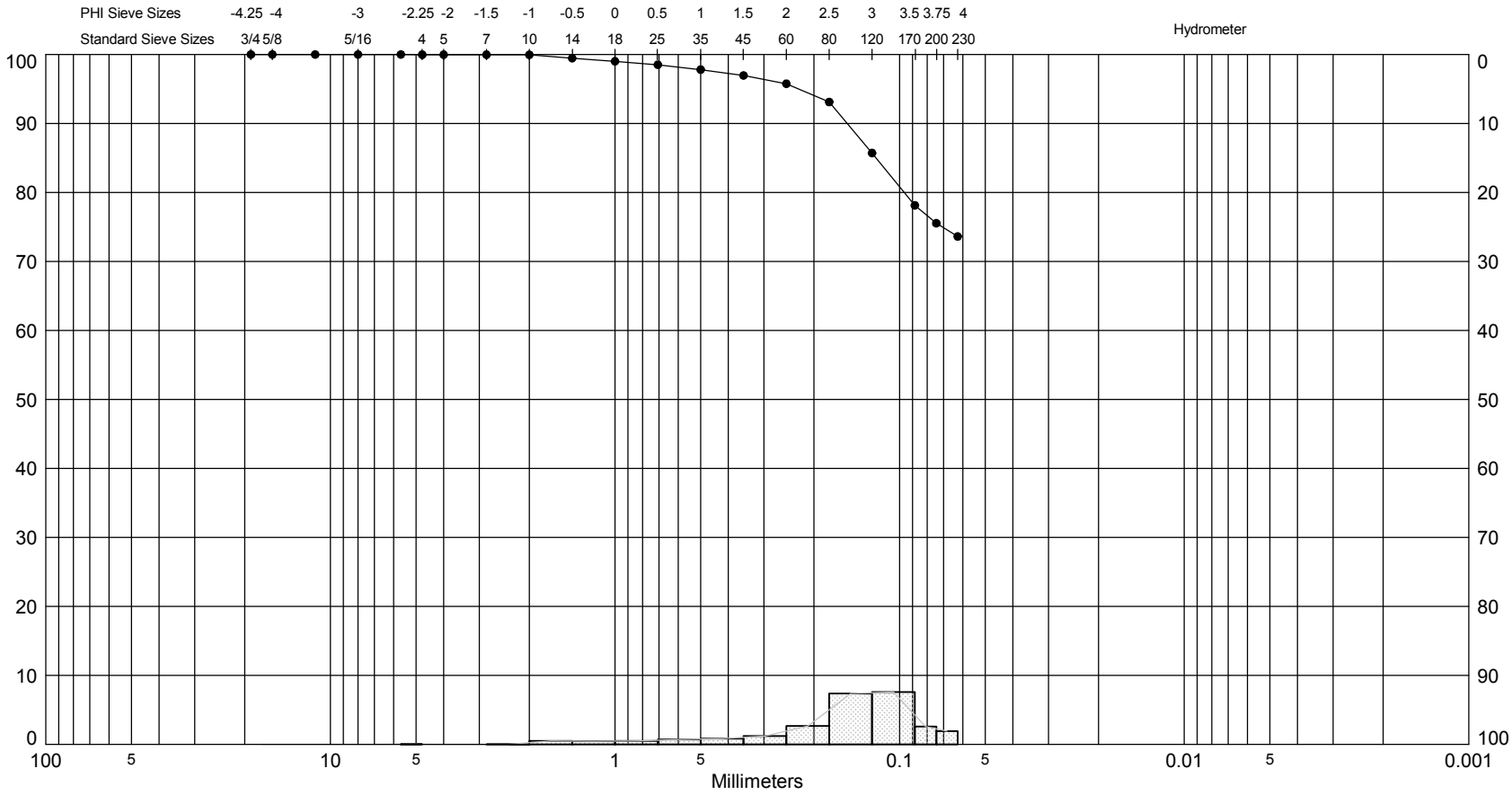
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z166 #4	—●—		ML-CL	#200 - 75.54 #230 - 73.62	7.80	5.20		2.69	-1.69	5.99	1.02

Comments: Peaty silt

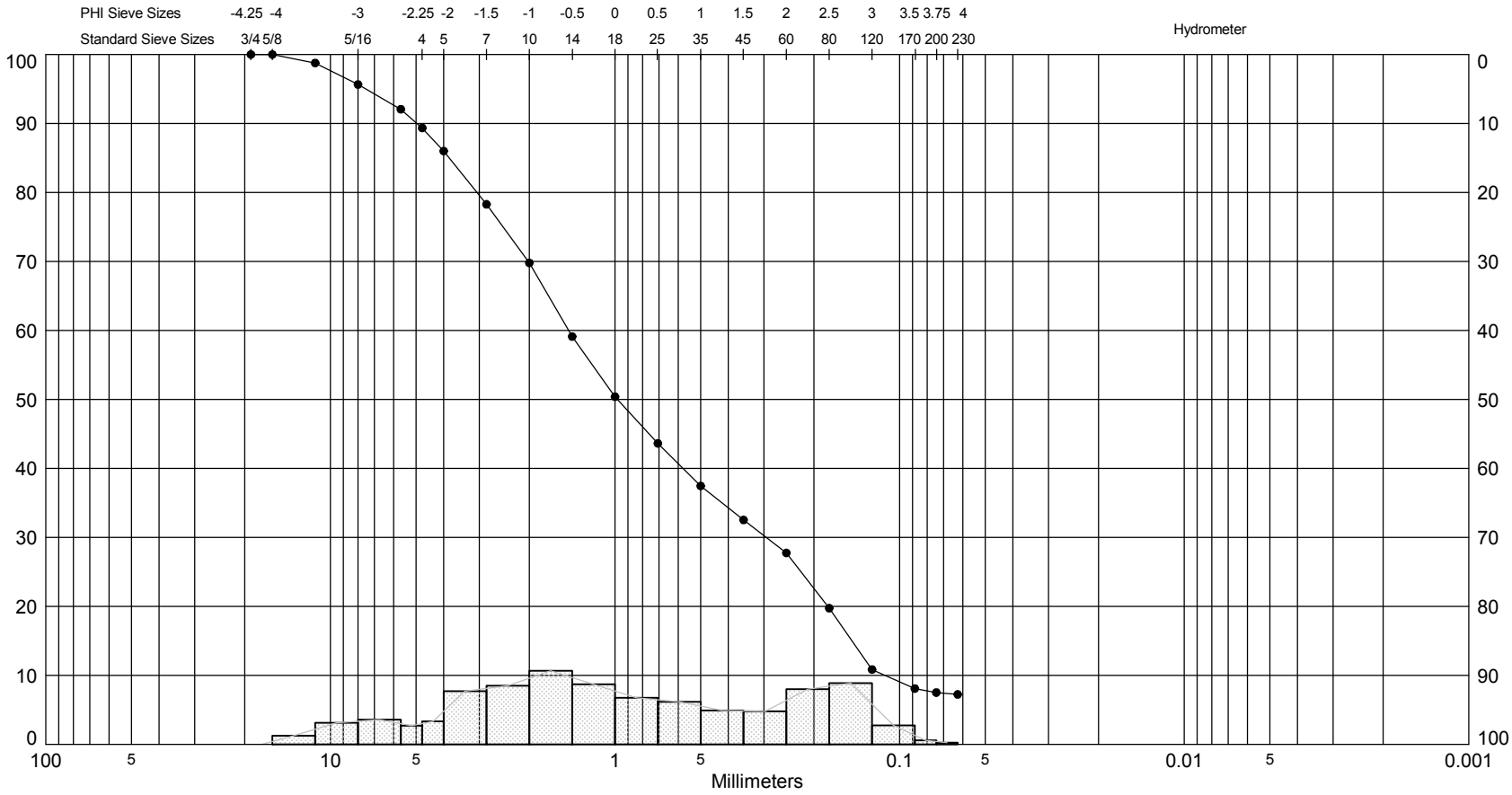
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z167 #1	—●—		SW-SM	#200 - 7.51 #230 - 7.24	1.90	25.00	0.03	0.03	0.07	1.99	1.87

Comments: Gray/blue sand, shell, rocks

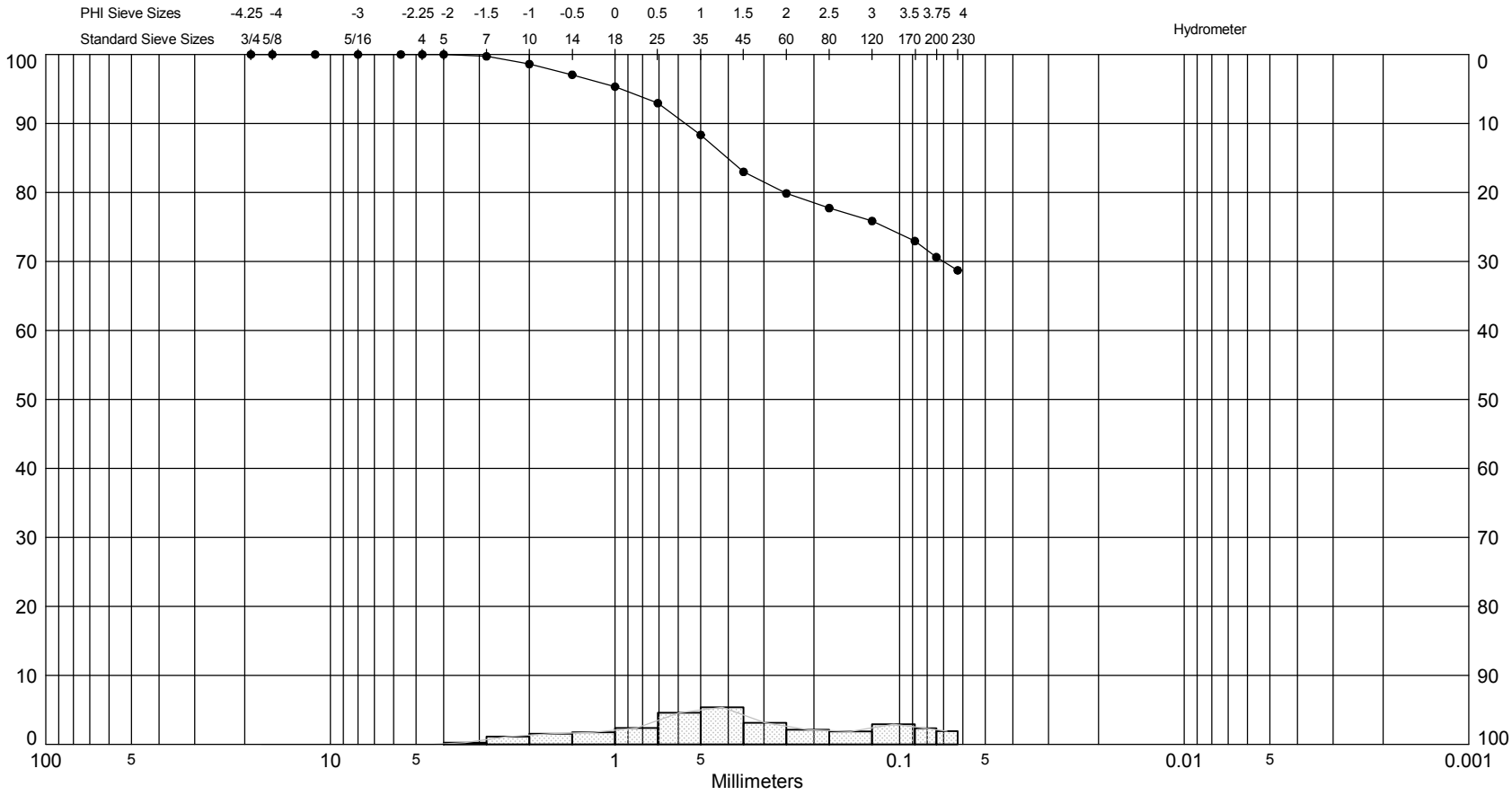
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z167 #2	—●—		ML-CL	#200 - 70.62 #230 - 68.71	12.90	5.80		1.53	-0.05	2.17	1.45

Comments: Peaty silt

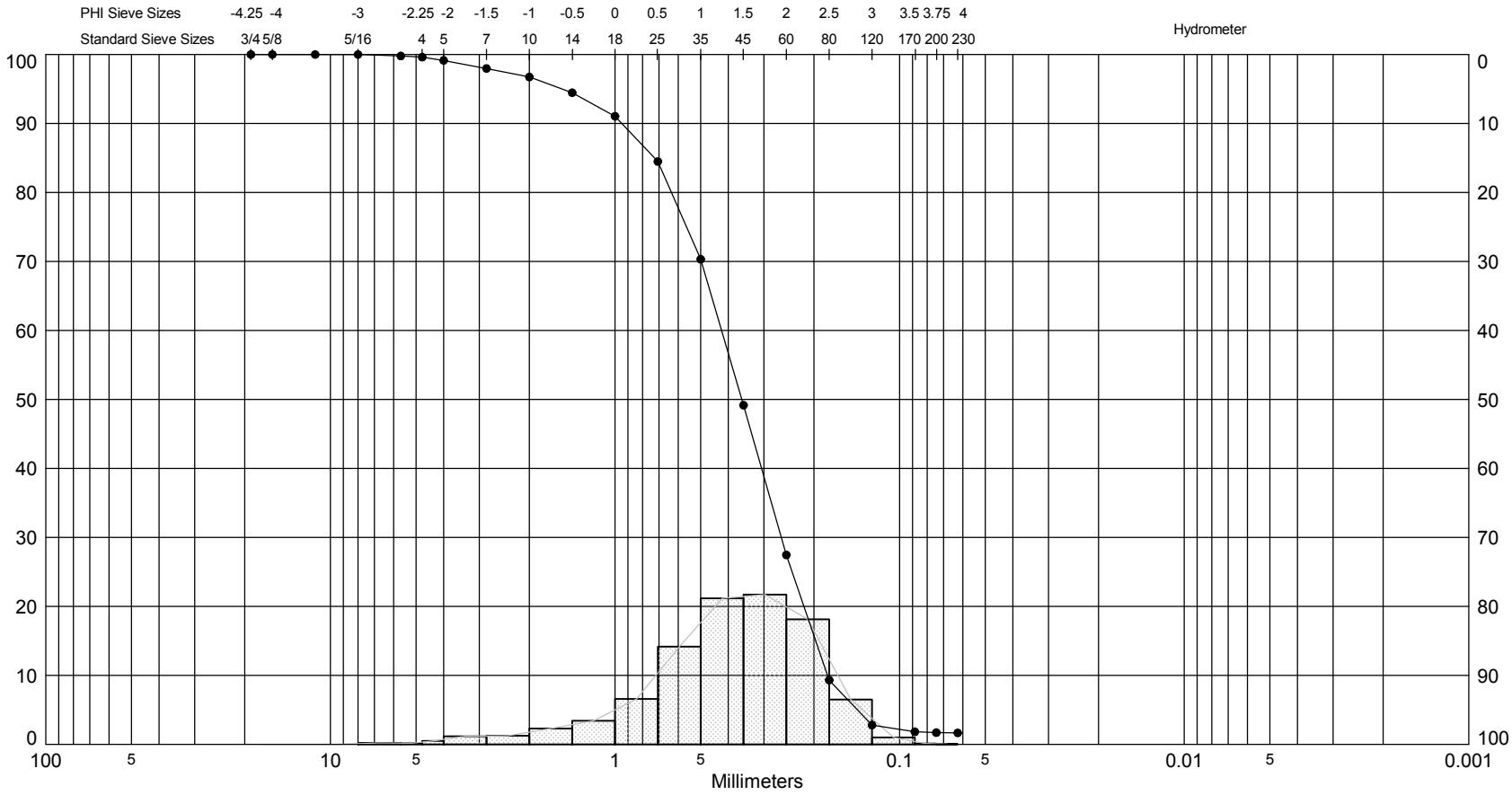
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z167 #3	—●—		SW	#200 - 1.70 #230 - 1.66	0.40	0.70	1.48	1.33	-1.02	4.59	1

Comments: Tan coarse sand, dark fines

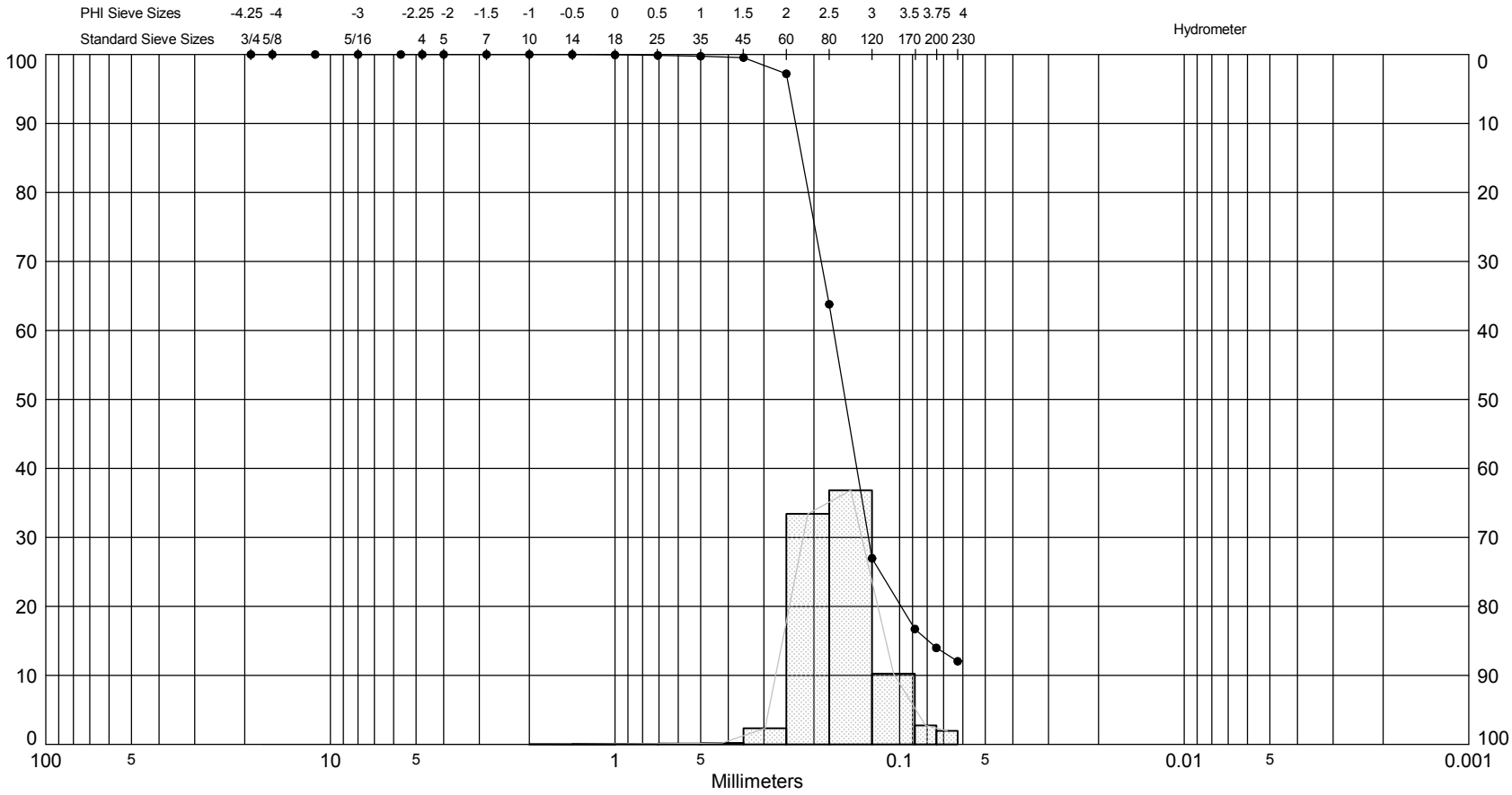
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z167 #4	—●—		SM	#200 - 13.98 #230 - 12.04	0.70	1.10	2.69	2.63	0.17	5.19	0.46

Comments: Fine tan sand, dark fines

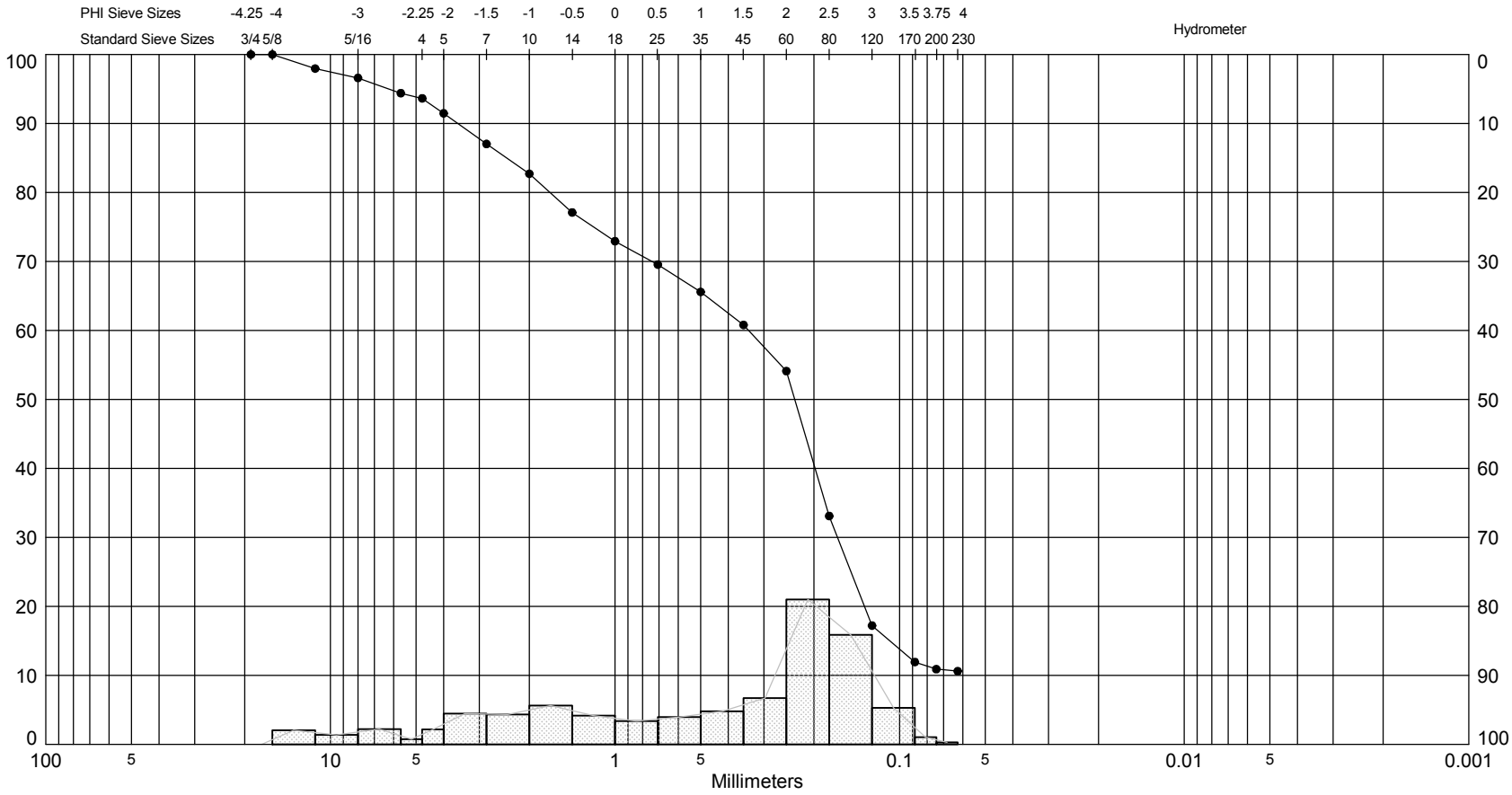
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z168 #1	—●—		SW-SM	#200 - 10.90 #230 - 10.61	4.60	15.80	2.1	1.02	-0.81	2.48	1.93

Comments: Gray/blue sand, shell, rocks

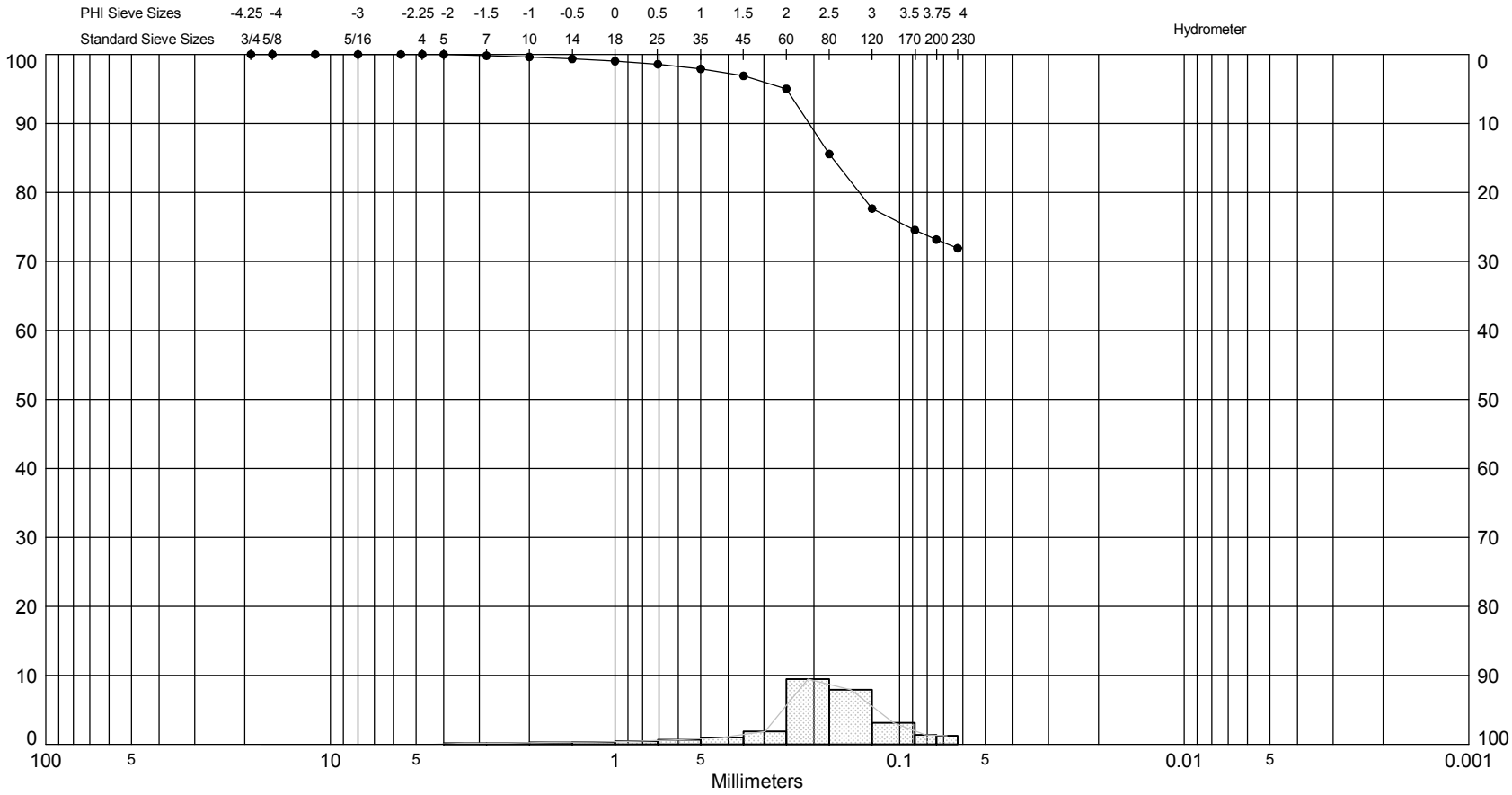
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z168 #2	—●—		ML-CL	#200 - 73.17 #230 - 71.91	3.70	2.30		2.4	-1.58	7.08	0.94

Comments: Silt

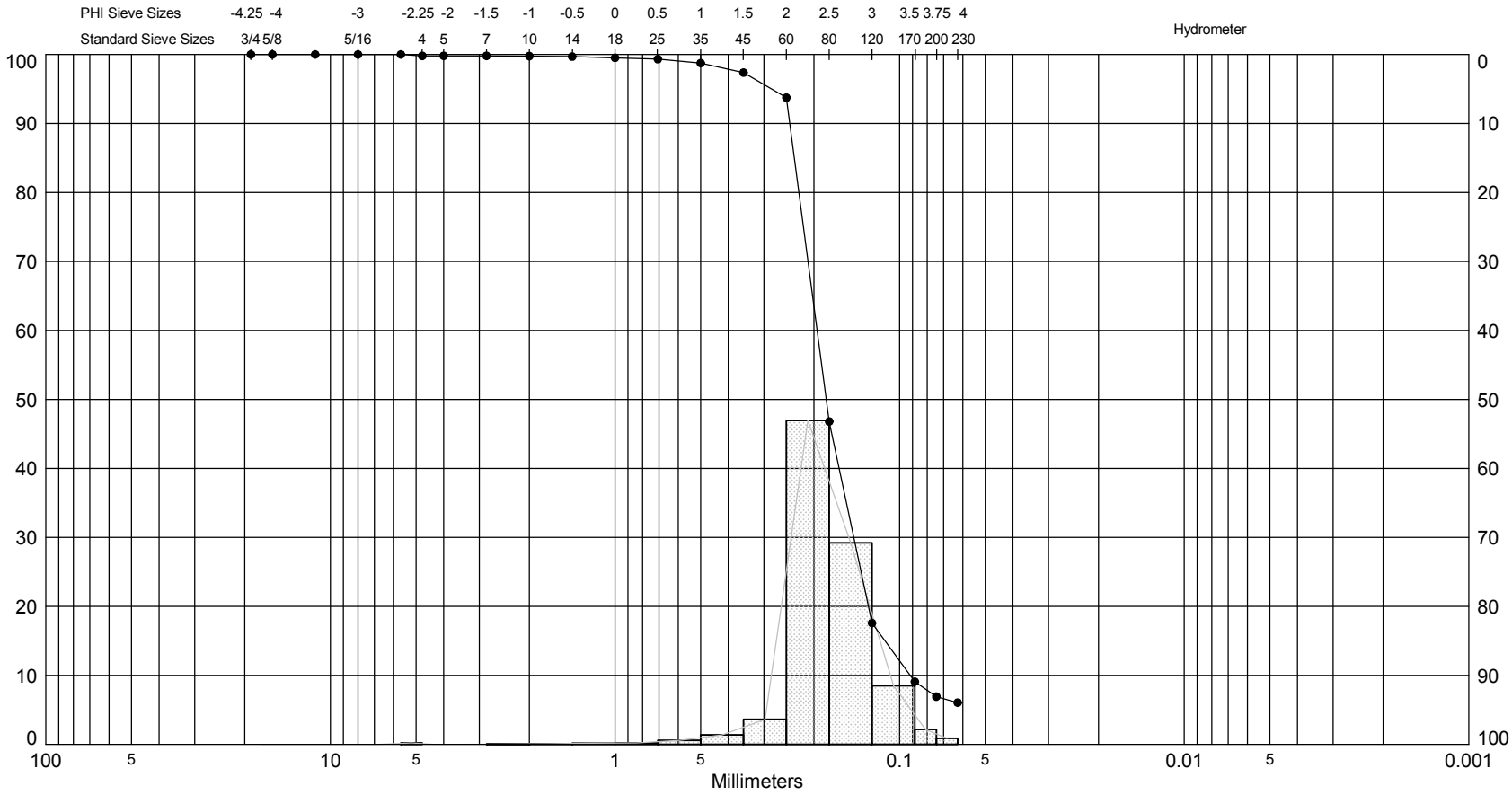
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z168 #3	—●—		SP-SM	#200 - 6.92 #230 - 6.05	0.80	0.90	2.47	2.48	-1.95	18.88	0.55

Comments: Brown sand

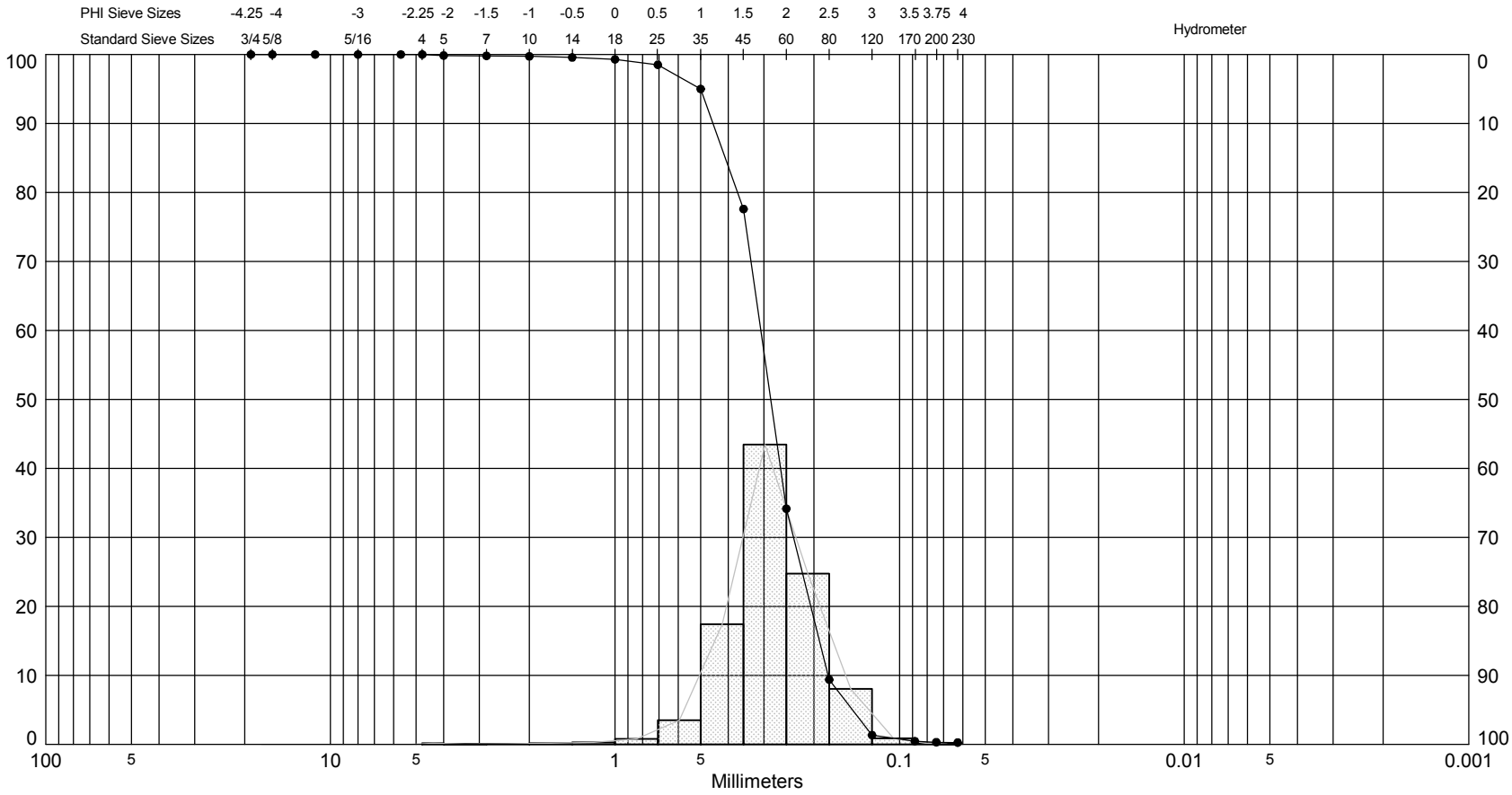
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z168 #4	—●—		SP	#200 - 0.31 #230 - 0.26	0.30	0.70	1.82	1.82	-0.93	8.55	0.56

Comments: Gray sand, shell, rock

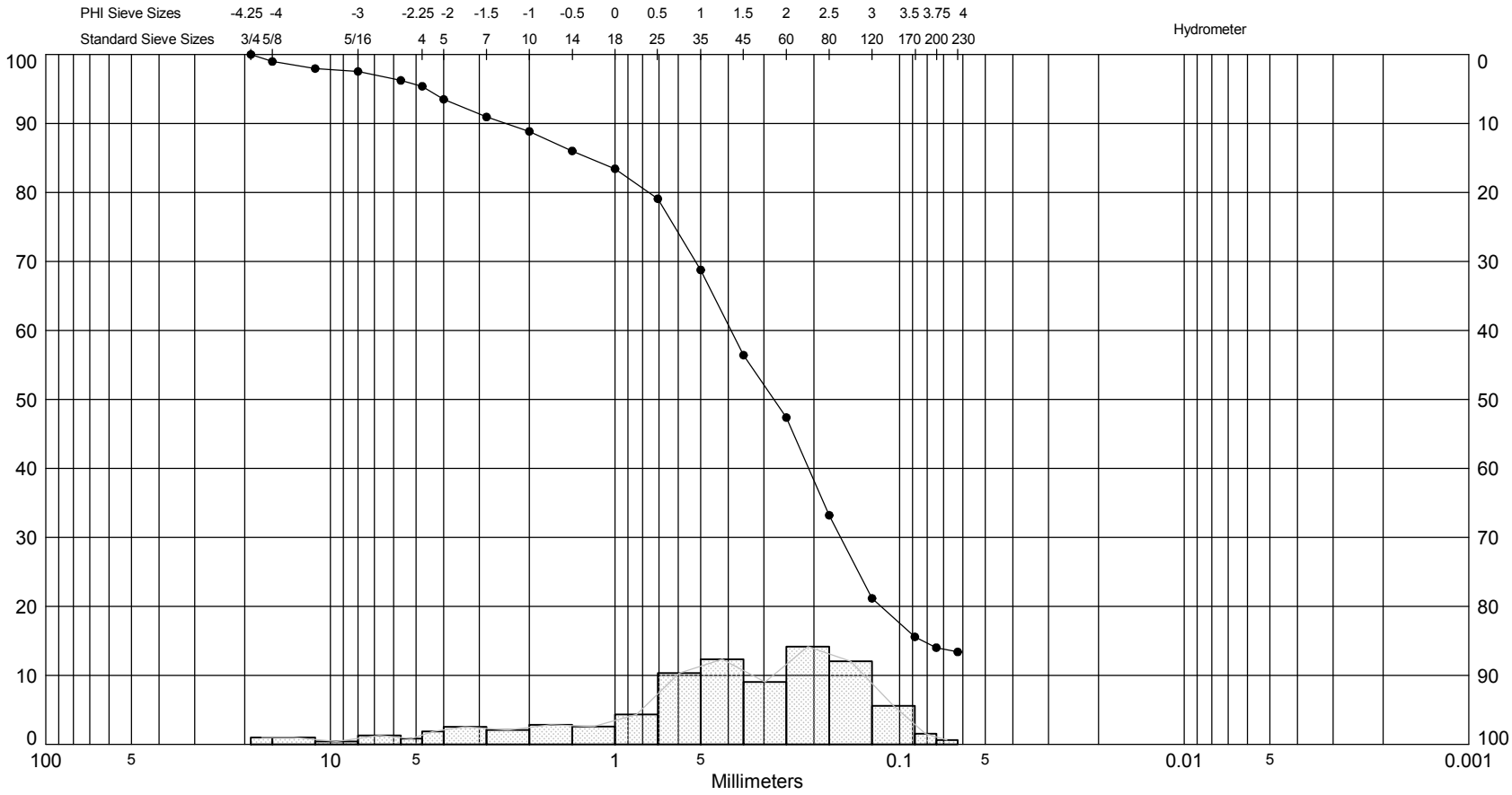
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Analyzed By:	MB
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z169 #1	—●—		SM	#200 - 14.02 #230 - 13.40	2.50	12.00	1.85	1.18	-1.08	3.77	1.72

Comments: Gray sand, shell, rock

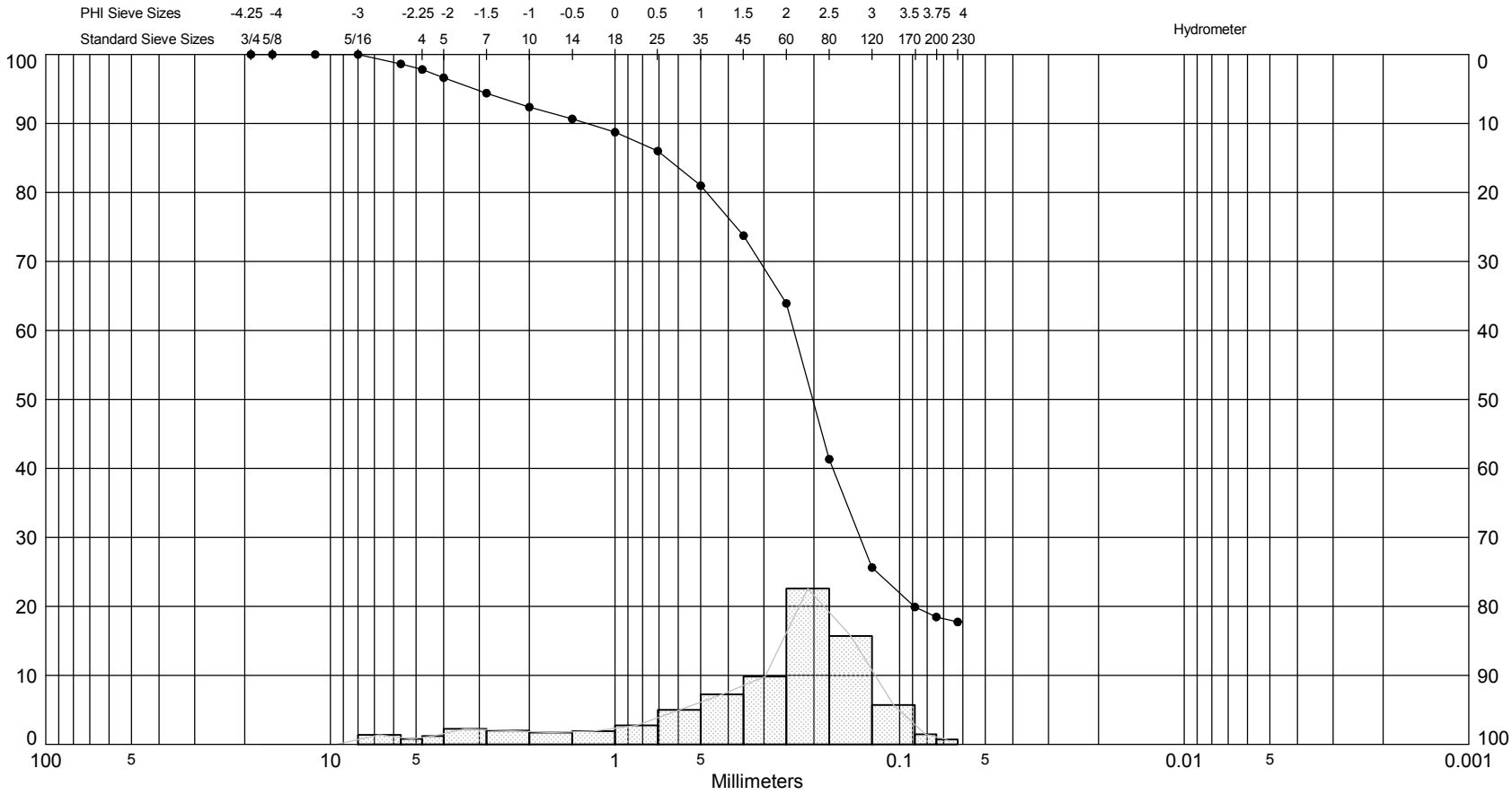
Depths and elevations based on measured values

Sample Information	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z169 #2	—●—		SM	#200 - 18.46 #230 - 17.74	1.70	1.70	2.31	1.64	-1.32	4.14	1.47

Comments: Gray sand, shell, rock

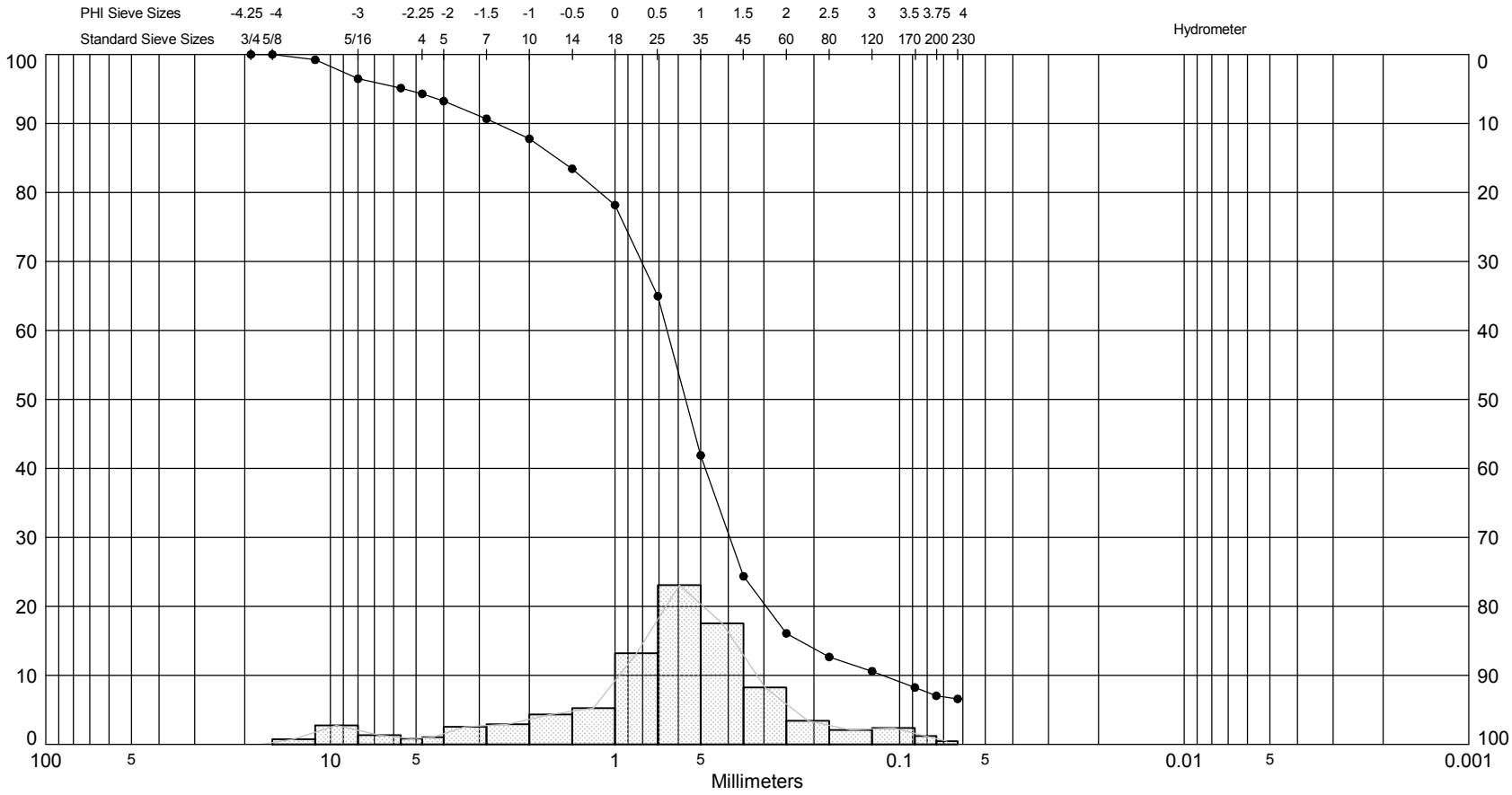
Depths and elevations based on measured values

Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z169 #3	—●—		SW-SM	#200 - 7.04 #230 - 6.59	0.80	1.50	0.82	0.55	-0.75	4.05	1.44

Comments: Coarser quartz sand, little organic silt

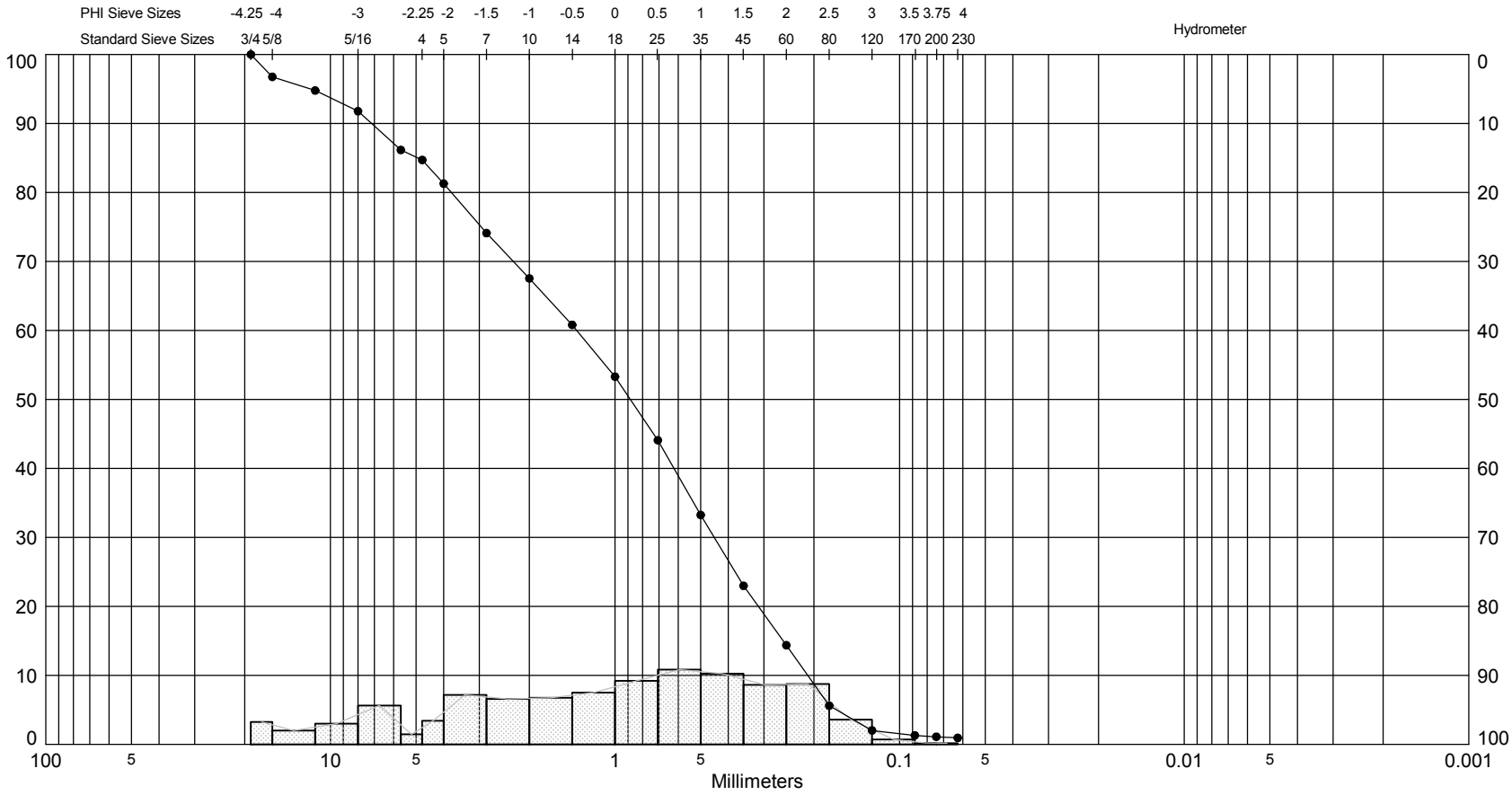
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z169 #4	—●—		SW	#200 - 1.10 #230 - 0.94	0.50	0.90	0.18	-0.13	-0.36	2.21	1.88

Comments: Coarser sand, rock

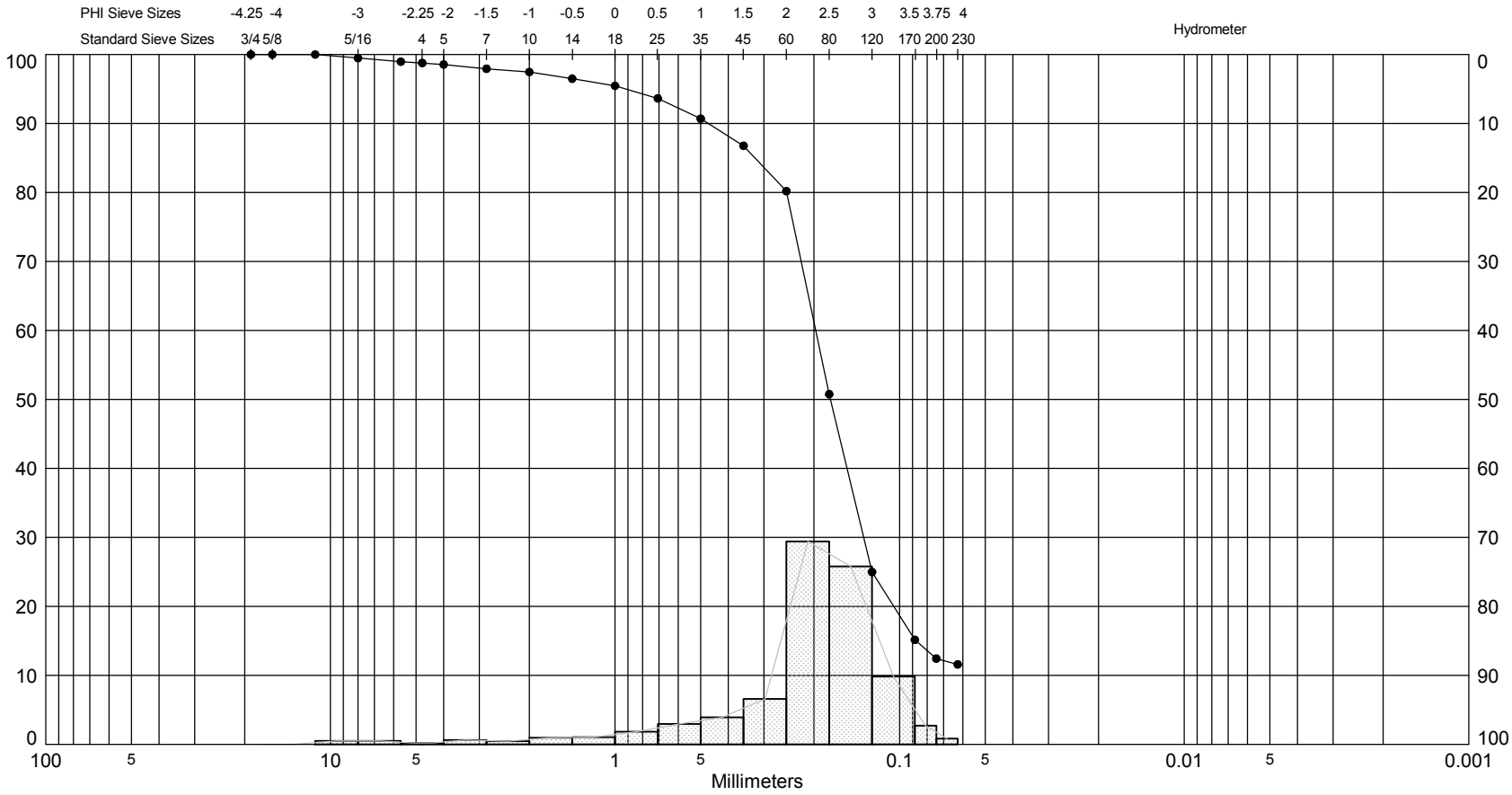
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z170 #1	—●—		SM	#200 - 12.43 #230 - 11.59	2.00	8.70	2.51	2.2	-2.26	9.63	1.12

Comments: Gray sand

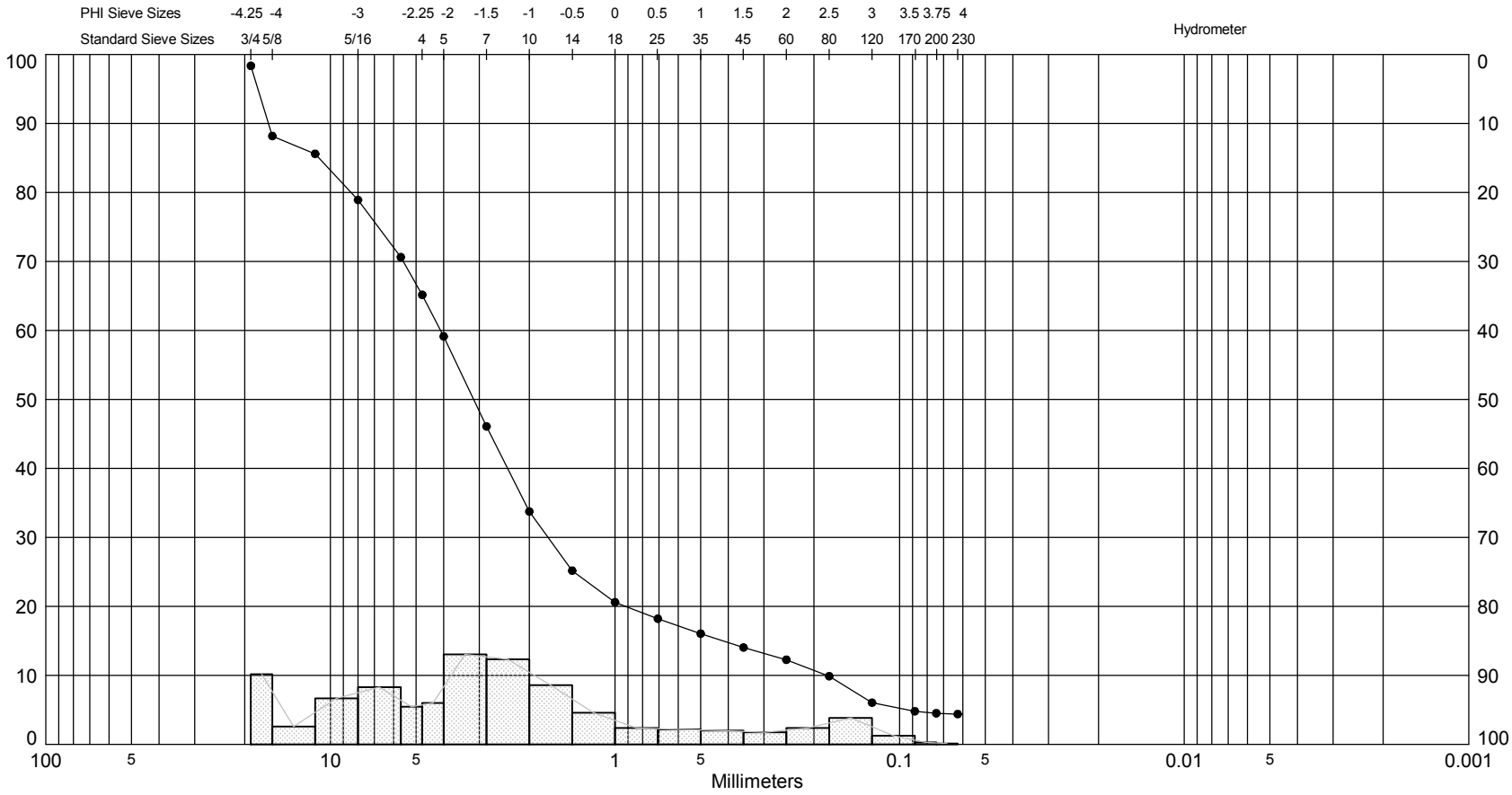
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z170 #2	—●—	SW WITH GRAVEL		#200 4.51 #230 4.39	2.10	8.60		-1.52	0.84	3.27	1.86

Comments: Rock with gray sand

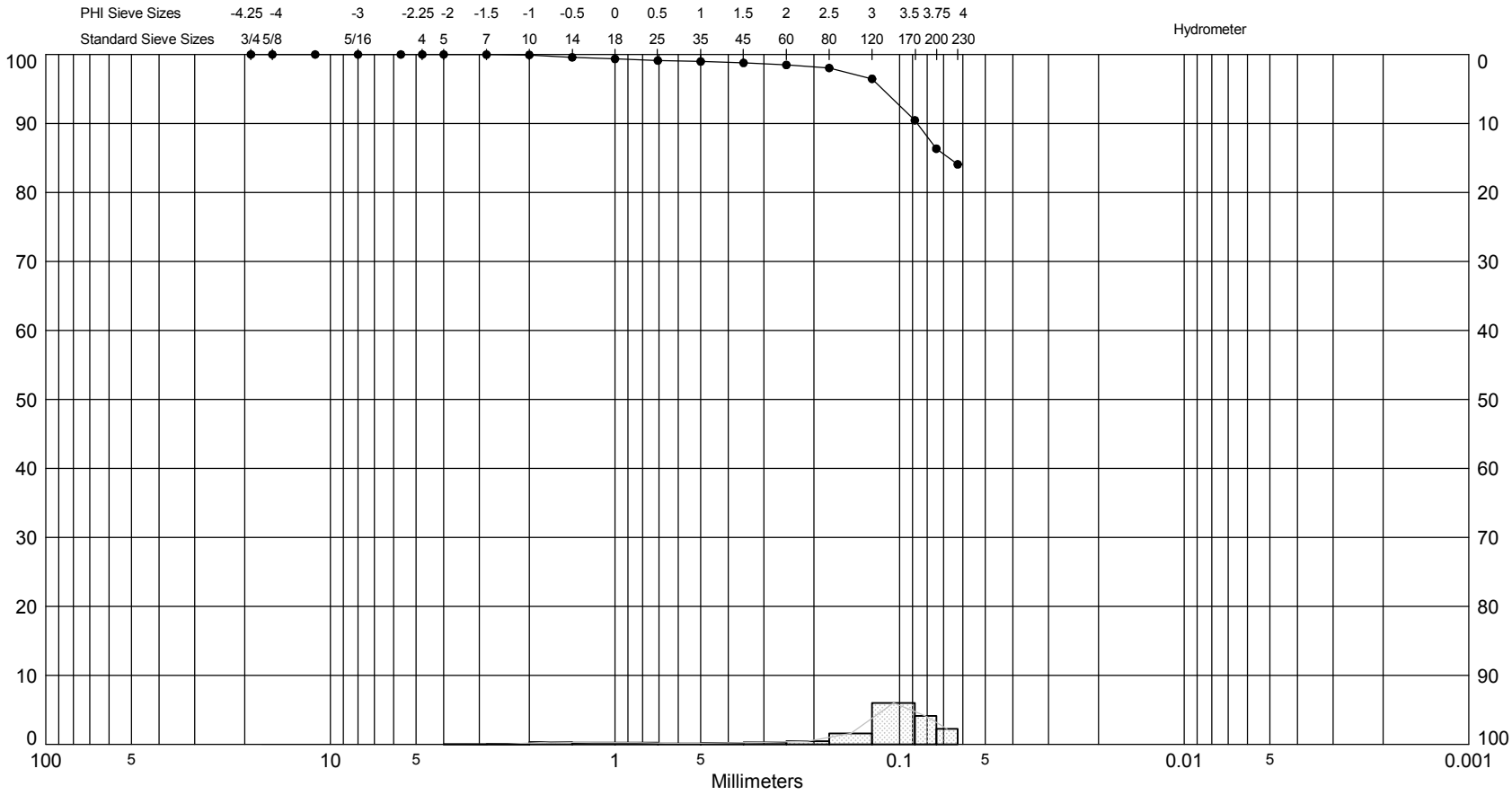
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z170 #3	—●—		ML-CL	#200 - 86.34 #230 - 84.07	9.30	6.20		3.08	-2.57	9.49	1.01

Comments: Gray sand, organic silt

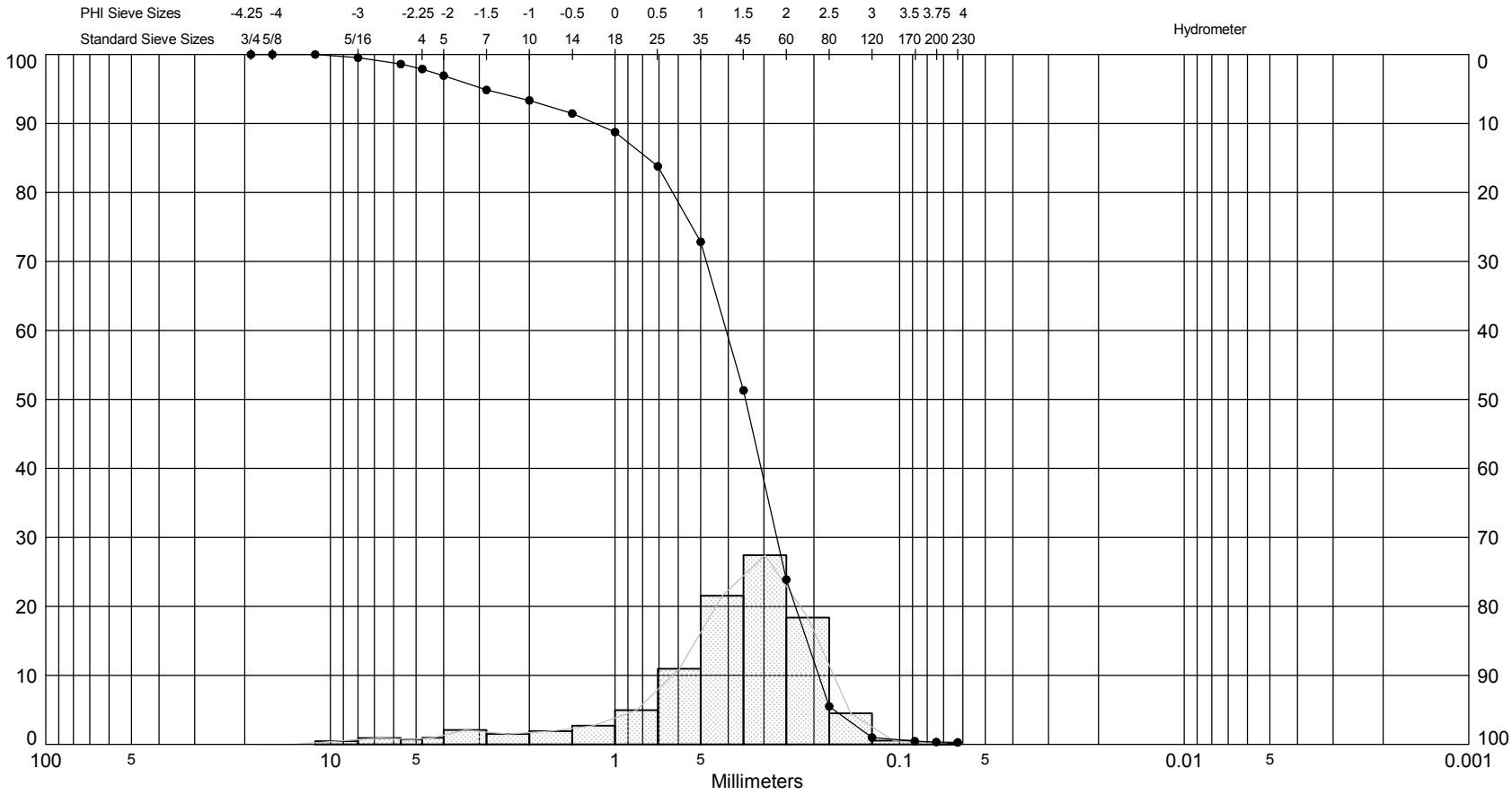
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z170 #4	—●—		SW	#200 - 0.33 #230 - 0.28	0.50	0.90	1.52	1.25	-1.57	5.75	1.15

Comments: Coarse quartz sand

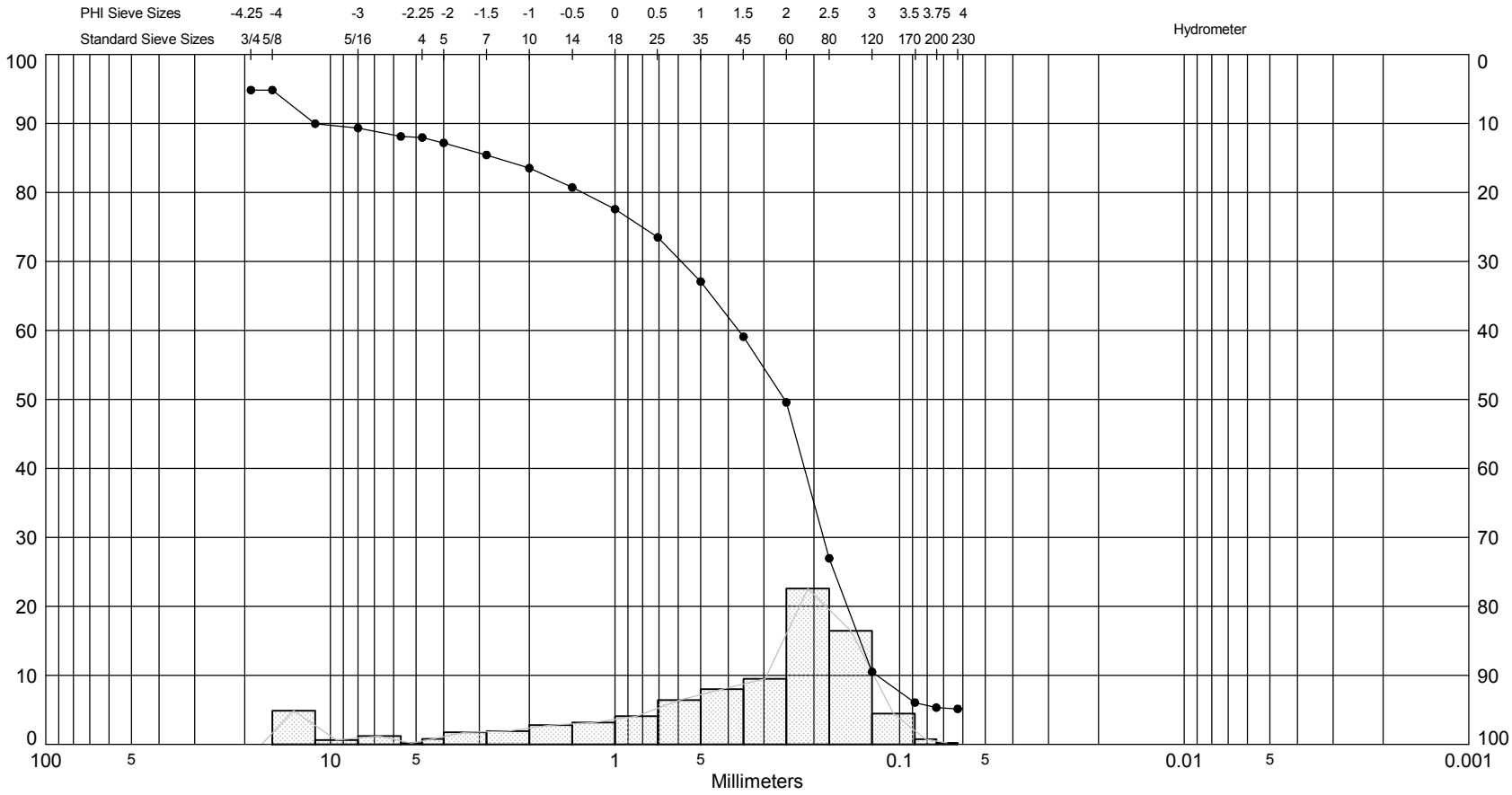
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
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Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z171 #1	—●—		SW-SM	#200 - 5.33 #230 - 5.14	1.90	19.90	1.98	0.95	-0.88	3.42	1.81

Comments: Gray sand, shell, rock

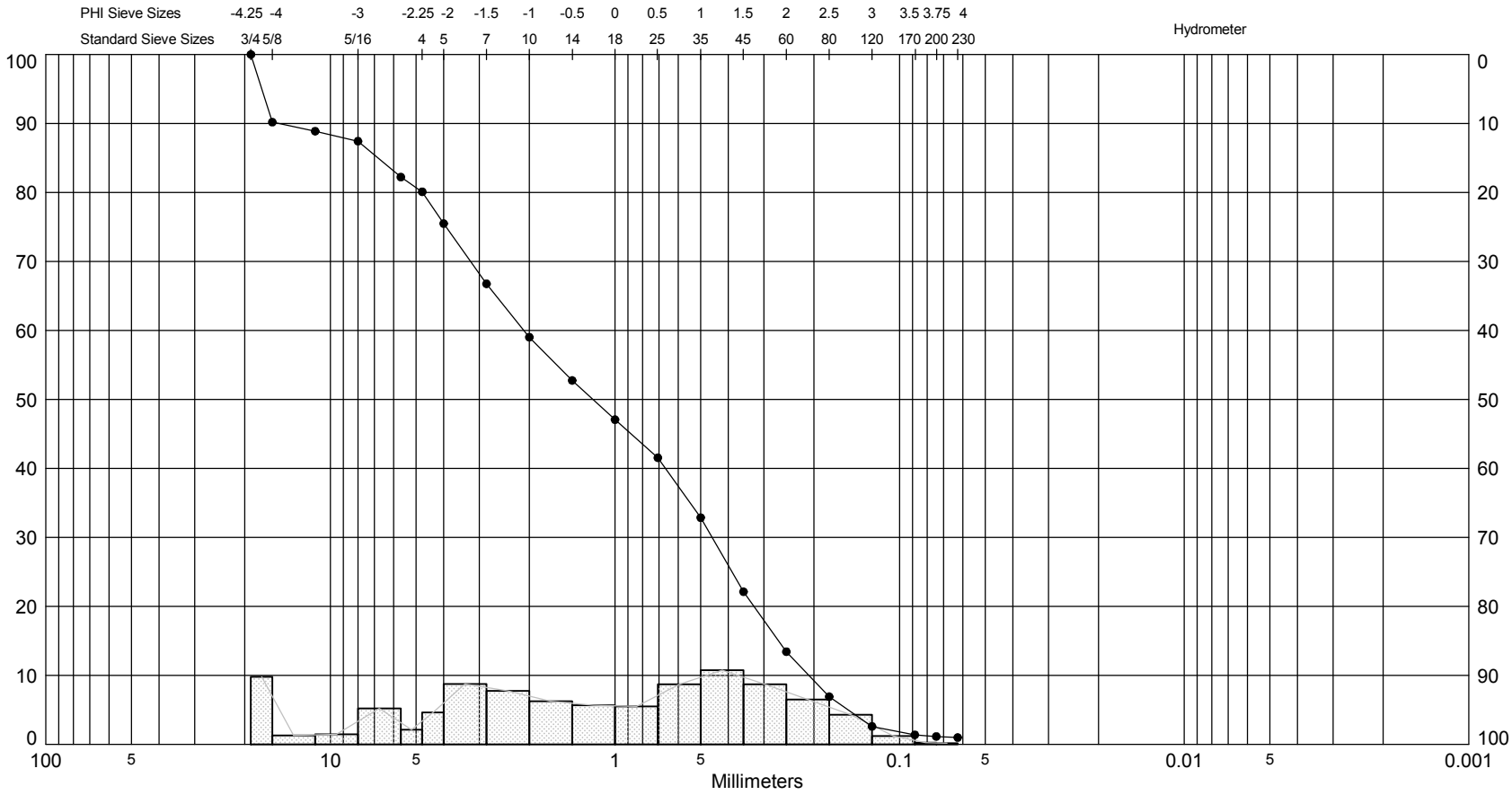
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z171 #2	—●—		SW	#200 - 1.14 #230 - 0.99	0.80	3.40		-0.42	-0.23	2.01	2.08

Comments: Rocks

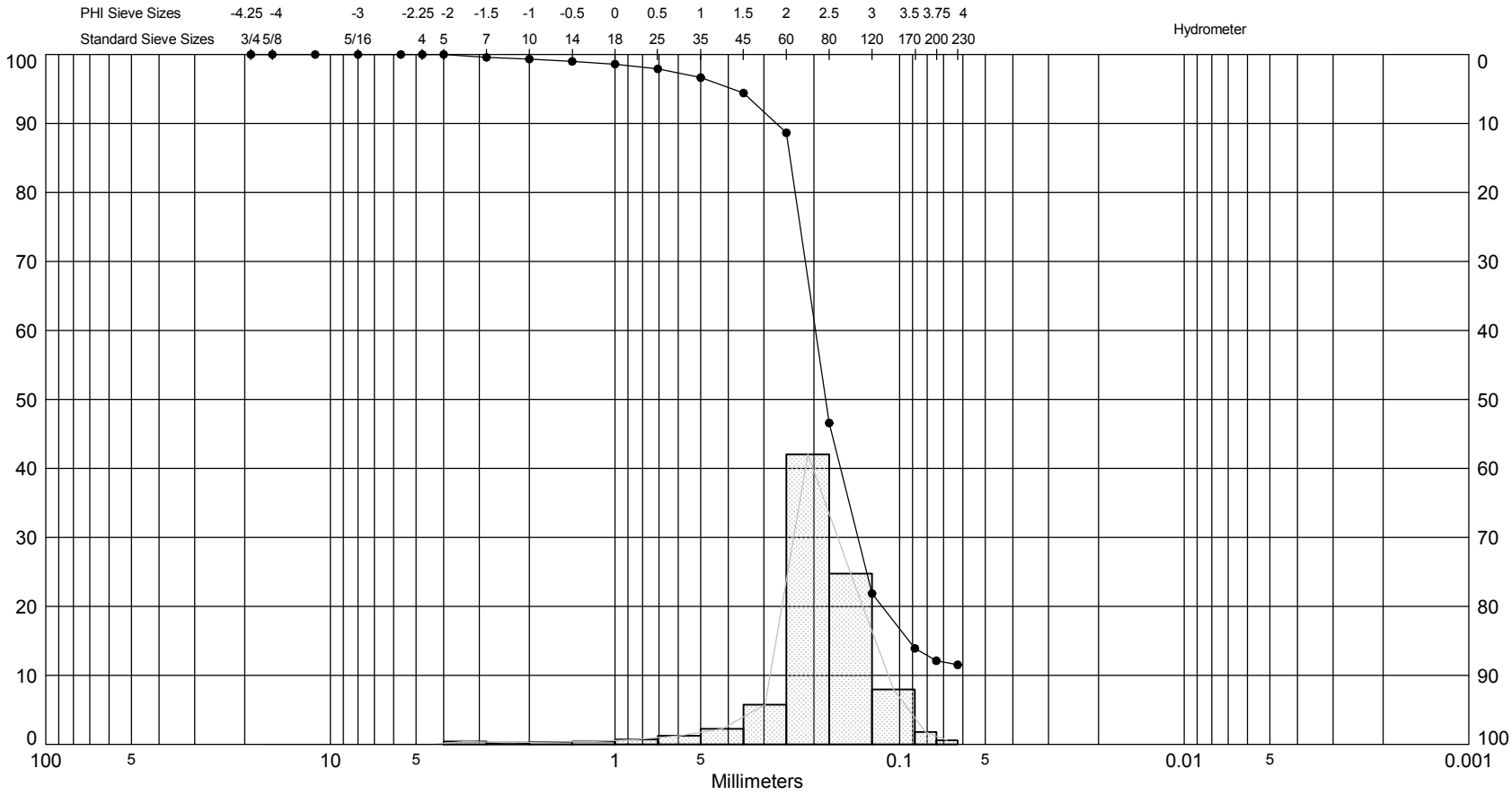
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z171 #3	—●—		SM	#200 - 12.12 #230 - 11.53	1.10	1.80	2.46	2.37	-2.15	12.58	0.69

Comments: Tan sand

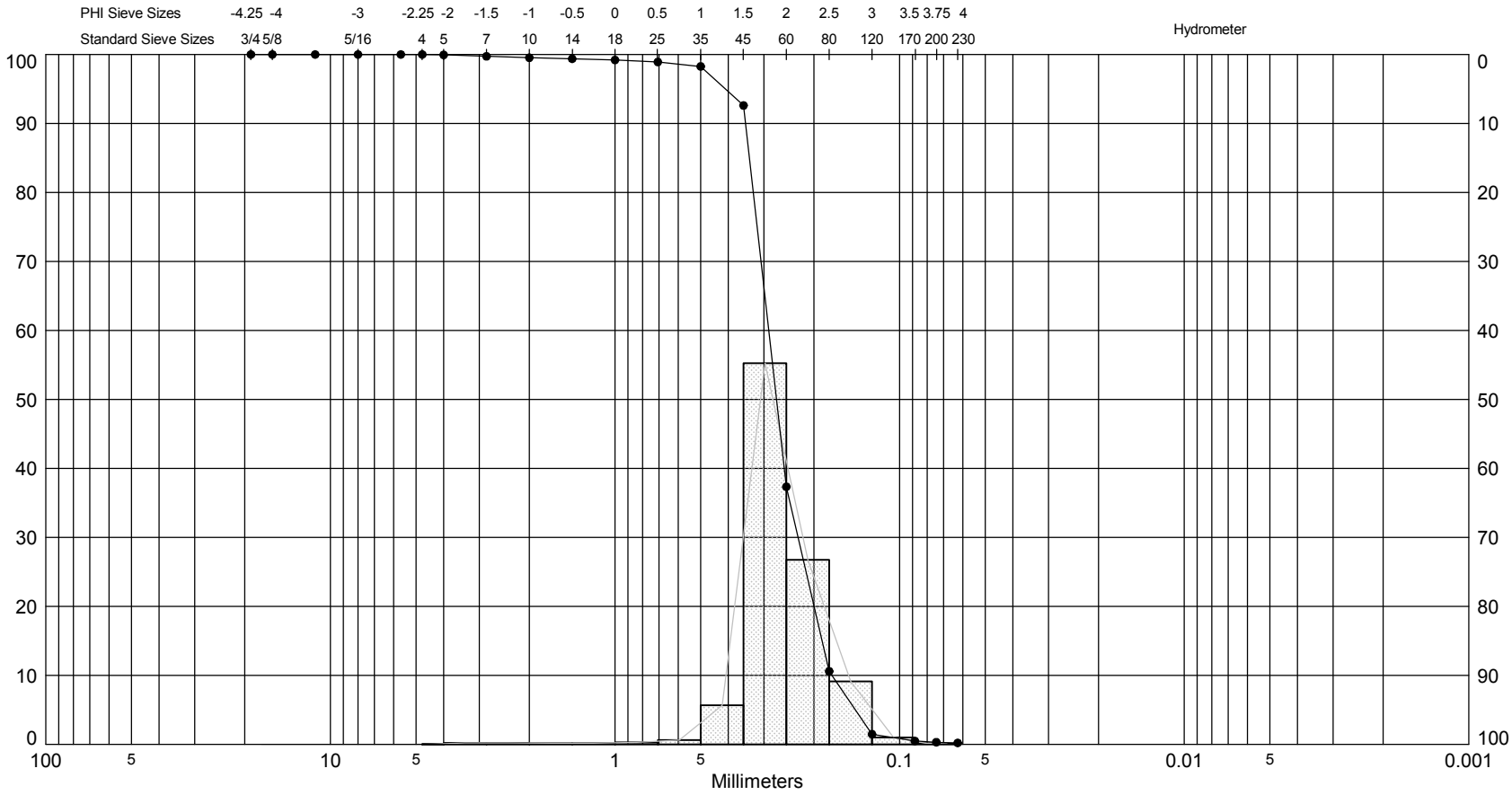
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
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Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z171 #4	—●—		SP	#200 - 0.31 #230 - 0.21	0.40	0.90	1.89	1.93	-1.61	15.84	0.5

Comments: Fine clean sand

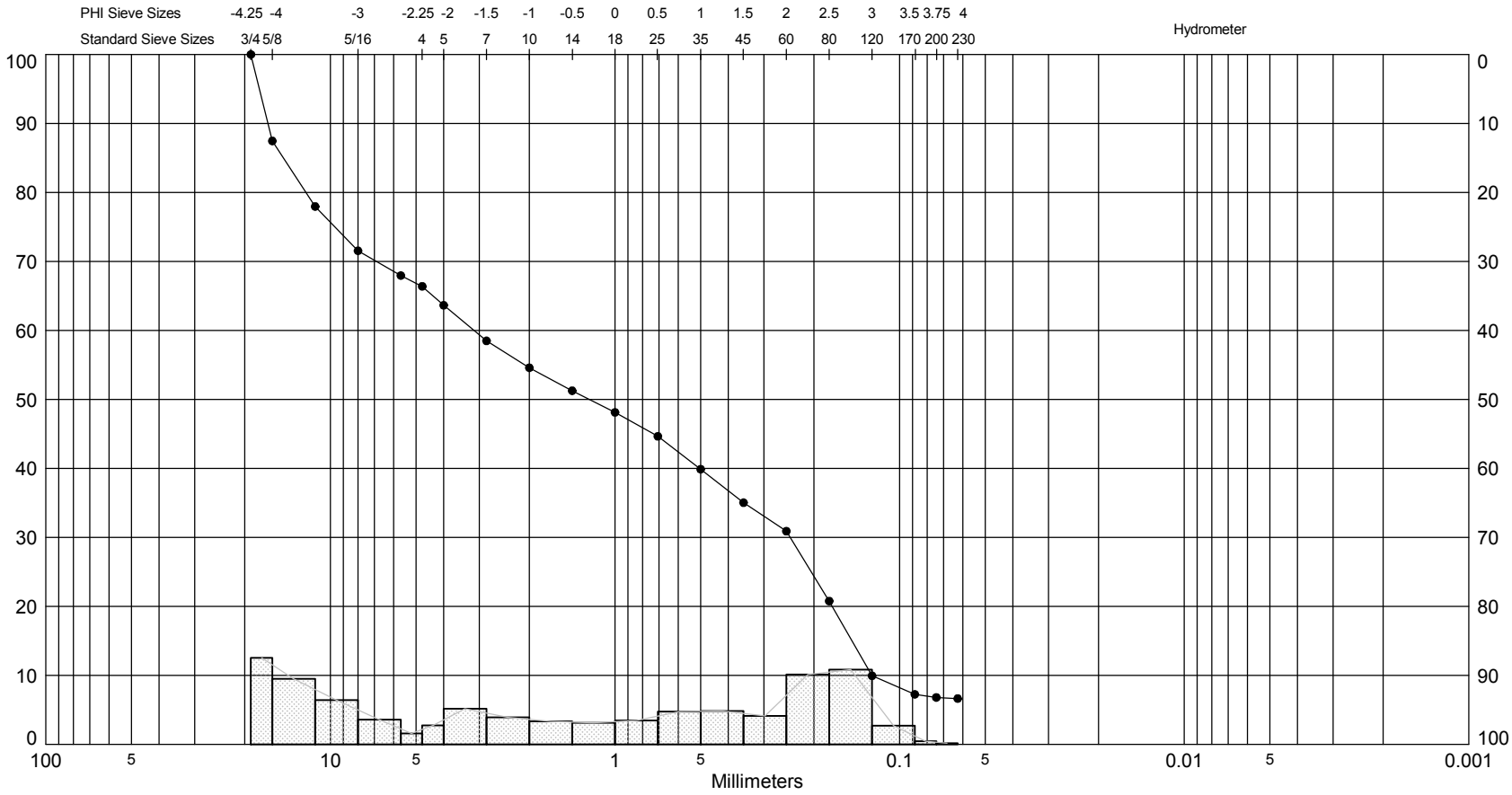
Depths and elevations based on measured values

Sample Information	
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Analysis Date:	04-01-12
Analyzed By:	MB
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z172 #1	—●—		SW-SM	W/ GRAVEL #200 - 6.80 #230 - 6.64	1.58	6.20		-0.68	0.04	1.46	2.61

Comments: Gray sand, rock

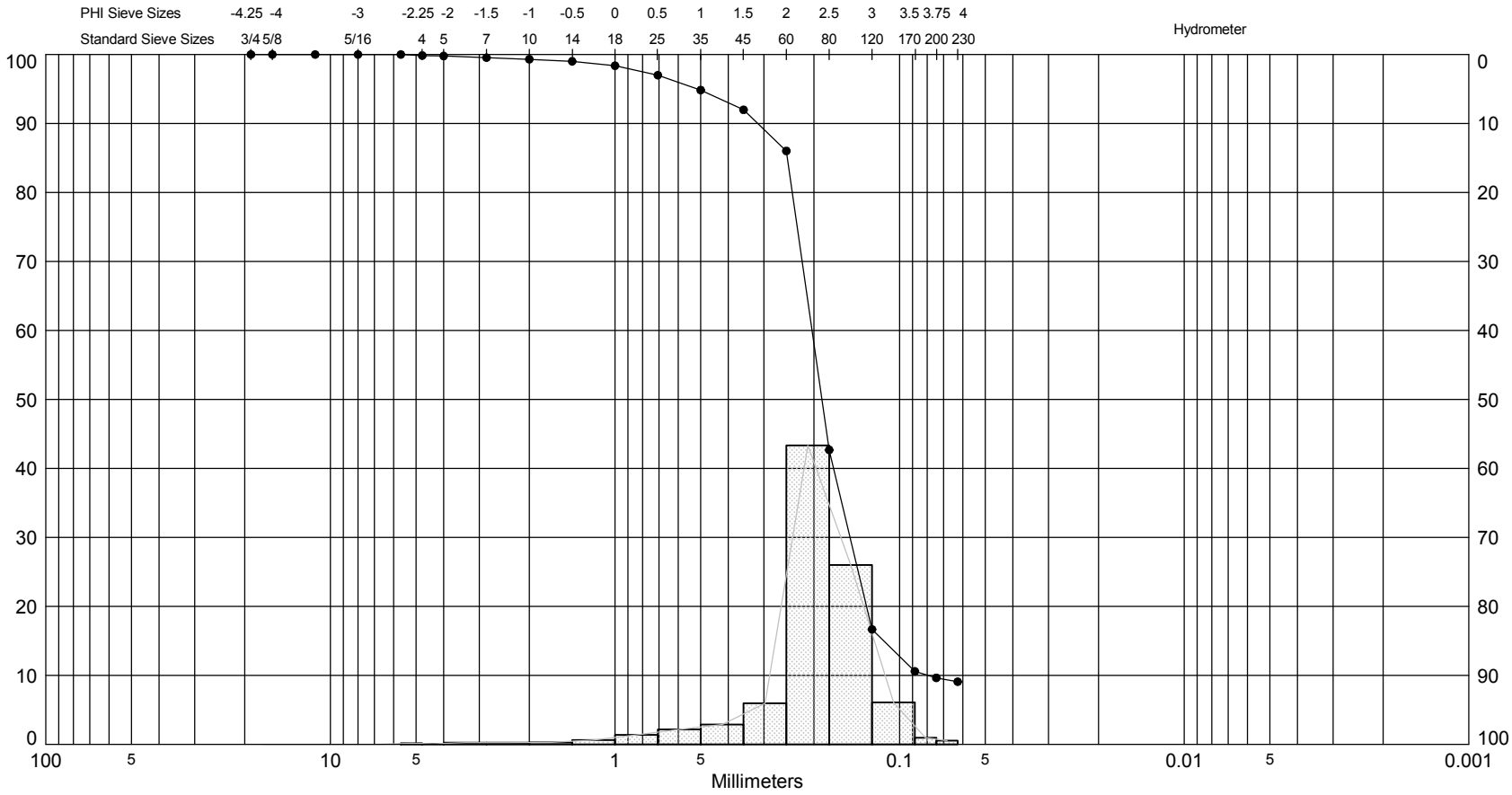
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z172 #2	—●—		SP-SM	#200 - 9.64 #230 - 9.08	1.18	1.48	2.42	2.3	-2.24	11.93	0.73

Comments: Gray sand

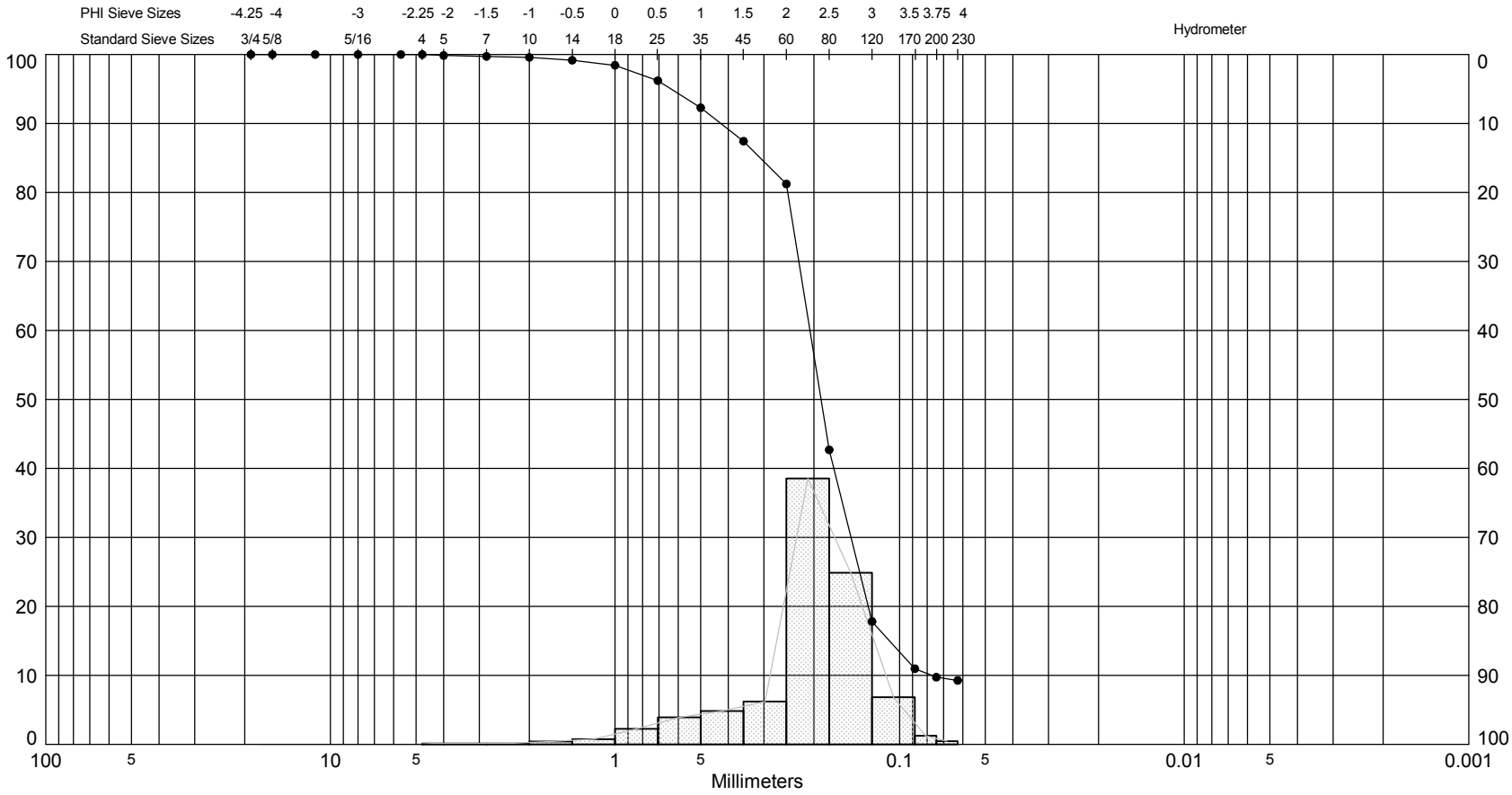
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z172 #3	—●—		SP-SM	#200 - 9.74 #230 - 9.27	0.73	1.19	2.41	2.24	-1.57	7.11	0.78

Comments: Gray sand

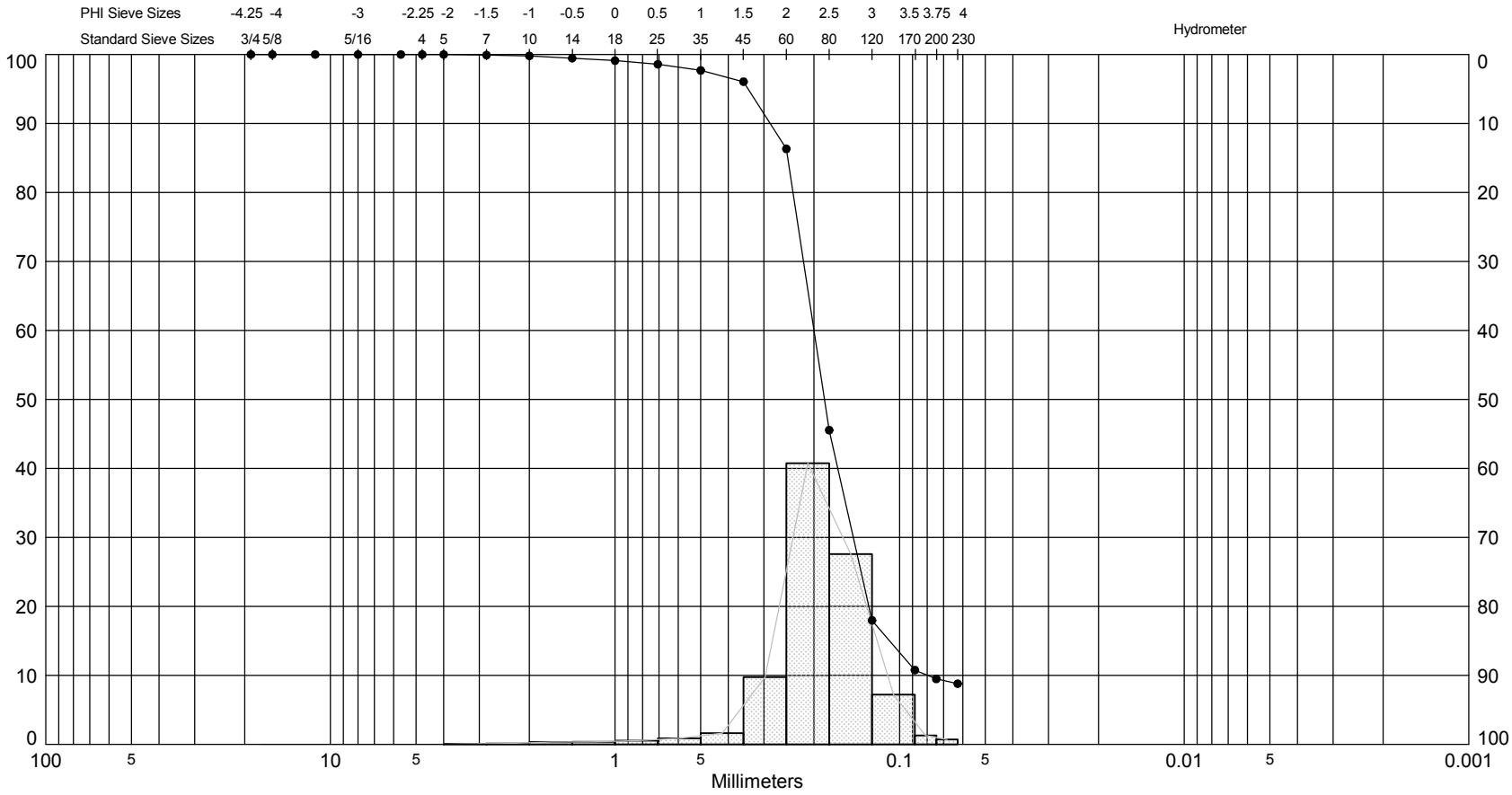
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z172 #4	—●—		SP-SM	#200 - 9.48 #230 - 8.79	1.23	2.23	2.45	2.39	-1.61	10.78	0.6

Comments: Gray sand

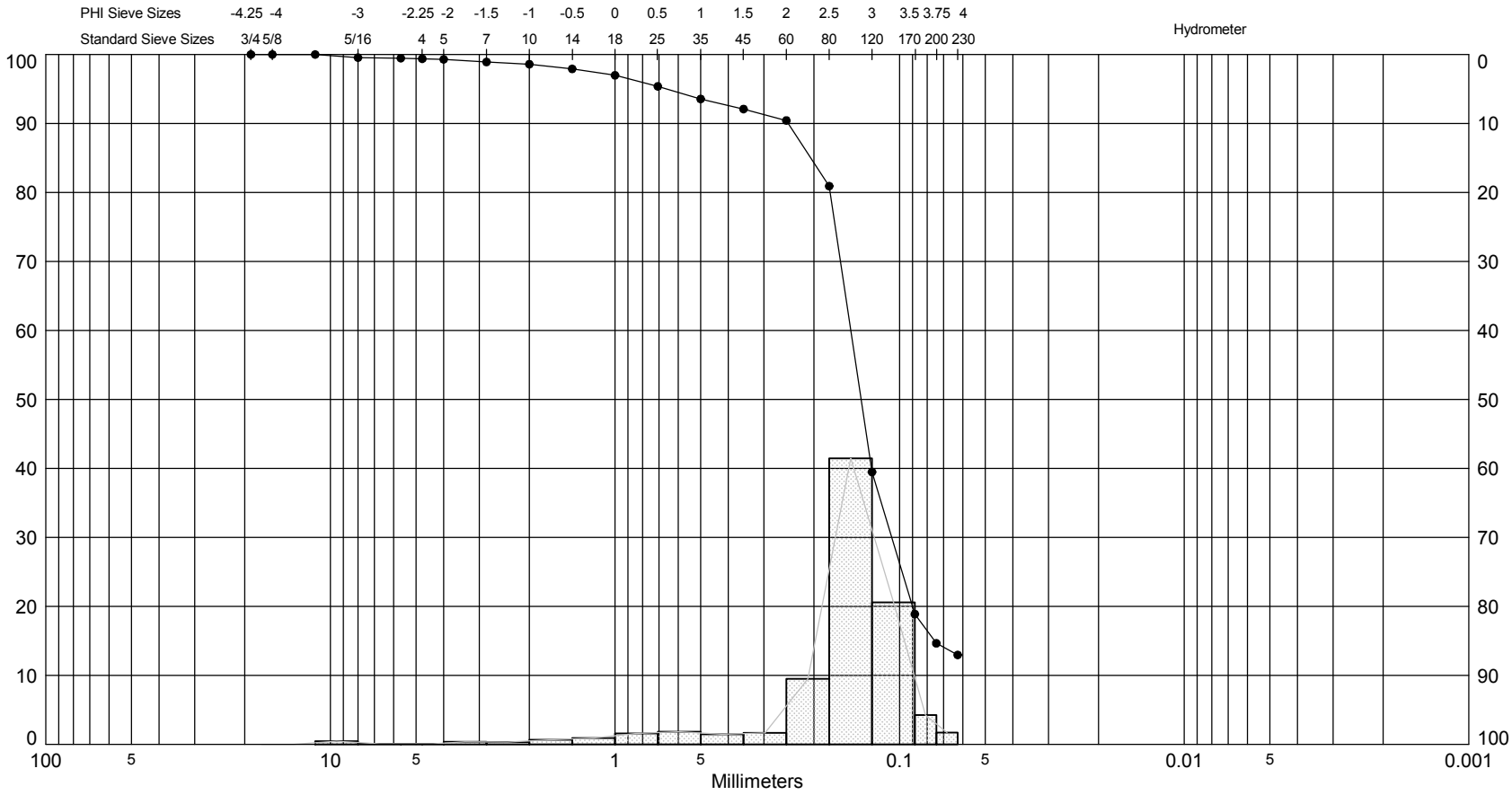
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-01-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z173 #1	—●—		SM	#200 - 14.65 #230 - 12.96	1.83	13.74	2.87	2.61	-2.86	13.42	0.99

Comments: Gray sand

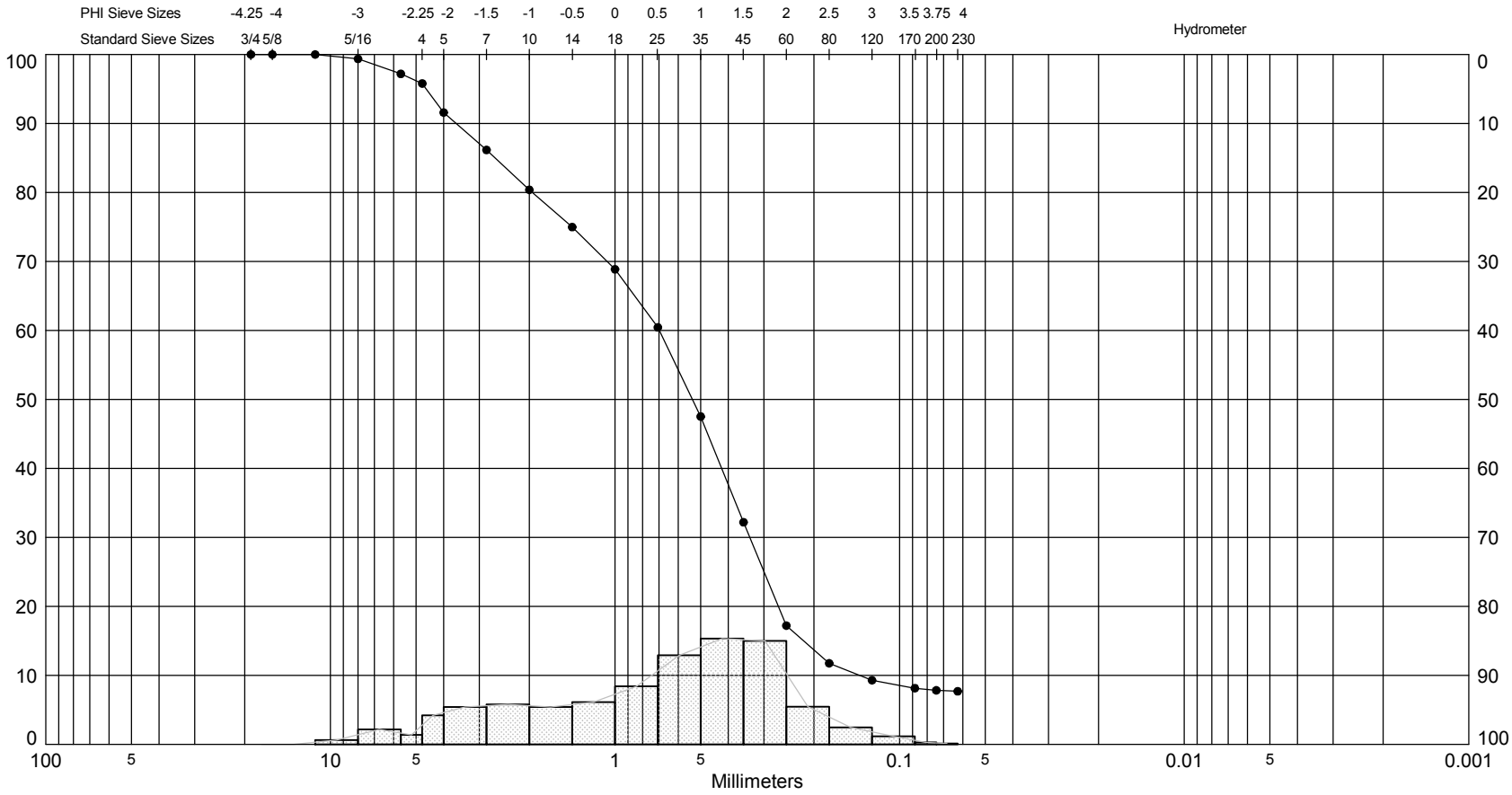
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z173 #2	—●—		SW-SM	#200 - 7.83 #230 - 7.69	0.94	3.83	0.9	0.42	-0.47	2.4	1.49

Comments: Gray sand, rocks

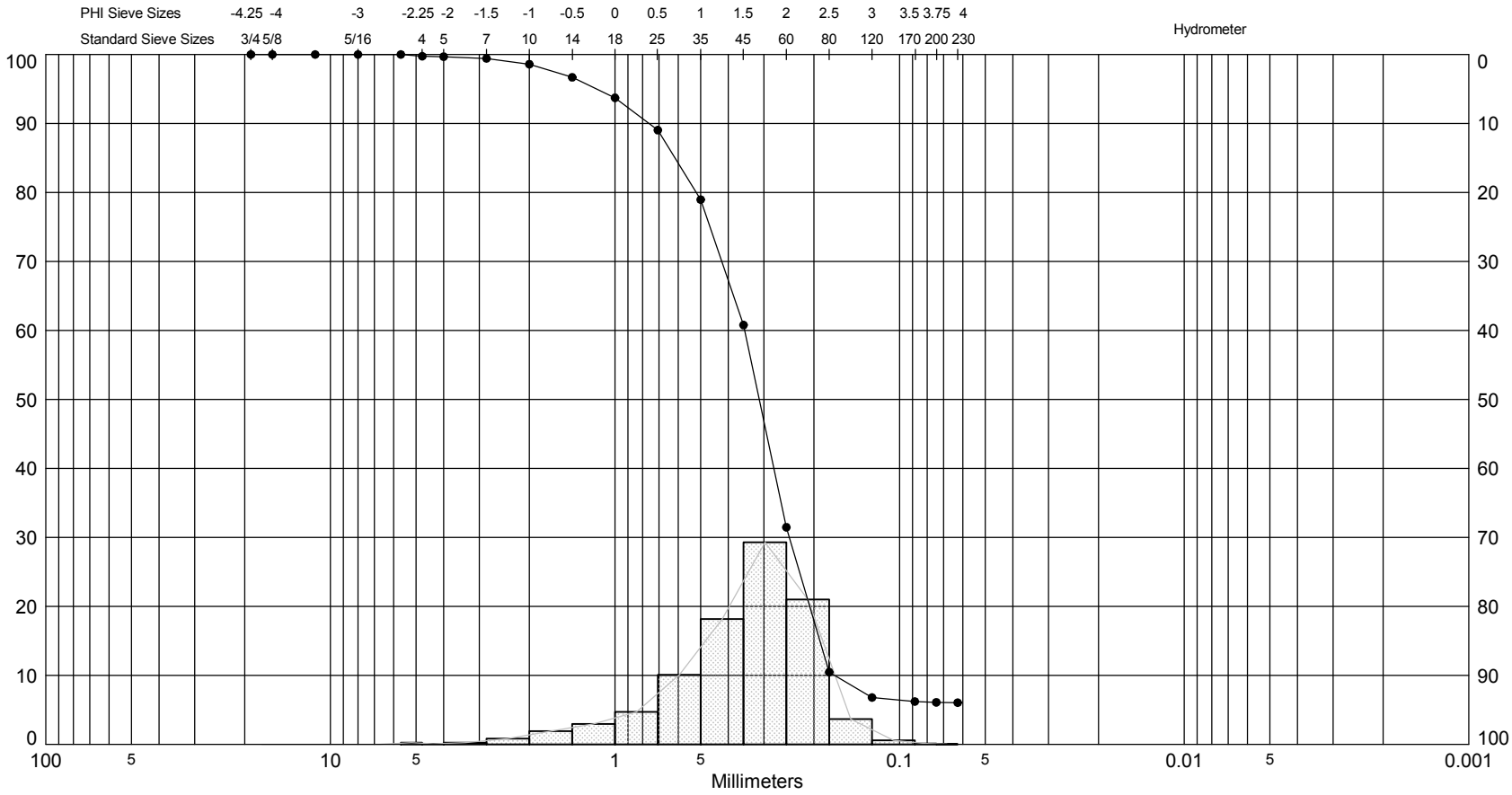
Depths and elevations based on measured values

Sample Information	
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Analysis Date:	04-05-12
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z173 #3	—●—		SP-SM	#200 - 6.09 #230 - 6.04	1.48	0.75	1.68	1.47	-1.16	5.08	0.85

Comments: Tan sand

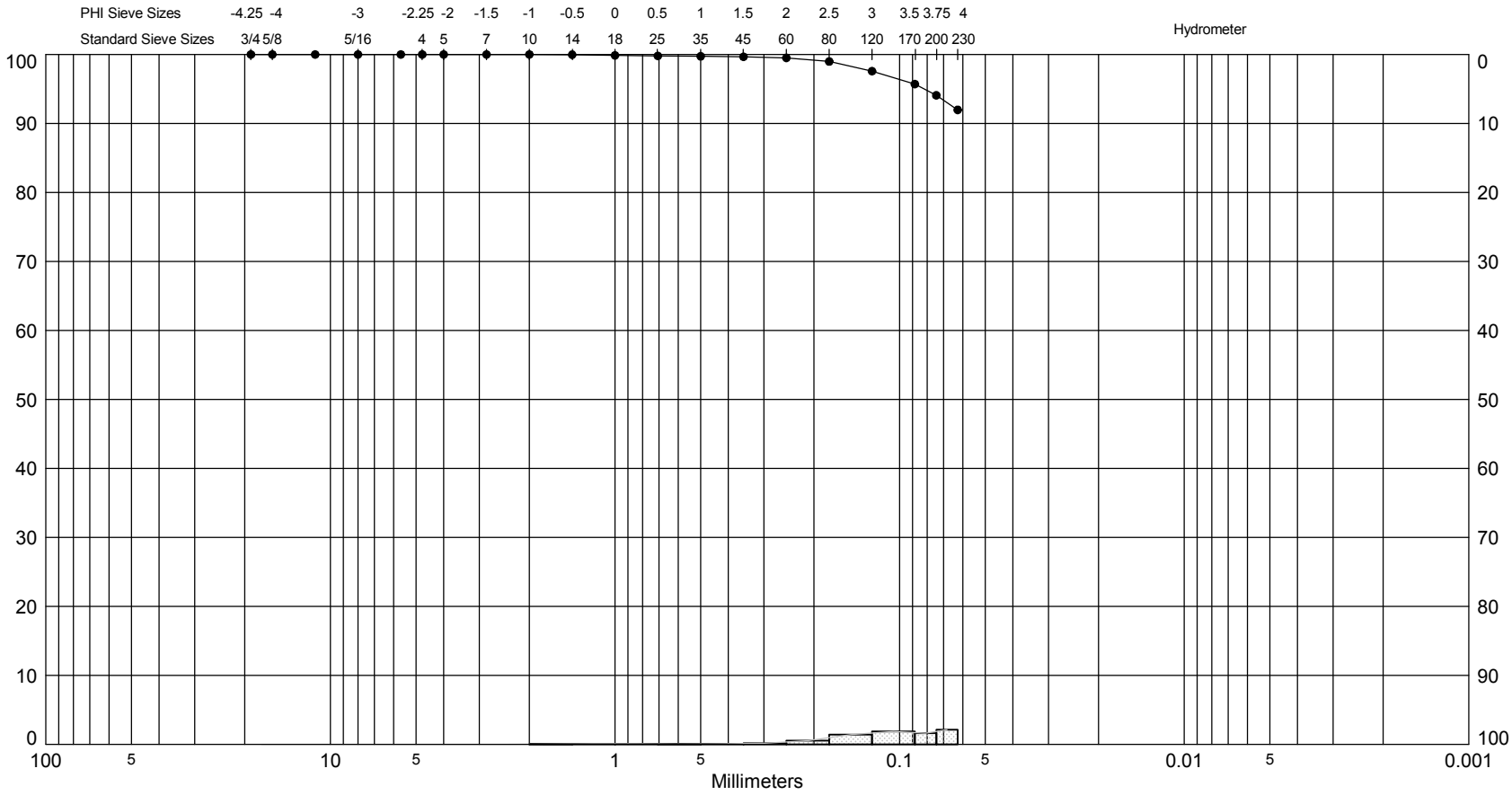
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z173 #4	—●—		ML-CL	#200 - 94.08 #230 - 91.97	4.31	6.83		3.18	-2.2	9.17	0.82

Comments: Gray sand

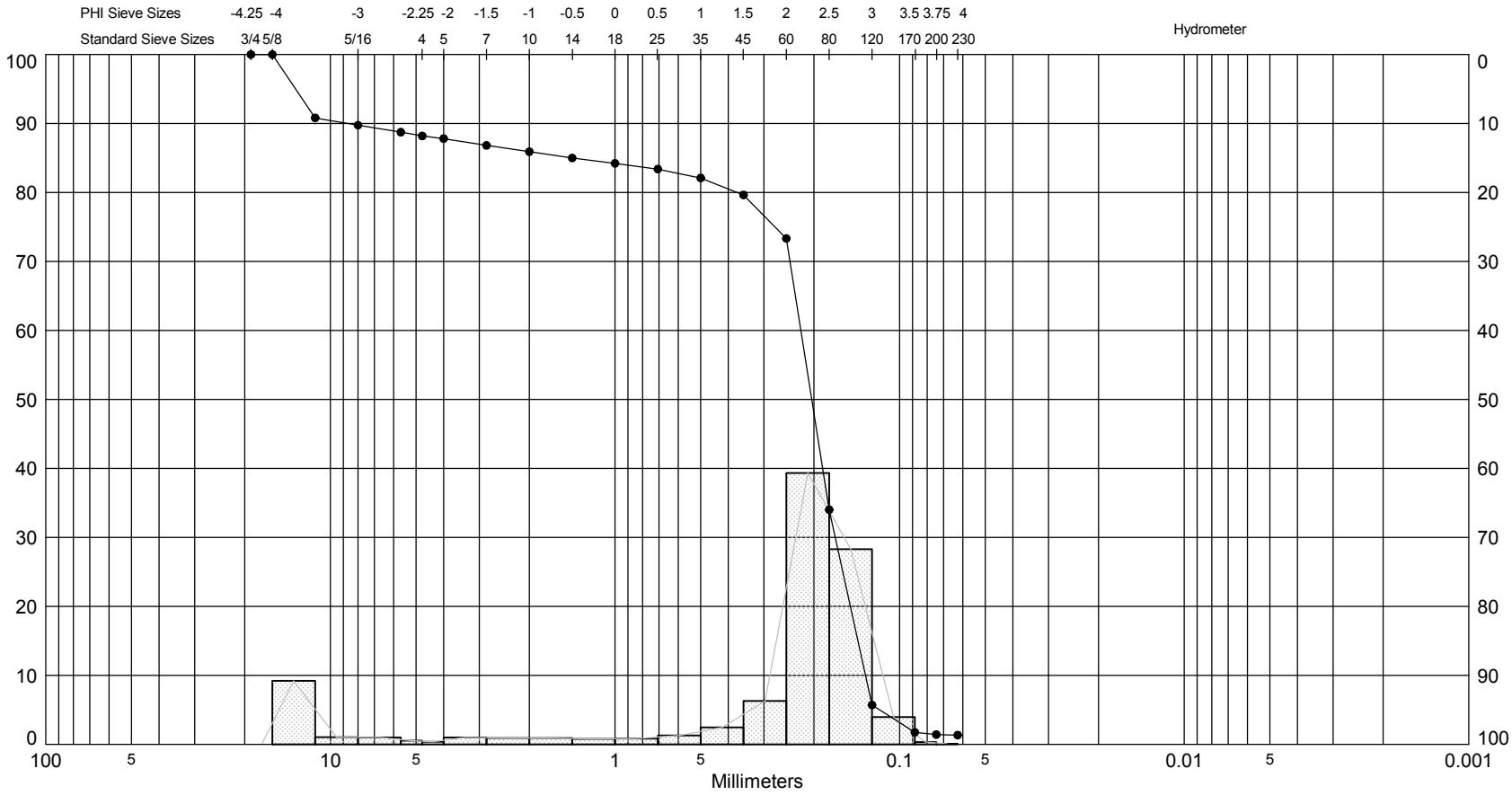
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z174 #1	—●—		SW	#200 - 1.42 #230 - 1.34	1.09	11.09	2.3	1.51	-1.83	4.82	2.05

Comments: Gray sand, oyster shells

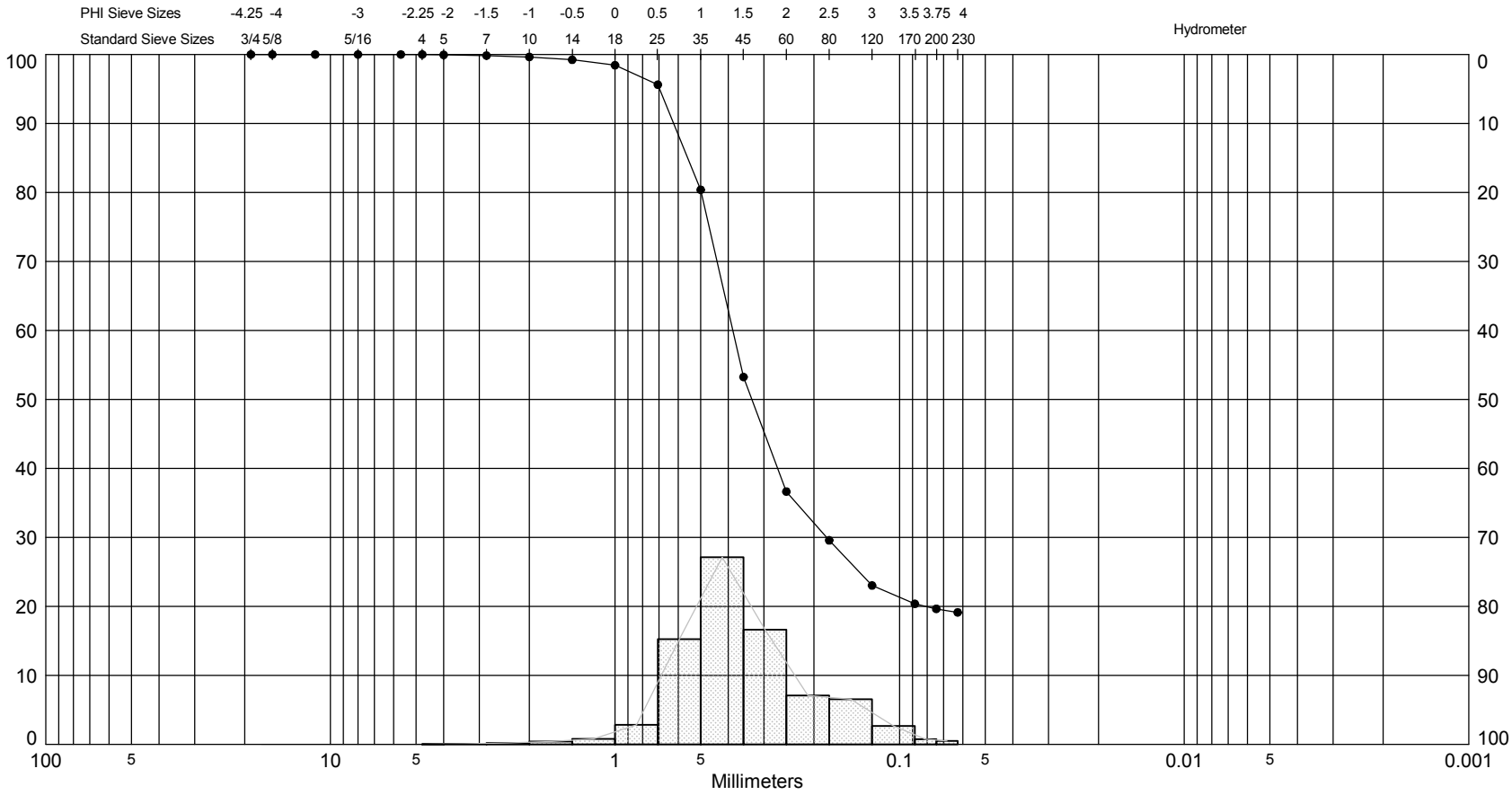
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z174 #2	—●—		SM	#200 - 19.64 #230 - 19.13	1.46	1.55	1.6	1.5	0.3	4.08	0.8

Comments: Coarser quartz sand, stiff clay

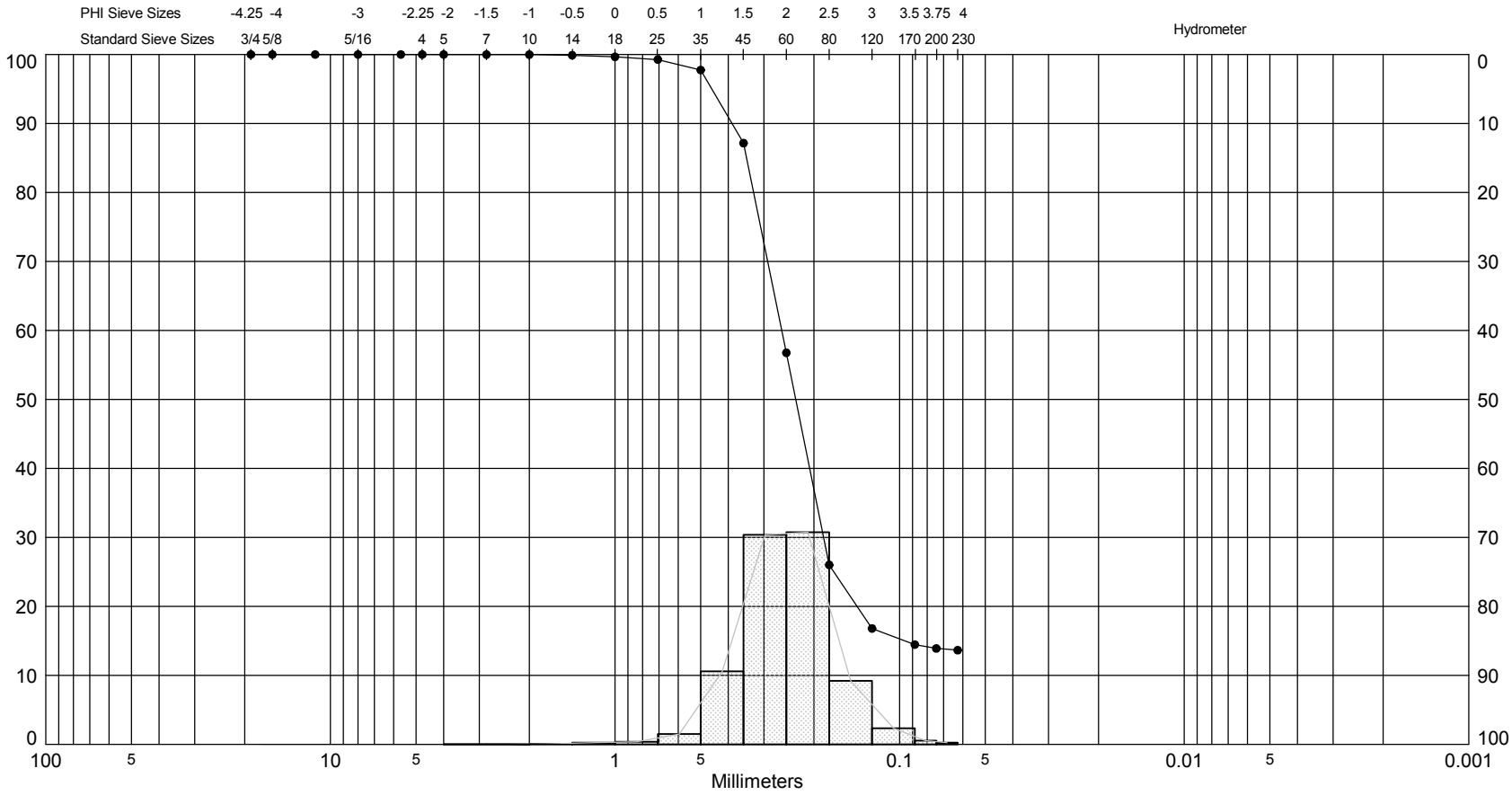
Depths and elevations based on measured values

Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z174 #3	—●—		SM	#200 - 13.90 #230 - 13.65	1.09	1.19	2.11	2	-0.15	4.94	0.56

Comments: Coarser quartz sand, lots of stiff clay

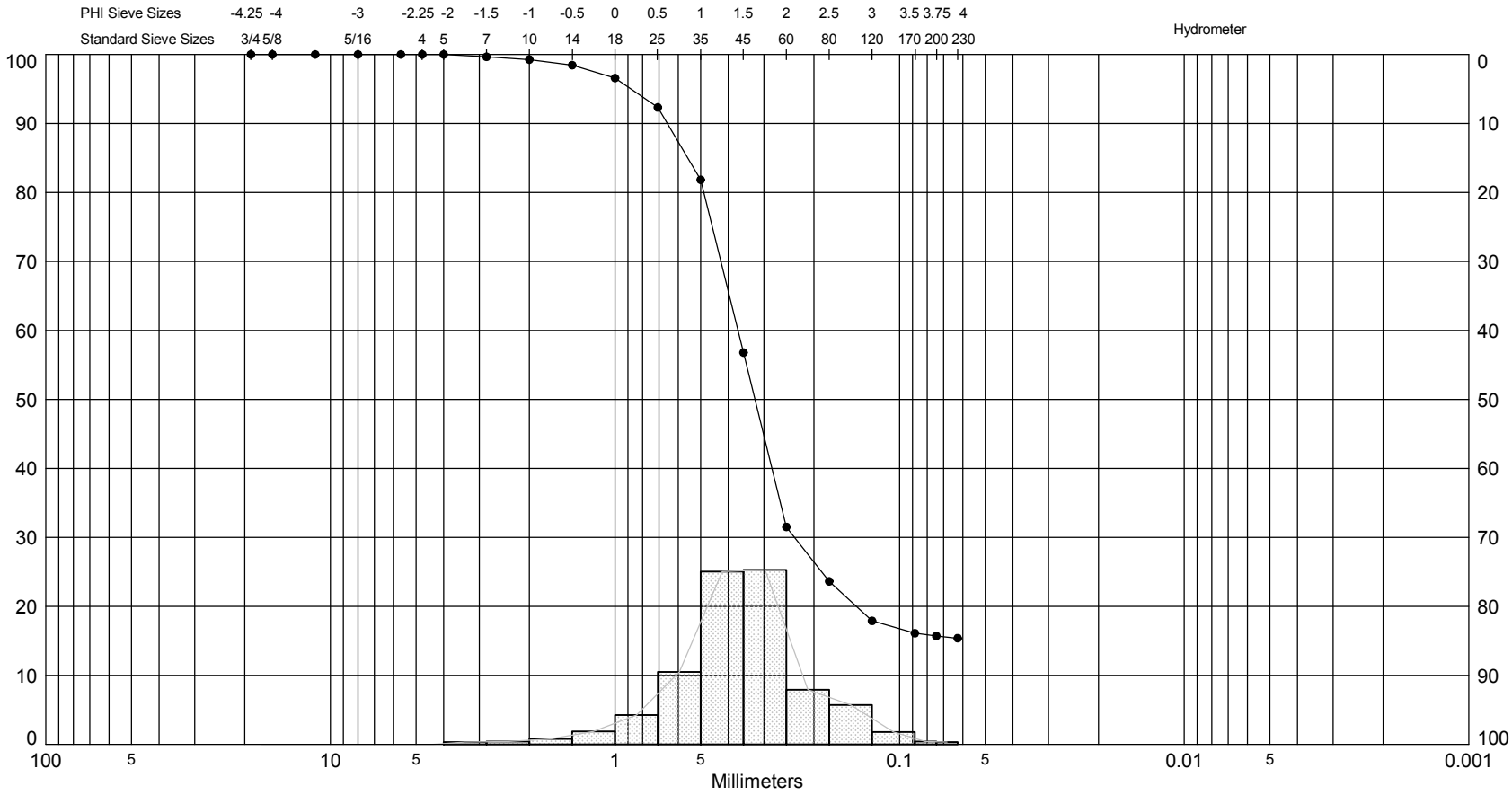
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z174 #4	—●—		SM	#200 - 15.71 #230 - 15.39	0.95	1.11	1.63	1.47	-0.33	4.61	0.8

Comments: Coarser quartz sand, stiff clay

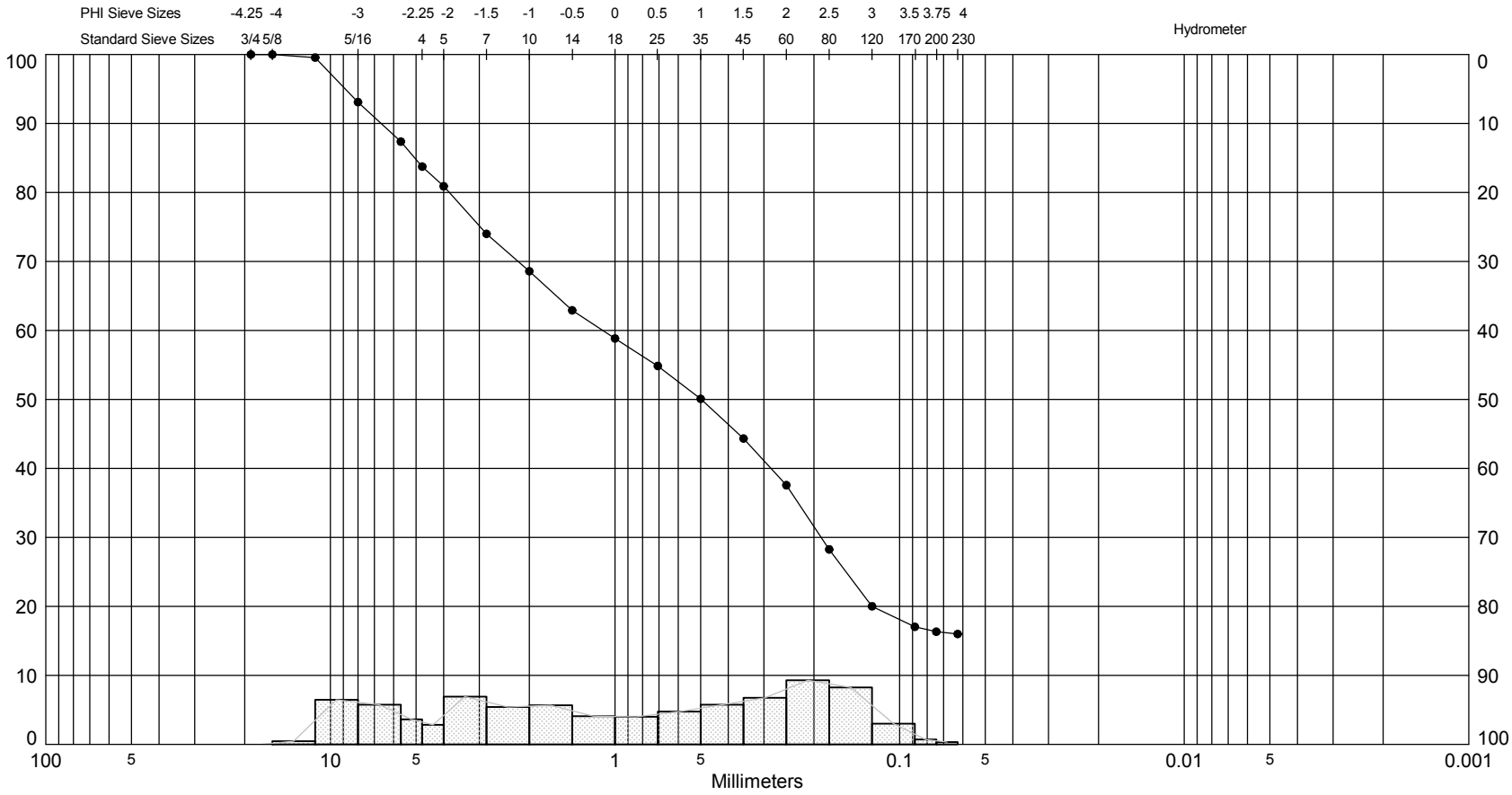
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z175 #1	—●—		SM W/ GRAVEL	#200 - 16.33 #230 - 16.00	1.46	21.29	1.01	0.04	-0.07	1.65	2.1

Comments: Gray sand, shells

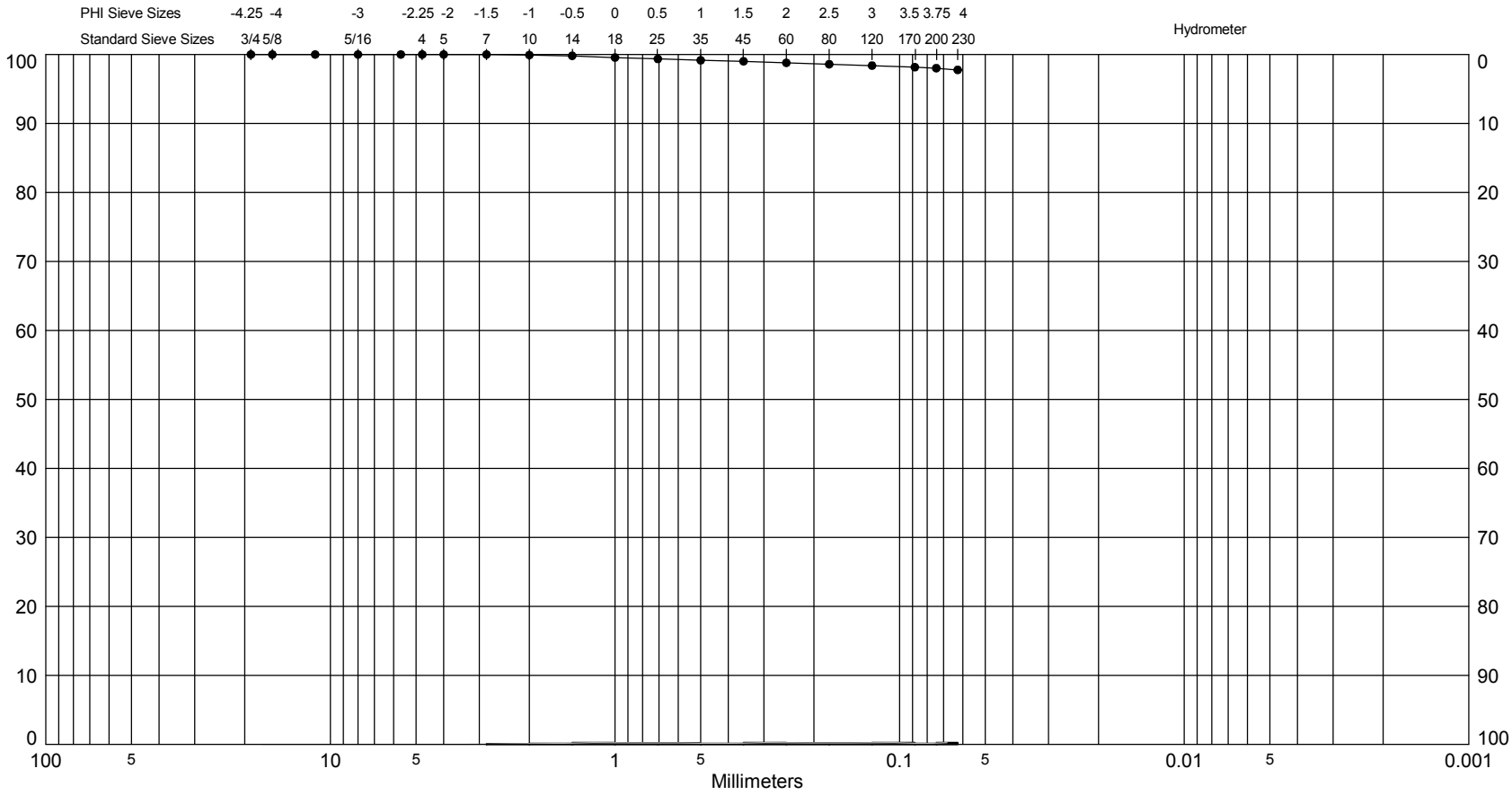
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z175 #2	—●—		ML-CL	#200 - 98.02 #230 - 97.77	10.17	7.76		1.67	-0.15	1.76	1.58

Comments: Silt, little sand

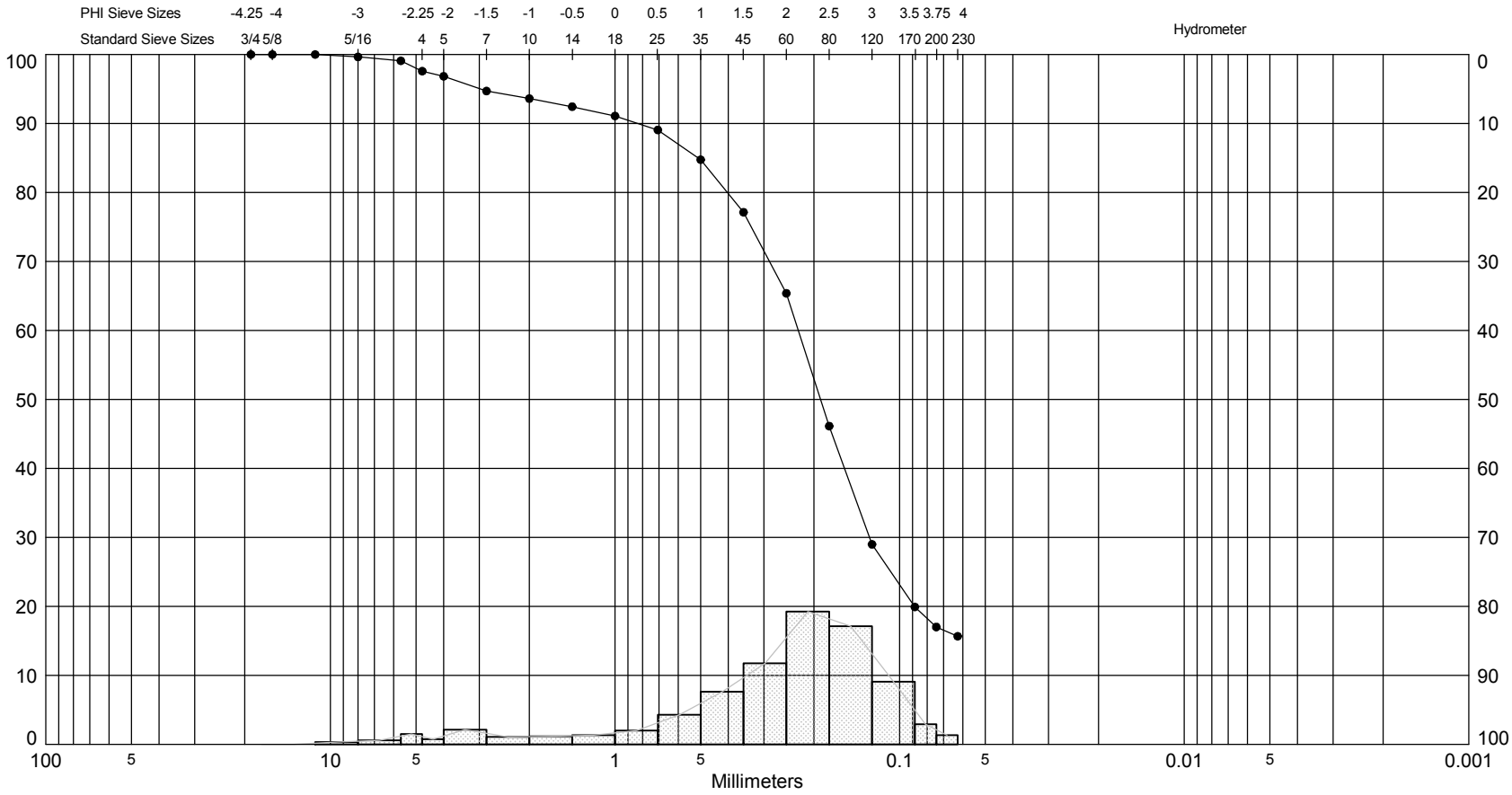
Depths and elevations based on measured values

Sample Information	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z175 #3	—●—		SM	#200 - 17.01 #230 - 15.67	21.44	3.88	2.4	1.84	-1.48	4.99	1.44

Comments: Peaty silt / soil-like, wood

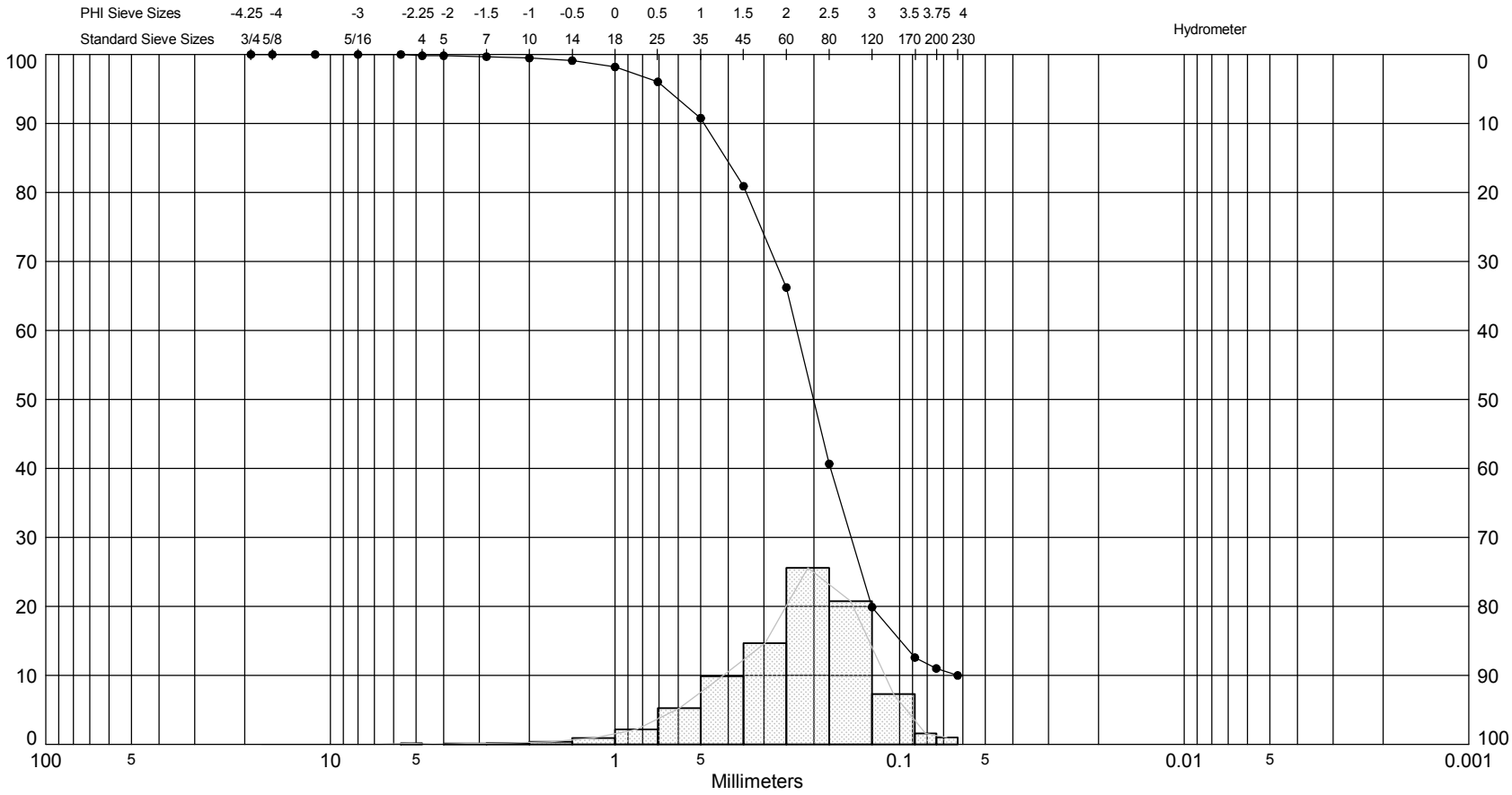
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z175 #4	—●—		SW-SM	#200 - 11.00 #230 - 9.99	1.07	0.98	2.32	2.1	-0.98	5.19	0.87

Comments: Gray sand

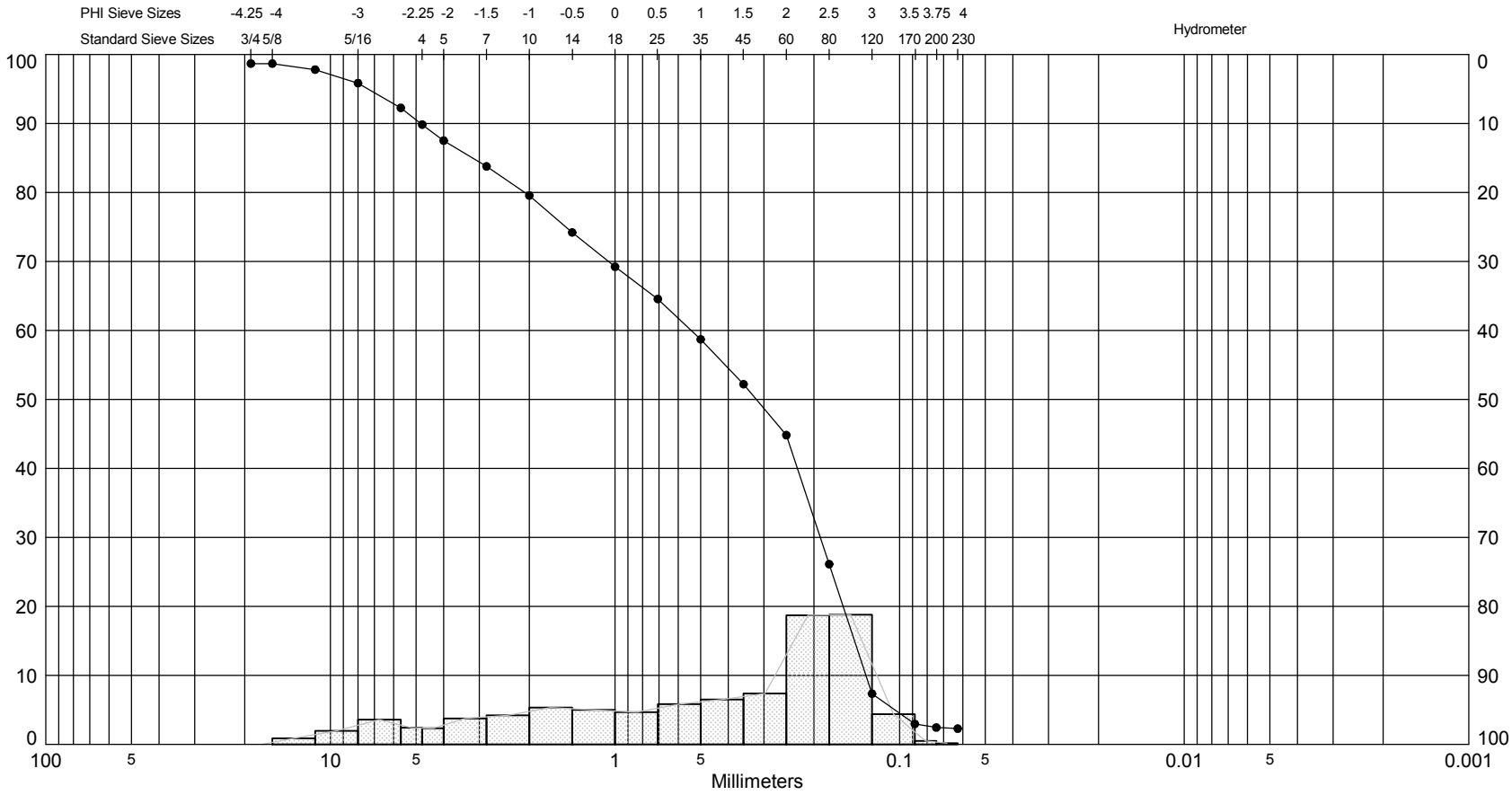
Depths and elevations based on measured values

Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z176 #1	—●—		SW	#200 - 2.44 #230 - 2.28	1.32	11.28	1.65	0.86	-0.62	2.23	1.9

Comments: Gray sand, shell

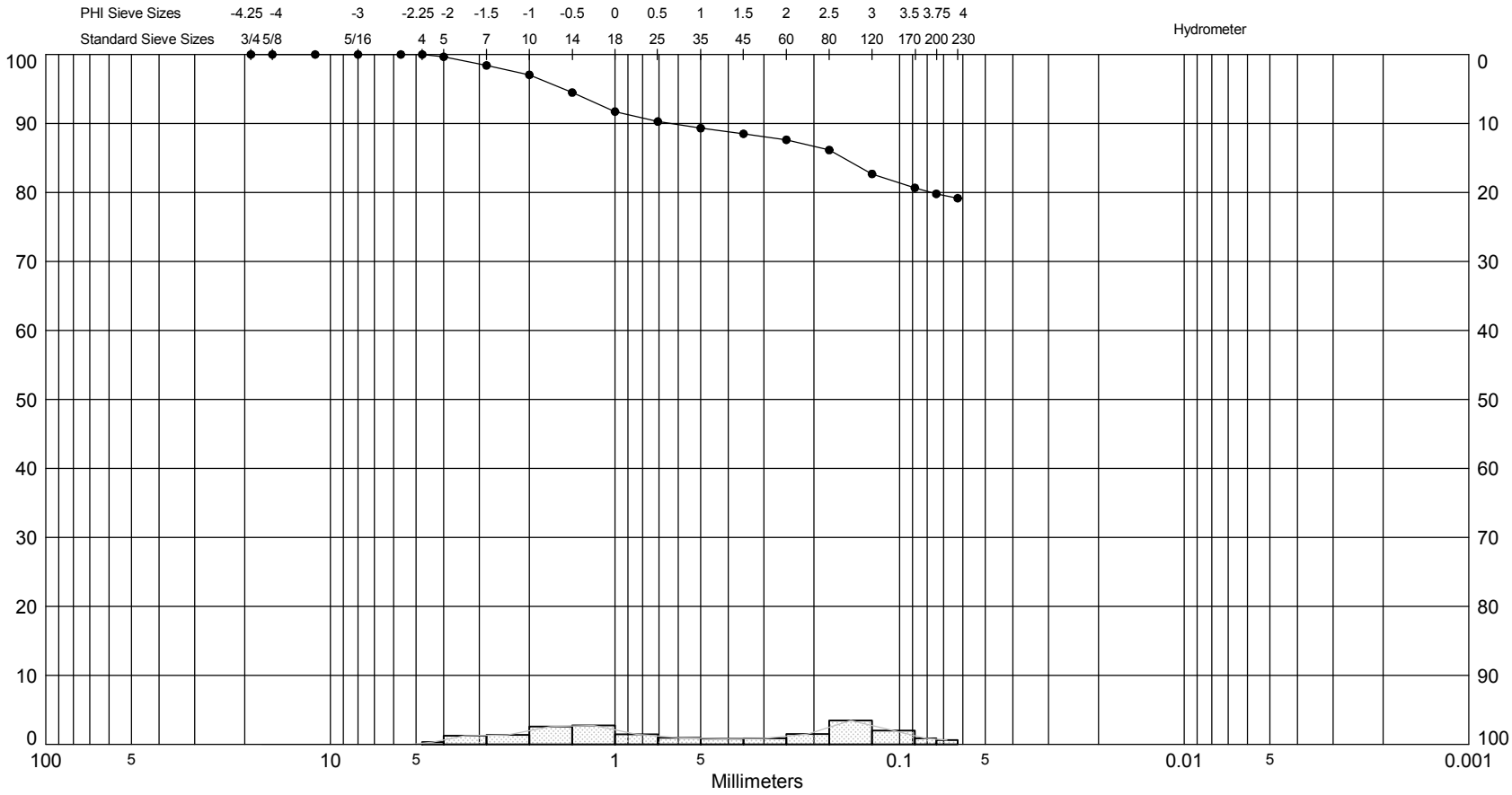
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z176 #2	—●—		ML-CL	#200 - 79.80 #230 - 79.17	7.84	7.41		1.03	-0.01	1.56	1.8

Comments: Organic silt, rocks

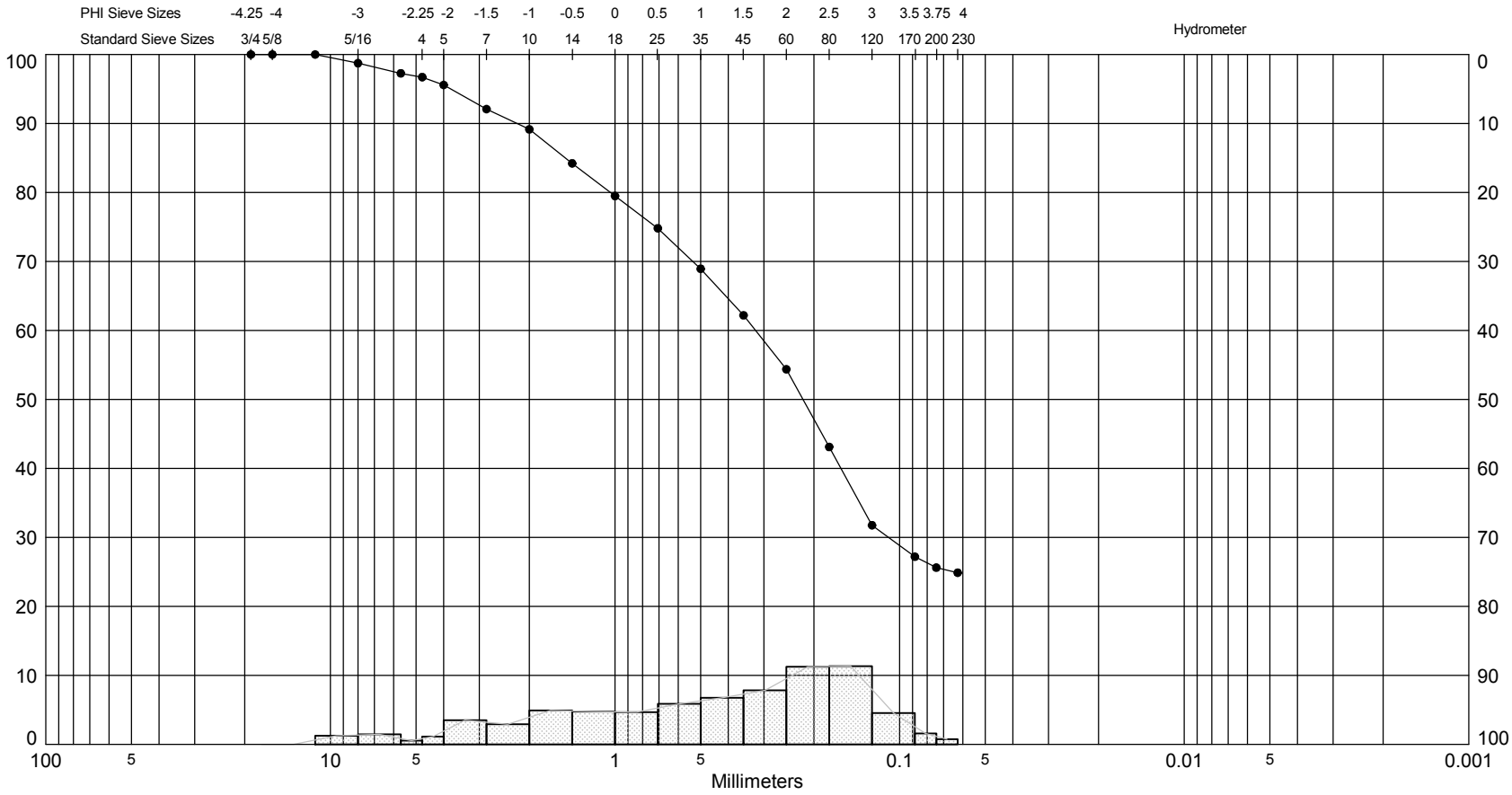
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z176 #3	—●—		SM	#200 - 25.62 #230 - 24.88	6.93	4.83	2.19	1.08	-0.63	2.48	1.73

Comments: Gray sand, shell

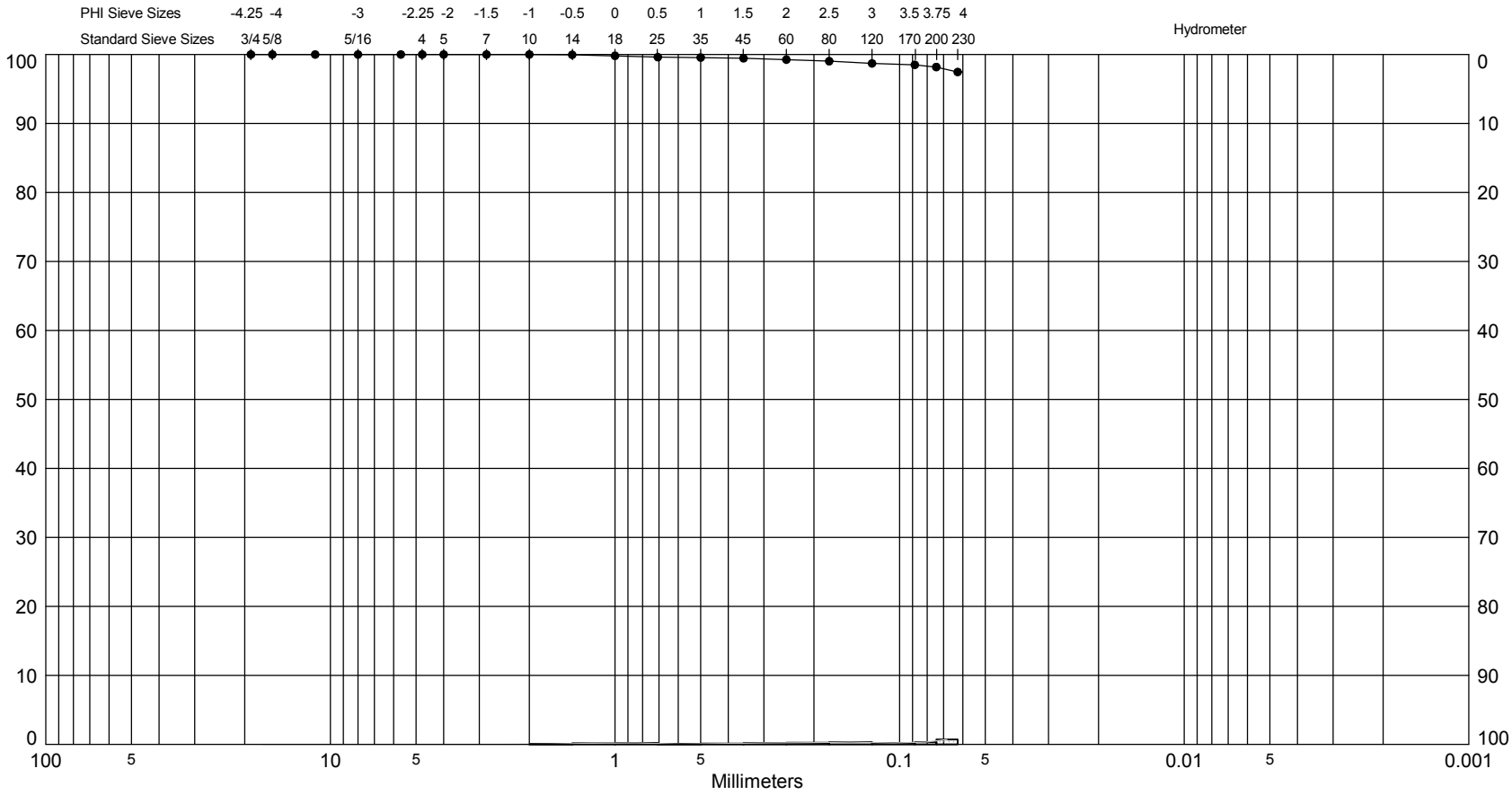
Depths and elevations based on measured values

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Analysis Date:	04-05-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z176 #4	—●—		ML-CL	#200 - 98.18 #230 - 97.46	15.27	6.12		2.57	-0.86	2.49	1.39

Comments: Silt

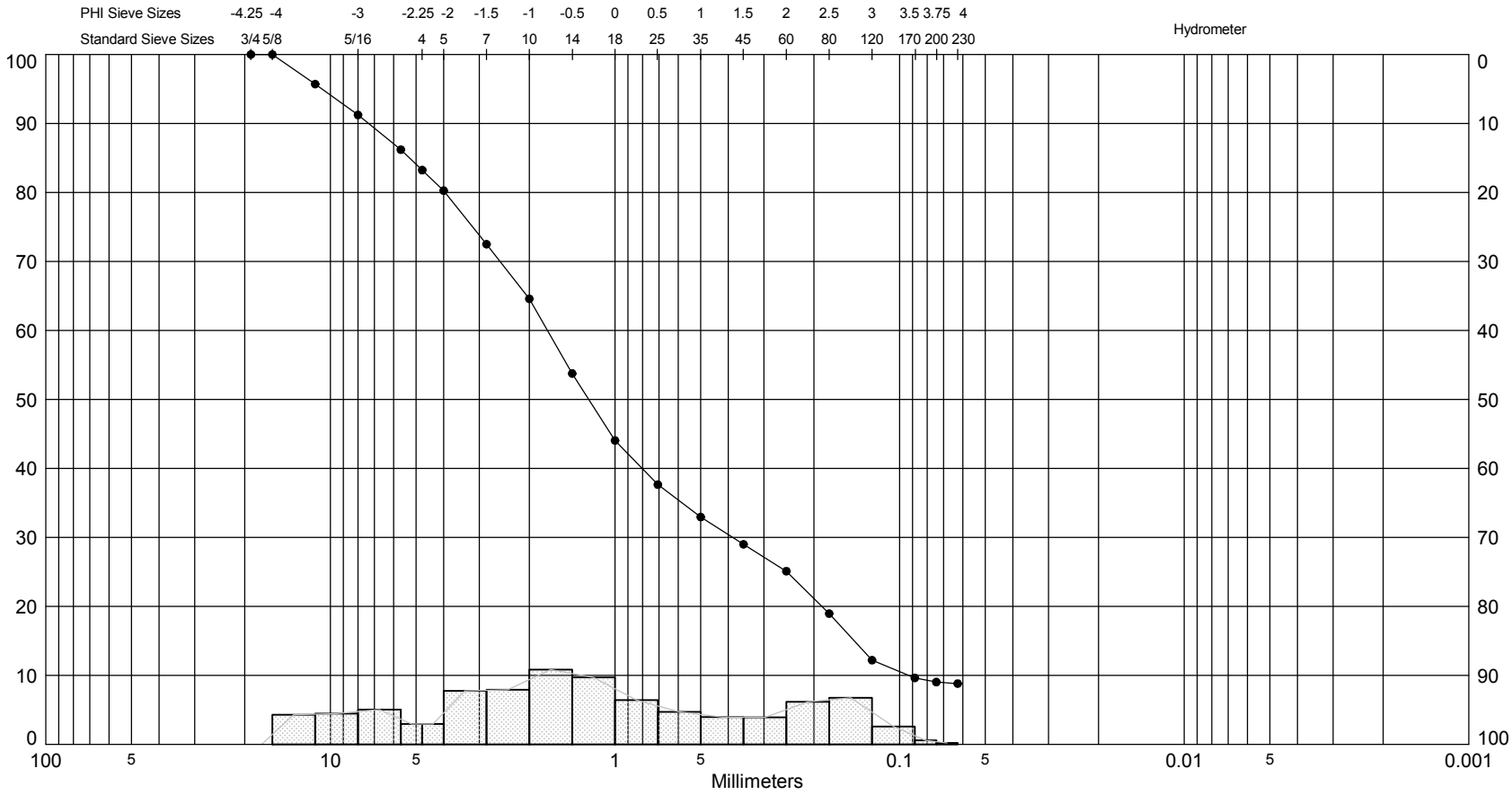
Depths and elevations based on measured values

Sample Information	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z177 #1	—●—	SW-SM	W/ GRAVEL	#200 - 9.03 #230 - 8.81	2.22	38.74		-0.34	0.17	2.11	1.96

Comments: Gray sand, shell

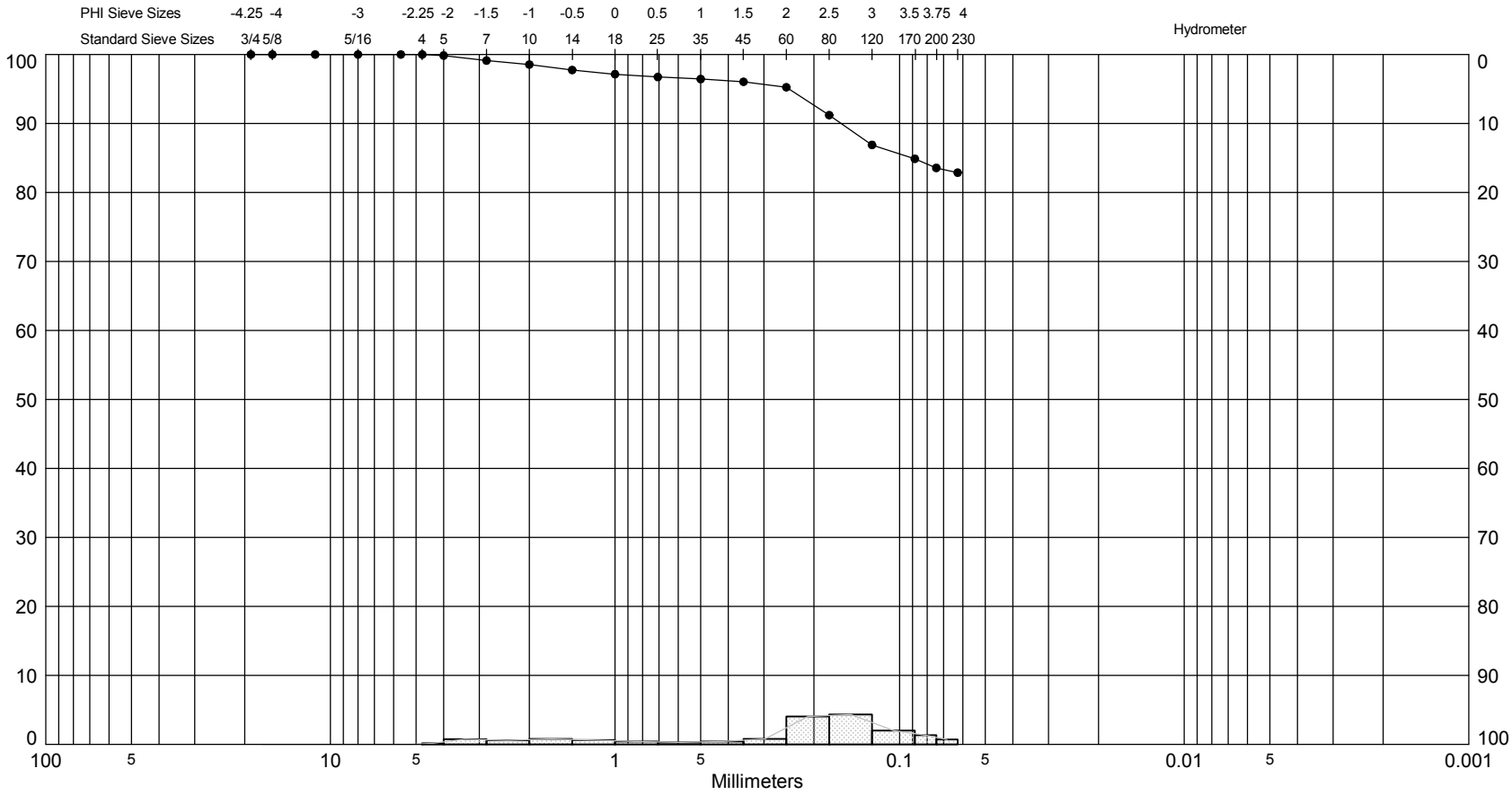
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z177 #2	—●—		ML-CL	#200 - 83.56 #230 - 82.87	6.42	4.59		1.99	-1.2	3.35	1.56

Comments: Silt, rock, gray sand

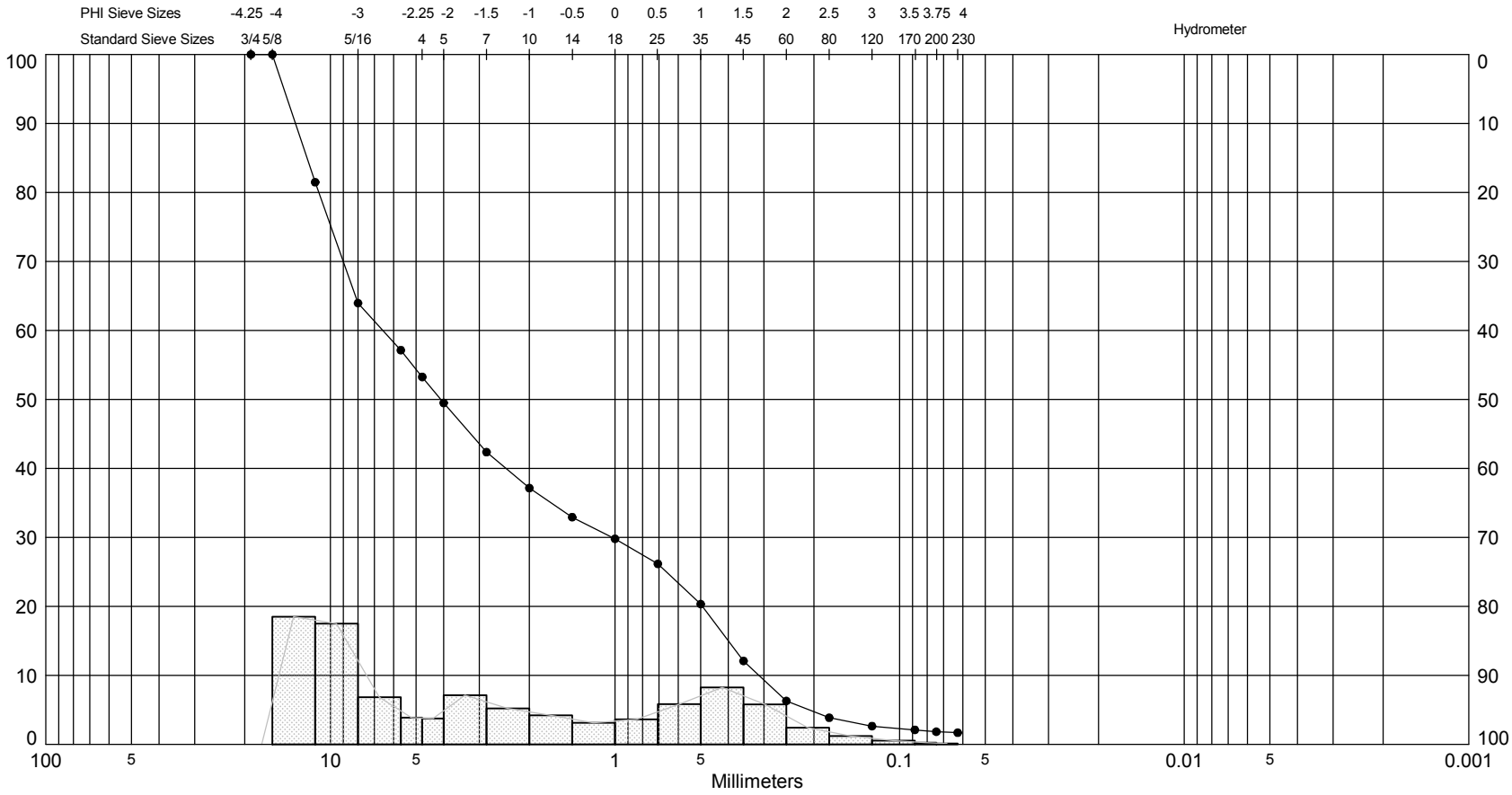
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z177 #3	—●—		SW	#200 - 1.83 #230 - 1.69	0.24	0.31		-1.5	0.56	1.96	2.05

Comments: Gray sand, rock, trace organic material

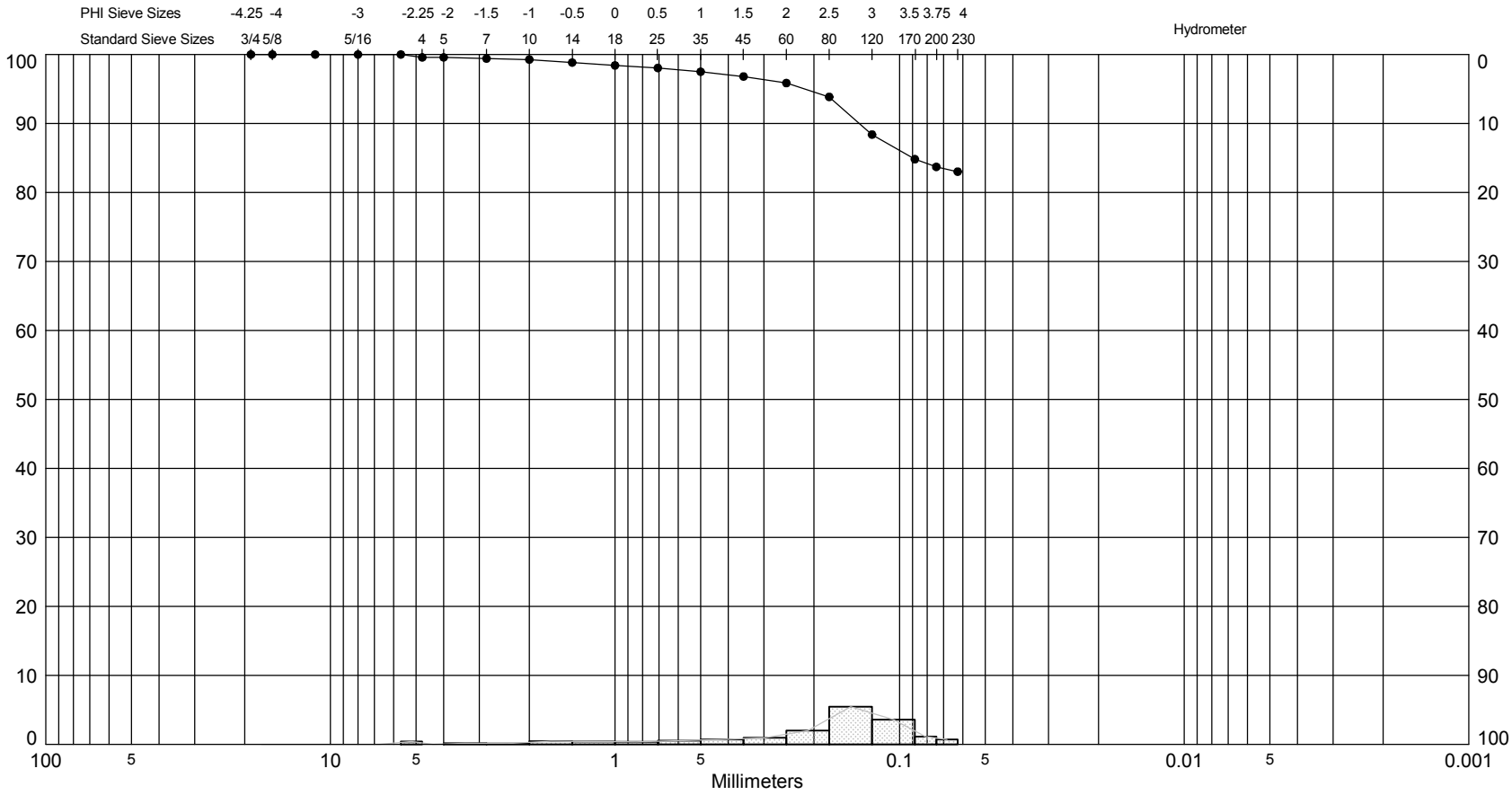
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z177 #4	—●—		ML-CL	#200 - 83.71 #230 - 83.02	23.35	5.16		2.29	-1.71	5.56	1.38

Comments: Silt

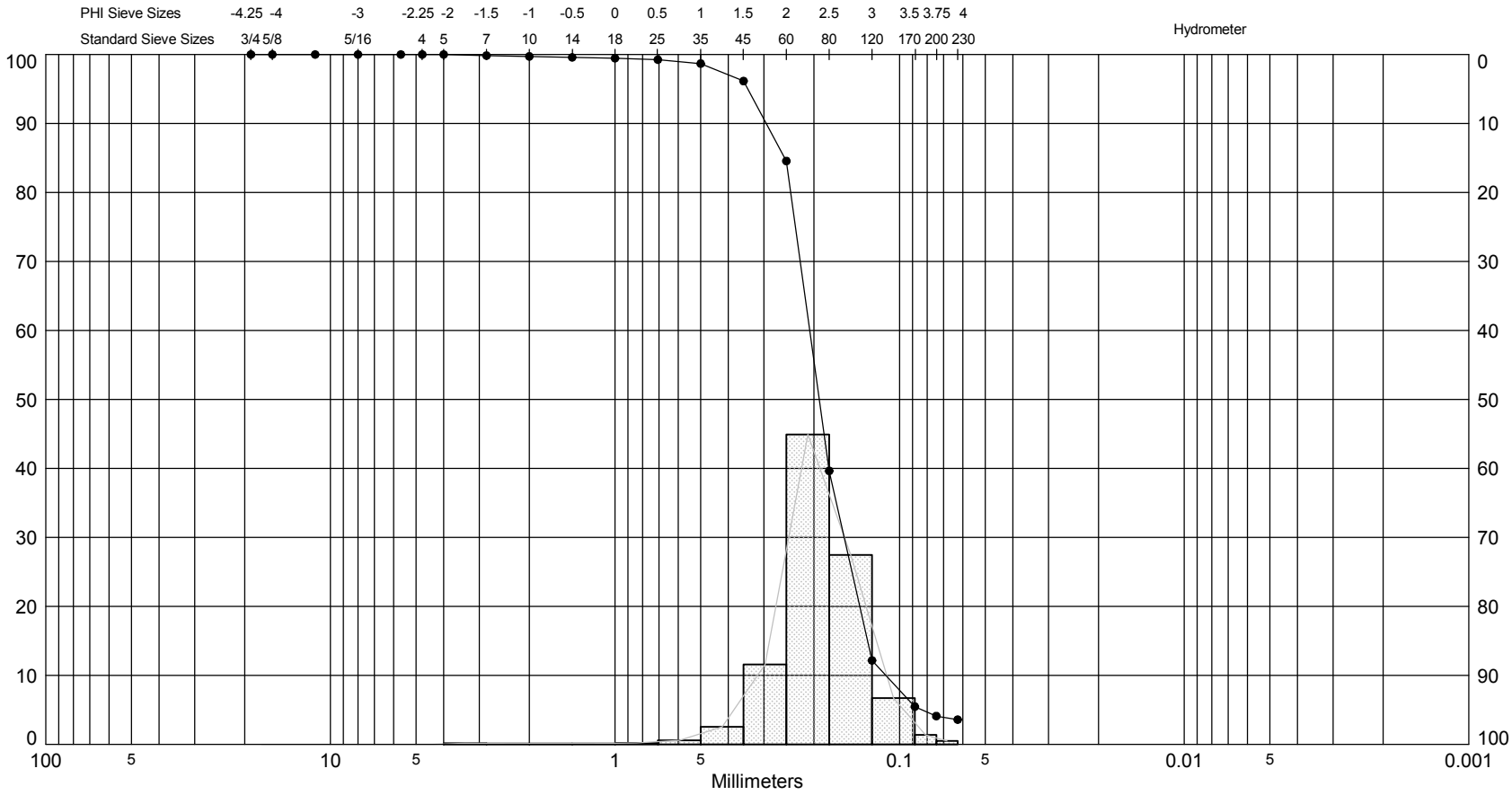
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z177 #5	—●—		SP	#200 - 4.10 #230 - 3.58	1.28	0.96	2.38	2.37	-1.46	12.14	0.56

Comments: Tan sand

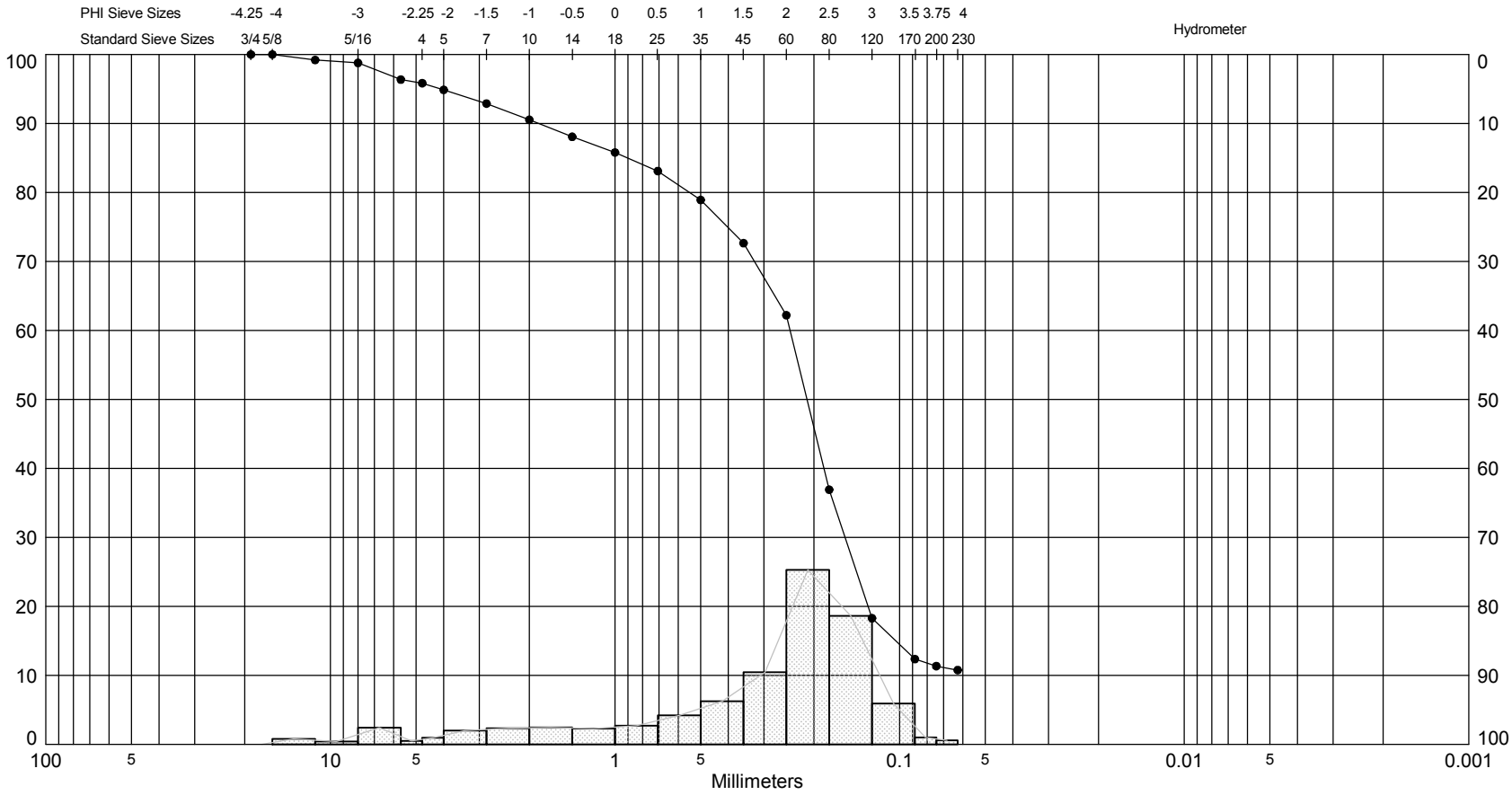
Depths and elevations based on measured values

Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z178 #1	—●—		SW-SM	#200 - 11.34 #230 - 10.77	3.97	16.24	2.24	1.57	-1.46	4.43	1.61

Comments: Gray sand

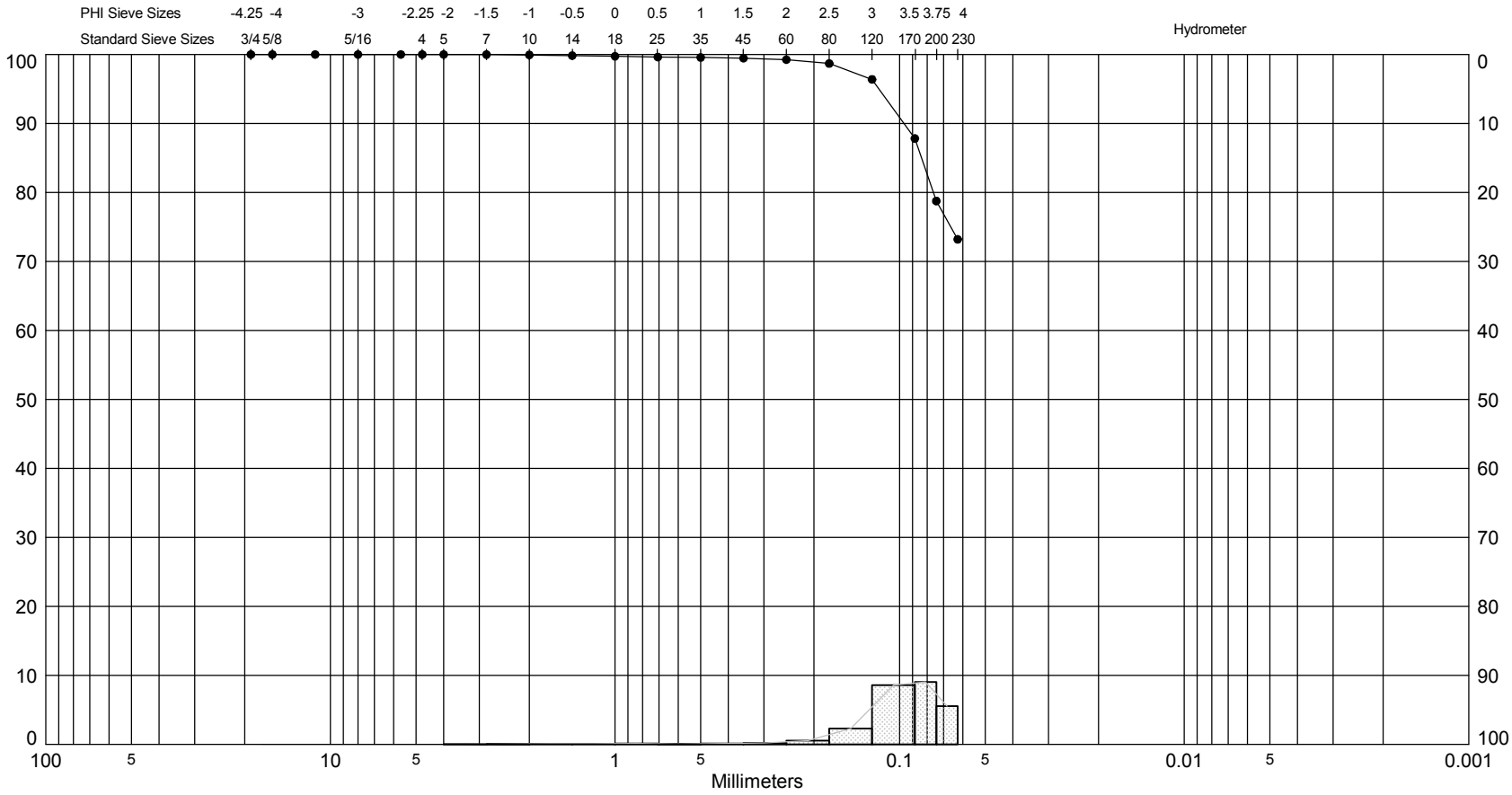
Depths and elevations based on measured values

Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z178 #2	—●—		ML-CL	#200 - 78.76 #230 - 73.20	7.00	3.86		3.37	-3.74	22.73	0.63

Comments: Peaty silt, gray sand

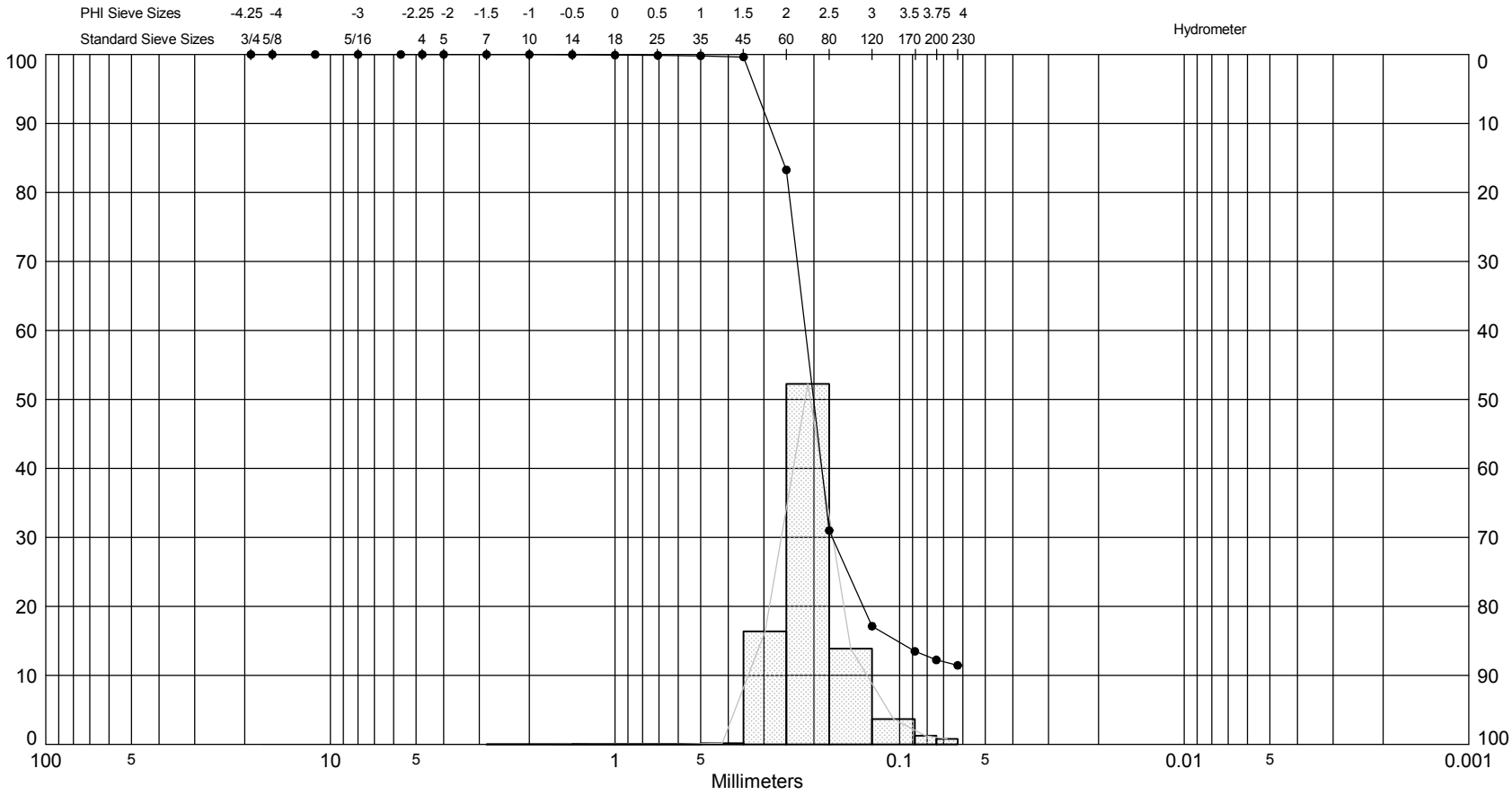
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z178 #3	—●—		SM	#200 - 12.24 #230 - 11.45	0.69	1.93	2.32	2.3	0.69	6.52	0.43

Comments: Tan sand

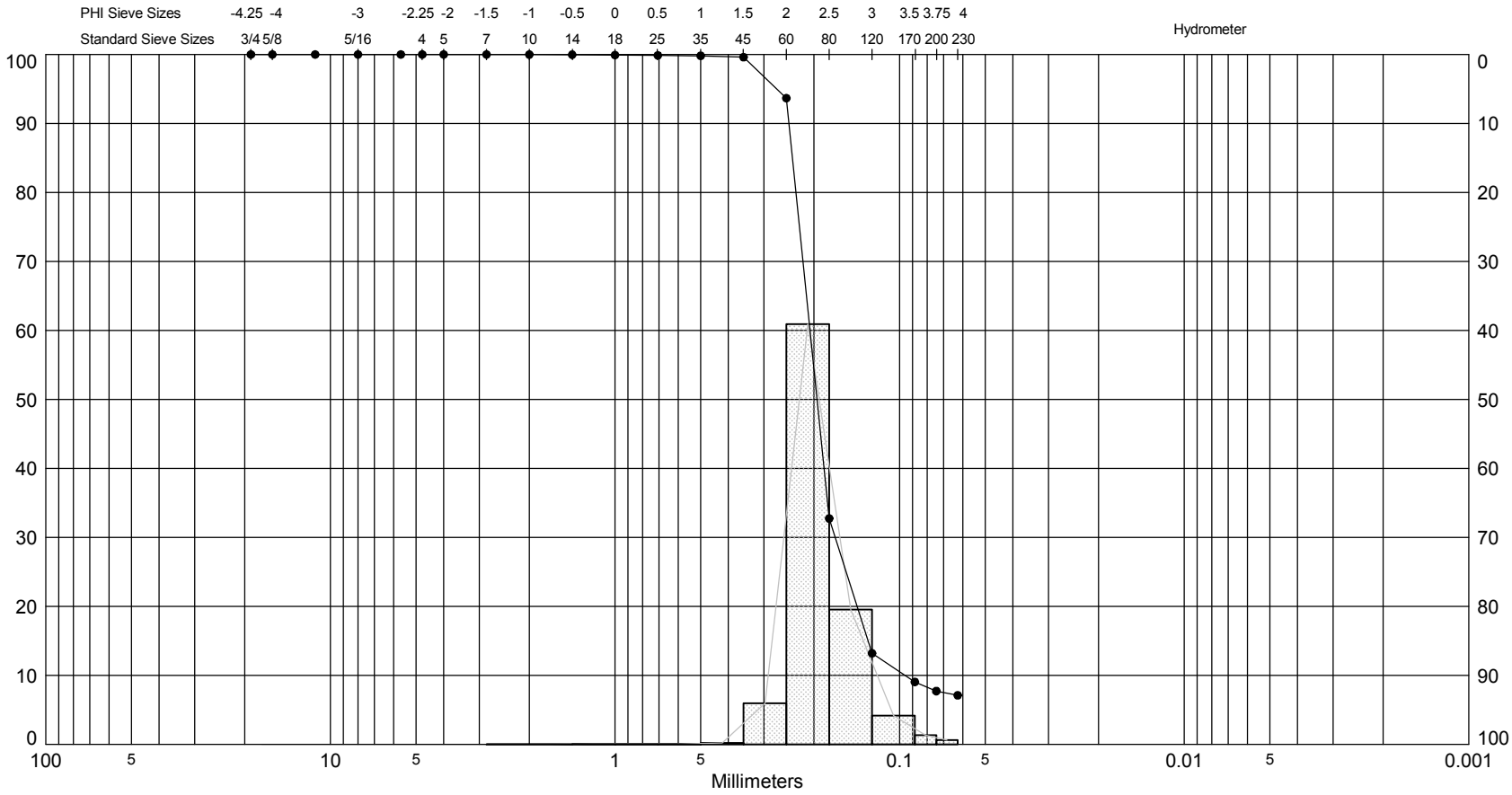
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z178 #4	—●—		SP-SM	#200 - 7.72 #230 - 7.11	0.56	2.38	2.36	2.39	0.62	8.25	0.39

Comments: Tan sand

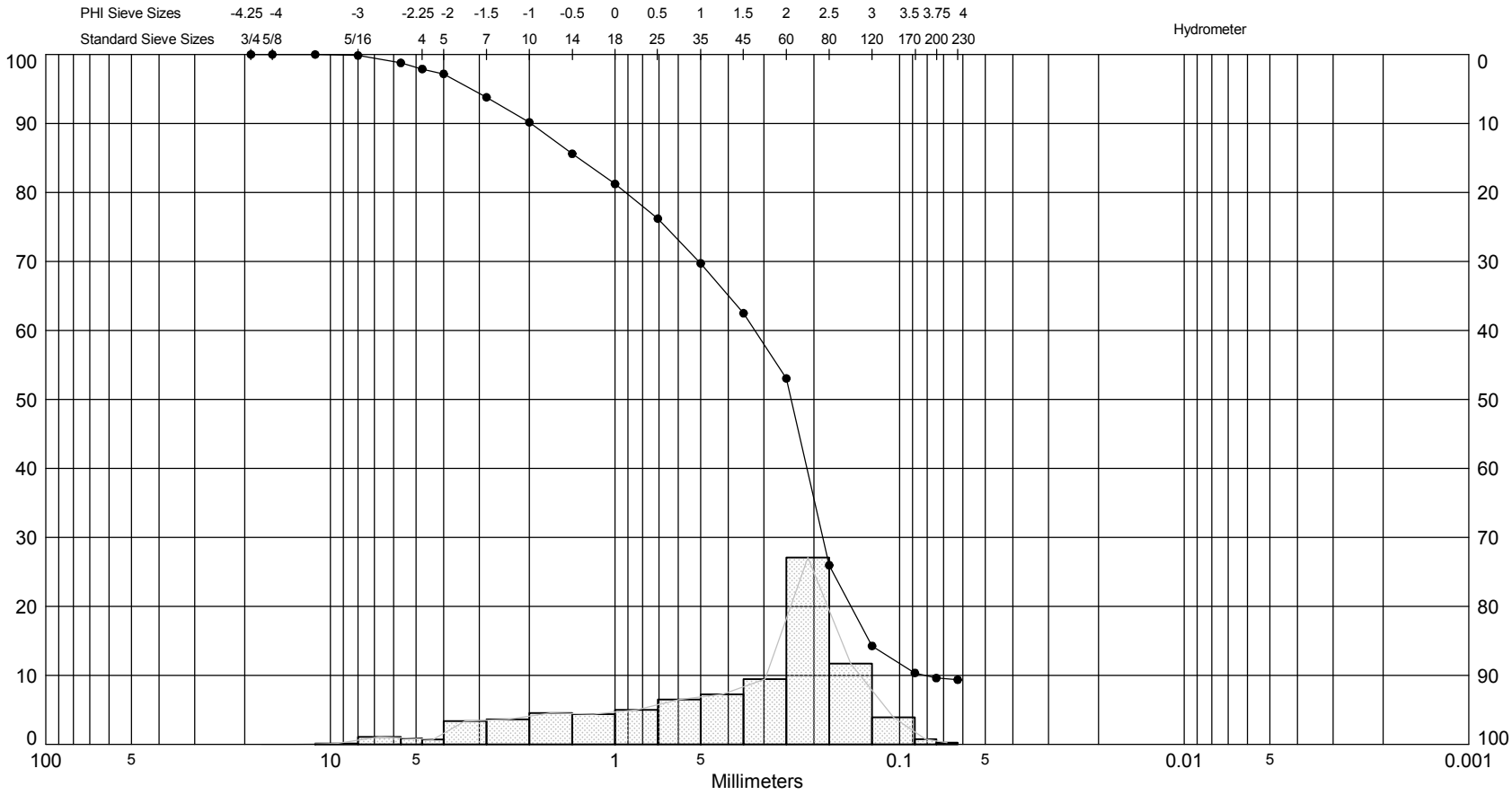
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z179 #1	—●—		SW-SM	#200 - 9.61 #230 - 9.37	5.25	11.26	2.06	1.31	-0.92	2.92	1.5

Comments: Gray sand

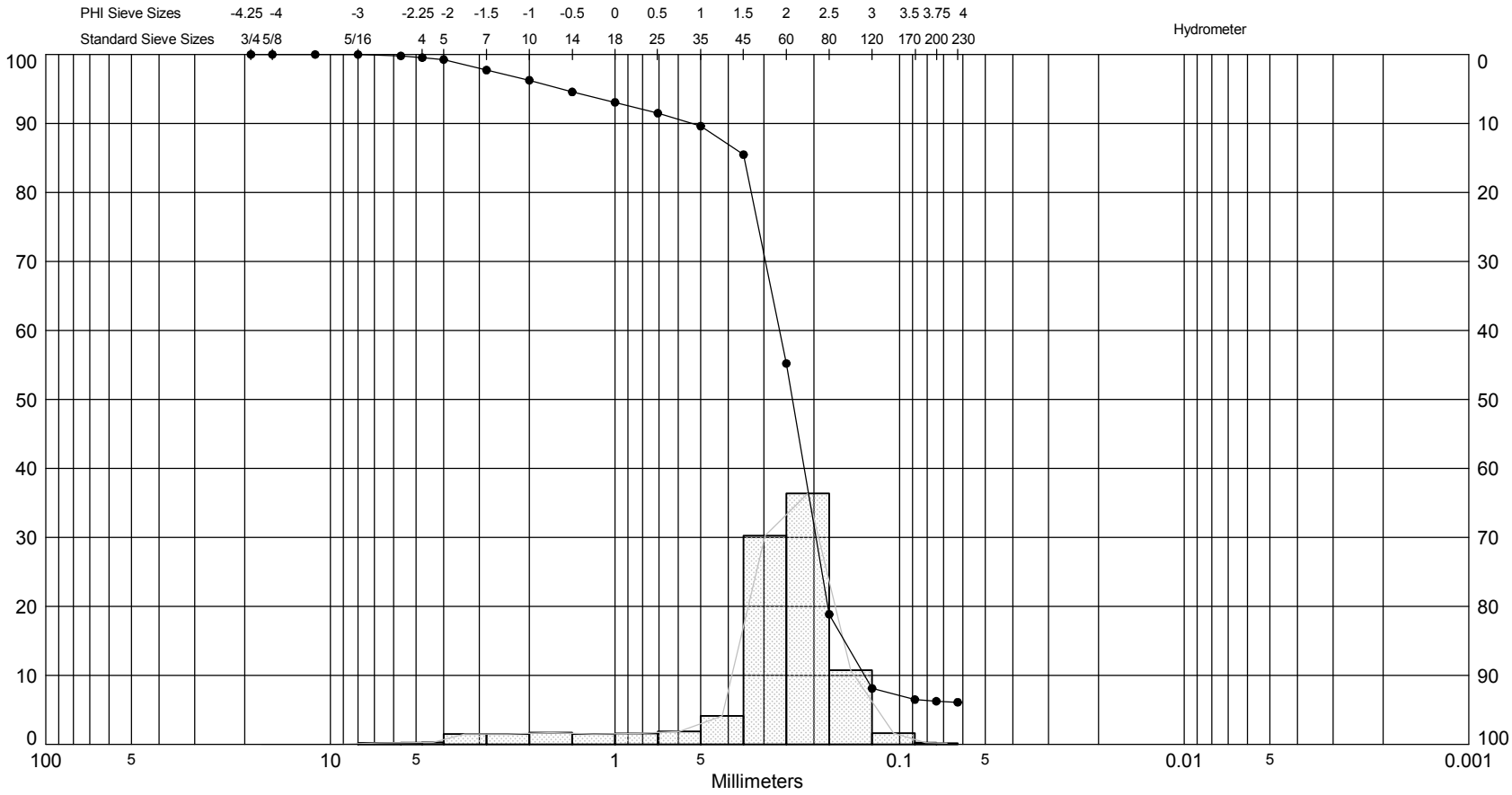
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z179 #2	—●—		SW-SM	#200 - 6.25 #230 - 6.10	1.02	9.18	2.07	1.81	-2.16	8.18	0.99

Comments: Gray sand

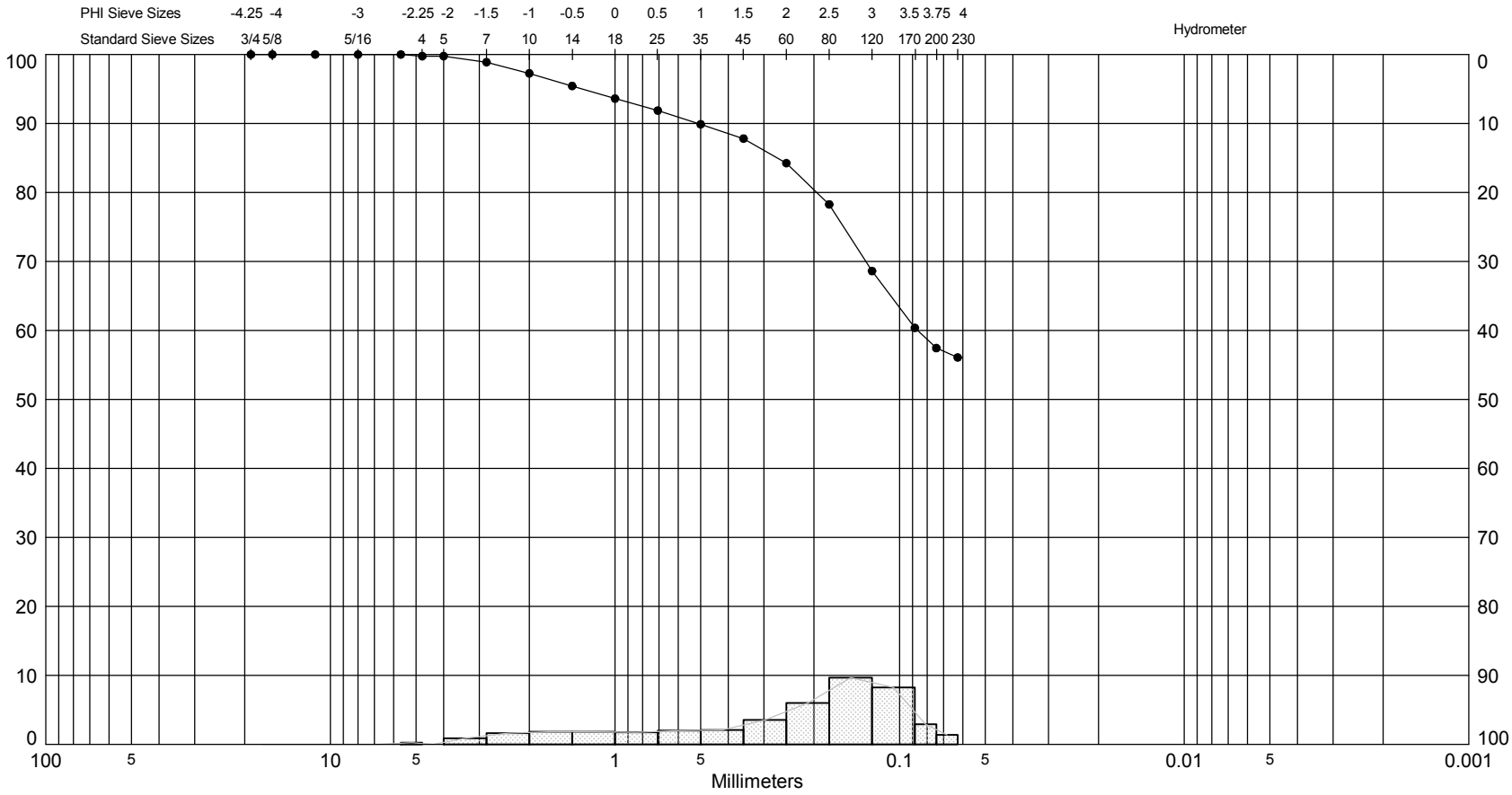
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z179 #3	—●—		ML-CL	#200 - 57.44 #230 - 56.08	5.89	5.49		1.99	-1.03	3.06	1.49

Comments: Peaty silt, soil-like

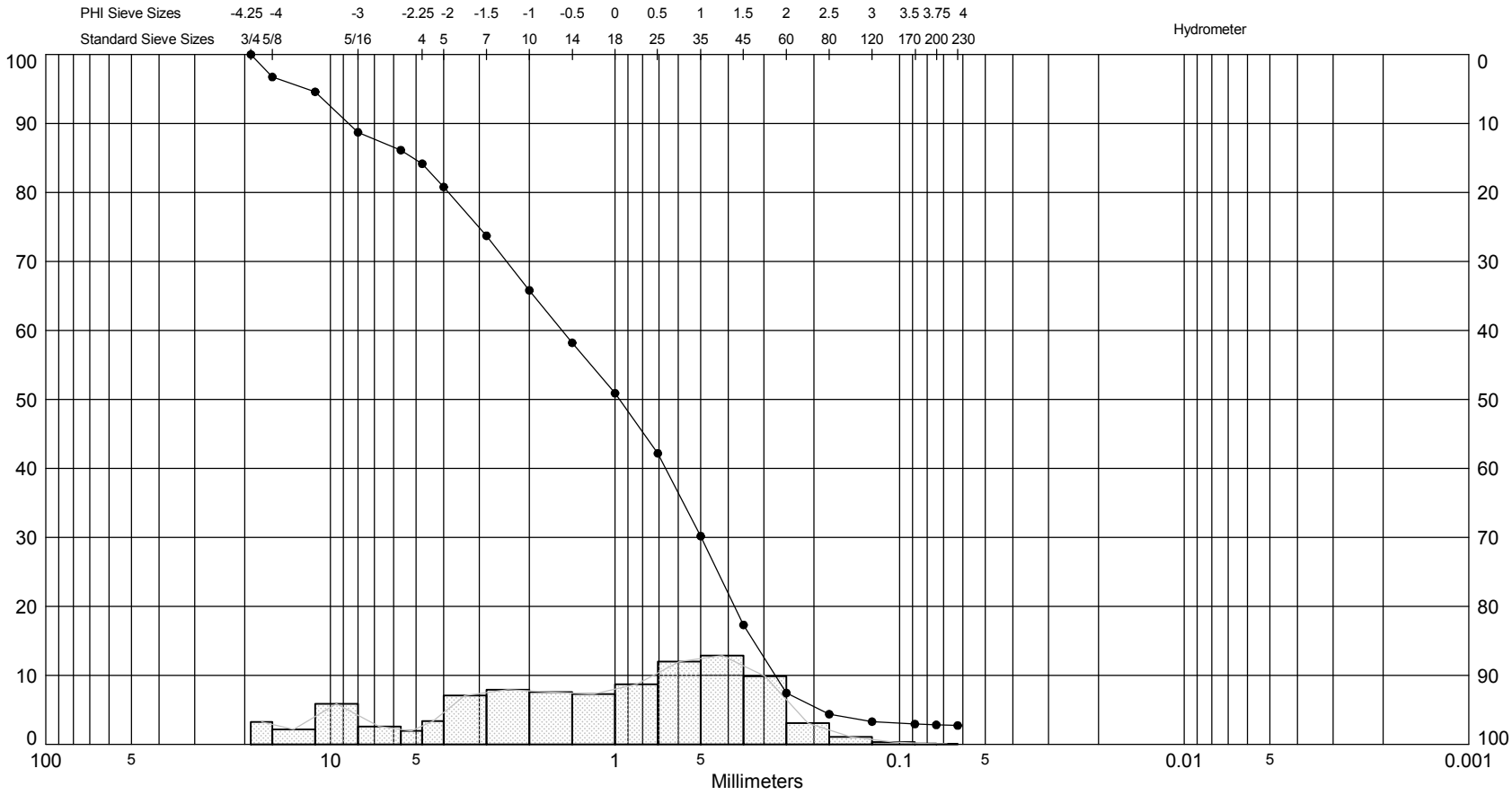
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z179 #4	—●—		SW	#200 - 2.82 #230 - 2.73	1.45	0.55	0.05	-0.34	-0.42	2.25	1.78

Comments: Coarser quartz sand, rock

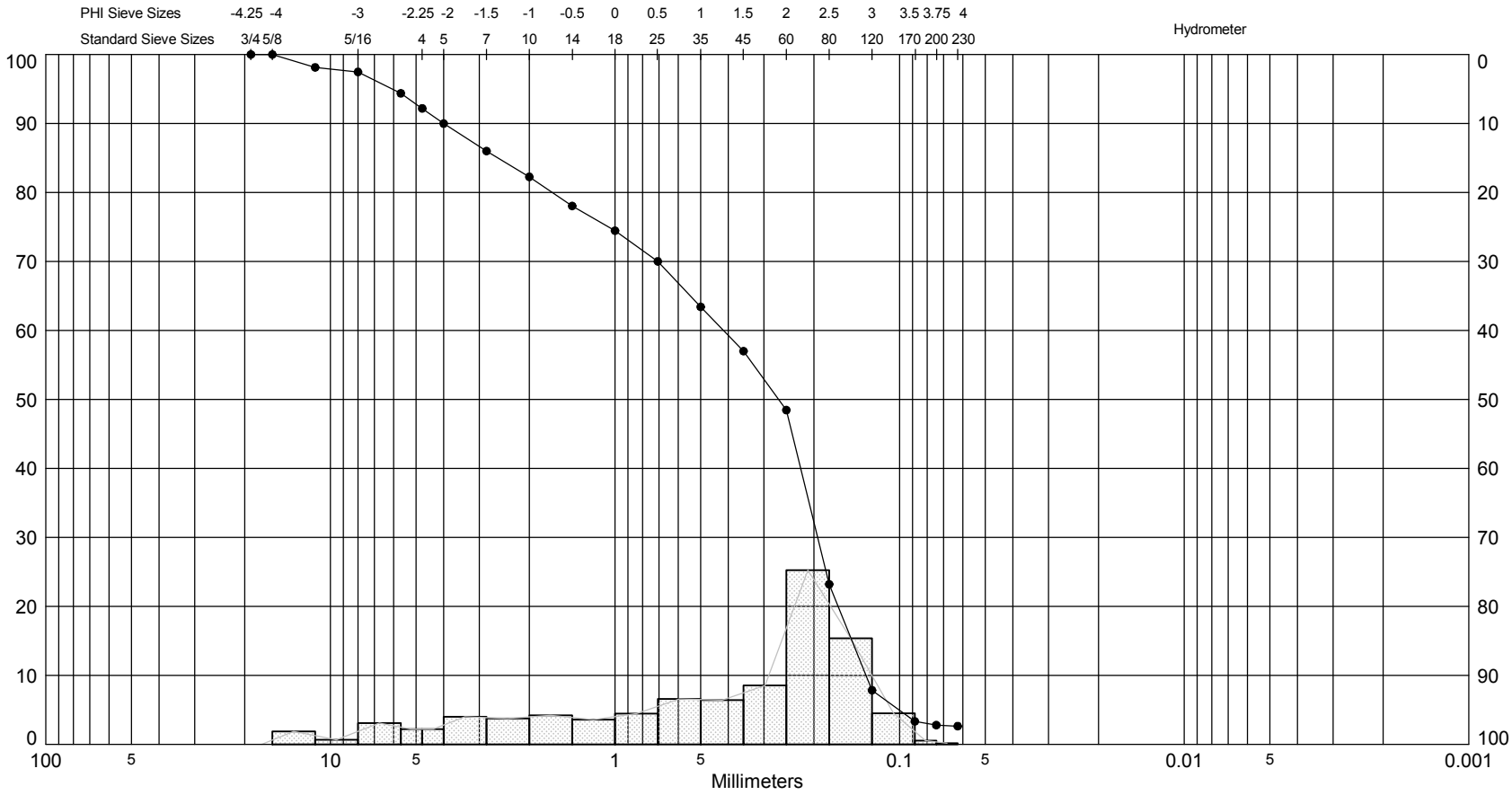
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z180 #1	—●—		SW	#200 - 2.79 #230 - 2.64	2.08	14.19	1.91	1.05	-0.92	2.72	1.85

Comments: Coarser quartz sand, shell, rock

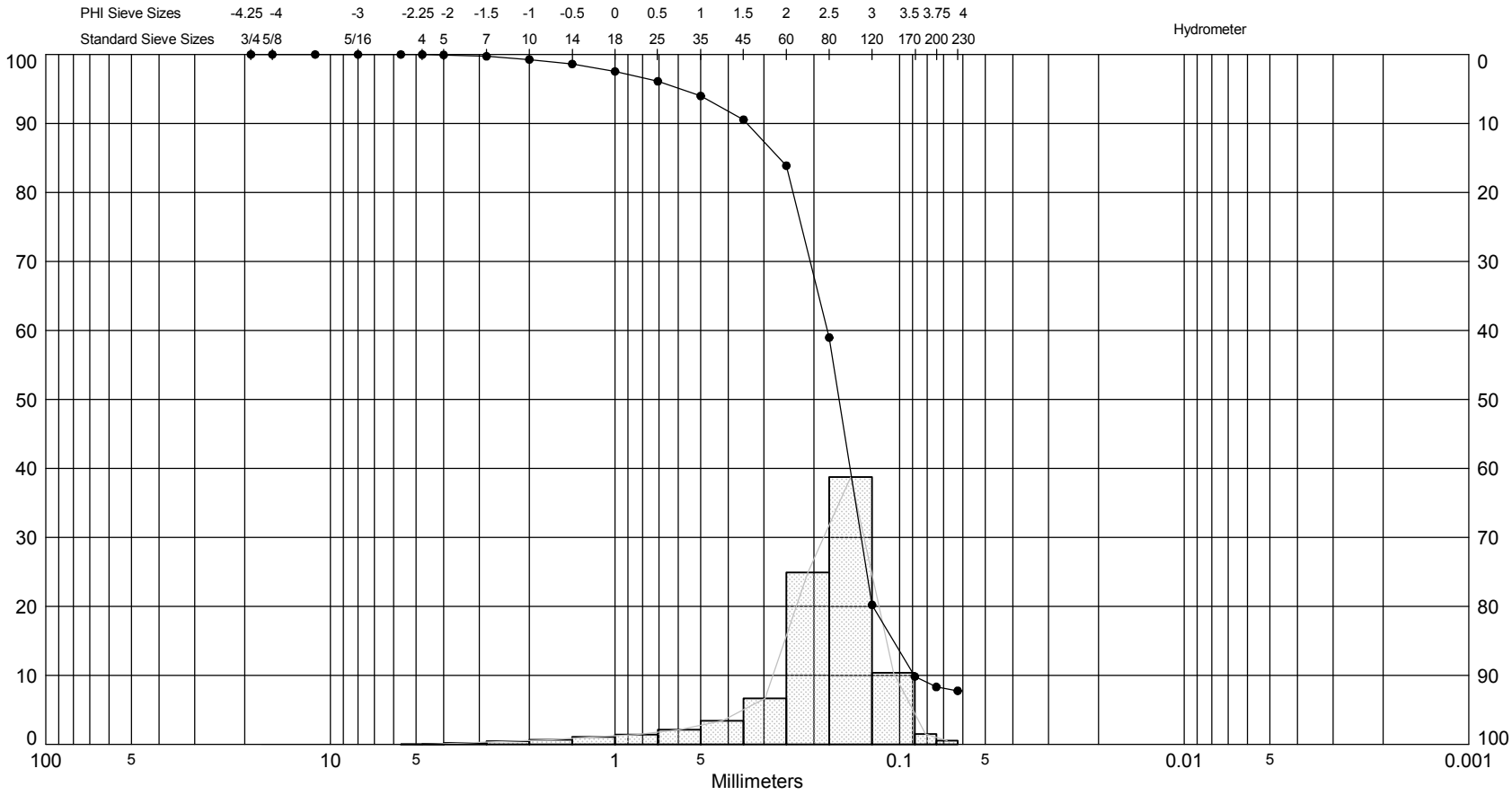
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z180 #2	—●—		SP-SM	#200 - 8.32 #230 - 7.76	1.98	8.31	2.62	2.39	-2	8.58	0.81

Comments: Fine gray sand, little silt

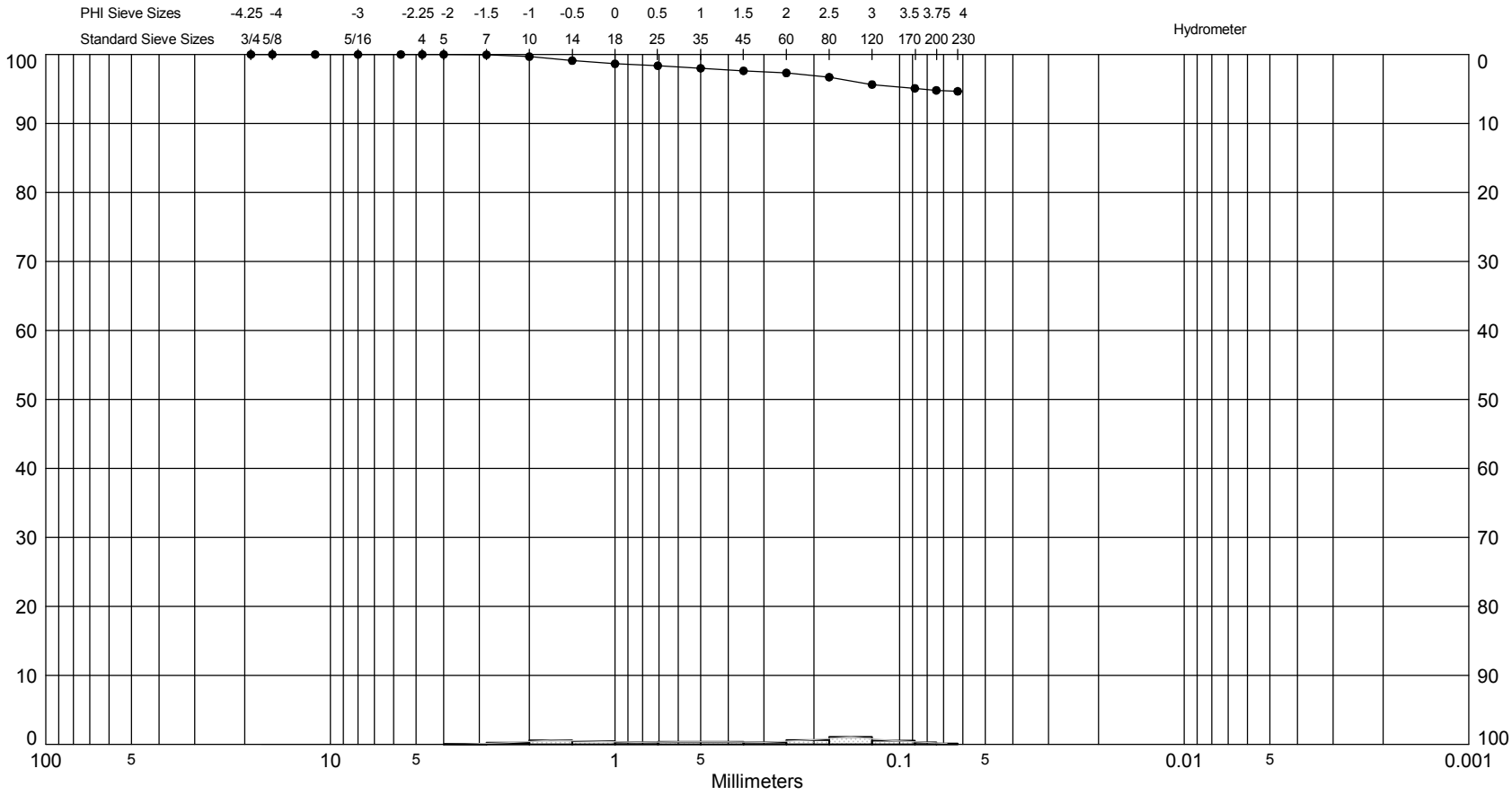
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z180 #3	—●—		ML-CL	#200 - 94.80 #230 - 94.66	14.73	10.26		1.52	-0.36	1.78	1.58

Comments: Peaty silt, soil-like

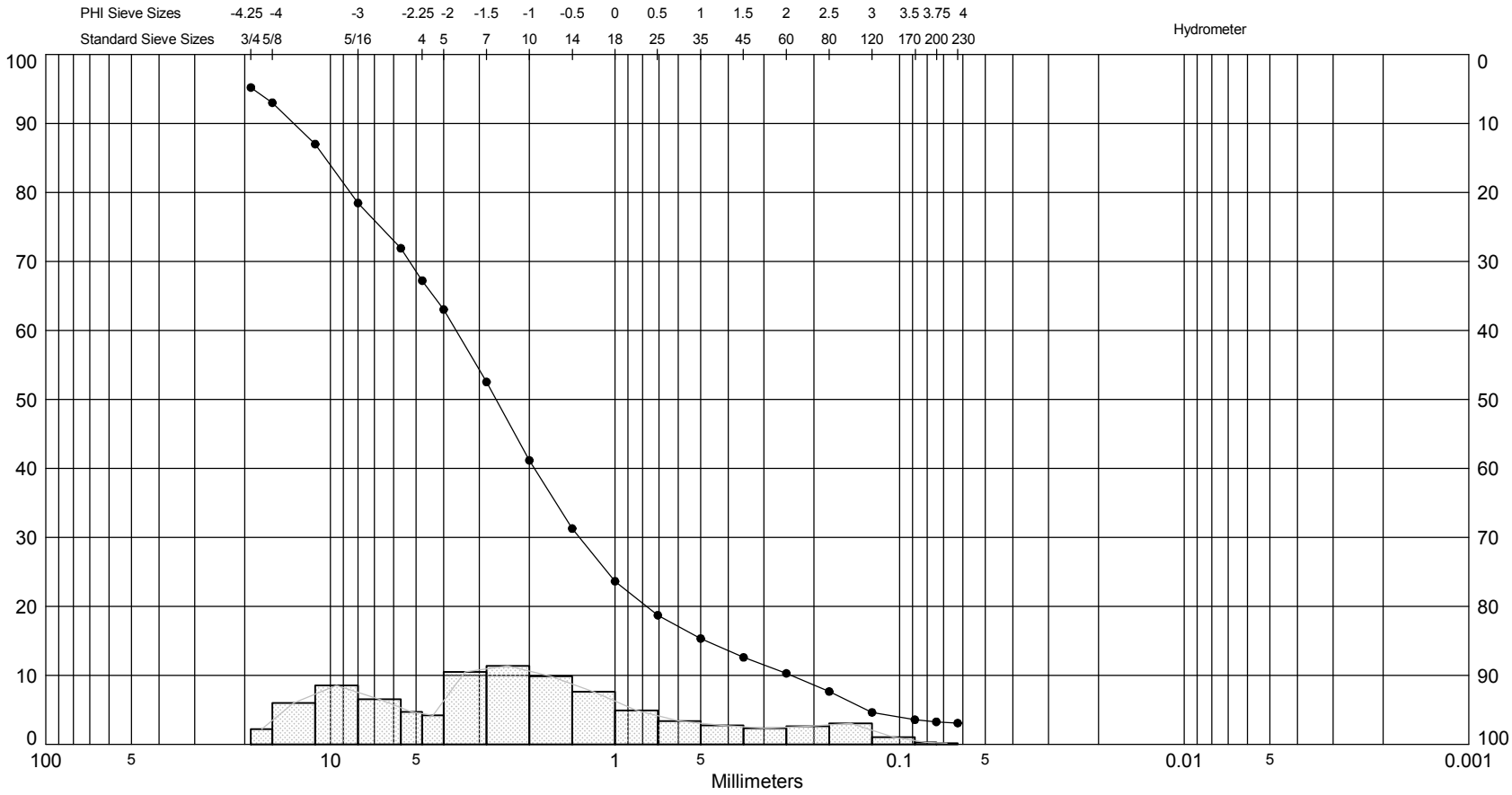
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z181 #1	—●—		SW WITH GRAVEL	#200 3.26 #230 3.08	3.11	31.64		-1.34	0.84	3.12	1.77

Comments: Rock, shell, little sand

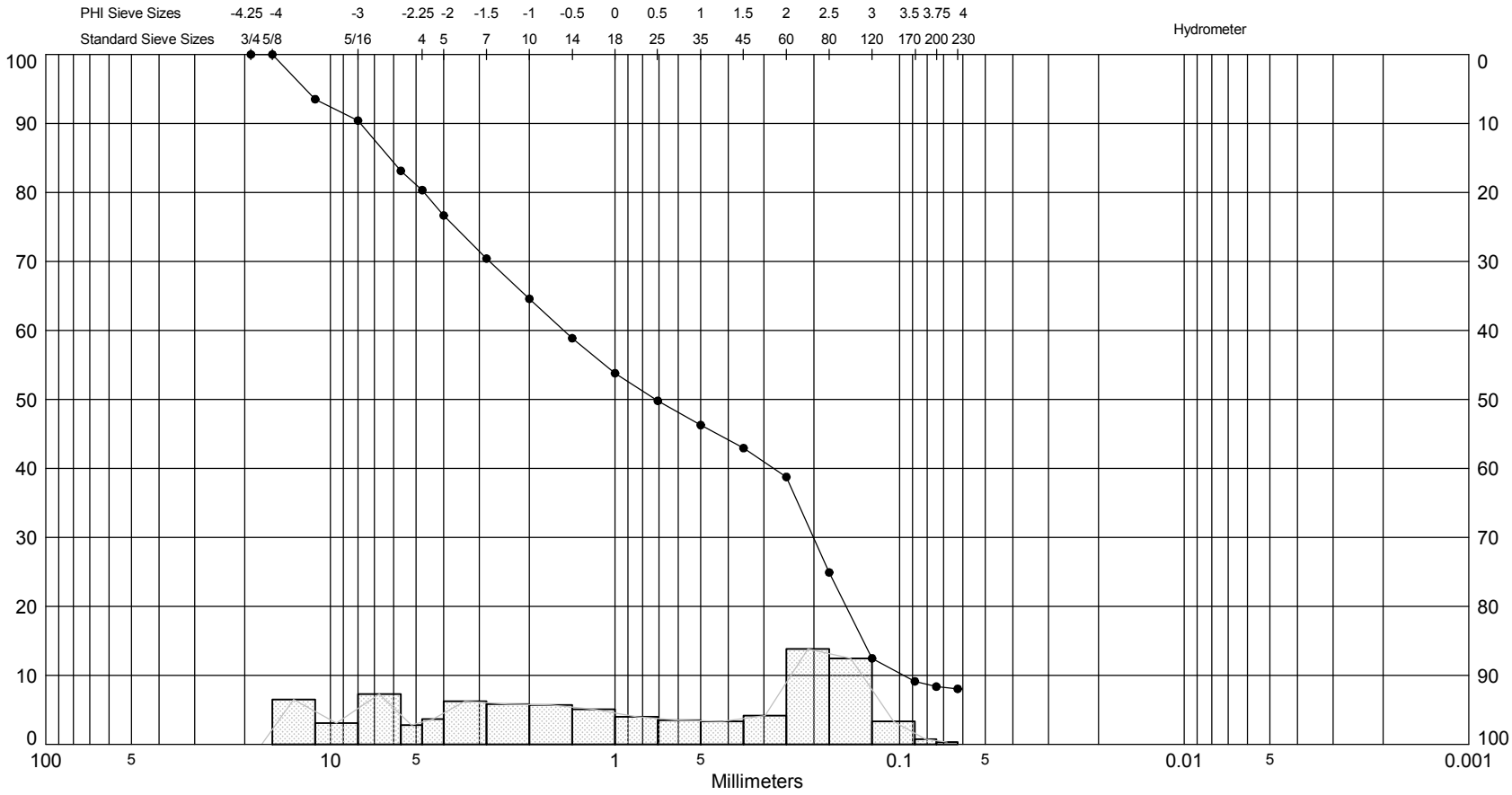
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z181 #2	—●—		SW-SM	W/ GRAVEL #200 - 8.37 #230 - 8.05	1.81	17.76	0.48	0.03	-0.13	1.61	2.28

Comments:

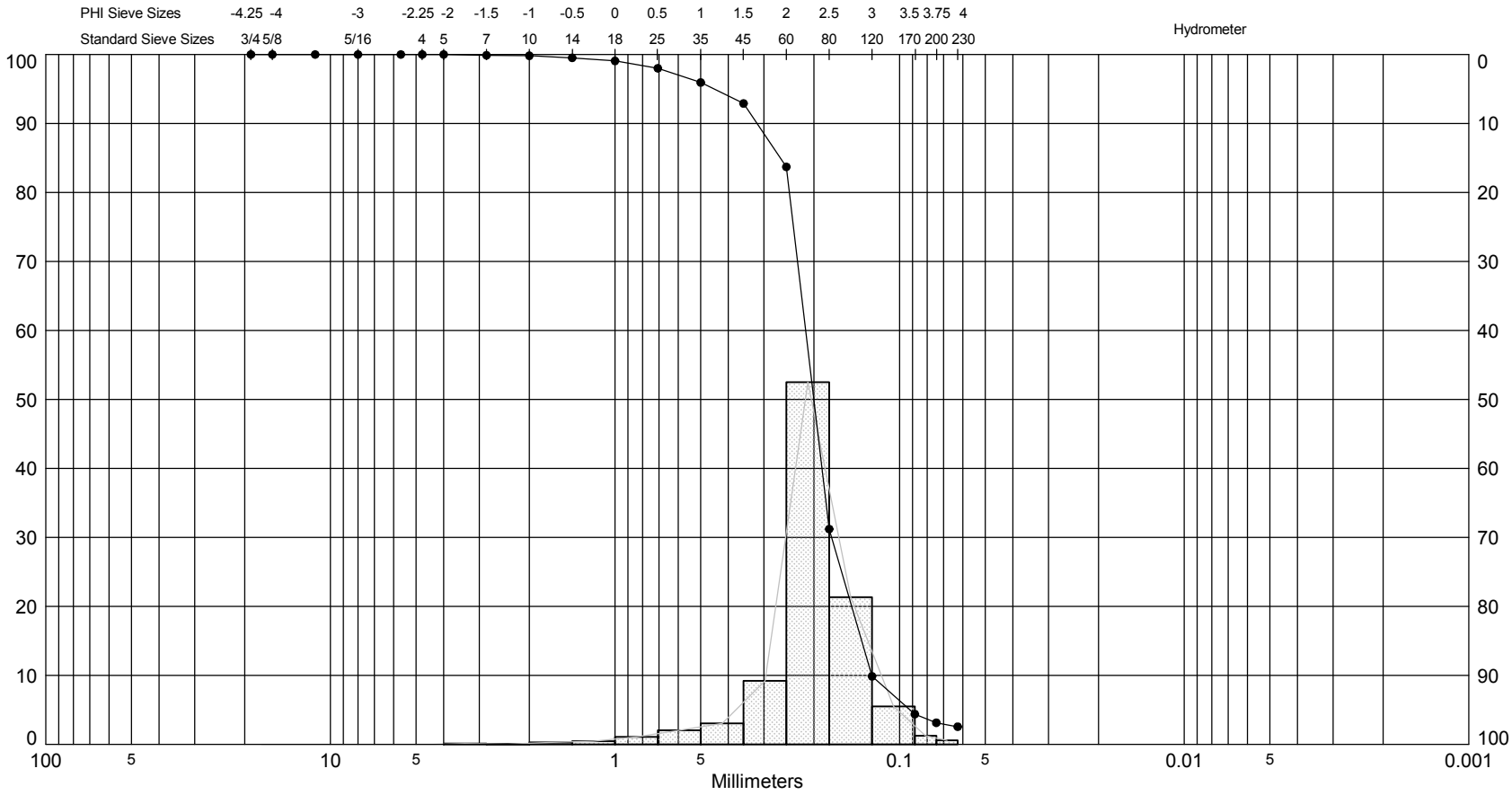
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z181 #3	—●—		SP	#200 - 3.13 #230 - 2.56	0.10	1.35	2.32	2.28	-1.55	9.49	0.62

Comments: Fine tan sand

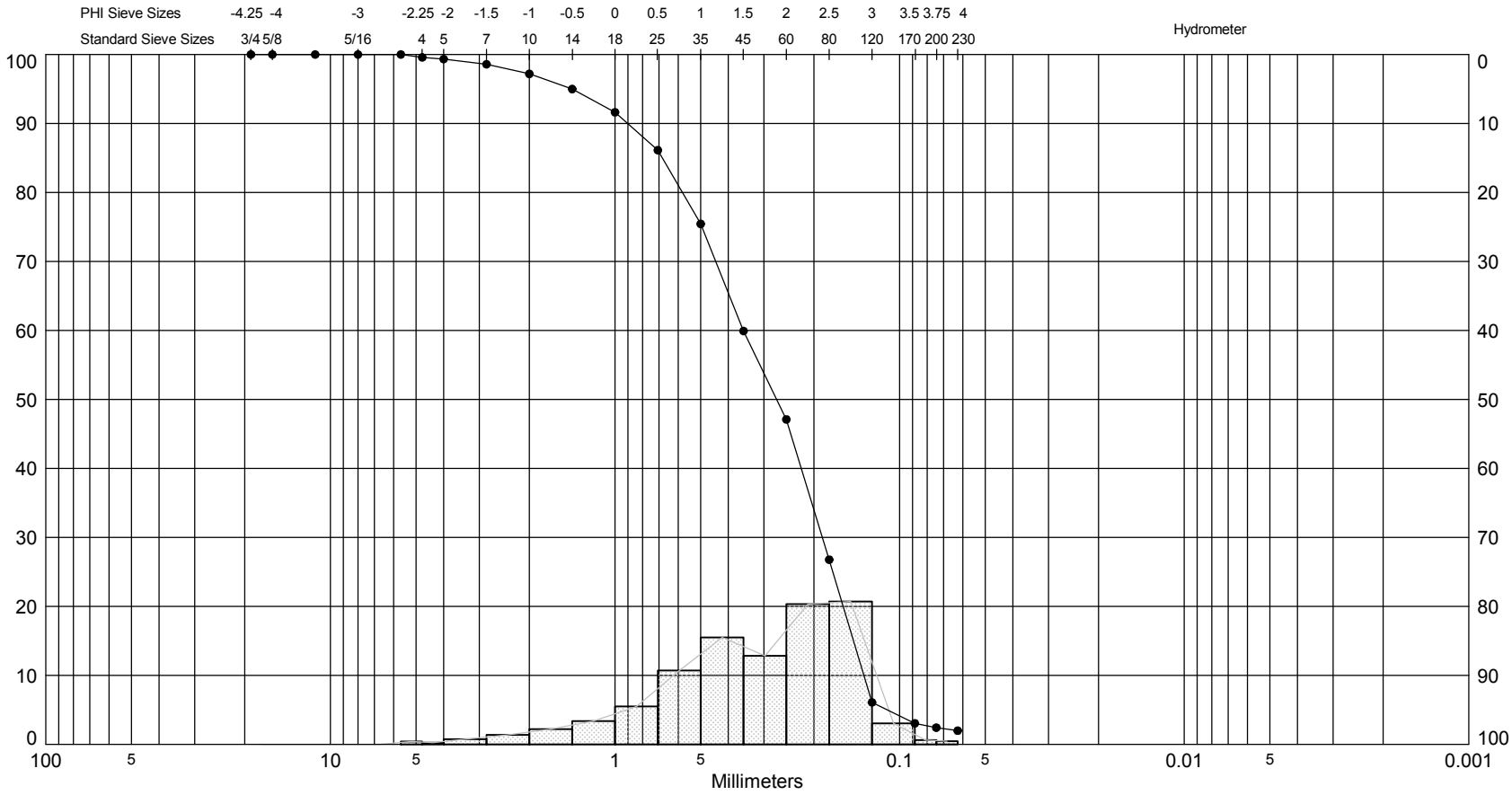
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z181 #4	—●—		SW	#200 - 2.42 #230 - 1.98	0.72	2.24	1.89	1.64	-0.9	3.75	1.12

Comments: Tan coarser quartz sand

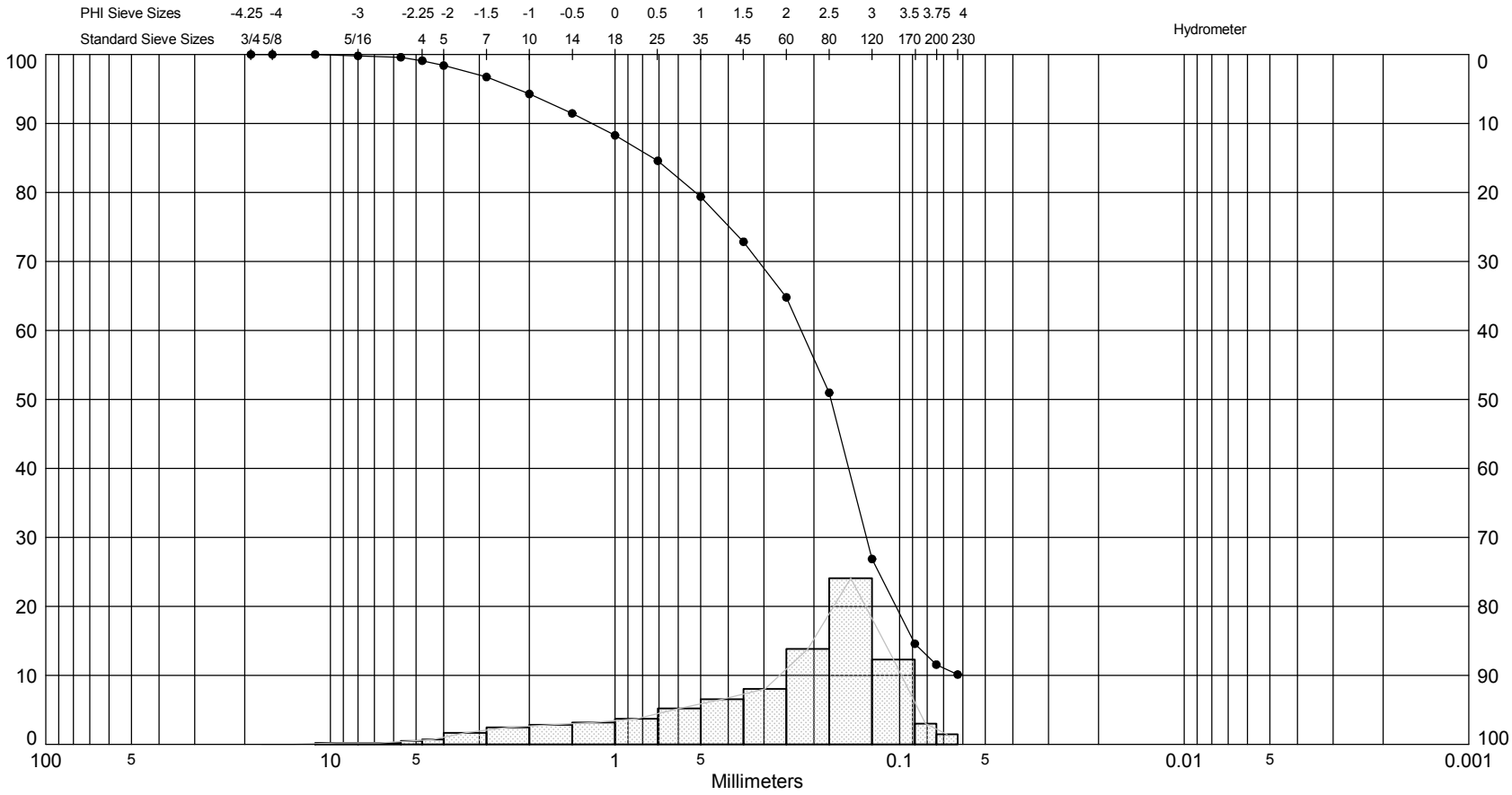
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z185 #1	—●—		SW-SM	#200 - 11.56 #230 - 10.12	2.05	18.20	2.52	1.87	-1.16	3.68	1.44

Comments: Gray sand, shell hash, clay balls

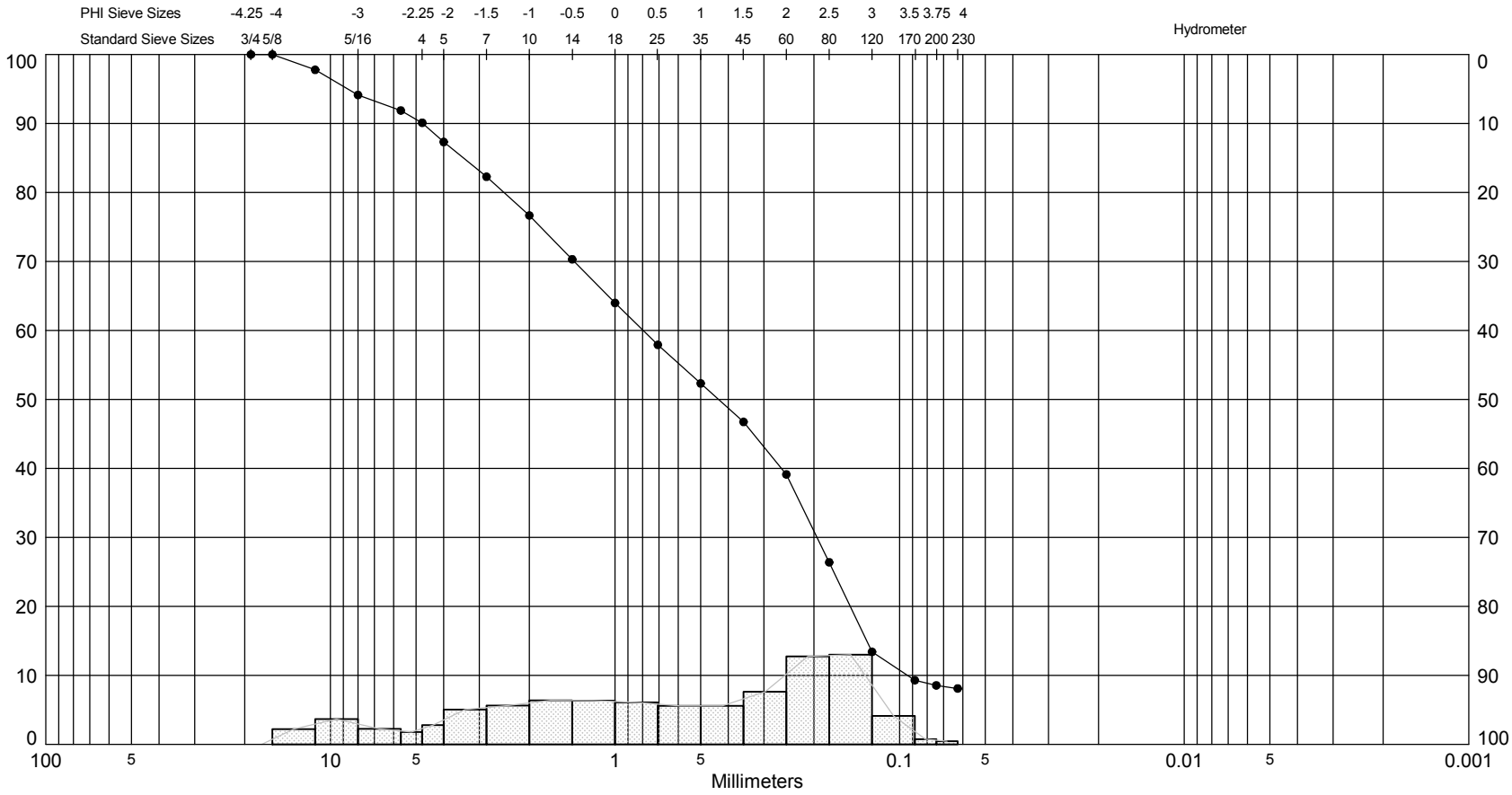
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z185 #2	—●—		SW-SM	#200 - 8.55 #230 - 8.10	1.53	12.57	1.21	0.54	-0.43	2.05	2

Comments: Gray sand, shell

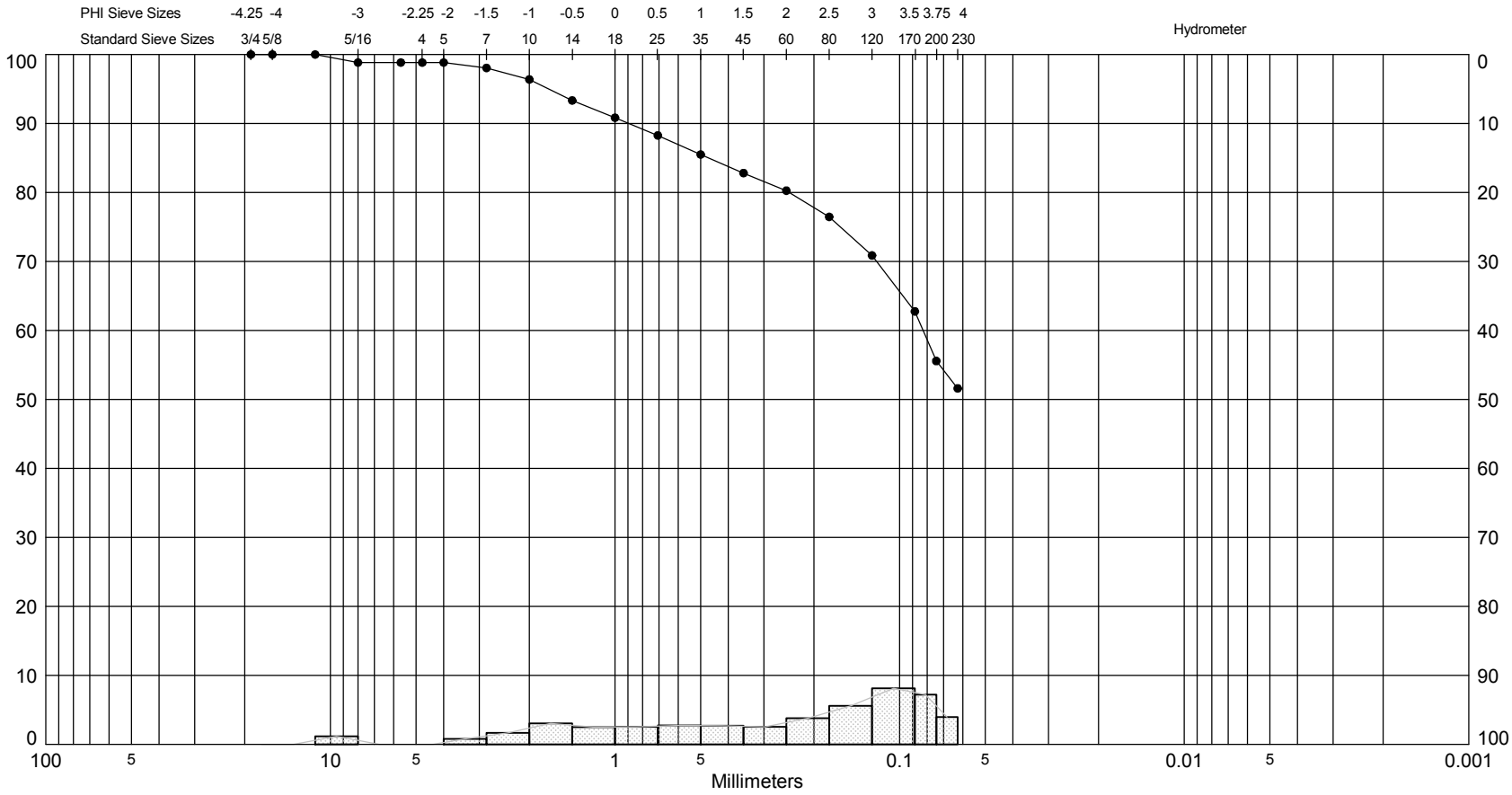
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z185 #3	—●—		ML-CL	#200 - 55.57 #230 - 51.60	7.54	4.49		1.9	-0.9	2.9	1.81

Comments: Sandy silt, organic material

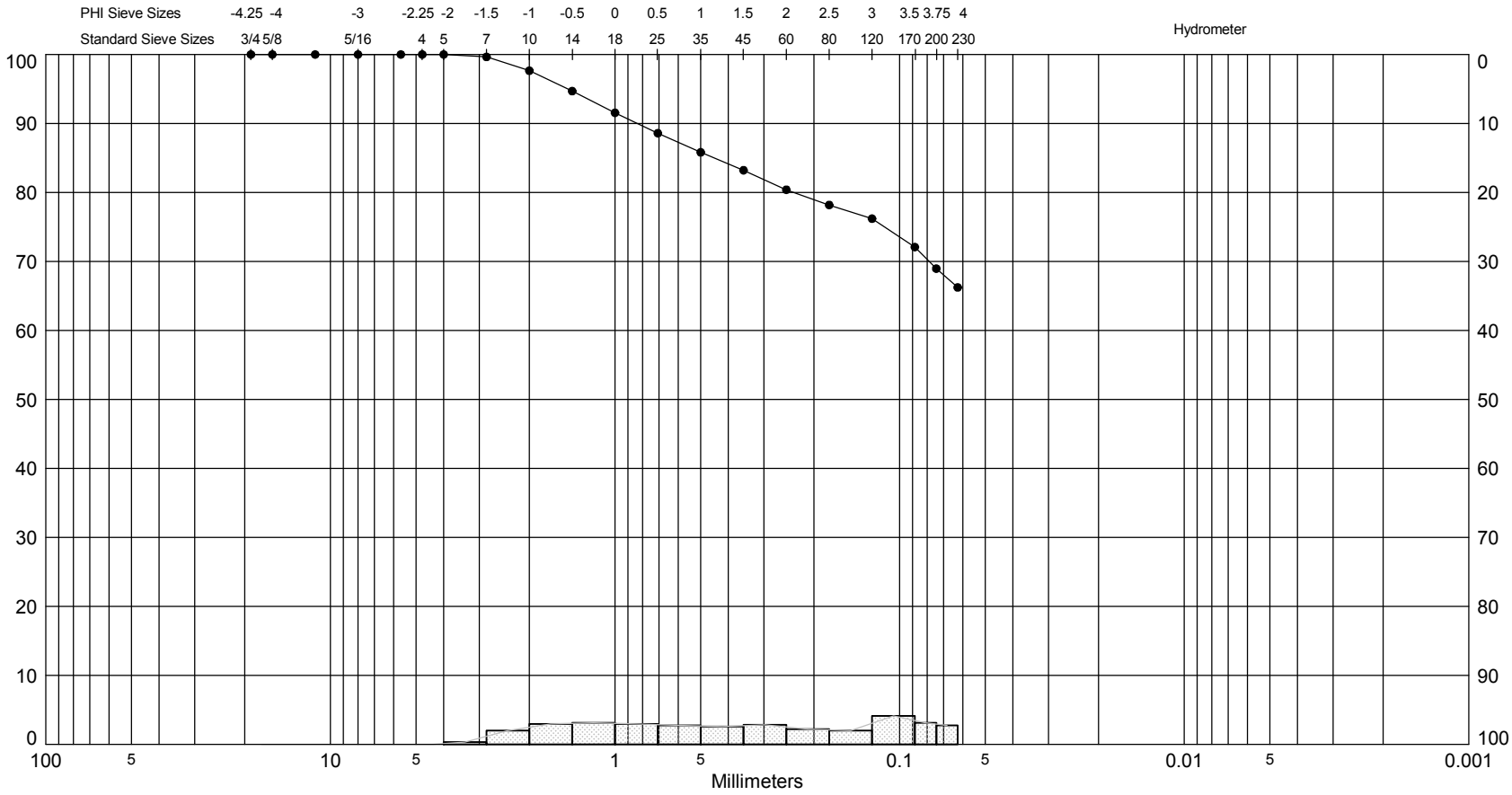
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z185 #4	—●—		ML-CL	#200 - 68.96 #230 - 66.23	8.63	6.88		1.5	-0.11	1.68	1.69

Comments: Sandy silt, organic matter

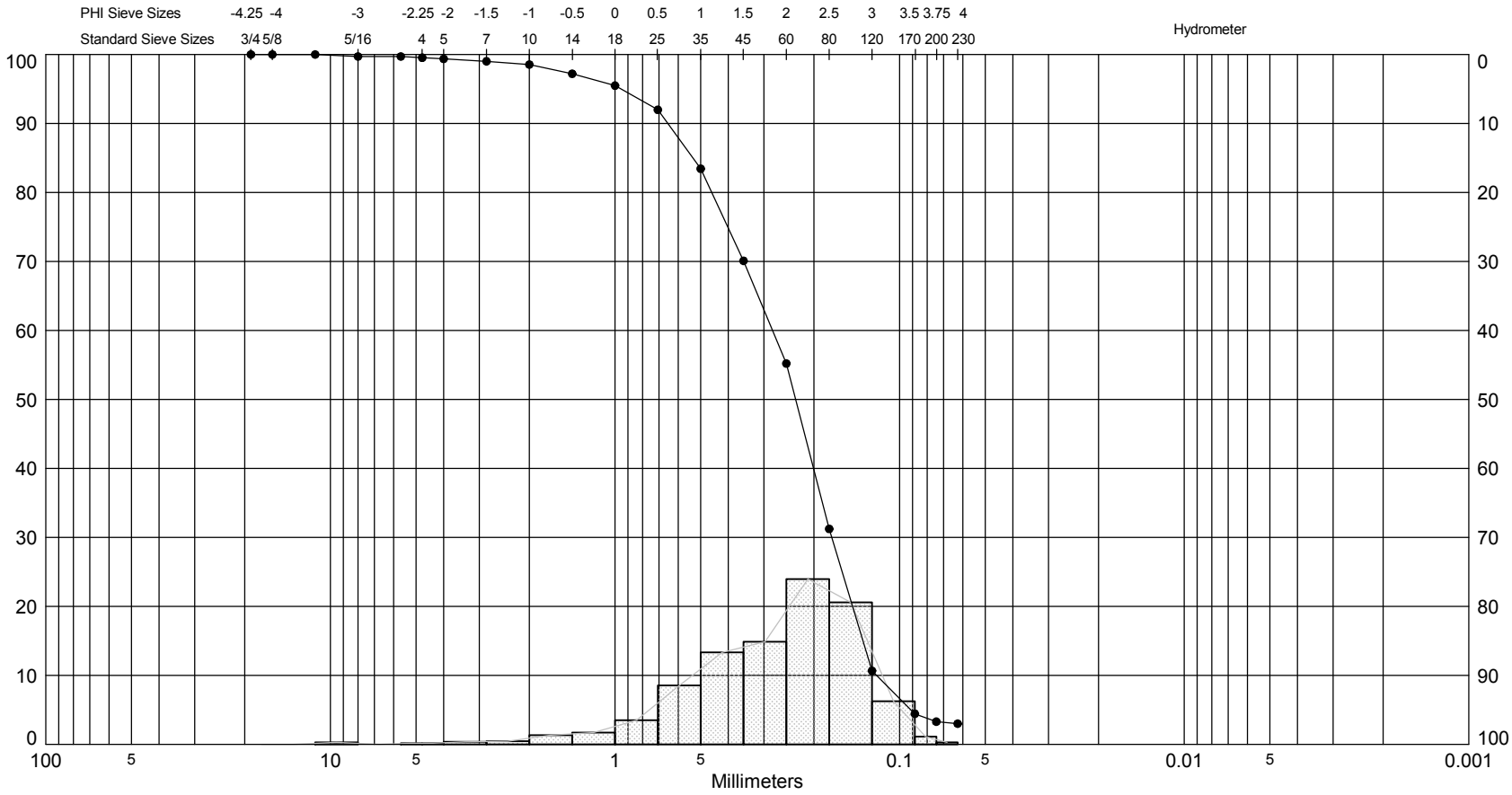
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z186 #1	—●—		SW	#200 - 3.29 #230 - 3.00	0.87	10.31	2.11	1.87	-1.22	5.67	1.02

Comments: Coarser quartz sand, shell hash

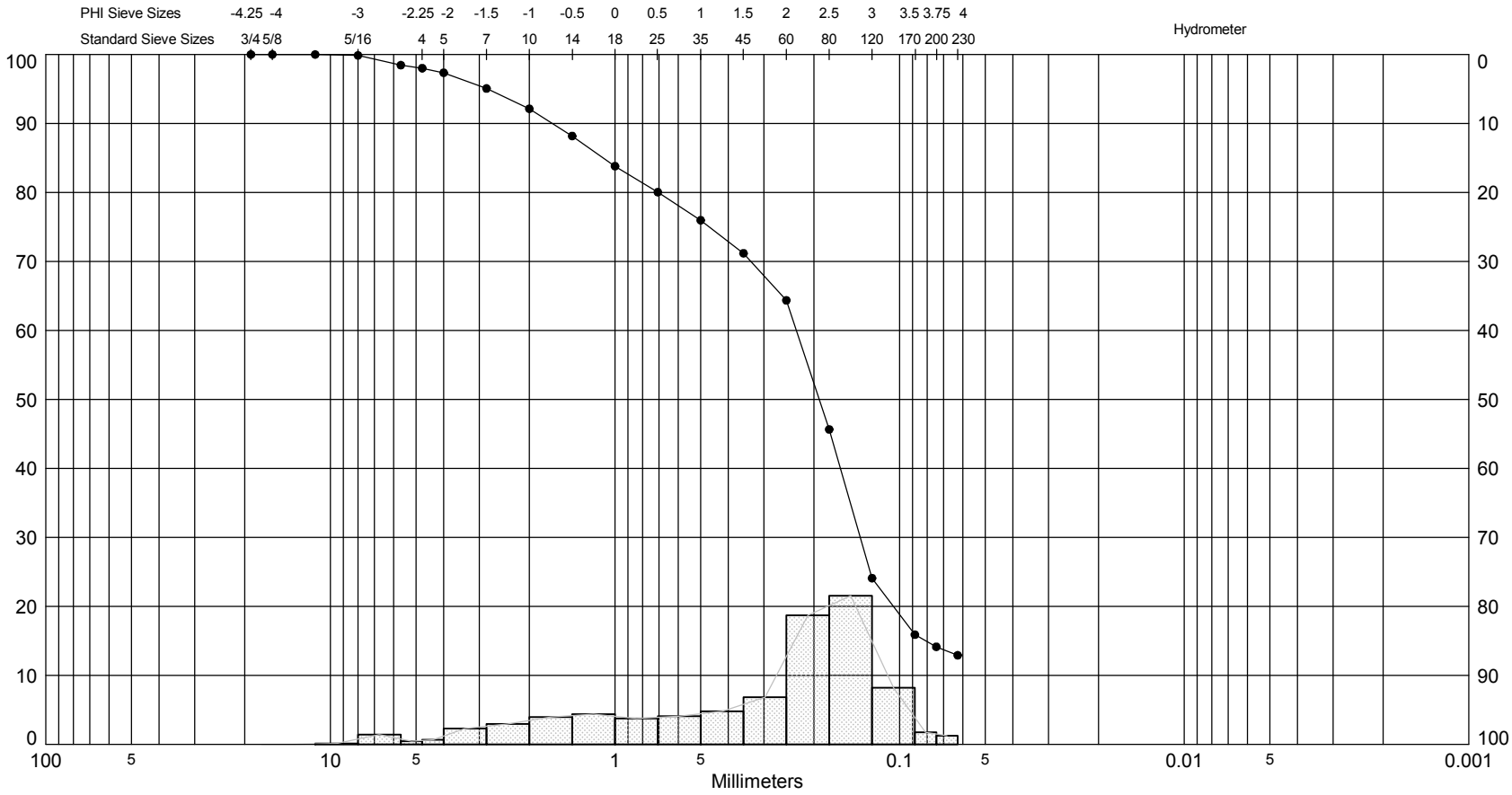
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z186 #2	—●—		SM	#200 - 14.14 #230 - 12.91	2.44	19.71	2.38	1.64	-1.06	3.21	1.57

Comments: Gray sand, shell hash, silt balls

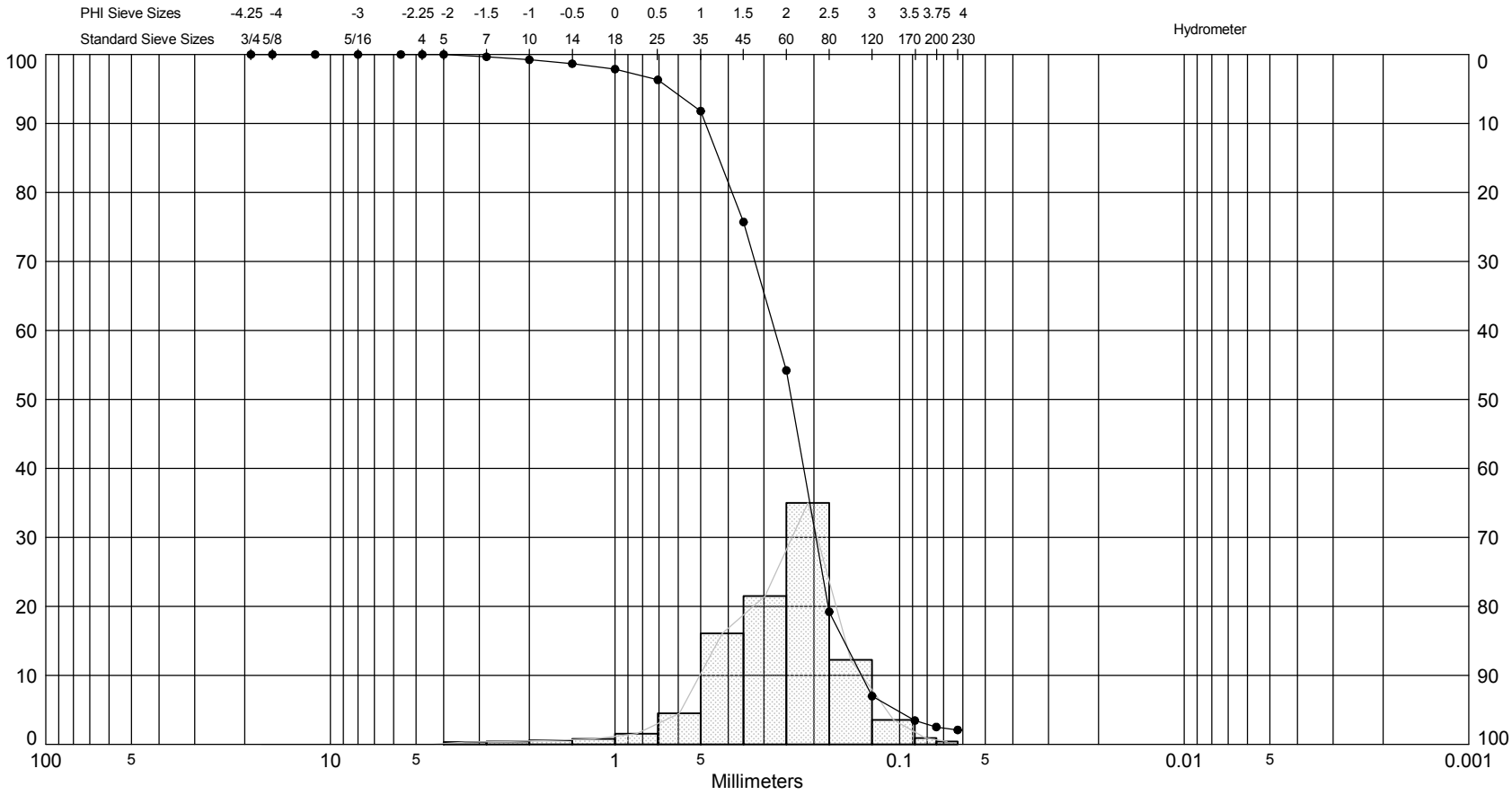
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z186 #3	—●—		SP	#200 - 2.52 #230 - 2.09	1.12	1.32	2.06	1.93	-1.02	6.05	0.77

Comments: Sand

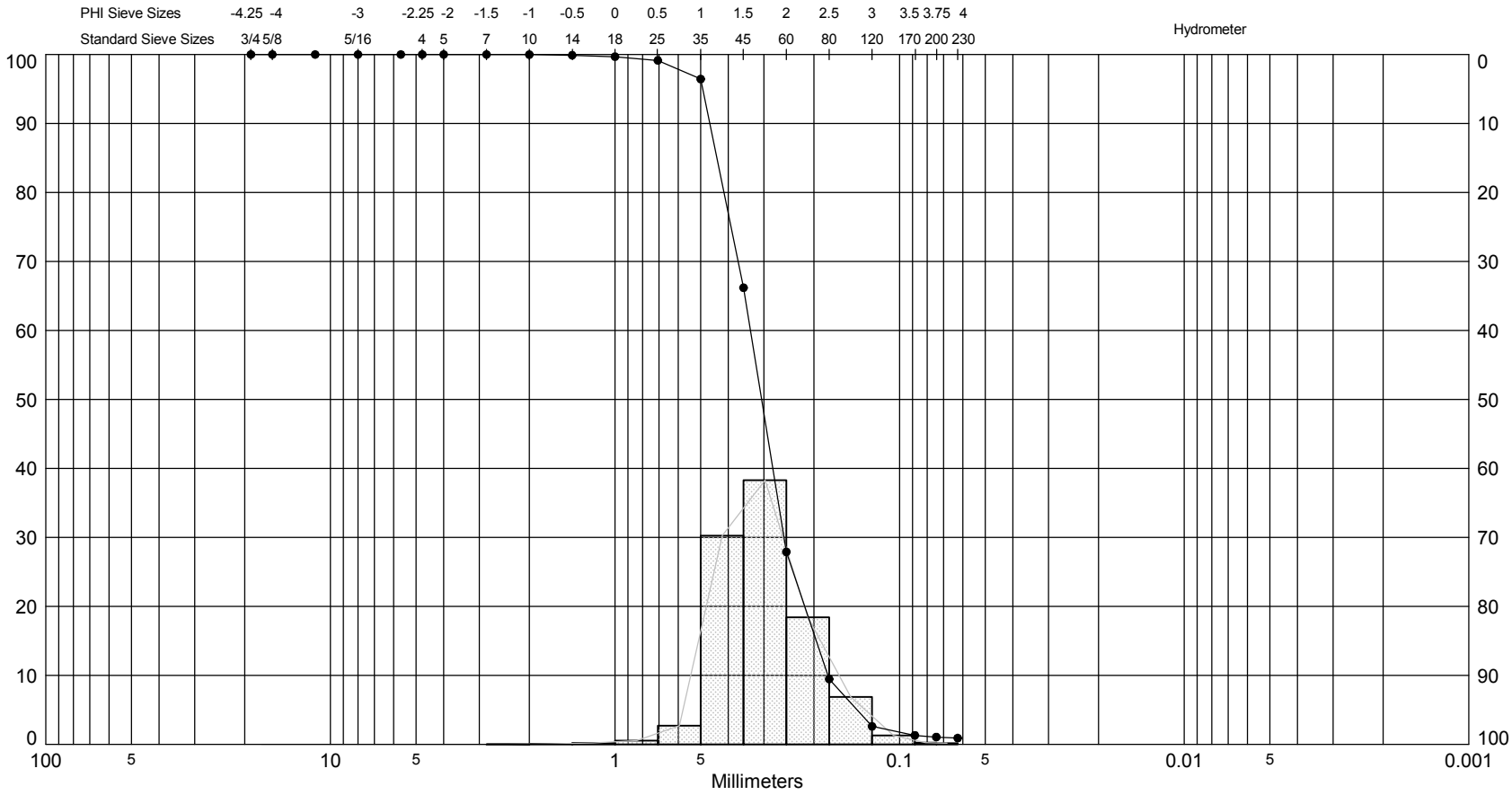
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z186 #4	—●—		SP	#200 - 1.06 #230 - 0.91	0.30	1.05	1.71	1.74	0.34	4.28	0.54

Comments: Sand

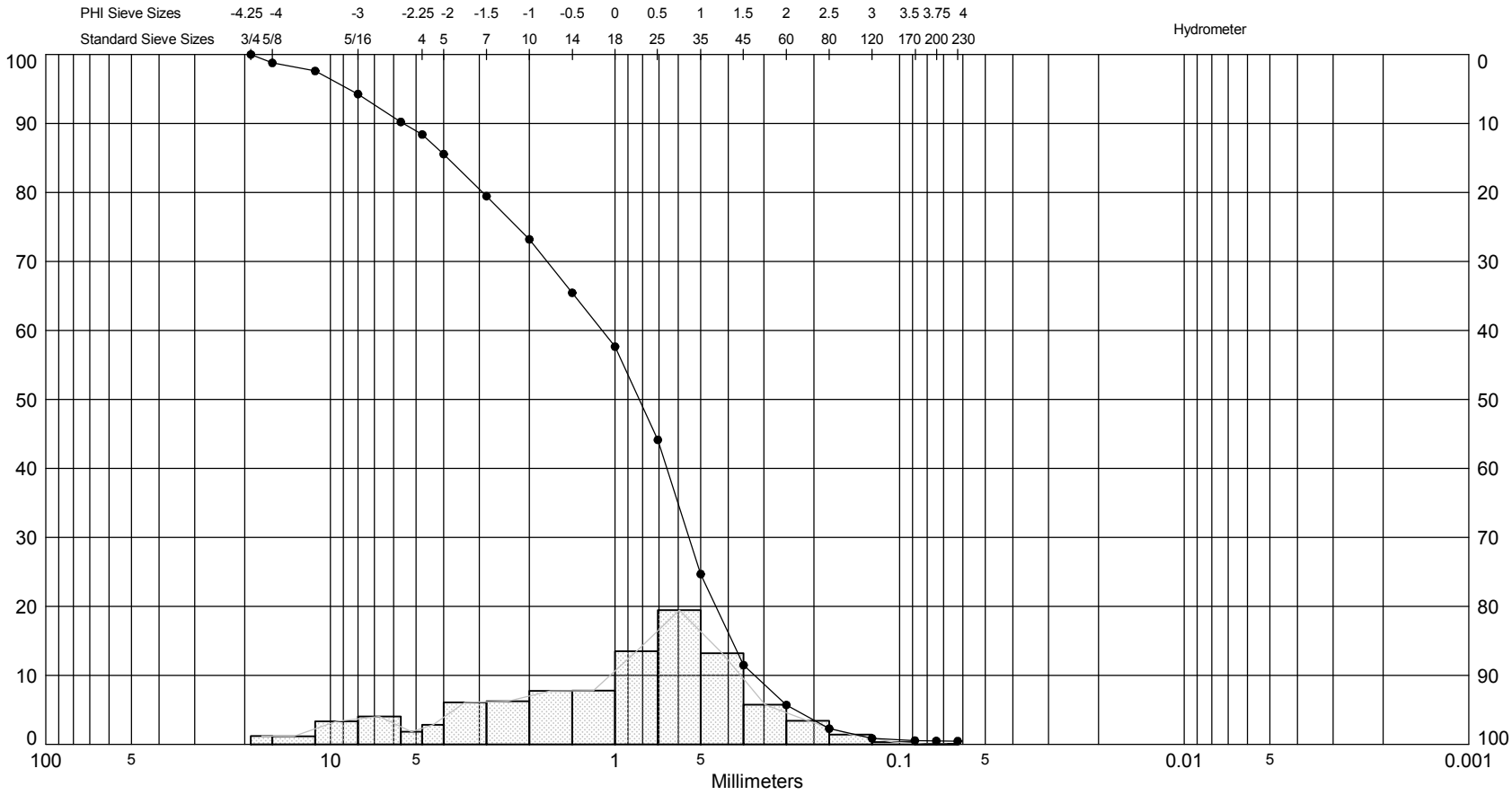
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z191 #1	—●—		SW	#200 - 0.50 #230 - 0.47	1.61	25.51	0.28	-0.11	-0.59	2.71	1.56

Comments: Coarser quartz sand, pebbles

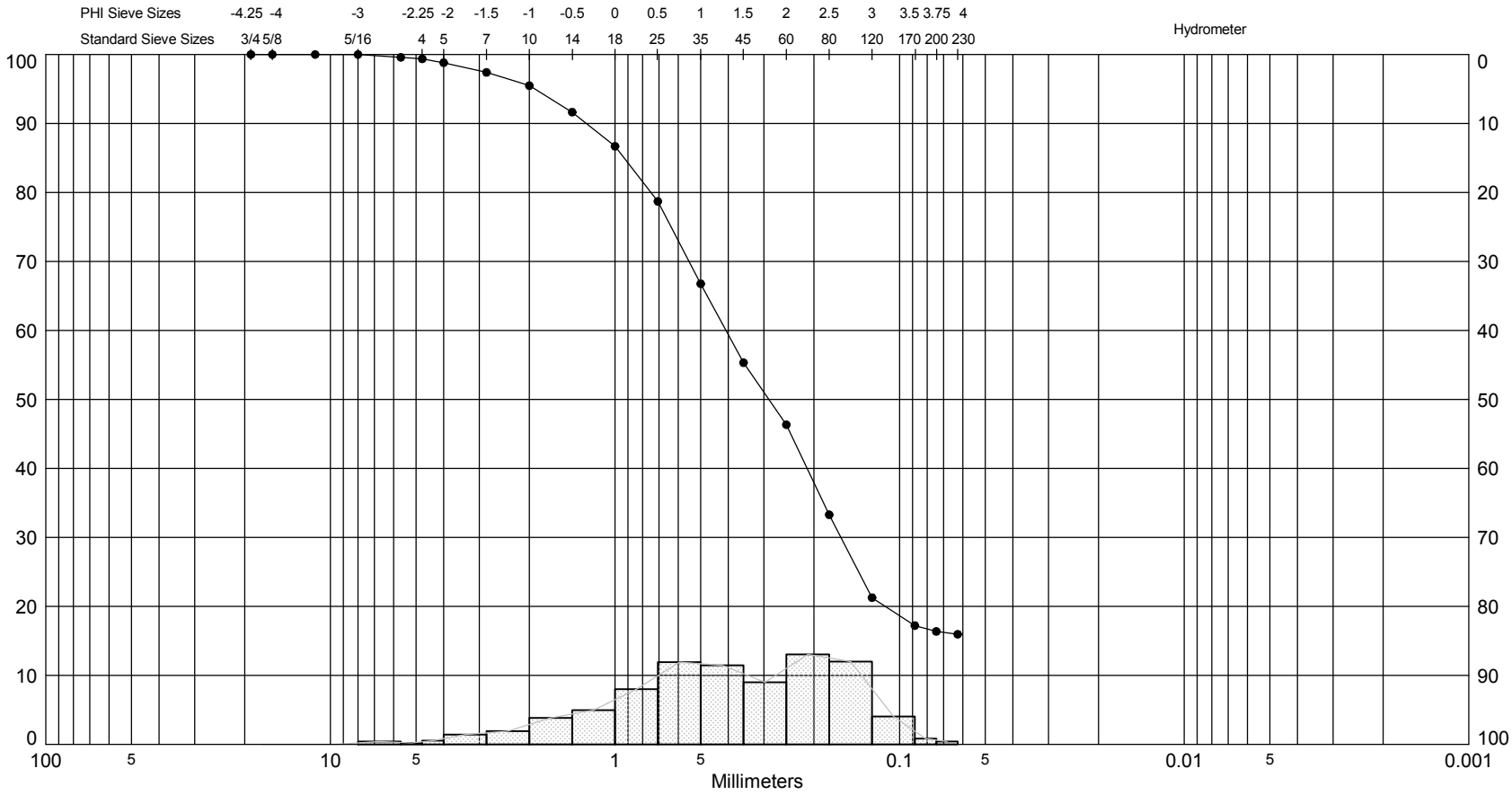
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z191 #2	—●—		SM	#200 - 16.37 #230 - 15.96	3.06	17.55	1.8	1.3	-0.53	2.86	1.31

Comments: Gray sand, shell, silt balls

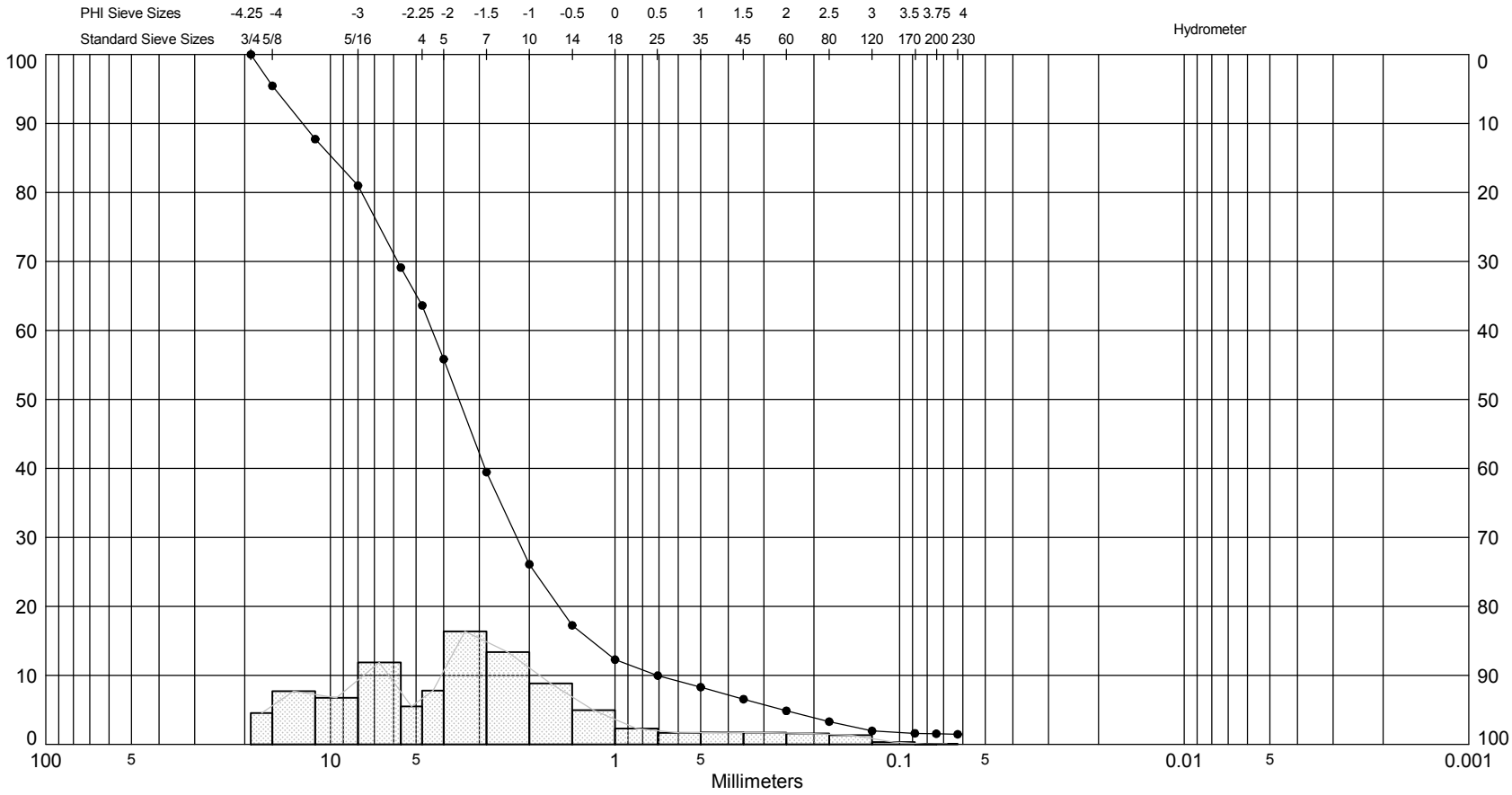
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z191 #3	—●—		SW	#200 - 1.54 #230 - 1.46	1.50	8.58		-1.72	0.85	3.88	1.53

Comments: Rock, oyster shells, trace sand

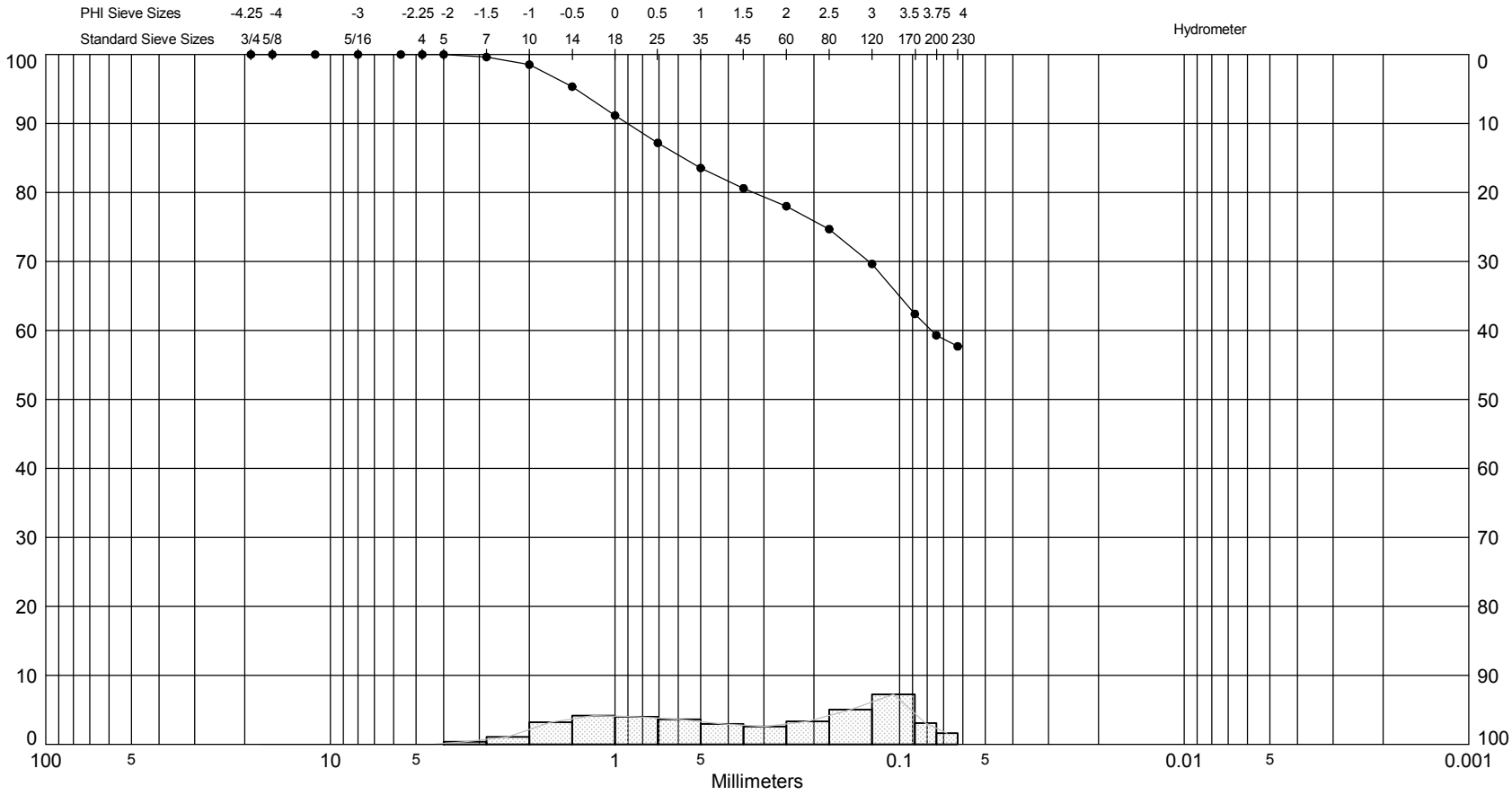
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z191 #4	—●—		ML-CL	#200 - 59.30 #230 - 57.69	21.44	8.50		1.63	-0.26	1.73	1.57

Comments: Silt

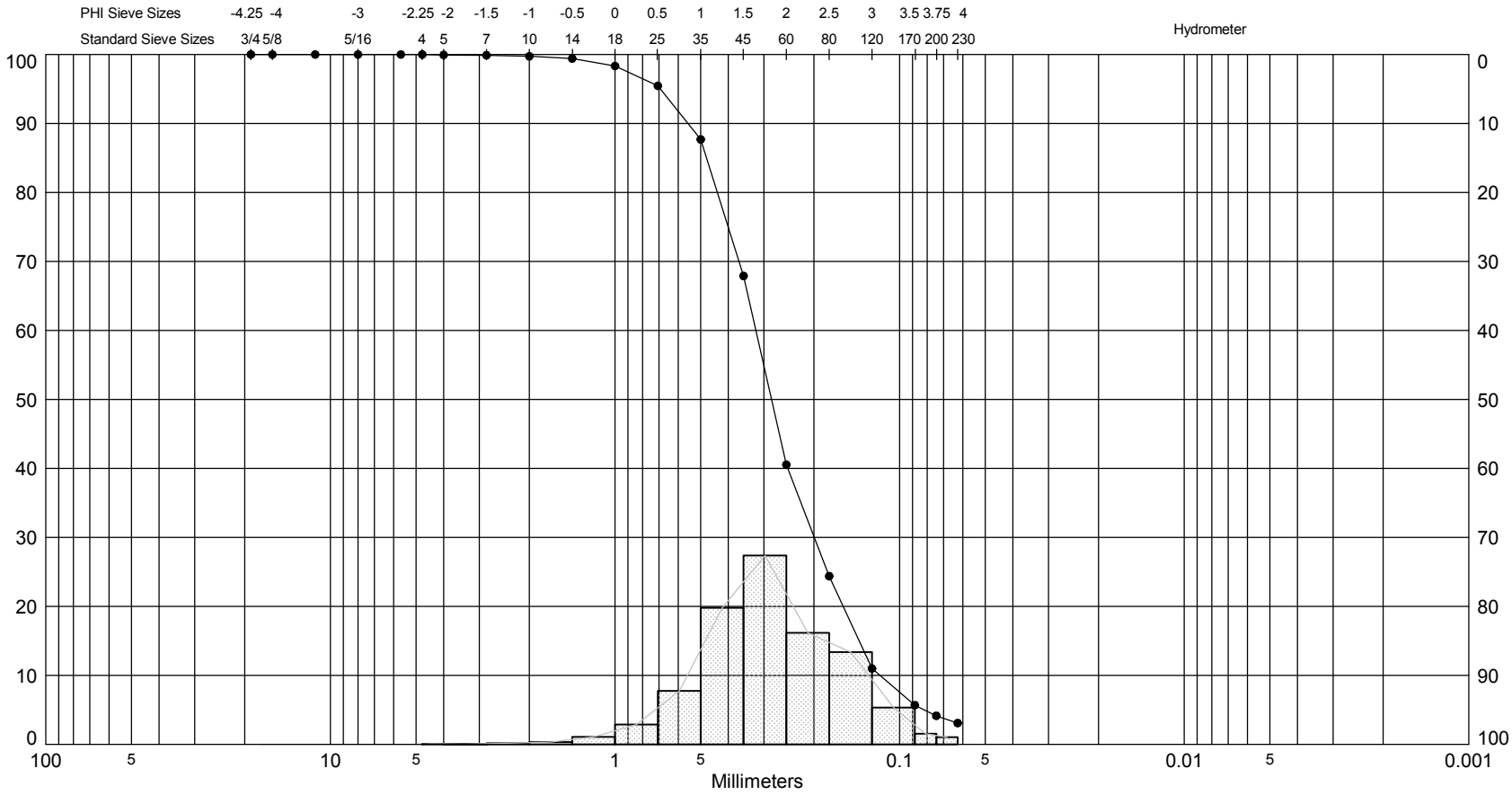
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z191 #5	—●—		SP	#200 - 4.14 #230 - 3.09	0.47	0.54	1.83	1.84	-0.15	3.63	0.83

Comments: Sand

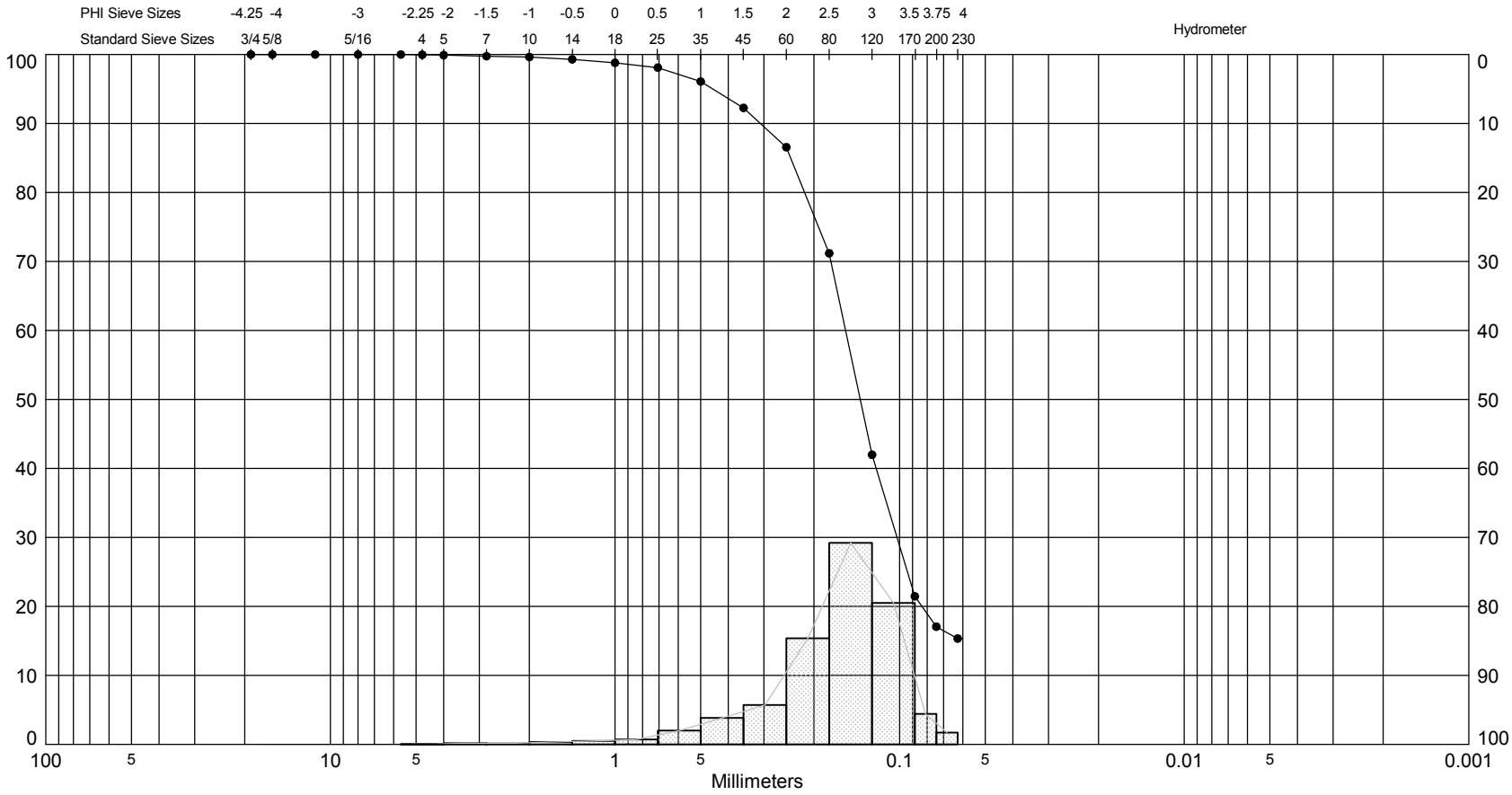
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z193 #1	—●—		SM	#200 - 17.06 #230 - 15.34	2.17	10.84	2.86	2.59	-1.69	7.84	0.81

Comments: Fine brown sand, silt

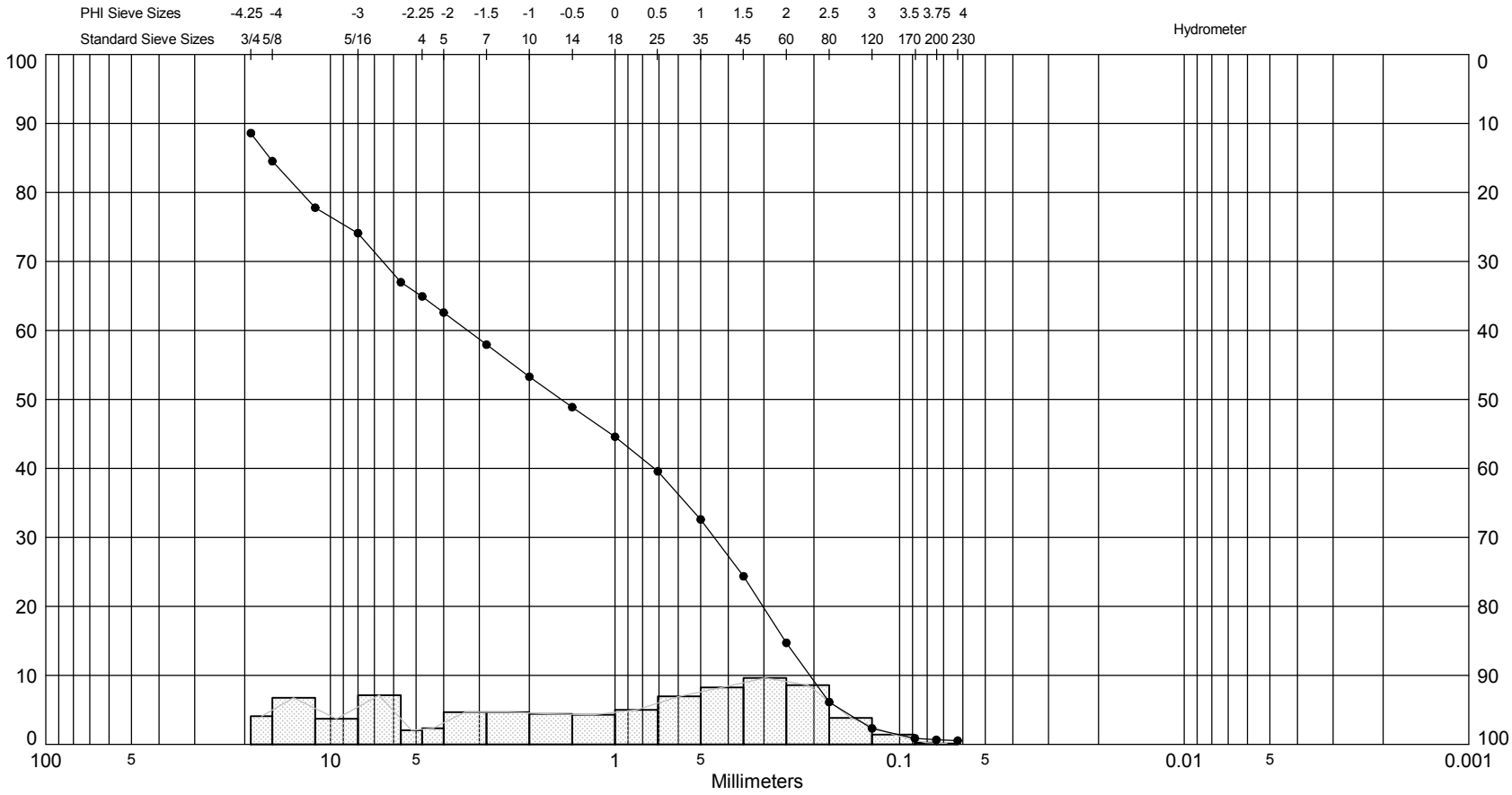
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z193 #2	—●—		SW WITH GRAVEL	#200 0.65 #230 0.53	1.17	26.92		-0.83	0.41	1.87	2.12

Comments:

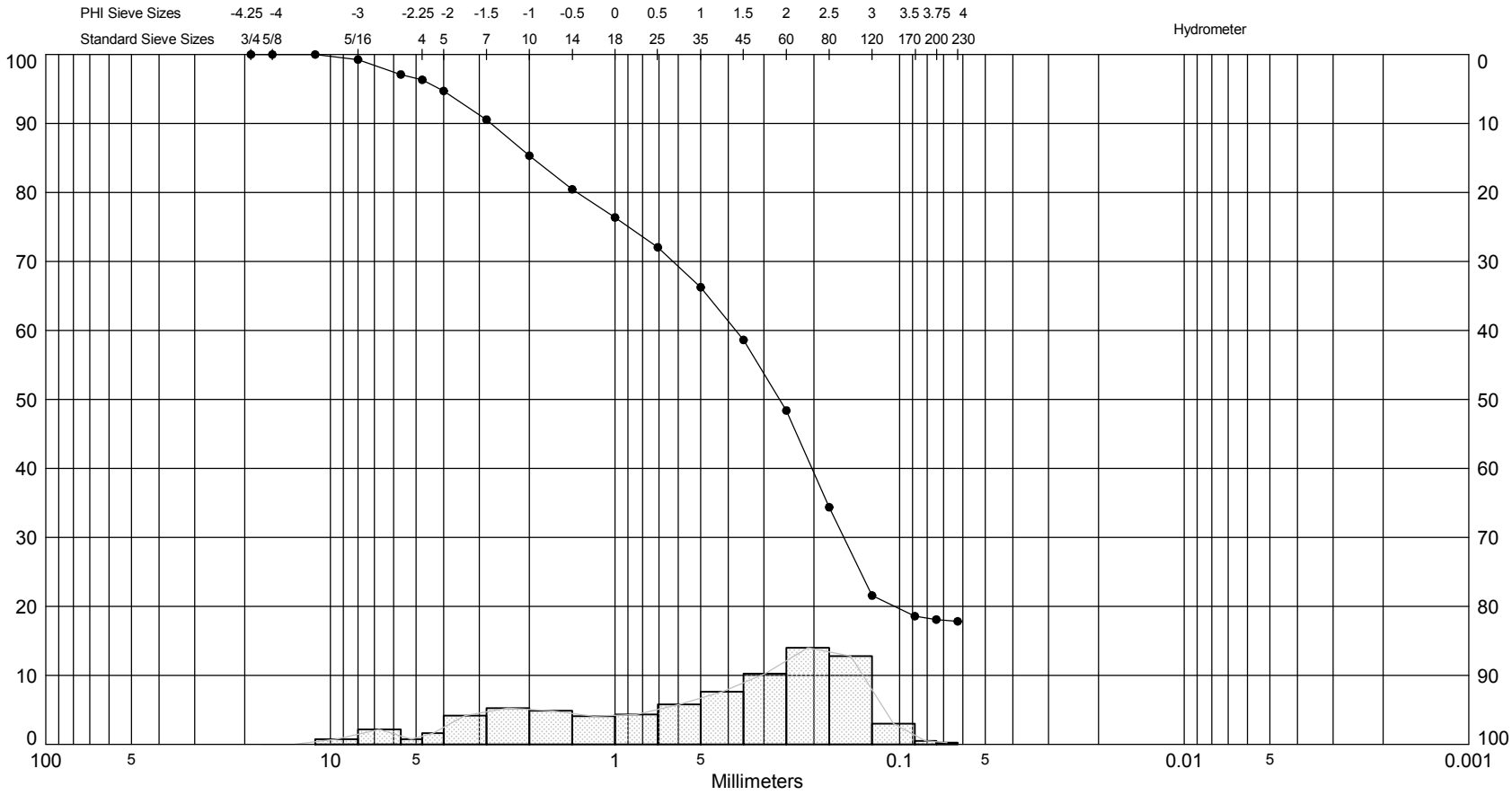
Depths and elevations based on measured values

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Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z193 #3	—●—		SM	#200 - 18.09 #230 - 17.83	2.93	3.12	1.92	0.97	-0.65	2.31	1.7

Comments: Gray sand/silt, pebbles

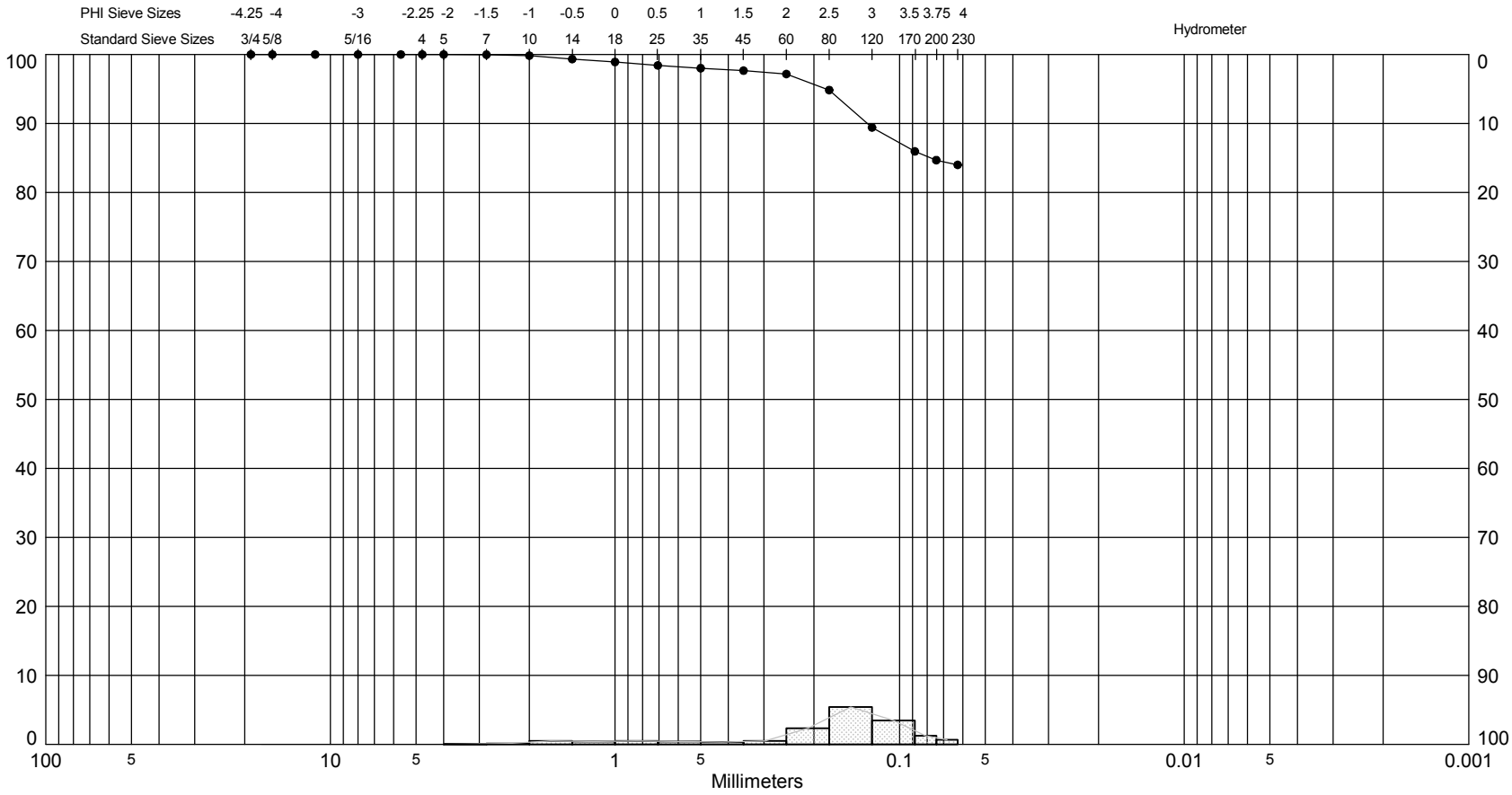
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z193 #4	—●—		ML-CL	#200 - 84.68 #230 - 84.00	24.11	7.05		2.48	-1.59	5.05	1.14

Comments: Silt

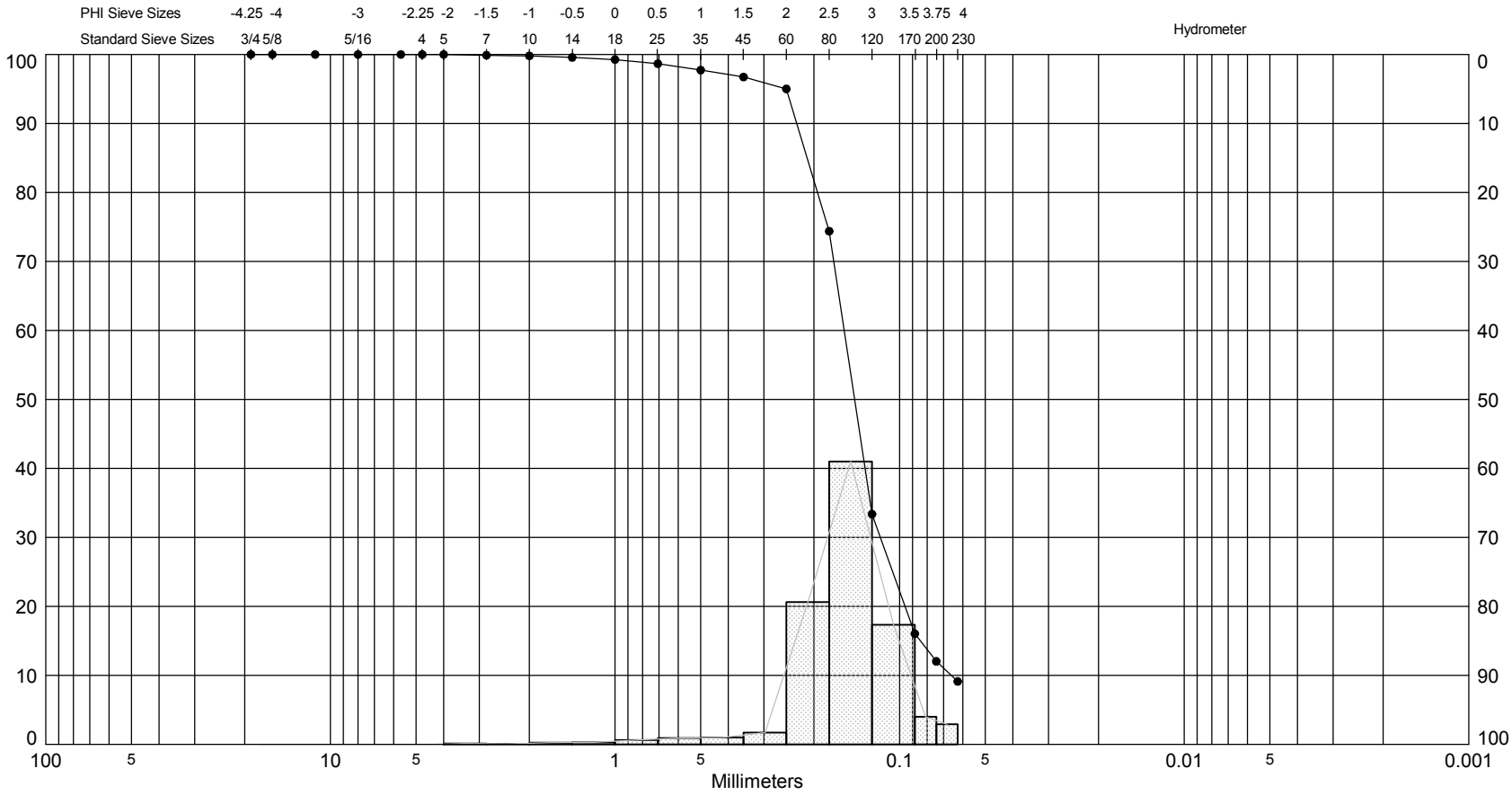
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z193 #5	—●—		SM	#200 - 12.03 #230 - 9.12	0.85	0.80	2.8	2.71	-1.9	11.67	0.64

Comments: Tan sand, little organic material/silt

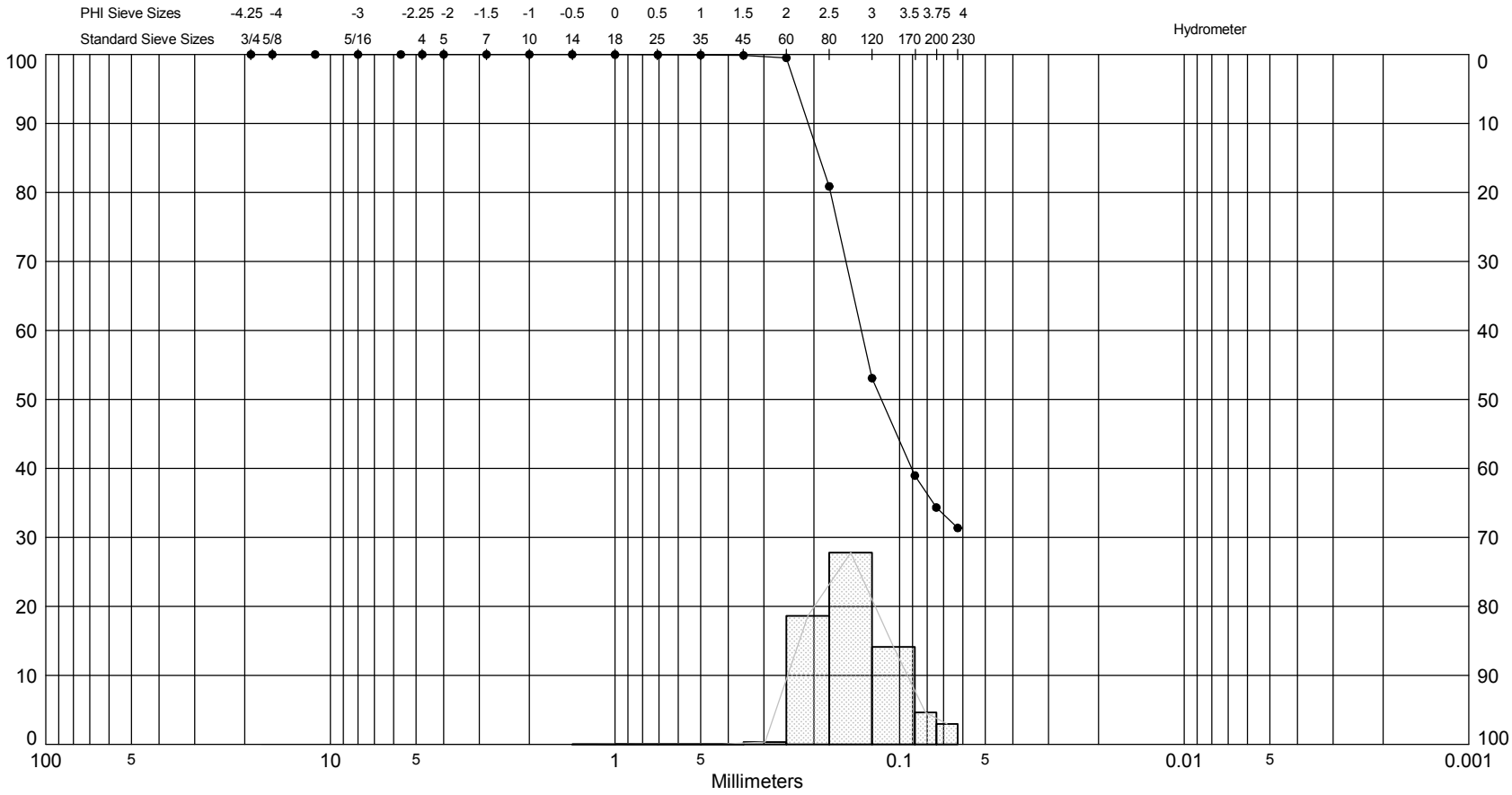
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z193 #6	—●—		SM	#200 - 34.33 #230 - 31.37	1.94	1.67	3.11	2.82	0.23	3.27	0.48

Comments: White sand, brown silt

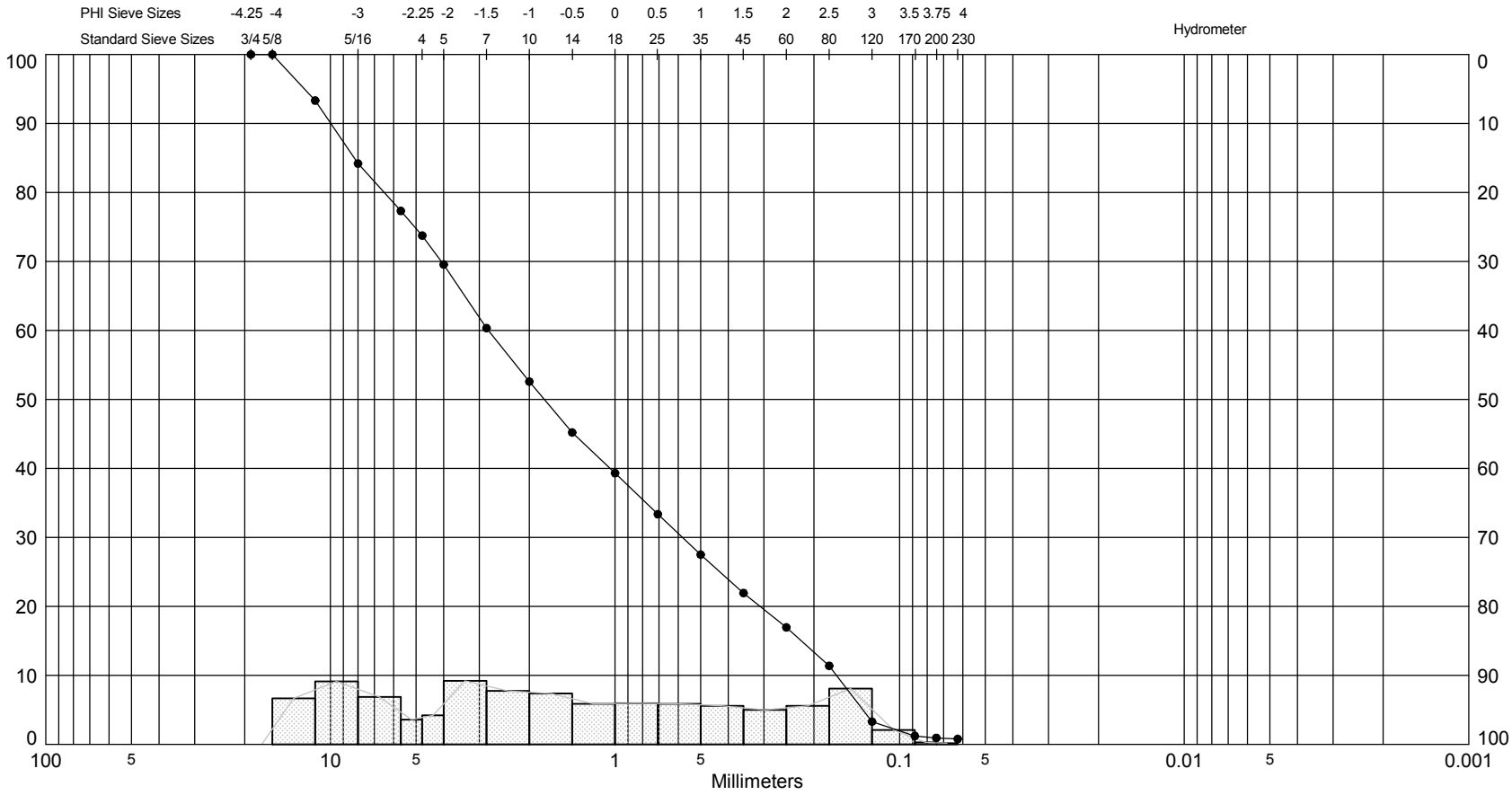
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z200 #1	—●—		SW	#200 - 0.93 #230 - 0.78	1.35	31.13		-0.6	0.22	1.86	2.1

Comments: Blue/gray oyster shells, sand

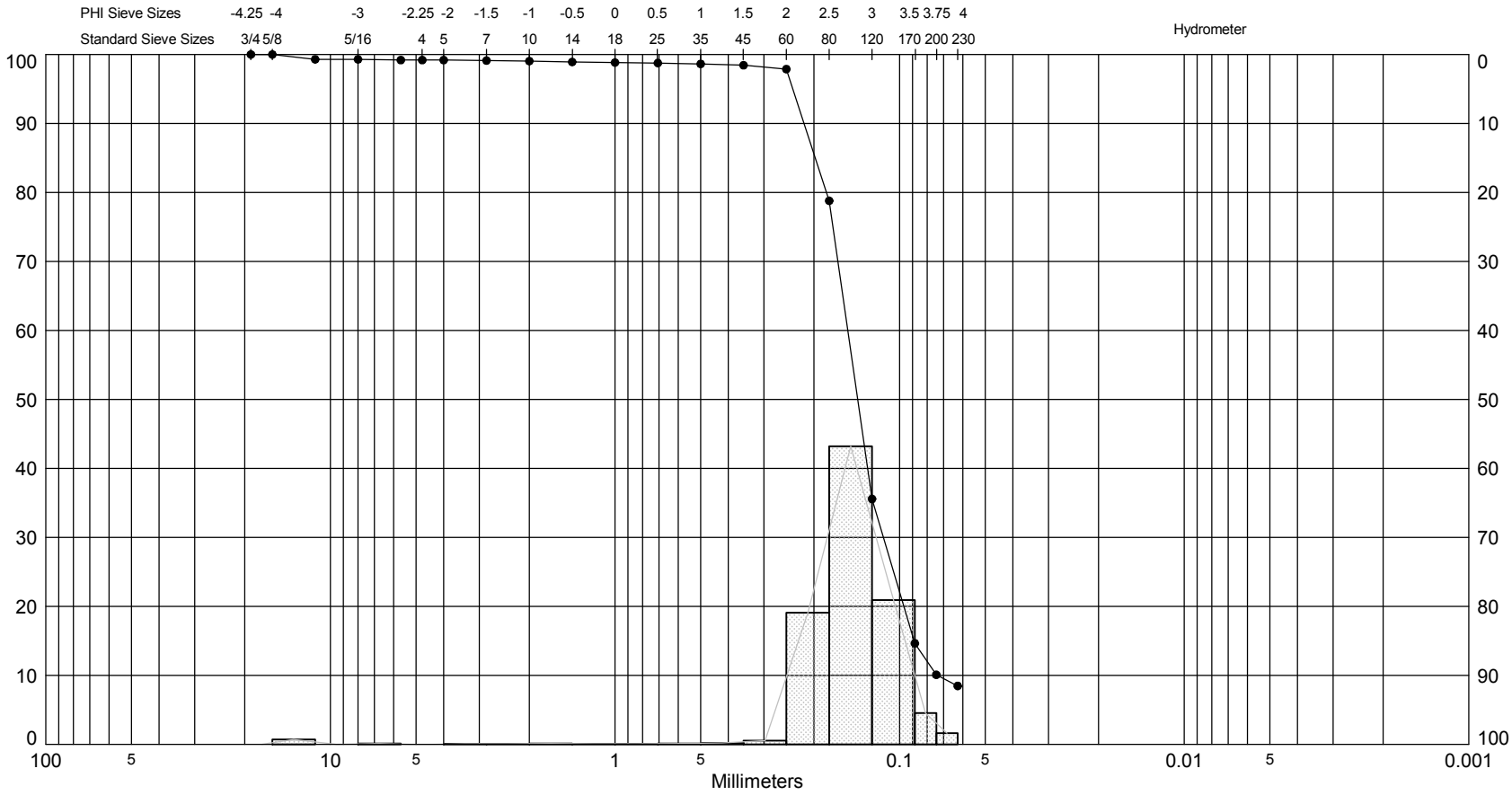
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z200 #2	—●—		SP-SM	#200 - 10.08 #230 - 8.47	1.34	5.84	2.83	2.74	-5.23	42.52	0.78

Comments: Fine gray sand, silt

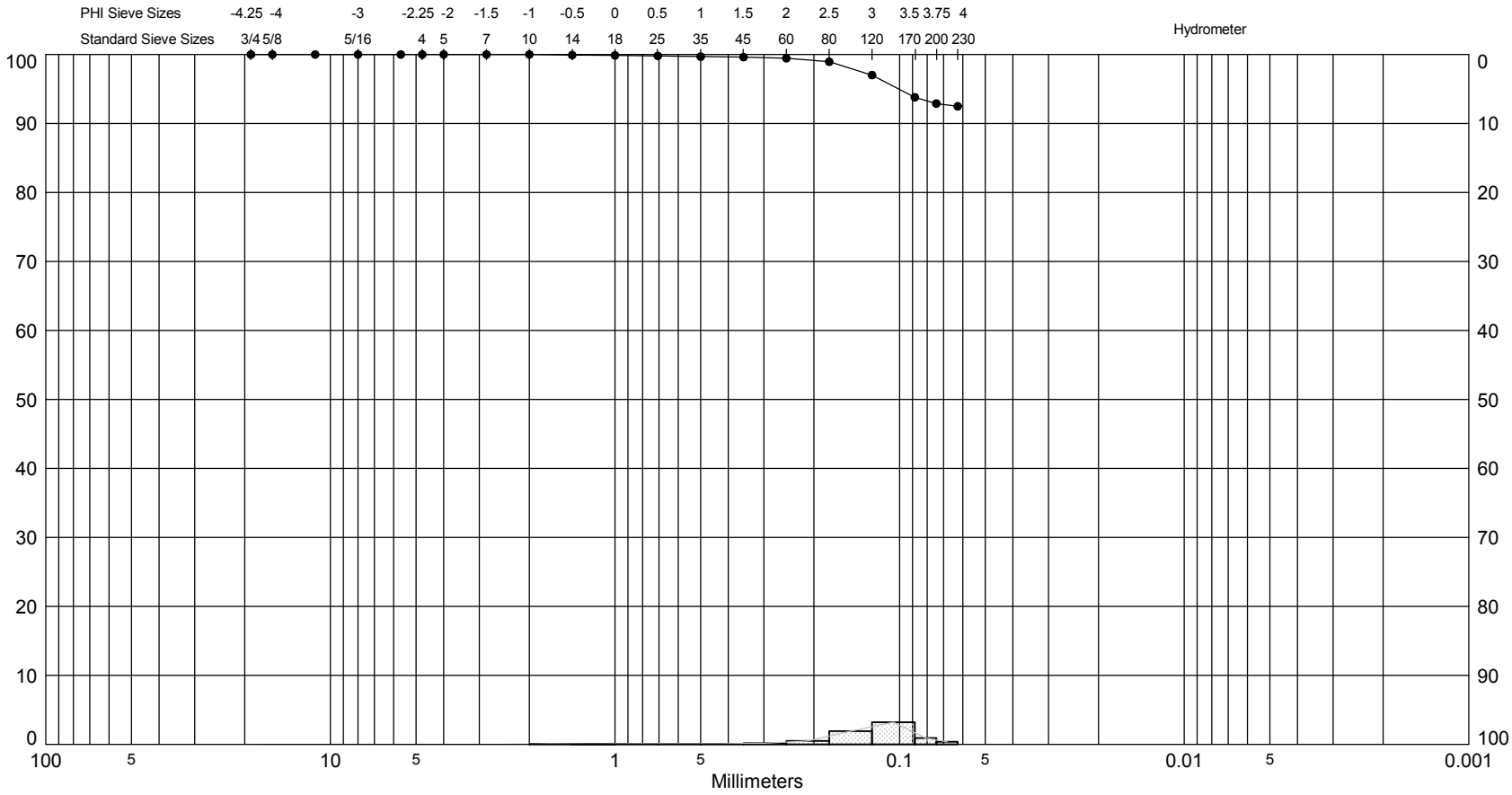
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z200 #3	—●—		CL	#200 - 92.88 #230 - 92.49	5.65	8.11		2.95	-2.45	10.55	0.78

Comments: Clay

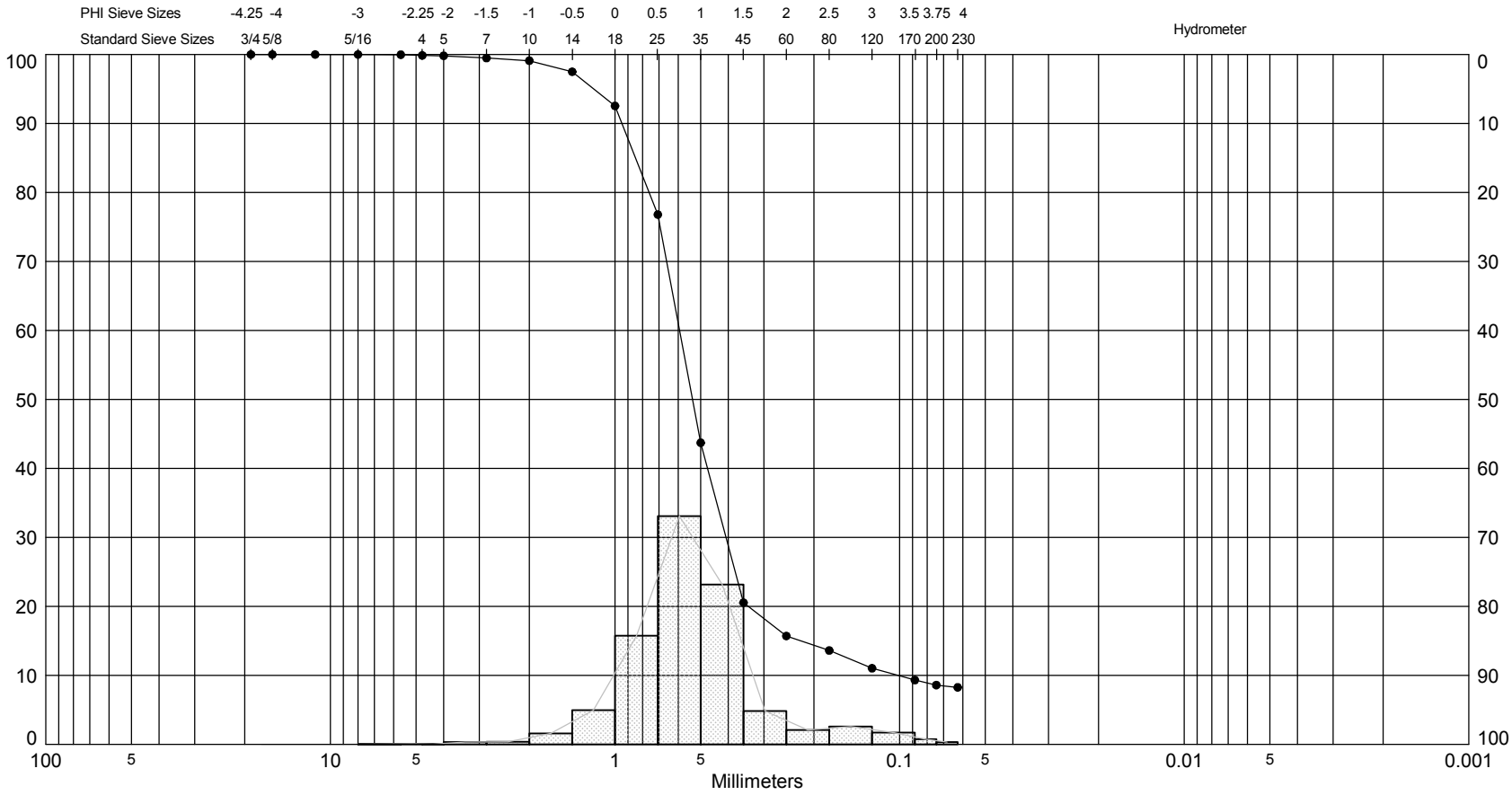
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z200 #4	—●—		SP-SM	#200 - 8.59 #230 - 8.26	1.33	2.87	0.91	0.91	0.66	5.57	0.82

Comments: Coarser quartz sand, few shell/small pebbles

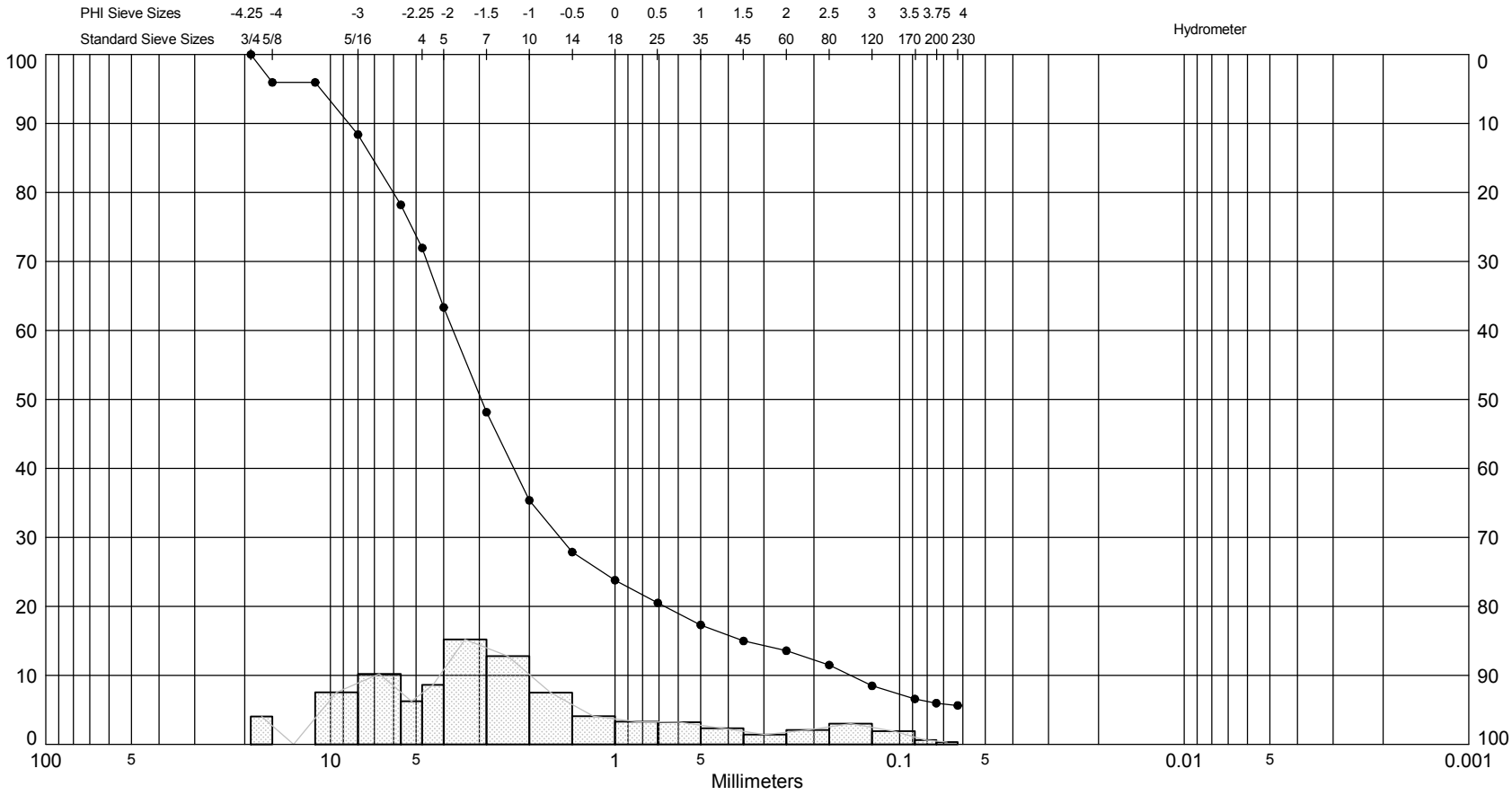
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z200 #5	—●—		SW-SM W/ GRAVEL	#200 - 5.97 #230 - 5.64	2.78	3.68		-1.28	0.97	3.53	1.76

Comments: Rocks

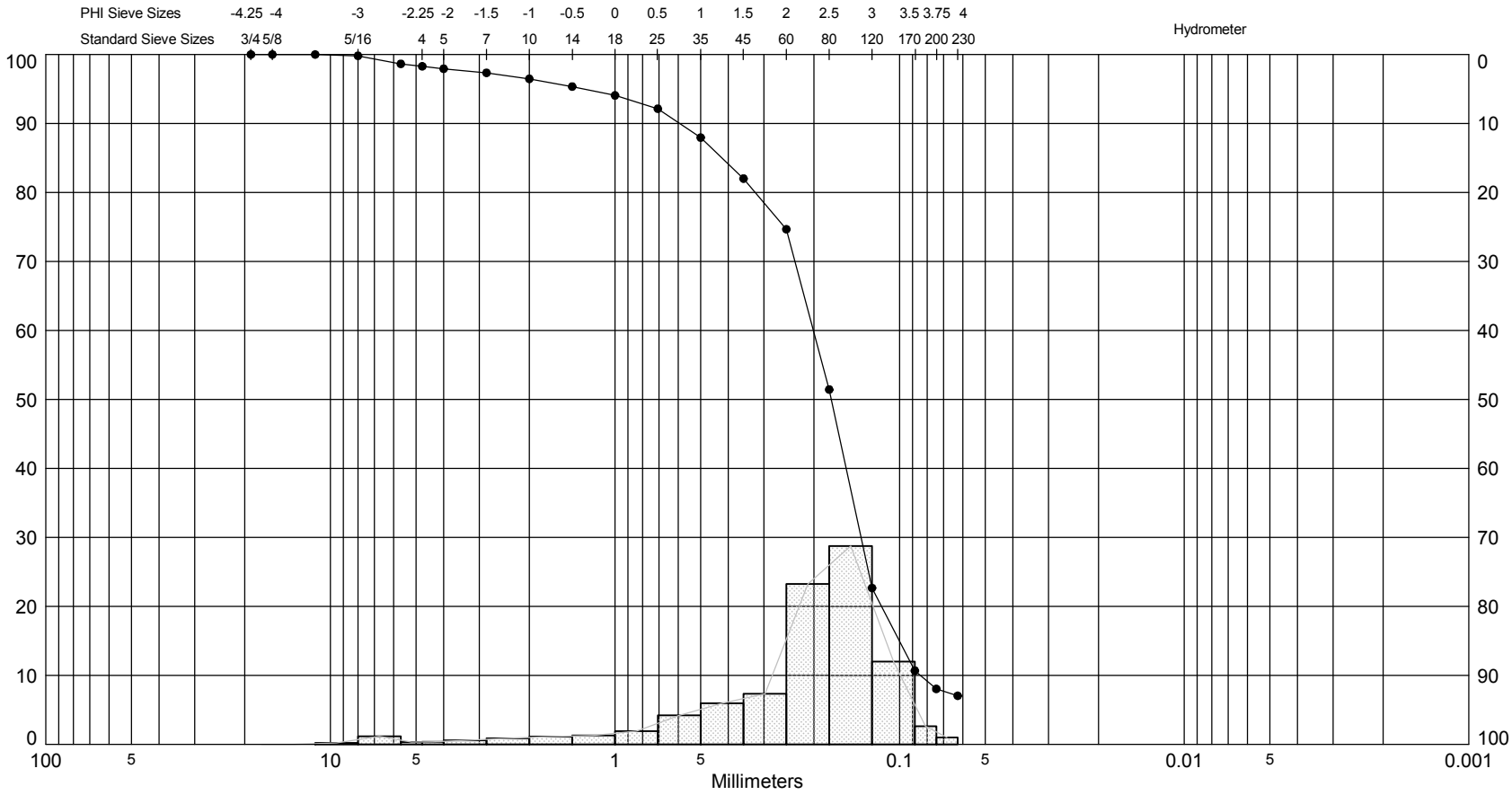
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z213 #1	—●—		SW-SM	#200 - 8.04 #230 - 7.04	1.07	12.02	2.52	2.14	-1.97	7.56	1.22

Comments: Brown sand, silt

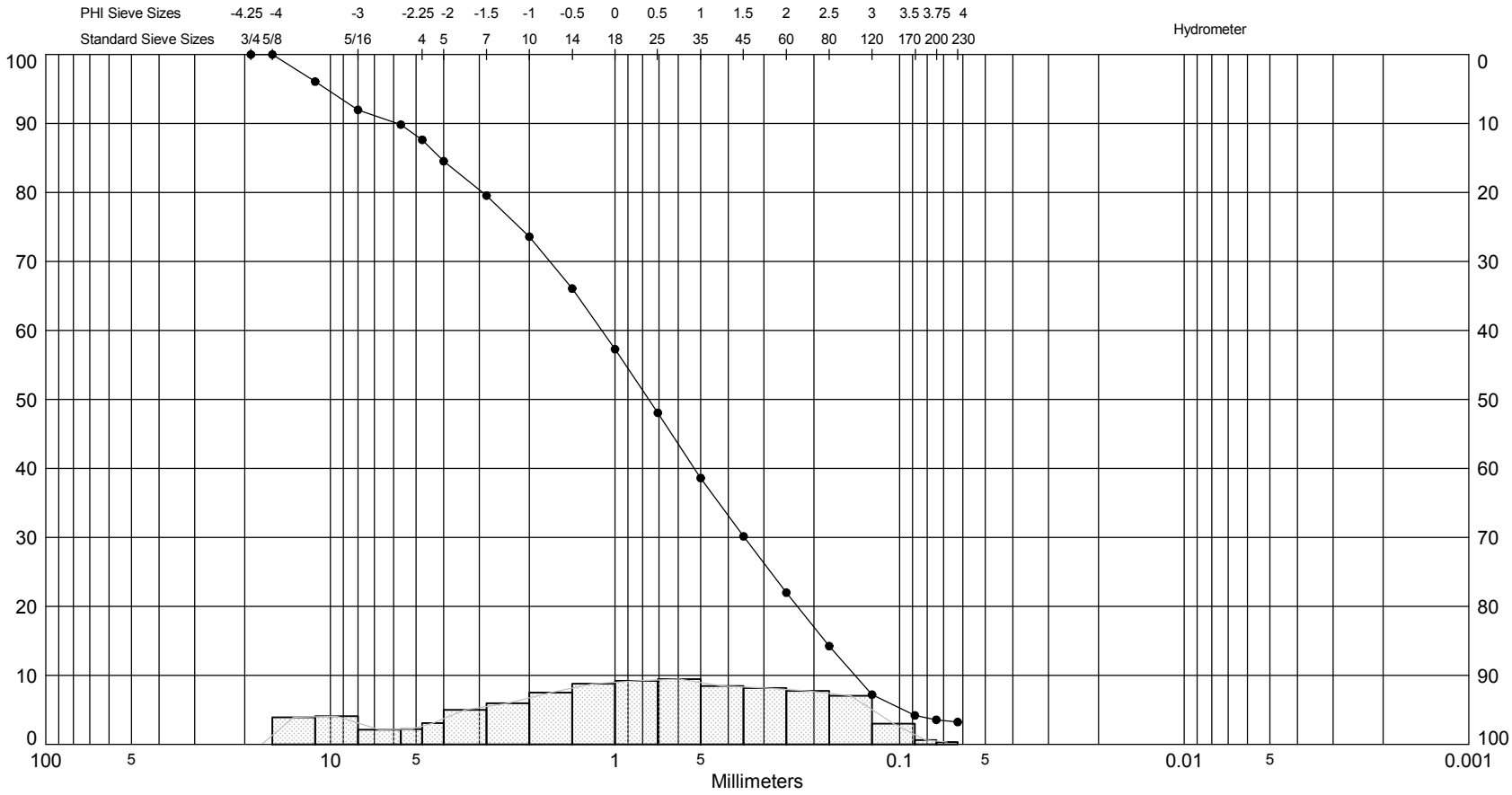
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z213 #2	—●—		SW	#200 - 3.56 #230 - 3.24	1.08	36.58	0.39	0.15	-0.3	2.25	1.9

Comments: Blue/gray shell, sand, silt

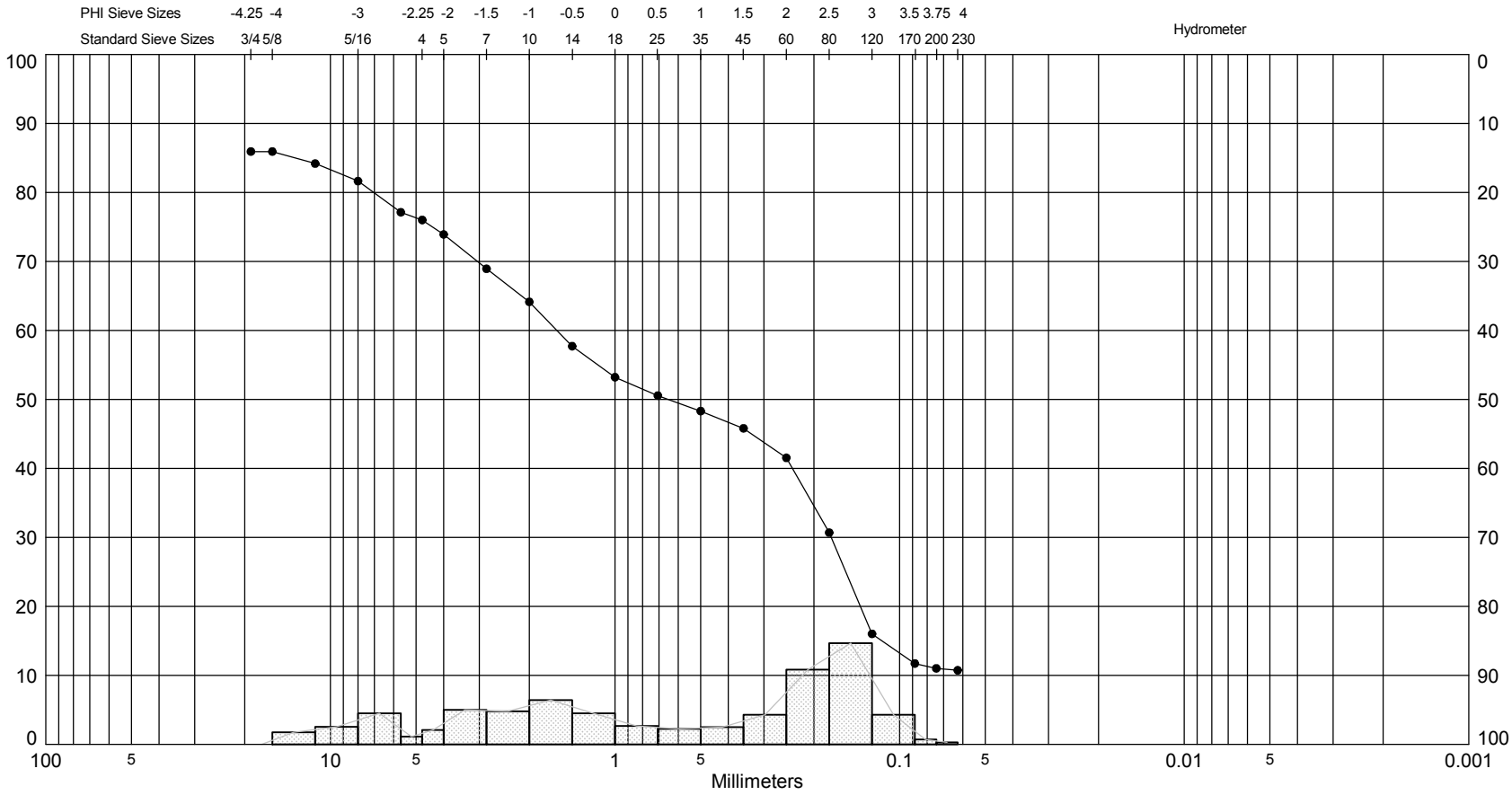
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z213 #3	—●—		SW-SM	W/ GRAVEL #200 - 11.02 #230 - 10.74	1.51	31.43	0.62	-0.24	0.7	1.88	2.1

Comments: Larger material is shell

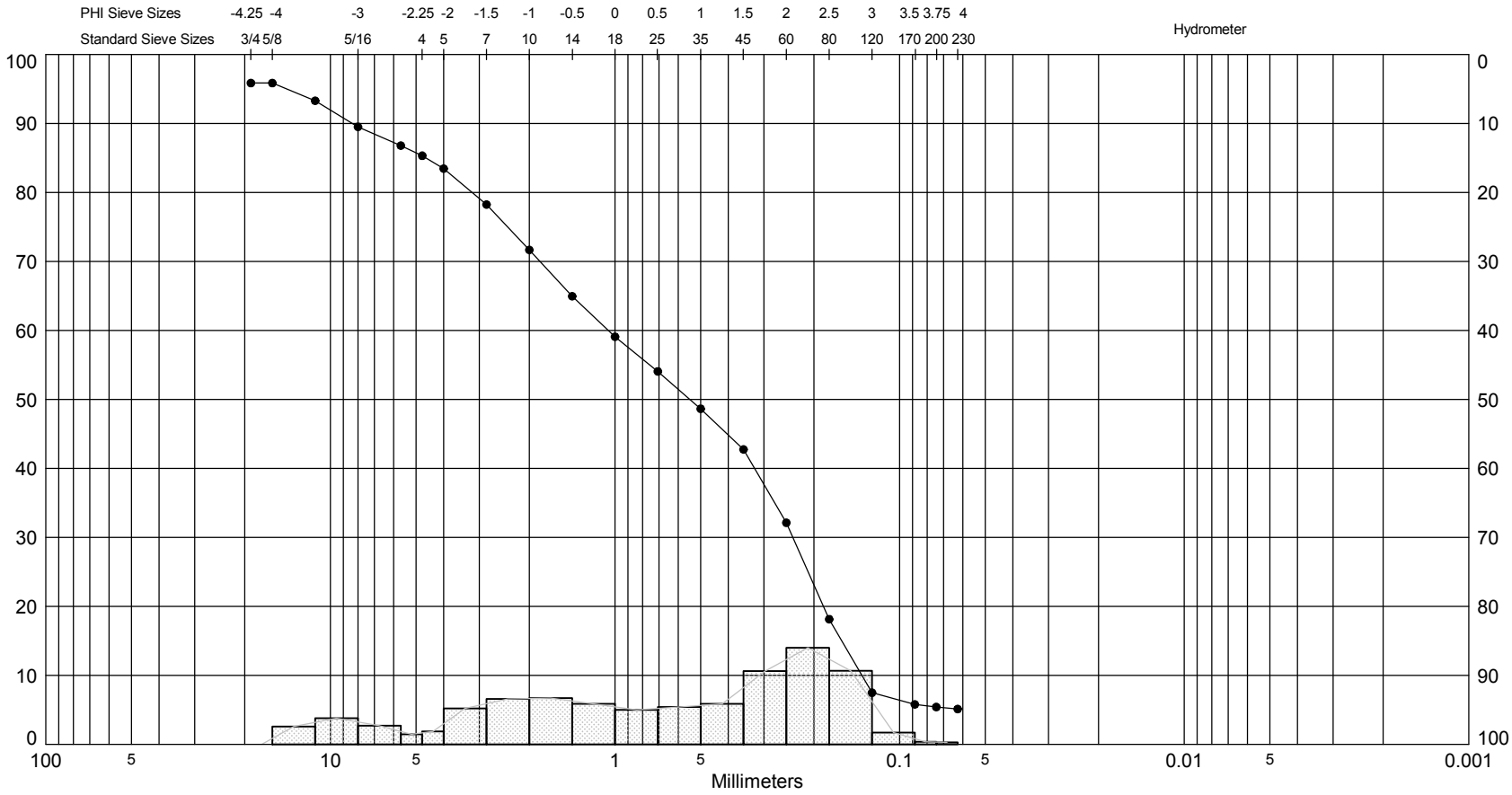
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z213 #4	—●—		SW-SM	#200 - 5.41 #230 - 5.12	1.35	55.35	0.87	0.22	-0.15	1.98	1.93

Comments: Larger material is shell

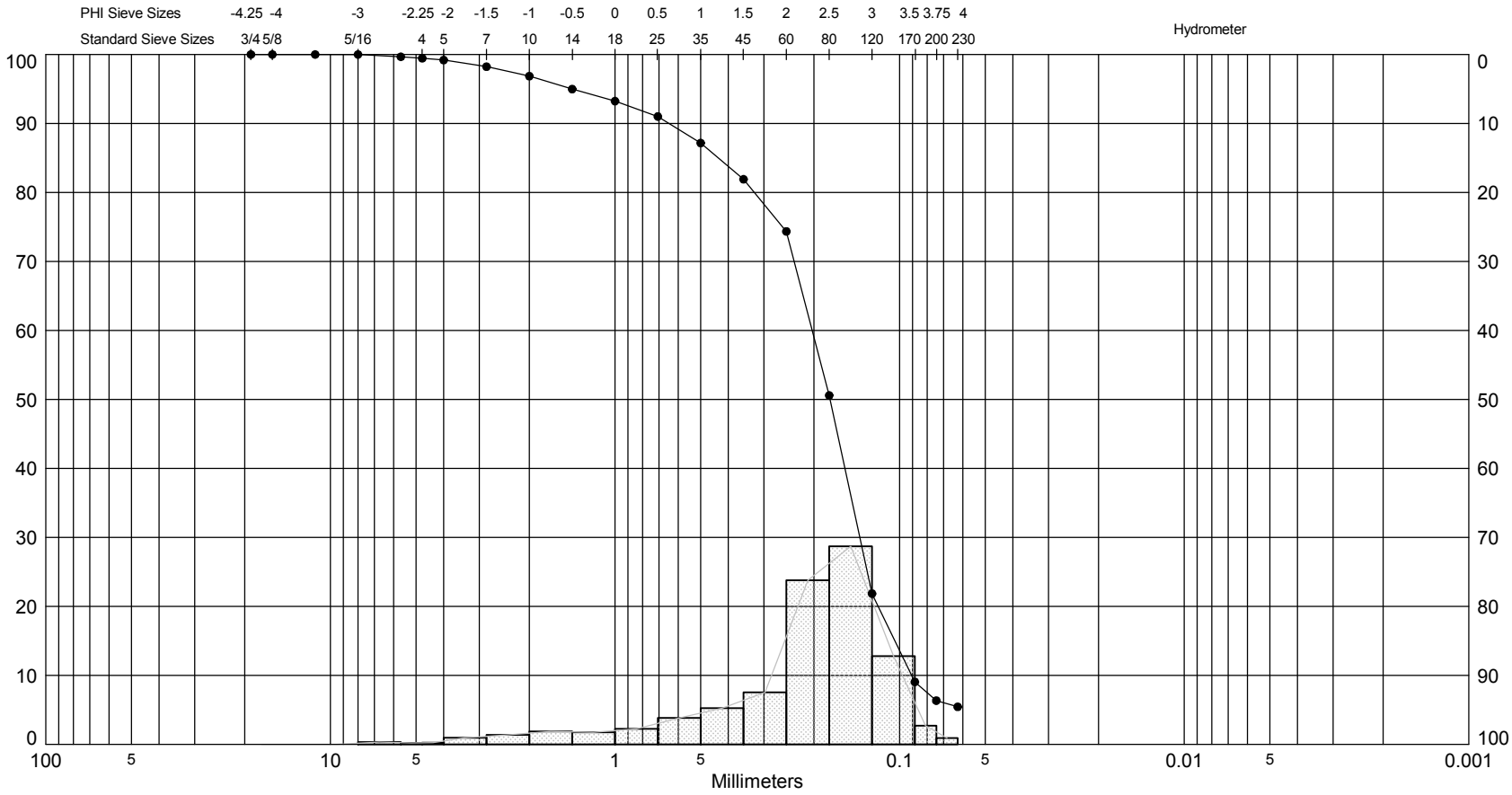
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z214 #1	—●—		SW-SM	#200 - 6.34 #230 - 5.44	0.84	8.14	2.51	2.15	-1.69	6	1.17

Comments:

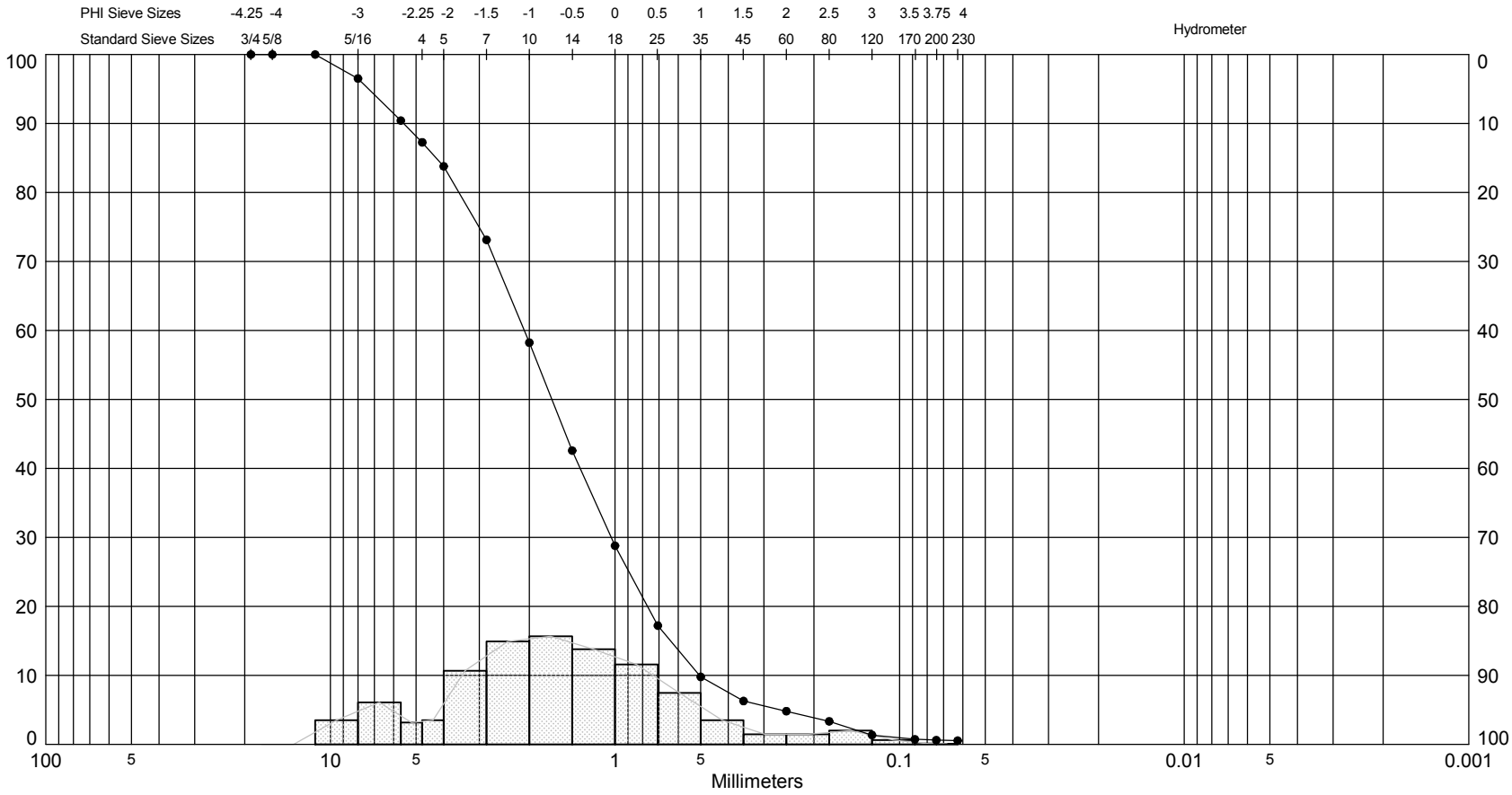
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z214 #2	—●—		SW	#200 - 0.61 #230 - 0.54	1.41	13.81		-0.69	0.41	3.23	1.35

Comments:

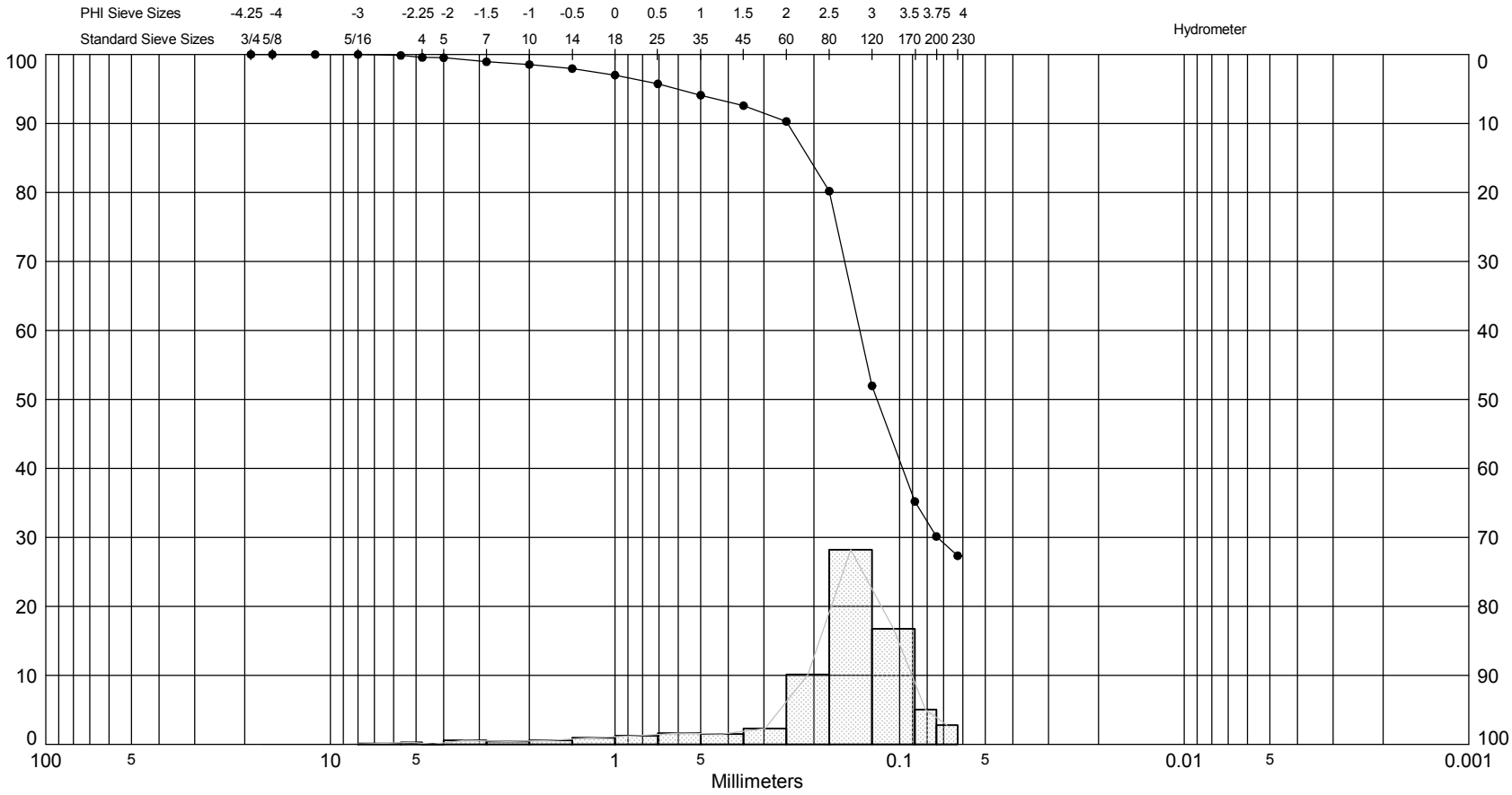
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z214 #3	—●—		SM	#200 - 30.14 #230 - 27.34	3.07	17.14	3.06	2.59	-2.3	9.46	1.04

Comments:

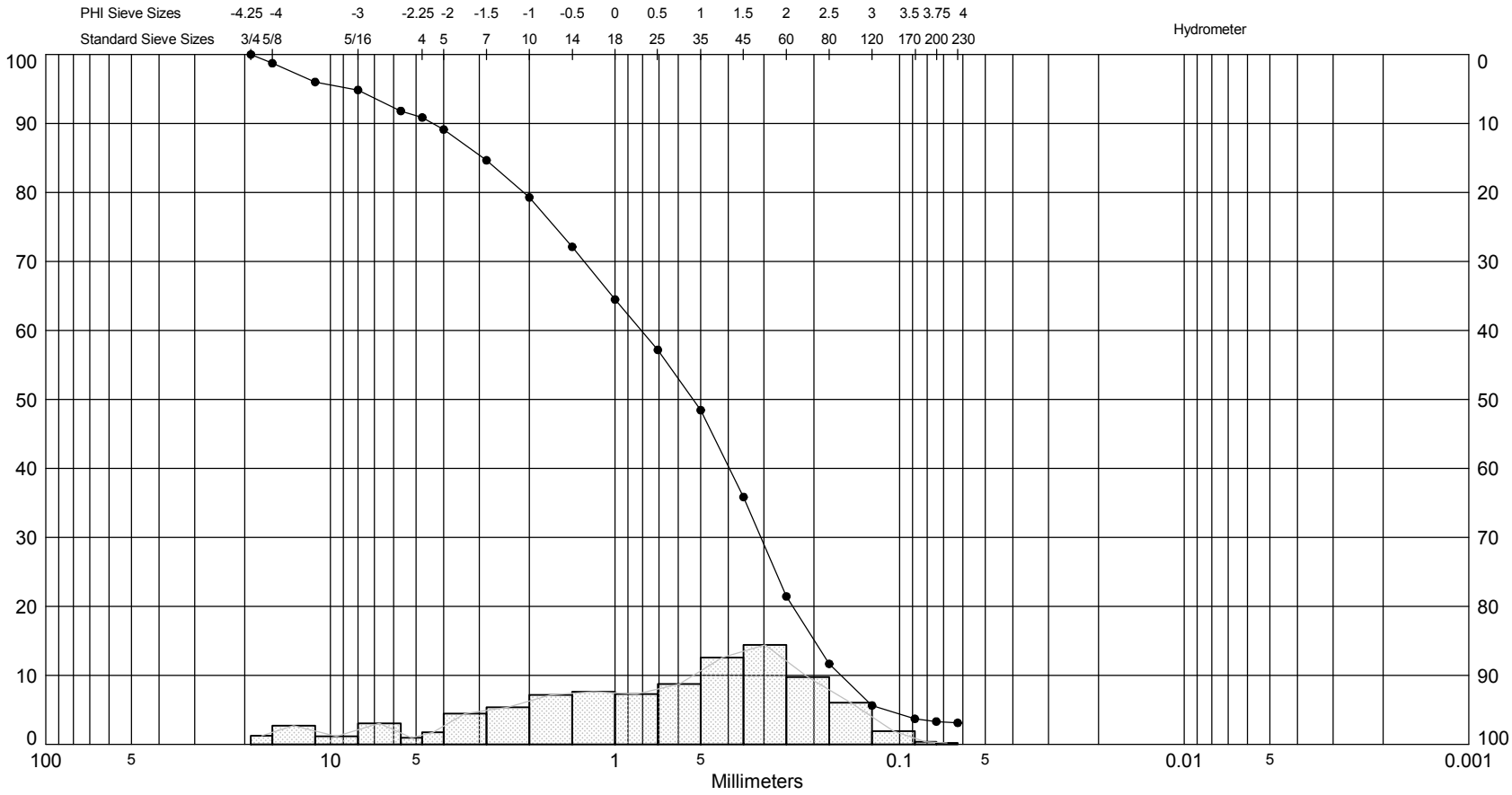
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z214 #4	—●—		SW	#200 - 3.31 #230 - 3.12	1.21	35.15	0.91	0.42	-0.66	2.72	1.79

Comments:

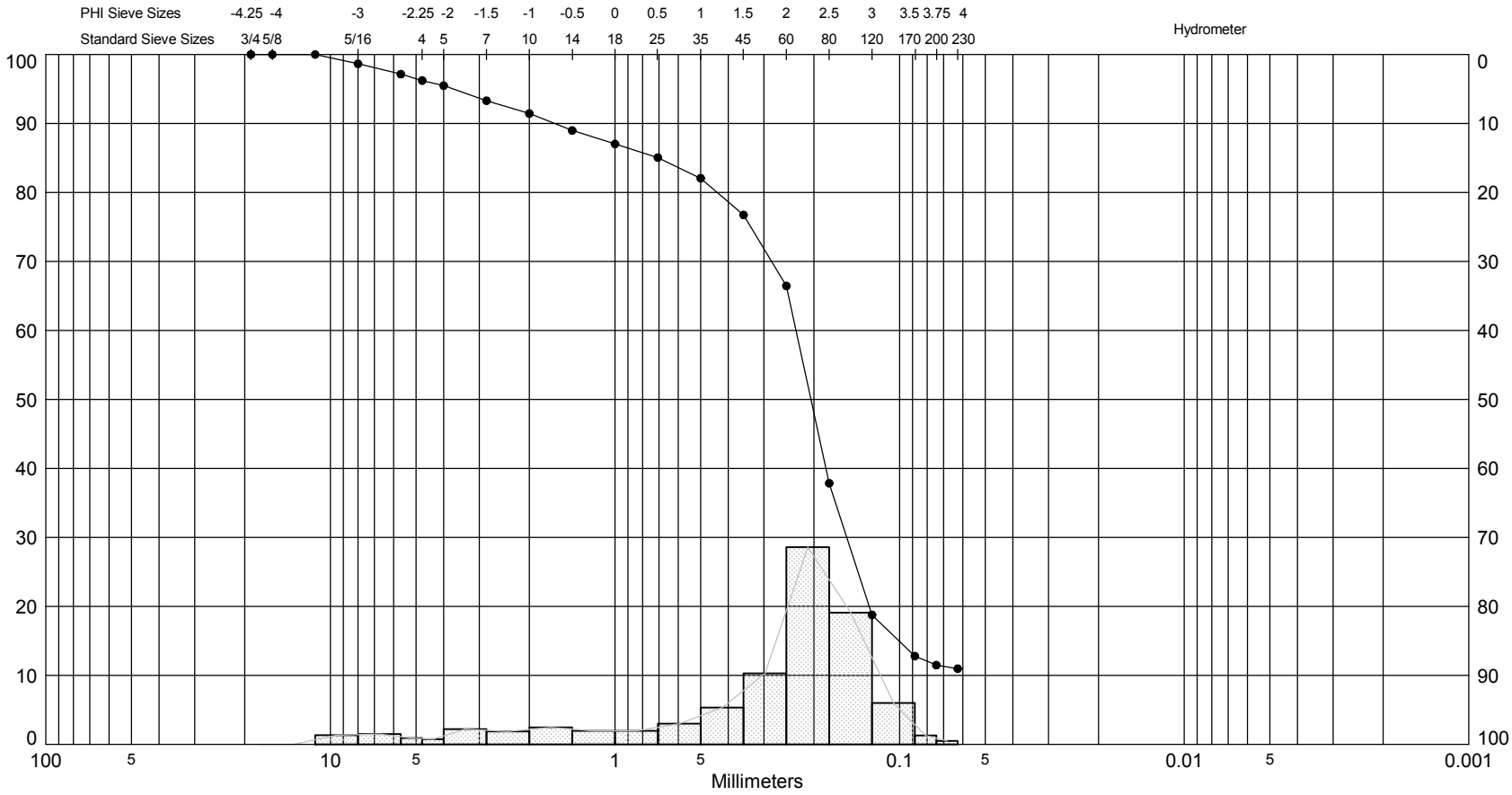
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z214 #5	—●—		SW-SM	#200 - 11.48 #230 - 10.97	1.52	16.22	2.29	1.68	-1.59	4.8	1.55

Comments:

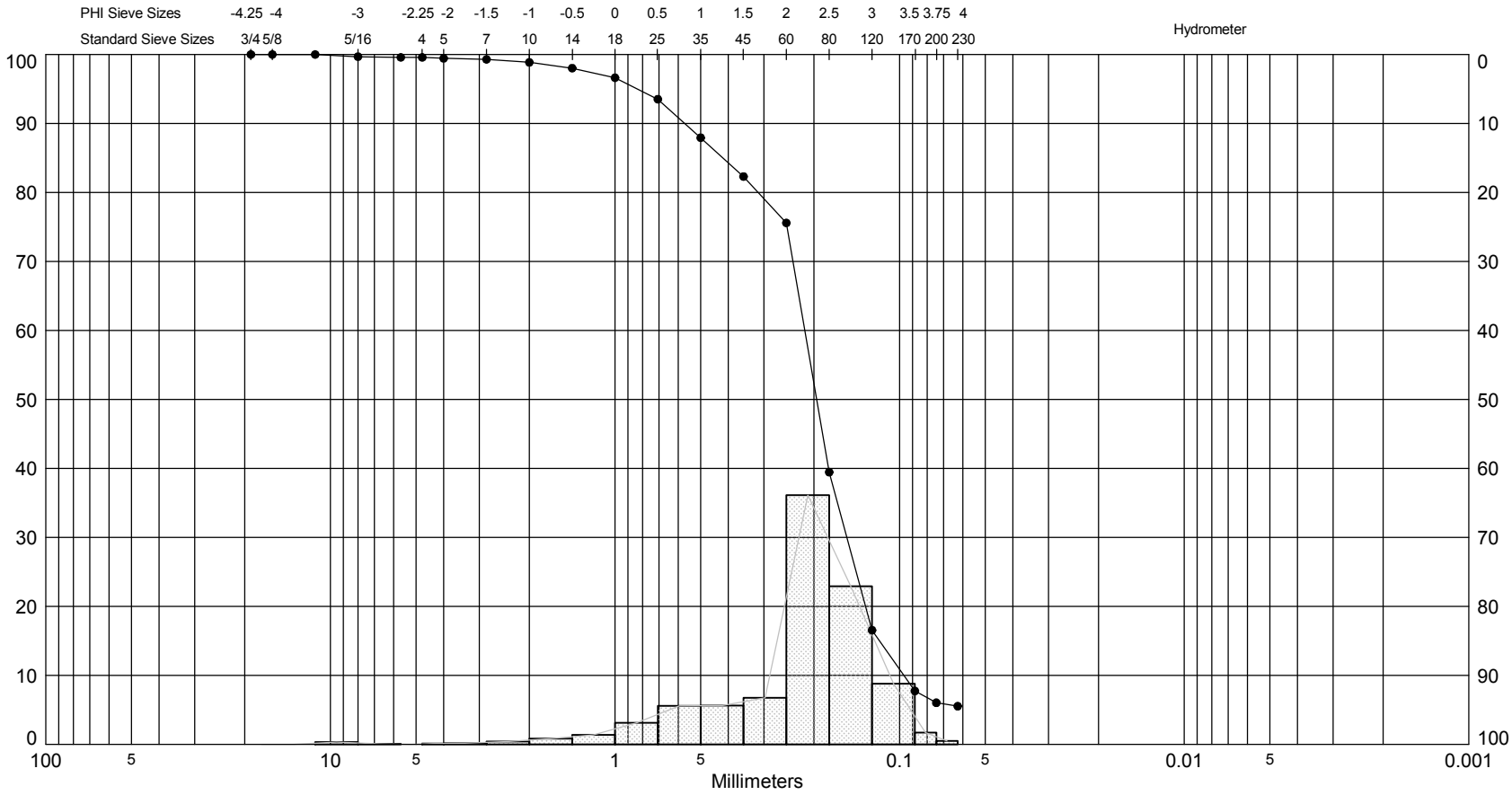
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z215 #1	—●—		SW-SM	#200 - 6.03 #230 - 5.53	1.05	8.32	2.35	2.13	-1.75	7.88	0.97

Comments: Gray sand, shell

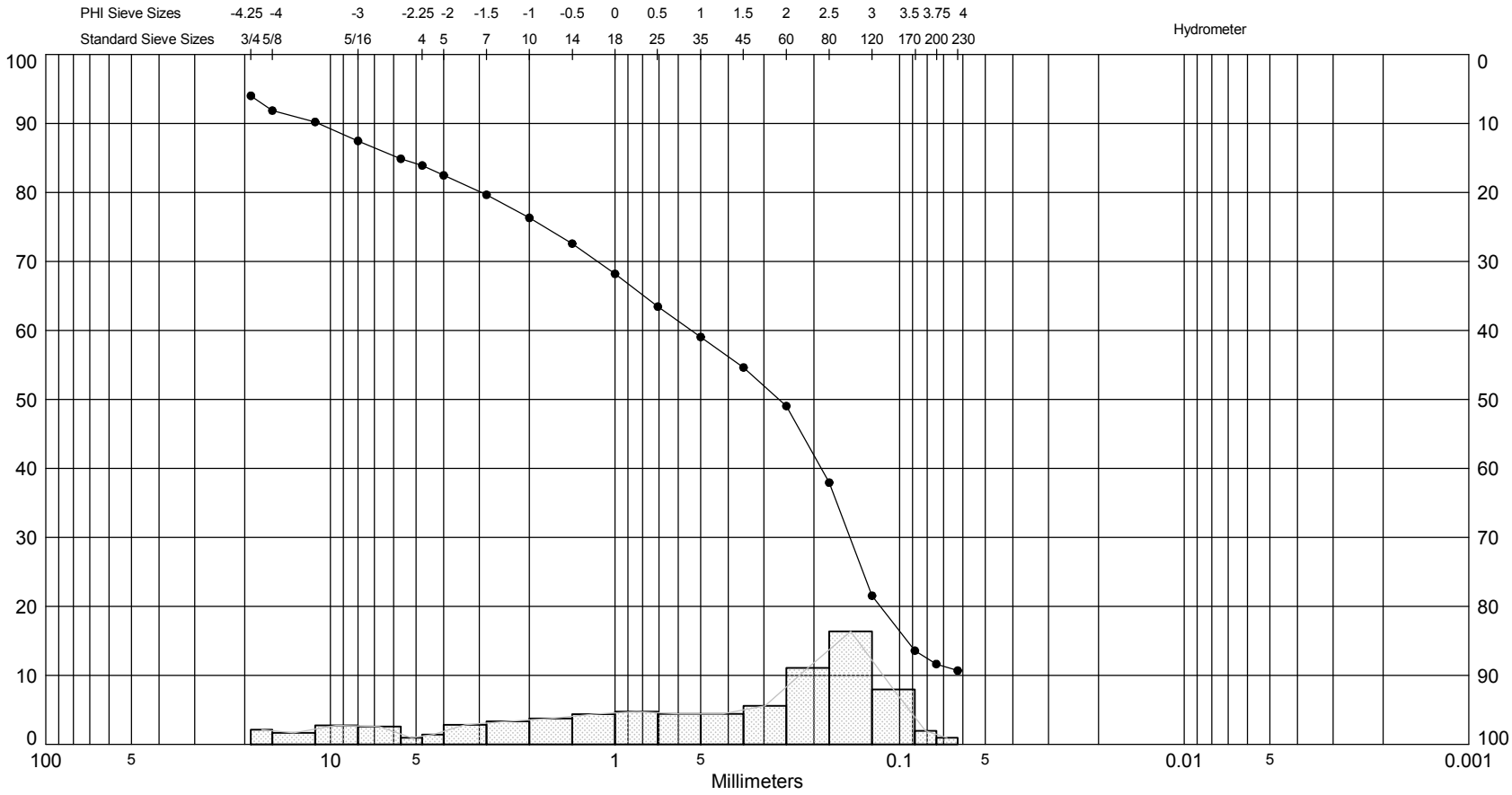
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z215 #2	—●—	SW-SM	W/ GRAVEL	#200 = 11.64 #230 = 10.69	1.97	14.47	1.91	0.57	-0.28	2.14	2.13

Comments: Gray sand, oyster shell

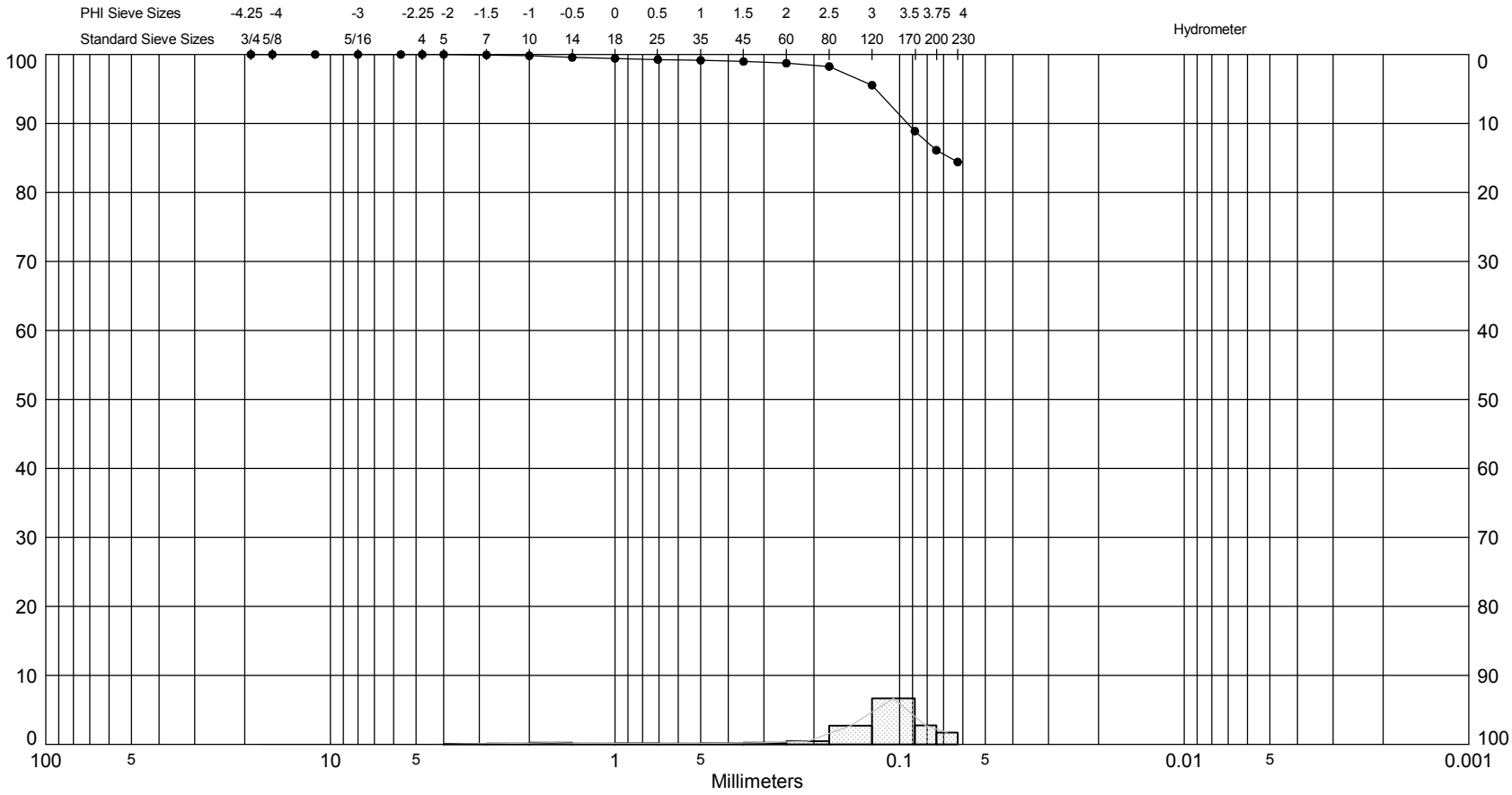
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z215 #3	—●—		ML-CL	#200 - 86.12 #230 - 84.41	5.52	7.70		3.02	-2.8	11.49	0.97

Comments: Silt, fine gray sand

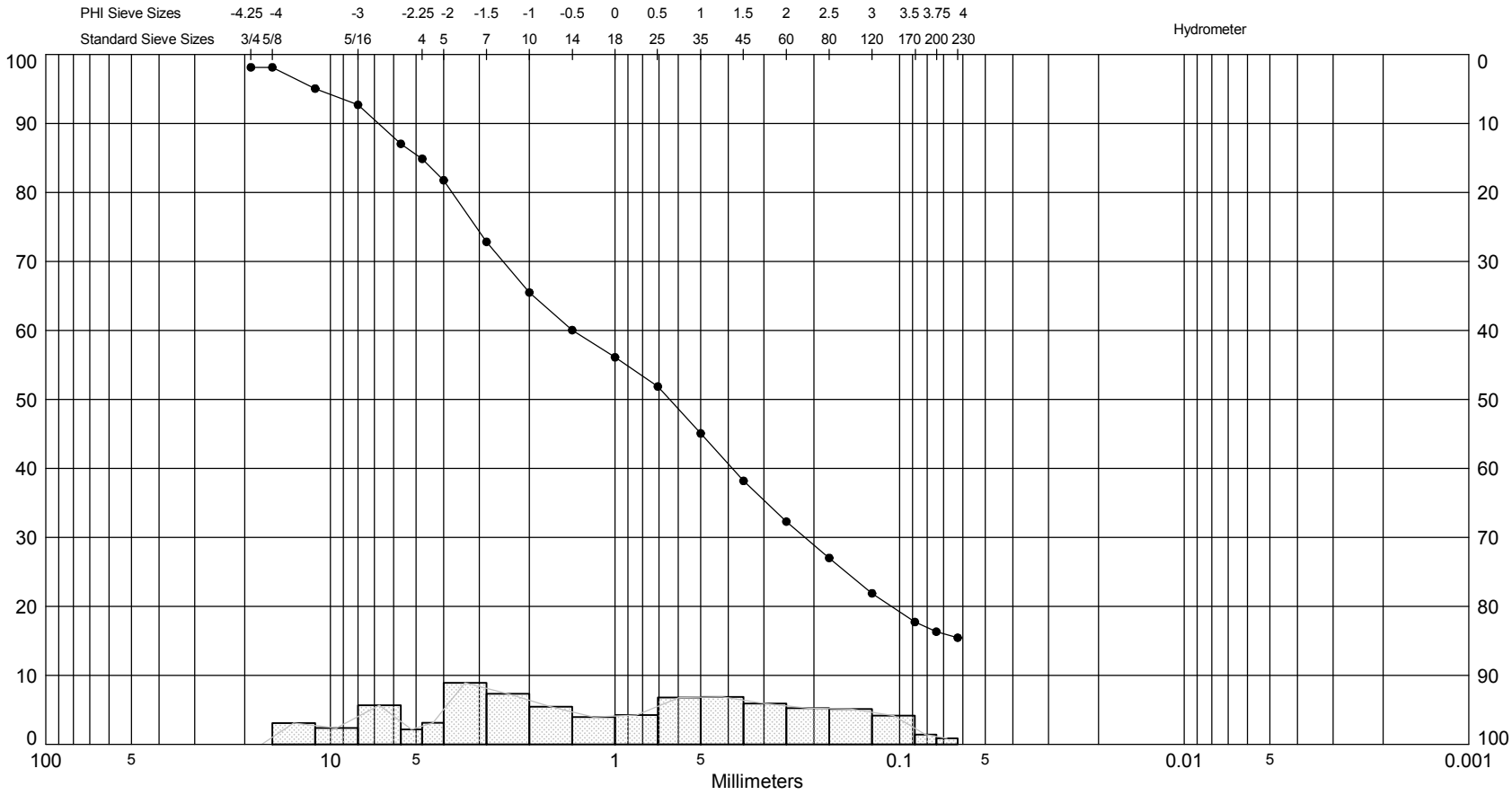
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z215 #4	—●—		SM W/ GRAVEL	#200 - 16.33 #230 - 15.46	2.41	7.16	0.64	-0.14	0.19	1.94	2.05

Comments: Gray sand, shell, rock

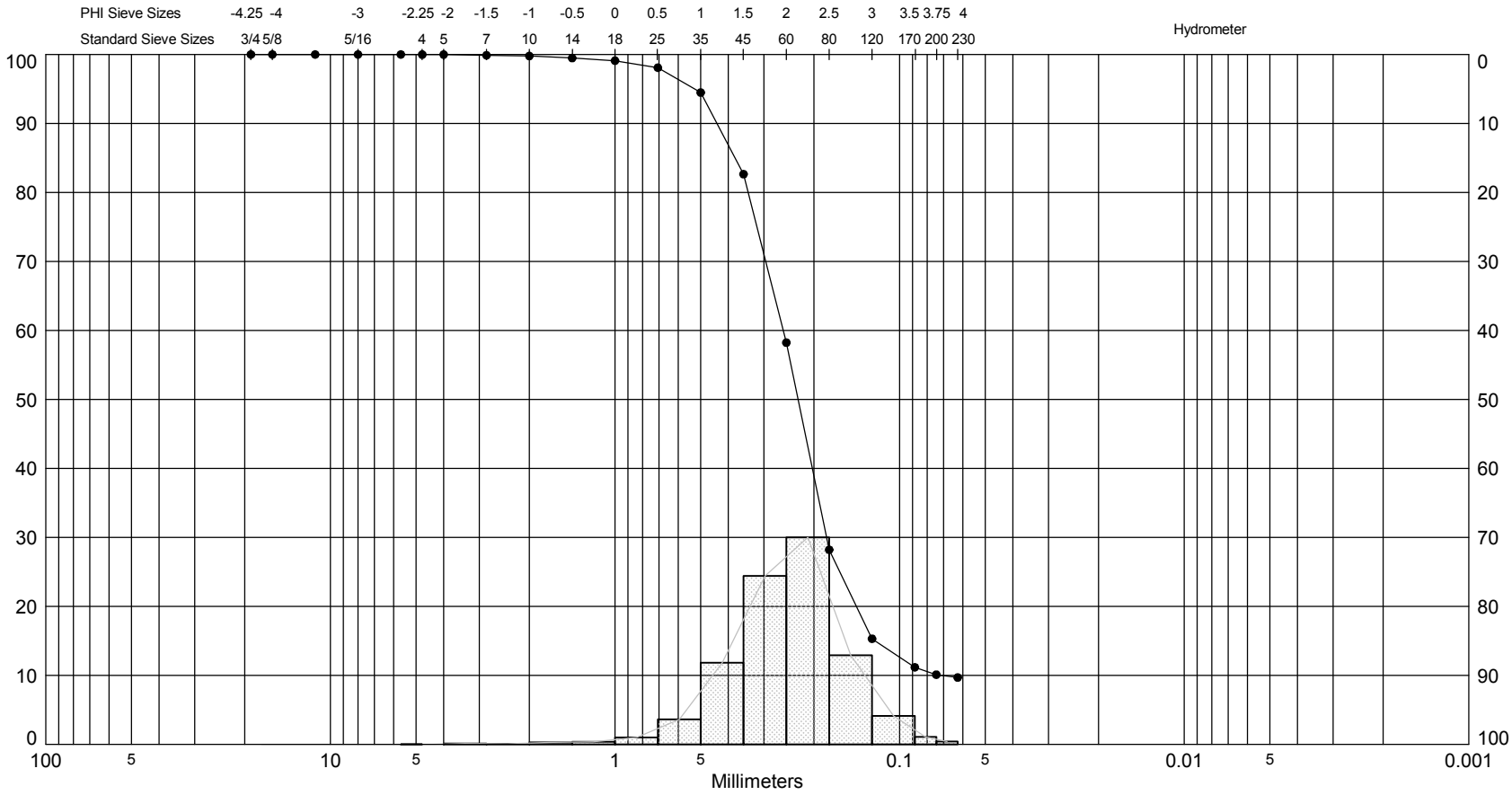
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z215 #5	—●—		SP-SM	#200 - 10.10 #230 - 9.69	0.90	1.70	2.14	2.01	-0.61	5.28	0.7

Comments: Gray sand

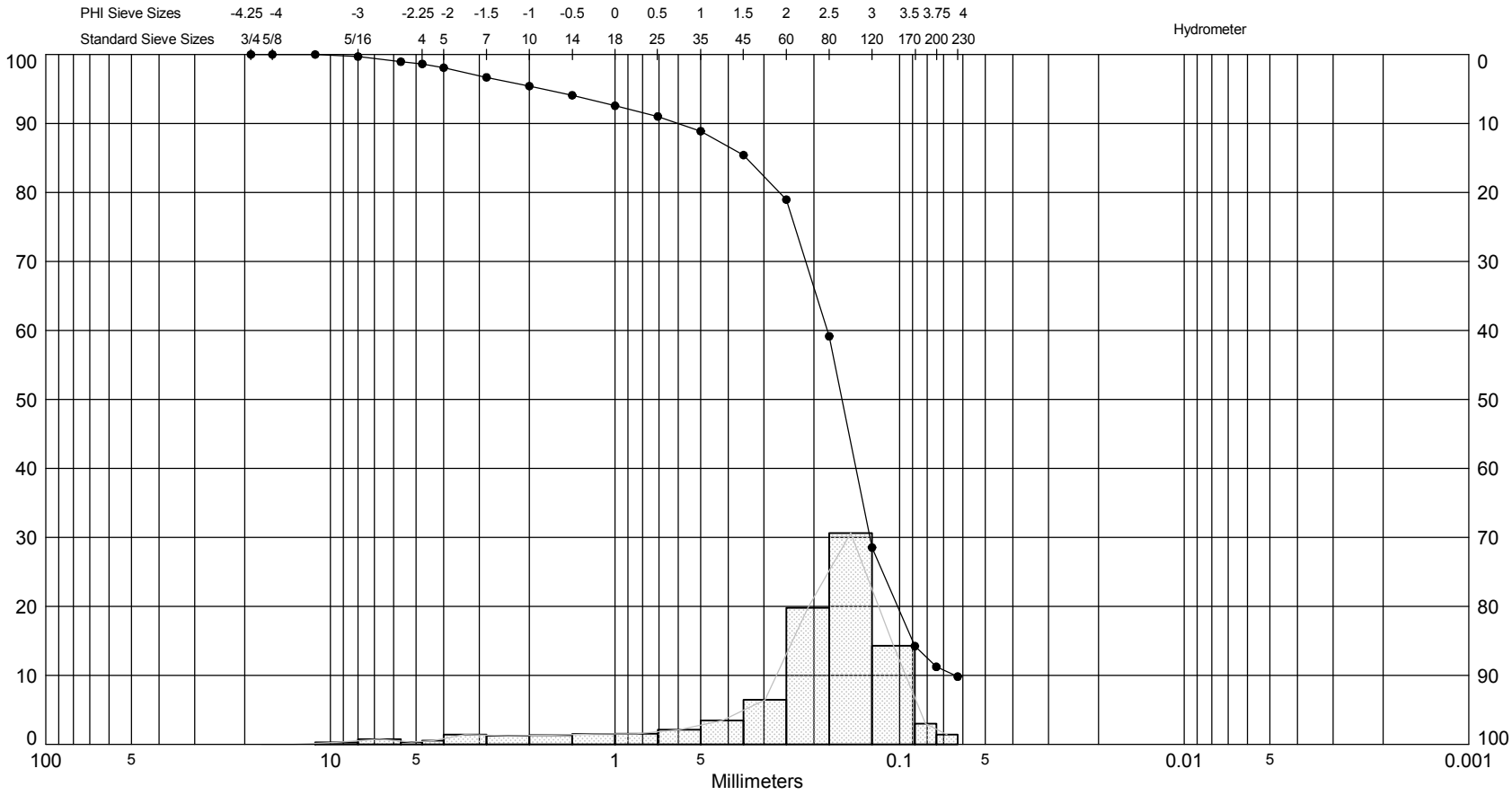
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z231 #1	—●—		SW-SM	#200 - 11.24 #230 - 9.82	0.60	11.58	2.65	2.2	-2.01	7.08	1.3

Comments: Gray sand

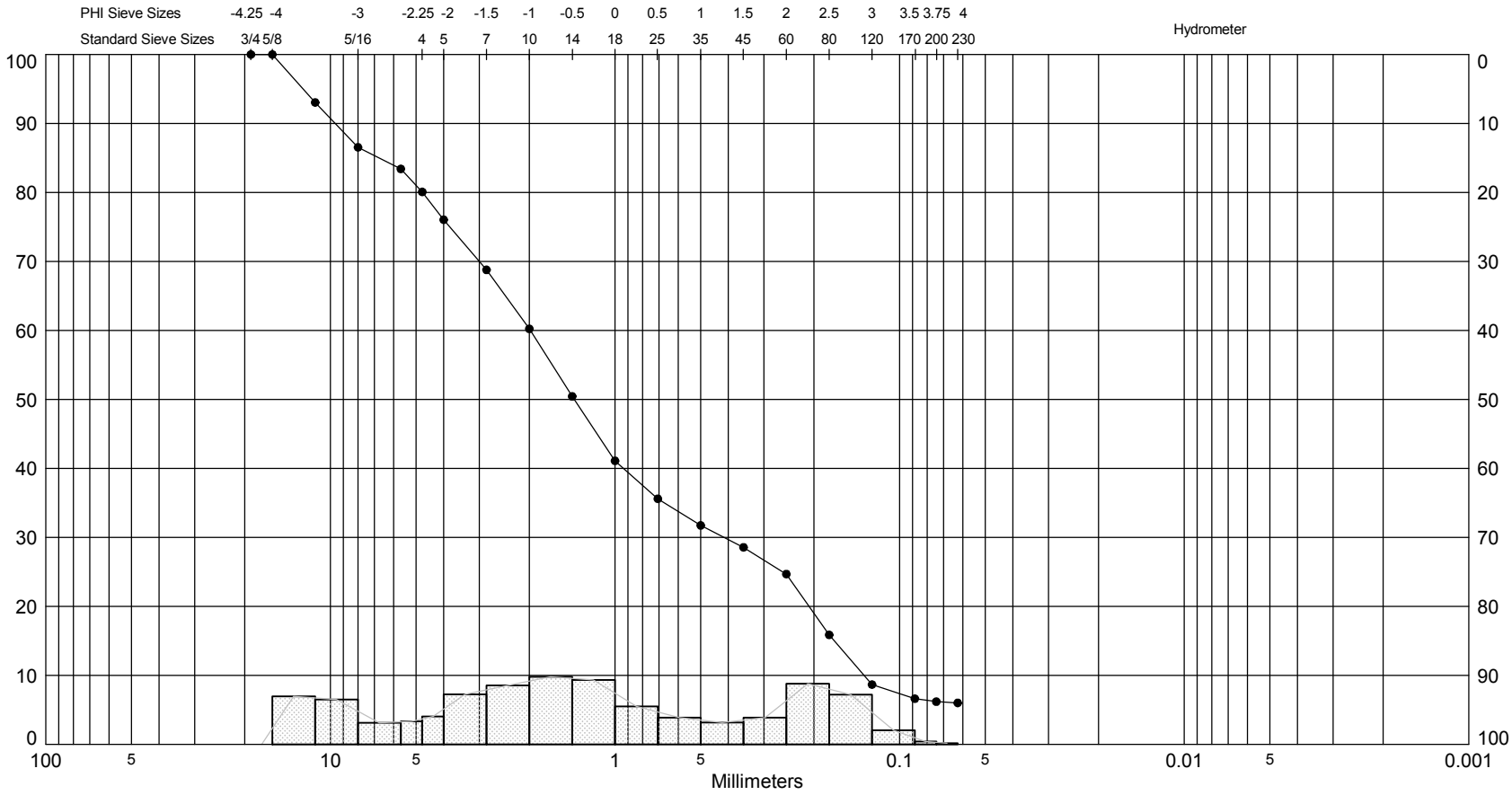
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z231 #2	—●—	SW-SM	W/ GRAVEL	#200 - 6.19 #230 - 6.01	11.89	22.02		-0.44	0.15	1.97	2.06

Comments: Gray sand, rock, shell

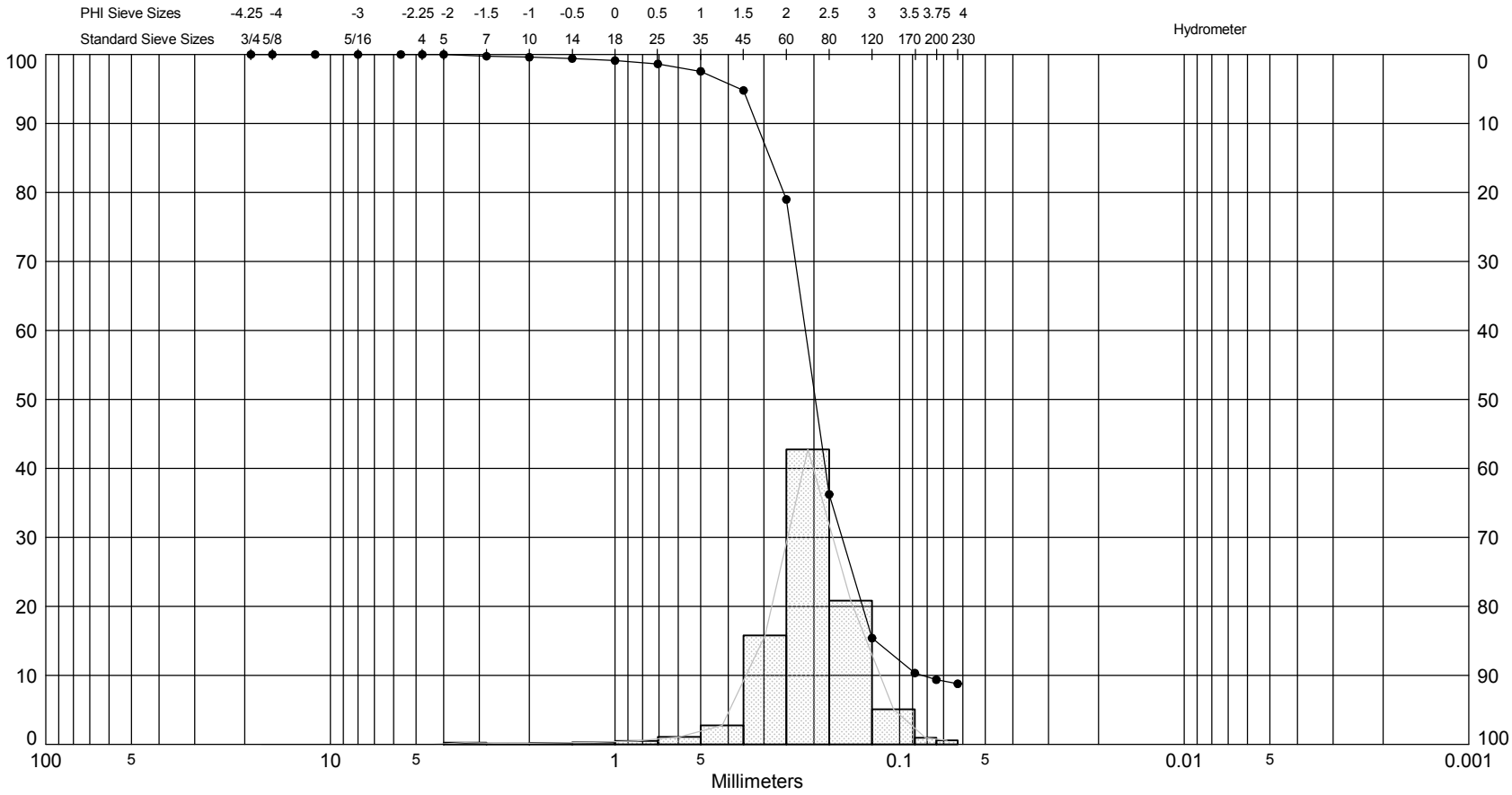
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z231 #3	—●—		SP-SM	#200 - 9.37 #230 - 8.78	1.94	11.89	2.34	2.27	-1.61	11.5	0.61

Comments: Fine tan sand, organic material

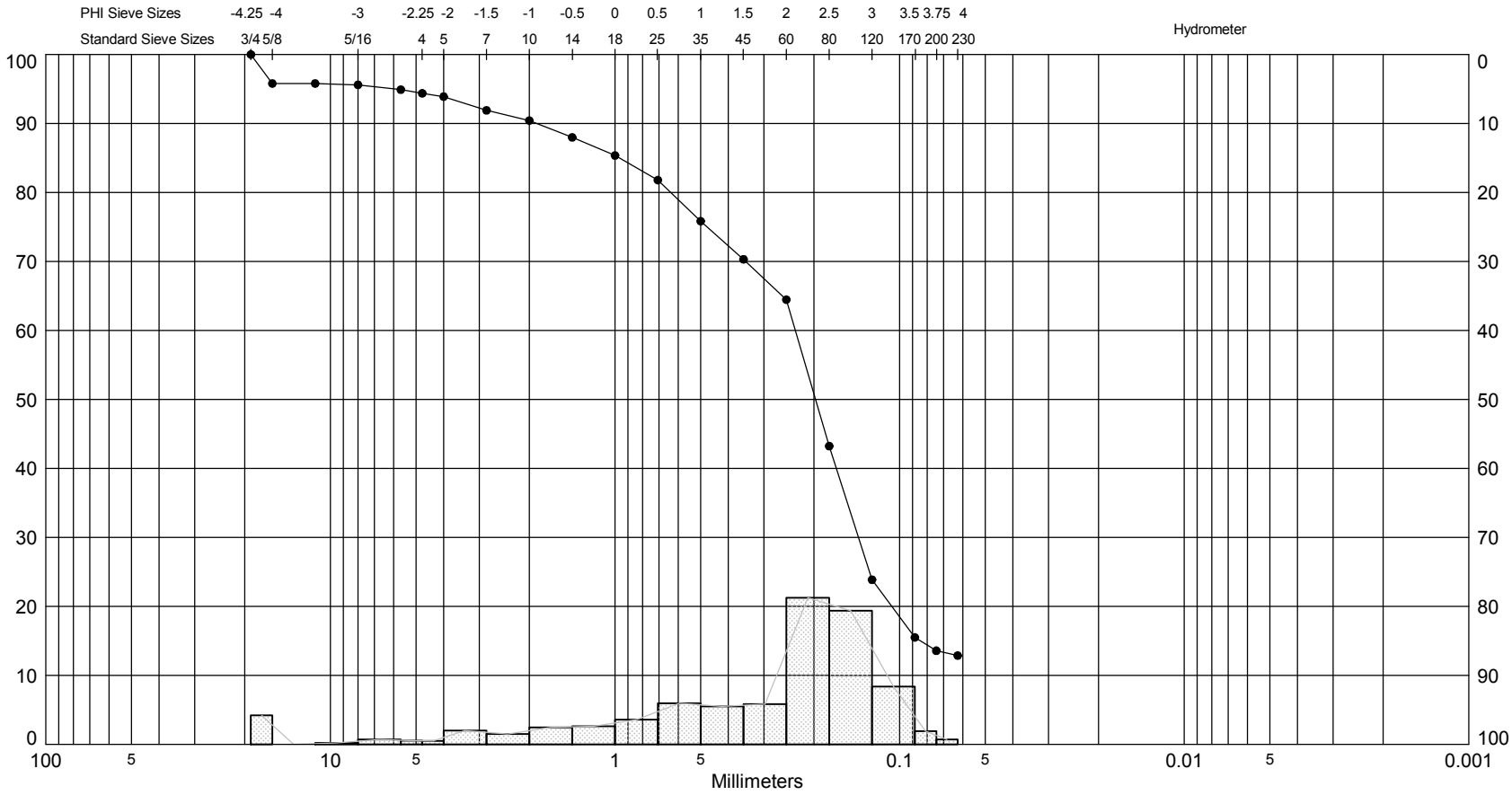
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z232 #1	—●—		SM	#200 - 13.57 #230 - 12.87	2.23	10.19	2.34	1.5	-1.57	4.92	1.88

Comments: Gray sand, shell

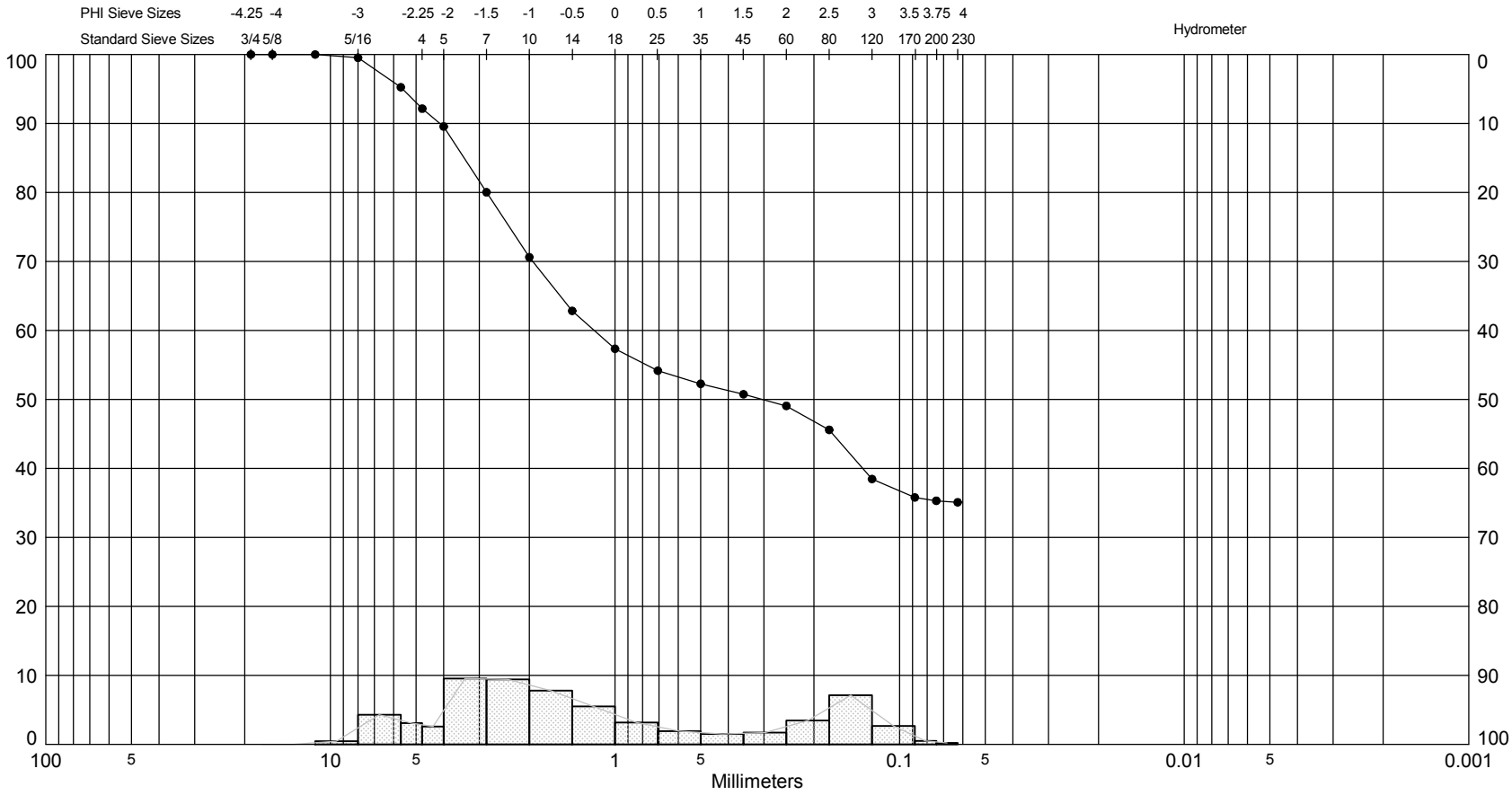
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z232 #2	—●—		SM	#200 - 35.31 #230 - 35.09	7.65	16.04	1.72	-0.25	0.59	2.07	1.88

Comments: Gray sand, silt, rocks, shell

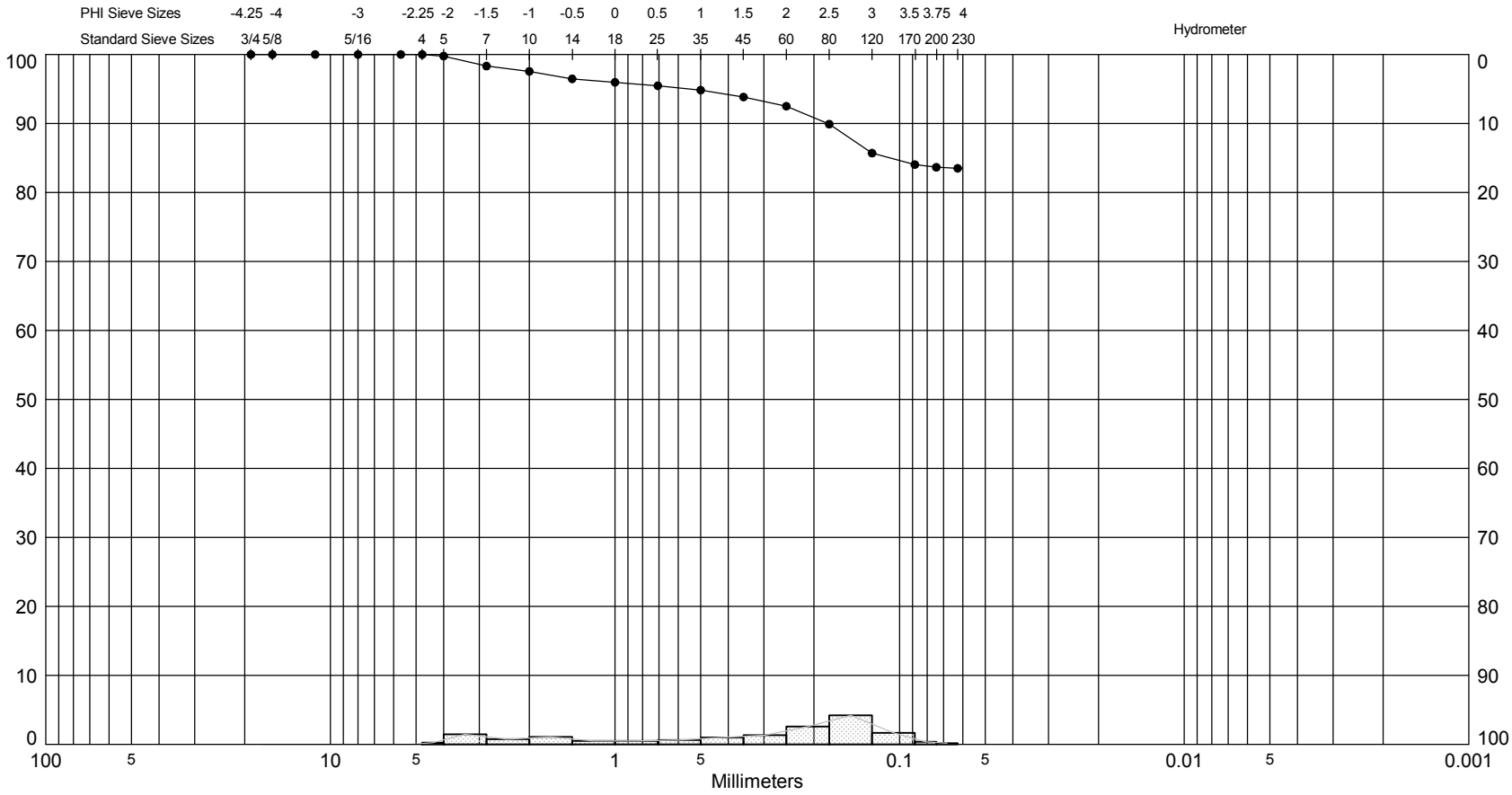
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z232 #3	—●—		ML-CL	#200 - 83.65 #230 - 83.50	14.72	10.21		1.46	-0.77	2.19	1.71

Comments: Silt

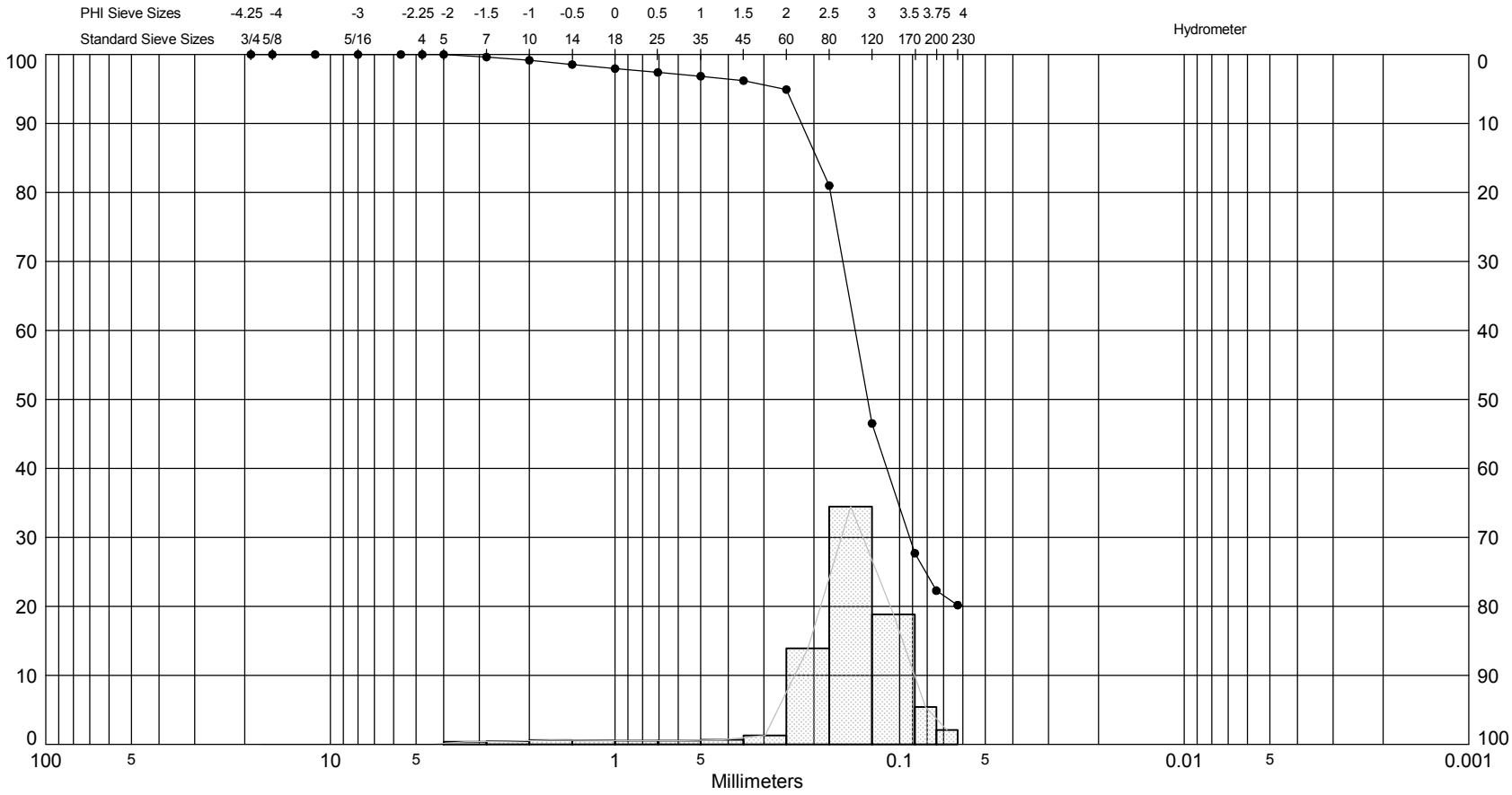
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z232 #4	—●—		SM	#200 - 22.28 #230 - 20.18	8.59	2.33	2.95	2.72	-2.69	13.44	0.8

Comments: Silt

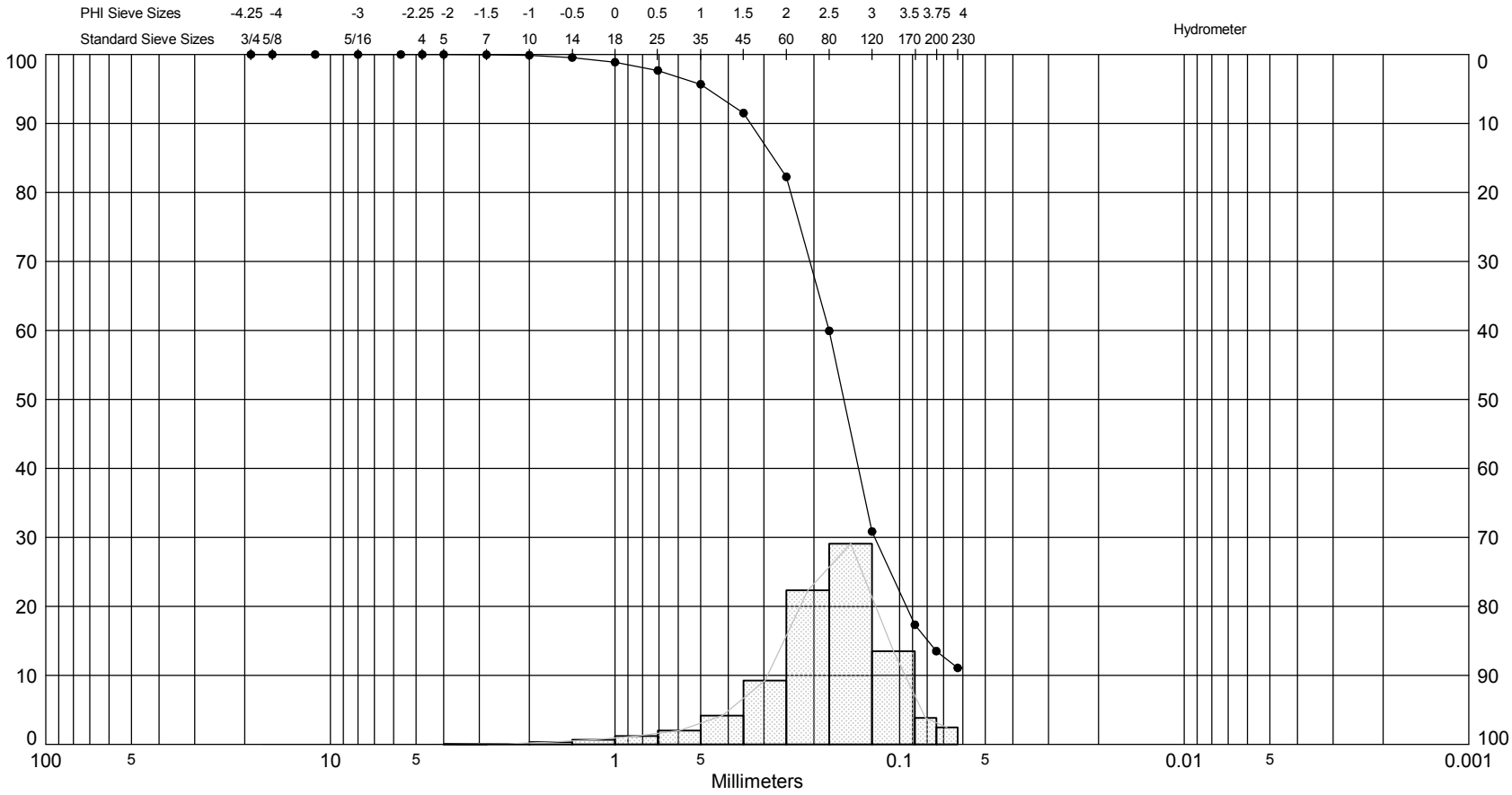
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z232 #5	—●—		SM	#200 - 13.52 #230 - 11.08	0.93	1.27	2.67	2.47	-1.09	5.34	0.78

Comments: Fine tan sand

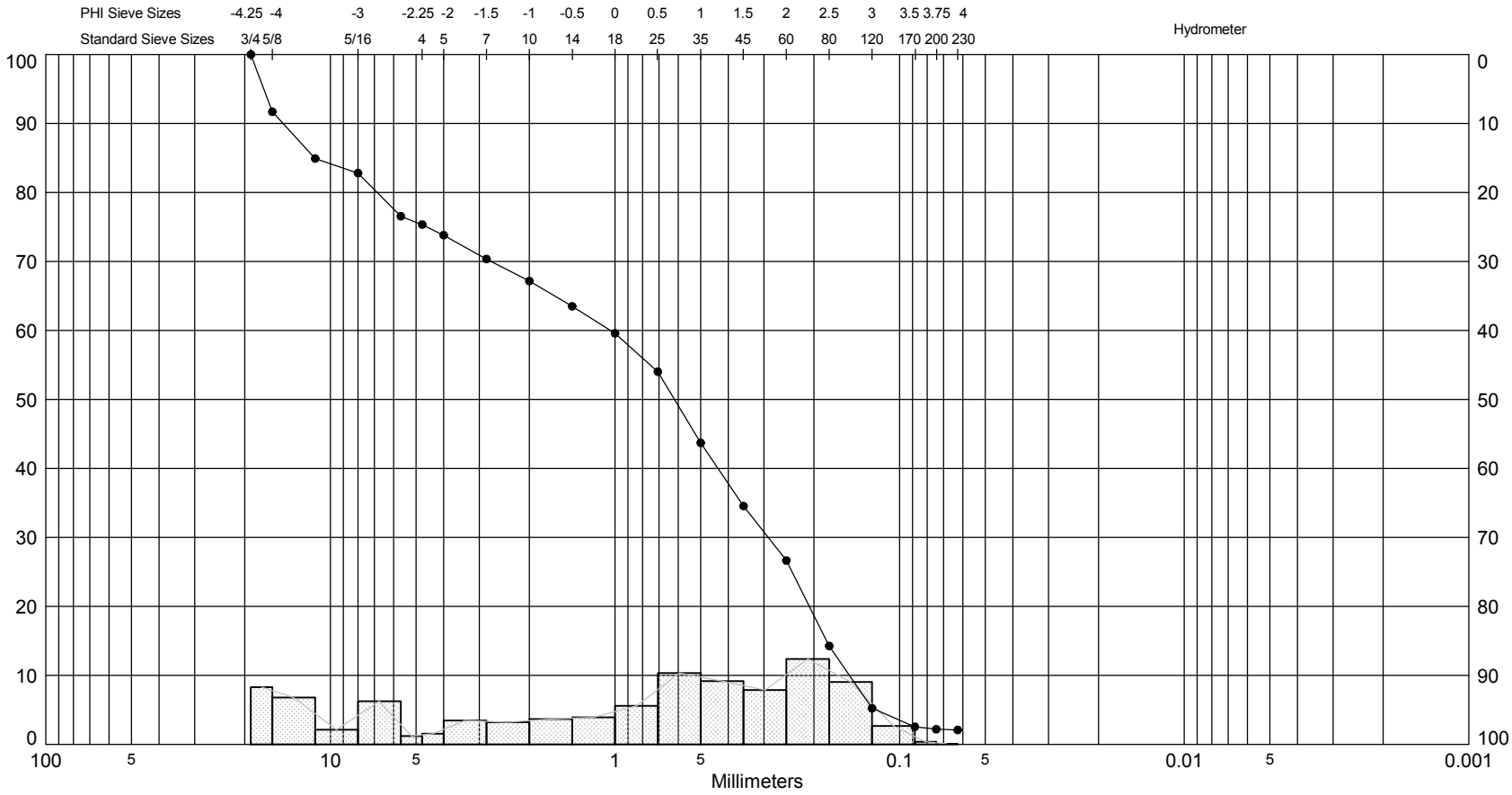
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z233 #1	—●—		SW	#200 - 2.19 #230 - 2.09	0.87	47.01	0.69	-0.06	-0.45	1.83	2.36

Comments: Gray sand, shell

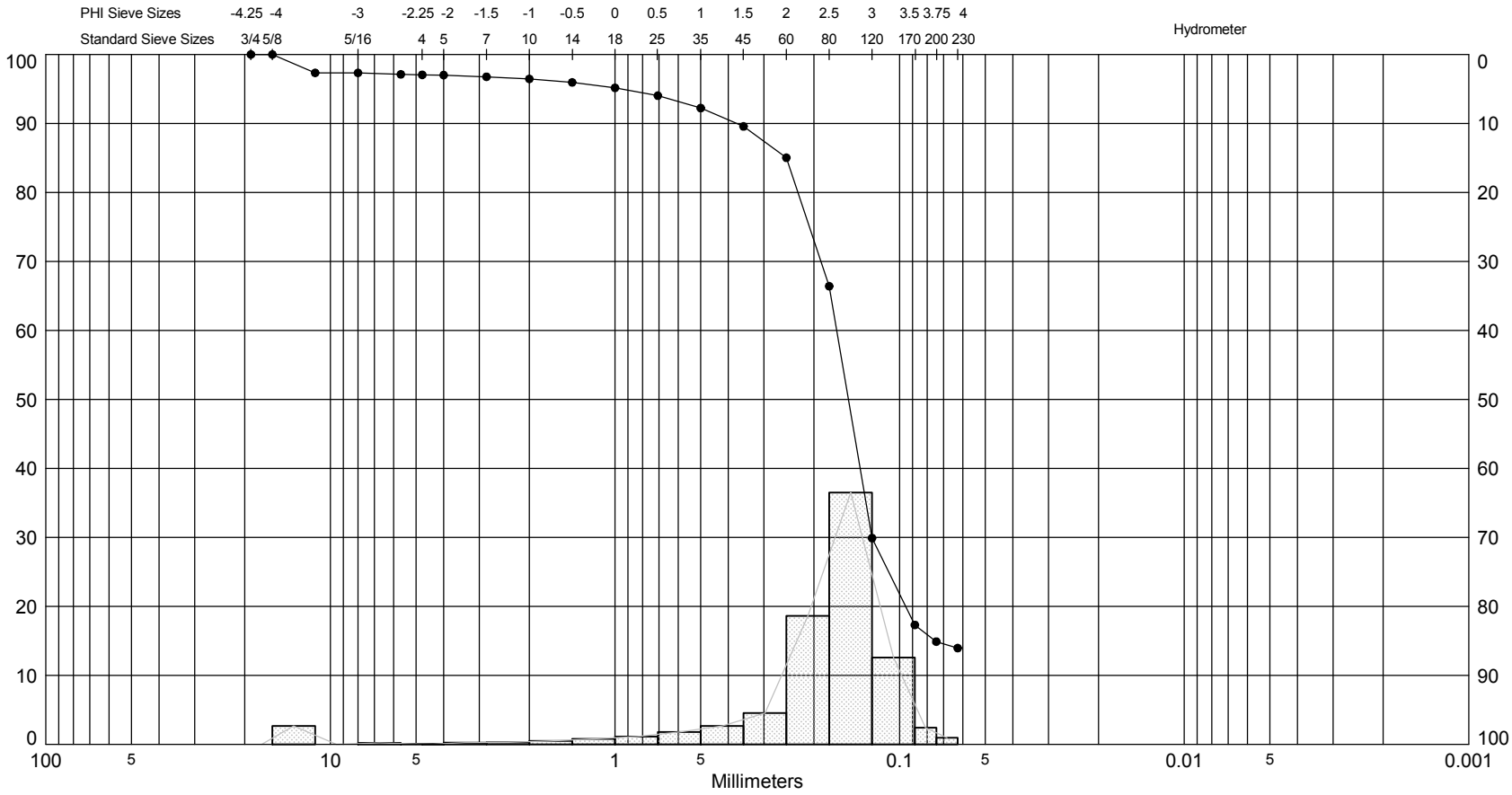
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z233 #2	—●—		SM	#200 - 14.89 #230 - 13.95	1.38	8.59	2.72	2.28	-3.03	13	1.37

Comments: Gray sand, shell

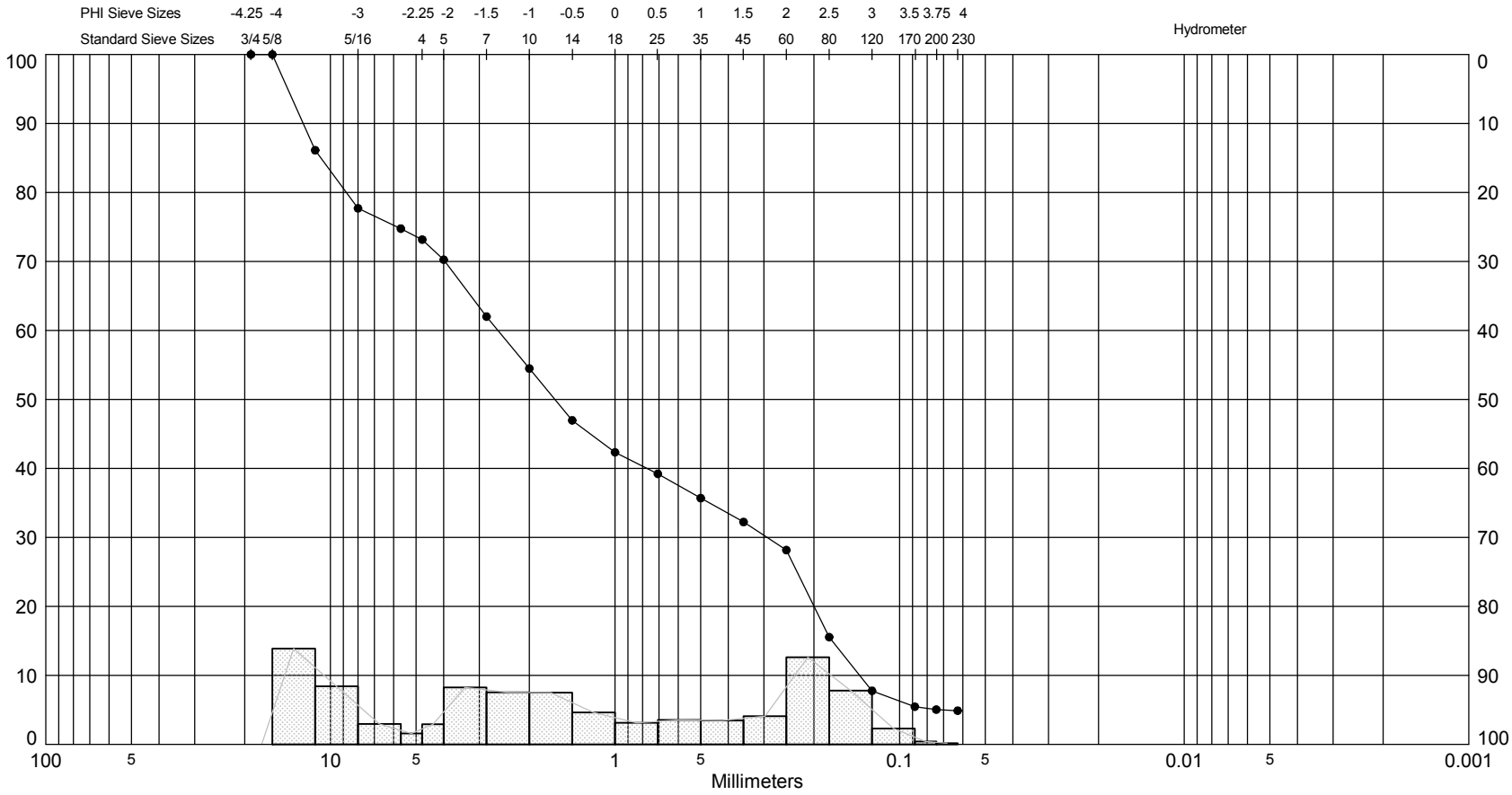
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z233 #3	—●—	SW-SM	W/ GRAVEL	#200 - 5.04 #230 - 4.88	0.97	11.56		-0.57	0.12	1.64	2.33

Comments: Gray sand, rocks

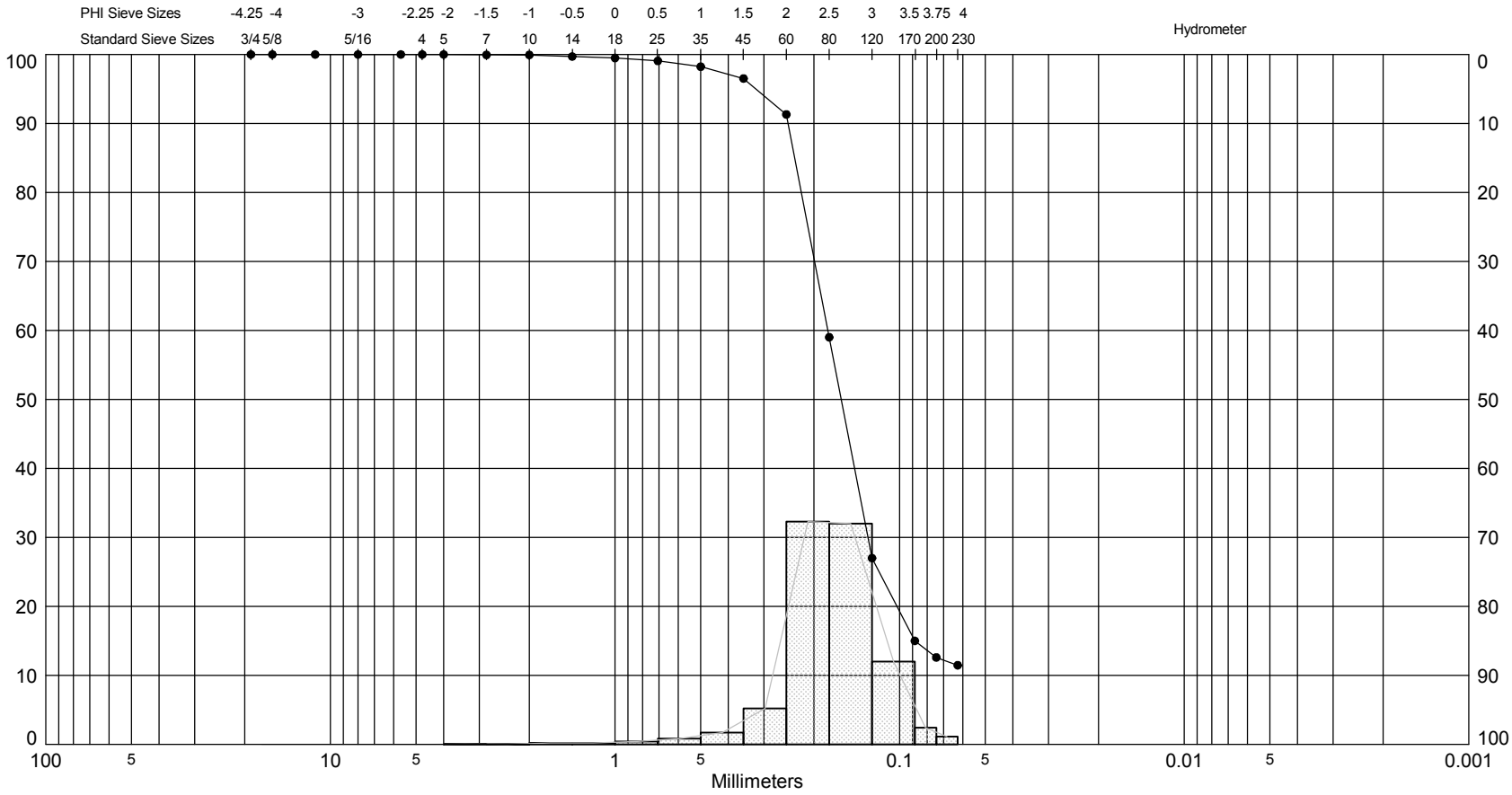
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Analyzed By:	MB
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z233 #4	—●—		SM	#200 - 12.60 #230 - 11.47	0.98	1.51	2.64	2.54	-1.28	8.79	0.59

Comments: Tan sand

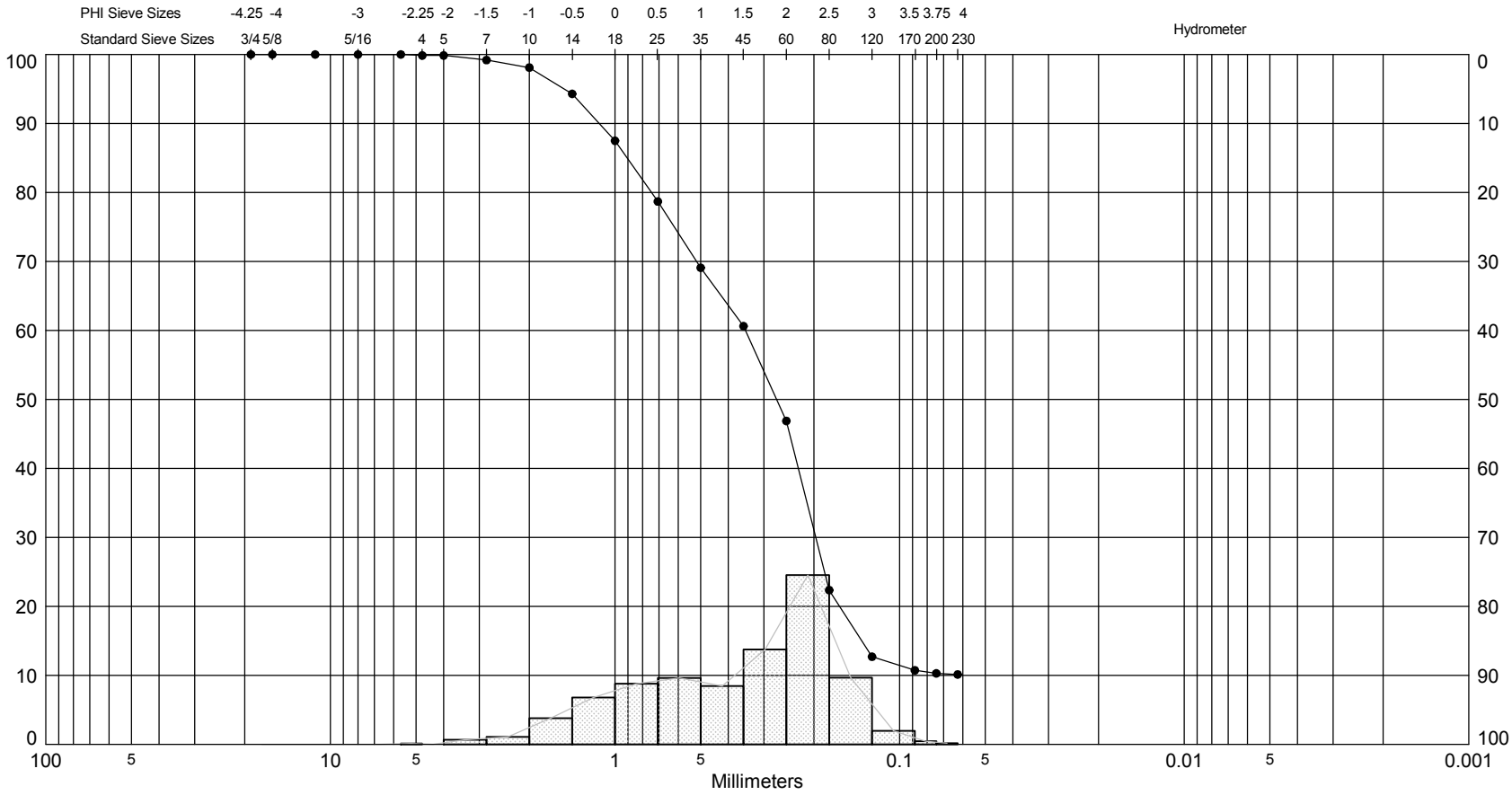
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-05-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z233 #5	—●—		SW-SM	#200 - 10.29 #230 - 10.13	1.10	1.78	1.89	1.41	-0.6	2.62	1.13

Comments: Coarser tan quartz sand

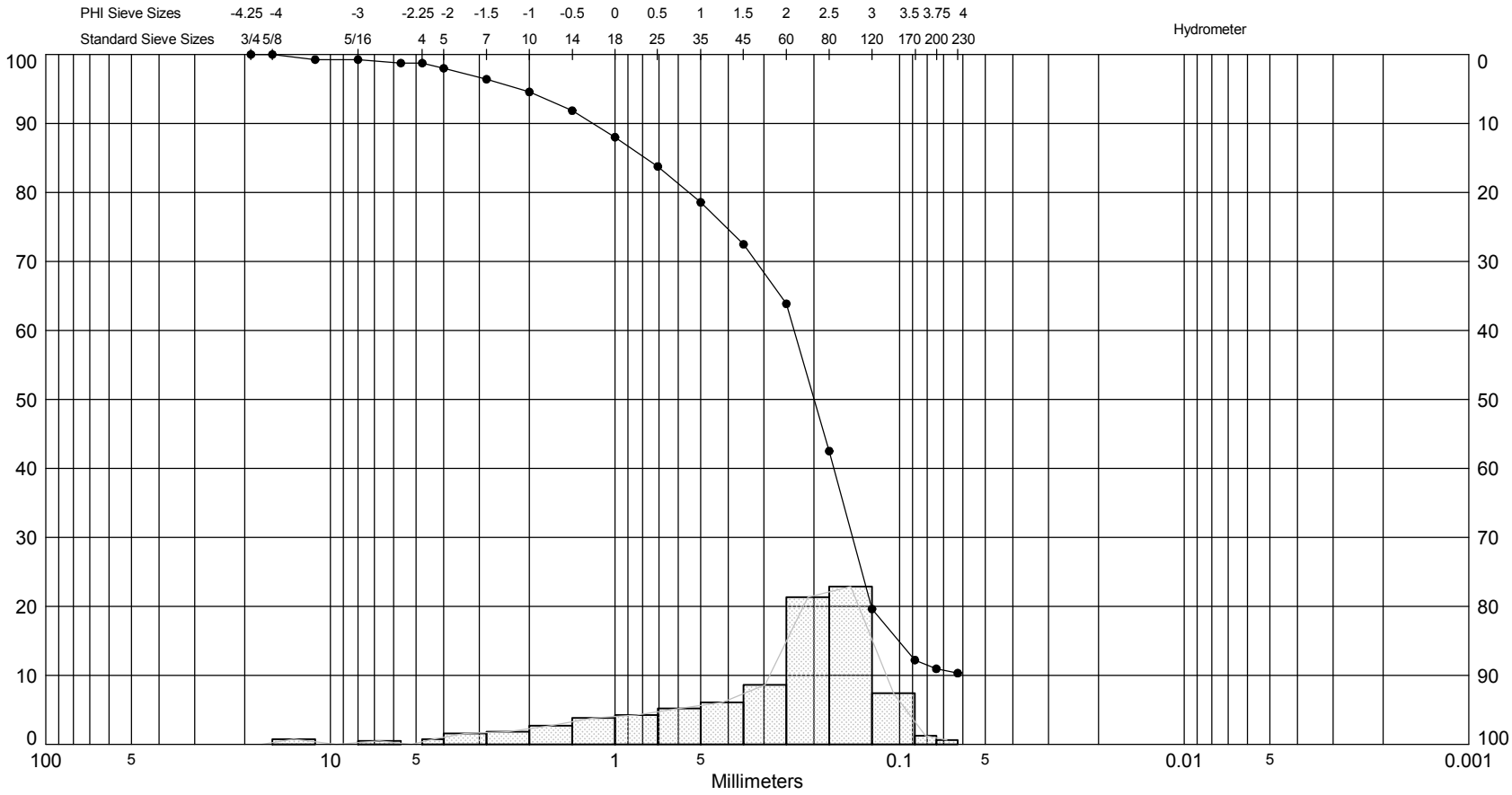
Depths and elevations based on measured values

Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z234 #1	—●—		SW-SM	#200 - 10.95 #230 - 10.32	1.63	17.73	2.32	1.74	-1.38	4.69	1.42

Comments: Gray sand, shell

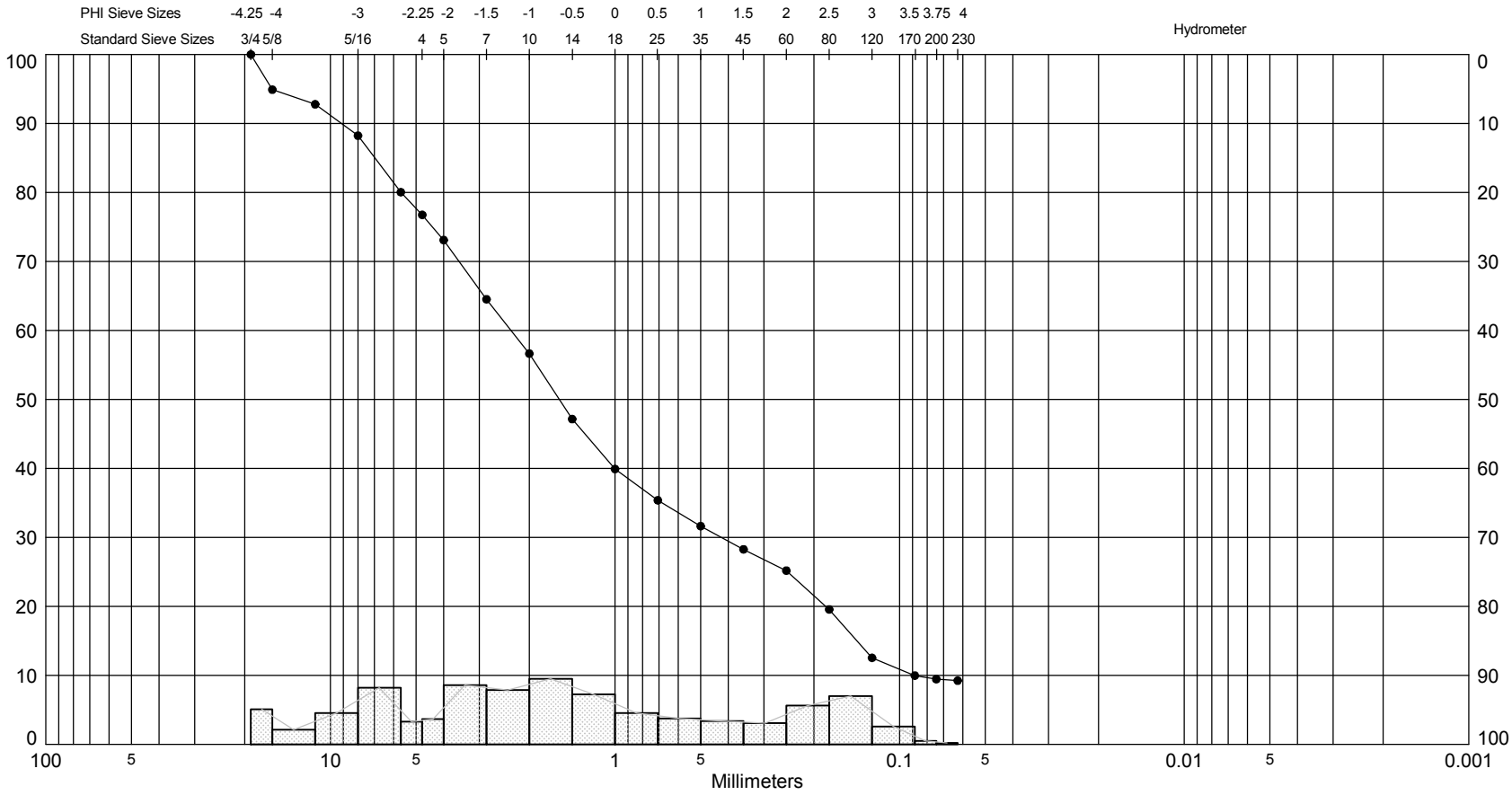
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z234 #2	—●—	SW-SM	W/ GRAVEL	#200 - 9.45 #230 - 9.24	2.27	32.47		-0.65	0.27	2.08	2.11

Comments: Gray sand, shell

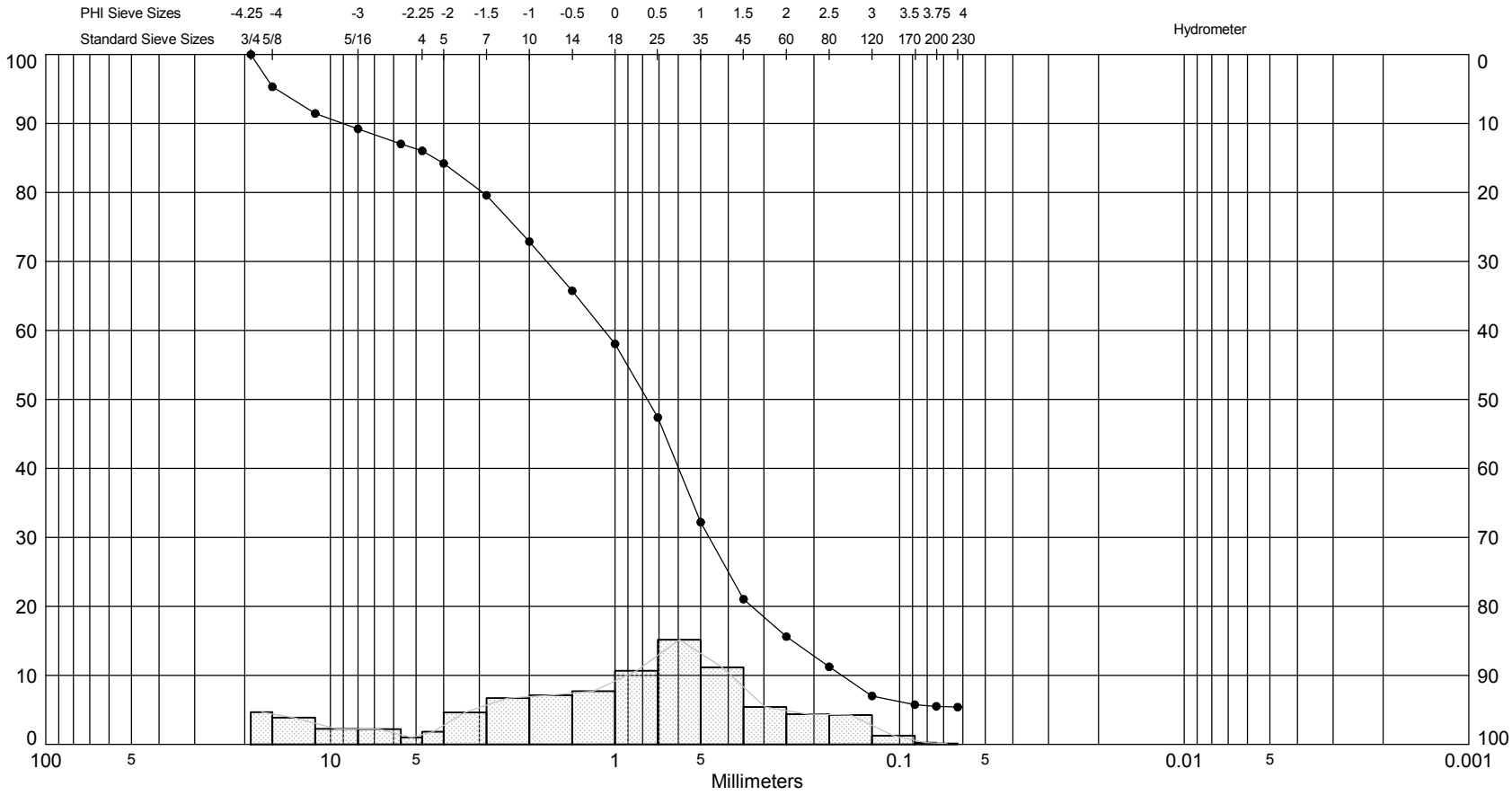
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z234 #3	—●—		SW-SM	#200 - 5.51 #230 - 5.40	0.73	2.19	0.38	-0.13	-0.54	2.64	1.87

Comments: Coarser gray sand, rocks

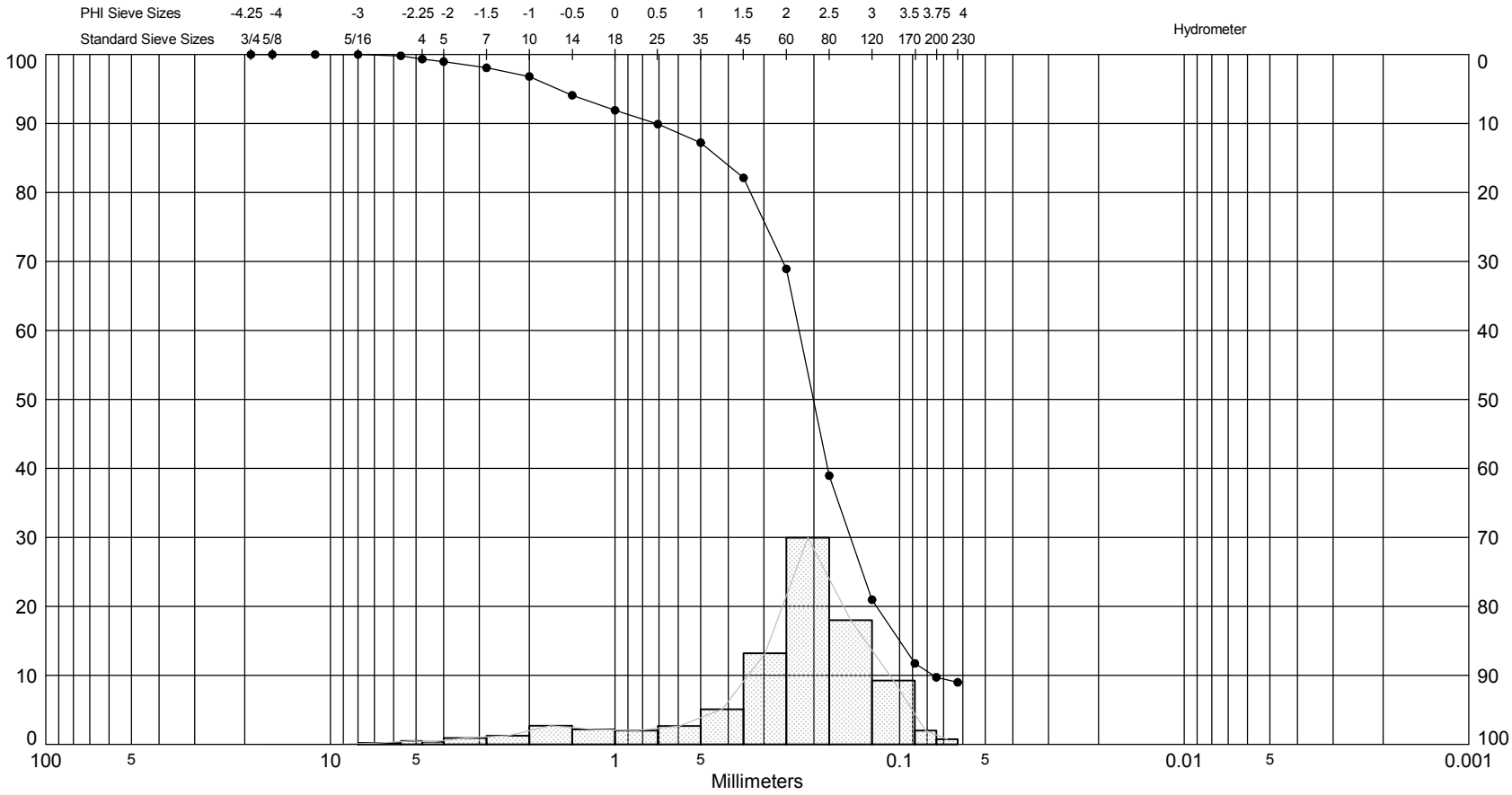
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z234 #4	—●—		SW-SM	#200 - 9.72 #230 - 8.99	1.06	2.26	2.32	1.99	-1.57	5.63	1.17

Comments: Fine gray sand

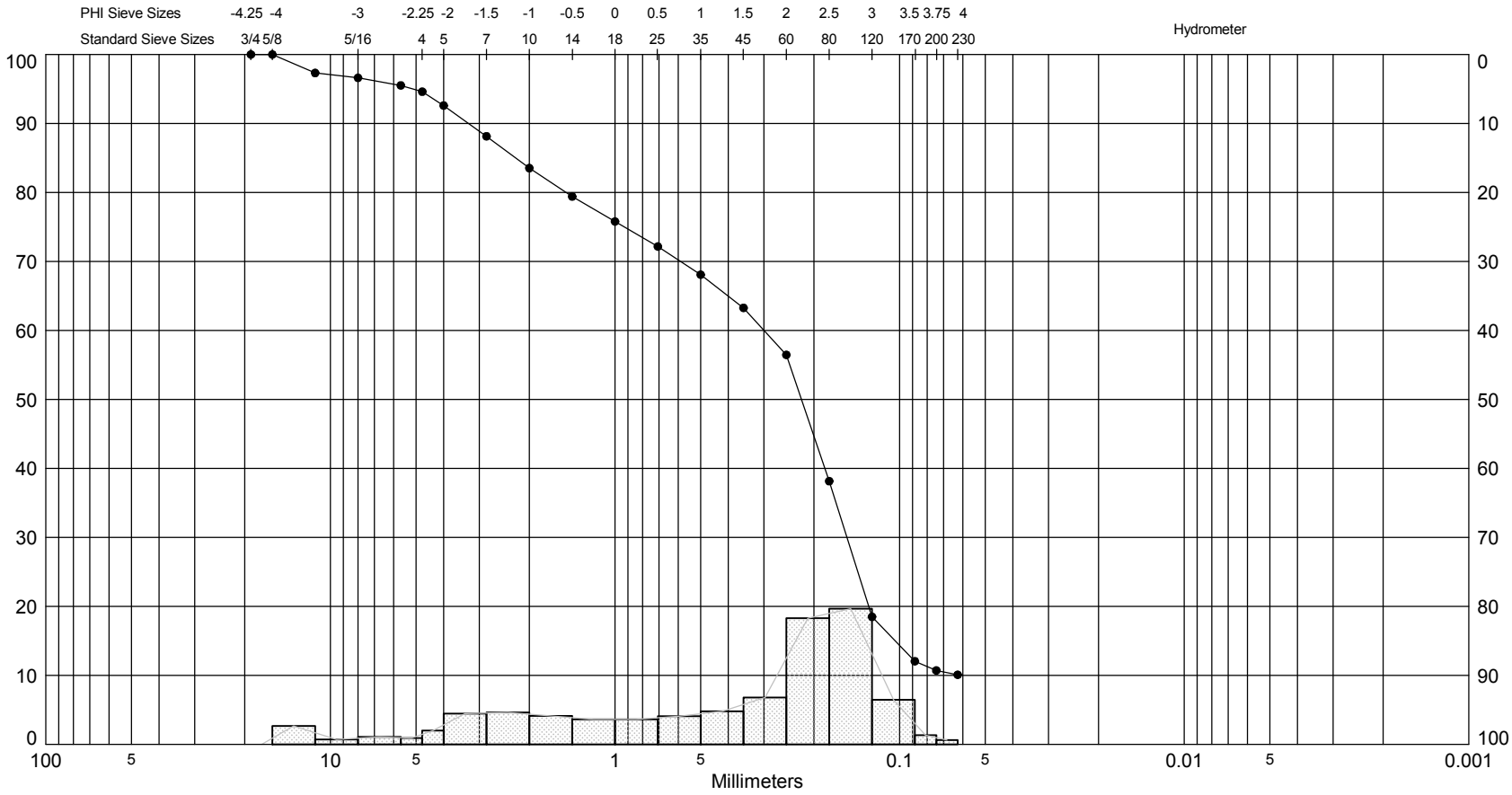
Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z235 #1	—●—		SW-SM	#200 - 10.71 #230 - 10.08	4.60	18.46	2.18	1.18	-0.93	2.76	1.92

Comments: Shell sand, rock, silt balls

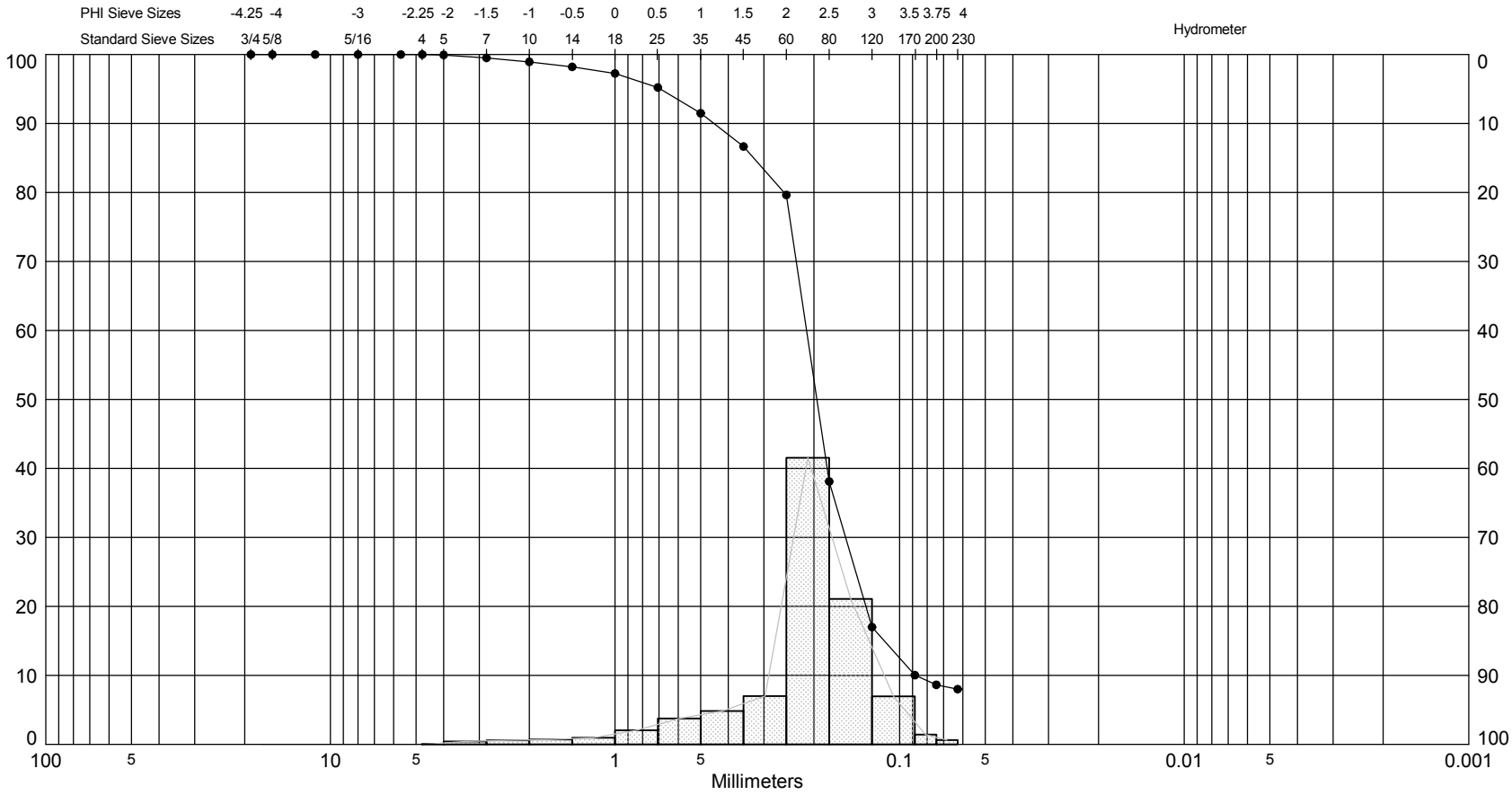
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z235 #2	—●—		SP-SM	#200 - 8.63 #230 - 8.00	1.31	4.90	2.36	2.18	-1.71	7.46	0.85

Comments: Sand, little silty organic matter

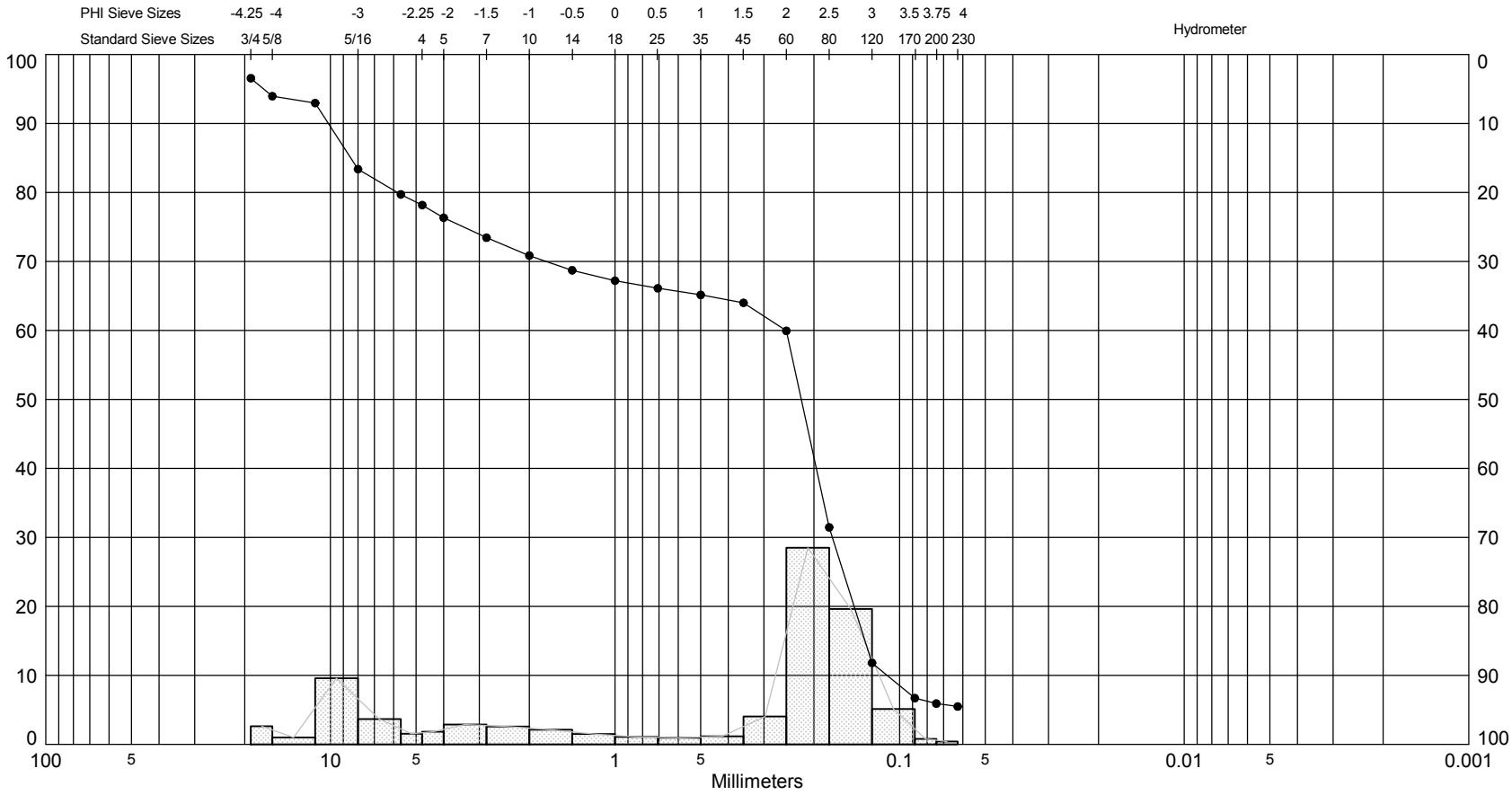
Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z235 #3	—●—		SW-SM	W/ GRAVEL #200 - 5.91 #230 - 5.48	1.37	14.39	2.17	0.64	-0.61	1.86	2.39

Comments: Brown sand, white shell

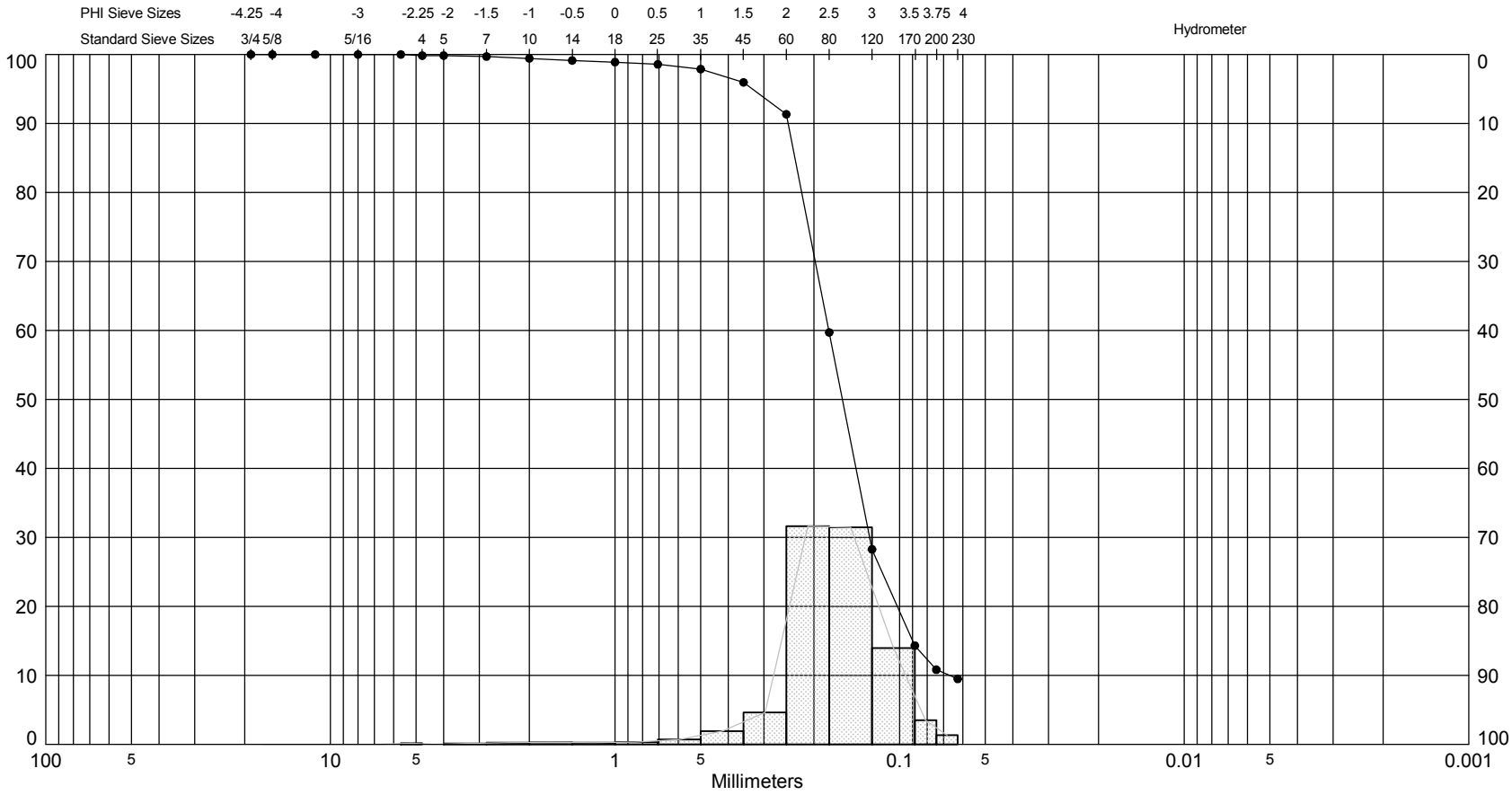
Depths and elevations based on measured values

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z235 #4	—●—		SP-SM	#200 - 10.82 #230 - 9.49	0.89	3.62	2.65	2.55	-2.15	13.89	0.69

Comments: Sand, silt

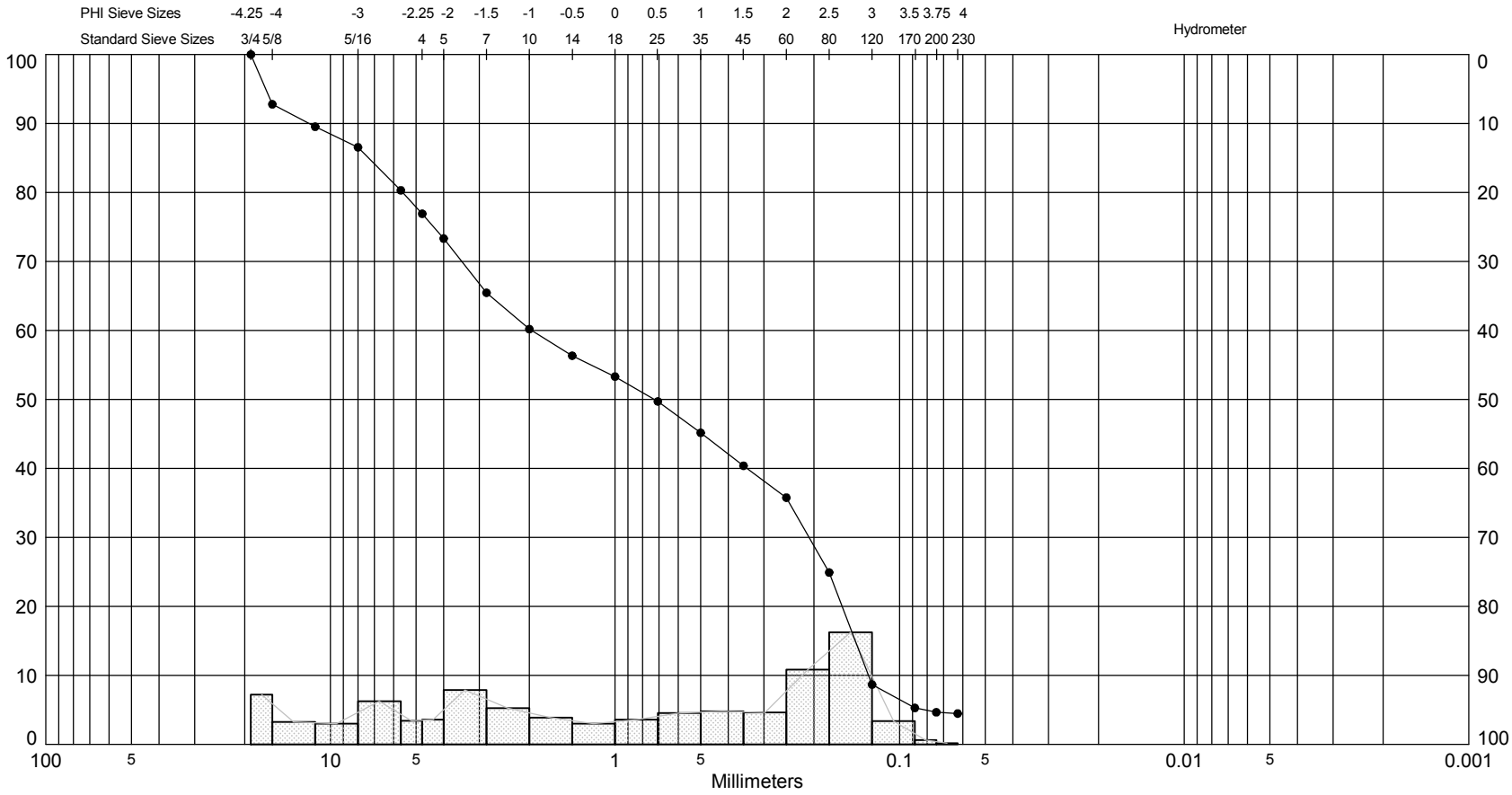
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z255 #1	—●—		SW	#200 - 4.65 #230 - 4.47	1.68	18.98	0.46	-0.07	-0.19	1.61	2.43

Comments: Sand, large shell, rock, silt balls

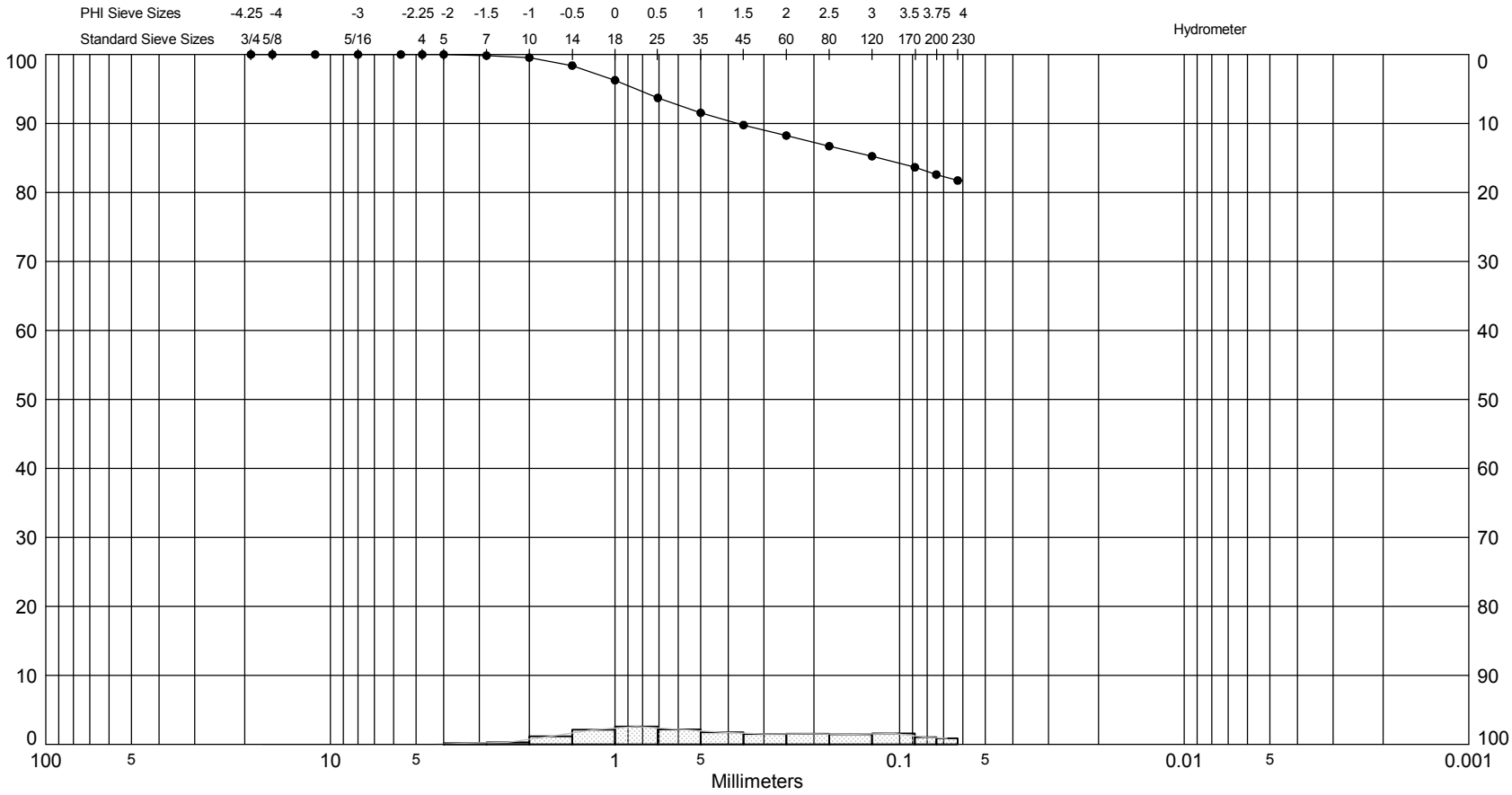
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z255 #2	—●—		ML-CL	#200 - 82.59 #230 - 81.73	14.52	6.17		1.37	0.13	1.9	1.46

Comments: Silt

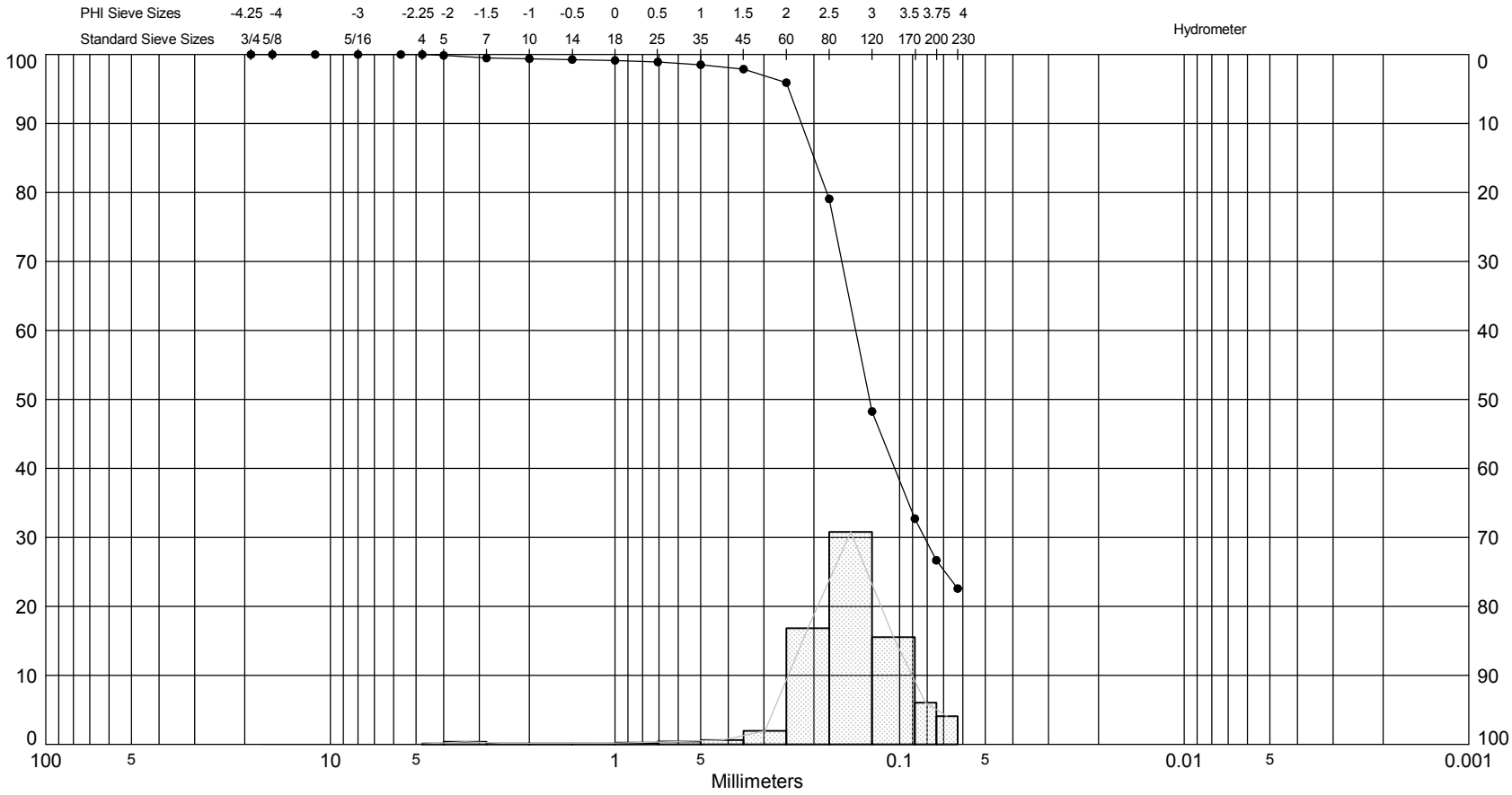
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z255 #3	—●—		SM	#200 - 26.68 #230 - 22.59	0.91	0.98	2.97	2.77	-2.42	16.01	0.71

Comments: Sand, dark fines

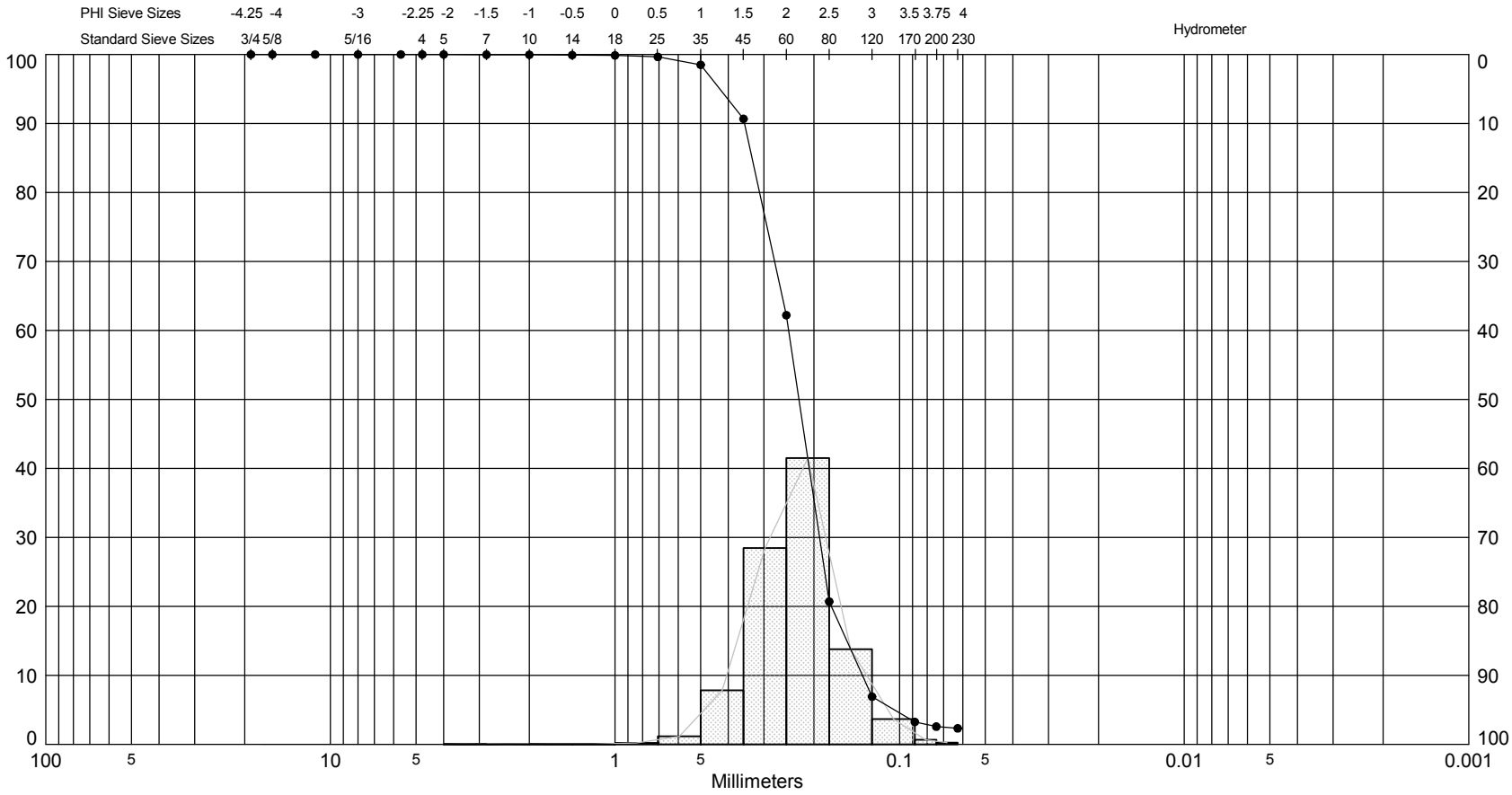
Depths and elevations based on measured values

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z255 #4	—●—		SP	#200 - 2.57 #230 - 2.32	0.41	0.68	2.15	2.12	-0.18	5.2	0.53

Comments: Coarser quartz sand, dark fines

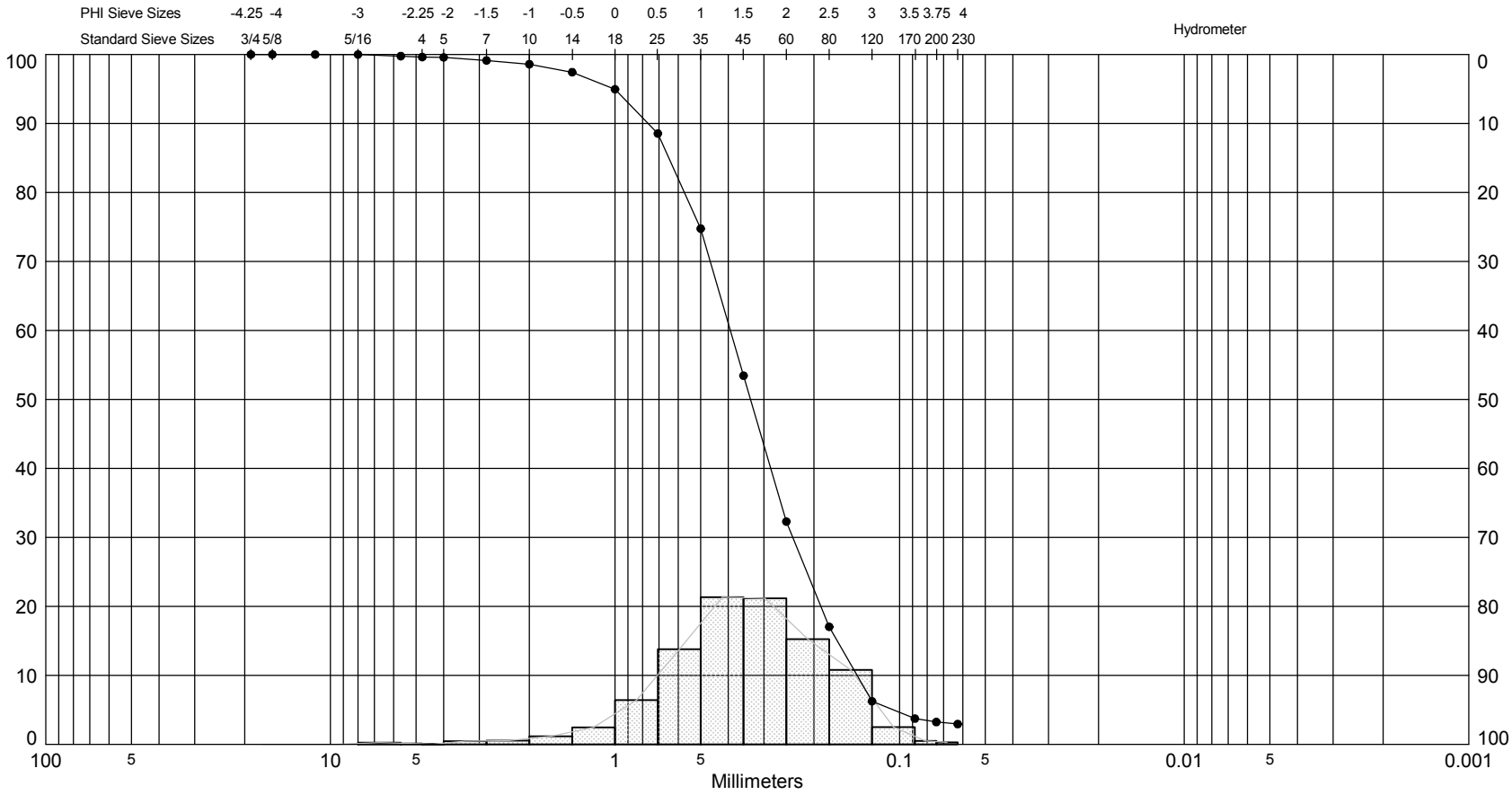
Depths and elevations based on measured values

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z255 #5	—●—		SW	#200 - 3.24 #230 - 2.94	0.49	0.91	1.58	1.51	-0.65	4.48	0.94

Comments: Coarser quartz sand, dark fines

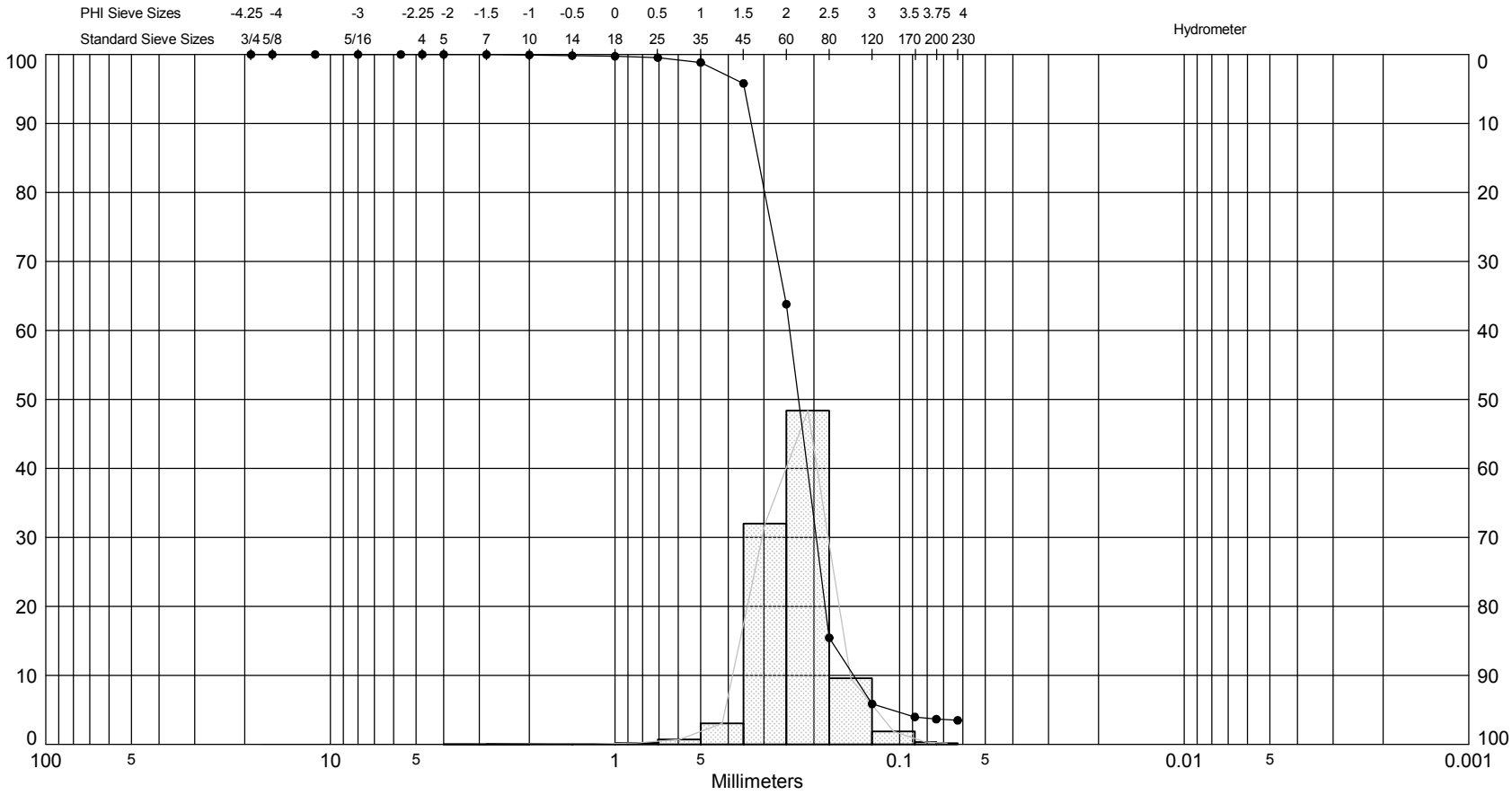
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z256 #1	—●—		SP	#200 - 3.65 #230 - 3.48	0.53	3.26	2.14	2.11	-0.63	9.27	0.45

Comments: Coarser quartz sand, dark fines

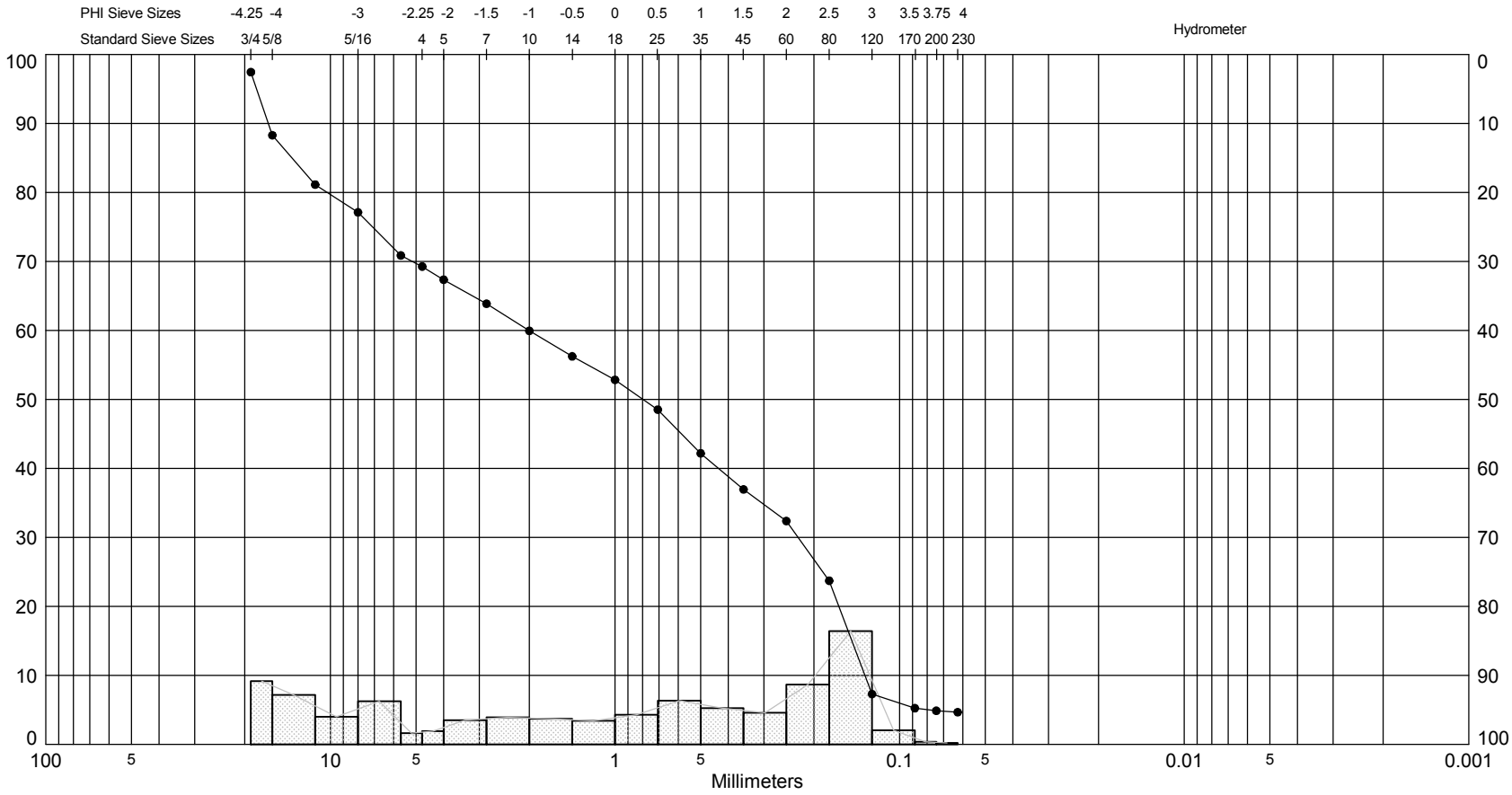
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z256 #2	—●—	SW WITH GRAVEL		#200 4.87 #230 4.66	1.22	56.16	0.33	-0.36	-0.08	1.56	2.51

Comments: Brown sand, white shell

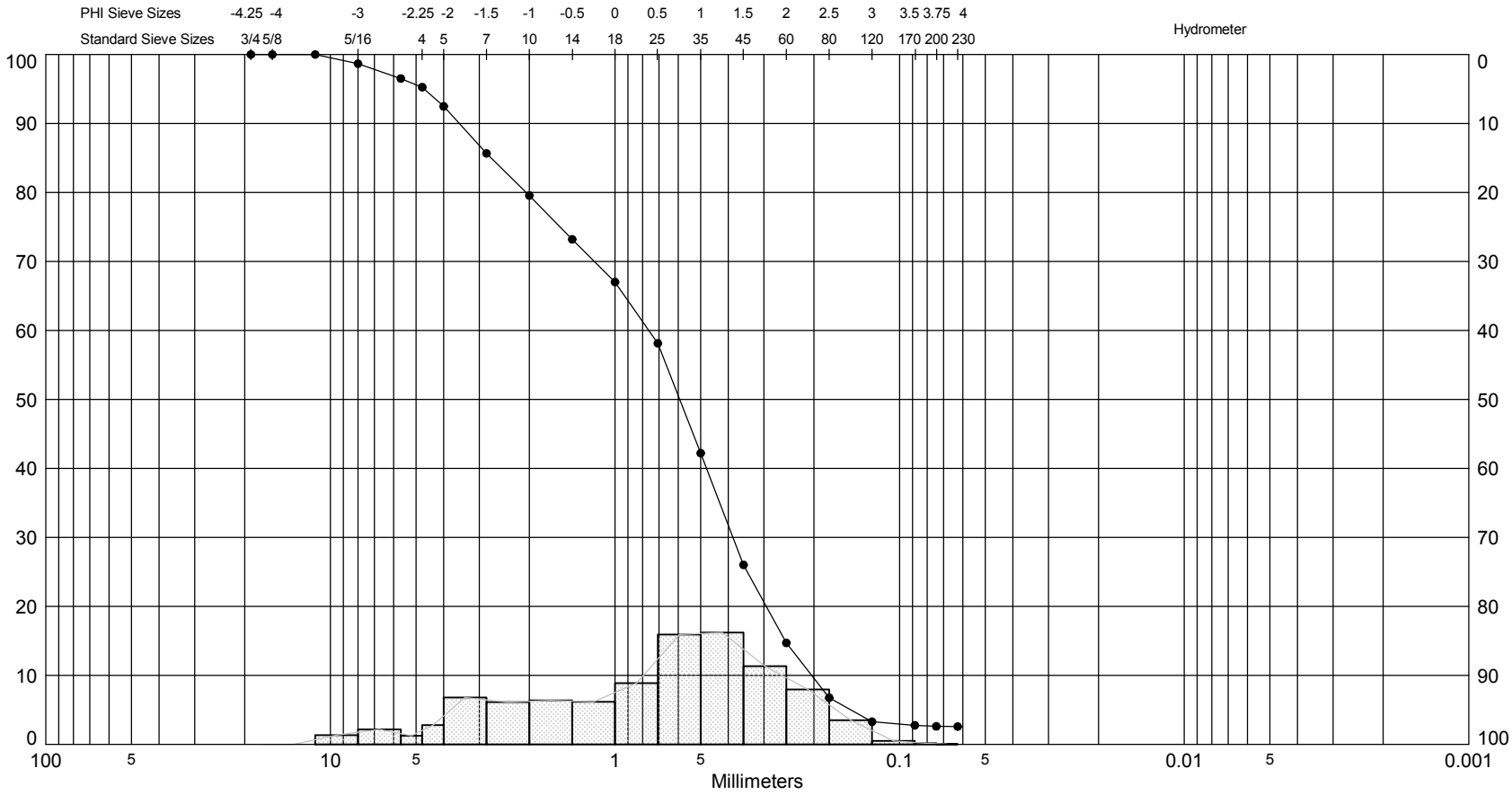
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z256 #3	—●—		SW	#200 - 2.61 #230 - 2.58	0.35	0.64	0.76	0.4	-0.5	2.46	1.48

Comments: Coaser quartz sand, rock

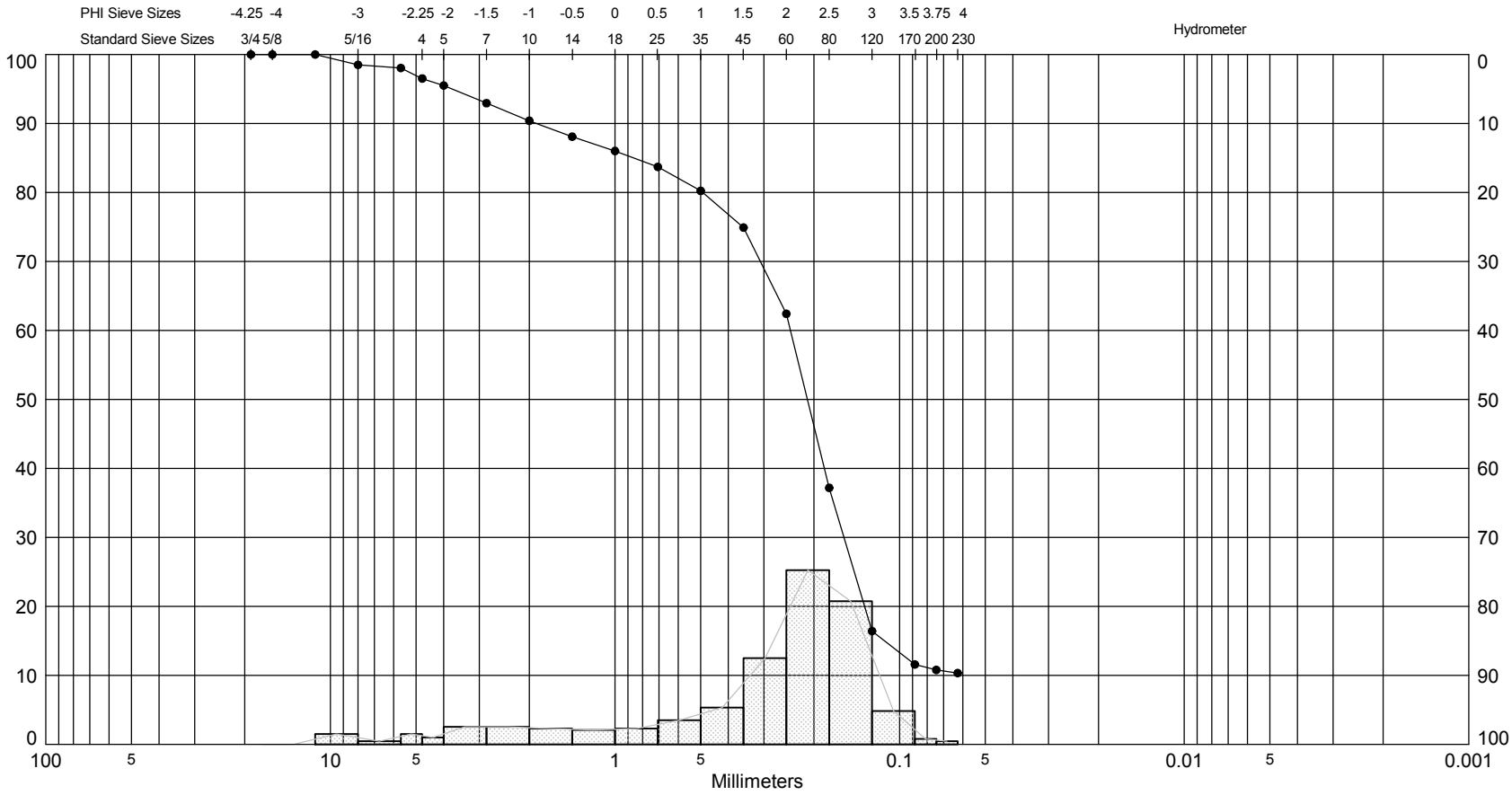
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z256 #4	—●—		SW-SM	#200 - 10.79 #230 - 10.33	1.57	9.58	2.25	1.61	-1.48	4.39	1.55

Comments: Gray sand, organic silt

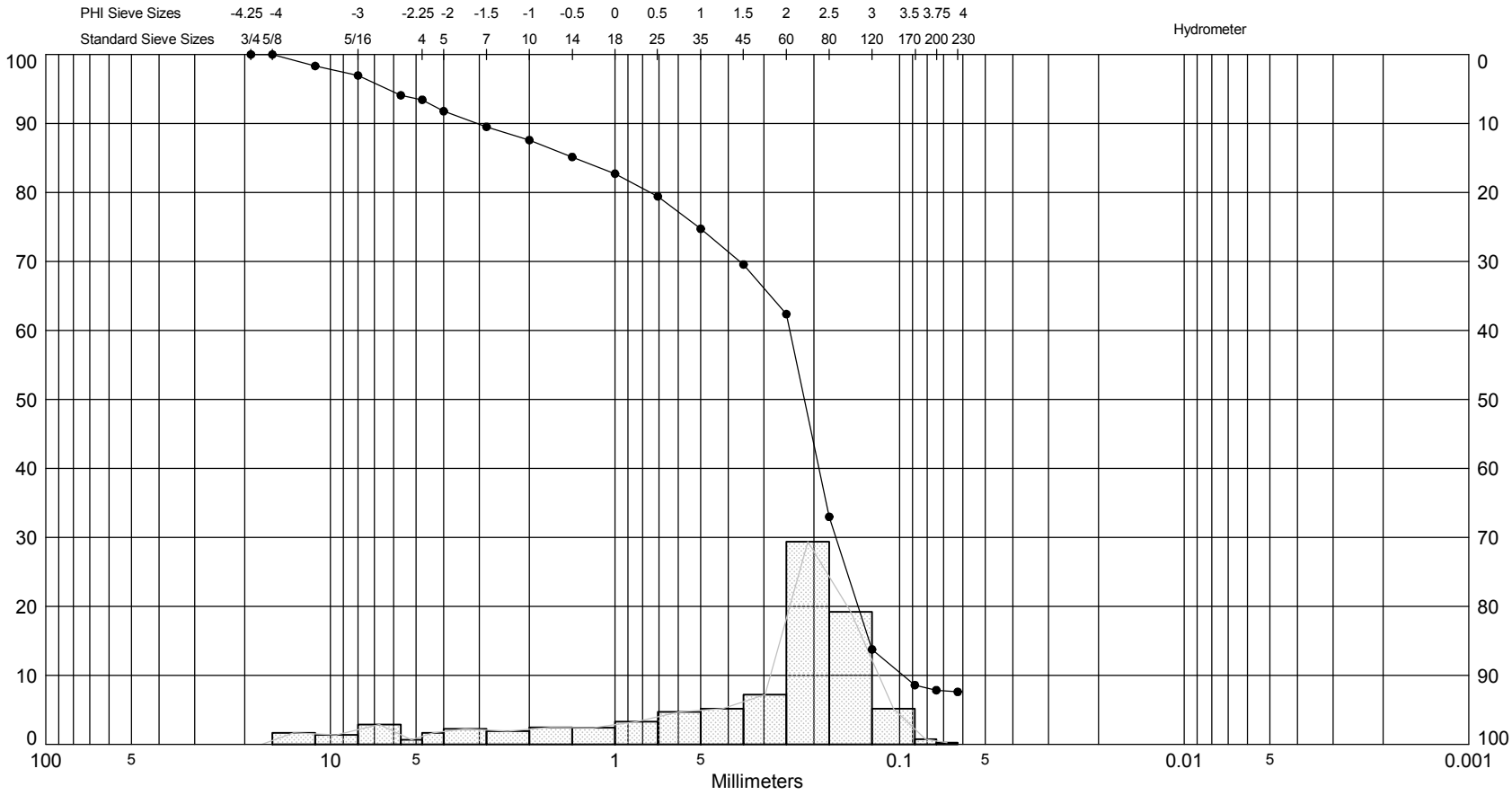
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z257 #1	—●—		SW-SM	#200 - 7.85 #230 - 7.61	1.75	9.31	2.21	1.41	-1.39	3.91	1.78

Comments: Coaser quartz sand, rock, silt balls

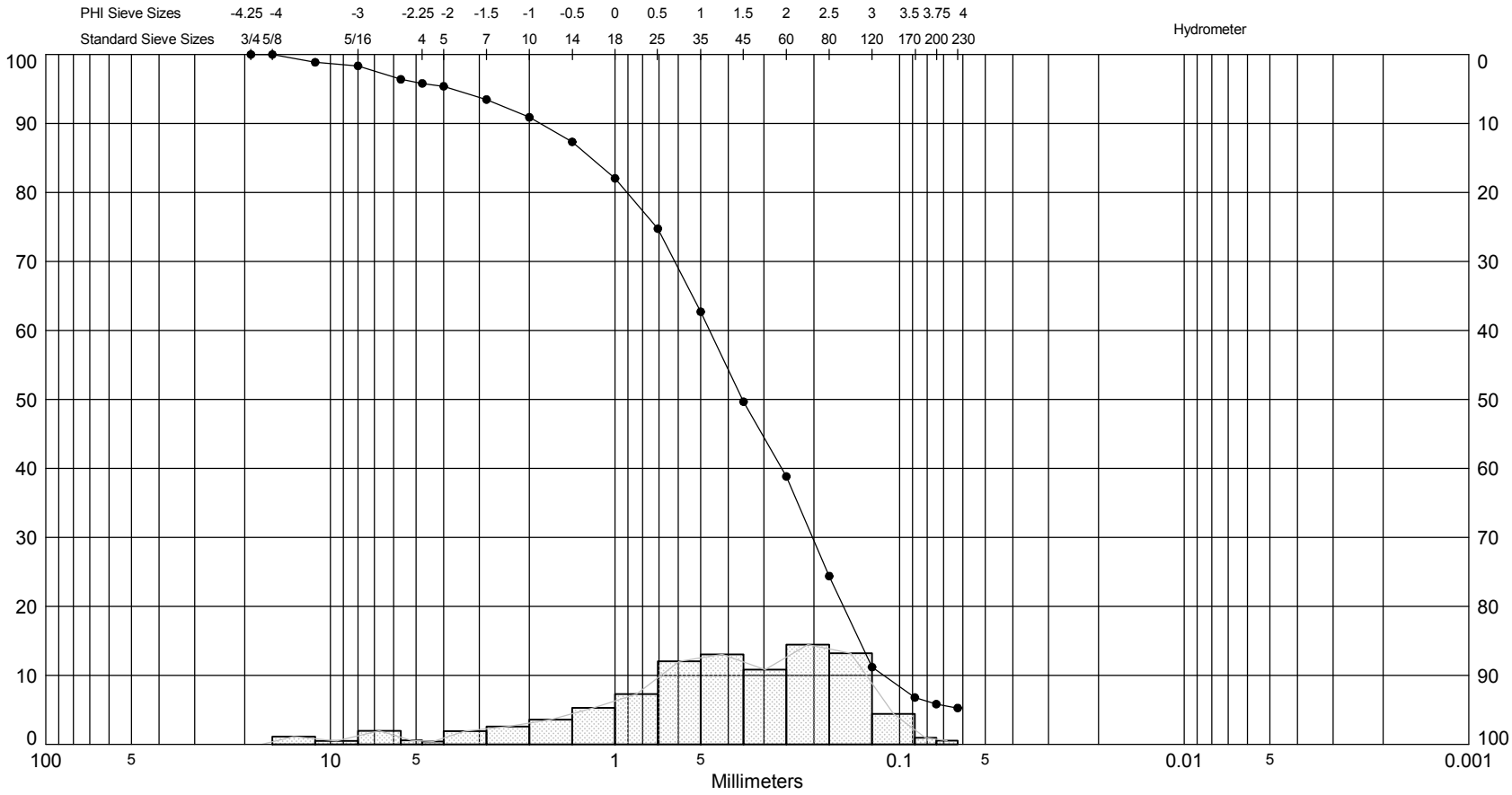
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z257 #2	—●—		SW-SM	#200 - 5.83 #230 - 5.27	0.91	1.74	1.49	1.17	-0.95	3.76	1.54

Comments: Coaser quartz sand, rock

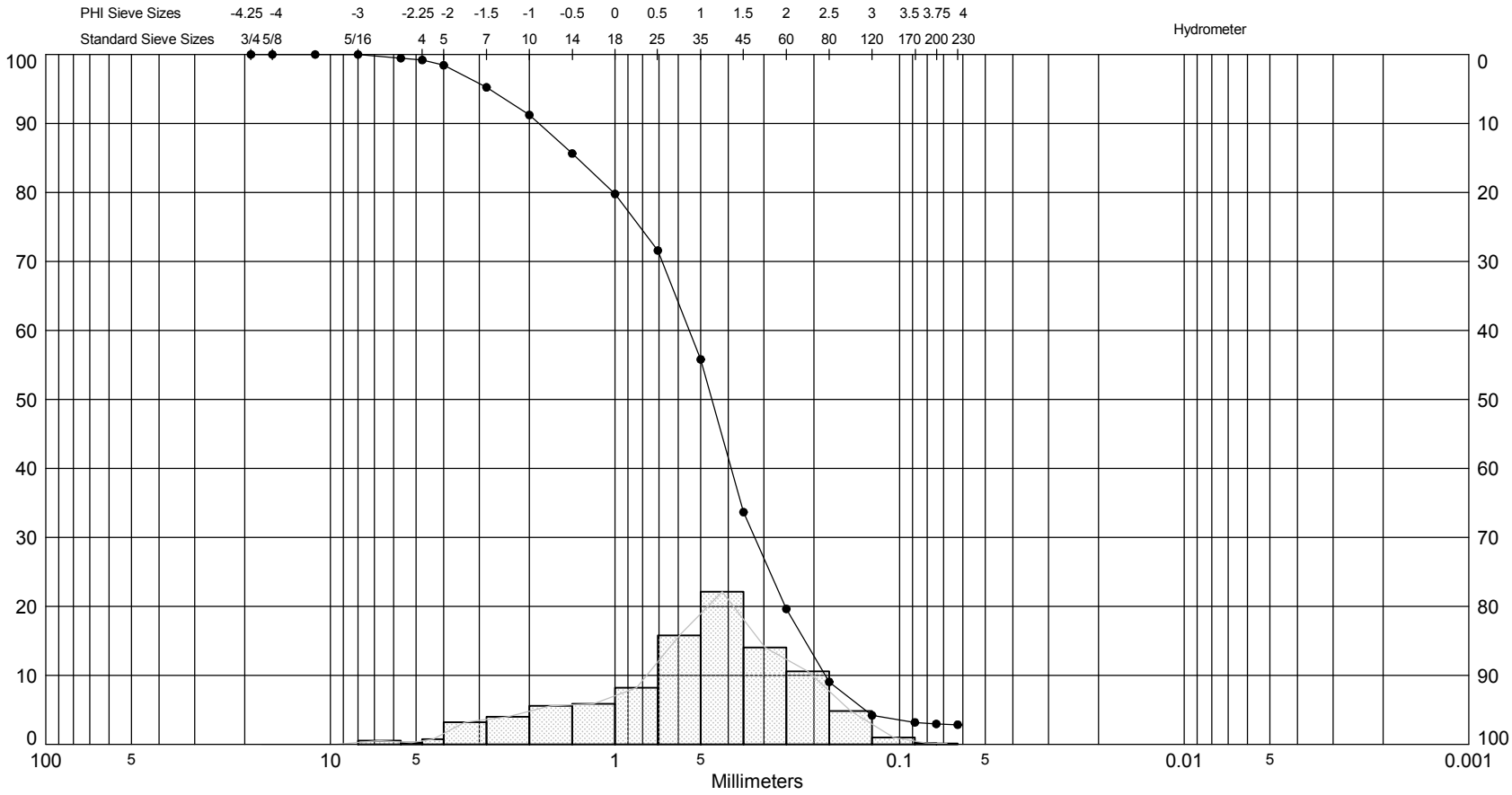
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
Analyzed By:	MB
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Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z257 #3	—●—		SW	#200 - 2.96 #230 - 2.85	0.30	0.57	1.13	0.9	-0.62	3.09	1.21

Comments: Coaser tan quartz sand, silt balls

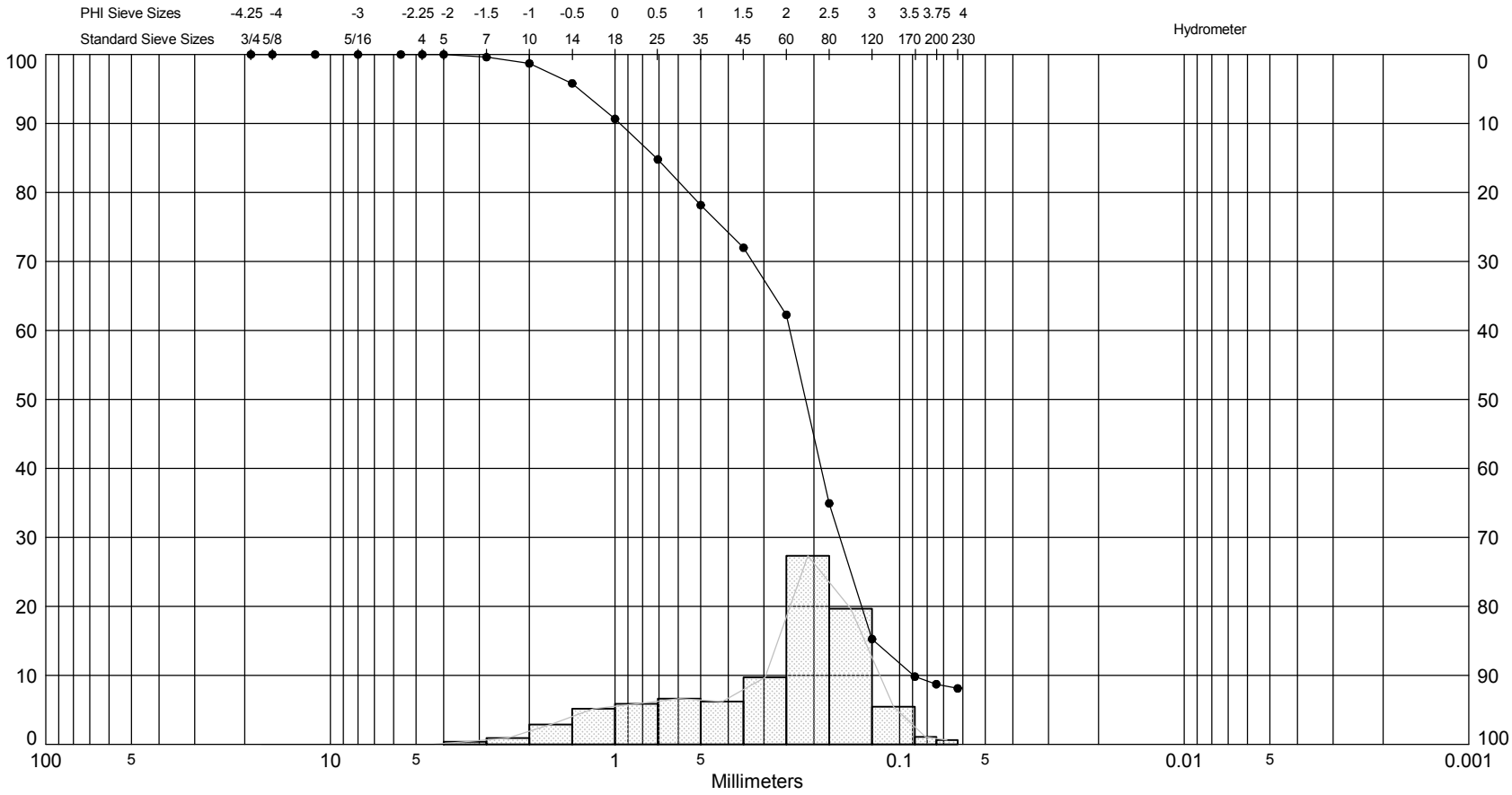
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
Analyzed By:	MB
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z257 #4	—●—		SW-SM	#200 - 8.72 #230 - 8.11	1.22	1.40	2.22	1.8	-0.88	3.04	1.13

Comments: Coaser quartz sand/rock, dark fines

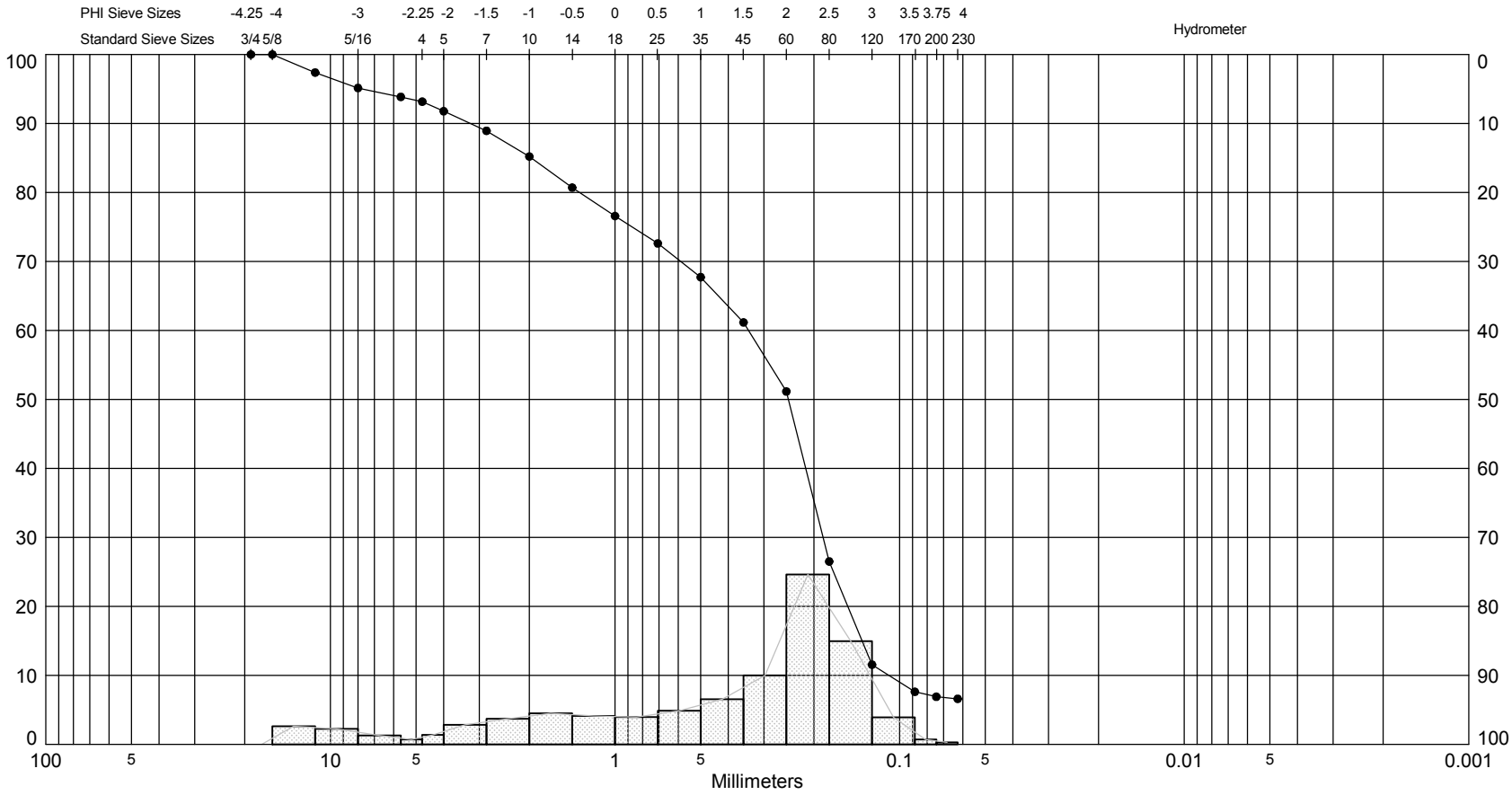
Depths and elevations based on measured values

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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z258 #1	—●—		SW-SM	#200 - 6.90 #230 - 6.60	4.68	18.90	2.02	1.12	-1.08	3.2	1.85

Comments: Sand, dark fines, rock

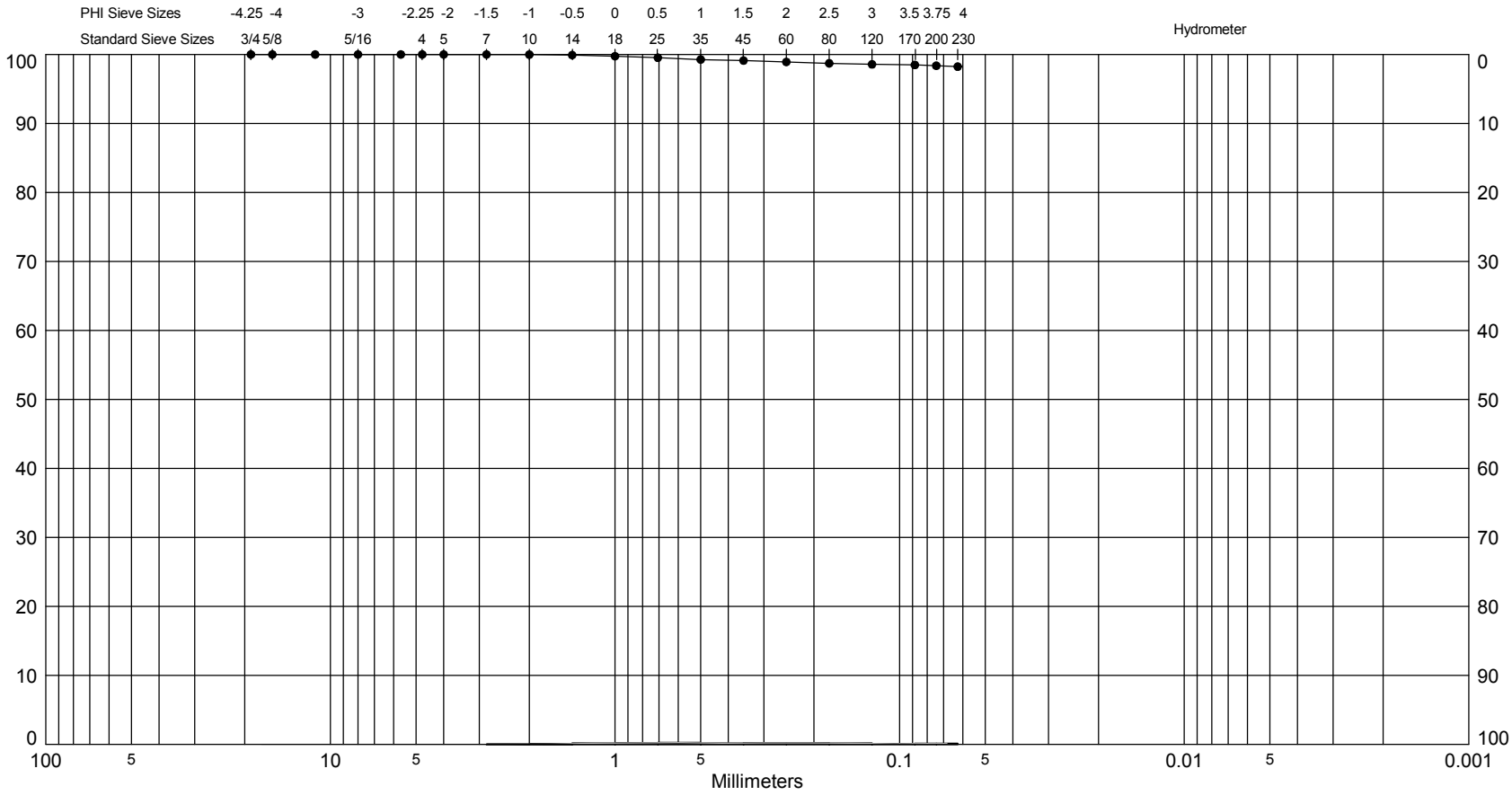
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z258 #2	—●—		ML-CL	#200 - 98.37 #230 - 98.24	17.50	9.90		1.57	0.12	1.96	1.37

Comments: Silt

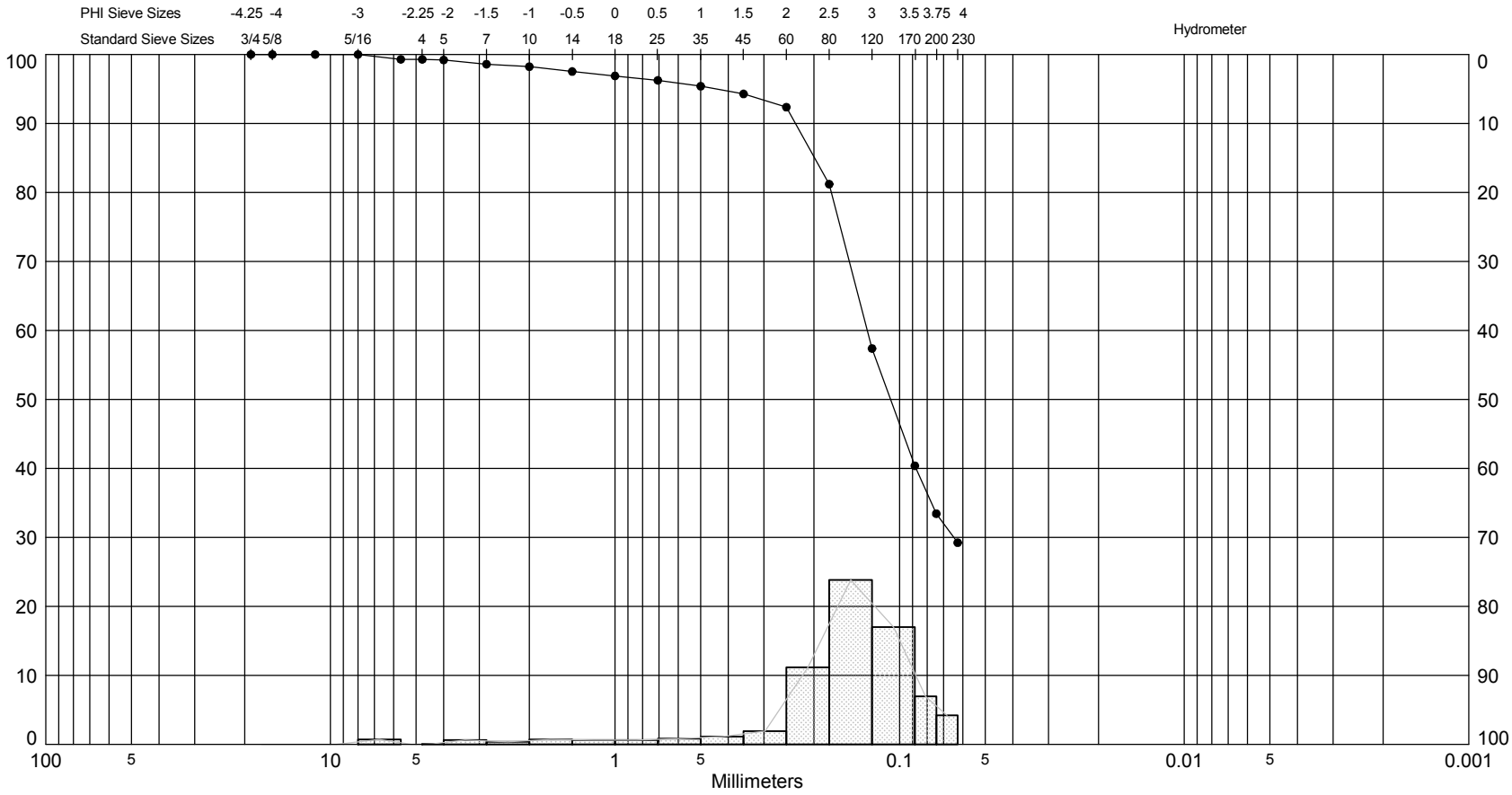
Depths and elevations based on measured values

Sample Information	
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Analysis Date:	04-10-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z258 #3	—●—		SM	#200 - 33.43 #230 - 29.23	7.66	1.83	3.22	2.66	-2.61	11.46	1.1

Comments: Fine tan sand, dark silt, wood

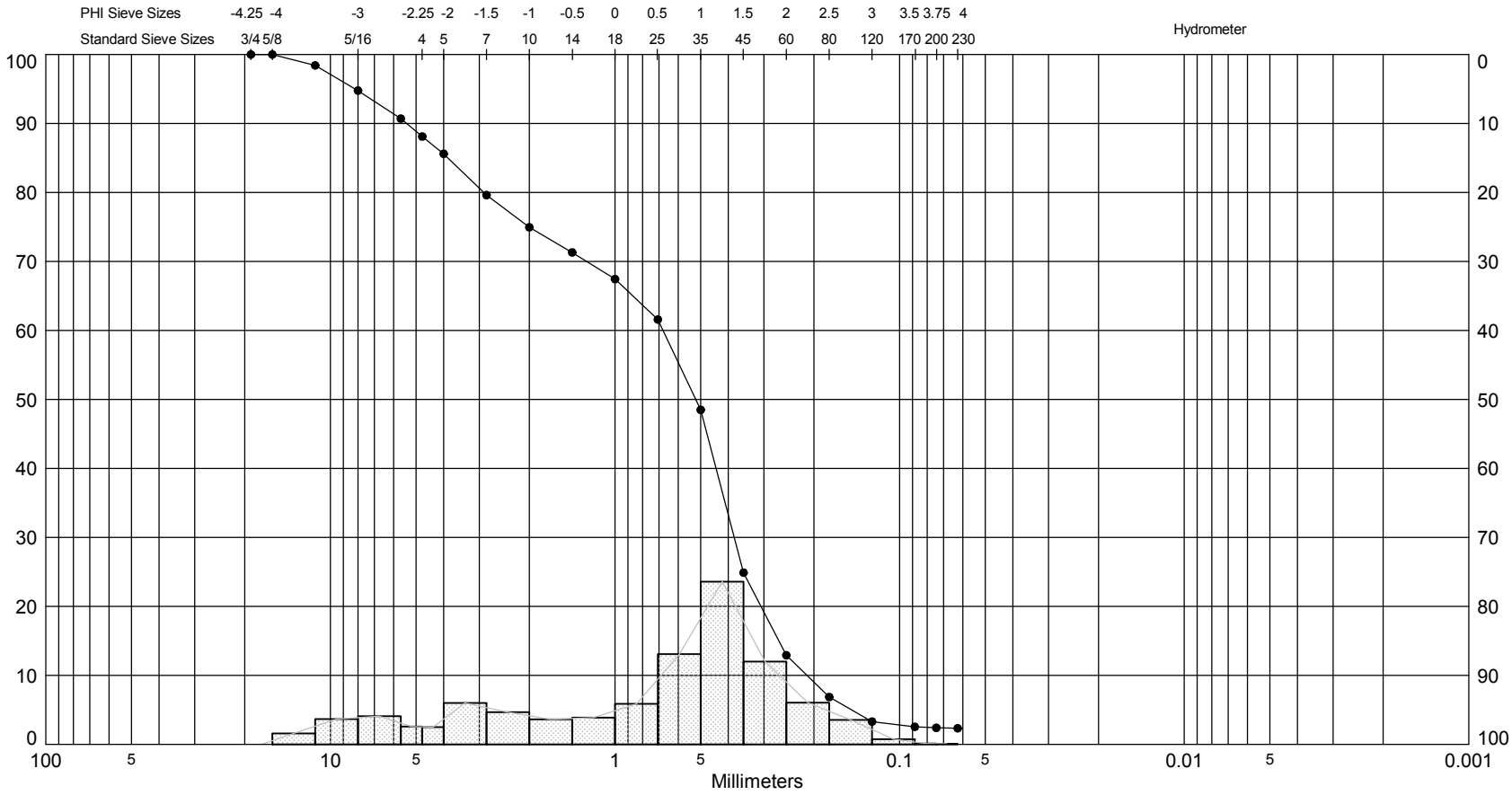
Depths and elevations based on measured values

Sample Information	
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Analysis Date:	04-10-12
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z258 #4	—●—		SW	#200 - 2.40 #230 - 2.33	0.60	0.97	0.94	0.29	-0.71	2.45	1.71

Comments: Coarser tan quartz sand, rock, trace organic matter

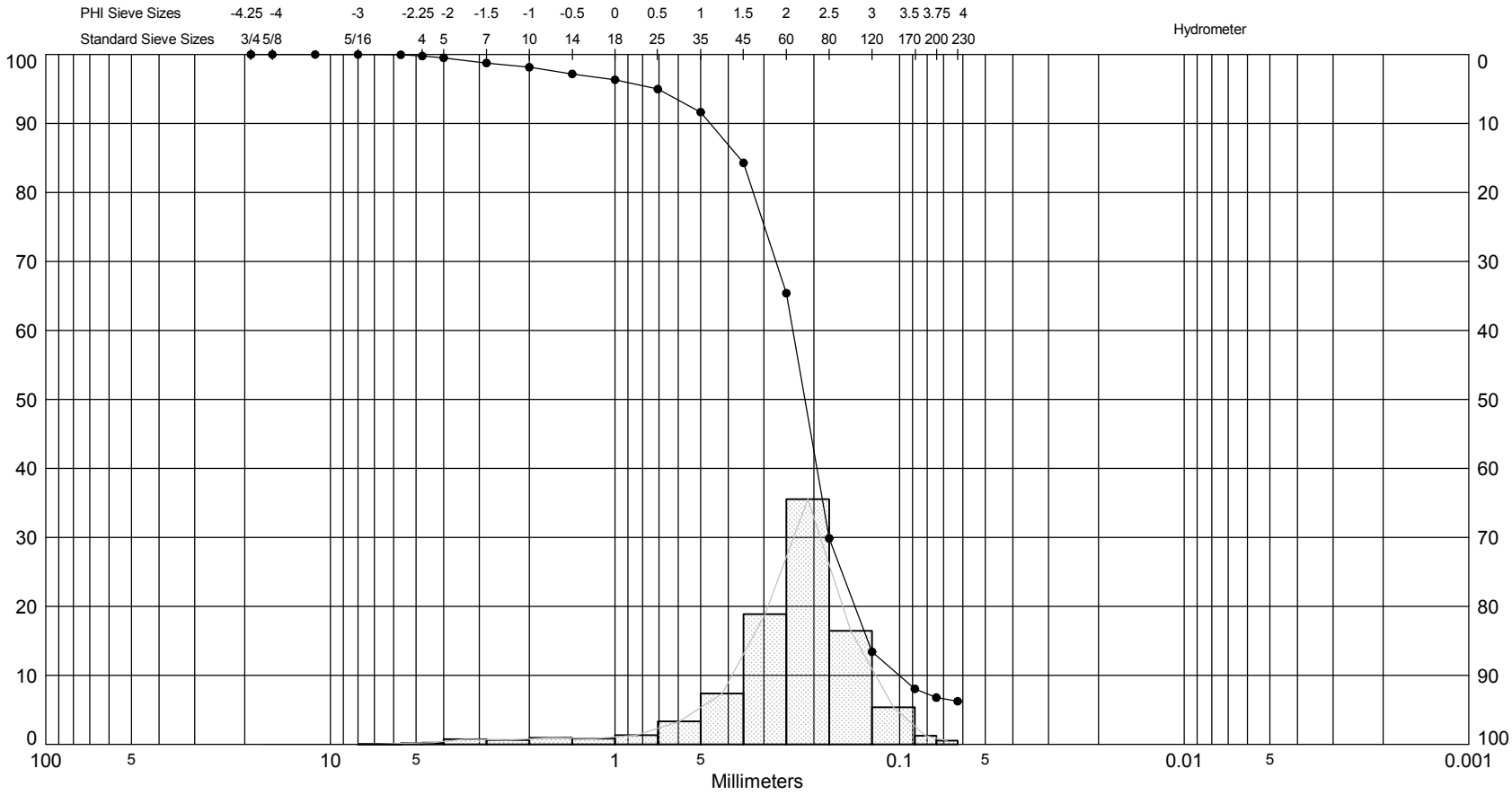
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z258 #5	—●—		SW-SM	#200 - 6.78 #230 - 6.25	1.33	1.46	2.22	2.03	-1.79	8.32	0.91

Comments: Tan sand, dark fines, wood

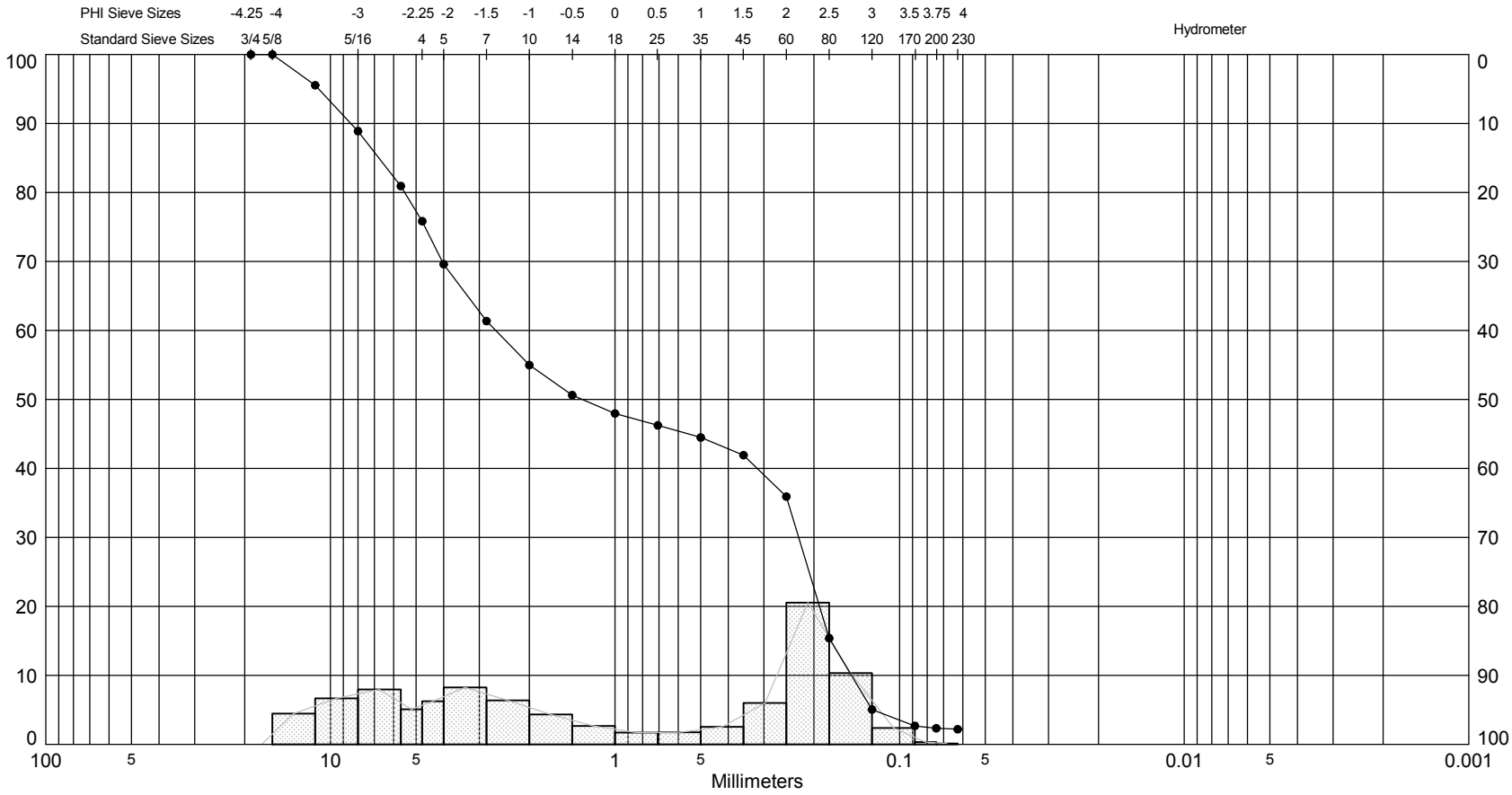
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z259 #1	—●—		SW	#200 - 2.33 #230 - 2.19	1.41	18.58		-0.13	-0.02	1.4	2.31

Comments: Coarser quartz sand, rock

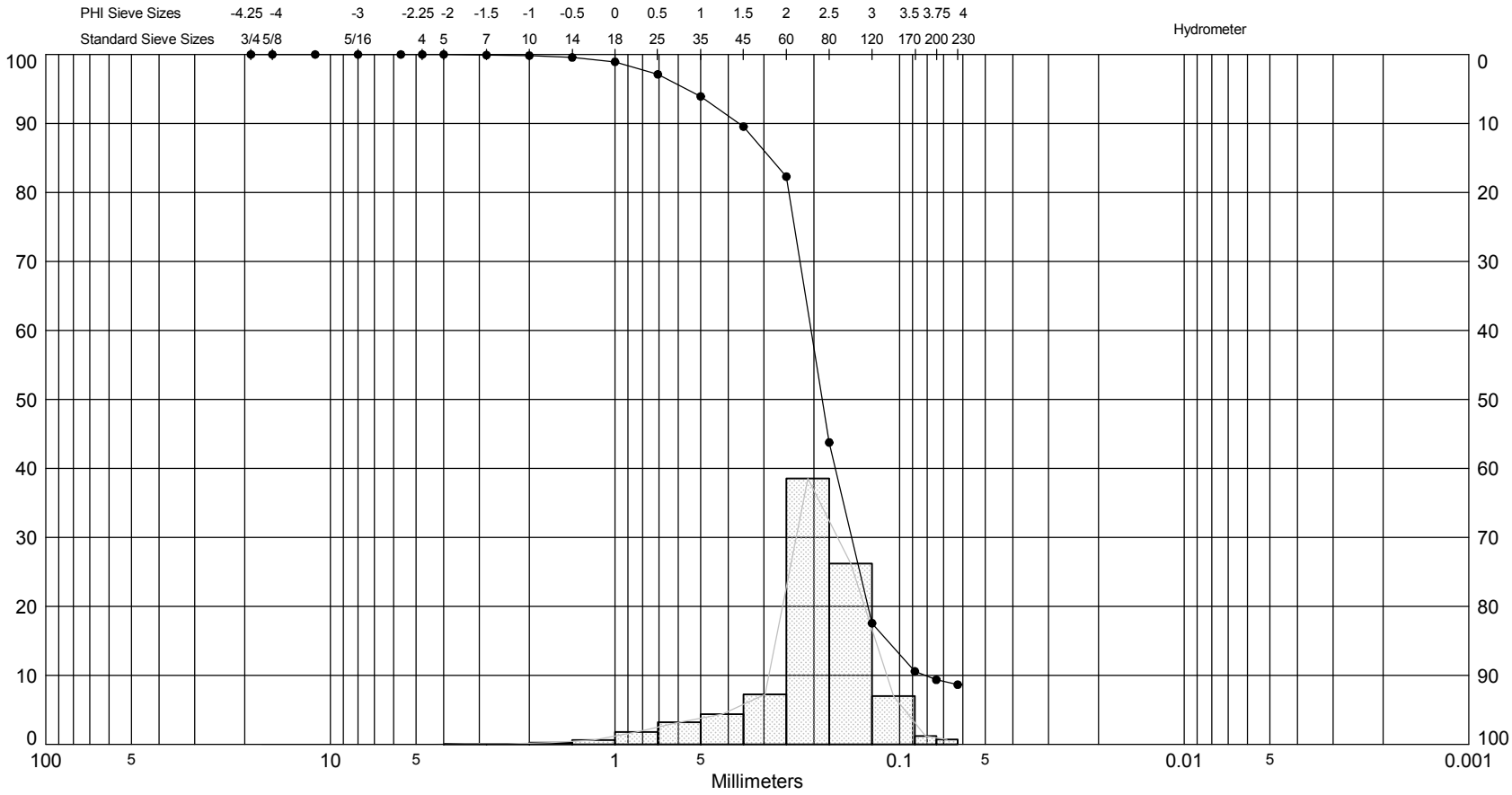
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z259 #2	—●—		SP-SM	#200 - 9.36 #230 - 8.65	0.73	1.59	2.42	2.29	-1.35	6.42	0.72

Comments: Tan sand, yellow silt

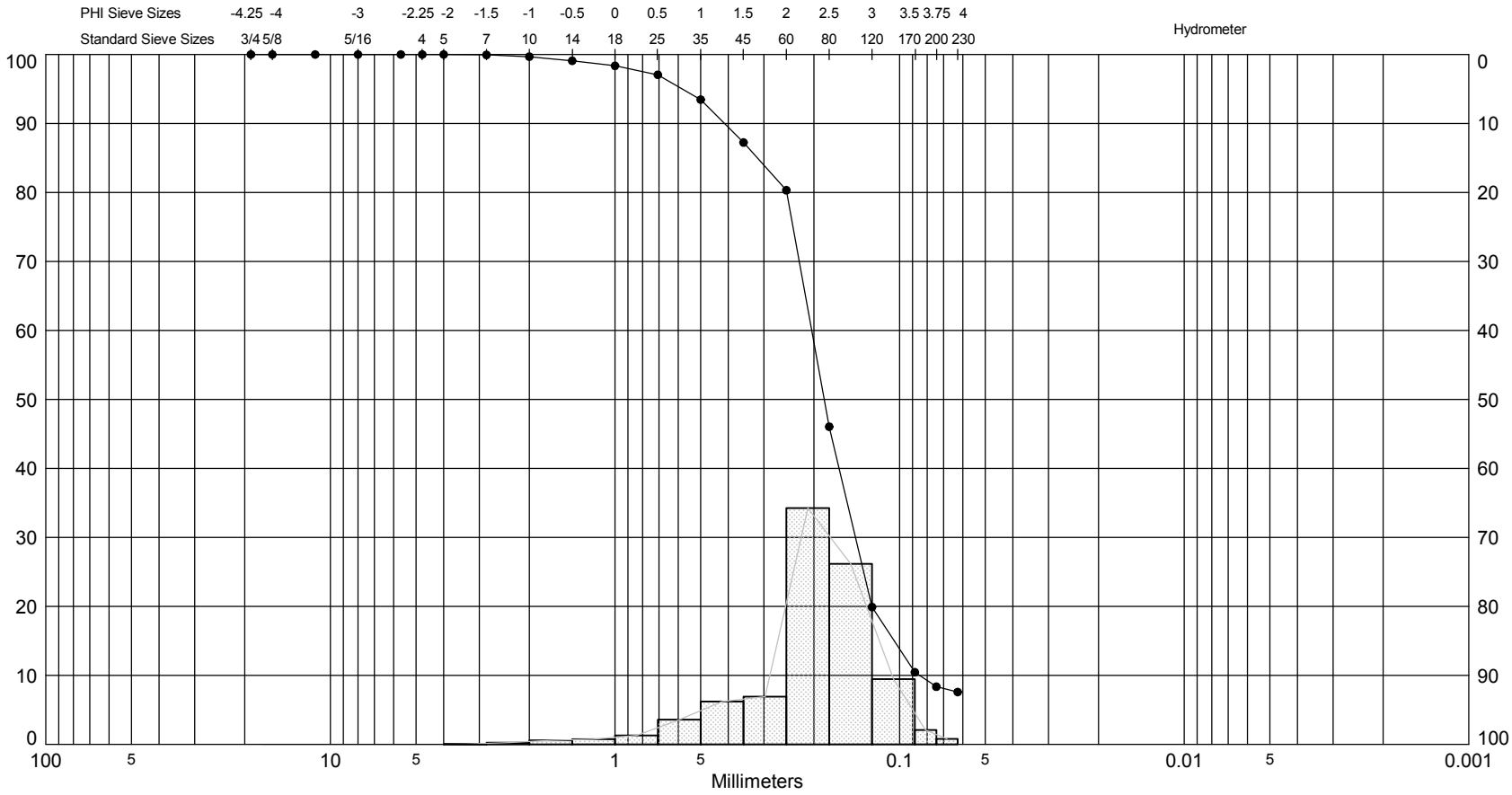
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z259 #3	—●—		SP-SM	#200 - 8.36 #230 - 7.58	0.99	1.48	2.44	2.3	-1.3	5.95	0.78

Comments: Gray sand, dark fines

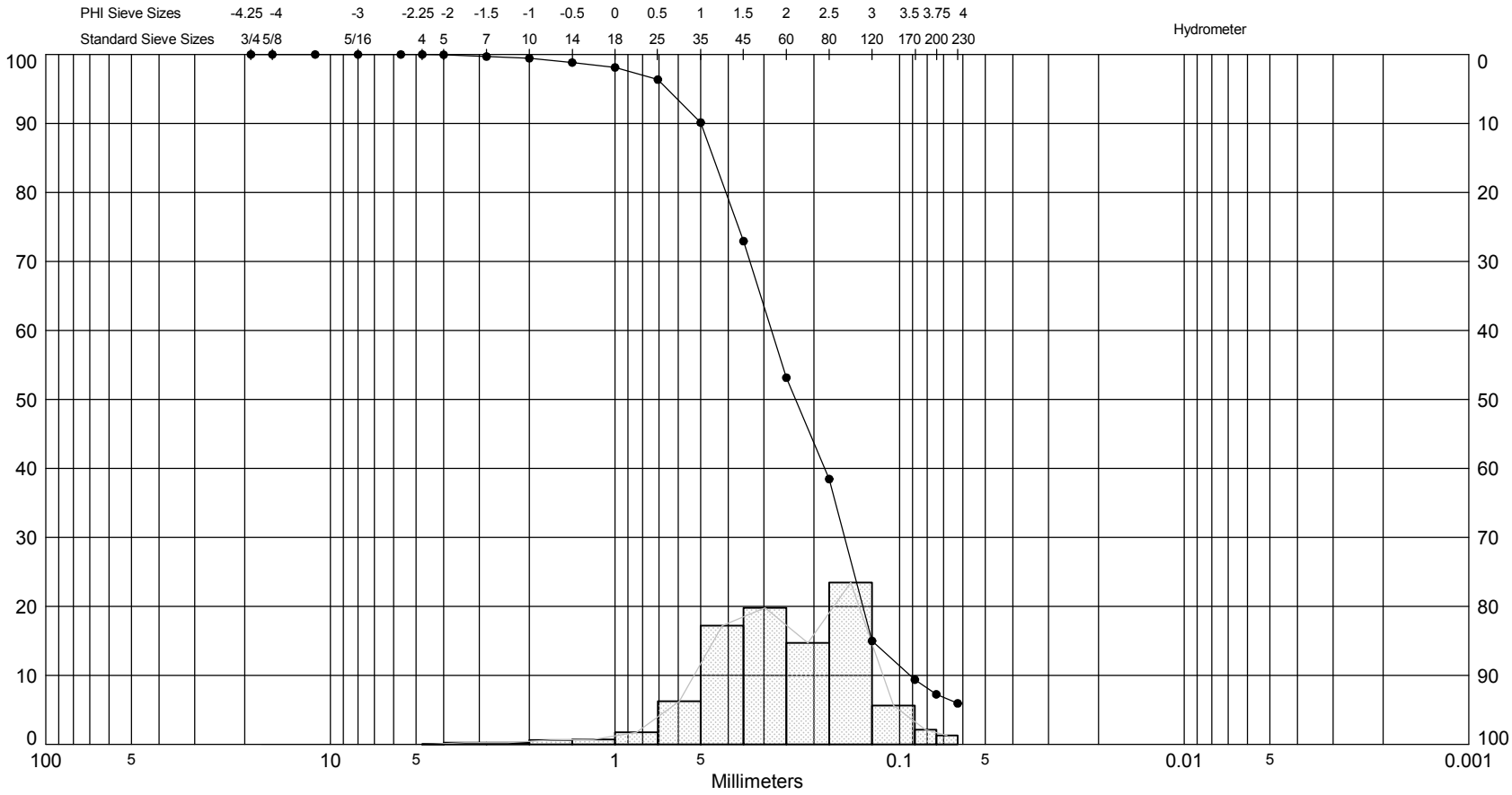
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
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Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z259 #4	—●—		SW-SM	#200 - 7.25 #230 - 5.94	0.36	0.91	2.11	2	-0.56	3.98	0.89

Comments: Coarser quartz sand, trace fines

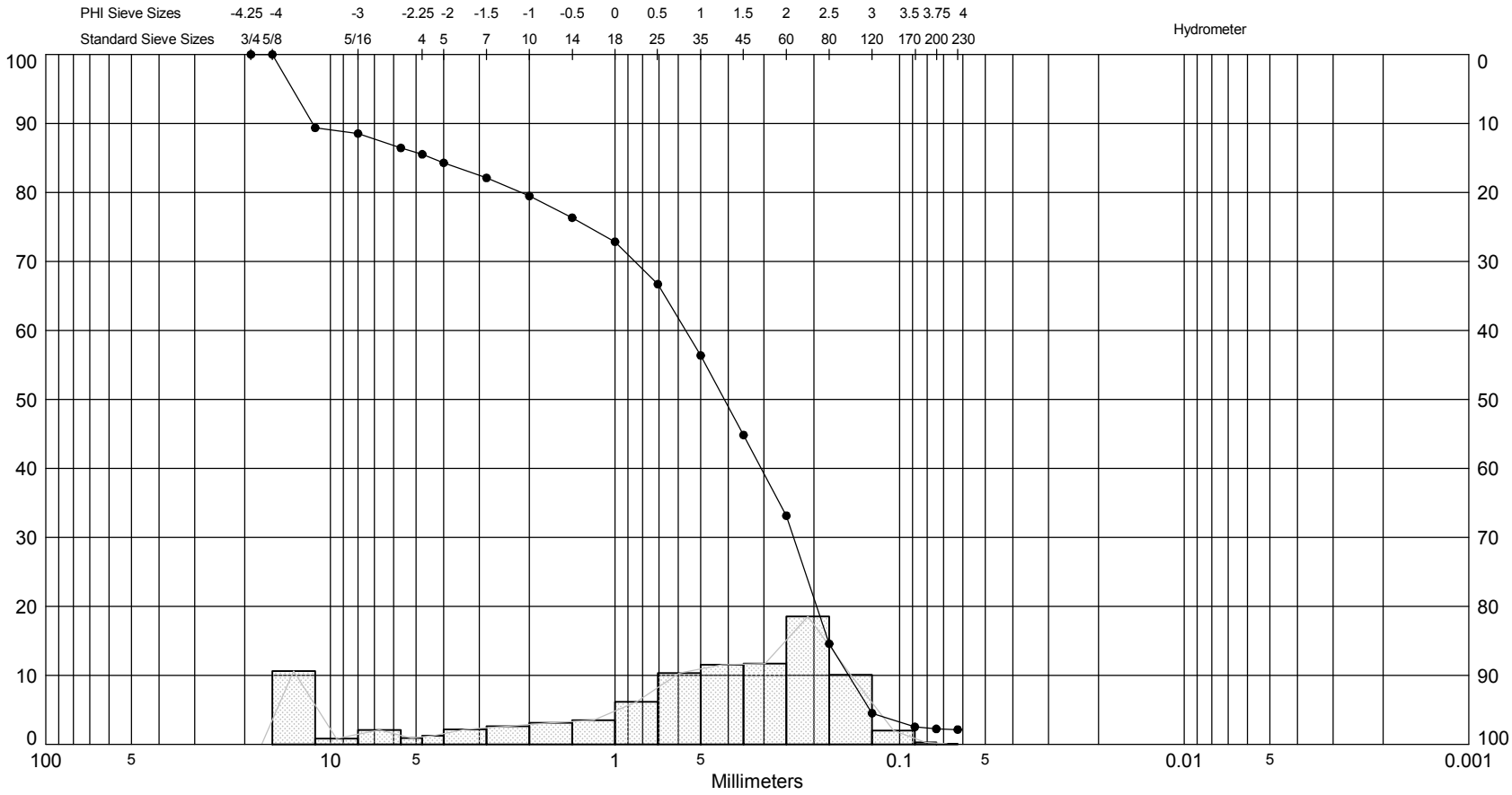
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z276 #1	—●—		SW	#200 - 2.24 #230 - 2.14	0.99	13.53	1.28	0.59	-0.97	2.77	2.07

Comments: Coarser quartz sand, rock, shell

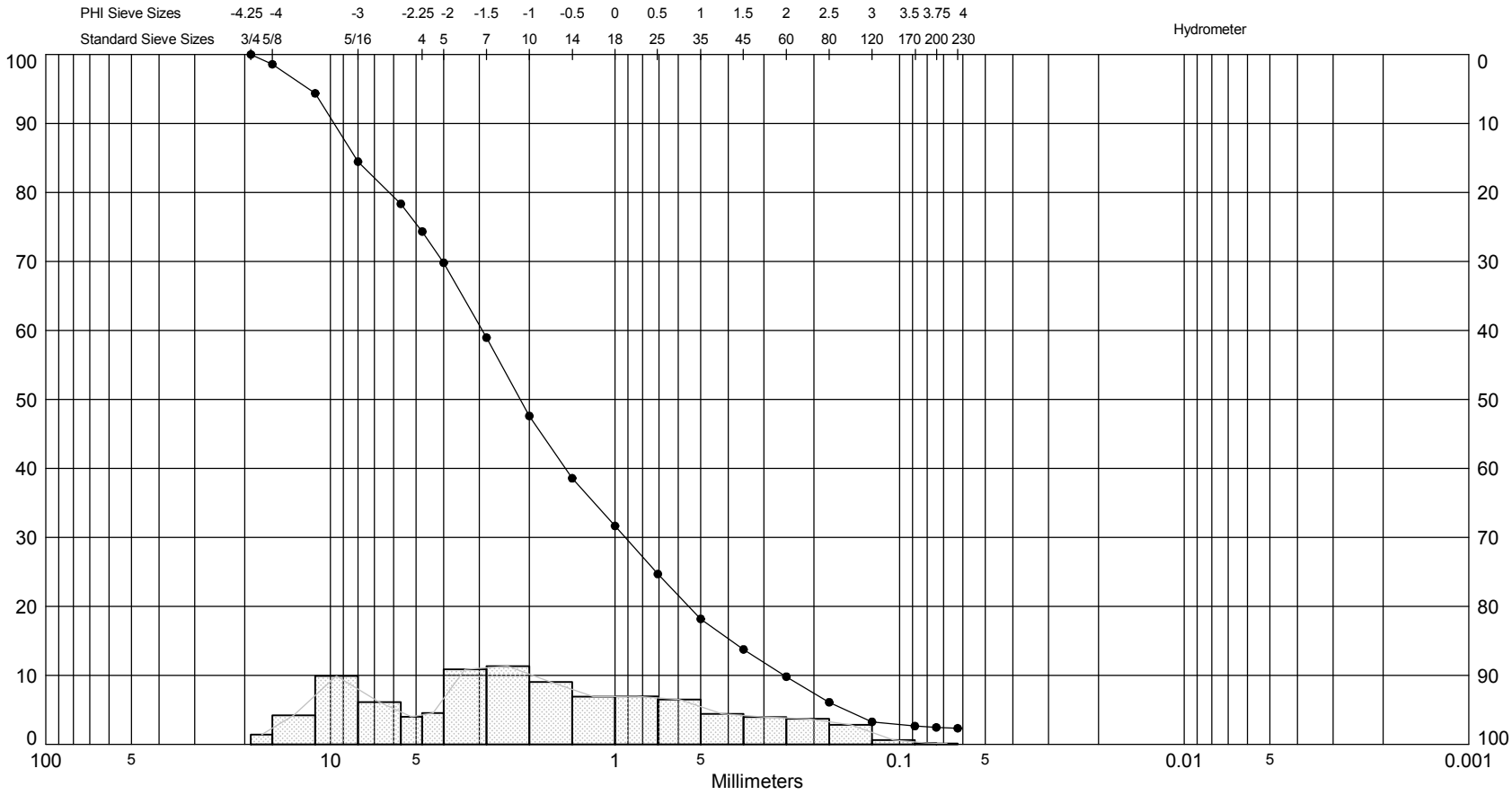
Depths and elevations based on measured values

Sample Information	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z276 #2	—●—		SW	#200 - 2.46 #230 - 2.33	1.47	29.50		-0.95	0.34	2.32	1.81

Comments: Quartz sand, rock, oyster shell

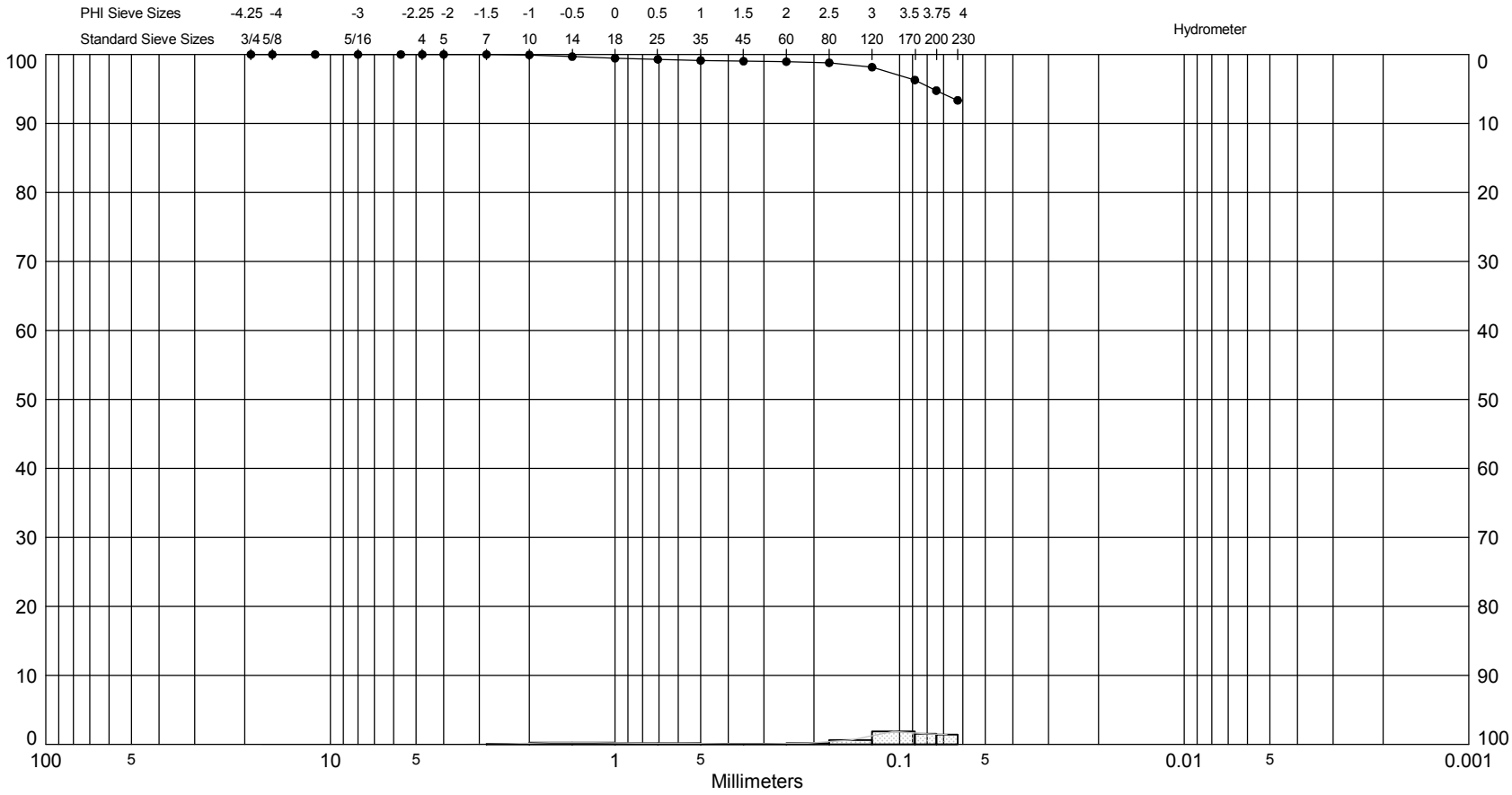
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z276 #3	—●—		ML-CL	#200 - 94.76 #230 - 93.35	18.36	10.81		2.9	-1.83	5.14	1.31

Comments: Silt, organic material

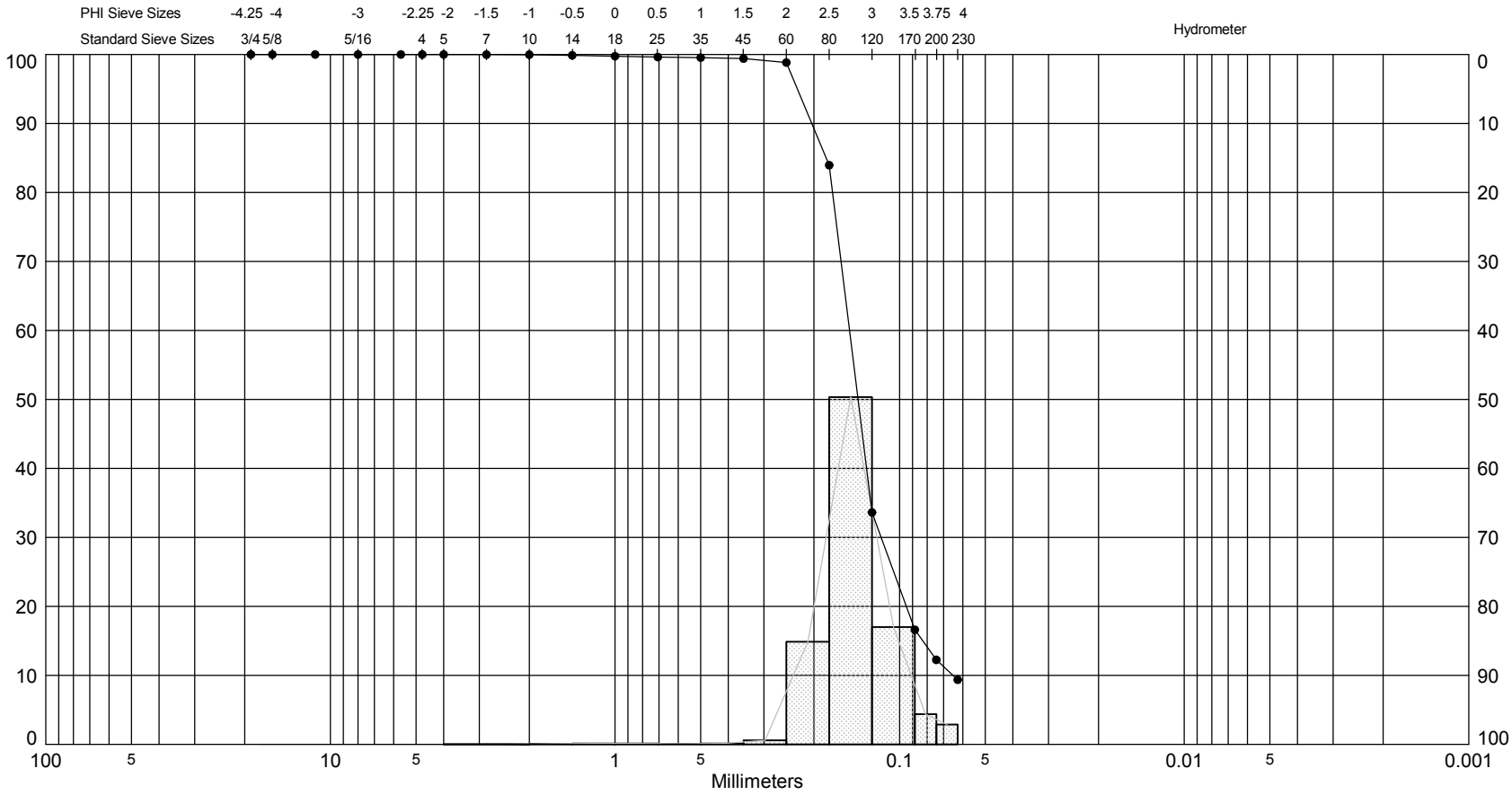
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z276 #4	—●—		SM	#200 - 12.25 #230 - 9.37	0.59	0.87	2.84	2.82	-1.15	13.16	0.46

Comments: Tan sand, little silt

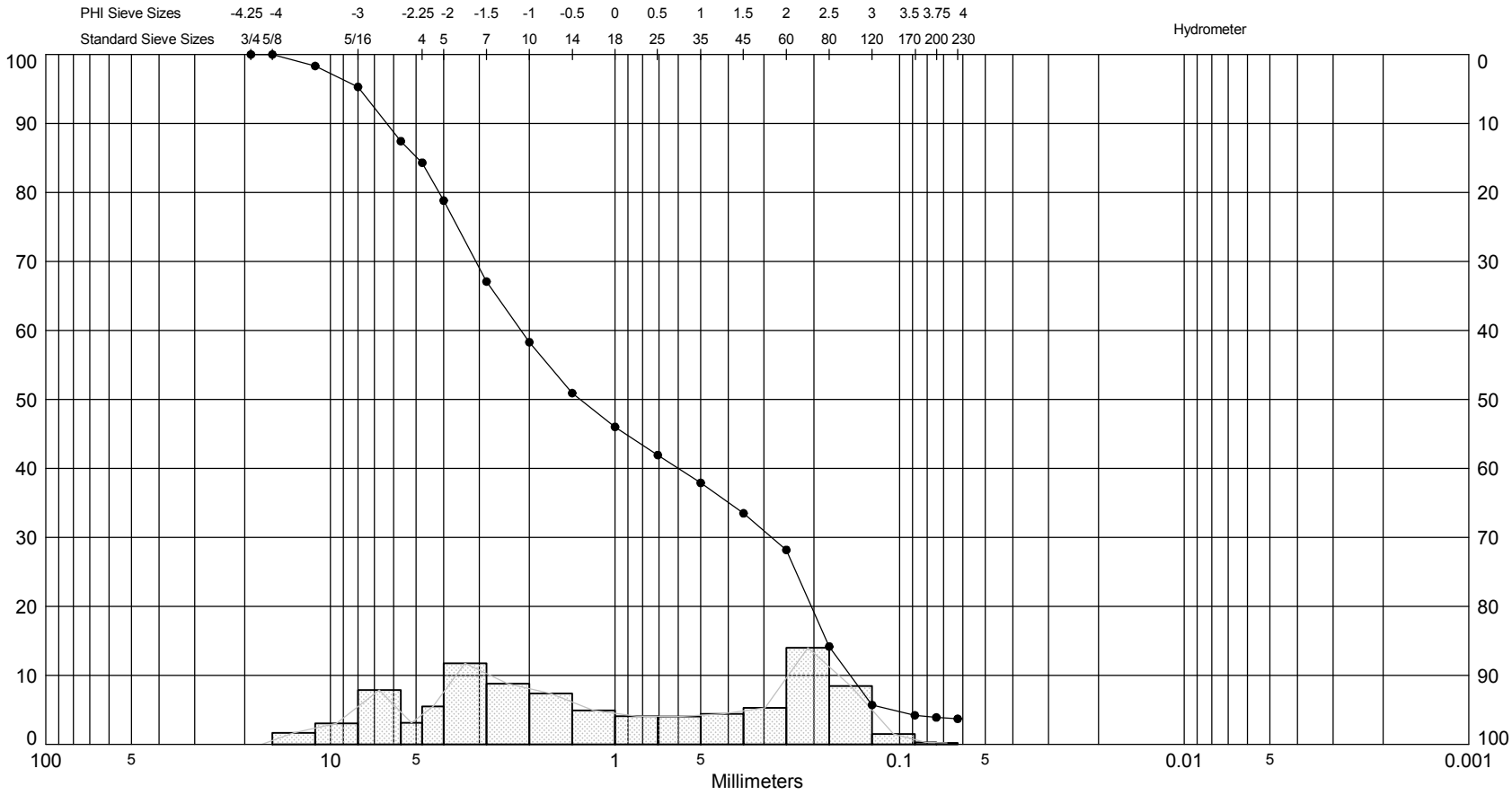
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z277 #1	—●—		SW	#200 - 3.90 #230 - 3.70	1.93	7.70		-0.15	0.12	1.65	2.02

Comments: Gray sand, rock, shell

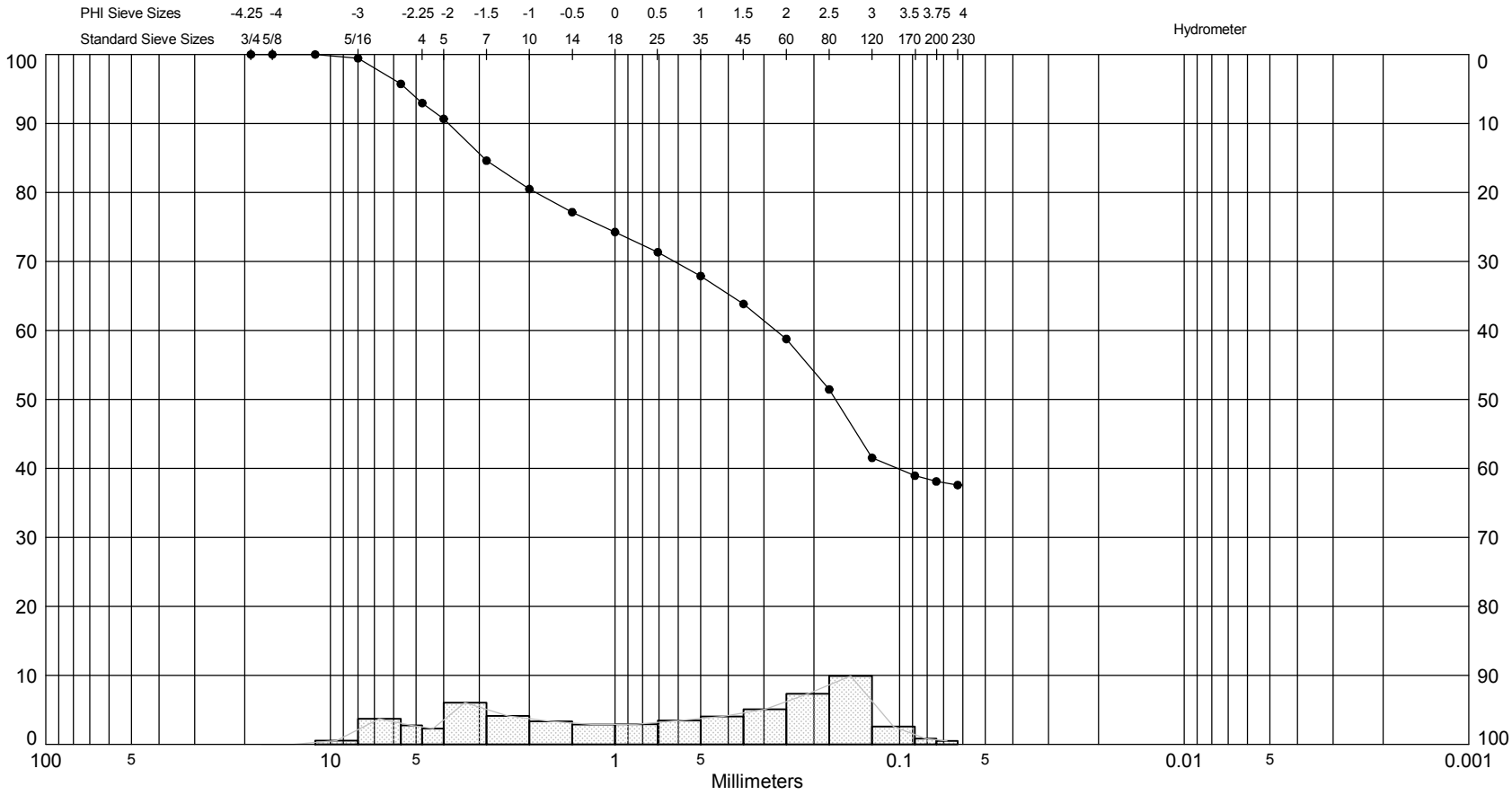
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z277 #2	—●—		SM	#200 - 38.11 #230 - 37.59	8.23	5.18	2.57	0.51	-0.22	1.62	2.01

Comments: Silt, rock, peaty material

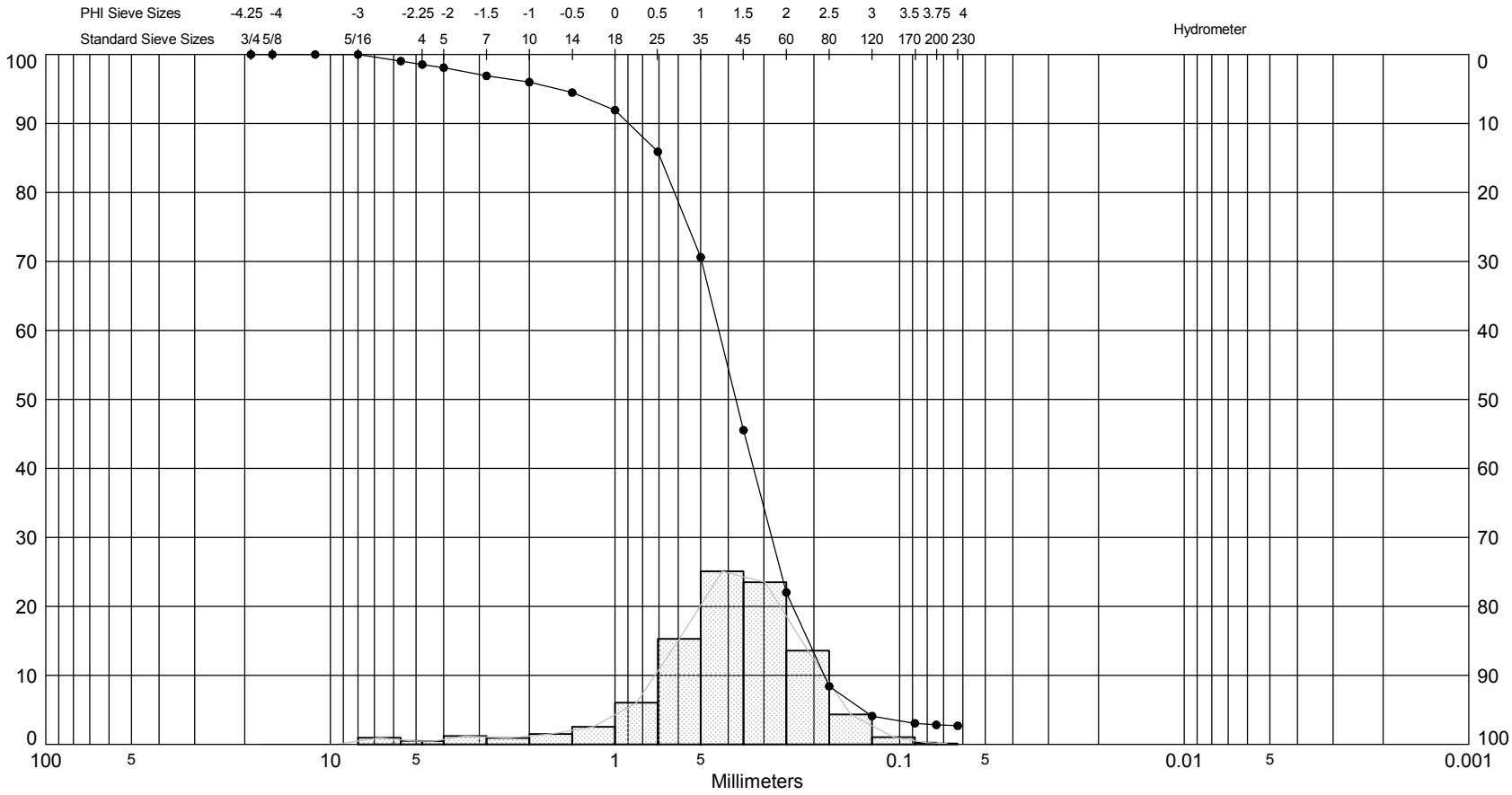
Depths and elevations based on measured values

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z277 #3	—●—		SW	#200 - 2.82 #230 - 2.69	0.34	0.69	1.41	1.26	-1.33	6.15	1.02

Comments: Coarser quartz sand, few rock

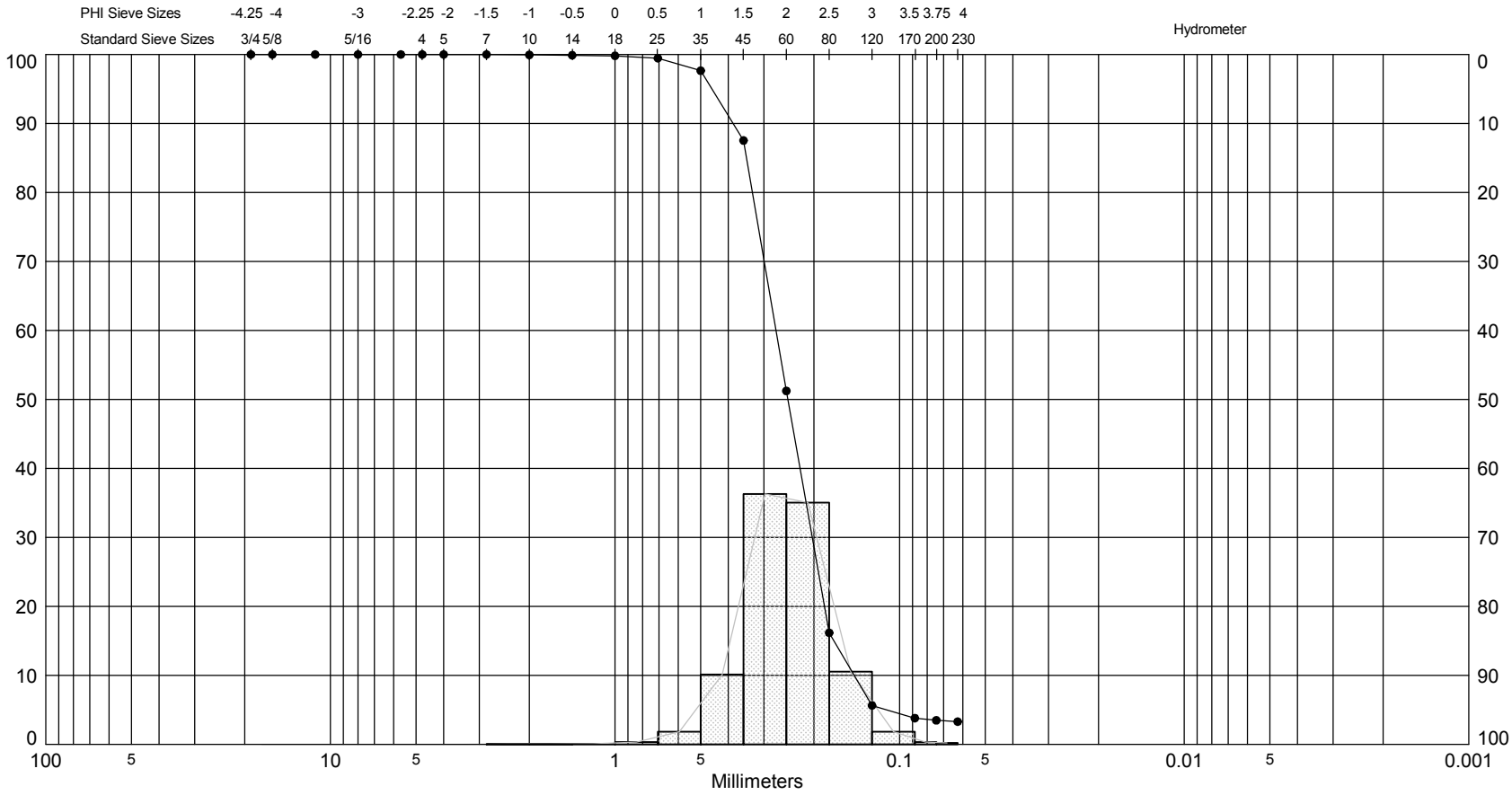
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z277 #4	—●—		SP	#200 - 3.48 #230 - 3.29	0.33	1.17	2.02	2	-0.2	5.06	0.52

Comments: Gray sand

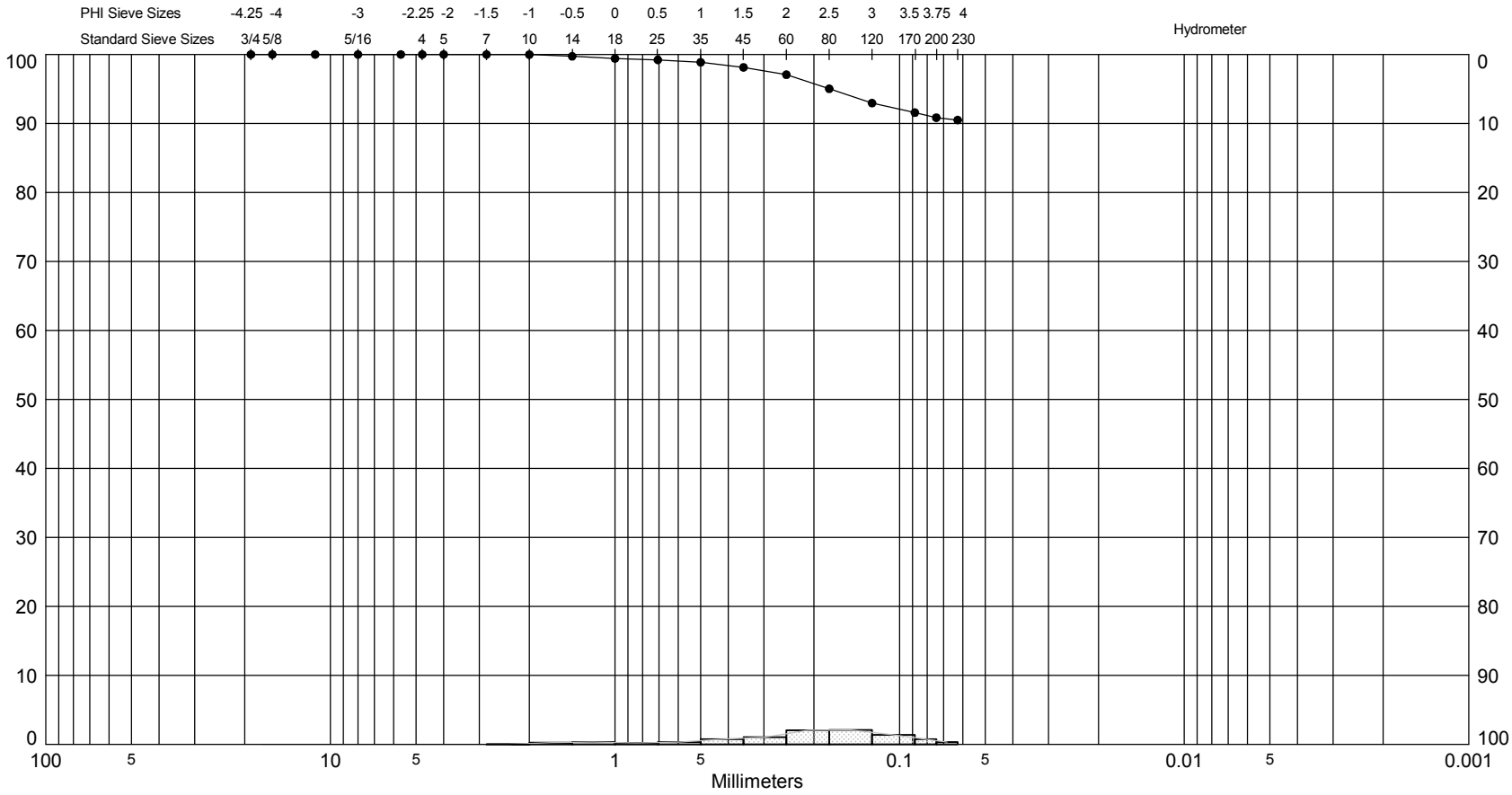
Depths and elevations based on measured values

Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z278 #1	—●—		ML-CL	#200 - 90.84 #230 - 90.50	16.94	8.50		2.27	-0.96	3.64	1.08

Comments: Peaty silt, gray sand

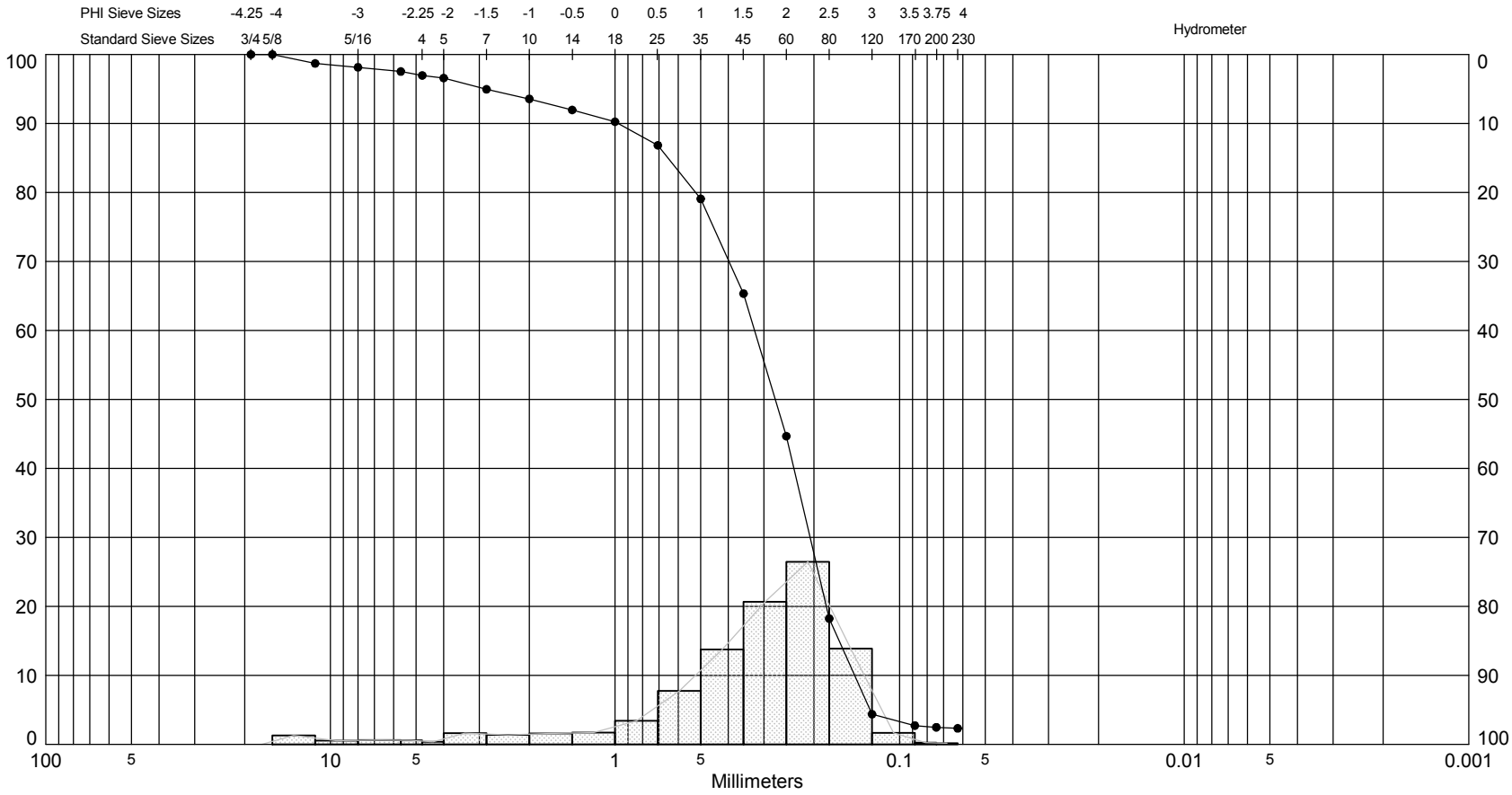
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
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Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z278 #2	—●—		SW	#200 - 2.47 #230 - 2.32	0.45	0.83	1.87	1.51	-1.89	7.08	1.32

Comments: Coarser quartz sand

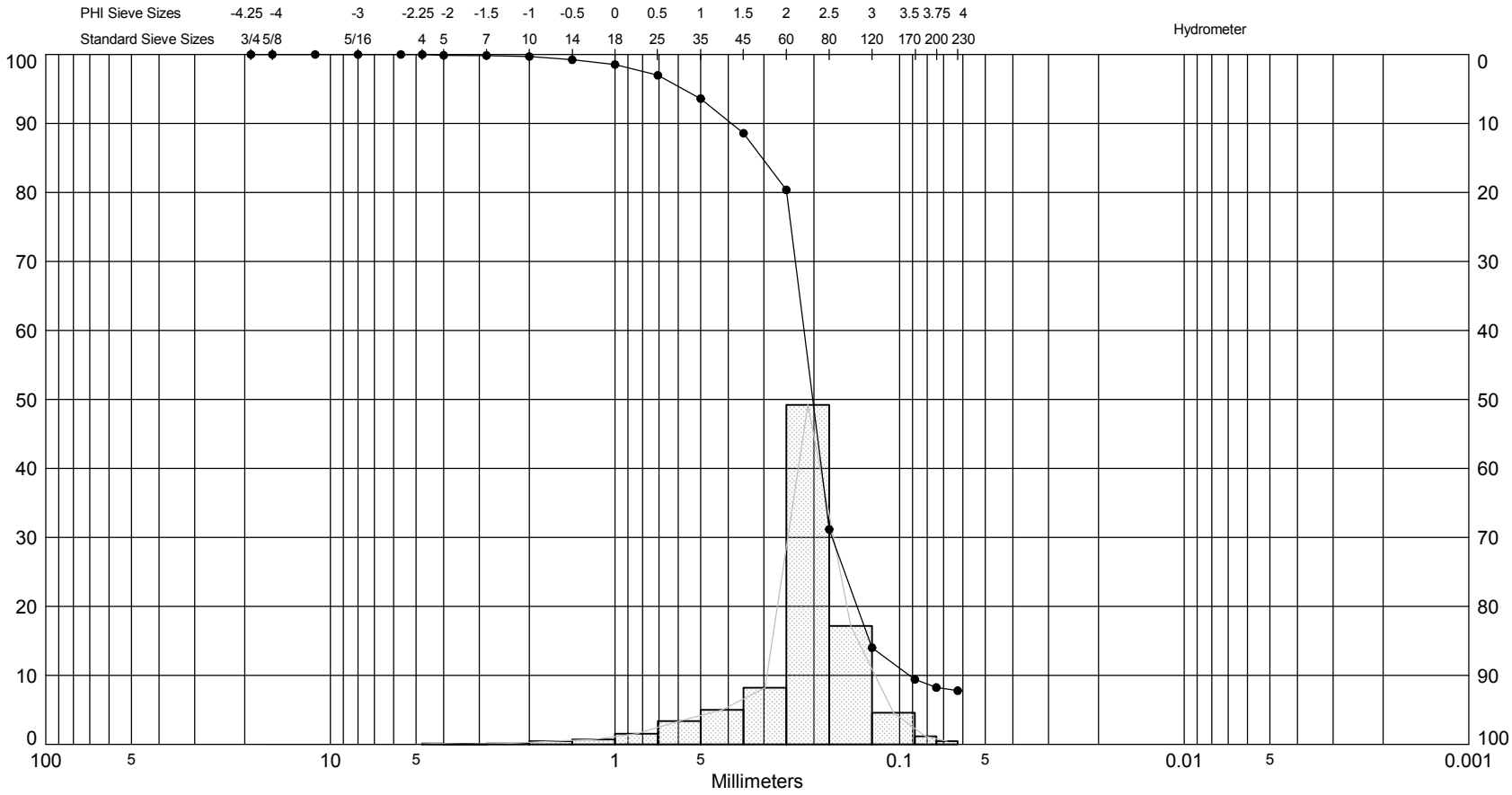
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
Analyzed By:	MB
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z278 #3	—●—		SP-SM	#200 - 8.24 #230 - 7.78	0.90	2.11	2.31	2.18	-1.57	8.09	0.71

Comments: Sand, dark silt

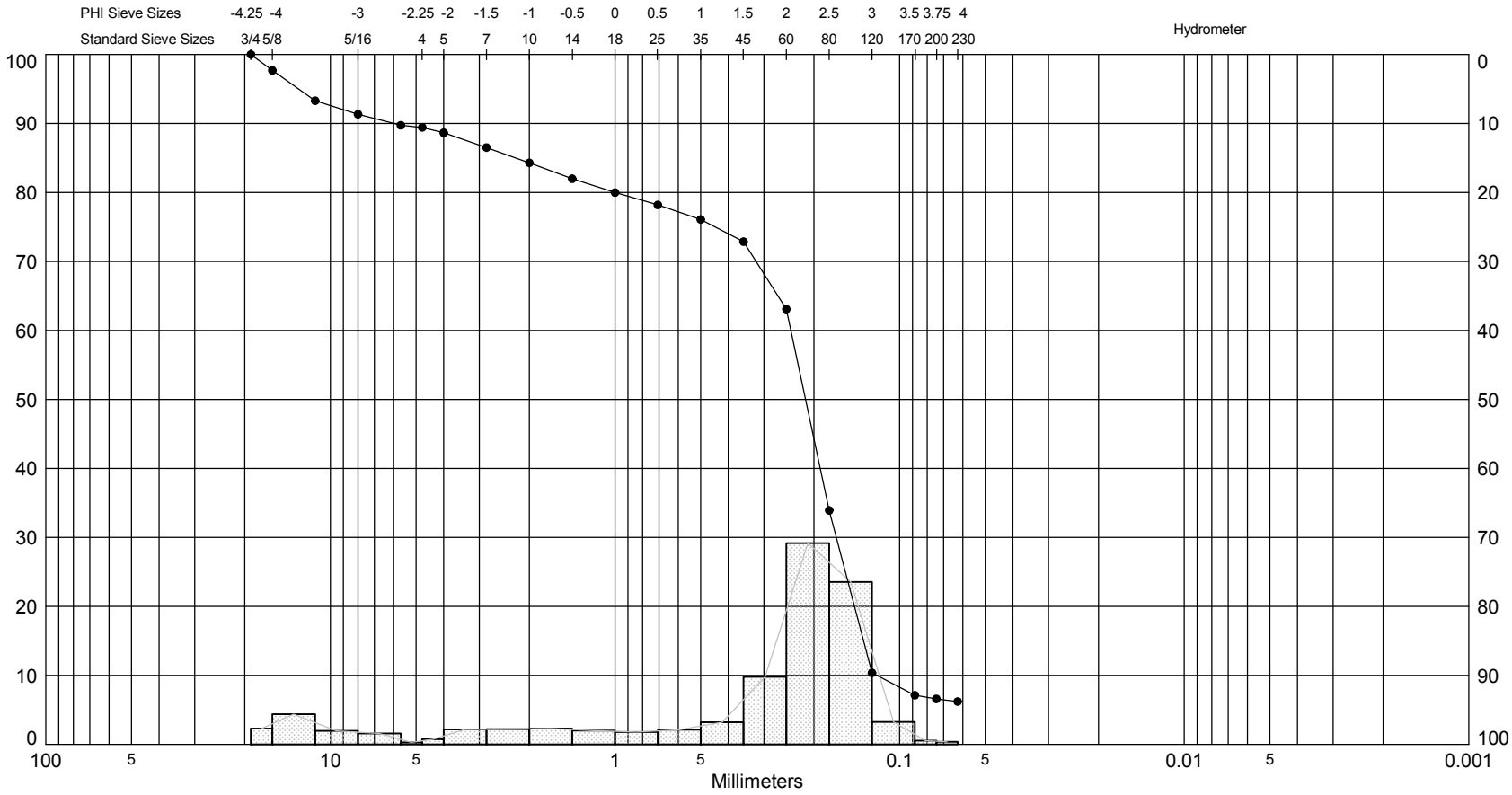
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z278 #4	—●—		SW-SM	#200 - 6.59 #230 - 6.21	1.16	13.34	2.22	1.28	-1.46	3.8	2.08

Comments: Brown sand, white shell

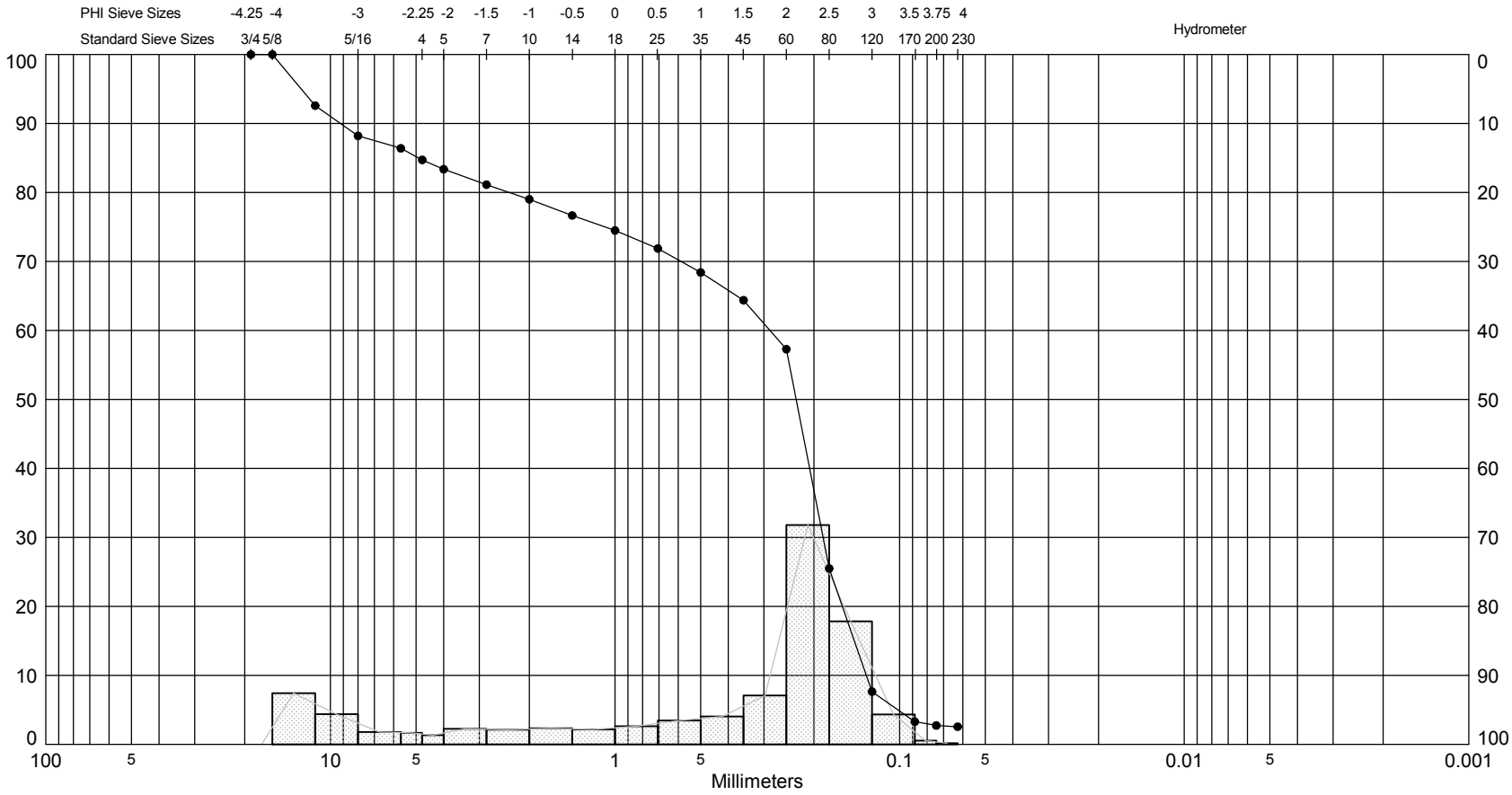
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-10-12
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z279 #1	—●—		SW	#200 - 2.73 #230 - 2.56	0.87	19.53	2.11	0.98	-1.1	2.72	2.22

Comments: Gray sand, shell, few rock

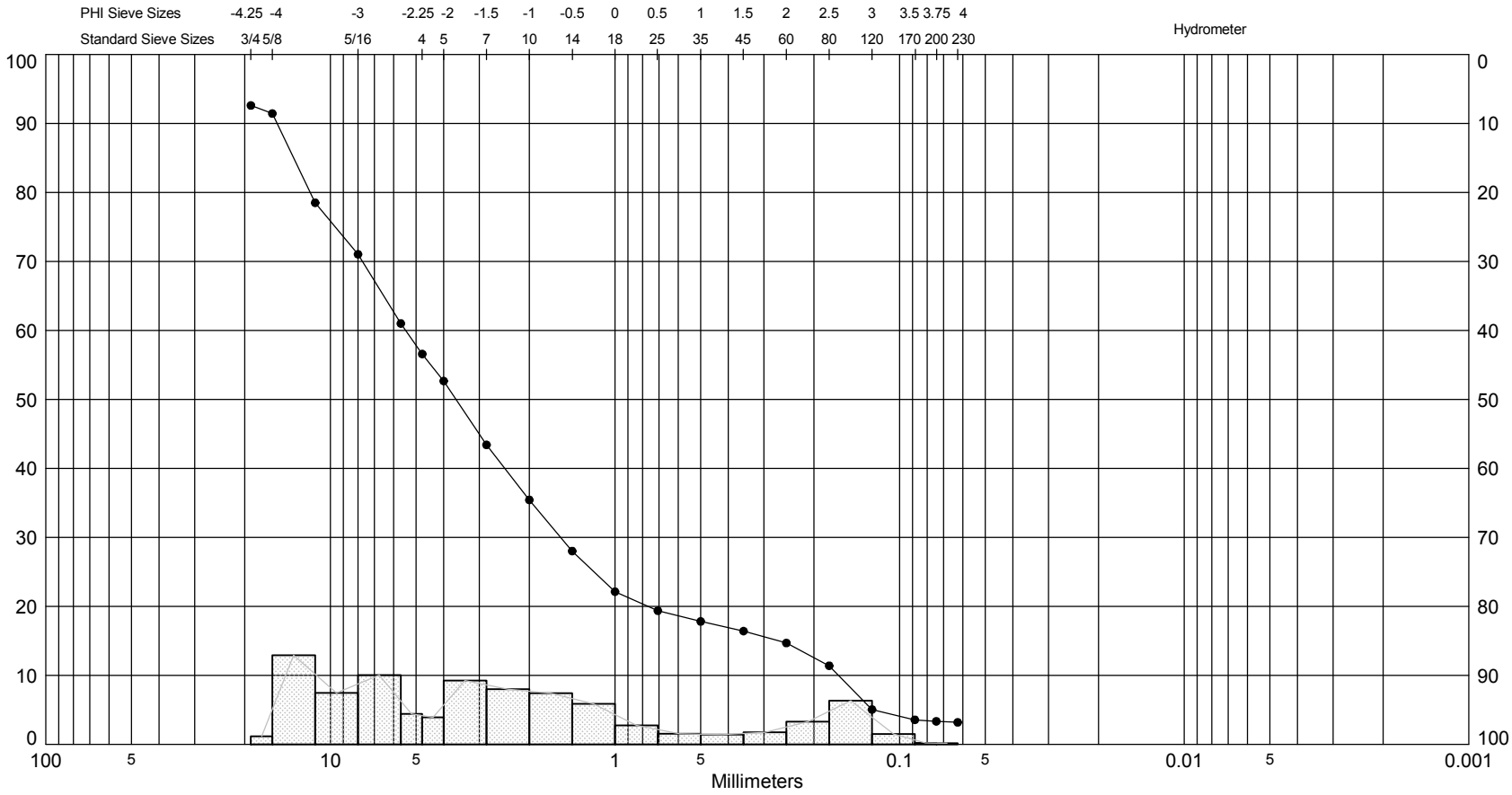
Depths and elevations based on measured values

Sample Information	
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Analysis Date:	04-15-12
Analyzed By:	MB
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Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z279 #2	—●—	SW WITH GRAVEL		#200 3.34 #230 3.19	3.66	14.72		-1.57	1.12	3.17	1.99

Comments: Rock, shell hash, little sand

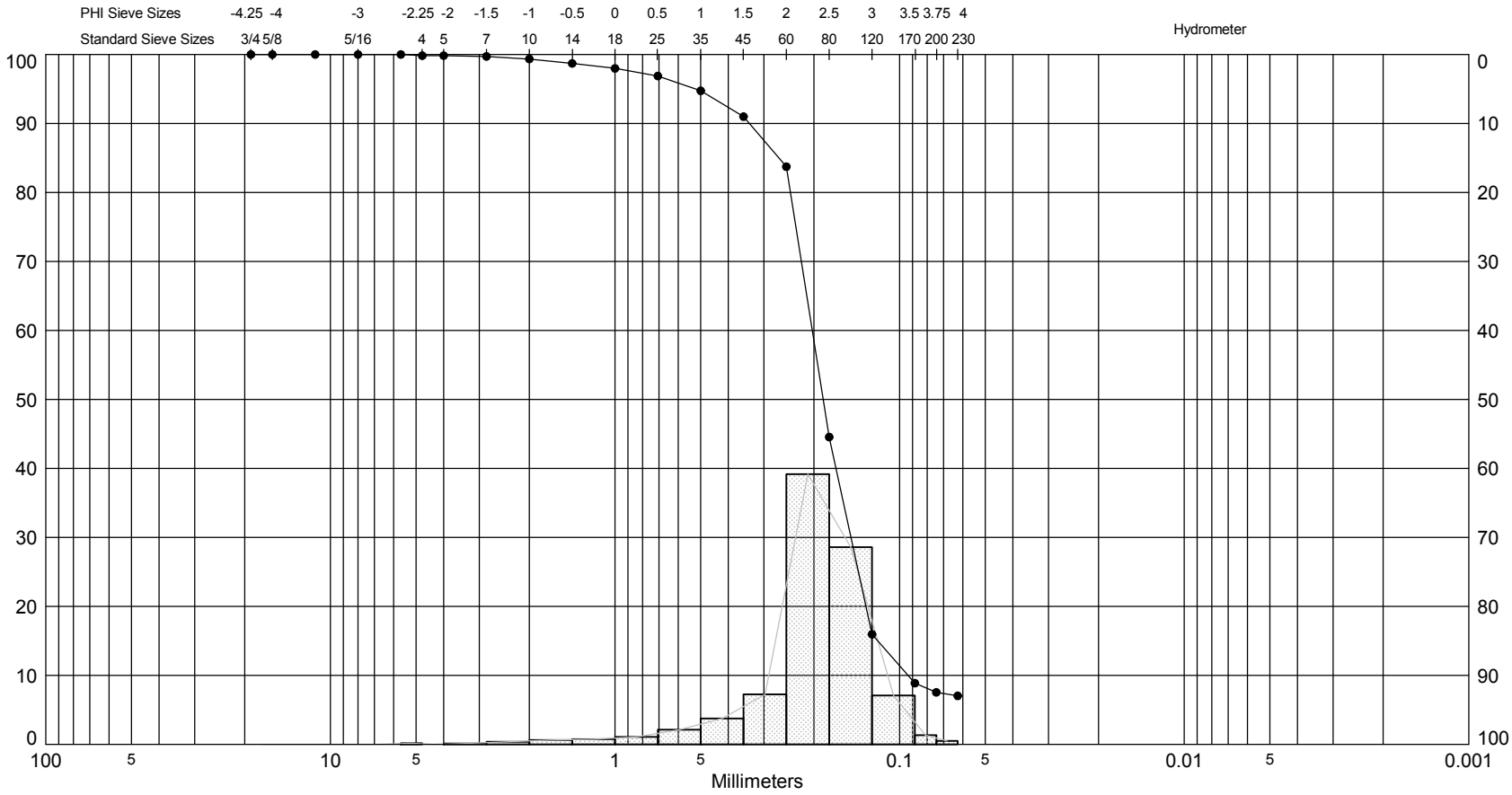
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z279 #3	—●—		SP-SM	#200 - 7.54 #230 - 7.03	3.43	6.52	2.43	2.3	-2.04	10.29	0.75

Comments: Sand, peaty organic matter

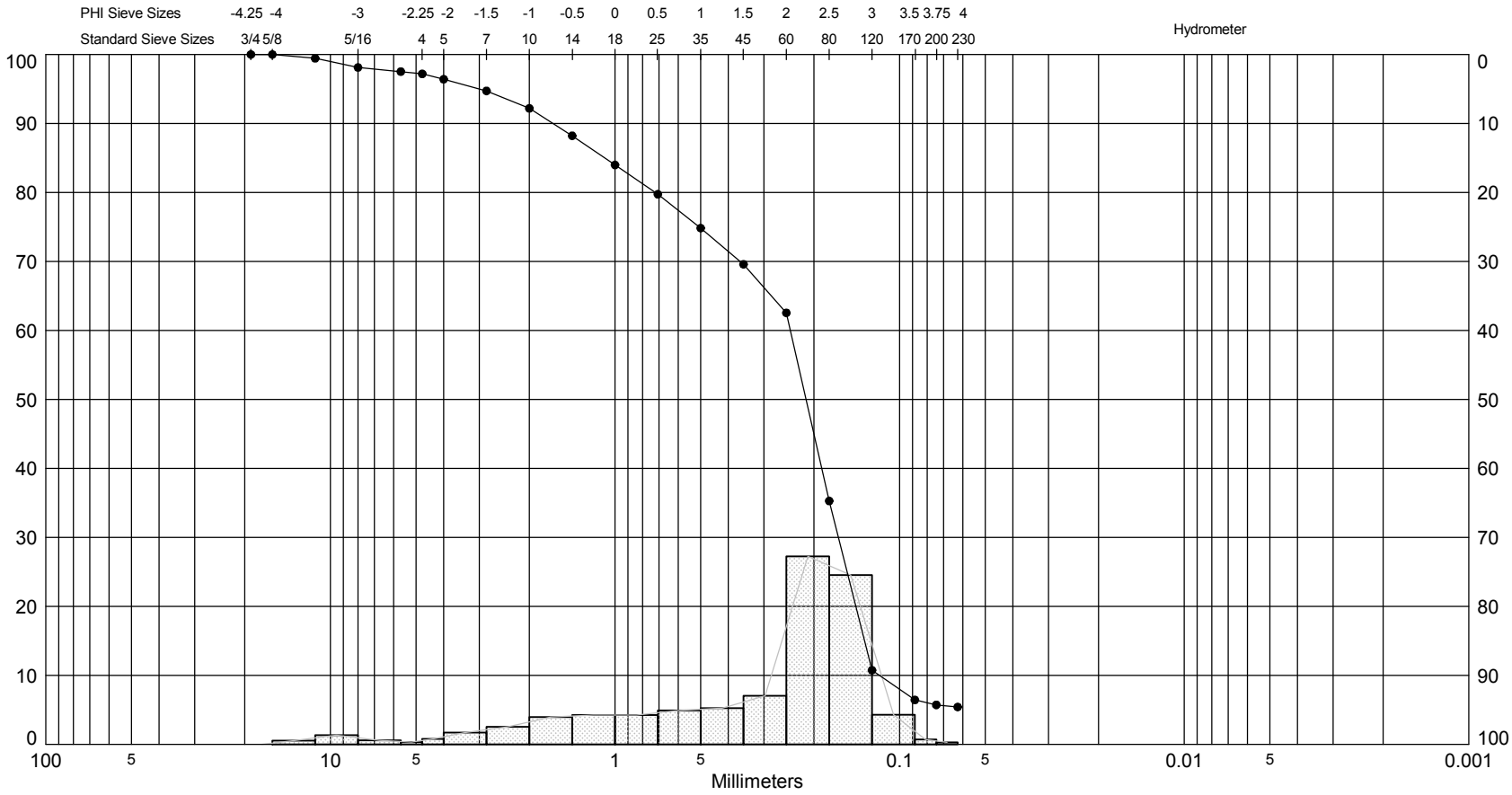
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z279 #4	—●—		SW-SM	#200 - 5.72 #230 - 5.42	0.76	8.76	2.23	1.58	-1.39	4.33	1.53

Comments: Gray sand, shell hash

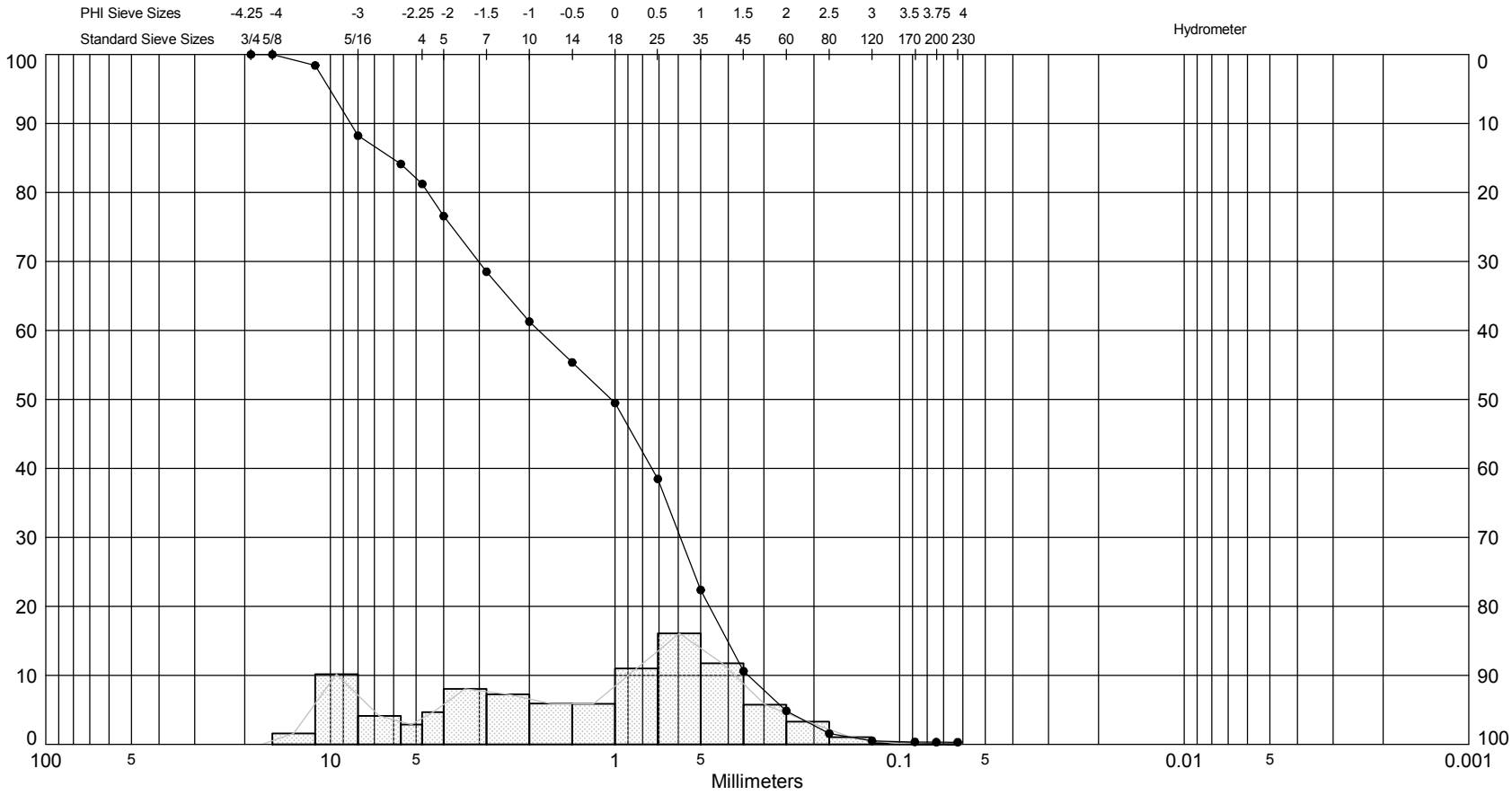
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z298 #1	—●—		SW	#200 - 0.32 #230 - 0.31	3.29	13.32		-0.46	-0.26	1.93	1.7

Comments: Sand, shell, rock

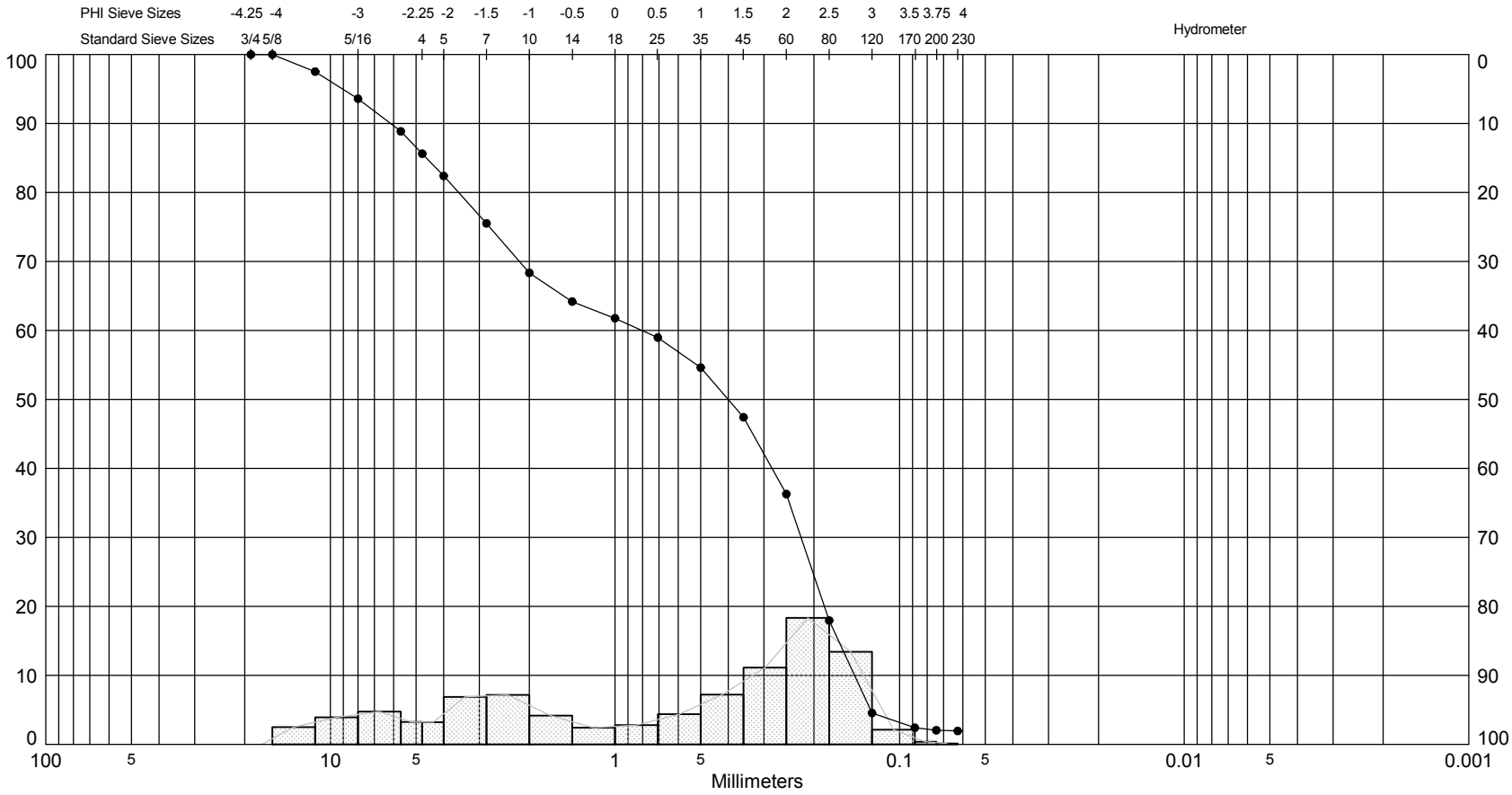
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z298 #2	—●—		SW	#200 - 2.05 #230 - 1.94	4.38	19.15	1.32	0.46	-0.48	1.79	2.09

Comments: Gray sand, rock, shell with silt

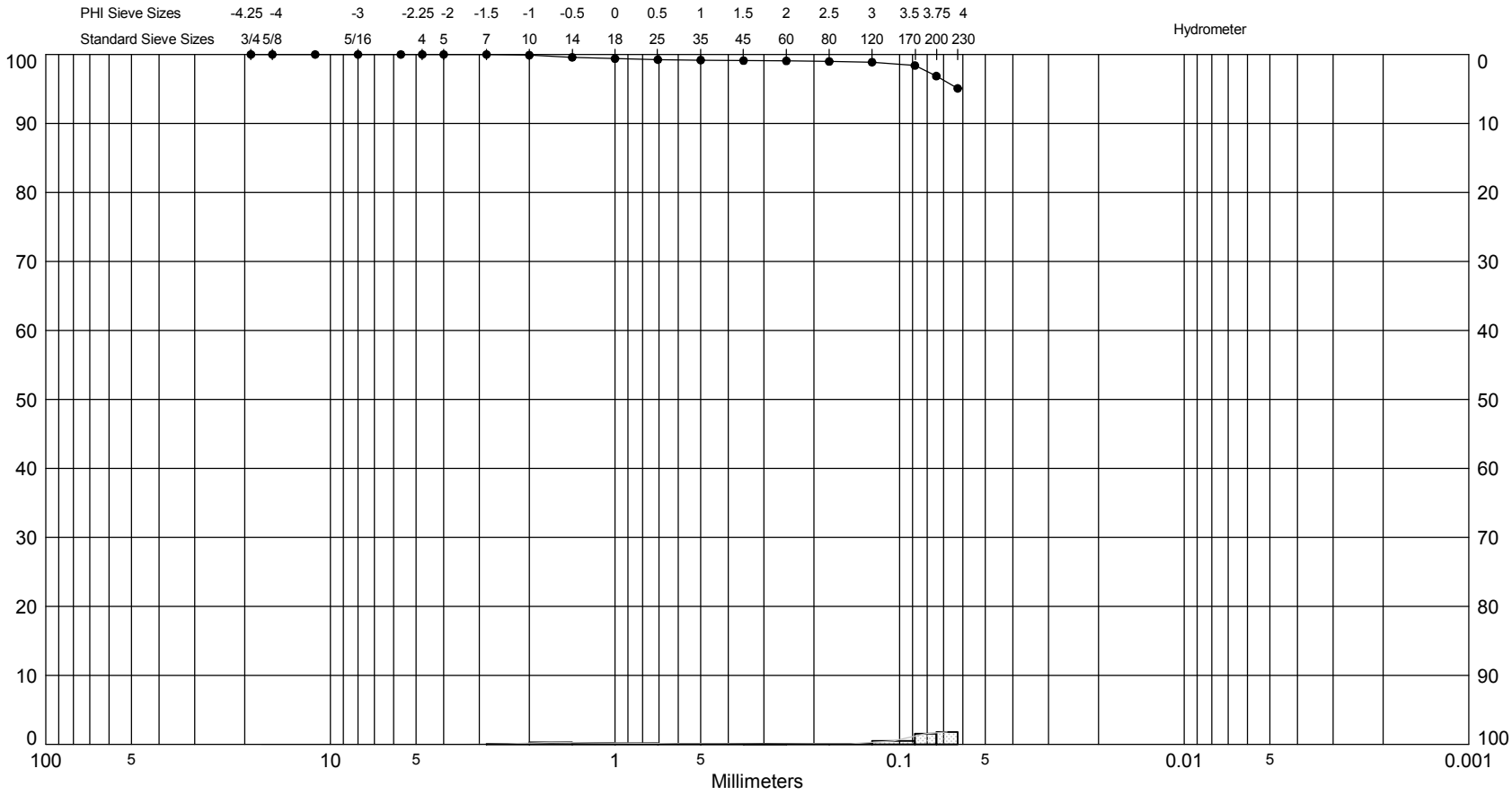
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z298 #3	—●—		ML-CL	#200 - 96.87 #230 - 95.08	14.91	6.11		2.92	-1.64	4.05	1.56

Comments: Peaty silt with gray sand

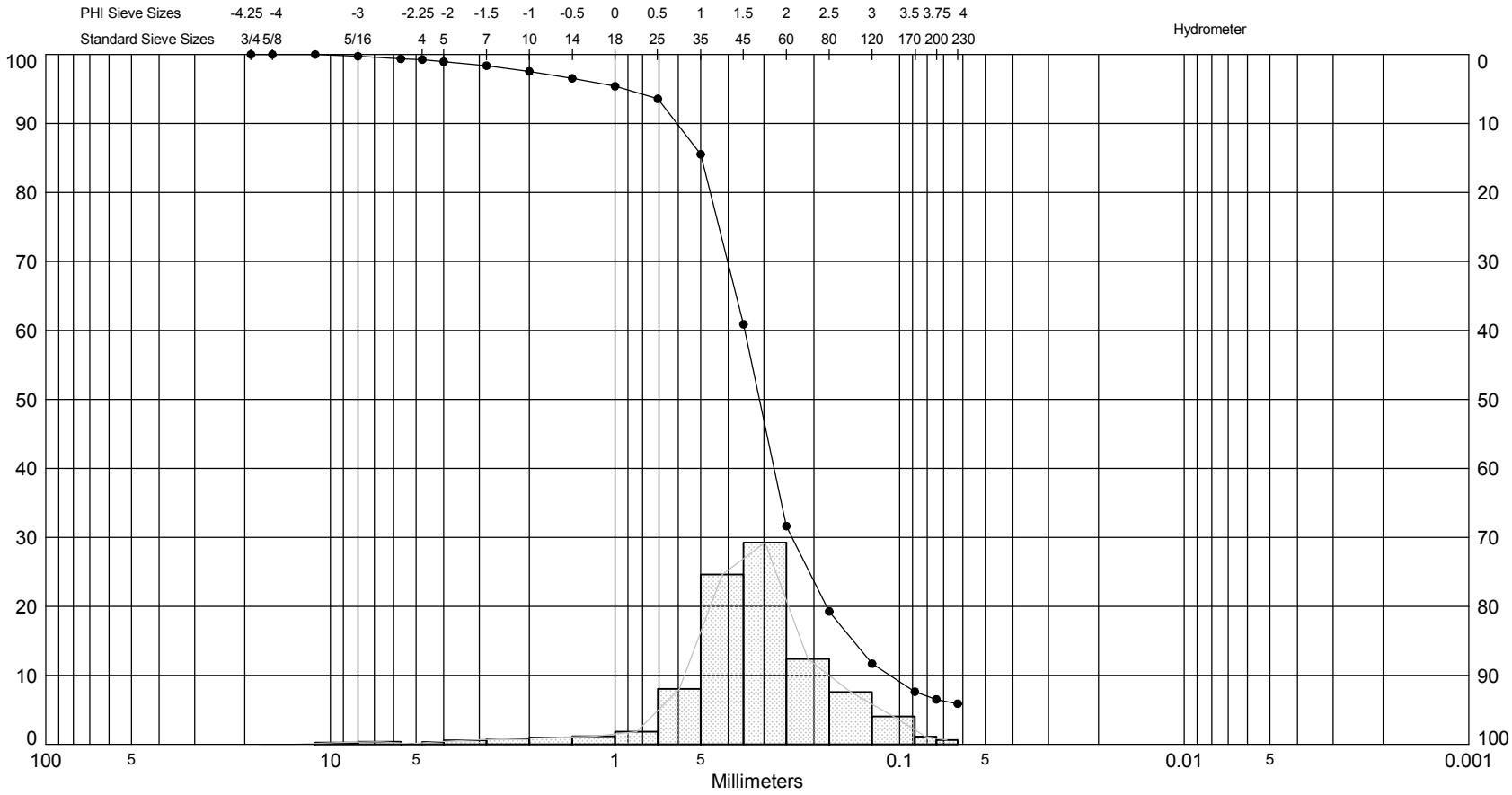
Depths and elevations based on measured values

Sample Information	
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Analysis Date:	04-15-12
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z298 #4	—●—		SW-SM	#200 - 6.52 #230 - 5.89	1.39	0.99	1.69	1.6	-1.22	7.49	0.97

Comments: Dark coarser quartz sand, woody organic matter

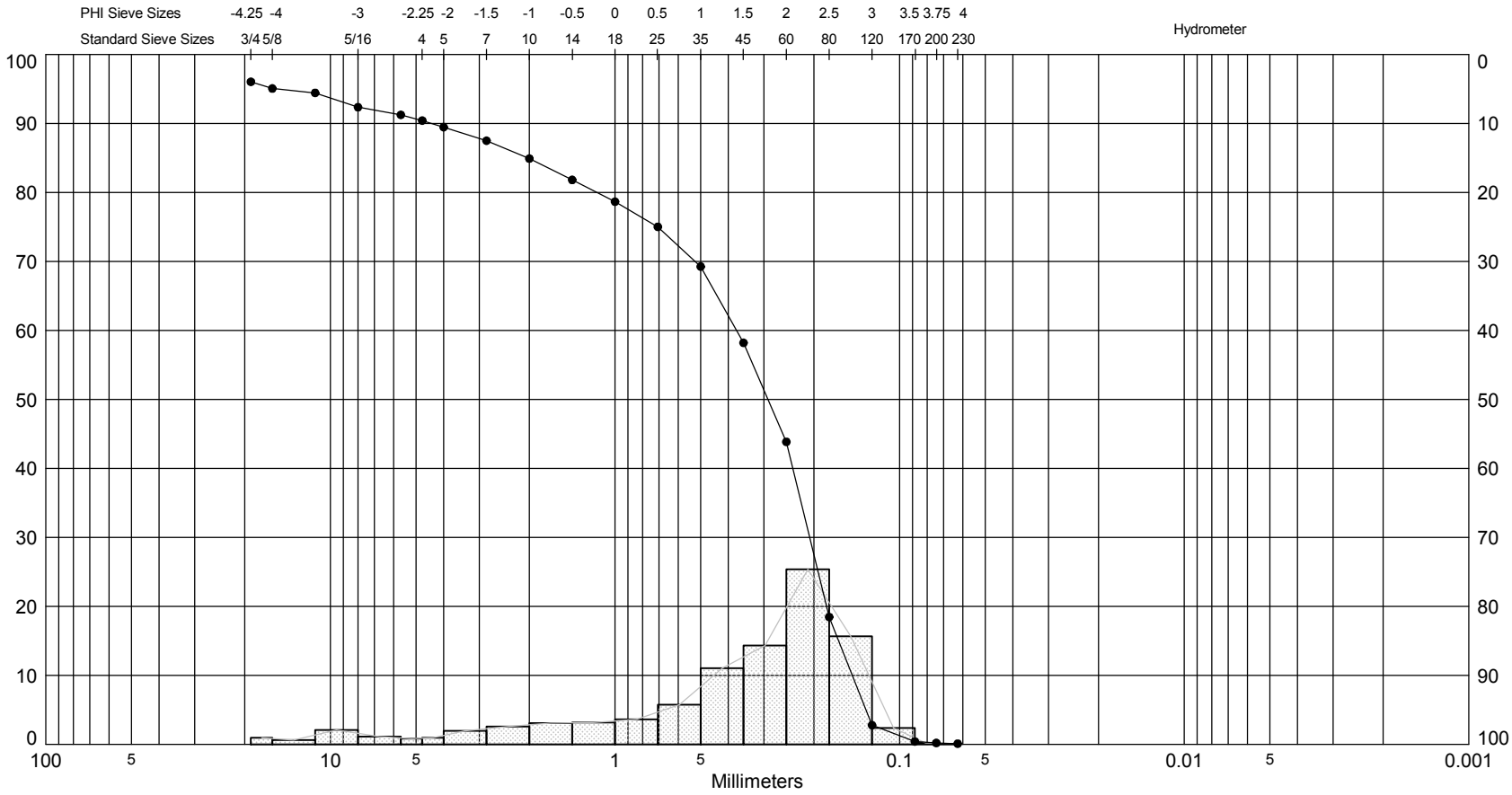
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z299 #1	—●—		SW	#200 - 0.20 #230 - 0.10	0.85	17.33	1.79	1.06	-1.04	3.86	1.63

Comments: Gray sand, blue/gray shell

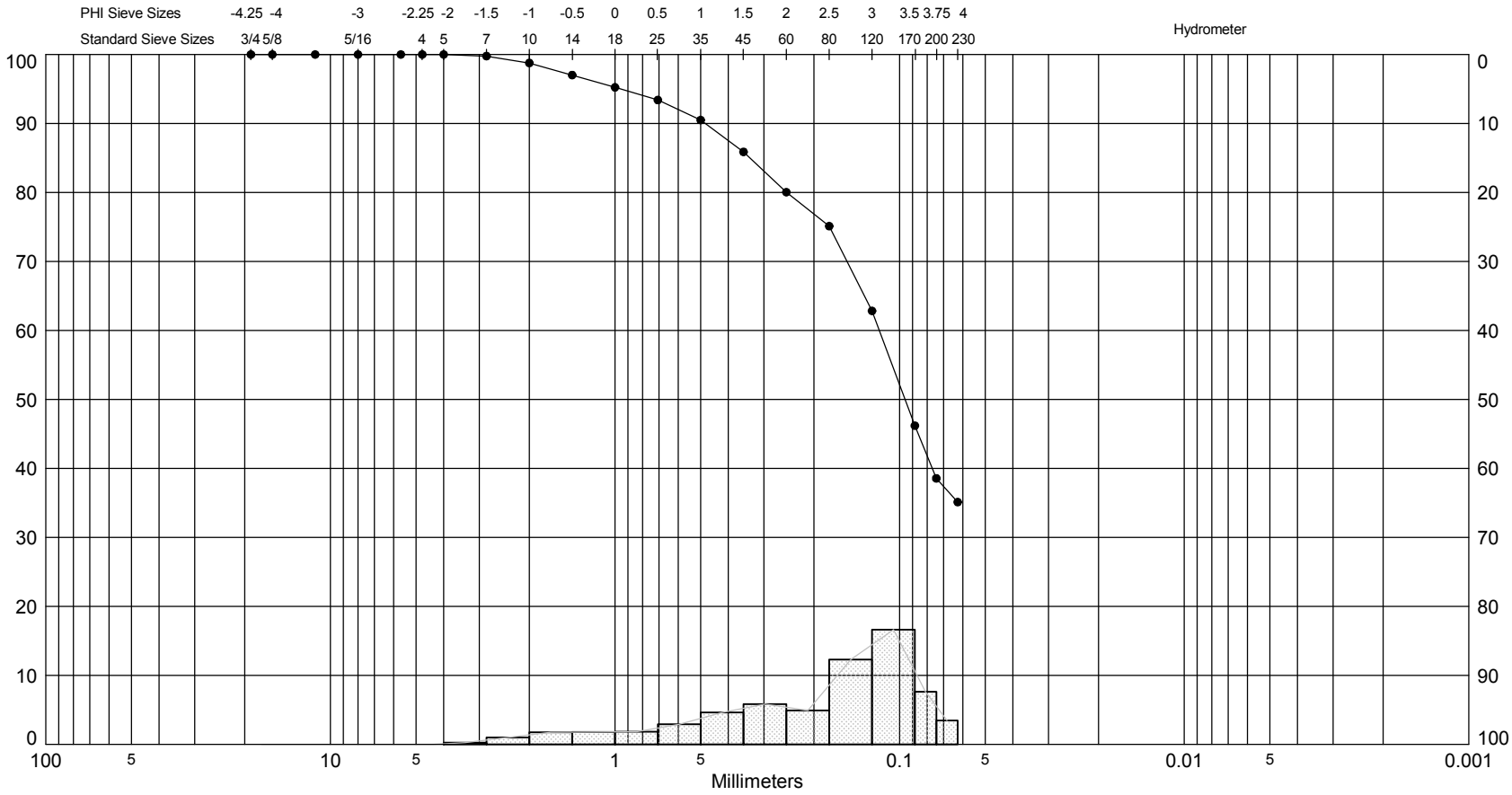
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z299 #2	—●—		SM	#200 - 38.56 #230 - 35.12	2.47	2.23	3.39	2.39	-1.16	3.63	1.27

Comments: Sand, dark fines

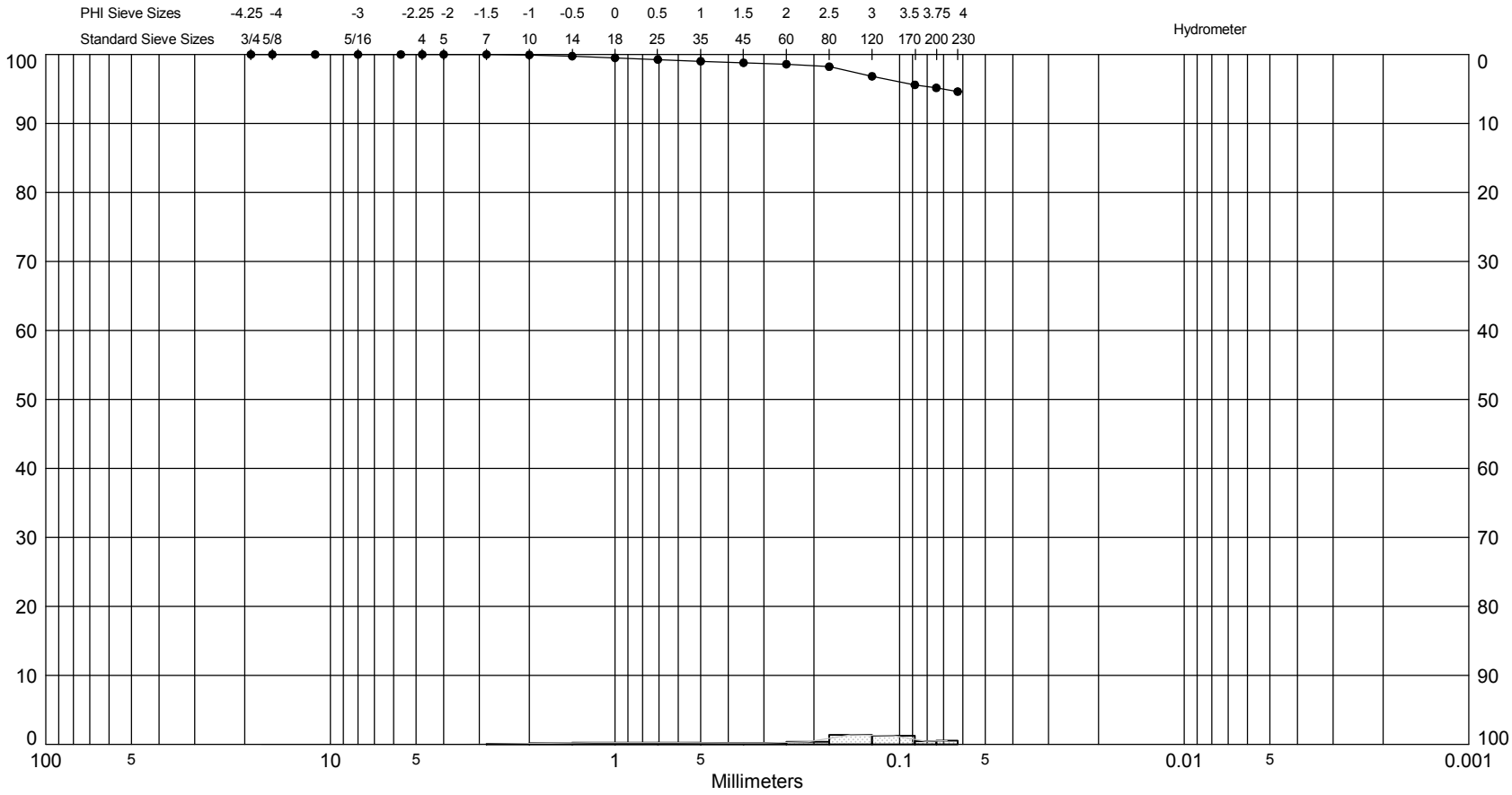
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Sample Information	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z299 #3	—●—		ML-CL	#200 - 95.16 #230 - 94.62	20.03	8.08		2.41	-1.13	3.22	1.32

Comments: Peaty silt

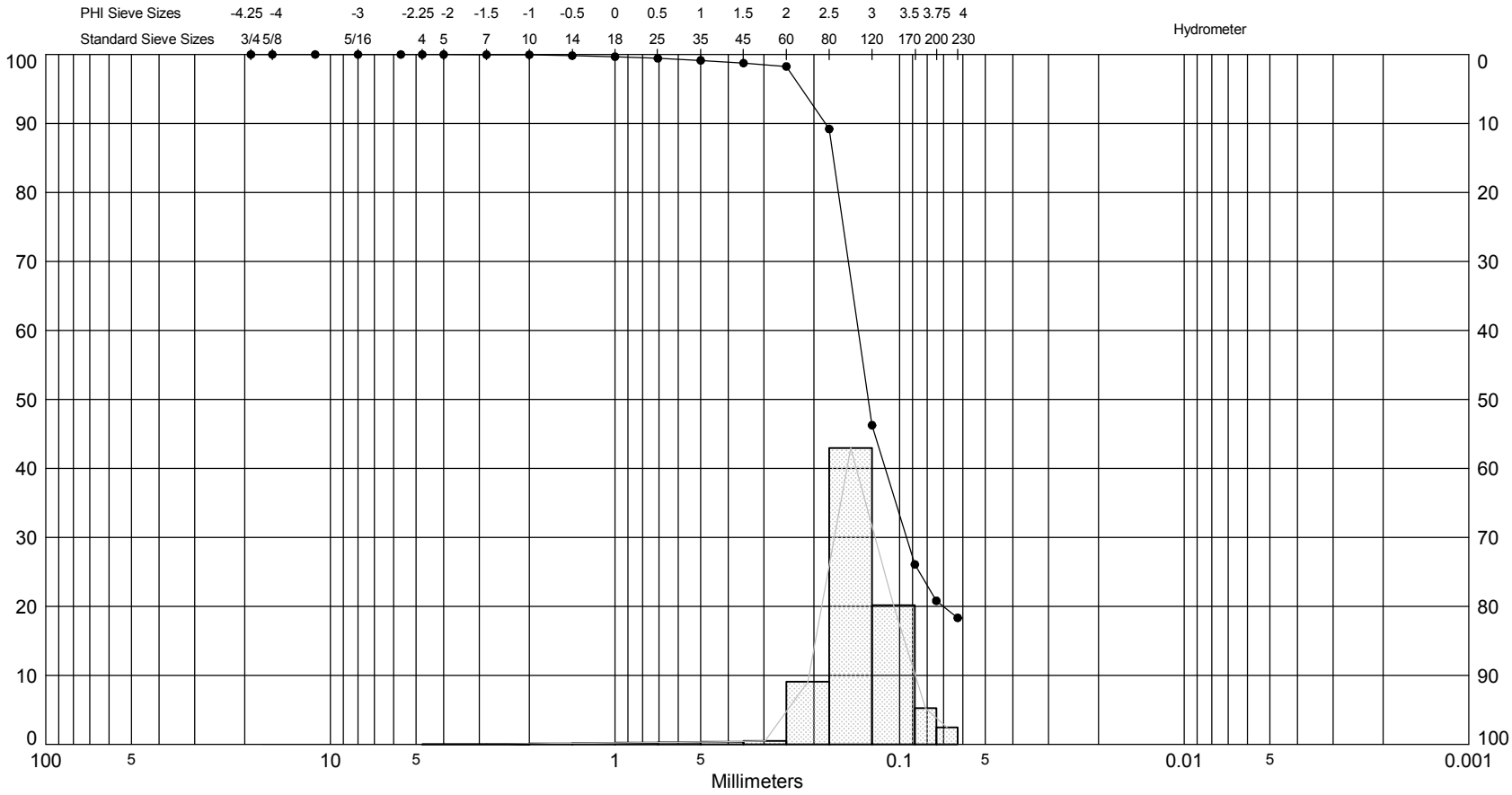
Depths and elevations based on measured values

Sample Information	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z299 #4	—●—		SM	#200 - 20.81 #230 - 18.34	3.09	1.37	2.96	2.87	-1.89	14.84	0.51

Comments: Sand, dark fines

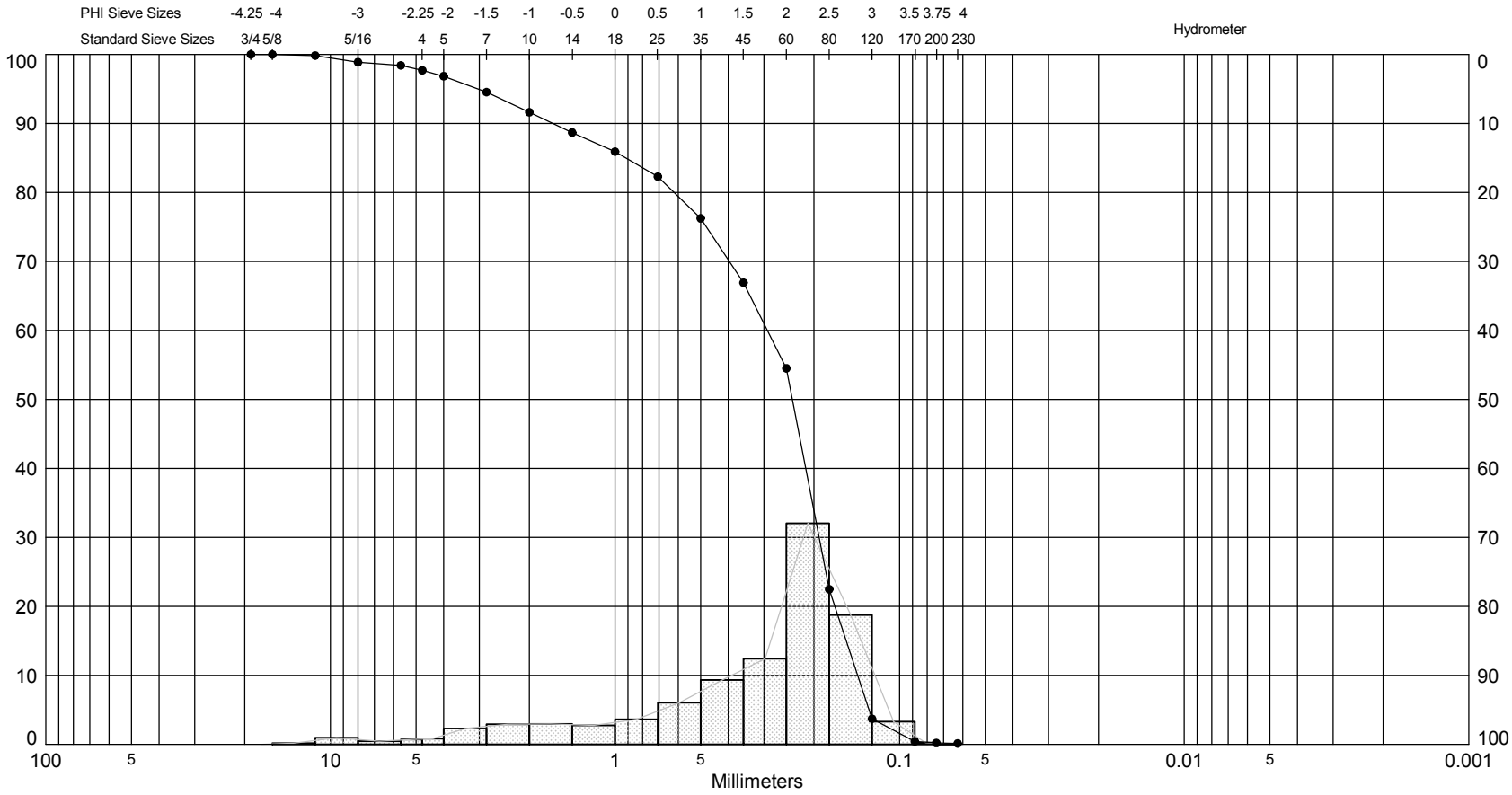
Depths and elevations based on measured values

Sample Information	
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z300 #1	—●—		SW	#200 - 0.19 #230 - 0.13	0.99	15.84	2.07	1.55	-1.48	4.68	1.4

Comments: Gray sand, shell

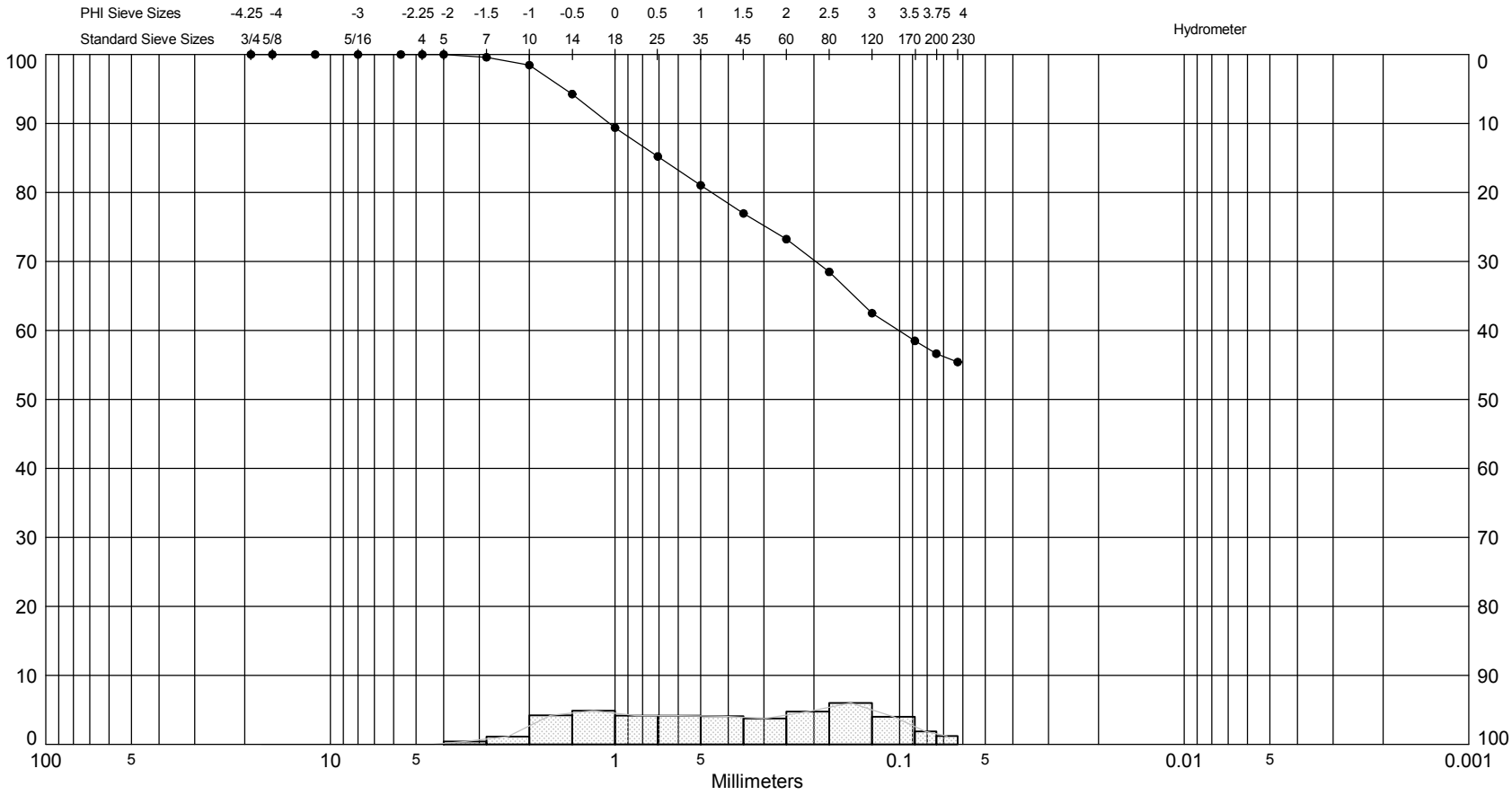
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
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Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z300 #2	—●—		ML-CL	#200 - 56.63 #230 - 55.42	18.97	8.61		1.37	-0.09	1.83	1.48

Comments: Peaty silt material

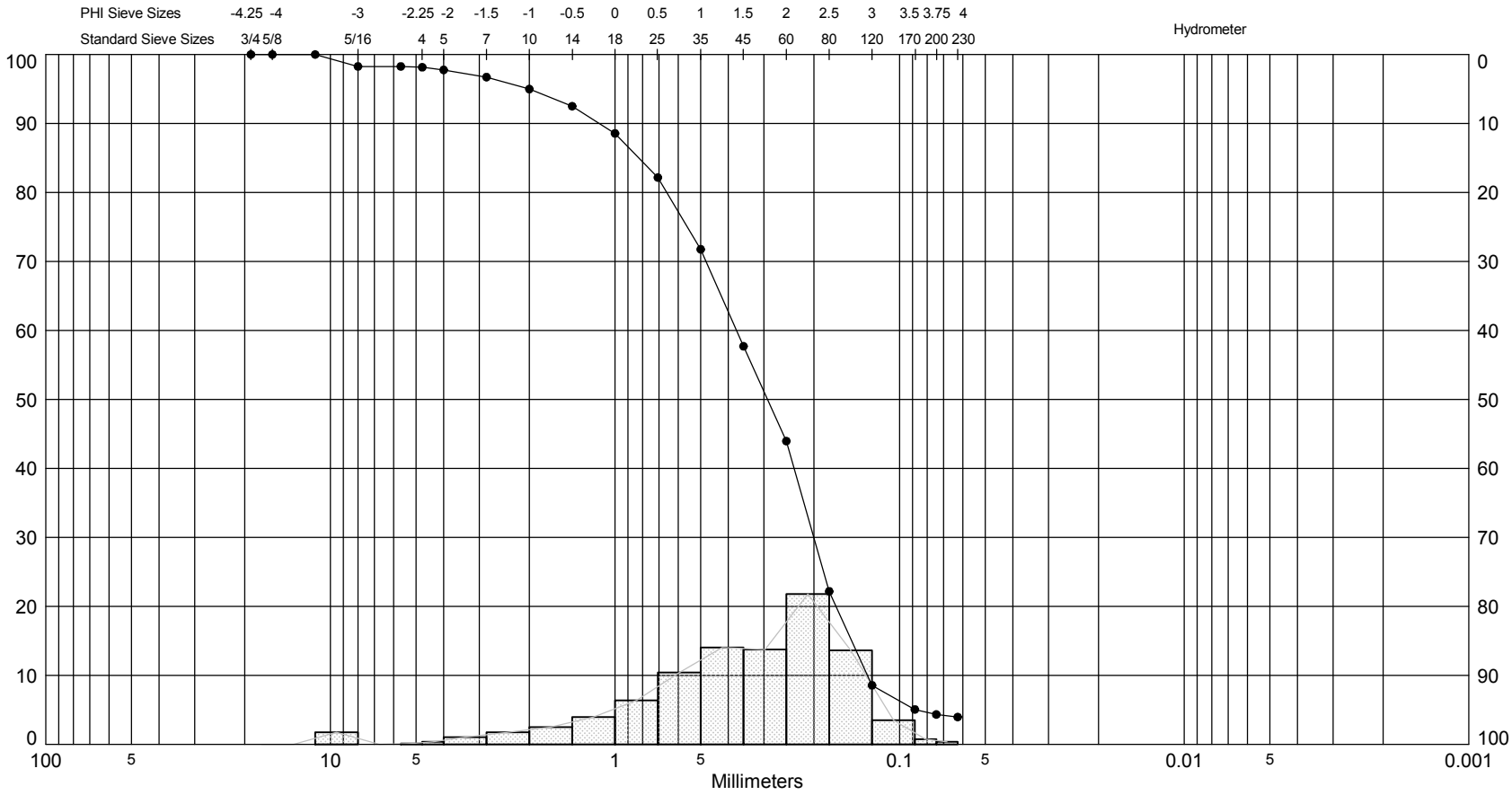
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z300 #3	—●—		SW	#200 - 4.33 #230 - 3.96	0.35	0.74	1.78	1.45	-1.23	4.98	1.3

Comments: Sand, trace fines

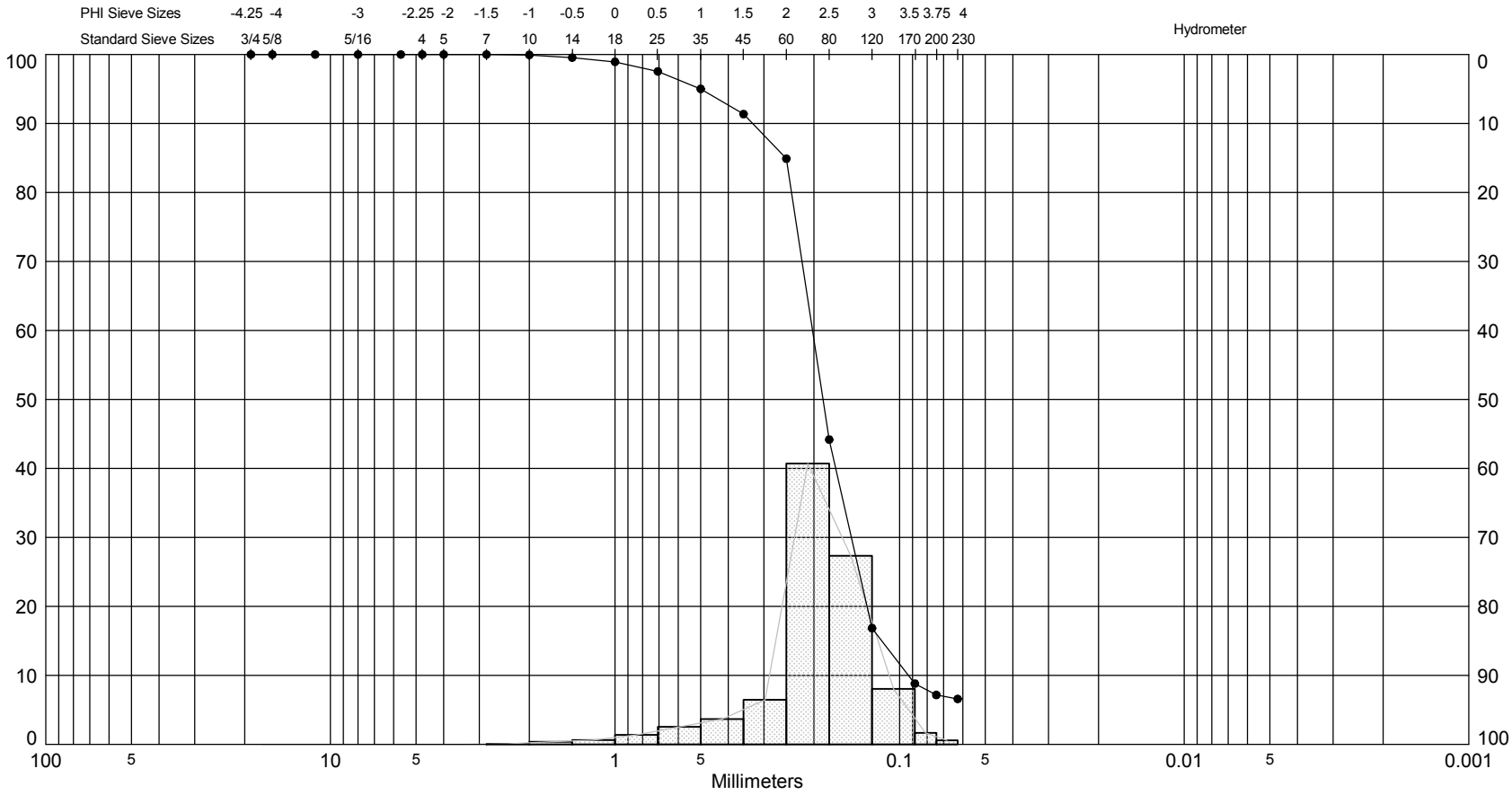
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z300 #4	—●—		SP-SM	#200 - 7.16 #230 - 6.58	1.01	1.51	2.43	2.34	-1.39	6.83	0.68

Comments: Sand, dark fines

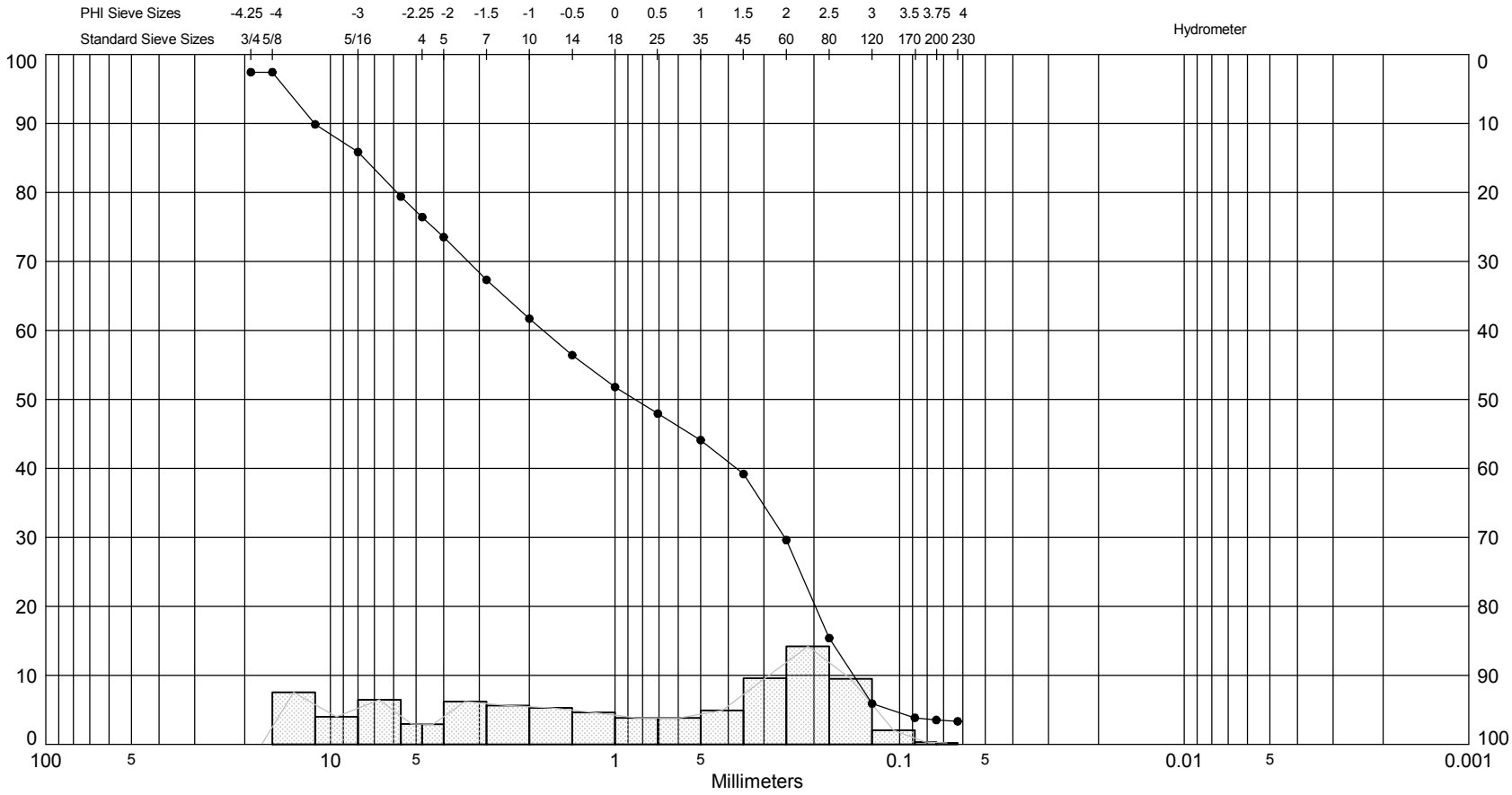
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z301 #1	—●—	SW WITH GRAVEL		#200 3.53 #230 3.34	1.66	9.69	0.23	-0.14	-0.07	1.64	2.21

Comments: Gray sand, rock, shell

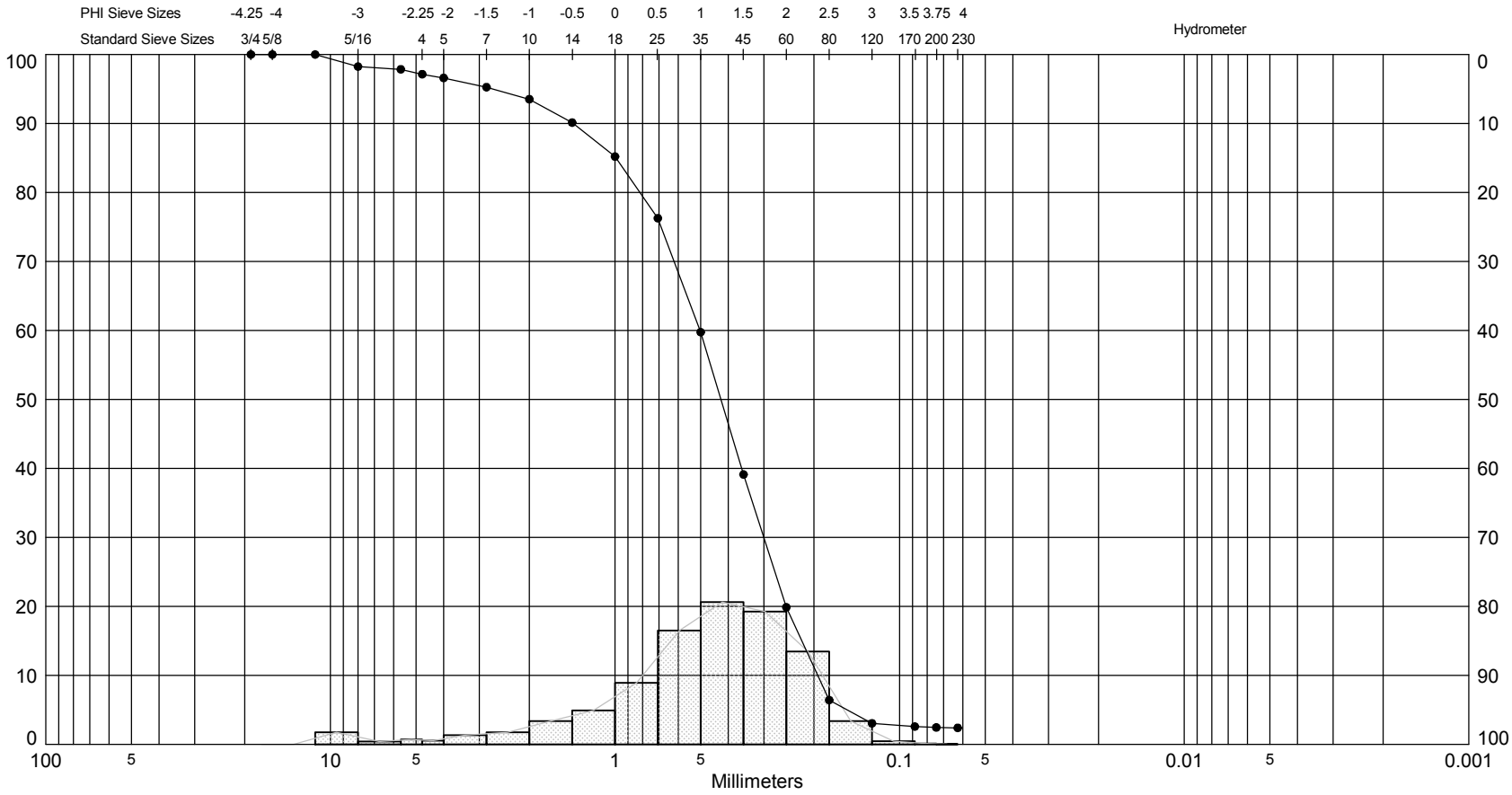
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z301 #2	—●—		SW	#200 - 2.45 #230 - 2.39	0.66	0.96	1.24	1	-1.29	5.2	1.2

Comments: Coarser brown sand, rock

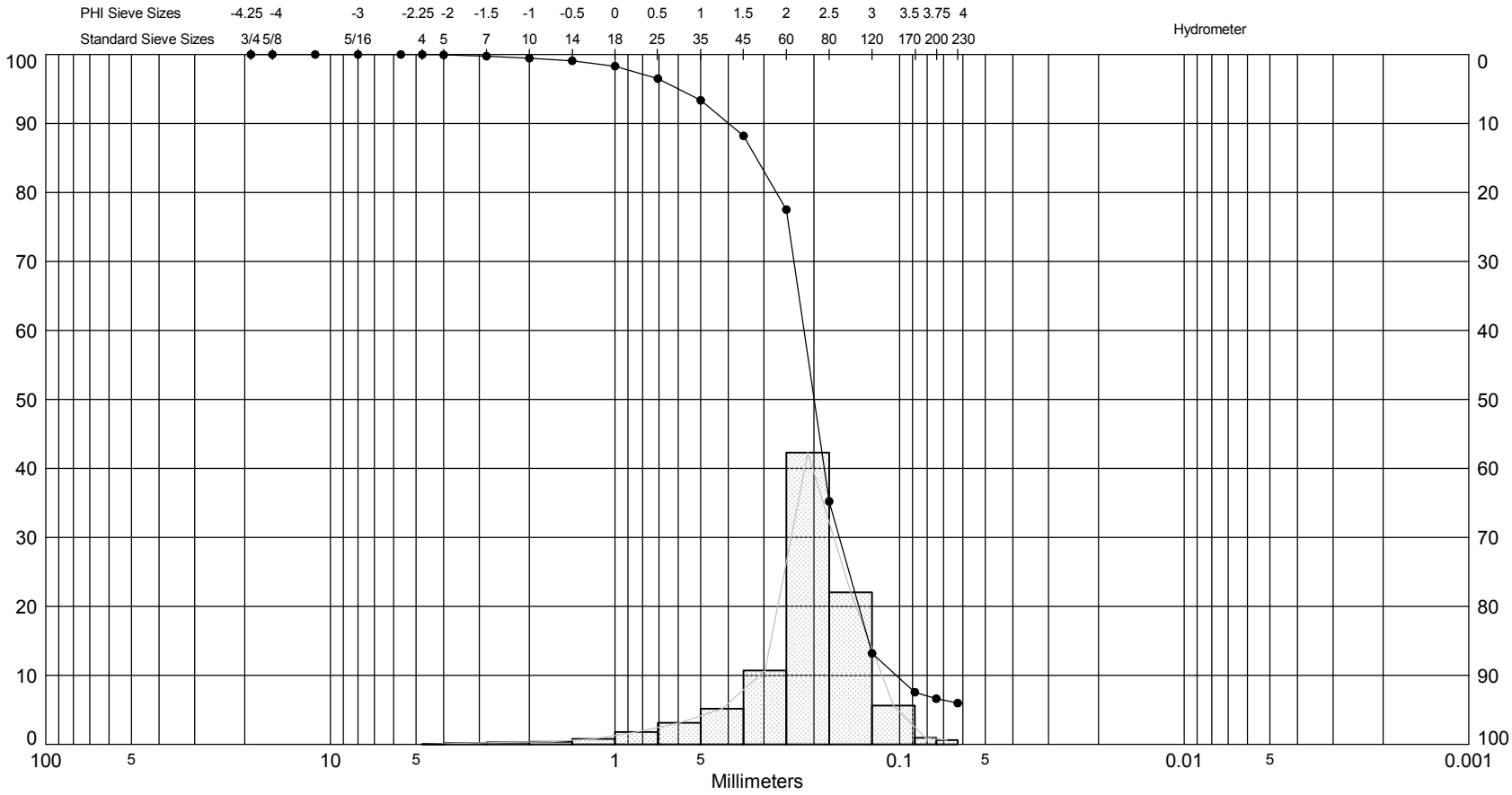
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
Z301 #3	—●—		SP-SM	#200 - 6.62 #230 - 5.98	0.94	1.05	2.33	2.2	-1.56	7.7	0.75

Comments: Tan sand, trace fines

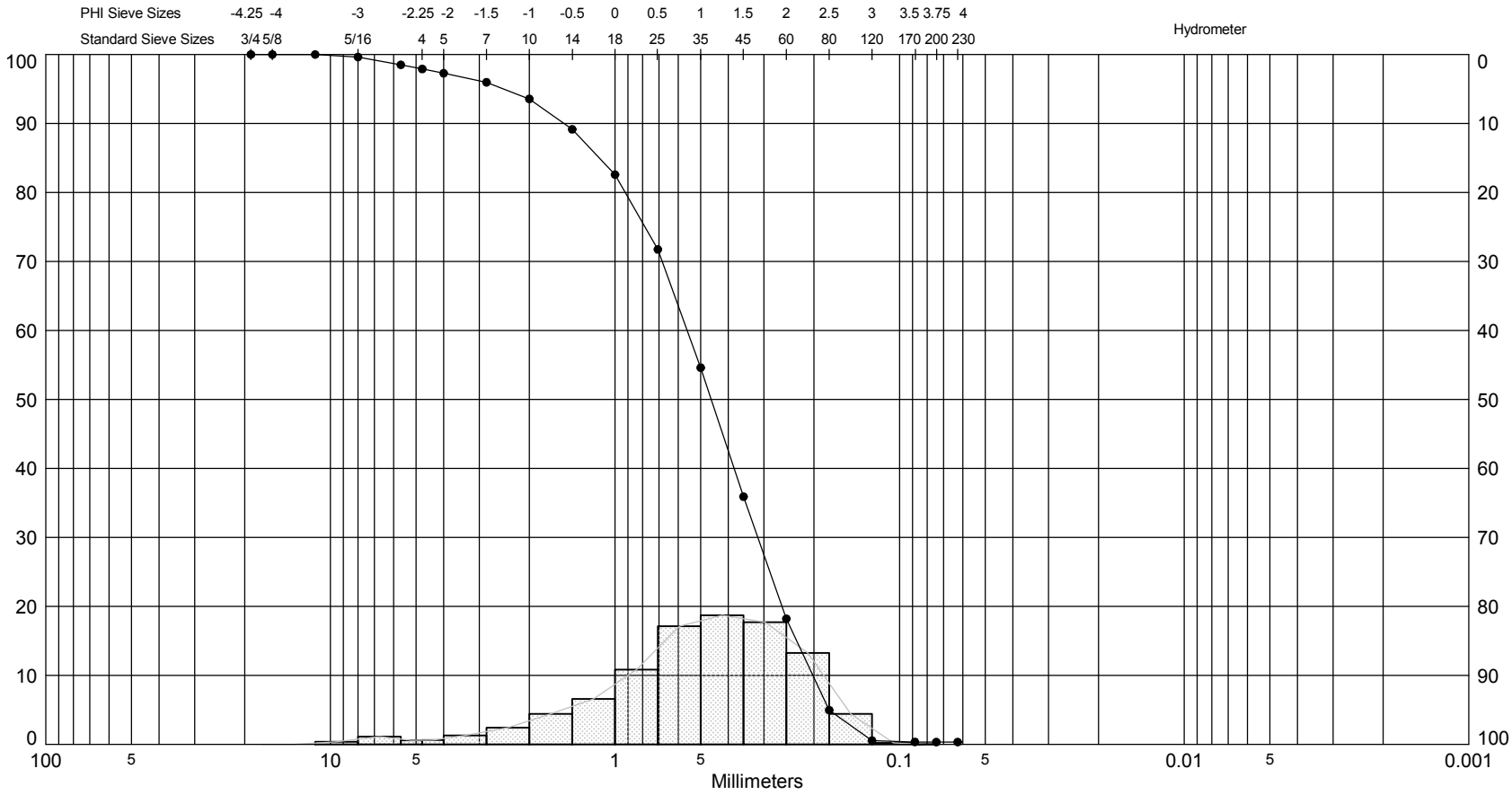
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-15-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-1 #1	—●—		SW	#200 - 0.33 #230 - 0.33	0.66	25.30	1.12	0.96	-0.94	4.04	1.16

Comments:

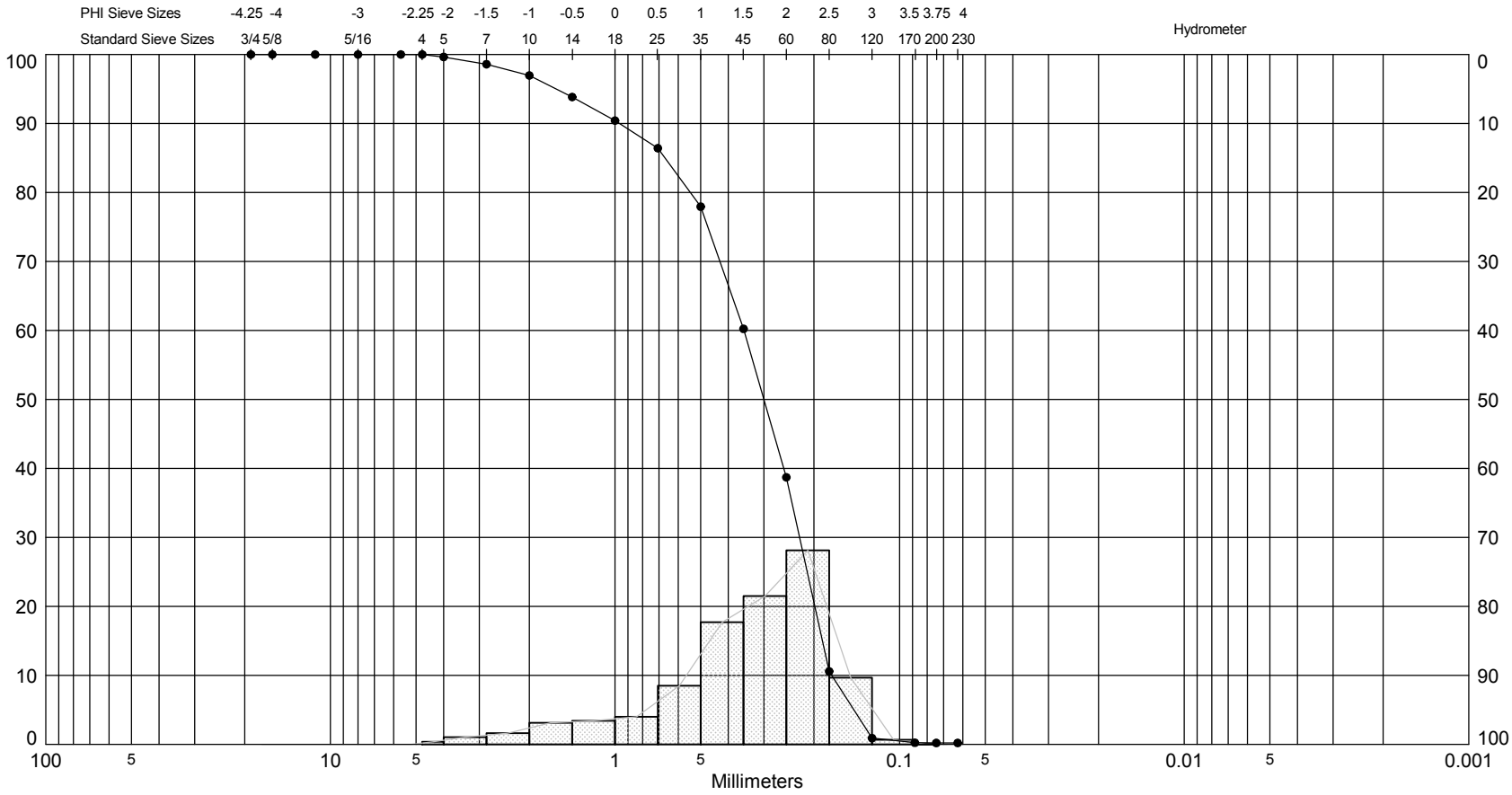
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-1 #2	—●—		SW	#200 - 0.20 #230 - 0.20	0.56	14.82	1.74	1.52	-1.21	4.36	1.01

Comments:

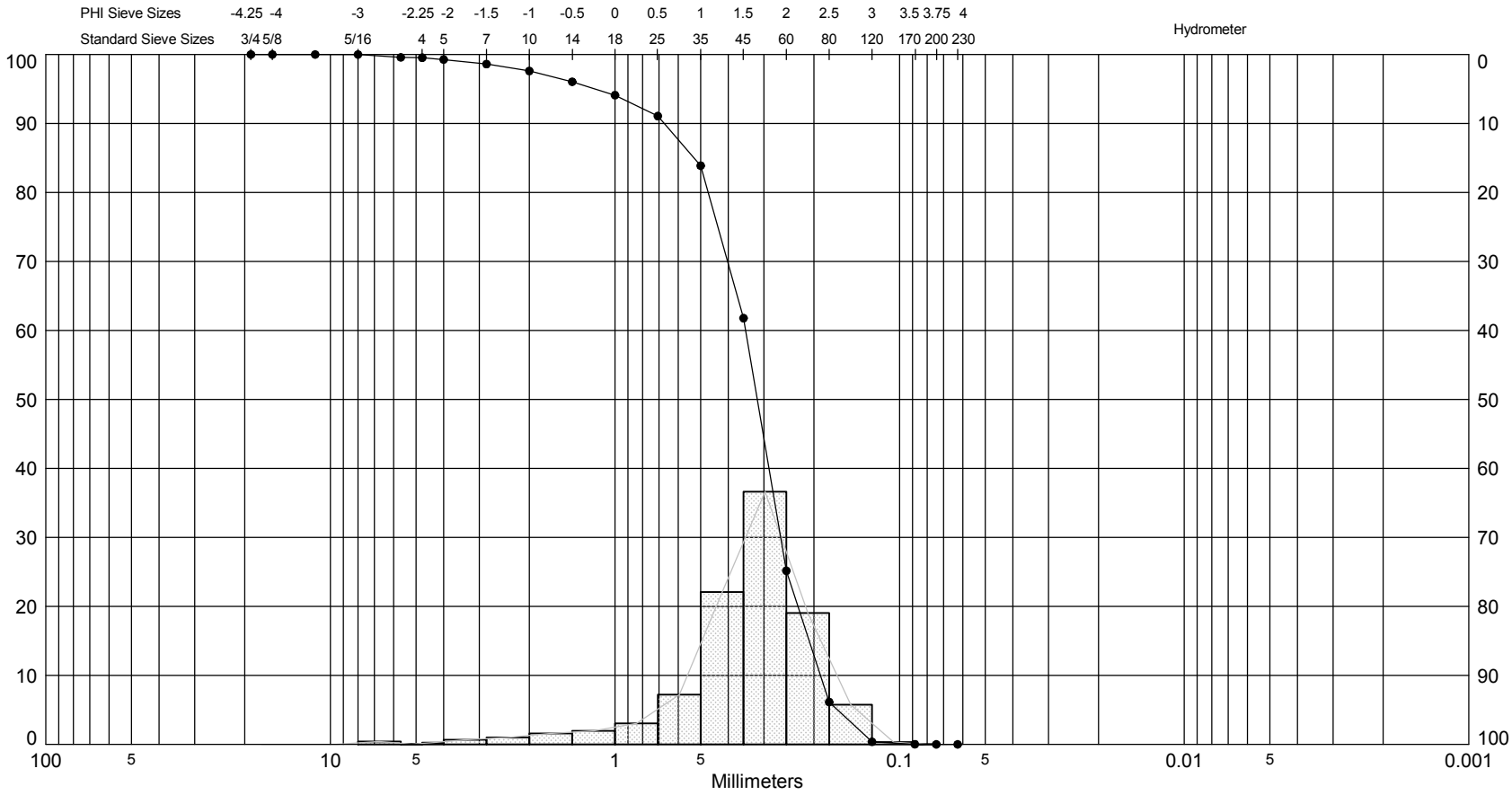
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-2 #1	—●—		SW	#200 - 0.00 #230 - 0.00	0.60	15.86	1.66	1.52	-1.76	7.86	0.86

Comments:

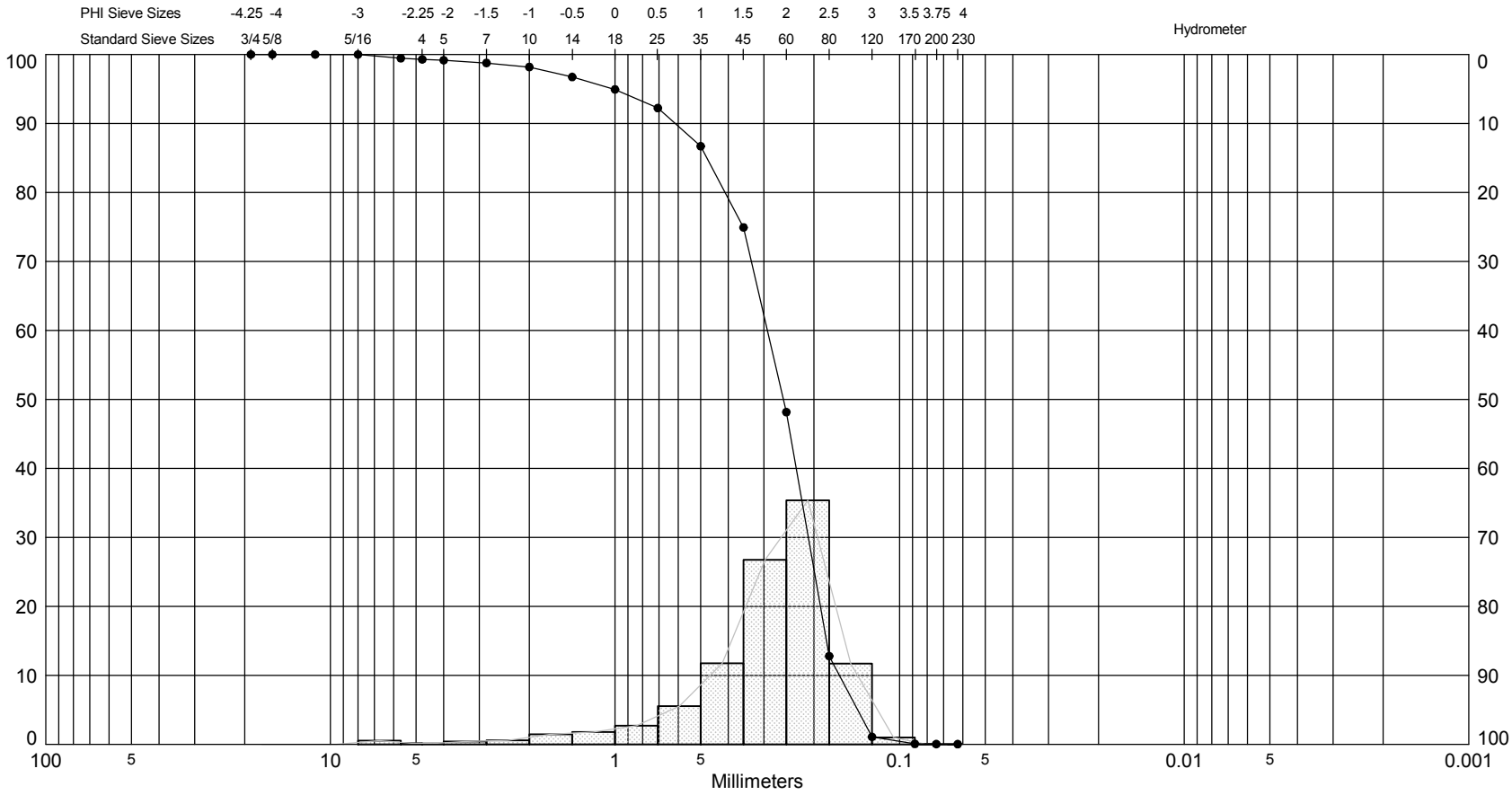
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-2 #2	—●—		SW	#200 - 0.04 #230 - 0.03	0.54	12.34	1.97	1.77	-1.95	8.52	0.89

Comments:

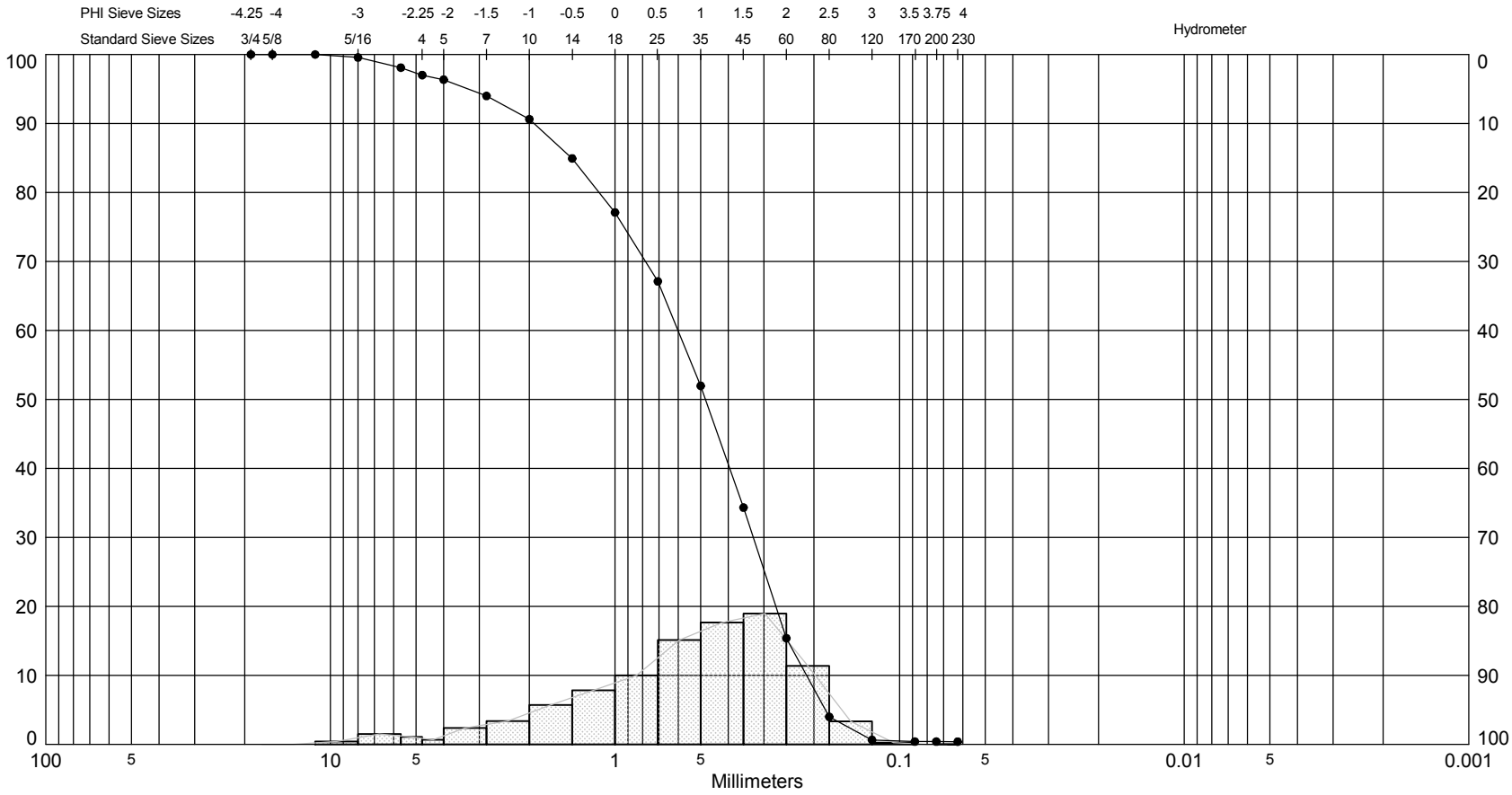
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-3 #1	—●—		SW	#200 - 0.40 #230 - 0.39	0.68	29.19	1.06	0.81	-0.87	3.45	1.25

Comments:

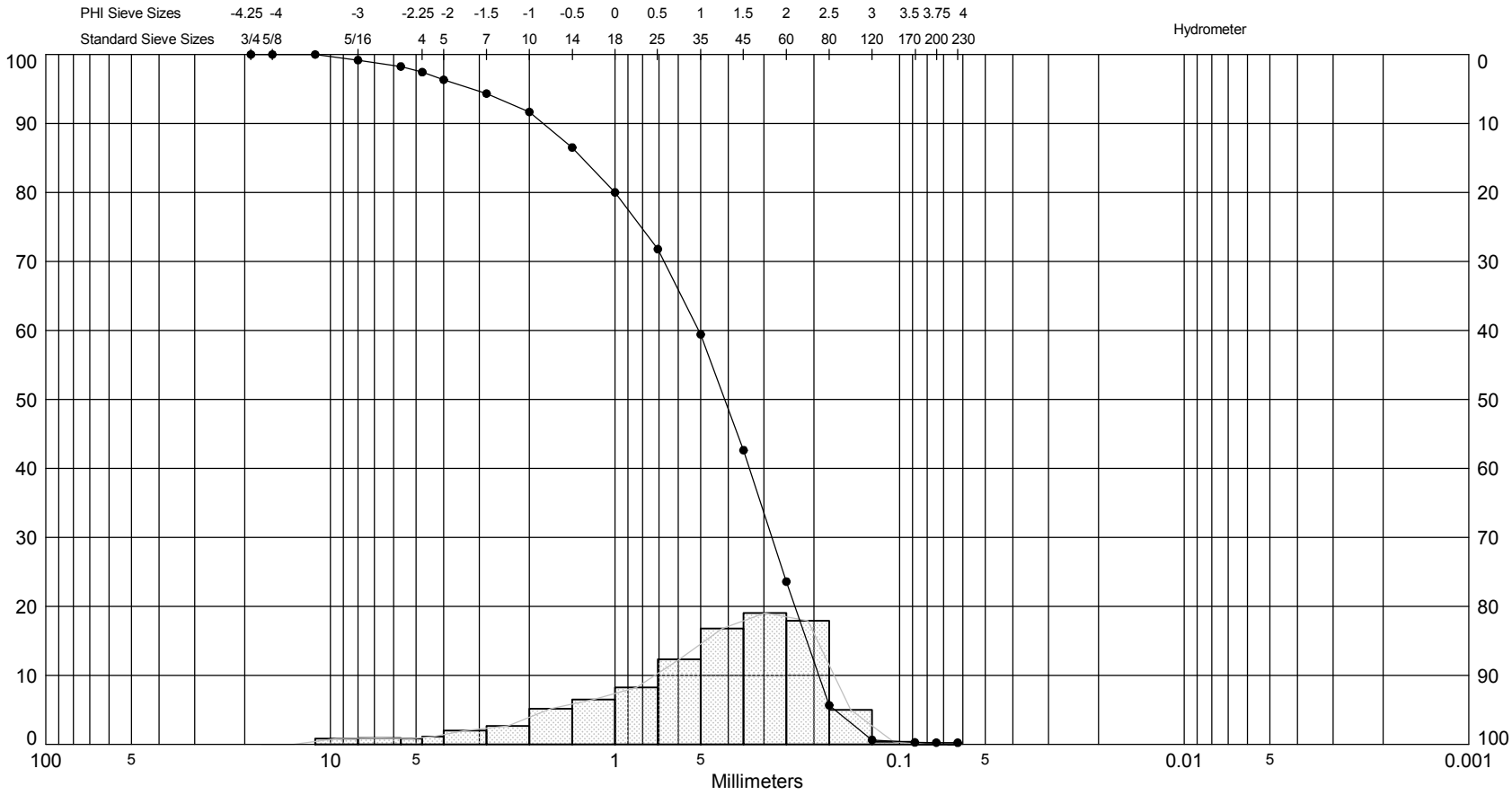
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-3 #2	—●—		SW	#200 - 0.25 #230 - 0.24	0.70	24.68	1.28	0.99	-1.01	3.71	1.29

Comments:

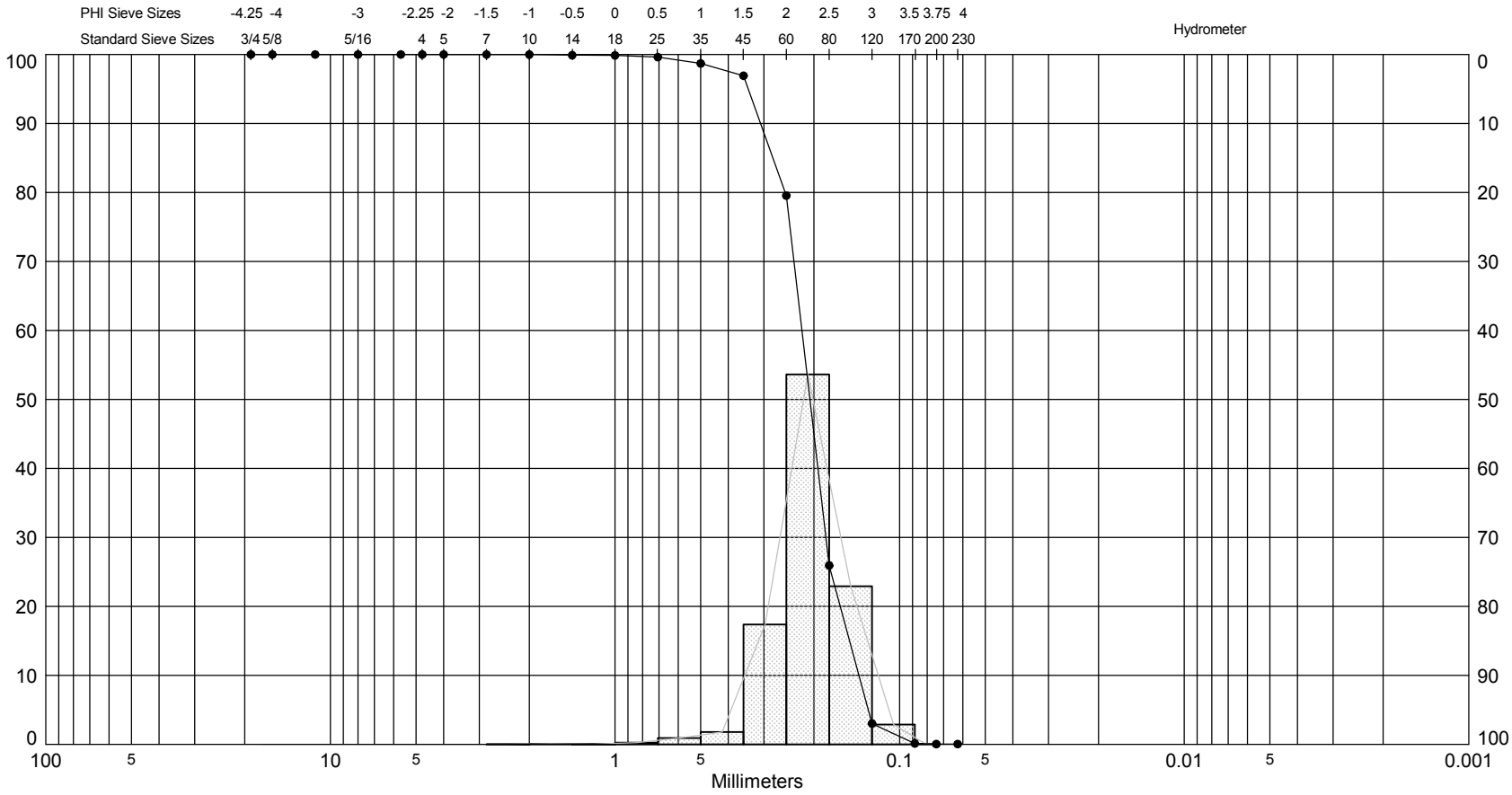
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-4 #1	—●—		SP	#200 - 0.04 #230 - 0.04	0.42	4.80	2.28	2.27	-0.91	7.47	0.44

Comments:

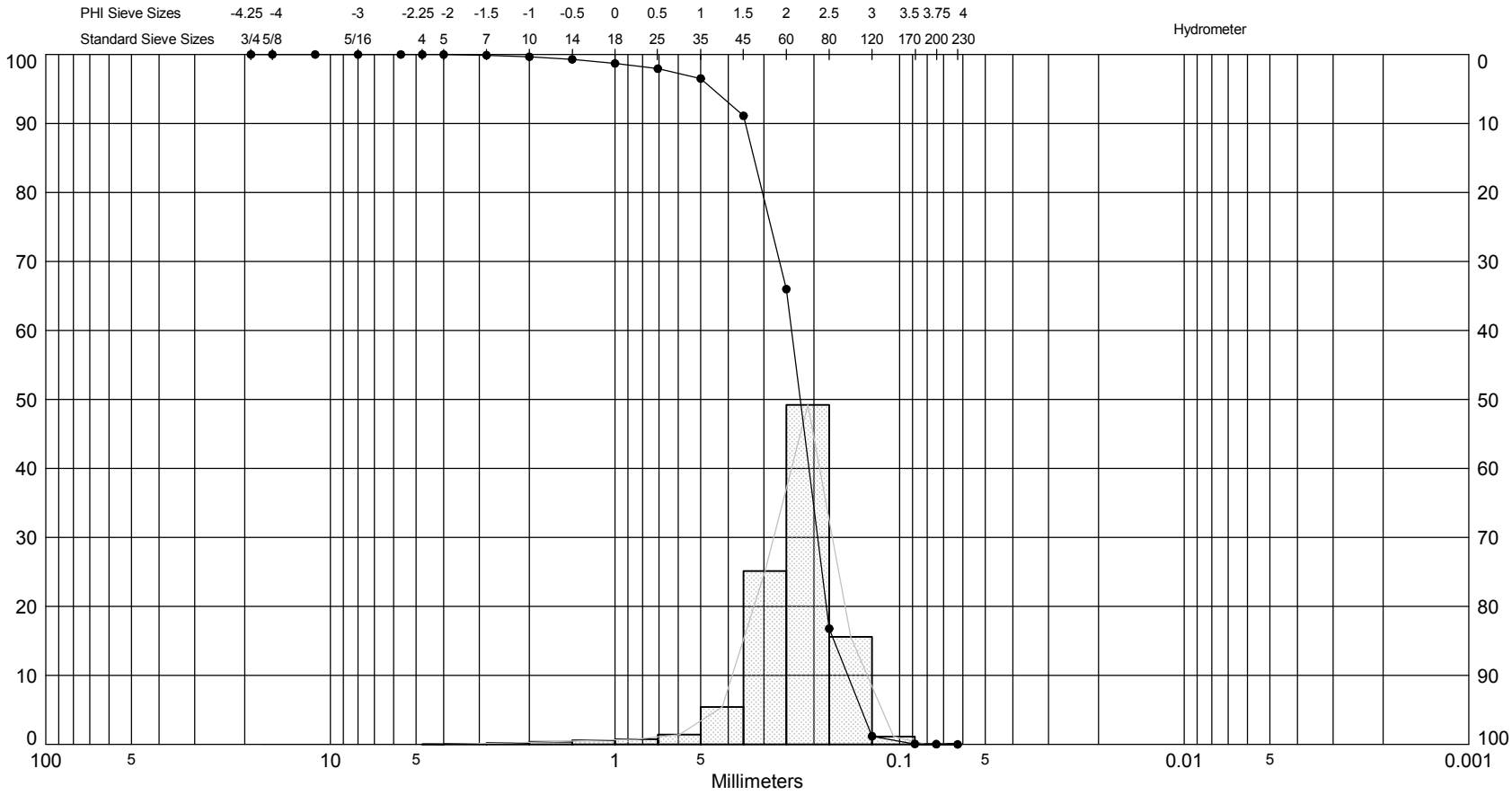
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-4 #2	—●—		SP	#200 - 0.03 #230 - 0.00	0.49	8.35	2.16	2.09	-2	11.38	0.57

Comments:

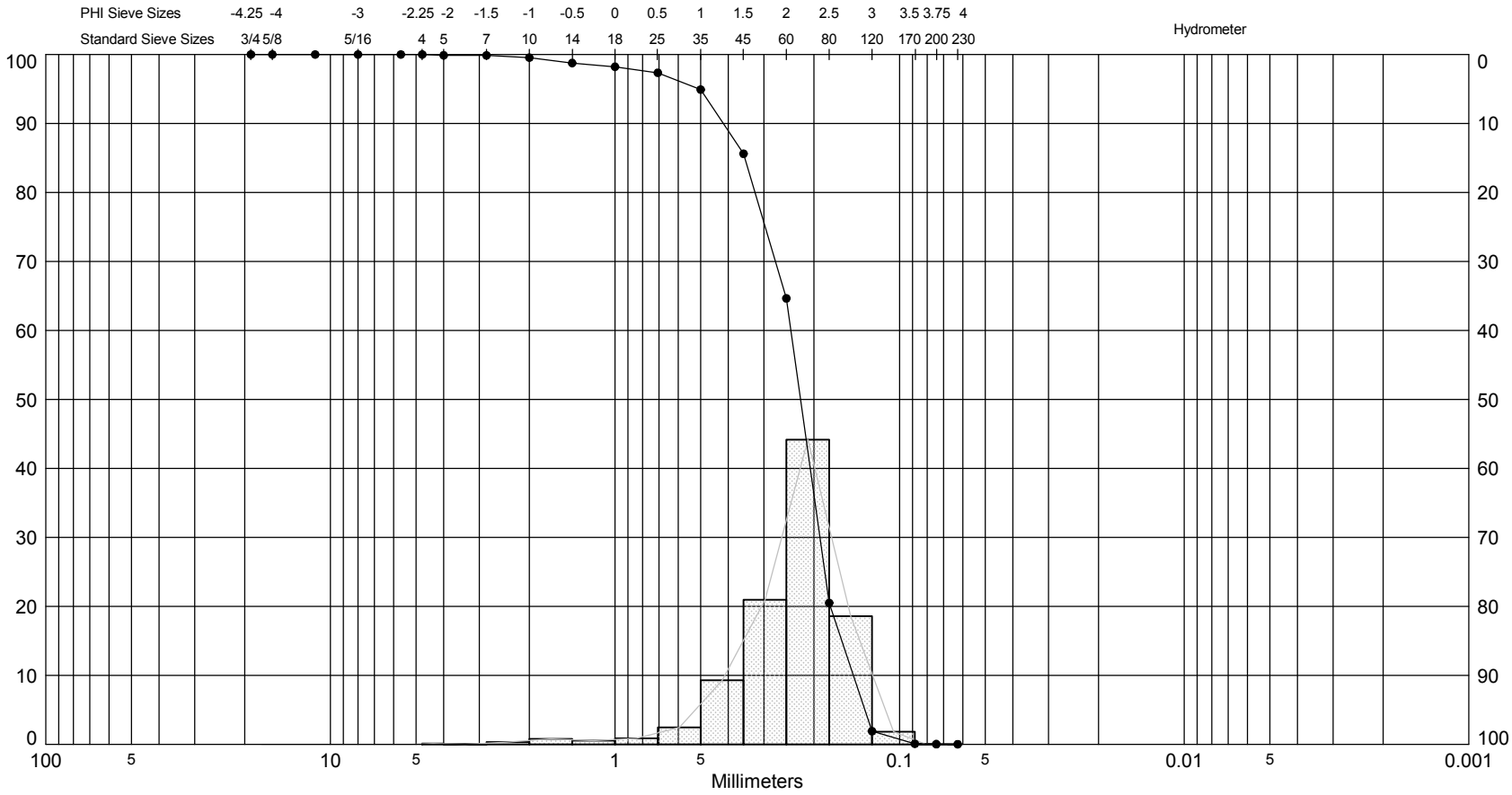
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-5 #1	—●—		SP	#200 - 0.03 #230 - 0.02	0.47	7.17	2.17	2.06	-1.81	9.15	0.66

Comments:

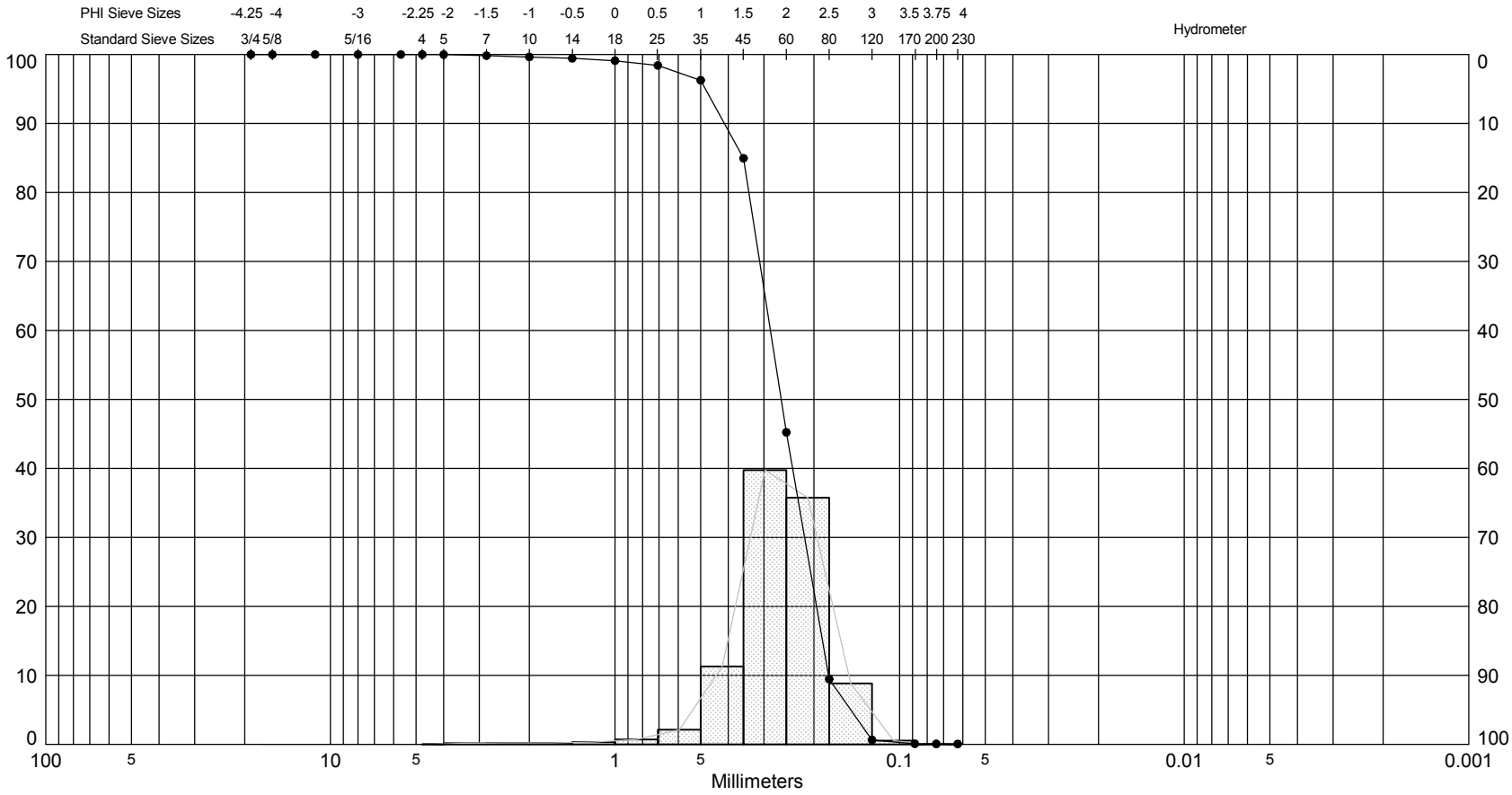
Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
B1-5 #2	—●—		SP	#200 - 0.07 #230 - 0.06	0.48	9.21	1.94	1.91	-1.48	9.91	0.54

Comments:

Depths and elevations based on measured values

Sample Information	
Project Name:	Carteret County
Analysis Date:	04-26-12
Analyzed By:	MB
Easting (X, ft):	
Northing (Y, ft):	
Horizontal System:	
Vertical System:	

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SIEVE ANALYSIS CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

3.0 Granularmetric Tables

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O1 #1

Analysis Date: 01-21-12

Analyzed By: LA

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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.97	123.68	0.45	0.01	#200 - 11.56 #230 - 10.72	1.80	21.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.26	0.91	1.26	0.91
5/16"	-3.00	8.00	0.25	0.18	1.51	1.09
3.5	-2.50	5.66	0.20	0.14	1.71	1.23
4	-2.25	4.76	0.00	0.00	1.71	1.23
5	-2.00	4.00	0.62	0.45	2.33	1.68
7	-1.50	2.83	2.23	1.62	4.56	3.30
10	-1.00	2.00	3.88	2.81	8.44	6.11
14	-0.50	1.41	5.81	4.21	14.25	10.32
18	0.00	1.00	6.94	5.03	21.19	15.35
25	0.50	0.71	6.53	4.73	27.72	20.08
35	1.00	0.50	6.09	4.41	33.81	24.49
45	1.50	0.35	5.77	4.18	39.58	28.67
60	2.00	0.25	7.84	5.68	47.42	34.35
80	2.50	0.18	21.09	15.29	68.51	49.64
120	3.00	0.13	39.86	28.89	108.37	78.53
170	3.50	0.09	11.83	8.57	120.20	87.10
200	3.75	0.07	1.85	1.34	122.05	88.44
230	4.00	0.06	1.16	0.84	123.21	89.28

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.32	2.94	2.51	1.06	0.07	-1.20

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.72	0.30	1.53	-1.21	3.87

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

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Project Name: Carteret County
Sample Name: O1 #2
Analysis Date: 01-21-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
153.15	146.45	0.29	0.05	#200 - 4.97 #230 - 4.62	1.20	22.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.49	0.32	0.49	0.32
3.5	-2.50	5.66	0.00	0.00	0.49	0.32
4	-2.25	4.76	0.00	0.00	0.49	0.32
5	-2.00	4.00	0.02	0.01	0.51	0.33
7	-1.50	2.83	0.48	0.31	0.99	0.64
10	-1.00	2.00	1.10	0.72	2.09	1.36
14	-0.50	1.41	2.45	1.60	4.54	2.96
18	0.00	1.00	2.93	1.91	7.47	4.87
25	0.50	0.71	3.39	2.21	10.86	7.08
35	1.00	0.50	5.94	3.88	16.80	10.96
45	1.50	0.35	8.82	5.76	25.62	16.72
60	2.00	0.25	14.50	9.47	40.12	26.19
80	2.50	0.18	54.64	35.68	94.76	61.87
120	3.00	0.13	42.21	27.56	136.97	89.43
170	3.50	0.09	7.31	4.77	144.28	94.20
200	3.75	0.07	1.27	0.83	145.55	95.03
230	4.00	0.06	0.54	0.35	146.09	95.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.74	2.90	2.74	2.33	1.94	1.44	0.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.09	0.23	0.96	-1.92	8.04

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O1 #3
Analysis Date: 01-21-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
116.92	106.47	0.65	0.14	#200 - 10.20 #230 - 9.60	1.60	43.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	1.96	1.68	1.96	1.68
5/8"	-4.00	16.00	0.00	0.00	1.96	1.68
11/16"	-3.50	11.31	6.15	5.26	8.11	6.94
5/16"	-3.00	8.00	2.93	2.51	11.04	9.45
3.5	-2.50	5.66	3.96	3.39	15.00	12.84
4	-2.25	4.76	2.45	2.10	17.45	14.94
5	-2.00	4.00	3.20	2.74	20.65	17.68
7	-1.50	2.83	7.14	6.11	27.79	23.79
10	-1.00	2.00	8.62	7.37	36.41	31.16
14	-0.50	1.41	9.46	8.09	45.87	39.25
18	0.00	1.00	6.83	5.84	52.70	45.09
25	0.50	0.71	5.59	4.78	58.29	49.87
35	1.00	0.50	5.80	4.96	64.09	54.83
45	1.50	0.35	8.25	7.06	72.34	61.89
60	2.00	0.25	8.84	7.56	81.18	69.45
80	2.50	0.18	9.41	8.05	90.59	77.50
120	3.00	0.13	10.30	8.81	100.89	86.31
170	3.50	0.09	3.21	2.75	104.10	89.06
200	3.75	0.07	0.86	0.74	104.96	89.80
230	4.00	0.06	0.70	0.60	105.66	90.40

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.87	2.34	0.51	-1.42	-2.15	-3.78

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.01	0.99	2.04	-0.06	1.95

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O1 #4
Analysis Date: 01-21-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.97	158.72	0.17	0.47	#200 - 6.81 #230 - 6.66	0.70	14.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	7.42	4.39	7.42	4.39
5/8"	-4.00	16.00	0.00	0.00	7.42	4.39
11/16"	-3.50	11.31	3.88	2.30	11.30	6.69
5/16"	-3.00	8.00	2.84	1.68	14.14	8.37
3.5	-2.50	5.66	3.18	1.88	17.32	10.25
4	-2.25	4.76	1.39	0.82	18.71	11.07
5	-2.00	4.00	1.10	0.65	19.81	11.72
7	-1.50	2.83	2.72	1.61	22.53	13.33
10	-1.00	2.00	3.45	2.04	25.98	15.37
14	-0.50	1.41	4.42	2.62	30.40	17.99
18	0.00	1.00	4.23	2.50	34.63	20.49
25	0.50	0.71	7.29	4.31	41.92	24.80
35	1.00	0.50	20.08	11.88	62.00	36.68
45	1.50	0.35	30.49	18.04	92.49	54.72
60	2.00	0.25	28.23	16.71	120.72	71.43
80	2.50	0.18	27.97	16.55	148.69	87.98
120	3.00	0.13	6.93	4.10	155.62	92.08
170	3.50	0.09	1.37	0.81	156.99	92.89
200	3.75	0.07	0.50	0.30	157.49	93.19
230	4.00	0.06	0.26	0.15	157.75	93.34

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.38	2.11	1.37	0.51	-0.88	-4.05

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.69	0.62	1.55	-0.93	3.82

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O1 #5

Analysis Date: 01-21-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
165.40	144.80	0.87	0.25	#200 - 14.37 #230 - 13.22	1.20	5.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.39	0.24	0.39	0.24
4	-2.25	4.76	0.16	0.10	0.55	0.34
5	-2.00	4.00	0.05	0.03	0.60	0.37
7	-1.50	2.83	0.74	0.45	1.34	0.82
10	-1.00	2.00	1.30	0.79	2.64	1.61
14	-0.50	1.41	1.69	1.02	4.33	2.63
18	0.00	1.00	2.03	1.23	6.36	3.86
25	0.50	0.71	3.76	2.27	10.12	6.13
35	1.00	0.50	13.10	7.92	23.22	14.05
45	1.50	0.35	19.34	11.69	42.56	25.74
60	2.00	0.25	23.78	14.38	66.34	40.12
80	2.50	0.18	29.61	17.90	95.95	58.02
120	3.00	0.13	29.66	17.93	125.61	75.95
170	3.50	0.09	12.88	7.79	138.49	83.74
200	3.75	0.07	3.13	1.89	141.62	85.63
230	4.00	0.06	1.90	1.15	143.52	86.78

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.53	2.97	2.28	1.47	1.08	0.25

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.94	0.26	1.05	-1	4.82

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O2 #1
Analysis Date: 01-21-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.43	130.59	0.52	0.08	#200 - 10.12 #230 - 9.40	2.30	18.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.32	0.22	0.32	0.22
3.5	-2.50	5.66	0.40	0.28	0.72	0.50
4	-2.25	4.76	0.83	0.58	1.55	1.08
5	-2.00	4.00	1.98	1.38	3.53	2.46
7	-1.50	2.83	3.59	2.50	7.12	4.96
10	-1.00	2.00	3.70	2.58	10.82	7.54
14	-0.50	1.41	6.71	4.68	17.53	12.22
18	0.00	1.00	6.76	4.71	24.29	16.93
25	0.50	0.71	6.13	4.27	30.42	21.20
35	1.00	0.50	7.08	4.94	37.50	26.14
45	1.50	0.35	7.98	5.56	45.48	31.70
60	2.00	0.25	10.71	7.47	56.19	39.17
80	2.50	0.18	28.35	19.77	84.54	58.94
120	3.00	0.13	31.00	21.61	115.54	80.55
170	3.50	0.09	10.89	7.59	126.43	88.14
200	3.75	0.07	2.50	1.74	128.93	89.88
230	4.00	0.06	1.03	0.72	129.96	90.60

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.23	2.87	2.27	0.88	-0.10	-1.49

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.59	0.33	1.52	-0.98	3.01

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O2 #2
Analysis Date: 01-21-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
146.18	126.88	1.27	0.04	#200 - 15.03 #230 - 14.11	1.80	36.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.07	0.73	1.07	0.73
3.5	-2.50	5.66	3.46	2.37	4.53	3.10
4	-2.25	4.76	2.65	1.81	7.18	4.91
5	-2.00	4.00	2.94	2.01	10.12	6.92
7	-1.50	2.83	8.44	5.77	18.56	12.69
10	-1.00	2.00	9.78	6.69	28.34	19.38
14	-0.50	1.41	11.55	7.90	39.89	27.28
18	0.00	1.00	9.87	6.75	49.76	34.03
25	0.50	0.71	10.76	7.36	60.52	41.39
35	1.00	0.50	9.27	6.34	69.79	47.73
45	1.50	0.35	8.15	5.58	77.94	53.31
60	2.00	0.25	10.28	7.03	88.22	60.34
80	2.50	0.18	15.26	10.44	103.48	70.78
120	3.00	0.13	13.77	9.42	117.25	80.20
170	3.50	0.09	5.49	3.76	122.74	83.96
200	3.75	0.07	1.47	1.01	124.21	84.97
230	4.00	0.06	1.34	0.92	125.55	85.89

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.51	2.72	1.20	-0.64	-1.25	-2.24

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.6	0.66	1.78	-0.15	1.92

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O2 #3

Analysis Date: 01-21-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
121.14	105.97	0.68	0.11	#200 - 13.69 #230 - 13.19	2.20	49.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.68	1.39	1.68	1.39
5/16"	-3.00	8.00	6.22	5.13	7.90	6.52
3.5	-2.50	5.66	4.34	3.58	12.24	10.10
4	-2.25	4.76	2.90	2.39	15.14	12.49
5	-2.00	4.00	2.26	1.87	17.40	14.36
7	-1.50	2.83	7.84	6.47	25.24	20.83
10	-1.00	2.00	8.98	7.41	34.22	28.24
14	-0.50	1.41	9.62	7.94	43.84	36.18
18	0.00	1.00	6.47	5.34	50.31	41.52
25	0.50	0.71	5.30	4.38	55.61	45.90
35	1.00	0.50	6.27	5.18	61.88	51.08
45	1.50	0.35	6.36	5.25	68.24	56.33
60	2.00	0.25	7.25	5.98	75.49	62.31
80	2.50	0.18	15.49	12.79	90.98	75.10
120	3.00	0.13	9.18	7.58	100.16	82.68
170	3.50	0.09	3.28	2.71	103.44	85.39
200	3.75	0.07	1.11	0.92	104.55	86.31
230	4.00	0.06	0.61	0.50	105.16	86.81

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.24	2.50	0.90	-1.22	-1.87	-3.15

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.19	0.88	2.02	-0.16	1.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O2 #4

Analysis Date: 01-21-12

Analyzed By: LA

COASTAL TECH
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
126.25	105.27	0.68	0.08	#200 - 18.00 #230 - 17.24	1.40	18.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.70	0.55	0.70	0.55
4	-2.25	4.76	0.18	0.14	0.88	0.69
5	-2.00	4.00	1.11	0.88	1.99	1.57
7	-1.50	2.83	3.48	2.76	5.47	4.33
10	-1.00	2.00	6.13	4.86	11.60	9.19
14	-0.50	1.41	6.48	5.13	18.08	14.32
18	0.00	1.00	5.32	4.21	23.40	18.53
25	0.50	0.71	4.89	3.87	28.29	22.40
35	1.00	0.50	6.89	5.46	35.18	27.86
45	1.50	0.35	8.79	6.96	43.97	34.82
60	2.00	0.25	11.31	8.96	55.28	43.78
80	2.50	0.18	22.86	18.11	78.14	61.89
120	3.00	0.13	19.67	15.58	97.81	77.47
170	3.50	0.09	4.58	3.63	102.39	81.10
200	3.75	0.07	1.14	0.90	103.53	82.00
230	4.00	0.06	0.96	0.76	104.49	82.76

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.92	2.17	0.74	-0.30	-1.43

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.35	0.39	1.52	-0.74	2.49

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O3 #1

Analysis Date: 01-21-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
109.99	109.99	0.56	0.00	#200 - 0.98 #230 - 0.51	0.50	9.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.11	0.10	0.11	0.10
5	-2.00	4.00	0.23	0.21	0.34	0.31
7	-1.50	2.83	0.42	0.38	0.76	0.69
10	-1.00	2.00	0.54	0.49	1.30	1.18
14	-0.50	1.41	0.64	0.58	1.94	1.76
18	0.00	1.00	0.99	0.90	2.93	2.66
25	0.50	0.71	1.58	1.44	4.51	4.10
35	1.00	0.50	2.79	2.54	7.30	6.64
45	1.50	0.35	5.32	4.84	12.62	11.48
60	2.00	0.25	13.00	11.82	25.62	23.30
80	2.50	0.18	27.08	24.62	52.70	47.92
120	3.00	0.13	40.54	36.86	93.24	84.78
170	3.50	0.09	14.05	12.77	107.29	97.55
200	3.75	0.07	1.62	1.47	108.91	99.02
230	4.00	0.06	0.52	0.47	109.43	99.49

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.40	2.99	2.87	2.53	2.03	1.69	0.68

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.33	0.20	0.86	-1.95	8.74

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O3 #2
Analysis Date: 01-21-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.80	119.61	0.75	0.13	#200 - 16.68 #230 - 15.71	1.80	15.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.60	0.43	0.60	0.43
10	-1.00	2.00	1.52	1.08	2.12	1.51
14	-0.50	1.41	3.45	2.45	5.57	3.96
18	0.00	1.00	4.07	2.89	9.64	6.85
25	0.50	0.71	4.62	3.28	14.26	10.13
35	1.00	0.50	5.76	4.09	20.02	14.22
45	1.50	0.35	6.18	4.39	26.20	18.61
60	2.00	0.25	7.69	5.46	33.89	24.07
80	2.50	0.18	21.73	15.43	55.62	39.50
120	3.00	0.13	41.83	29.71	97.45	69.21
170	3.50	0.09	16.74	11.89	114.19	81.10
200	3.75	0.07	3.13	2.22	117.32	83.32
230	4.00	0.06	1.36	0.97	118.68	84.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.93	3.24	2.68	2.03	1.20	-0.32

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.15	0.23	1.16	-1.29	4.02

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O3 #3
Analysis Date: 01-21-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
147.84	126.83	0.86	0.13	#200 - 16.28 #230 - 14.93	1.40	29.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.00	1.35	2.00	1.35
5/16"	-3.00	8.00	0.35	0.24	2.35	1.59
3.5	-2.50	5.66	1.20	0.81	3.55	2.40
4	-2.25	4.76	0.57	0.39	4.12	2.79
5	-2.00	4.00	1.28	0.87	5.40	3.66
7	-1.50	2.83	3.76	2.54	9.16	6.20
10	-1.00	2.00	5.37	3.63	14.53	9.83
14	-0.50	1.41	8.68	5.87	23.21	15.70
18	0.00	1.00	7.87	5.32	31.08	21.02
25	0.50	0.71	6.93	4.69	38.01	25.71
35	1.00	0.50	8.80	5.95	46.81	31.66
45	1.50	0.35	12.64	8.55	59.45	40.21
60	2.00	0.25	12.50	8.46	71.95	48.67
80	2.50	0.18	12.72	8.60	84.67	57.27
120	3.00	0.13	24.88	16.83	109.55	74.10
170	3.50	0.09	11.49	7.77	121.04	81.87
200	3.75	0.07	2.74	1.85	123.78	83.72
230	4.00	0.06	2.00	1.35	125.78	85.07

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.80	3.06	2.08	0.42	-0.47	-1.74

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.27	0.41	1.72	-0.76	2.89

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O3 #4
Analysis Date: 01-21-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.83	133.66	1.35	0.97	#200 - 12.76 #230 - 12.09	1.80	40.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.73	1.83	2.73	1.83
11/16"	-3.50	11.31	0.00	0.00	2.73	1.83
5/16"	-3.00	8.00	0.57	0.38	3.30	2.21
3.5	-2.50	5.66	2.44	1.64	5.74	3.85
4	-2.25	4.76	2.02	1.36	7.76	5.21
5	-2.00	4.00	2.93	1.97	10.69	7.18
7	-1.50	2.83	6.33	4.25	17.02	11.43
10	-1.00	2.00	8.34	5.60	25.36	17.03
14	-0.50	1.41	12.66	8.51	38.02	25.54
18	0.00	1.00	10.96	7.36	48.98	32.90
25	0.50	0.71	10.43	7.01	59.41	39.91
35	1.00	0.50	10.06	6.76	69.47	46.67
45	1.50	0.35	11.51	7.73	80.98	54.40
60	2.00	0.25	13.98	9.39	94.96	63.79
80	2.50	0.18	18.17	12.21	113.13	76.00
120	3.00	0.13	10.48	7.04	123.61	83.04
170	3.50	0.09	4.56	3.06	128.17	86.10
200	3.75	0.07	1.70	1.14	129.87	87.24
230	4.00	0.06	0.99	0.67	130.86	87.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.16	2.46	1.22	-0.53	-1.09	-2.29

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.6	0.66	1.77	-0.44	2.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O4 #1

Analysis Date: 01-21-12

Analyzed By: LA

COASTAL TECH
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
183.15	121.91	1.92	0.09	#200 - 37.05 #230 - 34.58	2.40	11.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.30	0.16	0.30	0.16
4	-2.25	4.76	0.16	0.09	0.46	0.25
5	-2.00	4.00	0.17	0.09	0.63	0.34
7	-1.50	2.83	0.66	0.36	1.29	0.70
10	-1.00	2.00	1.18	0.64	2.47	1.34
14	-0.50	1.41	2.02	1.10	4.49	2.44
18	0.00	1.00	2.89	1.58	7.38	4.02
25	0.50	0.71	3.65	1.99	11.03	6.01
35	1.00	0.50	4.99	2.72	16.02	8.73
45	1.50	0.35	6.64	3.63	22.66	12.36
60	2.00	0.25	11.97	6.54	34.63	18.90
80	2.50	0.18	24.19	13.21	58.82	32.11
120	3.00	0.13	29.09	15.88	87.91	47.99
170	3.50	0.09	22.19	12.12	110.10	60.11
200	3.75	0.07	5.20	2.84	115.30	62.95
230	4.00	0.06	4.52	2.47	119.82	65.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.08	2.23	1.78	0.25

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.26	0.21	1.16	-1.37	5.09

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O4 #2

Analysis Date: 01-21-12

Analyzed By: LA

COASTAL TECH
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
177.74	151.18	0.78	0.14	#200 - 16.05 #230 - 15.52	2.10	55.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.57	0.88	1.57	0.88
5/16"	-3.00	8.00	2.82	1.59	4.39	2.47
3.5	-2.50	5.66	3.19	1.79	7.58	4.26
4	-2.25	4.76	1.99	1.12	9.57	5.38
5	-2.00	4.00	2.87	1.61	12.44	6.99
7	-1.50	2.83	8.03	4.52	20.47	11.51
10	-1.00	2.00	8.62	4.85	29.09	16.36
14	-0.50	1.41	13.89	7.81	42.98	24.17
18	0.00	1.00	11.67	6.57	54.65	30.74
25	0.50	0.71	10.46	5.89	65.11	36.63
35	1.00	0.50	13.22	7.44	78.33	44.07
45	1.50	0.35	13.82	7.78	92.15	51.85
60	2.00	0.25	16.08	9.05	108.23	60.90
80	2.50	0.18	22.01	12.38	130.24	73.28
120	3.00	0.13	10.61	5.97	140.85	79.25
170	3.50	0.09	6.42	3.61	147.27	82.86
200	3.75	0.07	1.93	1.09	149.20	83.95
230	4.00	0.06	0.95	0.53	150.15	84.48

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.77	2.64	1.38	-0.44	-1.04	-2.33

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.64	0.64	1.76	-0.41	2.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O4 #3

Analysis Date: 01-21-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
160.40	138.52	1.27	0.12	#200 - 15.46 #230 - 14.52	2.00	38.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.19	0.12	0.19	0.12
3.5	-2.50	5.66	2.80	1.75	2.99	1.87
4	-2.25	4.76	1.96	1.22	4.95	3.09
5	-2.00	4.00	2.85	1.78	7.80	4.87
7	-1.50	2.83	6.54	4.08	14.34	8.95
10	-1.00	2.00	9.99	6.23	24.33	15.18
14	-0.50	1.41	11.28	7.03	35.61	22.21
18	0.00	1.00	9.70	6.05	45.31	28.26
25	0.50	0.71	10.29	6.42	55.60	34.68
35	1.00	0.50	10.98	6.85	66.58	41.53
45	1.50	0.35	11.85	7.39	78.43	48.92
60	2.00	0.25	15.64	9.75	94.07	58.67
80	2.50	0.18	20.89	13.02	114.96	71.69
120	3.00	0.13	13.23	8.25	128.19	79.94
170	3.50	0.09	5.66	3.53	133.85	83.47
200	3.75	0.07	1.71	1.07	135.56	84.54
230	4.00	0.06	1.50	0.94	137.06	85.48

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.62	2.70	1.56	-0.27	-0.94	-1.98

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.82	0.57	1.67	-0.33	2.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O5 #1

Analysis Date: 01-20-12

Analyzed By: LA

COASTAL TECH
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.07	138.07	0.62	0.17	#200 - 0.82 #230 - 0.63	0.60	10.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.16	0.12	0.16	0.12
5	-2.00	4.00	0.13	0.09	0.29	0.21
7	-1.50	2.83	0.64	0.46	0.93	0.67
10	-1.00	2.00	0.72	0.52	1.65	1.19
14	-0.50	1.41	1.51	1.09	3.16	2.28
18	0.00	1.00	1.95	1.41	5.11	3.69
25	0.50	0.71	3.17	2.30	8.28	5.99
35	1.00	0.50	5.63	4.08	13.91	10.07
45	1.50	0.35	10.71	7.76	24.62	17.83
60	2.00	0.25	20.48	14.83	45.10	32.66
80	2.50	0.18	46.49	33.67	91.59	66.33
120	3.00	0.13	36.04	26.10	127.63	92.43
170	3.50	0.09	8.29	6.00	135.92	98.43
200	3.75	0.07	1.03	0.75	136.95	99.18
230	4.00	0.06	0.26	0.19	137.21	99.37

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.21	2.84	2.67	2.26	1.74	1.38	0.28

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.08	0.24	0.89	-1.62	6.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
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Project Name: Carteret County
Sample Name: O5 #2
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
171.02	159.44	0.31	0.03	#200 - 7.41 #230 - 6.98	1.80	19.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.43	0.25	0.43	0.25
3.5	-2.50	5.66	0.13	0.08	0.56	0.33
4	-2.25	4.76	0.12	0.07	0.68	0.40
5	-2.00	4.00	0.30	0.18	0.98	0.58
7	-1.50	2.83	1.00	0.58	1.98	1.16
10	-1.00	2.00	1.92	1.12	3.90	2.28
14	-0.50	1.41	4.22	2.47	8.12	4.75
18	0.00	1.00	4.92	2.88	13.04	7.63
25	0.50	0.71	5.59	3.27	18.63	10.90
35	1.00	0.50	8.70	5.09	27.33	15.99
45	1.50	0.35	11.97	7.00	39.30	22.99
60	2.00	0.25	16.16	9.45	55.46	32.44
80	2.50	0.18	45.79	26.77	101.25	59.21
120	3.00	0.13	43.85	25.64	145.10	84.85
170	3.50	0.09	11.38	6.65	156.48	91.50
200	3.75	0.07	1.86	1.09	158.34	92.59
230	4.00	0.06	0.74	0.43	159.08	93.02

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.98	2.81	2.33	1.61	1.00	-0.46

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.95	0.26	1.13	-1.46	5.24

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O5 #3

Analysis Date: 01-20-12

Analyzed By: LA

COASTAL TECH
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.13	140.07	0.86	0.14	#200 - 14.93 #230 - 14.29	2.10	48.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	2.26	1.39	2.26	1.39
5/8"	-4.00	16.00	0.00	0.00	2.26	1.39
11/16"	-3.50	11.31	1.48	0.91	3.74	2.30
5/16"	-3.00	8.00	6.56	4.05	10.30	6.35
3.5	-2.50	5.66	7.25	4.47	17.55	10.82
4	-2.25	4.76	3.46	2.13	21.01	12.95
5	-2.00	4.00	5.25	3.24	26.26	16.19
7	-1.50	2.83	11.04	6.81	37.30	23.00
10	-1.00	2.00	13.43	8.28	50.73	31.28
14	-0.50	1.41	13.56	8.36	64.29	39.64
18	0.00	1.00	10.85	6.69	75.14	46.33
25	0.50	0.71	8.00	4.93	83.14	51.26
35	1.00	0.50	5.94	3.66	89.08	54.92
45	1.50	0.35	7.04	4.34	96.12	59.26
60	2.00	0.25	9.65	5.95	105.77	65.21
80	2.50	0.18	13.10	8.08	118.87	73.29
120	3.00	0.13	13.03	8.04	131.90	81.33
170	3.50	0.09	4.93	3.04	136.83	84.37
200	3.75	0.07	1.13	0.70	137.96	85.07
230	4.00	0.06	1.03	0.64	138.99	85.71

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.44	2.61	0.37	-1.38	-2.01	-3.17

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.03	1.02	1.98	0.16	1.87

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O6 #1
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.00	142.00	0.02	0.13	#200 - 0.17 #230 - 0.14	0.40	10.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.39	0.27	0.39	0.27
4	-2.25	4.76	0.00	0.00	0.39	0.27
5	-2.00	4.00	0.11	0.08	0.50	0.35
7	-1.50	2.83	0.44	0.31	0.94	0.66
10	-1.00	2.00	0.41	0.29	1.35	0.95
14	-0.50	1.41	1.06	0.75	2.41	1.70
18	0.00	1.00	1.69	1.19	4.10	2.89
25	0.50	0.71	3.07	2.16	7.17	5.05
35	1.00	0.50	7.52	5.30	14.69	10.35
45	1.50	0.35	19.45	13.70	34.14	24.05
60	2.00	0.25	41.40	29.15	75.54	53.20
80	2.50	0.18	40.59	28.58	116.13	81.78
120	3.00	0.13	23.14	16.30	139.27	98.08
170	3.50	0.09	2.38	1.68	141.65	99.76
200	3.75	0.07	0.10	0.07	141.75	99.83
230	4.00	0.06	0.04	0.03	141.79	99.86

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.57	2.38	1.95	1.52	1.21	0.49

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.85	0.28	0.79	-1.59	8.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O6 #2
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
129.67	116.78	0.20	0.18	#200 - 10.70 #230 - 10.26	2.10	14.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	6.11	4.71	6.11	4.71
5/16"	-3.00	8.00	0.00	0.00	6.11	4.71
3.5	-2.50	5.66	0.63	0.49	6.74	5.20
4	-2.25	4.76	0.19	0.15	6.93	5.35
5	-2.00	4.00	0.18	0.14	7.11	5.49
7	-1.50	2.83	1.66	1.28	8.77	6.77
10	-1.00	2.00	2.11	1.63	10.88	8.40
14	-0.50	1.41	2.89	2.23	13.77	10.63
18	0.00	1.00	3.71	2.86	17.48	13.49
25	0.50	0.71	4.95	3.82	22.43	17.31
35	1.00	0.50	7.83	6.04	30.26	23.35
45	1.50	0.35	11.62	8.96	41.88	32.31
60	2.00	0.25	18.17	14.01	60.05	46.32
80	2.50	0.18	22.16	17.09	82.21	63.41
120	3.00	0.13	24.72	19.06	106.93	82.47
170	3.50	0.09	7.87	6.07	114.80	88.54
200	3.75	0.07	0.98	0.76	115.78	89.30
230	4.00	0.06	0.57	0.44	116.35	89.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.13	2.80	2.11	1.09	0.33	-2.91

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.45	0.37	1.71	-1.63	5.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O6 #3

Analysis Date: 01-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.75	132.75	0.24	0.11	#200 - 0.40 #230 - 0.28	0.50	11.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	1.98	1.49	1.98	1.49
5/8"	-4.00	16.00	0.00	0.00	1.98	1.49
11/16"	-3.50	11.31	1.78	1.34	3.76	2.83
5/16"	-3.00	8.00	0.00	0.00	3.76	2.83
3.5	-2.50	5.66	0.50	0.38	4.26	3.21
4	-2.25	4.76	0.25	0.19	4.51	3.40
5	-2.00	4.00	0.17	0.13	4.68	3.53
7	-1.50	2.83	0.54	0.41	5.22	3.94
10	-1.00	2.00	0.80	0.60	6.02	4.54
14	-0.50	1.41	1.32	0.99	7.34	5.53
18	0.00	1.00	1.96	1.48	9.30	7.01
25	0.50	0.71	3.29	2.48	12.59	9.49
35	1.00	0.50	6.46	4.87	19.05	14.36
45	1.50	0.35	12.25	9.23	31.30	23.59
60	2.00	0.25	23.81	17.94	55.11	41.53
80	2.50	0.18	39.46	29.73	94.57	71.26
120	3.00	0.13	32.59	24.55	127.16	95.81
170	3.50	0.09	4.65	3.50	131.81	99.31
200	3.75	0.07	0.39	0.29	132.20	99.60
230	4.00	0.06	0.16	0.12	132.36	99.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.76	2.58	2.14	1.54	1.09	-0.77

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.79	0.29	1.14	-2.22	10.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O6 #4
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.33	157.33	0.20	0.29	#200 - 0.47 #230 - 0.43	0.60	17.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.59	0.38	0.59	0.38
3.5	-2.50	5.66	1.07	0.68	1.66	1.06
4	-2.25	4.76	0.62	0.39	2.28	1.45
5	-2.00	4.00	0.44	0.28	2.72	1.73
7	-1.50	2.83	2.14	1.36	4.86	3.09
10	-1.00	2.00	2.16	1.37	7.02	4.46
14	-0.50	1.41	4.20	2.67	11.22	7.13
18	0.00	1.00	4.95	3.15	16.17	10.28
25	0.50	0.71	6.81	4.33	22.98	14.61
35	1.00	0.50	11.30	7.18	34.28	21.79
45	1.50	0.35	18.97	12.06	53.25	33.85
60	2.00	0.25	33.15	21.07	86.40	54.92
80	2.50	0.18	49.69	31.58	136.09	86.50
120	3.00	0.13	18.35	11.66	154.44	98.16
170	3.50	0.09	1.99	1.26	156.43	99.42
200	3.75	0.07	0.17	0.11	156.60	99.53
230	4.00	0.06	0.07	0.04	156.67	99.57

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.86	2.46	2.32	1.88	1.13	0.60	-0.90

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.55	0.34	1.15	-1.58	5.73

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O6 #5
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.08	132.57	0.71	0.00	#200 - 13.87 #230 - 13.30	2.20	21.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.89	0.59	0.89	0.59
3.5	-2.50	5.66	0.13	0.09	1.02	0.68
4	-2.25	4.76	0.57	0.37	1.59	1.05
5	-2.00	4.00	0.94	0.62	2.53	1.67
7	-1.50	2.83	3.06	2.01	5.59	3.68
10	-1.00	2.00	4.75	3.12	10.34	6.80
14	-0.50	1.41	8.66	5.69	19.00	12.49
18	0.00	1.00	9.19	6.04	28.19	18.53
25	0.50	0.71	8.41	5.53	36.60	24.06
35	1.00	0.50	8.59	5.65	45.19	29.71
45	1.50	0.35	8.06	5.30	53.25	35.01
60	2.00	0.25	9.43	6.20	62.68	41.21
80	2.50	0.18	23.38	15.37	86.06	56.58
120	3.00	0.13	32.31	21.25	118.37	77.83
170	3.50	0.09	10.65	7.00	129.02	84.83
200	3.75	0.07	1.97	1.30	130.99	86.13
230	4.00	0.06	0.87	0.57	131.86	86.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.44	2.93	2.29	0.58	-0.21	-1.29

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.48	0.36	1.54	-0.78	2.63

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O7 #1

Analysis Date: 01-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.12 #230 - 0.04	Organics (%):	Carbonates (%):	Shells (%):
141.33	141.33	0.06	0.00		0.40	8.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.25	0.18	0.25	0.18
3.5	-2.50	5.66	0.00	0.00	0.25	0.18
4	-2.25	4.76	0.00	0.00	0.25	0.18
5	-2.00	4.00	0.04	0.03	0.29	0.21
7	-1.50	2.83	0.31	0.22	0.60	0.43
10	-1.00	2.00	0.37	0.26	0.97	0.69
14	-0.50	1.41	1.00	0.71	1.97	1.40
18	0.00	1.00	1.66	1.17	3.63	2.57
25	0.50	0.71	2.89	2.04	6.52	4.61
35	1.00	0.50	8.59	6.08	15.11	10.69
45	1.50	0.35	23.97	16.96	39.08	27.65
60	2.00	0.25	37.01	26.19	76.09	53.84
80	2.50	0.18	40.06	28.35	116.15	82.19
120	3.00	0.13	20.07	14.20	136.22	96.39
170	3.50	0.09	4.51	3.19	140.73	99.58
200	3.75	0.07	0.42	0.30	141.15	99.88
230	4.00	0.06	0.12	0.08	141.27	99.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.95	2.56	2.37	1.93	1.42	1.16	0.53

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.85	0.28	0.79	-1.26	7.41

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O7 #2
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.81	132.81	0.85	0.00	#200 - 1.03 #230 - 0.65	0.70	20.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.38	0.29	0.38	0.29
3.5	-2.50	5.66	0.92	0.69	1.30	0.98
4	-2.25	4.76	0.26	0.20	1.56	1.18
5	-2.00	4.00	0.63	0.47	2.19	1.65
7	-1.50	2.83	1.40	1.05	3.59	2.70
10	-1.00	2.00	2.62	1.97	6.21	4.67
14	-0.50	1.41	4.59	3.46	10.80	8.13
18	0.00	1.00	6.17	4.65	16.97	12.78
25	0.50	0.71	8.53	6.42	25.50	19.20
35	1.00	0.50	12.50	9.41	38.00	28.61
45	1.50	0.35	17.35	13.06	55.35	41.67
60	2.00	0.25	20.04	15.09	75.39	56.76
80	2.50	0.18	20.76	15.63	96.15	72.39
120	3.00	0.13	25.91	19.51	122.06	91.90
170	3.50	0.09	8.36	6.29	130.42	98.19
200	3.75	0.07	1.04	0.78	131.46	98.97
230	4.00	0.06	0.50	0.38	131.96	99.35

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.25	2.80	2.57	1.78	0.81	0.25	-0.95

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.54	0.34	1.3	-0.94	3.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O7 #3

Analysis Date: 01-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.54	138.54	0.27	0.22	#200 - 0.50 #230 - 0.42	0.60	14.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.30	0.22	0.30	0.22
4	-2.25	4.76	0.38	0.27	0.68	0.49
5	-2.00	4.00	0.60	0.43	1.28	0.92
7	-1.50	2.83	1.54	1.11	2.82	2.03
10	-1.00	2.00	2.00	1.44	4.82	3.47
14	-0.50	1.41	3.36	2.43	8.18	5.90
18	0.00	1.00	4.51	3.26	12.69	9.16
25	0.50	0.71	7.09	5.12	19.78	14.28
35	1.00	0.50	15.08	10.88	34.86	25.16
45	1.50	0.35	30.69	22.15	65.55	47.31
60	2.00	0.25	36.04	26.01	101.59	73.32
80	2.50	0.18	21.83	15.76	123.42	89.08
120	3.00	0.13	11.14	8.04	134.56	97.12
170	3.50	0.09	2.92	2.11	137.48	99.23
200	3.75	0.07	0.38	0.27	137.86	99.50
230	4.00	0.06	0.11	0.08	137.97	99.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.87	2.34	2.05	1.55	0.99	0.58	-0.69

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.4	0.38	1.02	-1.06	4.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O7 #4
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
150.57	150.57	0.34	0.03	#200 - 0.39 #230 - 0.26	0.60	11.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.85	0.56	0.85	0.56
5	-2.00	4.00	0.34	0.23	1.19	0.79
7	-1.50	2.83	1.01	0.67	2.20	1.46
10	-1.00	2.00	1.18	0.78	3.38	2.24
14	-0.50	1.41	2.01	1.33	5.39	3.57
18	0.00	1.00	2.70	1.79	8.09	5.36
25	0.50	0.71	4.28	2.84	12.37	8.20
35	1.00	0.50	7.37	4.89	19.74	13.09
45	1.50	0.35	13.96	9.27	33.70	22.36
60	2.00	0.25	30.26	20.10	63.96	42.46
80	2.50	0.18	48.54	32.24	112.50	74.70
120	3.00	0.13	31.77	21.10	144.27	95.80
170	3.50	0.09	5.24	3.48	149.51	99.28
200	3.75	0.07	0.49	0.33	150.00	99.61
230	4.00	0.06	0.19	0.13	150.19	99.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.72	2.51	2.12	1.57	1.16	-0.10

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.9	0.27	0.97	-1.7	6.85

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O8 #1
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
126.59	104.98	0.73	0.09	#200 - 19.33 #230 - 17.75	2.60	13.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.20	0.16	0.20	0.16
7	-1.50	2.83	0.31	0.24	0.51	0.40
10	-1.00	2.00	0.37	0.29	0.88	0.69
14	-0.50	1.41	1.23	0.97	2.11	1.66
18	0.00	1.00	1.89	1.49	4.00	3.15
25	0.50	0.71	2.82	2.23	6.82	5.38
35	1.00	0.50	4.92	3.89	11.74	9.27
45	1.50	0.35	7.91	6.25	19.65	15.52
60	2.00	0.25	13.80	10.90	33.45	26.42
80	2.50	0.18	22.82	18.03	56.27	44.45
120	3.00	0.13	23.64	18.67	79.91	63.12
170	3.50	0.09	17.05	13.47	96.96	76.59
200	3.75	0.07	5.17	4.08	102.13	80.67
230	4.00	0.06	2.00	1.58	104.13	82.25

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.44	2.65	1.93	1.52	0.41

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.25	0.21	1.02	-1.1	4.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O8 #2
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.87	130.50	0.23	0.08	#200 - 10.22 #230 - 9.51	1.60	12.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.79	0.55	0.79	0.55
4	-2.25	4.76	0.33	0.23	1.12	0.78
5	-2.00	4.00	0.38	0.26	1.50	1.04
7	-1.50	2.83	0.50	0.35	2.00	1.39
10	-1.00	2.00	1.16	0.81	3.16	2.20
14	-0.50	1.41	1.45	1.01	4.61	3.21
18	0.00	1.00	2.39	1.66	7.00	4.87
25	0.50	0.71	3.61	2.51	10.61	7.38
35	1.00	0.50	6.83	4.75	17.44	12.13
45	1.50	0.35	14.57	10.13	32.01	22.26
60	2.00	0.25	28.73	19.97	60.74	42.23
80	2.50	0.18	33.53	23.31	94.27	65.54
120	3.00	0.13	23.64	16.43	117.91	81.97
170	3.50	0.09	9.42	6.55	127.33	88.52
200	3.75	0.07	1.81	1.26	129.14	89.78
230	4.00	0.06	1.02	0.71	130.16	90.49

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.15	2.79	2.17	1.57	1.19	0.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.91	0.27	1.04	-1.48	6.64

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O8 #3
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.64	118.32	1.00	0.09	#200 - 23.63 #230 - 22.71	2.10	22.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.24	0.16	0.24	0.16
3.5	-2.50	5.66	0.13	0.09	0.37	0.25
4	-2.25	4.76	0.52	0.34	0.89	0.59
5	-2.00	4.00	0.33	0.22	1.22	0.81
7	-1.50	2.83	1.97	1.30	3.19	2.11
10	-1.00	2.00	2.97	1.96	6.16	4.07
14	-0.50	1.41	5.40	3.56	11.56	7.63
18	0.00	1.00	4.27	2.82	15.83	10.45
25	0.50	0.71	2.88	1.90	18.71	12.35
35	1.00	0.50	2.94	1.94	21.65	14.29
45	1.50	0.35	4.27	2.82	25.92	17.11
60	2.00	0.25	11.32	7.47	37.24	24.58
80	2.50	0.18	34.74	22.91	71.98	47.49
120	3.00	0.13	20.93	13.80	92.91	61.29
170	3.50	0.09	19.24	12.69	112.15	73.98
200	3.75	0.07	3.63	2.39	115.78	76.37
230	4.00	0.06	1.40	0.92	117.18	77.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.61	2.59	2.01	1.30	-0.87

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.96	0.26	1.37	-1.33	4.15

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O8 #4
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.02	136.25	0.87	0.08	#200 - 11.56 #230 - 11.04	2.40	44.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	8.50	5.59	8.50	5.59
5/16"	-3.00	8.00	2.69	1.77	11.19	7.36
3.5	-2.50	5.66	5.67	3.73	16.86	11.09
4	-2.25	4.76	2.72	1.79	19.58	12.88
5	-2.00	4.00	3.53	2.32	23.11	15.20
7	-1.50	2.83	9.84	6.47	32.95	21.67
10	-1.00	2.00	12.16	8.00	45.11	29.67
14	-0.50	1.41	12.67	8.33	57.78	38.00
18	0.00	1.00	10.16	6.68	67.94	44.68
25	0.50	0.71	8.51	5.60	76.45	50.28
35	1.00	0.50	8.83	5.81	85.28	56.09
45	1.50	0.35	9.06	5.96	94.34	62.05
60	2.00	0.25	10.22	6.72	104.56	68.77
80	2.50	0.18	14.12	9.29	118.68	78.06
120	3.00	0.13	10.92	7.18	129.60	85.24
170	3.50	0.09	3.77	2.48	133.37	87.72
200	3.75	0.07	1.10	0.72	134.47	88.44
230	4.00	0.06	0.79	0.52	135.26	88.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.91	2.34	0.48	-1.29	-1.94	-3.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.03	0.98	2.02	-0.16	2.01

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O9 #1

Analysis Date: 01-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.17 #230 - 0.13	Organics (%):	Carbonates (%):	Shells (%):
150.77	150.77	0.17	0.03		0.70	15.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.35	0.23	0.35	0.23
4	-2.25	4.76	0.25	0.17	0.60	0.40
5	-2.00	4.00	0.29	0.19	0.89	0.59
7	-1.50	2.83	1.31	0.87	2.20	1.46
10	-1.00	2.00	1.36	0.90	3.56	2.36
14	-0.50	1.41	2.65	1.76	6.21	4.12
18	0.00	1.00	3.45	2.29	9.66	6.41
25	0.50	0.71	5.40	3.58	15.06	9.99
35	1.00	0.50	9.41	6.24	24.47	16.23
45	1.50	0.35	15.79	10.47	40.26	26.70
60	2.00	0.25	32.94	21.85	73.20	48.55
80	2.50	0.18	53.73	35.64	126.93	84.19
120	3.00	0.13	21.26	14.10	148.19	98.29
170	3.50	0.09	2.12	1.41	150.31	99.70
200	3.75	0.07	0.19	0.13	150.50	99.83
230	4.00	0.06	0.06	0.04	150.56	99.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.88	2.50	2.37	2.02	1.42	0.98	-0.31

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.75	0.30	0.97	-1.64	6.32

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O9 #2
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
127.97	110.27	0.50	0.00	#200 - 15.09 #230 - 14.24	1.80	9.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.03	0.02	0.03	0.02
7	-1.50	2.83	0.85	0.66	0.88	0.68
10	-1.00	2.00	0.78	0.61	1.66	1.29
14	-0.50	1.41	1.41	1.10	3.07	2.39
18	0.00	1.00	1.35	1.05	4.42	3.44
25	0.50	0.71	1.49	1.16	5.91	4.60
35	1.00	0.50	1.55	1.21	7.46	5.81
45	1.50	0.35	1.85	1.45	9.31	7.26
60	2.00	0.25	3.71	2.90	13.02	10.16
80	2.50	0.18	27.45	21.45	40.47	31.61
120	3.00	0.13	49.18	38.43	89.65	70.04
170	3.50	0.09	16.29	12.73	105.94	82.77
200	3.75	0.07	2.74	2.14	108.68	84.91
230	4.00	0.06	1.09	0.85	109.77	85.76

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.64	3.19	2.74	2.35	2.14	0.67

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.46	0.18	0.9	-2.42	10.1

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O9 #3

Analysis Date: 01-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
188.65	169.28	0.63	0.04	#200 - 11.40 #230 - 10.65	1.80	32.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.44	0.23	0.44	0.23
3.5	-2.50	5.66	0.81	0.43	1.25	0.66
4	-2.25	4.76	0.35	0.19	1.60	0.85
5	-2.00	4.00	0.86	0.46	2.46	1.31
7	-1.50	2.83	3.16	1.68	5.62	2.99
10	-1.00	2.00	6.38	3.38	12.00	6.37
14	-0.50	1.41	10.30	5.46	22.30	11.83
18	0.00	1.00	10.90	5.78	33.20	17.61
25	0.50	0.71	10.58	5.61	43.78	23.22
35	1.00	0.50	9.74	5.16	53.52	28.38
45	1.50	0.35	9.24	4.90	62.76	33.28
60	2.00	0.25	12.11	6.42	74.87	39.70
80	2.50	0.18	26.76	14.18	101.63	53.88
120	3.00	0.13	48.79	25.86	150.42	79.74
170	3.50	0.09	14.74	7.81	165.16	87.55
200	3.75	0.07	1.99	1.05	167.15	88.60
230	4.00	0.06	1.42	0.75	168.57	89.35

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.27	2.91	2.36	0.67	-0.14	-1.20

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.59	0.33	1.51	-0.84	2.67

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O9 #4
Analysis Date: 01-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.67	127.47	1.09	0.04	#200 - 11.46 #230 - 10.85	2.40	46.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	1.50	1.06	1.50	1.06
11/16"	-3.50	11.31	0.00	0.00	1.50	1.06
5/16"	-3.00	8.00	3.57	2.52	5.07	3.58
3.5	-2.50	5.66	4.57	3.23	9.64	6.81
4	-2.25	4.76	3.66	2.58	13.30	9.39
5	-2.00	4.00	4.00	2.82	17.30	12.21
7	-1.50	2.83	11.39	8.04	28.69	20.25
10	-1.00	2.00	12.03	8.49	40.72	28.74
14	-0.50	1.41	13.99	9.88	54.71	38.62
18	0.00	1.00	9.18	6.48	63.89	45.10
25	0.50	0.71	6.97	4.92	70.86	50.02
35	1.00	0.50	6.96	4.91	77.82	54.93
45	1.50	0.35	7.01	4.95	84.83	59.88
60	2.00	0.25	8.69	6.13	93.52	66.01
80	2.50	0.18	14.71	10.38	108.23	76.39
120	3.00	0.13	11.51	8.12	119.74	84.51
170	3.50	0.09	4.17	2.94	123.91	87.45
200	3.75	0.07	1.55	1.09	125.46	88.54
230	4.00	0.06	0.86	0.61	126.32	89.15

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.97	2.43	0.50	-1.22	-1.76	-2.78

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.18	0.88	1.94	-0.02	1.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O10 #1

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.18 #230 - 0.12	Organics (%):	Carbonates (%):	Shells (%):
146.78	146.78	0.14	0.00		0.60	11.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.25	0.85	1.25	0.85
4	-2.25	4.76	0.49	0.33	1.74	1.18
5	-2.00	4.00	0.03	0.02	1.77	1.20
7	-1.50	2.83	0.82	0.56	2.59	1.76
10	-1.00	2.00	1.12	0.76	3.71	2.52
14	-0.50	1.41	1.83	1.25	5.54	3.77
18	0.00	1.00	2.37	1.61	7.91	5.38
25	0.50	0.71	3.83	2.61	11.74	7.99
35	1.00	0.50	6.80	4.63	18.54	12.62
45	1.50	0.35	14.20	9.67	32.74	22.29
60	2.00	0.25	31.77	21.64	64.51	43.93
80	2.50	0.18	47.31	32.23	111.82	76.16
120	3.00	0.13	30.46	20.75	142.28	96.91
170	3.50	0.09	4.01	2.73	146.29	99.64
200	3.75	0.07	0.26	0.18	146.55	99.82
230	4.00	0.06	0.09	0.06	146.64	99.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.95	2.69	2.48	2.09	1.56	1.17	-0.12

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.87	0.27	0.99	-1.99	8.39

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O10 #2
Analysis Date: 01-19-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.83	142.83	0.20	0.15	#200 - 0.35 #230 - 0.29	0.60	12.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.14	0.10	0.14	0.10
4	-2.25	4.76	0.17	0.12	0.31	0.22
5	-2.00	4.00	0.63	0.44	0.94	0.66
7	-1.50	2.83	0.94	0.66	1.88	1.32
10	-1.00	2.00	1.10	0.77	2.98	2.09
14	-0.50	1.41	2.00	1.40	4.98	3.49
18	0.00	1.00	2.62	1.83	7.60	5.32
25	0.50	0.71	3.66	2.56	11.26	7.88
35	1.00	0.50	7.87	5.51	19.13	13.39
45	1.50	0.35	15.13	10.59	34.26	23.98
60	2.00	0.25	29.89	20.93	64.15	44.91
80	2.50	0.18	51.62	36.14	115.77	81.05
120	3.00	0.13	23.47	16.43	139.24	97.48
170	3.50	0.09	2.87	2.01	142.11	99.49
200	3.75	0.07	0.23	0.16	142.34	99.65
230	4.00	0.06	0.08	0.06	142.42	99.71

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.92	2.59	2.42	2.07	1.52	1.12	-0.09

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.84	0.28	0.93	-1.73	7

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O10 #3

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
129.10	129.10	0.17	0.12	#200 - 0.32 #230 - 0.25	0.60	10.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.19	0.15	0.19	0.15
4	-2.25	4.76	0.04	0.03	0.23	0.18
5	-2.00	4.00	0.23	0.18	0.46	0.36
7	-1.50	2.83	0.47	0.36	0.93	0.72
10	-1.00	2.00	0.59	0.46	1.52	1.18
14	-0.50	1.41	1.21	0.94	2.73	2.12
18	0.00	1.00	1.86	1.44	4.59	3.56
25	0.50	0.71	2.95	2.29	7.54	5.85
35	1.00	0.50	5.61	4.35	13.15	10.20
45	1.50	0.35	12.01	9.30	25.16	19.50
60	2.00	0.25	31.00	24.01	56.16	43.51
80	2.50	0.18	45.73	35.42	101.89	78.93
120	3.00	0.13	24.31	18.83	126.20	97.76
170	3.50	0.09	2.28	1.77	128.48	99.53
200	3.75	0.07	0.20	0.15	128.68	99.68
230	4.00	0.06	0.09	0.07	128.77	99.75

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.93	2.63	2.44	2.09	1.61	1.31	0.31

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.93	0.26	0.82	-1.79	8.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O10 #4

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
136.50	136.50	0.04	0.15	#200 - 0.20 #230 - 0.18	0.60	13.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.81	0.59	0.81	0.59
4	-2.25	4.76	0.21	0.15	1.02	0.74
5	-2.00	4.00	0.52	0.38	1.54	1.12
7	-1.50	2.83	1.57	1.15	3.11	2.27
10	-1.00	2.00	1.41	1.03	4.52	3.30
14	-0.50	1.41	2.41	1.77	6.93	5.07
18	0.00	1.00	3.33	2.44	10.26	7.51
25	0.50	0.71	4.99	3.66	15.25	11.17
35	1.00	0.50	9.63	7.05	24.88	18.22
45	1.50	0.35	18.29	13.40	43.17	31.62
60	2.00	0.25	34.79	25.49	77.96	57.11
80	2.50	0.18	42.08	30.83	120.04	87.94
120	3.00	0.13	14.71	10.78	134.75	98.72
170	3.50	0.09	1.38	1.01	136.13	99.73
200	3.75	0.07	0.10	0.07	136.23	99.80
230	4.00	0.06	0.03	0.02	136.26	99.82

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.83	2.44	2.29	1.86	1.25	0.84	-0.52

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.62	0.33	1.01	-1.68	6.49

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O11 #1
Analysis Date: 01-19-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.30	132.30	0.51	0.23	#200 - 0.82 #230 - 0.63	0.70	15.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.61	1.22	1.61	1.22
3.5	-2.50	5.66	1.39	1.05	3.00	2.27
4	-2.25	4.76	0.57	0.43	3.57	2.70
5	-2.00	4.00	1.04	0.79	4.61	3.49
7	-1.50	2.83	2.34	1.77	6.95	5.26
10	-1.00	2.00	2.71	2.05	9.66	7.31
14	-0.50	1.41	3.32	2.51	12.98	9.82
18	0.00	1.00	3.79	2.86	16.77	12.68
25	0.50	0.71	4.45	3.36	21.22	16.04
35	1.00	0.50	7.33	5.54	28.55	21.58
45	1.50	0.35	14.38	10.87	42.93	32.45
60	2.00	0.25	28.53	21.56	71.46	54.01
80	2.50	0.18	32.67	24.69	104.13	78.70
120	3.00	0.13	21.94	16.58	126.07	95.28
170	3.50	0.09	4.67	3.53	130.74	98.81
200	3.75	0.07	0.49	0.37	131.23	99.18
230	4.00	0.06	0.25	0.19	131.48	99.37

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.99	2.66	2.43	1.91	1.16	0.49	-1.57

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.54	0.34	1.35	-1.56	5.28

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O11 #2

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.42	140.42	0.12	0.16	#200 - 0.29 #230 - 0.27	0.60	13.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.44	0.31	0.44	0.31
4	-2.25	4.76	0.17	0.12	0.61	0.43
5	-2.00	4.00	1.10	0.78	1.71	1.21
7	-1.50	2.83	1.93	1.37	3.64	2.58
10	-1.00	2.00	1.64	1.17	5.28	3.75
14	-0.50	1.41	2.85	2.03	8.13	5.78
18	0.00	1.00	3.91	2.78	12.04	8.56
25	0.50	0.71	6.00	4.27	18.04	12.83
35	1.00	0.50	11.73	8.35	29.77	21.18
45	1.50	0.35	20.71	14.75	50.48	35.93
60	2.00	0.25	31.10	22.15	81.58	58.08
80	2.50	0.18	37.69	26.84	119.27	84.92
120	3.00	0.13	17.75	12.64	137.02	97.56
170	3.50	0.09	2.79	1.99	139.81	99.55
200	3.75	0.07	0.23	0.16	140.04	99.71
230	4.00	0.06	0.03	0.02	140.07	99.73

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.48	2.32	1.82	1.13	0.69	-0.69

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.58	0.33	1.07	-1.38	5.23

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O11 #3

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
150.08	150.08	0.17	0.14	#200 - 0.27 #230 - 0.26	0.60	13.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.11	0.07	0.11	0.07
5	-2.00	4.00	0.00	0.00	0.11	0.07
7	-1.50	2.83	0.68	0.45	0.79	0.52
10	-1.00	2.00	0.58	0.39	1.37	0.91
14	-0.50	1.41	1.37	0.91	2.74	1.82
18	0.00	1.00	2.12	1.41	4.86	3.23
25	0.50	0.71	3.52	2.35	8.38	5.58
35	1.00	0.50	7.12	4.74	15.50	10.32
45	1.50	0.35	16.28	10.85	31.78	21.17
60	2.00	0.25	34.72	23.13	66.50	44.30
80	2.50	0.18	45.47	30.30	111.97	74.60
120	3.00	0.13	32.03	21.34	144.00	95.94
170	3.50	0.09	5.31	3.54	149.31	99.48
200	3.75	0.07	0.38	0.25	149.69	99.73
230	4.00	0.06	0.01	0.01	149.70	99.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.72	2.51	2.09	1.58	1.26	0.38

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.95	0.26	0.83	-1.4	6.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O11 #4
Analysis Date: 01-19-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.43	149.43	0.08	0.07	#200 - 0.15 #230 - 0.12	0.60	14.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.10	1.41	2.10	1.41
3.5	-2.50	5.66	0.52	0.35	2.62	1.76
4	-2.25	4.76	0.26	0.17	2.88	1.93
5	-2.00	4.00	0.17	0.11	3.05	2.04
7	-1.50	2.83	0.92	0.62	3.97	2.66
10	-1.00	2.00	1.12	0.75	5.09	3.41
14	-0.50	1.41	1.98	1.33	7.07	4.74
18	0.00	1.00	2.58	1.73	9.65	6.47
25	0.50	0.71	3.65	2.44	13.30	8.91
35	1.00	0.50	7.59	5.08	20.89	13.99
45	1.50	0.35	15.71	10.51	36.60	24.50
60	2.00	0.25	32.41	21.69	69.01	46.19
80	2.50	0.18	54.25	36.30	123.26	82.49
120	3.00	0.13	22.61	15.13	145.87	97.62
170	3.50	0.09	3.10	2.07	148.97	99.69
200	3.75	0.07	0.24	0.16	149.21	99.85
230	4.00	0.06	0.04	0.03	149.25	99.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.55	2.40	2.05	1.51	1.10	-0.42

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.77	0.29	1.09	-2.31	9.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O12 #1

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.15	154.15	0.19	0.16	#200 - 0.32 #230 - 0.26	0.70	23.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.65	1.72	2.65	1.72
11/16"	-3.50	11.31	0.00	0.00	2.65	1.72
5/16"	-3.00	8.00	1.09	0.71	3.74	2.43
3.5	-2.50	5.66	2.63	1.71	6.37	4.14
4	-2.25	4.76	0.69	0.45	7.06	4.59
5	-2.00	4.00	2.70	1.75	9.76	6.34
7	-1.50	2.83	2.83	1.84	12.59	8.18
10	-1.00	2.00	4.34	2.82	16.93	11.00
14	-0.50	1.41	5.82	3.78	22.75	14.78
18	0.00	1.00	7.27	4.72	30.02	19.50
25	0.50	0.71	9.85	6.39	39.87	25.89
35	1.00	0.50	13.82	8.97	53.69	34.86
45	1.50	0.35	16.98	11.02	70.67	45.88
60	2.00	0.25	25.56	16.58	96.23	62.46
80	2.50	0.18	31.66	20.54	127.89	83.00
120	3.00	0.13	21.85	14.17	149.74	97.17
170	3.50	0.09	3.56	2.31	153.30	99.48
200	3.75	0.07	0.31	0.20	153.61	99.68
230	4.00	0.06	0.10	0.06	153.71	99.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.92	2.54	2.31	1.62	0.43	-0.37	-2.19

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.16	0.45	1.59	-1.28	4.31

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O12 #2
Analysis Date: 01-19-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
144.24	144.24	0.16	0.10	#200 - 0.29 #230 - 0.21	0.80	14.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.45	1.01	1.45	1.01
4	-2.25	4.76	0.45	0.31	1.90	1.32
5	-2.00	4.00	0.65	0.45	2.55	1.77
7	-1.50	2.83	1.87	1.30	4.42	3.07
10	-1.00	2.00	2.15	1.49	6.57	4.56
14	-0.50	1.41	3.47	2.41	10.04	6.97
18	0.00	1.00	4.33	3.00	14.37	9.97
25	0.50	0.71	5.38	3.73	19.75	13.70
35	1.00	0.50	8.53	5.91	28.28	19.61
45	1.50	0.35	14.35	9.95	42.63	29.56
60	2.00	0.25	28.69	19.89	71.32	49.45
80	2.50	0.18	48.60	33.69	119.92	83.14
120	3.00	0.13	20.68	14.34	140.60	97.48
170	3.50	0.09	2.91	2.02	143.51	99.50
200	3.75	0.07	0.31	0.21	143.82	99.71
230	4.00	0.06	0.11	0.08	143.93	99.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.53	2.38	2.01	1.27	0.69	-0.91

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.65	0.32	1.15	-1.62	5.69

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O12 #3
Analysis Date: 01-19-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
150.45	105.44	0.45	0.00	#200 - 31.16 #230 - 30.21	3.10	17.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.28	0.19	0.28	0.19
4	-2.25	4.76	0.23	0.15	0.51	0.34
5	-2.00	4.00	0.20	0.13	0.71	0.47
7	-1.50	2.83	0.64	0.43	1.35	0.90
10	-1.00	2.00	0.80	0.53	2.15	1.43
14	-0.50	1.41	1.33	0.88	3.48	2.31
18	0.00	1.00	1.59	1.06	5.07	3.37
25	0.50	0.71	1.78	1.18	6.85	4.55
35	1.00	0.50	2.09	1.39	8.94	5.94
45	1.50	0.35	2.98	1.98	11.92	7.92
60	2.00	0.25	8.74	5.81	20.66	13.73
80	2.50	0.18	28.29	18.80	48.95	32.53
120	3.00	0.13	40.60	26.99	89.55	59.52
170	3.50	0.09	12.30	8.18	101.85	67.70
200	3.75	0.07	1.71	1.14	103.56	68.84
230	4.00	0.06	1.43	0.95	104.99	69.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			2.82	2.30	2.06	0.66

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.31	0.20	0.99	-2.21	9.13

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O12 #4

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.01	117.79	0.33	0.11	#200 - 11.01 #230 - 10.46	1.70	29.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.03	0.02	0.03	0.02
5	-2.00	4.00	0.25	0.19	0.28	0.21
7	-1.50	2.83	0.59	0.45	0.87	0.66
10	-1.00	2.00	1.64	1.25	2.51	1.91
14	-0.50	1.41	4.10	3.13	6.61	5.04
18	0.00	1.00	4.74	3.62	11.35	8.66
25	0.50	0.71	5.01	3.82	16.36	12.48
35	1.00	0.50	6.50	4.96	22.86	17.44
45	1.50	0.35	9.24	7.05	32.10	24.49
60	2.00	0.25	20.72	15.82	52.82	40.31
80	2.50	0.18	36.55	27.90	89.37	68.21
120	3.00	0.13	16.08	12.27	105.45	80.48
170	3.50	0.09	9.14	6.98	114.59	87.46
200	3.75	0.07	2.01	1.53	116.60	88.99
230	4.00	0.06	0.72	0.55	117.32	89.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.25	2.78	2.17	1.52	0.85	-0.51

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.81	0.29	1.12	-1.02	3.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O13 #1

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.53	132.53	0.13	0.19	#200 - 0.39 #230 - 0.28	0.60	11.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.11	0.08	0.11	0.08
5	-2.00	4.00	0.33	0.25	0.44	0.33
7	-1.50	2.83	0.50	0.38	0.94	0.71
10	-1.00	2.00	0.99	0.75	1.93	1.46
14	-0.50	1.41	1.66	1.25	3.59	2.71
18	0.00	1.00	2.86	2.16	6.45	4.87
25	0.50	0.71	4.77	3.60	11.22	8.47
35	1.00	0.50	8.65	6.53	19.87	15.00
45	1.50	0.35	16.06	12.12	35.93	27.12
60	2.00	0.25	32.07	24.20	68.00	51.32
80	2.50	0.18	42.47	32.05	110.47	83.37
120	3.00	0.13	18.87	14.24	129.34	97.61
170	3.50	0.09	2.39	1.80	131.73	99.41
200	3.75	0.07	0.27	0.20	132.00	99.61
230	4.00	0.06	0.15	0.11	132.15	99.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.52	2.37	1.97	1.41	1.04	0.02

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.78	0.29	0.88	-1.37	5.71

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O13 #2
Analysis Date: 01-19-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.08	118.84	0.39	0.11	#200 - 10.23 #230 - 9.73	1.30	15.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.04	0.03	0.04	0.03
4	-2.25	4.76	0.27	0.21	0.31	0.24
5	-2.00	4.00	0.27	0.21	0.58	0.45
7	-1.50	2.83	0.97	0.74	1.55	1.19
10	-1.00	2.00	1.13	0.86	2.68	2.05
14	-0.50	1.41	1.91	1.46	4.59	3.51
18	0.00	1.00	2.06	1.57	6.65	5.08
25	0.50	0.71	2.45	1.87	9.10	6.95
35	1.00	0.50	3.67	2.80	12.77	9.75
45	1.50	0.35	6.09	4.65	18.86	14.40
60	2.00	0.25	14.55	11.10	33.41	25.50
80	2.50	0.18	39.47	30.11	72.88	55.61
120	3.00	0.13	32.10	24.49	104.98	80.10
170	3.50	0.09	10.71	8.17	115.69	88.27
200	3.75	0.07	1.97	1.50	117.66	89.77
230	4.00	0.06	0.65	0.50	118.31	90.27

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.24	2.90	2.41	1.98	1.57	-0.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.13	0.23	1.01	-1.79	6.97

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O13 #3

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
81.94	29.74	0.26	0.00	#200 - 65.21 #230 - 64.04	4.30	11.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.01	0.01	0.01	0.01
4	-2.25	4.76	0.00	0.00	0.01	0.01
5	-2.00	4.00	0.00	0.00	0.01	0.01
7	-1.50	2.83	0.09	0.11	0.10	0.12
10	-1.00	2.00	0.12	0.15	0.22	0.27
14	-0.50	1.41	0.19	0.23	0.41	0.50
18	0.00	1.00	0.29	0.35	0.70	0.85
25	0.50	0.71	0.33	0.40	1.03	1.25
35	1.00	0.50	0.37	0.45	1.40	1.70
45	1.50	0.35	0.55	0.67	1.95	2.37
60	2.00	0.25	2.09	2.55	4.04	4.92
80	2.50	0.18	8.95	10.92	12.99	15.84
120	3.00	0.13	11.99	14.63	24.98	30.47
170	3.50	0.09	2.69	3.28	27.67	33.75
200	3.75	0.07	0.85	1.04	28.52	34.79
230	4.00	0.06	0.96	1.17	29.48	35.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.81	2.51	2.00

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.47	0.18	0.79	-1.97	10.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O14 #1
Analysis Date: 01-19-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.67	130.67	0.23	0.17	#200 - 0.49 #230 - 0.33	0.60	18.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.44	0.34	0.44	0.34
4	-2.25	4.76	0.47	0.36	0.91	0.70
5	-2.00	4.00	1.05	0.80	1.96	1.50
7	-1.50	2.83	2.08	1.59	4.04	3.09
10	-1.00	2.00	1.66	1.27	5.70	4.36
14	-0.50	1.41	3.42	2.62	9.12	6.98
18	0.00	1.00	4.44	3.40	13.56	10.38
25	0.50	0.71	6.34	4.85	19.90	15.23
35	1.00	0.50	12.31	9.42	32.21	24.65
45	1.50	0.35	21.53	16.48	53.74	41.13
60	2.00	0.25	28.72	21.98	82.46	63.11
80	2.50	0.18	27.84	21.31	110.30	84.42
120	3.00	0.13	13.41	10.26	123.71	94.68
170	3.50	0.09	5.43	4.16	129.14	98.84
200	3.75	0.07	0.87	0.67	130.01	99.51
230	4.00	0.06	0.21	0.16	130.22	99.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.04	2.49	2.28	1.70	1.01	0.54	-0.88

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.5	0.35	1.15	-1.1	4.47

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O14 #2
Analysis Date: 01-19-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
127.60	127.60	0.26	0.04	#200 - 0.44 #230 - 0.21	0.60	17.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.90	0.71	0.90	0.71
4	-2.25	4.76	0.20	0.16	1.10	0.87
5	-2.00	4.00	0.24	0.19	1.34	1.06
7	-1.50	2.83	1.45	1.14	2.79	2.20
10	-1.00	2.00	2.05	1.61	4.84	3.81
14	-0.50	1.41	3.12	2.45	7.96	6.26
18	0.00	1.00	3.64	2.85	11.60	9.11
25	0.50	0.71	4.75	3.72	16.35	12.83
35	1.00	0.50	7.08	5.55	23.43	18.38
45	1.50	0.35	10.45	8.19	33.88	26.57
60	2.00	0.25	19.66	15.41	53.54	41.98
80	2.50	0.18	34.96	27.40	88.50	69.38
120	3.00	0.13	30.12	23.61	118.62	92.99
170	3.50	0.09	7.62	5.97	126.24	98.96
200	3.75	0.07	0.76	0.60	127.00	99.56
230	4.00	0.06	0.29	0.23	127.29	99.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.17	2.81	2.62	2.15	1.40	0.79	-0.76

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.82	0.28	1.17	-1.47	5.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O14 #3

Analysis Date: 01-19-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
139.49	139.49	0.27	0.38	#200 - 0.69 #230 - 0.60	0.80	39.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.86	2.05	2.86	2.05
11/16"	-3.50	11.31	7.28	5.22	10.14	7.27
5/16"	-3.00	8.00	4.83	3.46	14.97	10.73
3.5	-2.50	5.66	5.79	4.15	20.76	14.88
4	-2.25	4.76	3.36	2.41	24.12	17.29
5	-2.00	4.00	1.82	1.30	25.94	18.59
7	-1.50	2.83	5.84	4.19	31.78	22.78
10	-1.00	2.00	6.63	4.75	38.41	27.53
14	-0.50	1.41	11.78	8.45	50.19	35.98
18	0.00	1.00	11.71	8.39	61.90	44.37
25	0.50	0.71	12.90	9.25	74.80	53.62
35	1.00	0.50	14.03	10.06	88.83	63.68
45	1.50	0.35	12.42	8.90	101.25	72.58
60	2.00	0.25	13.10	9.39	114.35	81.97
80	2.50	0.18	14.43	10.34	128.78	92.31
120	3.00	0.13	7.26	5.20	136.04	97.51
170	3.50	0.09	2.14	1.53	138.18	99.04
200	3.75	0.07	0.38	0.27	138.56	99.31
230	4.00	0.06	0.13	0.09	138.69	99.40

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.76	2.10	1.63	0.30	-1.27	-2.38	-3.72

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0	1.00	1.96	-0.45	2.25

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O15 #1

Analysis Date: 01-18-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.16 #230 - 0.09	Organics (%):	Carbonates (%):	Shells (%):
128.01	128.01	0.06	0.04		0.60	9.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.29	0.23	0.29	0.23
4	-2.25	4.76	0.07	0.05	0.36	0.28
5	-2.00	4.00	0.08	0.06	0.44	0.34
7	-1.50	2.83	0.16	0.12	0.60	0.46
10	-1.00	2.00	0.32	0.25	0.92	0.71
14	-0.50	1.41	0.81	0.63	1.73	1.34
18	0.00	1.00	1.21	0.95	2.94	2.29
25	0.50	0.71	1.77	1.38	4.71	3.67
35	1.00	0.50	3.15	2.46	7.86	6.13
45	1.50	0.35	6.59	5.15	14.45	11.28
60	2.00	0.25	19.67	15.37	34.12	26.65
80	2.50	0.18	46.13	36.04	80.25	62.69
120	3.00	0.13	40.61	31.72	120.86	94.41
170	3.50	0.09	6.57	5.13	127.43	99.54
200	3.75	0.07	0.38	0.30	127.81	99.84
230	4.00	0.06	0.09	0.07	127.90	99.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.06	2.84	2.69	2.32	1.95	1.65	0.77

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.2	0.22	0.76	-2.18	11.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O15 #2

Analysis Date: 01-18-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.09 #230 - 0.04	Organics (%):	Carbonates (%):	Shells (%):
132.94	132.94	0.06	0.00		0.60	10.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.14	0.11	0.14	0.11
7	-1.50	2.83	0.20	0.15	0.34	0.26
10	-1.00	2.00	0.58	0.44	0.92	0.70
14	-0.50	1.41	1.40	1.05	2.32	1.75
18	0.00	1.00	2.31	1.74	4.63	3.49
25	0.50	0.71	3.78	2.84	8.41	6.33
35	1.00	0.50	7.90	5.94	16.31	12.27
45	1.50	0.35	16.95	12.75	33.26	25.02
60	2.00	0.25	27.37	20.59	60.63	45.61
80	2.50	0.18	43.82	32.96	104.45	78.57
120	3.00	0.13	24.02	18.07	128.47	96.64
170	3.50	0.09	4.05	3.05	132.52	99.69
200	3.75	0.07	0.29	0.22	132.81	99.91
230	4.00	0.06	0.07	0.05	132.88	99.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.95	2.65	2.45	2.07	1.50	1.15	0.27

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.9	0.27	0.83	-1.2	5.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O15 #3
Analysis Date: 01-18-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
121.72	117.89	0.15	0.01	#200 - 3.51 #230 - 3.26	1.50	33.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.14	0.94	1.14	0.94
5/16"	-3.00	8.00	2.49	2.05	3.63	2.99
3.5	-2.50	5.66	3.63	2.98	7.26	5.97
4	-2.25	4.76	2.58	2.12	9.84	8.09
5	-2.00	4.00	2.65	2.18	12.49	10.27
7	-1.50	2.83	5.04	4.14	17.53	14.41
10	-1.00	2.00	4.84	3.98	22.37	18.39
14	-0.50	1.41	5.15	4.23	27.52	22.62
18	0.00	1.00	3.20	2.63	30.72	25.25
25	0.50	0.71	2.35	1.93	33.07	27.18
35	1.00	0.50	2.18	1.79	35.25	28.97
45	1.50	0.35	2.60	2.14	37.85	31.11
60	2.00	0.25	4.84	3.98	42.69	35.09
80	2.50	0.18	24.60	20.21	67.29	55.30
120	3.00	0.13	36.48	29.97	103.77	85.27
170	3.50	0.09	12.43	10.21	116.20	95.48
200	3.75	0.07	1.23	1.01	117.43	96.49
230	4.00	0.06	0.30	0.25	117.73	96.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.48	2.98	2.83	2.37	-0.05	-1.30	-2.66

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.38	0.38	2	-1.06	2.68

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O16 #1
Analysis Date: 01-18-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.96	140.96	0.10	0.26	#200 - 0.39 #230 - 0.33	0.60	13.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.73	1.23	1.73	1.23
3.5	-2.50	5.66	0.58	0.41	2.31	1.64
4	-2.25	4.76	0.29	0.21	2.60	1.85
5	-2.00	4.00	0.78	0.55	3.38	2.40
7	-1.50	2.83	1.71	1.21	5.09	3.61
10	-1.00	2.00	1.51	1.07	6.60	4.68
14	-0.50	1.41	1.96	1.39	8.56	6.07
18	0.00	1.00	2.89	2.05	11.45	8.12
25	0.50	0.71	4.72	3.35	16.17	11.47
35	1.00	0.50	8.85	6.28	25.02	17.75
45	1.50	0.35	17.76	12.60	42.78	30.35
60	2.00	0.25	37.32	26.48	80.10	56.83
80	2.50	0.18	36.21	25.69	116.31	82.52
120	3.00	0.13	20.45	14.51	136.76	97.03
170	3.50	0.09	3.39	2.40	140.15	99.43
200	3.75	0.07	0.25	0.18	140.40	99.61
230	4.00	0.06	0.09	0.06	140.49	99.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.93	2.55	2.35	1.87	1.29	0.86	-0.88

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.63	0.32	1.16	-1.9	7.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O16 #2
Analysis Date: 01-18-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.51	112.15	0.50	0.14	#200 - 16.67 #230 - 15.89	1.20	11.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.15	1.62	2.15	1.62
3.5	-2.50	5.66	0.90	0.68	3.05	2.30
4	-2.25	4.76	0.40	0.30	3.45	2.60
5	-2.00	4.00	0.57	0.43	4.02	3.03
7	-1.50	2.83	1.67	1.26	5.69	4.29
10	-1.00	2.00	1.64	1.24	7.33	5.53
14	-0.50	1.41	2.10	1.58	9.43	7.11
18	0.00	1.00	2.03	1.53	11.46	8.64
25	0.50	0.71	1.84	1.39	13.30	10.03
35	1.00	0.50	2.43	1.83	15.73	11.86
45	1.50	0.35	4.19	3.16	19.92	15.02
60	2.00	0.25	10.04	7.58	29.96	22.60
80	2.50	0.18	26.91	20.31	56.87	42.91
120	3.00	0.13	41.19	31.08	98.06	73.99
170	3.50	0.09	11.19	8.44	109.25	82.43
200	3.75	0.07	1.19	0.90	110.44	83.33
230	4.00	0.06	1.03	0.78	111.47	84.11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.96	3.06	2.61	2.06	1.56	-1.21

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.02	0.25	1.42	-2.09	7.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O16 #3

Analysis Date: 01-18-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
35.17	8.52	0.39	0.00	#200 - 77.74 #230 - 76.89	4.00	7.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.05	0.14	0.05	0.14
14	-0.50	1.41	0.08	0.23	0.13	0.37
18	0.00	1.00	0.18	0.51	0.31	0.88
25	0.50	0.71	0.18	0.51	0.49	1.39
35	1.00	0.50	0.27	0.77	0.76	2.16
45	1.50	0.35	0.29	0.82	1.05	2.98
60	2.00	0.25	0.49	1.39	1.54	4.37
80	2.50	0.18	1.61	4.58	3.15	8.95
120	3.00	0.13	2.93	8.33	6.08	17.28
170	3.50	0.09	1.42	4.04	7.50	21.32
200	3.75	0.07	0.33	0.94	7.83	22.26
230	4.00	0.06	0.30	0.85	8.13	23.11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					2.92	2.07

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.45	0.18	0.96	-1.48	5.48

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O17 #1

Analysis Date: 01-17-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
120.90	117.63	0.07	0.00	#200 - 2.96 #230 - 2.75	0.90	10.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.48	0.40	0.48	0.40
5	-2.00	4.00	0.11	0.09	0.59	0.49
7	-1.50	2.83	0.30	0.25	0.89	0.74
10	-1.00	2.00	0.35	0.29	1.24	1.03
14	-0.50	1.41	0.74	0.61	1.98	1.64
18	0.00	1.00	1.05	0.87	3.03	2.51
25	0.50	0.71	1.47	1.22	4.50	3.73
35	1.00	0.50	3.21	2.66	7.71	6.39
45	1.50	0.35	7.32	6.05	15.03	12.44
60	2.00	0.25	18.33	15.16	33.36	27.60
80	2.50	0.18	39.93	33.03	73.29	60.63
120	3.00	0.13	36.70	30.36	109.99	90.99
170	3.50	0.09	6.53	5.40	116.52	96.39
200	3.75	0.07	0.79	0.65	117.31	97.04
230	4.00	0.06	0.25	0.21	117.56	97.25

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.37	2.88	2.74	2.34	1.91	1.62	0.74

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.18	0.22	0.81	-2.08	10.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O17 #2

Analysis Date: 01-17-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
129.20	123.38	0.20	0.00	#200 - 5.07 #230 - 4.64	1.70	13.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	5.21	4.03	5.21	4.03
3.5	-2.50	5.66	1.17	0.91	6.38	4.94
4	-2.25	4.76	0.68	0.53	7.06	5.47
5	-2.00	4.00	0.53	0.41	7.59	5.88
7	-1.50	2.83	1.92	1.49	9.51	7.37
10	-1.00	2.00	1.83	1.42	11.34	8.79
14	-0.50	1.41	2.01	1.56	13.35	10.35
18	0.00	1.00	1.86	1.44	15.21	11.79
25	0.50	0.71	1.67	1.29	16.88	13.08
35	1.00	0.50	1.82	1.41	18.70	14.49
45	1.50	0.35	2.22	1.72	20.92	16.21
60	2.00	0.25	5.01	3.88	25.93	20.09
80	2.50	0.18	27.68	21.42	53.61	41.51
120	3.00	0.13	52.35	40.52	105.96	82.03
170	3.50	0.09	15.27	11.82	121.23	93.85
200	3.75	0.07	1.39	1.08	122.62	94.93
230	4.00	0.06	0.56	0.43	123.18	95.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.79	3.08	2.91	2.60	2.11	1.44	-2.47

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2	0.25	1.64	-2.1	6.41

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O17 #3

Analysis Date: 01-17-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
118.20	114.62	0.12	0.00	#200 - 3.43 #230 - 3.13	0.70	6.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.02	0.02	0.02	0.02
14	-0.50	1.41	0.03	0.03	0.05	0.05
18	0.00	1.00	0.13	0.11	0.18	0.16
25	0.50	0.71	0.13	0.11	0.31	0.27
35	1.00	0.50	0.39	0.33	0.70	0.60
45	1.50	0.35	0.59	0.50	1.29	1.10
60	2.00	0.25	2.66	2.25	3.95	3.35
80	2.50	0.18	63.62	53.82	67.57	57.17
120	3.00	0.13	37.02	31.32	104.59	88.49
170	3.50	0.09	8.39	7.10	112.98	95.59
200	3.75	0.07	1.16	0.98	114.14	96.57
230	4.00	0.06	0.36	0.30	114.50	96.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.46	2.93	2.78	2.43	2.20	2.12	2.02

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.48	0.18	0.41	-0.46	9.51

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O17 #4
Analysis Date: 01-17-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
125.06	109.39	0.45	0.09	#200 - 13.96 #230 - 12.97	2.00	34.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	20.65	16.51	20.65	16.51
5/8"	-4.00	16.00	0.00	0.00	20.65	16.51
11/16"	-3.50	11.31	0.00	0.00	20.65	16.51
5/16"	-3.00	8.00	0.26	0.21	20.91	16.72
3.5	-2.50	5.66	1.03	0.82	21.94	17.54
4	-2.25	4.76	0.87	0.70	22.81	18.24
5	-2.00	4.00	1.92	1.54	24.73	19.78
7	-1.50	2.83	4.77	3.81	29.50	23.59
10	-1.00	2.00	6.14	4.91	35.64	28.50
14	-0.50	1.41	6.73	5.38	42.37	33.88
18	0.00	1.00	6.00	4.80	48.37	38.68
25	0.50	0.71	5.50	4.40	53.87	43.08
35	1.00	0.50	6.15	4.92	60.02	48.00
45	1.50	0.35	6.72	5.37	66.74	53.37
60	2.00	0.25	7.08	5.66	73.82	59.03
80	2.50	0.18	10.90	8.72	84.72	67.75
120	3.00	0.13	14.69	11.75	99.41	79.50
170	3.50	0.09	6.53	5.22	105.94	84.72
200	3.75	0.07	1.65	1.32	107.59	86.04
230	4.00	0.06	1.24	0.99	108.83	87.03

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.43	2.81	1.19	-1.36		

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.01	0.99	1.82	1.13	2.23

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O18 #1

Analysis Date: 01-15-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.28	131.28	0.52	0.13	#200 - 0.71 #230 - 0.53	0.90	12.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.79	0.60	0.79	0.60
3.5	-2.50	5.66	0.63	0.48	1.42	1.08
4	-2.25	4.76	0.18	0.14	1.60	1.22
5	-2.00	4.00	0.49	0.37	2.09	1.59
7	-1.50	2.83	0.74	0.56	2.83	2.15
10	-1.00	2.00	1.10	0.84	3.93	2.99
14	-0.50	1.41	2.00	1.52	5.93	4.51
18	0.00	1.00	2.98	2.27	8.91	6.78
25	0.50	0.71	4.41	3.36	13.32	10.14
35	1.00	0.50	7.60	5.79	20.92	15.93
45	1.50	0.35	13.43	10.23	34.35	26.16
60	2.00	0.25	23.85	18.17	58.20	44.33
80	2.50	0.18	39.94	30.42	98.14	74.75
120	3.00	0.13	25.51	19.43	123.65	94.18
170	3.50	0.09	5.97	4.55	129.62	98.73
200	3.75	0.07	0.73	0.56	130.35	99.29
230	4.00	0.06	0.24	0.18	130.59	99.47

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.09	2.74	2.51	2.09	1.44	1.00	-0.39

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.82	0.28	1.1	-1.78	7.36

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O18 #2
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
135.32	135.32	0.28	0.08	#200 - 0.40 #230 - 0.29	0.60	12.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.08	0.06	0.08	0.06
4	-2.25	4.76	0.20	0.15	0.28	0.21
5	-2.00	4.00	0.33	0.24	0.61	0.45
7	-1.50	2.83	1.51	1.12	2.12	1.57
10	-1.00	2.00	1.59	1.17	3.71	2.74
14	-0.50	1.41	2.48	1.83	6.19	4.57
18	0.00	1.00	3.35	2.48	9.54	7.05
25	0.50	0.71	4.49	3.32	14.03	10.37
35	1.00	0.50	7.31	5.40	21.34	15.77
45	1.50	0.35	13.20	9.75	34.54	25.52
60	2.00	0.25	25.40	18.77	59.94	44.29
80	2.50	0.18	40.91	30.23	100.85	74.52
120	3.00	0.13	30.01	22.18	130.86	96.70
170	3.50	0.09	3.64	2.69	134.50	99.39
200	3.75	0.07	0.28	0.21	134.78	99.60
230	4.00	0.06	0.15	0.11	134.93	99.71

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.96	2.71	2.51	2.09	1.47	1.01	-0.41

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.83	0.28	1.02	-1.52	5.54

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O18 #3
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
135.18	110.62	0.46	0.12	#200 - 19.35 #230 - 18.62	2.00	23.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.07	0.05	0.07	0.05
4	-2.25	4.76	0.05	0.04	0.12	0.09
5	-2.00	4.00	0.20	0.15	0.32	0.24
7	-1.50	2.83	0.77	0.57	1.09	0.81
10	-1.00	2.00	1.33	0.98	2.42	1.79
14	-0.50	1.41	2.63	1.95	5.05	3.74
18	0.00	1.00	2.35	1.74	7.40	5.48
25	0.50	0.71	2.11	1.56	9.51	7.04
35	1.00	0.50	2.35	1.74	11.86	8.78
45	1.50	0.35	2.61	1.93	14.47	10.71
60	2.00	0.25	4.66	3.45	19.13	14.16
80	2.50	0.18	28.16	20.83	47.29	34.99
120	3.00	0.13	47.60	35.21	94.89	70.20
170	3.50	0.09	12.22	9.04	107.11	79.24
200	3.75	0.07	1.90	1.41	109.01	80.65
230	4.00	0.06	0.99	0.73	110.00	81.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.27	2.71	2.26	2.04	-0.14

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.29	0.20	1.05	-2.05	7.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O19 #1
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.18 #230 - 0.08	Organics (%):	Carbonates (%):	Shells (%):
127.68	127.68	0.11	0.00		0.60	10.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.03	0.02	0.03	0.02
7	-1.50	2.83	0.41	0.32	0.44	0.34
10	-1.00	2.00	0.43	0.34	0.87	0.68
14	-0.50	1.41	1.39	1.09	2.26	1.77
18	0.00	1.00	2.18	1.71	4.44	3.48
25	0.50	0.71	3.77	2.95	8.21	6.43
35	1.00	0.50	7.48	5.86	15.69	12.29
45	1.50	0.35	13.31	10.42	29.00	22.71
60	2.00	0.25	21.37	16.74	50.37	39.45
80	2.50	0.18	41.62	32.60	91.99	72.05
120	3.00	0.13	29.40	23.03	121.39	95.08
170	3.50	0.09	5.62	4.40	127.01	99.48
200	3.75	0.07	0.43	0.34	127.44	99.82
230	4.00	0.06	0.13	0.10	127.57	99.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.00	2.76	2.56	2.16	1.57	1.18	0.26

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.98	0.25	0.86	-1.25	5.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O19 #2
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
129.43	129.43	0.01	0.01	#200 - 0.04 #230 - 0.00	0.60	13.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.70	1.31	1.70	1.31
3.5	-2.50	5.66	0.00	0.00	1.70	1.31
4	-2.25	4.76	0.49	0.38	2.19	1.69
5	-2.00	4.00	0.39	0.30	2.58	1.99
7	-1.50	2.83	0.24	0.19	2.82	2.18
10	-1.00	2.00	0.89	0.69	3.71	2.87
14	-0.50	1.41	1.71	1.32	5.42	4.19
18	0.00	1.00	2.47	1.91	7.89	6.10
25	0.50	0.71	4.03	3.11	11.92	9.21
35	1.00	0.50	7.47	5.77	19.39	14.98
45	1.50	0.35	14.04	10.85	33.43	25.83
60	2.00	0.25	29.12	22.50	62.55	48.33
80	2.50	0.18	41.45	32.03	104.00	80.36
120	3.00	0.13	22.75	17.58	126.75	97.94
170	3.50	0.09	2.46	1.90	129.21	99.84
200	3.75	0.07	0.15	0.12	129.36	99.96
230	4.00	0.06	0.05	0.04	129.41	100.00

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.92	2.60	2.42	2.03	1.46	1.05	-0.29

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.77	0.29	1.07	-2.18	9.5

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O19 #3
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
133.18	133.18	0.06	0.10	#200 - 0.18 #230 - 0.12	0.70	12.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.42	0.32	0.42	0.32
5/16"	-3.00	8.00	1.19	0.89	1.61	1.21
3.5	-2.50	5.66	0.25	0.19	1.86	1.40
4	-2.25	4.76	0.31	0.23	2.17	1.63
5	-2.00	4.00	0.09	0.07	2.26	1.70
7	-1.50	2.83	0.66	0.50	2.92	2.20
10	-1.00	2.00	0.95	0.71	3.87	2.91
14	-0.50	1.41	2.18	1.64	6.05	4.55
18	0.00	1.00	3.51	2.64	9.56	7.19
25	0.50	0.71	5.62	4.22	15.18	11.41
35	1.00	0.50	10.56	7.93	25.74	19.34
45	1.50	0.35	18.31	13.75	44.05	33.09
60	2.00	0.25	27.18	20.41	71.23	53.50
80	2.50	0.18	39.59	29.73	110.82	83.23
120	3.00	0.13	19.68	14.78	130.50	98.01
170	3.50	0.09	2.18	1.64	132.68	99.65
200	3.75	0.07	0.23	0.17	132.91	99.82
230	4.00	0.06	0.08	0.06	132.99	99.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.53	2.36	1.91	1.21	0.79	-0.41

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.65	0.32	1.1	-1.89	8.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O19 #4
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
124.56	124.56	0.42	0.15	#200 - 0.70 #230 - 0.49	0.70	9.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.09	0.07	0.09	0.07
7	-1.50	2.83	0.05	0.04	0.14	0.11
10	-1.00	2.00	0.21	0.17	0.35	0.28
14	-0.50	1.41	0.67	0.54	1.02	0.82
18	0.00	1.00	1.45	1.16	2.47	1.98
25	0.50	0.71	2.54	2.04	5.01	4.02
35	1.00	0.50	4.79	3.85	9.80	7.87
45	1.50	0.35	9.97	8.00	19.77	15.87
60	2.00	0.25	26.87	21.57	46.64	37.44
80	2.50	0.18	46.26	37.14	92.90	74.58
120	3.00	0.13	25.99	20.87	118.89	95.45
170	3.50	0.09	4.29	3.44	123.18	98.89
200	3.75	0.07	0.51	0.41	123.69	99.30
230	4.00	0.06	0.26	0.21	123.95	99.51

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.99	2.73	2.51	2.17	1.71	1.50	0.63

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.05	0.24	0.73	-1.28	6.1

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O20 #1
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
126.68	126.68	0.01	0.11	#200 - 0.14 #230 - 0.12	0.60	17.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.14	1.69	2.14	1.69
3.5	-2.50	5.66	0.45	0.36	2.59	2.05
4	-2.25	4.76	0.63	0.50	3.22	2.55
5	-2.00	4.00	0.86	0.68	4.08	3.23
7	-1.50	2.83	1.49	1.18	5.57	4.41
10	-1.00	2.00	1.89	1.49	7.46	5.90
14	-0.50	1.41	3.23	2.55	10.69	8.45
18	0.00	1.00	4.17	3.29	14.86	11.74
25	0.50	0.71	5.19	4.10	20.05	15.84
35	1.00	0.50	8.54	6.74	28.59	22.58
45	1.50	0.35	13.97	11.03	42.56	33.61
60	2.00	0.25	25.72	20.30	68.28	53.91
80	2.50	0.18	36.20	28.58	104.48	82.49
120	3.00	0.13	19.26	15.20	123.74	97.69
170	3.50	0.09	2.59	2.04	126.33	99.73
200	3.75	0.07	0.17	0.13	126.50	99.86
230	4.00	0.06	0.03	0.02	126.53	99.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.55	2.37	1.90	1.11	0.51	-1.30

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.53	0.35	1.29	-1.67	5.92

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O20 #2

Analysis Date: 01-15-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
126.80	126.80	0.49	0.34	#200 - 0.89 #230 - 0.72	0.80	21.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.35	1.06	1.35	1.06
3.5	-2.50	5.66	0.19	0.15	1.54	1.21
4	-2.25	4.76	0.09	0.07	1.63	1.28
5	-2.00	4.00	0.09	0.07	1.72	1.35
7	-1.50	2.83	1.17	0.92	2.89	2.27
10	-1.00	2.00	1.57	1.24	4.46	3.51
14	-0.50	1.41	2.83	2.23	7.29	5.74
18	0.00	1.00	4.19	3.30	11.48	9.04
25	0.50	0.71	5.93	4.68	17.41	13.72
35	1.00	0.50	8.57	6.76	25.98	20.48
45	1.50	0.35	12.29	9.69	38.27	30.17
60	2.00	0.25	21.88	17.26	60.15	47.43
80	2.50	0.18	35.68	28.14	95.83	75.57
120	3.00	0.13	24.95	19.68	120.78	95.25
170	3.50	0.09	4.49	3.54	125.27	98.79
200	3.75	0.07	0.40	0.32	125.67	99.11
230	4.00	0.06	0.21	0.17	125.88	99.28

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.99	2.71	2.49	2.05	1.23	0.67	-0.67

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.71	0.31	1.18	-1.59	6.15

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O20 #3
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.32	134.32	0.22	0.20	#200 - 0.45 #230 - 0.39	0.60	9.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.43	1.06	1.43	1.06
3.5	-2.50	5.66	1.22	0.91	2.65	1.97
4	-2.25	4.76	0.46	0.34	3.11	2.31
5	-2.00	4.00	0.55	0.41	3.66	2.72
7	-1.50	2.83	1.20	0.89	4.86	3.61
10	-1.00	2.00	1.45	1.08	6.31	4.69
14	-0.50	1.41	2.53	1.88	8.84	6.57
18	0.00	1.00	2.74	2.04	11.58	8.61
25	0.50	0.71	4.07	3.03	15.65	11.64
35	1.00	0.50	6.48	4.82	22.13	16.46
45	1.50	0.35	9.86	7.34	31.99	23.80
60	2.00	0.25	22.11	16.46	54.10	40.26
80	2.50	0.18	50.51	37.60	104.61	77.86
120	3.00	0.13	25.63	19.08	130.24	96.94
170	3.50	0.09	3.24	2.41	133.48	99.35
200	3.75	0.07	0.27	0.20	133.75	99.55
230	4.00	0.06	0.08	0.06	133.83	99.61

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.95	2.66	2.46	2.13	1.54	0.95	-0.92

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.76	0.30	1.21	-2.07	7.65

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O21 #1
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
114.49	114.49	0.01	0.28	#200 - 0.30 #230 - 0.28	0.60	16.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.41	0.36	0.41	0.36
4	-2.25	4.76	0.00	0.00	0.41	0.36
5	-2.00	4.00	0.37	0.32	0.78	0.68
7	-1.50	2.83	0.51	0.45	1.29	1.13
10	-1.00	2.00	1.00	0.87	2.29	2.00
14	-0.50	1.41	1.65	1.44	3.94	3.44
18	0.00	1.00	2.46	2.15	6.40	5.59
25	0.50	0.71	3.88	3.39	10.28	8.98
35	1.00	0.50	7.34	6.41	17.62	15.39
45	1.50	0.35	14.40	12.58	32.02	27.97
60	2.00	0.25	31.14	27.20	63.16	55.17
80	2.50	0.18	34.37	30.02	97.53	85.19
120	3.00	0.13	15.26	13.33	112.79	98.52
170	3.50	0.09	1.29	1.13	114.08	99.65
200	3.75	0.07	0.06	0.05	114.14	99.70
230	4.00	0.06	0.02	0.02	114.16	99.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.87	2.48	2.33	1.90	1.38	1.02	-0.14

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.72	0.30	0.92	-1.63	6.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O21 #2
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.07	130.07	0.16	0.32	#200 - 0.51 #230 - 0.46	0.60	11.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.37	0.28	0.37	0.28
3.5	-2.50	5.66	1.45	1.11	1.82	1.39
4	-2.25	4.76	0.50	0.38	2.32	1.77
5	-2.00	4.00	0.46	0.35	2.78	2.12
7	-1.50	2.83	1.71	1.31	4.49	3.43
10	-1.00	2.00	1.88	1.45	6.37	4.88
14	-0.50	1.41	4.08	3.14	10.45	8.02
18	0.00	1.00	5.09	3.91	15.54	11.93
25	0.50	0.71	7.35	5.65	22.89	17.58
35	1.00	0.50	12.61	9.69	35.50	27.27
45	1.50	0.35	17.17	13.20	52.67	40.47
60	2.00	0.25	21.02	16.16	73.69	56.63
80	2.50	0.18	32.75	25.18	106.44	81.81
120	3.00	0.13	19.57	15.05	126.01	96.86
170	3.50	0.09	3.16	2.43	129.17	99.29
200	3.75	0.07	0.26	0.20	129.43	99.49
230	4.00	0.06	0.07	0.05	129.50	99.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.94	2.57	2.36	1.79	0.88	0.36	-0.98

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.48	0.36	1.24	-1.26	4.62

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O21 #3
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
133.66	133.66	0.12	0.07	#200 - 0.23 #230 - 0.16	0.70	12.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.88	1.41	1.88	1.41
4	-2.25	4.76	0.34	0.25	2.22	1.66
5	-2.00	4.00	0.23	0.17	2.45	1.83
7	-1.50	2.83	0.85	0.64	3.30	2.47
10	-1.00	2.00	1.27	0.95	4.57	3.42
14	-0.50	1.41	2.06	1.54	6.63	4.96
18	0.00	1.00	3.09	2.31	9.72	7.27
25	0.50	0.71	5.13	3.84	14.85	11.11
35	1.00	0.50	8.60	6.43	23.45	17.54
45	1.50	0.35	13.52	10.12	36.97	27.66
60	2.00	0.25	30.32	22.68	67.29	50.34
80	2.50	0.18	42.76	31.99	110.05	82.33
120	3.00	0.13	20.92	15.65	130.97	97.98
170	3.50	0.09	2.19	1.64	133.16	99.62
200	3.75	0.07	0.20	0.15	133.36	99.77
230	4.00	0.06	0.09	0.07	133.45	99.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.55	2.39	1.99	1.37	0.88	-0.49

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.71	0.31	1.08	-1.84	7.2

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O22 #1
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
116.26	116.26	0.00	0.13	#200 - 0.14 #230 - 0.13	0.60	16.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.97	0.83	0.97	0.83
5/16"	-3.00	8.00	0.38	0.33	1.35	1.16
3.5	-2.50	5.66	0.76	0.65	2.11	1.81
4	-2.25	4.76	0.38	0.33	2.49	2.14
5	-2.00	4.00	0.57	0.49	3.06	2.63
7	-1.50	2.83	1.00	0.86	4.06	3.49
10	-1.00	2.00	1.36	1.17	5.42	4.66
14	-0.50	1.41	2.53	2.18	7.95	6.84
18	0.00	1.00	3.46	2.98	11.41	9.82
25	0.50	0.71	4.91	4.22	16.32	14.04
35	1.00	0.50	8.09	6.96	24.41	21.00
45	1.50	0.35	13.41	11.53	37.82	32.53
60	2.00	0.25	25.92	22.29	63.74	54.82
80	2.50	0.18	38.40	33.03	102.14	87.85
120	3.00	0.13	12.82	11.03	114.96	98.88
170	3.50	0.09	1.07	0.92	116.03	99.80
200	3.75	0.07	0.07	0.06	116.10	99.86
230	4.00	0.06	0.01	0.01	116.11	99.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.82	2.44	2.31	1.89	1.17	0.64	-0.92

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.55	0.34	1.2	-1.95	7.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O22 #2
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
133.58	133.58	0.07	0.10	#200 - 0.20 #230 - 0.14	0.40	12.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.14	0.85	1.14	0.85
3.5	-2.50	5.66	1.09	0.82	2.23	1.67
4	-2.25	4.76	0.60	0.45	2.83	2.12
5	-2.00	4.00	0.75	0.56	3.58	2.68
7	-1.50	2.83	1.66	1.24	5.24	3.92
10	-1.00	2.00	1.53	1.15	6.77	5.07
14	-0.50	1.41	2.16	1.62	8.93	6.69
18	0.00	1.00	2.80	2.10	11.73	8.79
25	0.50	0.71	3.97	2.97	15.70	11.76
35	1.00	0.50	6.21	4.65	21.91	16.41
45	1.50	0.35	11.59	8.68	33.50	25.09
60	2.00	0.25	28.67	21.46	62.17	46.55
80	2.50	0.18	47.72	35.72	109.89	82.27
120	3.00	0.13	21.60	16.17	131.49	98.44
170	3.50	0.09	1.69	1.27	133.18	99.71
200	3.75	0.07	0.12	0.09	133.30	99.80
230	4.00	0.06	0.08	0.06	133.38	99.86

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.89	2.55	2.40	2.05	1.49	0.96	-1.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.7	0.31	1.18	-2.05	7.54

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O22 #3
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.11	142.11	0.02	0.36	#200 - 0.38 #230 - 0.37	0.40	11.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.46	1.03	1.46	1.03
5/16"	-3.00	8.00	0.00	0.00	1.46	1.03
3.5	-2.50	5.66	0.46	0.32	1.92	1.35
4	-2.25	4.76	0.32	0.23	2.24	1.58
5	-2.00	4.00	0.14	0.10	2.38	1.68
7	-1.50	2.83	0.71	0.50	3.09	2.18
10	-1.00	2.00	0.86	0.61	3.95	2.79
14	-0.50	1.41	1.62	1.14	5.57	3.93
18	0.00	1.00	2.22	1.56	7.79	5.49
25	0.50	0.71	3.53	2.48	11.32	7.97
35	1.00	0.50	6.88	4.84	18.20	12.81
45	1.50	0.35	14.64	10.30	32.84	23.11
60	2.00	0.25	33.62	23.66	66.46	46.77
80	2.50	0.18	55.74	39.22	122.20	85.99
120	3.00	0.13	17.72	12.47	139.92	98.46
170	3.50	0.09	1.56	1.10	141.48	99.56
200	3.75	0.07	0.09	0.06	141.57	99.62
230	4.00	0.06	0.01	0.01	141.58	99.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.86	2.47	2.36	2.04	1.54	1.15	-0.16

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.77	0.29	1.03	-2.66	12.61

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O22 #4
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.33	132.33	0.01	0.39	#200 - 0.41 #230 - 0.40	0.50	14.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.64	0.48	0.64	0.48
3.5	-2.50	5.66	0.38	0.29	1.02	0.77
4	-2.25	4.76	0.38	0.29	1.40	1.06
5	-2.00	4.00	0.50	0.38	1.90	1.44
7	-1.50	2.83	1.61	1.22	3.51	2.66
10	-1.00	2.00	1.41	1.07	4.92	3.73
14	-0.50	1.41	2.41	1.82	7.33	5.55
18	0.00	1.00	3.26	2.46	10.59	8.01
25	0.50	0.71	4.32	3.26	14.91	11.27
35	1.00	0.50	7.70	5.82	22.61	17.09
45	1.50	0.35	18.62	14.07	41.23	31.16
60	2.00	0.25	42.43	32.06	83.66	63.22
80	2.50	0.18	36.97	27.94	120.63	91.16
120	3.00	0.13	10.65	8.05	131.28	99.21
170	3.50	0.09	0.48	0.36	131.76	99.57
200	3.75	0.07	0.03	0.02	131.79	99.59
230	4.00	0.06	0.01	0.01	131.80	99.60

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.74	2.37	2.21	1.79	1.28	0.91	-0.65

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.57	0.34	1.02	-1.95	7.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O23 #1
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
122.31	122.31	0.07	0.05	#200 - 0.14 #230 - 0.11	0.60	13.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.76	1.44	1.76	1.44
5/16"	-3.00	8.00	0.00	0.00	1.76	1.44
3.5	-2.50	5.66	0.19	0.16	1.95	1.60
4	-2.25	4.76	0.34	0.28	2.29	1.88
5	-2.00	4.00	0.75	0.61	3.04	2.49
7	-1.50	2.83	1.68	1.37	4.72	3.86
10	-1.00	2.00	1.86	1.52	6.58	5.38
14	-0.50	1.41	3.83	3.13	10.41	8.51
18	0.00	1.00	4.03	3.29	14.44	11.80
25	0.50	0.71	5.05	4.13	19.49	15.93
35	1.00	0.50	7.73	6.32	27.22	22.25
45	1.50	0.35	14.14	11.56	41.36	33.81
60	2.00	0.25	28.07	22.95	69.43	56.76
80	2.50	0.18	38.40	31.40	107.83	88.16
120	3.00	0.13	12.95	10.59	120.78	98.75
170	3.50	0.09	1.22	1.00	122.00	99.75
200	3.75	0.07	0.14	0.11	122.14	99.86
230	4.00	0.06	0.04	0.03	122.18	99.89

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.82	2.43	2.29	1.85	1.12	0.51	-1.12

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.49	0.36	1.25	-1.84	6.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O23 #2

Analysis Date: 01-15-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
125.85	116.16	0.05	0.10	#200 - 8.15 #230 - 7.82	1.00	8.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.10	0.08	0.10	0.08
5	-2.00	4.00	0.17	0.14	0.27	0.22
7	-1.50	2.83	0.36	0.29	0.63	0.51
10	-1.00	2.00	0.46	0.37	1.09	0.88
14	-0.50	1.41	0.77	0.61	1.86	1.49
18	0.00	1.00	0.75	0.60	2.61	2.09
25	0.50	0.71	0.78	0.62	3.39	2.71
35	1.00	0.50	0.87	0.69	4.26	3.40
45	1.50	0.35	1.26	1.00	5.52	4.40
60	2.00	0.25	6.95	5.52	12.47	9.92
80	2.50	0.18	46.56	37.00	59.03	46.92
120	3.00	0.13	45.34	36.03	104.37	82.95
170	3.50	0.09	10.24	8.14	114.61	91.09
200	3.75	0.07	0.96	0.76	115.57	91.85
230	4.00	0.06	0.41	0.33	115.98	92.18

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.06	2.89	2.54	2.20	2.08	1.55

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.41	0.19	0.71	-2.92	16.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O23 #3

Analysis Date: 01-15-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
165.57	138.22	0.09	0.07	#200 - 16.88 #230 - 16.64	1.20	24.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.58	0.35	0.58	0.35
3.5	-2.50	5.66	0.53	0.32	1.11	0.67
4	-2.25	4.76	0.06	0.04	1.17	0.71
5	-2.00	4.00	0.07	0.04	1.24	0.75
7	-1.50	2.83	0.60	0.36	1.84	1.11
10	-1.00	2.00	1.02	0.62	2.86	1.73
14	-0.50	1.41	2.97	1.79	5.83	3.52
18	0.00	1.00	4.05	2.45	9.88	5.97
25	0.50	0.71	5.56	3.36	15.44	9.33
35	1.00	0.50	7.61	4.60	23.05	13.93
45	1.50	0.35	9.46	5.71	32.51	19.64
60	2.00	0.25	17.59	10.62	50.10	30.26
80	2.50	0.18	55.81	33.71	105.91	63.97
120	3.00	0.13	26.03	15.72	131.94	79.69
170	3.50	0.09	4.94	2.98	136.88	82.67
200	3.75	0.07	0.74	0.45	137.62	83.12
230	4.00	0.06	0.39	0.24	138.01	83.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.85	2.29	1.75	1.18	-0.20

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.87	0.27	1.06	-1.75	6.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O23 #4
Analysis Date: 01-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
128.41	116.68	0.18	0.16	#200 - 9.72 #230 - 9.42	1.90	53.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.84	1.43	1.84	1.43
5/16"	-3.00	8.00	4.30	3.35	6.14	4.78
3.5	-2.50	5.66	3.15	2.45	9.29	7.23
4	-2.25	4.76	2.44	1.90	11.73	9.13
5	-2.00	4.00	3.90	3.04	15.63	12.17
7	-1.50	2.83	7.49	5.83	23.12	18.00
10	-1.00	2.00	9.18	7.15	32.30	25.15
14	-0.50	1.41	10.94	8.52	43.24	33.67
18	0.00	1.00	9.09	7.08	52.33	40.75
25	0.50	0.71	8.28	6.45	60.61	47.20
35	1.00	0.50	8.97	6.99	69.58	54.19
45	1.50	0.35	8.46	6.59	78.04	60.78
60	2.00	0.25	7.66	5.97	85.70	66.75
80	2.50	0.18	11.34	8.83	97.04	75.58
120	3.00	0.13	15.22	11.85	112.26	87.43
170	3.50	0.09	3.07	2.39	115.33	89.82
200	3.75	0.07	0.59	0.46	115.92	90.28
230	4.00	0.06	0.38	0.30	116.30	90.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.86	2.47	0.70	-1.01	-1.67	-2.96

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.3	0.81	1.9	-0.2	1.99

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O24 #1
Analysis Date: 01-16-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
118.65	113.17	0.24	0.00	#200 - 5.19 #230 - 4.81	1.50	13.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.62	1.37	1.62	1.37
5/16"	-3.00	8.00	0.70	0.59	2.32	1.96
3.5	-2.50	5.66	2.73	2.30	5.05	4.26
4	-2.25	4.76	0.62	0.52	5.67	4.78
5	-2.00	4.00	1.10	0.93	6.77	5.71
7	-1.50	2.83	1.37	1.15	8.14	6.86
10	-1.00	2.00	1.68	1.42	9.82	8.28
14	-0.50	1.41	1.84	1.55	11.66	9.83
18	0.00	1.00	1.43	1.21	13.09	11.04
25	0.50	0.71	1.20	1.01	14.29	12.05
35	1.00	0.50	1.75	1.47	16.04	13.52
45	1.50	0.35	1.92	1.62	17.96	15.14
60	2.00	0.25	4.22	3.56	22.18	18.70
80	2.50	0.18	27.47	23.15	49.65	41.85
120	3.00	0.13	47.96	40.42	97.61	82.27
170	3.50	0.09	13.44	11.33	111.05	93.60
200	3.75	0.07	1.43	1.21	112.48	94.81
230	4.00	0.06	0.45	0.38	112.93	95.19

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.88	3.08	2.91	2.60	2.14	1.62	-2.19

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.03	0.24	1.59	-2.2	6.99

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O24 #2

Analysis Date: 01-16-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.36	137.36	0.22	0.04	#200 - 0.30 #230 - 0.20	0.50	10.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.06	0.04	0.06	0.04
4	-2.25	4.76	0.39	0.28	0.45	0.32
5	-2.00	4.00	0.10	0.07	0.55	0.39
7	-1.50	2.83	0.41	0.30	0.96	0.69
10	-1.00	2.00	0.68	0.50	1.64	1.19
14	-0.50	1.41	1.27	0.92	2.91	2.11
18	0.00	1.00	2.13	1.55	5.04	3.66
25	0.50	0.71	3.34	2.43	8.38	6.09
35	1.00	0.50	6.56	4.78	14.94	10.87
45	1.50	0.35	14.44	10.51	29.38	21.38
60	2.00	0.25	33.84	24.64	63.22	46.02
80	2.50	0.18	42.22	30.74	105.44	76.76
120	3.00	0.13	26.61	19.37	132.05	96.13
170	3.50	0.09	4.54	3.31	136.59	99.44
200	3.75	0.07	0.36	0.26	136.95	99.70
230	4.00	0.06	0.14	0.10	137.09	99.80

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.97	2.69	2.47	2.06	1.57	1.24	0.28

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.92	0.26	0.85	-1.55	7.11

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O24 #3
Analysis Date: 01-16-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.87	108.36	0.99	0.03	#200 - 20.06 #230 - 18.63	2.30	32.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.06	0.80	1.06	0.80
3.5	-2.50	5.66	0.86	0.65	1.92	1.45
4	-2.25	4.76	0.53	0.40	2.45	1.85
5	-2.00	4.00	0.94	0.71	3.39	2.56
7	-1.50	2.83	2.74	2.08	6.13	4.64
10	-1.00	2.00	4.41	3.34	10.54	7.98
14	-0.50	1.41	6.55	4.97	17.09	12.95
18	0.00	1.00	7.26	5.51	24.35	18.46
25	0.50	0.71	7.56	5.73	31.91	24.19
35	1.00	0.50	8.06	6.11	39.97	30.30
45	1.50	0.35	7.61	5.77	47.58	36.07
60	2.00	0.25	9.72	7.37	57.30	43.44
80	2.50	0.18	13.89	10.53	71.19	53.97
120	3.00	0.13	22.26	16.88	93.45	70.85
170	3.50	0.09	9.83	7.45	103.28	78.30
200	3.75	0.07	2.16	1.64	105.44	79.94
230	4.00	0.06	1.89	1.43	107.33	81.37

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.28	2.31	0.57	-0.22	-1.45

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.38	0.38	1.63	-0.68	2.61

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O25 #1
Analysis Date: 01-16-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.70	143.70	0.33	0.14	#200 - 0.45 #230 - 0.36	0.50	13.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.82	0.57	0.82	0.57
4	-2.25	4.76	0.48	0.33	1.30	0.90
5	-2.00	4.00	0.73	0.51	2.03	1.41
7	-1.50	2.83	1.62	1.13	3.65	2.54
10	-1.00	2.00	1.75	1.22	5.40	3.76
14	-0.50	1.41	2.61	1.82	8.01	5.58
18	0.00	1.00	4.16	2.89	12.17	8.47
25	0.50	0.71	6.32	4.40	18.49	12.87
35	1.00	0.50	12.54	8.73	31.03	21.60
45	1.50	0.35	20.62	14.35	51.65	35.95
60	2.00	0.25	29.74	20.70	81.39	56.65
80	2.50	0.18	37.56	26.14	118.95	82.79
120	3.00	0.13	20.44	14.22	139.39	97.01
170	3.50	0.09	3.29	2.29	142.68	99.30
200	3.75	0.07	0.36	0.25	143.04	99.55
230	4.00	0.06	0.13	0.09	143.17	99.64

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.93	2.54	2.35	1.84	1.12	0.68	-0.66

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.6	0.33	1.1	-1.38	5.35

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O25 #2

Analysis Date: 01-16-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.48	134.48	0.57	0.42	#200 - 0.96 #230 - 0.83	0.50	18.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.97	0.72	0.97	0.72
3.5	-2.50	5.66	1.32	0.98	2.29	1.70
4	-2.25	4.76	0.47	0.35	2.76	2.05
5	-2.00	4.00	0.16	0.12	2.92	2.17
7	-1.50	2.83	0.92	0.68	3.84	2.85
10	-1.00	2.00	1.49	1.11	5.33	3.96
14	-0.50	1.41	3.40	2.53	8.73	6.49
18	0.00	1.00	4.67	3.47	13.40	9.96
25	0.50	0.71	6.22	4.63	19.62	14.59
35	1.00	0.50	10.46	7.78	30.08	22.37
45	1.50	0.35	15.63	11.62	45.71	33.99
60	2.00	0.25	23.37	17.38	69.08	51.37
80	2.50	0.18	37.07	27.57	106.15	78.94
120	3.00	0.13	22.88	17.01	129.03	95.95
170	3.50	0.09	3.71	2.76	132.74	98.71
200	3.75	0.07	0.44	0.33	133.18	99.04
230	4.00	0.06	0.17	0.13	133.35	99.17

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.97	2.65	2.43	1.96	1.11	0.59	-0.79

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.61	0.33	1.21	-1.54	5.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O25 #3
Analysis Date: 01-16-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.91	143.91	0.11	0.04	#200 - 0.15 #230 - 0.12	0.90	19.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.35	0.24	0.35	0.24
3.5	-2.50	5.66	2.14	1.49	2.49	1.73
4	-2.25	4.76	0.09	0.06	2.58	1.79
5	-2.00	4.00	1.27	0.88	3.85	2.67
7	-1.50	2.83	1.22	0.85	5.07	3.52
10	-1.00	2.00	1.62	1.13	6.69	4.65
14	-0.50	1.41	2.91	2.02	9.60	6.67
18	0.00	1.00	3.89	2.70	13.49	9.37
25	0.50	0.71	5.28	3.67	18.77	13.04
35	1.00	0.50	8.31	5.77	27.08	18.81
45	1.50	0.35	14.36	9.98	41.44	28.79
60	2.00	0.25	34.78	24.17	76.22	52.96
80	2.50	0.18	42.31	29.40	118.53	82.36
120	3.00	0.13	22.51	15.64	141.04	98.00
170	3.50	0.09	2.49	1.73	143.53	99.73
200	3.75	0.07	0.17	0.12	143.70	99.85
230	4.00	0.06	0.04	0.03	143.74	99.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.55	2.37	1.94	1.31	0.76	-0.91

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.64	0.32	1.17	-1.79	6.54

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O25 #4
Analysis Date: 01-16-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
109.67	102.55	0.16	0.00	#200 - 6.97 #230 - 6.63	1.60	9.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.16	0.15	0.16	0.15
7	-1.50	2.83	0.41	0.37	0.57	0.52
10	-1.00	2.00	0.60	0.55	1.17	1.07
14	-0.50	1.41	0.96	0.88	2.13	1.95
18	0.00	1.00	0.99	0.90	3.12	2.85
25	0.50	0.71	0.97	0.88	4.09	3.73
35	1.00	0.50	1.38	1.26	5.47	4.99
45	1.50	0.35	1.76	1.60	7.23	6.59
60	2.00	0.25	4.27	3.89	11.50	10.48
80	2.50	0.18	26.80	24.44	38.30	34.92
120	3.00	0.13	49.05	44.73	87.35	79.65
170	3.50	0.09	12.95	11.81	100.30	91.46
200	3.75	0.07	1.72	1.57	102.02	93.03
230	4.00	0.06	0.37	0.34	102.39	93.37

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.18	2.95	2.67	2.30	2.11	1.00

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.47	0.18	0.8	-2.67	12.34

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O26 #1
Analysis Date: 01-16-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.35	134.35	0.31	0.13	#200 - 0.47 #230 - 0.37	0.60	12.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	4.50	3.35	4.50	3.35
5/16"	-3.00	8.00	0.00	0.00	4.50	3.35
3.5	-2.50	5.66	1.35	1.00	5.85	4.35
4	-2.25	4.76	0.88	0.66	6.73	5.01
5	-2.00	4.00	1.02	0.76	7.75	5.77
7	-1.50	2.83	2.37	1.76	10.12	7.53
10	-1.00	2.00	2.54	1.89	12.66	9.42
14	-0.50	1.41	3.97	2.95	16.63	12.37
18	0.00	1.00	4.58	3.41	21.21	15.78
25	0.50	0.71	5.48	4.08	26.69	19.86
35	1.00	0.50	7.86	5.85	34.55	25.71
45	1.50	0.35	10.25	7.63	44.80	33.34
60	2.00	0.25	16.94	12.61	61.74	45.95
80	2.50	0.18	39.66	29.52	101.40	75.47
120	3.00	0.13	27.28	20.31	128.68	95.78
170	3.50	0.09	4.60	3.42	133.28	99.20
200	3.75	0.07	0.45	0.33	133.73	99.53
230	4.00	0.06	0.13	0.10	133.86	99.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.71	2.49	2.07	0.94	0.03	-2.25

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.46	0.36	1.62	-1.64	5.22

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O26 #2

Analysis Date: 01-16-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
150.78	150.78	0.00	0.22	#200 - 0.24 #230 - 0.21	0.40	11.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.03	0.68	1.03	0.68
4	-2.25	4.76	0.43	0.29	1.46	0.97
5	-2.00	4.00	0.35	0.23	1.81	1.20
7	-1.50	2.83	0.56	0.37	2.37	1.57
10	-1.00	2.00	1.16	0.77	3.53	2.34
14	-0.50	1.41	2.24	1.49	5.77	3.83
18	0.00	1.00	3.46	2.29	9.23	6.12
25	0.50	0.71	5.21	3.46	14.44	9.58
35	1.00	0.50	9.62	6.38	24.06	15.96
45	1.50	0.35	18.78	12.46	42.84	28.42
60	2.00	0.25	35.38	23.46	78.22	51.88
80	2.50	0.18	49.46	32.80	127.68	84.68
120	3.00	0.13	20.46	13.57	148.14	98.25
170	3.50	0.09	2.11	1.40	150.25	99.65
200	3.75	0.07	0.16	0.11	150.41	99.76
230	4.00	0.06	0.04	0.03	150.45	99.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.88	2.49	2.35	1.96	1.36	1.00	-0.24

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.72	0.30	0.97	-1.77	7.34

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O26 #3

Analysis Date: 01-16-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.91	115.38	0.63	0.10	#200 - 21.83 #230 - 20.37	1.50	10.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.33	0.23	0.33	0.23
4	-2.25	4.76	0.17	0.12	0.50	0.35
5	-2.00	4.00	0.35	0.24	0.85	0.59
7	-1.50	2.83	1.56	1.08	2.41	1.67
10	-1.00	2.00	3.50	2.43	5.91	4.10
14	-0.50	1.41	4.04	2.81	9.95	6.91
18	0.00	1.00	3.70	2.57	13.65	9.48
25	0.50	0.71	3.36	2.33	17.01	11.81
35	1.00	0.50	3.36	2.33	20.37	14.14
45	1.50	0.35	3.53	2.45	23.90	16.59
60	2.00	0.25	5.84	4.06	29.74	20.65
80	2.50	0.18	19.16	13.31	48.90	33.96
120	3.00	0.13	48.16	33.47	97.06	67.43
170	3.50	0.09	13.11	9.11	110.17	76.54
200	3.75	0.07	2.34	1.63	112.51	78.17
230	4.00	0.06	2.10	1.46	114.61	79.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.42	2.74	2.16	1.38	-0.84

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.09	0.23	1.33	-1.52	4.48

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O27 #1
Analysis Date: 01-17-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.02	143.02	0.01	0.18	#200 - 0.20 #230 - 0.20	0.50	16.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.34	0.24	0.34	0.24
3.5	-2.50	5.66	0.19	0.13	0.53	0.37
4	-2.25	4.76	0.27	0.19	0.80	0.56
5	-2.00	4.00	0.30	0.21	1.10	0.77
7	-1.50	2.83	1.35	0.94	2.45	1.71
10	-1.00	2.00	2.60	1.82	5.05	3.53
14	-0.50	1.41	4.71	3.29	9.76	6.82
18	0.00	1.00	6.74	4.71	16.50	11.53
25	0.50	0.71	10.04	7.02	26.54	18.55
35	1.00	0.50	16.44	11.49	42.98	30.04
45	1.50	0.35	25.72	17.98	68.70	48.02
60	2.00	0.25	32.99	23.07	101.69	71.09
80	2.50	0.18	27.10	18.95	128.79	90.04
120	3.00	0.13	12.77	8.93	141.56	98.97
170	3.50	0.09	1.06	0.74	142.62	99.71
200	3.75	0.07	0.13	0.09	142.75	99.80
230	4.00	0.06	0.00	0.00	142.75	99.80

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.78	2.34	2.10	1.54	0.78	0.32	-0.78

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.34	0.40	1.06	-1.02	4.24

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O27 #2
Analysis Date: 01-17-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
145.82	145.82	0.02	0.32	#200 - 0.38 #230 - 0.35	0.50	12.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.60	0.41	0.60	0.41
3.5	-2.50	5.66	0.05	0.03	0.65	0.44
4	-2.25	4.76	0.34	0.23	0.99	0.67
5	-2.00	4.00	0.25	0.17	1.24	0.84
7	-1.50	2.83	1.08	0.74	2.32	1.58
10	-1.00	2.00	1.62	1.11	3.94	2.69
14	-0.50	1.41	2.73	1.87	6.67	4.56
18	0.00	1.00	3.92	2.69	10.59	7.25
25	0.50	0.71	5.60	3.84	16.19	11.09
35	1.00	0.50	10.11	6.93	26.30	18.02
45	1.50	0.35	17.93	12.30	44.23	30.32
60	2.00	0.25	33.83	23.20	78.06	53.52
80	2.50	0.18	48.88	33.52	126.94	87.04
120	3.00	0.13	16.92	11.60	143.86	98.64
170	3.50	0.09	1.29	0.88	145.15	99.52
200	3.75	0.07	0.14	0.10	145.29	99.62
230	4.00	0.06	0.04	0.03	145.33	99.65

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.84	2.45	2.32	1.92	1.28	0.85	-0.42

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.66	0.32	1	-1.7	6.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O27 #3
Analysis Date: 01-17-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.49 #230 - 0.41	Organics (%):	Carbonates (%):	Shells (%):
143.58	143.58	0.35	0.17		0.50	11.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.14	0.10	0.14	0.10
3.5	-2.50	5.66	0.08	0.06	0.22	0.16
4	-2.25	4.76	0.00	0.00	0.22	0.16
5	-2.00	4.00	0.20	0.14	0.42	0.30
7	-1.50	2.83	0.83	0.58	1.25	0.88
10	-1.00	2.00	0.91	0.63	2.16	1.51
14	-0.50	1.41	1.76	1.23	3.92	2.74
18	0.00	1.00	2.57	1.79	6.49	4.53
25	0.50	0.71	4.58	3.19	11.07	7.72
35	1.00	0.50	8.66	6.03	19.73	13.75
45	1.50	0.35	16.85	11.74	36.58	25.49
60	2.00	0.25	35.20	24.52	71.78	50.01
80	2.50	0.18	46.73	32.55	118.51	82.56
120	3.00	0.13	21.70	15.11	140.21	97.67
170	3.50	0.09	2.33	1.62	142.54	99.29
200	3.75	0.07	0.32	0.22	142.86	99.51
230	4.00	0.06	0.12	0.08	142.98	99.59

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.55	2.38	2.00	1.48	1.10	0.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.81	0.29	0.88	-1.56	6.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O27 #4
Analysis Date: 01-17-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.59	133.95	0.74	0.00	#200 - 13.47 #230 - 12.72	1.80	20.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.18	0.12	0.18	0.12
4	-2.25	4.76	0.43	0.28	0.61	0.40
5	-2.00	4.00	0.48	0.31	1.09	0.71
7	-1.50	2.83	2.00	1.31	3.09	2.02
10	-1.00	2.00	2.34	1.53	5.43	3.55
14	-0.50	1.41	2.85	1.87	8.28	5.42
18	0.00	1.00	2.26	1.48	10.54	6.90
25	0.50	0.71	2.05	1.34	12.59	8.24
35	1.00	0.50	2.36	1.55	14.95	9.79
45	1.50	0.35	2.90	1.90	17.85	11.69
60	2.00	0.25	6.53	4.28	24.38	15.97
80	2.50	0.18	39.09	25.62	63.47	41.59
120	3.00	0.13	52.80	34.60	116.27	76.19
170	3.50	0.09	13.57	8.89	129.84	85.08
200	3.75	0.07	2.22	1.45	132.06	86.53
230	4.00	0.06	1.15	0.75	133.21	87.28

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.44	2.98	2.62	2.18	2.00	-0.61

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.22	0.21	1.15	-2.12	7.34

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O28 #1
Analysis Date: 01-17-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.12 #230 - 0.09	Organics (%):	Carbonates (%):	Shells (%):
155.07	155.07	0.15	0.00		0.50	12.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.48	0.31	0.48	0.31
4	-2.25	4.76	0.43	0.28	0.91	0.59
5	-2.00	4.00	0.32	0.21	1.23	0.80
7	-1.50	2.83	0.85	0.55	2.08	1.35
10	-1.00	2.00	1.34	0.86	3.42	2.21
14	-0.50	1.41	2.04	1.32	5.46	3.53
18	0.00	1.00	2.76	1.78	8.22	5.31
25	0.50	0.71	4.40	2.84	12.62	8.15
35	1.00	0.50	7.23	4.66	19.85	12.81
45	1.50	0.35	13.63	8.79	33.48	21.60
60	2.00	0.25	34.42	22.20	67.90	43.80
80	2.50	0.18	57.64	37.17	125.54	80.97
120	3.00	0.13	26.81	17.29	152.35	98.26
170	3.50	0.09	2.36	1.52	154.71	99.78
200	3.75	0.07	0.16	0.10	154.87	99.88
230	4.00	0.06	0.05	0.03	154.92	99.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.59	2.42	2.08	1.58	1.18	-0.09

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.85	0.28	0.93	-1.93	7.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O28 #2

Analysis Date: 01-17-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
155.35	155.35	0.22	0.01	#200 - 0.25 #230 - 0.16	0.50	13.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.31	0.20	0.31	0.20
3.5	-2.50	5.66	0.00	0.00	0.31	0.20
4	-2.25	4.76	0.32	0.21	0.63	0.41
5	-2.00	4.00	0.50	0.32	1.13	0.73
7	-1.50	2.83	0.95	0.61	2.08	1.34
10	-1.00	2.00	1.25	0.80	3.33	2.14
14	-0.50	1.41	2.72	1.75	6.05	3.89
18	0.00	1.00	3.72	2.39	9.77	6.28
25	0.50	0.71	5.65	3.64	15.42	9.92
35	1.00	0.50	9.21	5.93	24.63	15.85
45	1.50	0.35	14.65	9.43	39.28	25.28
60	2.00	0.25	37.10	23.88	76.38	49.16
80	2.50	0.18	55.69	35.85	132.07	85.01
120	3.00	0.13	20.79	13.38	152.86	98.39
170	3.50	0.09	1.89	1.22	154.75	99.61
200	3.75	0.07	0.22	0.14	154.97	99.75
230	4.00	0.06	0.14	0.09	155.11	99.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.87	2.49	2.36	2.01	1.49	1.01	-0.27

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.76	0.30	0.95	-1.73	6.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O28 #3

Analysis Date: 01-17-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.70	111.00	0.67	0.09	#200 - 23.35 #230 - 22.80	1.70	13.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.17	0.12	0.17	0.12
4	-2.25	4.76	0.33	0.23	0.50	0.35
5	-2.00	4.00	0.30	0.21	0.80	0.56
7	-1.50	2.83	1.09	0.76	1.89	1.32
10	-1.00	2.00	1.29	0.90	3.18	2.22
14	-0.50	1.41	2.36	1.65	5.54	3.87
18	0.00	1.00	3.54	2.48	9.08	6.35
25	0.50	0.71	4.85	3.40	13.93	9.75
35	1.00	0.50	6.31	4.42	20.24	14.17
45	1.50	0.35	7.67	5.37	27.91	19.54
60	2.00	0.25	13.42	9.40	41.33	28.94
80	2.50	0.18	34.72	24.33	76.05	53.27
120	3.00	0.13	26.49	18.56	102.54	71.83
170	3.50	0.09	5.74	4.02	108.28	75.85
200	3.75	0.07	1.14	0.80	109.42	76.65
230	4.00	0.06	0.78	0.55	110.20	77.20

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.39	2.43	1.79	1.17	-0.27

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.89	0.27	1.13	-1.38	4.89

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/10/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O29 #1

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
144.80	140.33	0.16	0.06	#200 - 3.56 #230 - 3.27	1.10	11.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	3.00	2.07	3.00	2.07
5/8"	-4.00	16.00	0.11	0.08	3.11	2.15
11/16"	-3.50	11.31	0.00	0.00	3.11	2.15
5/16"	-3.00	8.00	2.95	2.04	6.06	4.19
3.5	-2.50	5.66	0.04	0.03	6.10	4.22
4	-2.25	4.76	0.35	0.24	6.45	4.46
5	-2.00	4.00	0.54	0.37	6.99	4.83
7	-1.50	2.83	0.54	0.37	7.53	5.20
10	-1.00	2.00	0.88	0.61	8.41	5.81
14	-0.50	1.41	1.03	0.71	9.44	6.52
18	0.00	1.00	1.02	0.70	10.46	7.22
25	0.50	0.71	1.14	0.79	11.60	8.01
35	1.00	0.50	1.39	0.96	12.99	8.97
45	1.50	0.35	1.92	1.33	14.91	10.30
60	2.00	0.25	5.84	4.03	20.75	14.33
80	2.50	0.18	39.17	27.05	59.92	41.38
120	3.00	0.13	65.57	45.28	125.49	86.66
170	3.50	0.09	12.79	8.83	138.28	95.49
200	3.75	0.07	1.38	0.95	139.66	96.44
230	4.00	0.06	0.42	0.29	140.08	96.73

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.47	2.97	2.87	2.60	2.20	2.03	-1.77

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.16	0.22	1.18	-2.88	12.87

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O29 #2

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.16	21.38	2.03	0.00	#200 - 86.81 #230 - 85.36	3.40	11.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.52	0.39	0.52	0.39
3.5	-2.50	5.66	0.00	0.00	0.52	0.39
4	-2.25	4.76	0.24	0.18	0.76	0.57
5	-2.00	4.00	0.16	0.12	0.92	0.69
7	-1.50	2.83	0.23	0.17	1.15	0.86
10	-1.00	2.00	0.30	0.23	1.45	1.09
14	-0.50	1.41	0.50	0.38	1.95	1.47
18	0.00	1.00	0.41	0.31	2.36	1.78
25	0.50	0.71	0.37	0.28	2.73	2.06
35	1.00	0.50	0.41	0.31	3.14	2.37
45	1.50	0.35	0.51	0.39	3.65	2.76
60	2.00	0.25	0.77	0.58	4.42	3.34
80	2.50	0.18	2.43	1.84	6.85	5.18
120	3.00	0.13	6.14	4.65	12.99	9.83
170	3.50	0.09	3.03	2.29	16.02	12.12
200	3.75	0.07	1.41	1.07	17.43	13.19
230	4.00	0.06	1.92	1.45	19.35	14.64

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						2.45

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.24	0.21	1.67	-1.77	5.54

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O29 #3
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
175.72	150.60	1.00	0.07	#200 - 15.75 #230 - 14.93	1.80	27.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.18	0.67	1.18	0.67
5/16"	-3.00	8.00	0.00	0.00	1.18	0.67
3.5	-2.50	5.66	0.99	0.56	2.17	1.23
4	-2.25	4.76	0.23	0.13	2.40	1.36
5	-2.00	4.00	0.84	0.48	3.24	1.84
7	-1.50	2.83	2.67	1.52	5.91	3.36
10	-1.00	2.00	4.70	2.67	10.61	6.03
14	-0.50	1.41	7.17	4.08	17.78	10.11
18	0.00	1.00	8.12	4.62	25.90	14.73
25	0.50	0.71	8.36	4.76	34.26	19.49
35	1.00	0.50	9.59	5.46	43.85	24.95
45	1.50	0.35	11.35	6.46	55.20	31.41
60	2.00	0.25	14.79	8.42	69.99	39.83
80	2.50	0.18	23.30	13.26	93.29	53.09
120	3.00	0.13	38.39	21.85	131.68	74.94
170	3.50	0.09	14.37	8.18	146.05	83.12
200	3.75	0.07	1.98	1.13	148.03	84.25
230	4.00	0.06	1.44	0.82	149.47	85.07

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.69	3.00	2.38	1.00	0.13	-1.19

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.6	0.33	1.51	-1.04	3.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O29 #4
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.32	141.18	0.80	0.15	#200 - 14.25 #230 - 13.68	2.10	37.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.53	0.33	0.53	0.33
3.5	-2.50	5.66	2.67	1.64	3.20	1.97
4	-2.25	4.76	1.30	0.80	4.50	2.77
5	-2.00	4.00	2.80	1.72	7.30	4.49
7	-1.50	2.83	6.32	3.89	13.62	8.38
10	-1.00	2.00	8.88	5.47	22.50	13.85
14	-0.50	1.41	13.07	8.05	35.57	21.90
18	0.00	1.00	12.72	7.84	48.29	29.74
25	0.50	0.71	12.70	7.82	60.99	37.56
35	1.00	0.50	12.30	7.58	73.29	45.14
45	1.50	0.35	14.22	8.76	87.51	53.90
60	2.00	0.25	13.93	8.58	101.44	62.48
80	2.50	0.18	16.41	10.11	117.85	72.59
120	3.00	0.13	13.55	8.35	131.40	80.94
170	3.50	0.09	6.05	3.73	137.45	84.67
200	3.75	0.07	1.75	1.08	139.20	85.75
230	4.00	0.06	0.93	0.57	140.13	86.32

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.41	2.64	1.28	-0.30	-0.87	-1.93

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.75	0.59	1.62	-0.23	2.16

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O30 #1
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.17	127.49	0.11	0.01	#200 - 2.36 #230 - 2.15	0.90	17.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	4.03	3.10	4.03	3.10
5/16"	-3.00	8.00	1.27	0.98	5.30	4.08
3.5	-2.50	5.66	1.06	0.81	6.36	4.89
4	-2.25	4.76	0.97	0.75	7.33	5.64
5	-2.00	4.00	1.42	1.09	8.75	6.73
7	-1.50	2.83	2.06	1.58	10.81	8.31
10	-1.00	2.00	2.36	1.81	13.17	10.12
14	-0.50	1.41	2.85	2.19	16.02	12.31
18	0.00	1.00	2.66	2.04	18.68	14.35
25	0.50	0.71	2.44	1.87	21.12	16.22
35	1.00	0.50	2.82	2.17	23.94	18.39
45	1.50	0.35	4.72	3.63	28.66	22.02
60	2.00	0.25	11.98	9.20	40.64	31.22
80	2.50	0.18	31.93	24.53	72.57	55.75
120	3.00	0.13	44.17	33.93	116.74	89.68
170	3.50	0.09	9.57	7.35	126.31	97.03
200	3.75	0.07	0.79	0.61	127.10	97.64
230	4.00	0.06	0.27	0.21	127.37	97.85

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.36	2.92	2.78	2.38	1.66	0.44	-2.46

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.74	0.30	1.72	-1.87	5.64

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O30 #2

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
98.32	14.66	4.14	0.00	#200 - 91.41 #230 - 89.32	4.00	6.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.02	0.02	0.02
10	-1.00	2.00	0.12	0.12	0.14	0.14
14	-0.50	1.41	0.13	0.13	0.27	0.27
18	0.00	1.00	0.23	0.23	0.50	0.50
25	0.50	0.71	0.21	0.21	0.71	0.71
35	1.00	0.50	0.22	0.22	0.93	0.93
45	1.50	0.35	0.28	0.28	1.21	1.21
60	2.00	0.25	0.51	0.52	1.72	1.73
80	2.50	0.18	1.41	1.43	3.13	3.16
120	3.00	0.13	2.76	2.81	5.89	5.97
170	3.50	0.09	1.46	1.48	7.35	7.45
200	3.75	0.07	1.12	1.14	8.47	8.59
230	4.00	0.06	2.05	2.09	10.52	10.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						2.83

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.72	0.15	1.13	-1.5	5.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O30 #3
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
174.03	133.19	1.00	0.05	#200 - 25.16 #230 - 24.08	2.30	39.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.51	0.87	1.51	0.87
5/16"	-3.00	8.00	0.34	0.20	1.85	1.07
3.5	-2.50	5.66	2.38	1.37	4.23	2.44
4	-2.25	4.76	0.40	0.23	4.63	2.67
5	-2.00	4.00	0.67	0.38	5.30	3.05
7	-1.50	2.83	2.51	1.44	7.81	4.49
10	-1.00	2.00	3.31	1.90	11.12	6.39
14	-0.50	1.41	5.22	3.00	16.34	9.39
18	0.00	1.00	5.83	3.35	22.17	12.74
25	0.50	0.71	6.61	3.80	28.78	16.54
35	1.00	0.50	7.77	4.46	36.55	21.00
45	1.50	0.35	9.78	5.62	46.33	26.62
60	2.00	0.25	11.88	6.83	58.21	33.45
80	2.50	0.18	15.83	9.10	74.04	42.55
120	3.00	0.13	39.19	22.52	113.23	65.07
170	3.50	0.09	14.64	8.41	127.87	73.48
200	3.75	0.07	2.36	1.36	130.23	74.84
230	4.00	0.06	1.88	1.08	132.11	75.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.79	2.67	1.36	0.43	-1.37

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.65	0.32	1.63	-1.22	3.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O30 #4
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.47	121.82	0.74	0.49	#200 - 16.58 #230 - 16.09	2.70	36.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.06	0.74	1.06	0.74
3.5	-2.50	5.66	0.88	0.61	1.94	1.35
4	-2.25	4.76	1.09	0.76	3.03	2.11
5	-2.00	4.00	2.12	1.48	5.15	3.59
7	-1.50	2.83	5.23	3.65	10.38	7.24
10	-1.00	2.00	6.36	4.43	16.74	11.67
14	-0.50	1.41	9.32	6.50	26.06	18.17
18	0.00	1.00	8.92	6.22	34.98	24.39
25	0.50	0.71	8.33	5.81	43.31	30.20
35	1.00	0.50	8.45	5.89	51.76	36.09
45	1.50	0.35	9.58	6.68	61.34	42.77
60	2.00	0.25	10.78	7.51	72.12	50.28
80	2.50	0.18	17.53	12.22	89.65	62.50
120	3.00	0.13	21.86	15.24	111.51	77.74
170	3.50	0.09	6.64	4.63	118.15	82.37
200	3.75	0.07	1.51	1.05	119.66	83.42
230	4.00	0.06	0.71	0.49	120.37	83.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.91	1.98	0.05	-0.67	-1.81

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.07	0.48	1.67	-0.51	2.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O31 #1
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
120.09	117.85	0.10	0.44	#200 - 2.58 #230 - 2.39	1.30	29.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.60	2.17	2.60	2.17
3.5	-2.50	5.66	2.45	2.04	5.05	4.21
4	-2.25	4.76	1.09	0.91	6.14	5.12
5	-2.00	4.00	1.20	1.00	7.34	6.12
7	-1.50	2.83	1.69	1.41	9.03	7.53
10	-1.00	2.00	2.20	1.83	11.23	9.36
14	-0.50	1.41	2.89	2.41	14.12	11.77
18	0.00	1.00	2.94	2.45	17.06	14.22
25	0.50	0.71	3.89	3.24	20.95	17.46
35	1.00	0.50	6.04	5.03	26.99	22.49
45	1.50	0.35	11.28	9.39	38.27	31.88
60	2.00	0.25	17.80	14.82	56.07	46.70
80	2.50	0.18	23.90	19.90	79.97	66.60
120	3.00	0.13	27.73	23.09	107.70	89.69
170	3.50	0.09	8.65	7.20	116.35	96.89
200	3.75	0.07	0.64	0.53	116.99	97.42
230	4.00	0.06	0.23	0.19	117.22	97.61

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.37	2.88	2.68	2.08	1.13	0.27	-2.28

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.56	0.34	1.58	-1.49	4.62

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O31 #2

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
124.01	28.18	4.75	0.00	#200 - 83.91 #230 - 81.10	3.00	13.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.73	0.59	0.73	0.59
5/16"	-3.00	8.00	0.00	0.00	0.73	0.59
3.5	-2.50	5.66	0.68	0.55	1.41	1.14
4	-2.25	4.76	0.14	0.11	1.55	1.25
5	-2.00	4.00	0.38	0.31	1.93	1.56
7	-1.50	2.83	0.40	0.32	2.33	1.88
10	-1.00	2.00	0.48	0.39	2.81	2.27
14	-0.50	1.41	0.52	0.42	3.33	2.69
18	0.00	1.00	0.51	0.41	3.84	3.10
25	0.50	0.71	0.48	0.39	4.32	3.49
35	1.00	0.50	0.58	0.47	4.90	3.96
45	1.50	0.35	0.60	0.48	5.50	4.44
60	2.00	0.25	0.95	0.77	6.45	5.21
80	2.50	0.18	2.55	2.06	9.00	7.27
120	3.00	0.13	5.20	4.19	14.20	11.46
170	3.50	0.09	3.25	2.62	17.45	14.08
200	3.75	0.07	2.49	2.01	19.94	16.09
230	4.00	0.06	3.49	2.81	23.43	18.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					3.74	1.86

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.07	0.24	2.02	-1.49	4.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O31 #3

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.30	119.84	1.21	0.00	#200 - 25.96 #230 - 24.58	1.90	21.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.42	0.27	0.42	0.27
5	-2.00	4.00	0.13	0.08	0.55	0.35
7	-1.50	2.83	0.75	0.48	1.30	0.83
10	-1.00	2.00	1.26	0.80	2.56	1.63
14	-0.50	1.41	2.03	1.29	4.59	2.92
18	0.00	1.00	3.16	2.01	7.75	4.93
25	0.50	0.71	4.39	2.79	12.14	7.72
35	1.00	0.50	6.41	4.08	18.55	11.80
45	1.50	0.35	7.63	4.85	26.18	16.65
60	2.00	0.25	10.33	6.57	36.51	23.22
80	2.50	0.18	14.16	9.00	50.67	32.22
120	3.00	0.13	46.37	29.48	97.04	61.70
170	3.50	0.09	16.27	10.34	113.31	72.04
200	3.75	0.07	3.15	2.00	116.46	74.04
230	4.00	0.06	2.17	1.38	118.63	75.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.92	2.80	2.10	1.43	0.01

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.18	0.22	1.15	-1.39	4.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O32 #1
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
158.89	158.89	1.54	0.18	#200 - 1.45 #230 - 1.13	1.30	14.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.52	0.33	0.52	0.33
4	-2.25	4.76	0.28	0.18	0.80	0.51
5	-2.00	4.00	0.46	0.29	1.26	0.80
7	-1.50	2.83	0.93	0.59	2.19	1.39
10	-1.00	2.00	1.46	0.92	3.65	2.31
14	-0.50	1.41	3.24	2.04	6.89	4.35
18	0.00	1.00	4.48	2.82	11.37	7.17
25	0.50	0.71	6.38	4.02	17.75	11.19
35	1.00	0.50	9.97	6.27	27.72	17.46
45	1.50	0.35	15.15	9.53	42.87	26.99
60	2.00	0.25	18.98	11.95	61.85	38.94
80	2.50	0.18	30.47	19.18	92.32	58.12
120	3.00	0.13	47.26	29.74	139.58	87.86
170	3.50	0.09	15.28	9.62	154.86	97.48
200	3.75	0.07	1.70	1.07	156.56	98.55
230	4.00	0.06	0.51	0.32	157.07	98.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.37	2.94	2.78	2.29	1.40	0.88	-0.38

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.96	0.26	1.14	-1.3	4.74

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O32 #2

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
139.26	67.86	7.09	0.00	#200 - 59.79 #230 - 56.36	2.70	13.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.07	0.05	0.07	0.05
7	-1.50	2.83	0.42	0.30	0.49	0.35
10	-1.00	2.00	0.72	0.52	1.21	0.87
14	-0.50	1.41	1.36	0.98	2.57	1.85
18	0.00	1.00	1.62	1.16	4.19	3.01
25	0.50	0.71	1.70	1.22	5.89	4.23
35	1.00	0.50	2.19	1.57	8.08	5.80
45	1.50	0.35	2.64	1.90	10.72	7.70
60	2.00	0.25	3.59	2.58	14.31	10.28
80	2.50	0.18	8.38	6.02	22.69	16.30
120	3.00	0.13	18.93	13.59	41.62	29.89
170	3.50	0.09	9.45	6.79	51.07	36.68
200	3.75	0.07	4.92	3.53	55.99	40.21
230	4.00	0.06	4.78	3.43	60.77	43.64

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.82	2.48	0.75

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.41	0.19	1.21	-1.37	4.58

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O32 #3
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.97	110.45	0.87	0.00	#200 - 18.15 #230 - 16.98	2.40	32.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.24	0.94	1.24	0.94
3.5	-2.50	5.66	1.05	0.80	2.29	1.74
4	-2.25	4.76	0.41	0.31	2.70	2.05
5	-2.00	4.00	1.73	1.31	4.43	3.36
7	-1.50	2.83	3.04	2.30	7.47	5.66
10	-1.00	2.00	6.22	4.71	13.69	10.37
14	-0.50	1.41	9.20	6.97	22.89	17.34
18	0.00	1.00	8.31	6.30	31.20	23.64
25	0.50	0.71	7.01	5.31	38.21	28.95
35	1.00	0.50	6.76	5.12	44.97	34.07
45	1.50	0.35	6.98	5.29	51.95	39.36
60	2.00	0.25	8.48	6.43	60.43	45.79
80	2.50	0.18	11.76	8.91	72.19	54.70
120	3.00	0.13	20.83	15.78	93.02	70.48
170	3.50	0.09	12.57	9.52	105.59	80.00
200	3.75	0.07	2.44	1.85	108.03	81.85
230	4.00	0.06	1.55	1.17	109.58	83.02

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.24	2.24	0.13	-0.60	-1.64

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.24	0.42	1.74	-0.52	2.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O33 #1

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
126.12	121.51	0.13	0.01	#200 - 4.04 #230 - 3.78	1.20	11.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.02	0.02	0.02	0.02
7	-1.50	2.83	0.08	0.06	0.10	0.08
10	-1.00	2.00	0.25	0.20	0.35	0.28
14	-0.50	1.41	0.58	0.46	0.93	0.74
18	0.00	1.00	0.82	0.65	1.75	1.39
25	0.50	0.71	1.22	0.97	2.97	2.36
35	1.00	0.50	2.41	1.91	5.38	4.27
45	1.50	0.35	5.40	4.28	10.78	8.55
60	2.00	0.25	14.85	11.77	25.63	20.32
80	2.50	0.18	40.42	32.05	66.05	52.37
120	3.00	0.13	42.14	33.41	108.19	85.78
170	3.50	0.09	11.52	9.13	119.71	94.91
200	3.75	0.07	1.33	1.05	121.04	95.96
230	4.00	0.06	0.33	0.26	121.37	96.22

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.52	2.97	2.84	2.46	2.07	1.82	1.09

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.34	0.20	0.7	-1.6	7.85

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O33 #2
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.65	98.13	4.34	0.00	#200 - 35.54 #230 - 32.36	2.10	14.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.21	0.15	0.21	0.15
4	-2.25	4.76	0.38	0.27	0.59	0.42
5	-2.00	4.00	0.84	0.61	1.43	1.03
7	-1.50	2.83	1.36	0.98	2.79	2.01
10	-1.00	2.00	2.50	1.80	5.29	3.81
14	-0.50	1.41	3.09	2.23	8.38	6.04
18	0.00	1.00	2.99	2.16	11.37	8.20
25	0.50	0.71	2.99	2.16	14.36	10.36
35	1.00	0.50	3.42	2.47	17.78	12.83
45	1.50	0.35	4.04	2.91	21.82	15.74
60	2.00	0.25	5.76	4.15	27.58	19.89
80	2.50	0.18	13.15	9.48	40.73	29.37
120	3.00	0.13	33.32	24.03	74.05	53.40
170	3.50	0.09	12.16	8.77	86.21	62.17
200	3.75	0.07	3.17	2.29	89.38	64.46
230	4.00	0.06	4.41	3.18	93.79	67.64

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			2.93	2.27	1.53	-0.73

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.09	0.23	1.42	-1.35	4.1

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O33 #3

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.47	138.73	0.63	0.08	#200 - 18.76 #230 - 18.12	2.30	38.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.91	0.54	0.91	0.54
5/16"	-3.00	8.00	0.18	0.11	1.09	0.65
3.5	-2.50	5.66	0.96	0.57	2.05	1.22
4	-2.25	4.76	0.68	0.40	2.73	1.62
5	-2.00	4.00	2.30	1.37	5.03	2.99
7	-1.50	2.83	4.59	2.72	9.62	5.71
10	-1.00	2.00	6.73	3.99	16.35	9.70
14	-0.50	1.41	9.61	5.70	25.96	15.40
18	0.00	1.00	8.02	4.76	33.98	20.16
25	0.50	0.71	7.87	4.67	41.85	24.83
35	1.00	0.50	10.10	6.00	51.95	30.83
45	1.50	0.35	11.79	7.00	63.74	37.83
60	2.00	0.25	15.00	8.90	78.74	46.73
80	2.50	0.18	20.29	12.04	99.03	58.77
120	3.00	0.13	23.10	13.71	122.13	72.48
170	3.50	0.09	12.23	7.26	134.36	79.74
200	3.75	0.07	2.53	1.50	136.89	81.24
230	4.00	0.06	1.08	0.64	137.97	81.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.17	2.14	0.51	-0.44	-1.63

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.26	0.42	1.65	-0.68	2.59

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O34 #1

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.78	131.78	0.19	0.11	#200 - 0.36 #230 - 0.27	0.70	13.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.20	0.15	0.20	0.15
4	-2.25	4.76	0.00	0.00	0.20	0.15
5	-2.00	4.00	0.03	0.02	0.23	0.17
7	-1.50	2.83	0.94	0.71	1.17	0.88
10	-1.00	2.00	0.93	0.71	2.10	1.59
14	-0.50	1.41	2.18	1.65	4.28	3.24
18	0.00	1.00	3.22	2.44	7.50	5.68
25	0.50	0.71	5.02	3.81	12.52	9.49
35	1.00	0.50	7.84	5.95	20.36	15.44
45	1.50	0.35	11.34	8.61	31.70	24.05
60	2.00	0.25	21.96	16.66	53.66	40.71
80	2.50	0.18	47.05	35.70	100.71	76.41
120	3.00	0.13	25.76	19.55	126.47	95.96
170	3.50	0.09	4.42	3.35	130.89	99.31
200	3.75	0.07	0.44	0.33	131.33	99.64
230	4.00	0.06	0.12	0.09	131.45	99.73

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.69	2.48	2.13	1.53	1.03	-0.14

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.88	0.27	0.96	-1.46	5.54

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O34 #2

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.40	132.56	0.30	0.01	#200 - 6.25 #230 - 5.82	1.70	8.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.94	0.67	0.94	0.67
5/16"	-3.00	8.00	0.50	0.36	1.44	1.03
3.5	-2.50	5.66	0.27	0.19	1.71	1.22
4	-2.25	4.76	0.10	0.07	1.81	1.29
5	-2.00	4.00	0.23	0.16	2.04	1.45
7	-1.50	2.83	1.46	1.04	3.50	2.49
10	-1.00	2.00	1.49	1.06	4.99	3.55
14	-0.50	1.41	2.00	1.42	6.99	4.97
18	0.00	1.00	1.90	1.35	8.89	6.32
25	0.50	0.71	1.83	1.30	10.72	7.62
35	1.00	0.50	1.94	1.38	12.66	9.00
45	1.50	0.35	2.33	1.66	14.99	10.66
60	2.00	0.25	5.72	4.07	20.71	14.73
80	2.50	0.18	36.51	26.00	57.22	40.73
120	3.00	0.13	57.04	40.63	114.26	81.36
170	3.50	0.09	15.78	11.24	130.04	92.60
200	3.75	0.07	1.61	1.15	131.65	93.75
230	4.00	0.06	0.60	0.43	132.25	94.18

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.12	2.92	2.61	2.20	2.02	-0.49

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.27	0.21	1.18	-2.75	11.46

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O34 #3

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
150.81	124.14	2.03	0.00	#200 - 20.33 #230 - 19.03	2.50	24.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.20	0.13	0.20	0.13
4	-2.25	4.76	0.35	0.23	0.55	0.36
5	-2.00	4.00	0.51	0.34	1.06	0.70
7	-1.50	2.83	1.65	1.09	2.71	1.79
10	-1.00	2.00	2.07	1.37	4.78	3.16
14	-0.50	1.41	2.75	1.82	7.53	4.98
18	0.00	1.00	2.74	1.82	10.27	6.80
25	0.50	0.71	3.96	2.63	14.23	9.43
35	1.00	0.50	5.96	3.95	20.19	13.38
45	1.50	0.35	7.25	4.81	27.44	18.19
60	2.00	0.25	12.40	8.22	39.84	26.41
80	2.50	0.18	28.73	19.05	68.57	45.46
120	3.00	0.13	37.88	25.12	106.45	70.58
170	3.50	0.09	11.08	7.35	117.53	77.93
200	3.75	0.07	2.62	1.74	120.15	79.67
230	4.00	0.06	1.96	1.30	122.11	80.97

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.30	2.59	1.91	1.27	-0.49

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.03	0.24	1.21	-1.47	5.01

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O34 #4
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
187.01	156.17	1.80	0.04	#200 - 18.65 #230 - 17.49	2.40	39.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.62	0.33	0.62	0.33
3.5	-2.50	5.66	0.93	0.50	1.55	0.83
4	-2.25	4.76	0.90	0.48	2.45	1.31
5	-2.00	4.00	1.14	0.61	3.59	1.92
7	-1.50	2.83	4.35	2.33	7.94	4.25
10	-1.00	2.00	6.59	3.52	14.53	7.77
14	-0.50	1.41	8.88	4.75	23.41	12.52
18	0.00	1.00	8.55	4.57	31.96	17.09
25	0.50	0.71	8.29	4.43	40.25	21.52
35	1.00	0.50	8.92	4.77	49.17	26.29
45	1.50	0.35	11.74	6.28	60.91	32.57
60	2.00	0.25	20.32	10.87	81.23	43.44
80	2.50	0.18	24.65	13.18	105.88	56.62
120	3.00	0.13	25.48	13.62	131.36	70.24
170	3.50	0.09	17.26	9.23	148.62	79.47
200	3.75	0.07	3.52	1.88	152.14	81.35
230	4.00	0.06	2.16	1.16	154.30	82.51

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.26	2.25	0.86	-0.12	-1.39

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.48	0.36	1.57	-0.76	2.71

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O35 #1
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
133.18	133.18	0.52	0.10	#200 - 0.58 #230 - 0.47	0.70	10.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.27	0.95	1.27	0.95
5/16"	-3.00	8.00	0.00	0.00	1.27	0.95
3.5	-2.50	5.66	0.13	0.10	1.40	1.05
4	-2.25	4.76	0.00	0.00	1.40	1.05
5	-2.00	4.00	0.33	0.25	1.73	1.30
7	-1.50	2.83	0.45	0.34	2.18	1.64
10	-1.00	2.00	1.09	0.82	3.27	2.46
14	-0.50	1.41	1.71	1.28	4.98	3.74
18	0.00	1.00	3.11	2.34	8.09	6.08
25	0.50	0.71	4.79	3.60	12.88	9.68
35	1.00	0.50	7.18	5.39	20.06	15.07
45	1.50	0.35	12.21	9.17	32.27	24.24
60	2.00	0.25	26.73	20.07	59.00	44.31
80	2.50	0.18	42.28	31.75	101.28	76.06
120	3.00	0.13	26.75	20.09	128.03	96.15
170	3.50	0.09	3.93	2.95	131.96	99.10
200	3.75	0.07	0.43	0.32	132.39	99.42
230	4.00	0.06	0.14	0.11	132.53	99.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.97	2.70	2.48	2.09	1.52	1.05	-0.23

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.83	0.28	1.07	-2.15	9.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O35 #2
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.44	149.31	0.61	0.00	#200 - 10.13 #230 - 9.58	1.90	25.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.93	1.17	1.93	1.17
3.5	-2.50	5.66	3.61	2.20	5.54	3.37
4	-2.25	4.76	2.10	1.28	7.64	4.65
5	-2.00	4.00	2.85	1.73	10.49	6.38
7	-1.50	2.83	4.34	2.64	14.83	9.02
10	-1.00	2.00	3.50	2.13	18.33	11.15
14	-0.50	1.41	3.71	2.26	22.04	13.41
18	0.00	1.00	2.75	1.67	24.79	15.08
25	0.50	0.71	2.03	1.23	26.82	16.31
35	1.00	0.50	2.09	1.27	28.91	17.58
45	1.50	0.35	2.37	1.44	31.28	19.02
60	2.00	0.25	5.95	3.62	37.23	22.64
80	2.50	0.18	42.03	25.56	79.26	48.20
120	3.00	0.13	53.56	32.57	132.82	80.77
170	3.50	0.09	12.93	7.86	145.75	88.63
200	3.75	0.07	2.04	1.24	147.79	89.87
230	4.00	0.06	0.91	0.55	148.70	90.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.21	2.91	2.53	2.05	0.37	-2.20

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.8	0.29	1.7	-1.63	4.4

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O35 #3

Analysis Date: 01-23-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
173.00	101.14	0.48	0.00	#200 - 42.50 #230 - 41.82	2.30	11.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.23	0.13	0.23	0.13
3.5	-2.50	5.66	0.35	0.20	0.58	0.33
4	-2.25	4.76	0.26	0.15	0.84	0.48
5	-2.00	4.00	0.51	0.29	1.35	0.77
7	-1.50	2.83	1.30	0.75	2.65	1.52
10	-1.00	2.00	1.10	0.64	3.75	2.16
14	-0.50	1.41	0.91	0.53	4.66	2.69
18	0.00	1.00	0.92	0.53	5.58	3.22
25	0.50	0.71	0.89	0.51	6.47	3.73
35	1.00	0.50	1.04	0.60	7.51	4.33
45	1.50	0.35	1.50	0.87	9.01	5.20
60	2.00	0.25	5.42	3.13	14.43	8.33
80	2.50	0.18	37.52	21.69	51.95	30.02
120	3.00	0.13	41.03	23.72	92.98	53.74
170	3.50	0.09	5.50	3.18	98.48	56.92
200	3.75	0.07	1.01	0.58	99.49	57.50
230	4.00	0.06	1.17	0.68	100.66	58.18

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			2.92	2.38	2.18	1.39

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.26	0.21	1.04	-2.82	11.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O36 #1
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.08 #230 - 0.06	Organics (%):	Carbonates (%):	Shells (%):
142.03	142.03	0.04	0.04		0.50	11.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.21	0.15	0.21	0.15
5	-2.00	4.00	0.21	0.15	0.42	0.30
7	-1.50	2.83	0.60	0.42	1.02	0.72
10	-1.00	2.00	0.93	0.65	1.95	1.37
14	-0.50	1.41	2.07	1.46	4.02	2.83
18	0.00	1.00	3.22	2.27	7.24	5.10
25	0.50	0.71	4.51	3.18	11.75	8.28
35	1.00	0.50	8.38	5.90	20.13	14.18
45	1.50	0.35	16.89	11.89	37.02	26.07
60	2.00	0.25	38.51	27.11	75.53	53.18
80	2.50	0.18	47.22	33.25	122.75	86.43
120	3.00	0.13	16.62	11.70	139.37	98.13
170	3.50	0.09	2.33	1.64	141.70	99.77
200	3.75	0.07	0.21	0.15	141.91	99.92
230	4.00	0.06	0.03	0.02	141.94	99.94

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.87	2.46	2.33	1.94	1.46	1.08	-0.02

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.77	0.29	0.86	-1.48	6.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O36 #2
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
158.30	150.28	0.47	0.11	#200 - 5.82 #230 - 5.47	1.50	21.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.52	0.33	0.52	0.33
5/16"	-3.00	8.00	0.00	0.00	0.52	0.33
3.5	-2.50	5.66	1.64	1.04	2.16	1.37
4	-2.25	4.76	1.23	0.78	3.39	2.15
5	-2.00	4.00	1.32	0.83	4.71	2.98
7	-1.50	2.83	2.85	1.80	7.56	4.78
10	-1.00	2.00	2.66	1.68	10.22	6.46
14	-0.50	1.41	4.50	2.84	14.72	9.30
18	0.00	1.00	4.58	2.89	19.30	12.19
25	0.50	0.71	4.81	3.04	24.11	15.23
35	1.00	0.50	5.35	3.38	29.46	18.61
45	1.50	0.35	5.64	3.56	35.10	22.17
60	2.00	0.25	9.69	6.12	44.79	28.29
80	2.50	0.18	38.08	24.06	82.87	52.35
120	3.00	0.13	50.48	31.89	133.35	84.24
170	3.50	0.09	13.74	8.68	147.09	92.92
200	3.75	0.07	1.99	1.26	149.08	94.18
230	4.00	0.06	0.56	0.35	149.64	94.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.00	2.86	2.45	1.73	0.61	-1.43

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.89	0.27	1.44	-1.64	5.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O36 #3
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.69	133.21	0.08	0.01	#200 - 6.82 #230 - 6.70	1.00	8.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.01	0.02	0.01
10	-1.00	2.00	0.03	0.02	0.05	0.03
14	-0.50	1.41	0.00	0.00	0.05	0.03
18	0.00	1.00	0.01	0.01	0.06	0.04
25	0.50	0.71	0.06	0.04	0.12	0.08
35	1.00	0.50	0.08	0.06	0.20	0.14
45	1.50	0.35	0.17	0.12	0.37	0.26
60	2.00	0.25	0.67	0.47	1.04	0.73
80	2.50	0.18	15.34	10.75	16.38	11.48
120	3.00	0.13	81.80	57.33	98.18	68.81
170	3.50	0.09	32.92	23.07	131.10	91.88
200	3.75	0.07	1.85	1.30	132.95	93.18
230	4.00	0.06	0.17	0.12	133.12	93.30

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.33	3.13	2.84	2.62	2.54	2.20

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.82	0.14	0.34	-1.18	14.7

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O36 #4
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
135.84	115.79	0.66	0.18	#200 - 16.48 #230 - 15.43	2.30	33.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	1.78	1.31	1.78	1.31
11/16"	-3.50	11.31	0.69	0.51	2.47	1.82
5/16"	-3.00	8.00	0.38	0.28	2.85	2.10
3.5	-2.50	5.66	0.67	0.49	3.52	2.59
4	-2.25	4.76	0.29	0.21	3.81	2.80
5	-2.00	4.00	0.88	0.65	4.69	3.45
7	-1.50	2.83	1.86	1.37	6.55	4.82
10	-1.00	2.00	2.68	1.97	9.23	6.79
14	-0.50	1.41	5.06	3.72	14.29	10.51
18	0.00	1.00	5.23	3.85	19.52	14.36
25	0.50	0.71	5.68	4.18	25.20	18.54
35	1.00	0.50	6.72	4.95	31.92	23.49
45	1.50	0.35	8.19	6.03	40.11	29.52
60	2.00	0.25	10.53	7.75	50.64	37.27
80	2.50	0.18	22.64	16.67	73.28	53.94
120	3.00	0.13	25.39	18.69	98.67	72.63
170	3.50	0.09	11.14	8.20	109.81	80.83
200	3.75	0.07	3.65	2.69	113.46	83.52
230	4.00	0.06	1.43	1.05	114.89	84.57

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.86	3.14	2.38	1.13	0.20	-1.45

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.6	0.33	1.66	-1.34	4.62

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O37 #1
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
124.16	124.16	0.15	0.10	#200 - 0.37 #230 - 0.25	0.50	14.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.82	0.66	0.82	0.66
3.5	-2.50	5.66	0.09	0.07	0.91	0.73
4	-2.25	4.76	0.22	0.18	1.13	0.91
5	-2.00	4.00	0.15	0.12	1.28	1.03
7	-1.50	2.83	0.76	0.61	2.04	1.64
10	-1.00	2.00	1.02	0.82	3.06	2.46
14	-0.50	1.41	2.10	1.69	5.16	4.15
18	0.00	1.00	3.01	2.42	8.17	6.57
25	0.50	0.71	4.09	3.29	12.26	9.86
35	1.00	0.50	6.40	5.15	18.66	15.01
45	1.50	0.35	11.24	9.05	29.90	24.06
60	2.00	0.25	22.26	17.93	52.16	41.99
80	2.50	0.18	33.21	26.75	85.37	68.74
120	3.00	0.13	31.06	25.02	116.43	93.76
170	3.50	0.09	6.76	5.44	123.19	99.20
200	3.75	0.07	0.54	0.43	123.73	99.63
230	4.00	0.06	0.15	0.12	123.88	99.75

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.11	2.80	2.63	2.15	1.53	1.05	-0.32

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.9	0.27	1.08	-1.75	7.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O37 #2
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
128.96	125.72	0.22	0.00	#200 - 2.97 #230 - 2.68	1.00	14.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.47	1.14	1.47	1.14
5/16"	-3.00	8.00	1.21	0.94	2.68	2.08
3.5	-2.50	5.66	0.36	0.28	3.04	2.36
4	-2.25	4.76	0.68	0.53	3.72	2.89
5	-2.00	4.00	0.46	0.36	4.18	3.25
7	-1.50	2.83	1.81	1.40	5.99	4.65
10	-1.00	2.00	1.52	1.18	7.51	5.83
14	-0.50	1.41	1.92	1.49	9.43	7.32
18	0.00	1.00	1.69	1.31	11.12	8.63
25	0.50	0.71	1.47	1.14	12.59	9.77
35	1.00	0.50	1.65	1.28	14.24	11.05
45	1.50	0.35	2.25	1.74	16.49	12.79
60	2.00	0.25	5.20	4.03	21.69	16.82
80	2.50	0.18	29.88	23.17	51.57	39.99
120	3.00	0.13	60.90	47.22	112.47	87.21
170	3.50	0.09	11.68	9.06	124.15	96.27
200	3.75	0.07	0.98	0.76	125.13	97.03
230	4.00	0.06	0.37	0.29	125.50	97.32

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.43	2.97	2.87	2.61	2.18	1.90	-1.35

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.16	0.22	1.38	-2.61	9.58

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O37 #3
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.73	149.59	0.71	0.00	#200 - 9.19 #230 - 8.53	0.70	2.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.07	0.04	0.07	0.04
10	-1.00	2.00	0.06	0.04	0.13	0.08
14	-0.50	1.41	0.10	0.06	0.23	0.14
18	0.00	1.00	0.18	0.11	0.41	0.25
25	0.50	0.71	0.17	0.10	0.58	0.35
35	1.00	0.50	0.30	0.18	0.88	0.53
45	1.50	0.35	0.43	0.26	1.31	0.79
60	2.00	0.25	1.64	1.01	2.95	1.80
80	2.50	0.18	59.03	36.27	61.98	38.07
120	3.00	0.13	66.19	40.67	128.17	78.74
170	3.50	0.09	16.61	10.21	144.78	88.95
200	3.75	0.07	3.03	1.86	147.81	90.81
230	4.00	0.06	1.07	0.66	148.88	91.47

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.26	2.95	2.65	2.32	2.20	2.04

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.6	0.16	0.44	-1.2	14.45

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O37 #4
Analysis Date: 01-23-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.30	129.31	0.33	0.42	#200 - 13.86 #230 - 13.44	2.20	48.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.88	0.59	0.88	0.59
5/16"	-3.00	8.00	1.94	1.31	2.82	1.90
3.5	-2.50	5.66	2.34	1.58	5.16	3.48
4	-2.25	4.76	1.79	1.21	6.95	4.69
5	-2.00	4.00	2.81	1.89	9.76	6.58
7	-1.50	2.83	7.59	5.12	17.35	11.70
10	-1.00	2.00	9.96	6.72	27.31	18.42
14	-0.50	1.41	11.60	7.82	38.91	26.24
18	0.00	1.00	11.28	7.61	50.19	33.85
25	0.50	0.71	10.25	6.91	60.44	40.76
35	1.00	0.50	10.37	6.99	70.81	47.75
45	1.50	0.35	10.39	7.01	81.20	54.76
60	2.00	0.25	12.14	8.19	93.34	62.95
80	2.50	0.18	12.75	8.60	106.09	71.55
120	3.00	0.13	15.96	10.76	122.05	82.31
170	3.50	0.09	4.74	3.20	126.79	85.51
200	3.75	0.07	0.93	0.63	127.72	86.14
230	4.00	0.06	0.63	0.42	128.35	86.56

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.26	2.66	1.16	-0.58	-1.18	-2.21

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.58	0.67	1.75	-0.26	2.13

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O38 #1
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.65	137.65	0.10	0.20	#200 - 0.31 #230 - 0.25	0.60	23.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.74	0.54	0.74	0.54
3.5	-2.50	5.66	1.37	1.00	2.11	1.54
4	-2.25	4.76	0.59	0.43	2.70	1.97
5	-2.00	4.00	1.00	0.73	3.70	2.70
7	-1.50	2.83	3.52	2.56	7.22	5.26
10	-1.00	2.00	4.30	3.12	11.52	8.38
14	-0.50	1.41	7.44	5.41	18.96	13.79
18	0.00	1.00	8.05	5.85	27.01	19.64
25	0.50	0.71	9.93	7.21	36.94	26.85
35	1.00	0.50	13.46	9.78	50.40	36.63
45	1.50	0.35	17.15	12.46	67.55	49.09
60	2.00	0.25	23.40	17.00	90.95	66.09
80	2.50	0.18	29.36	21.33	120.31	87.42
120	3.00	0.13	13.18	9.58	133.49	97.00
170	3.50	0.09	3.33	2.42	136.82	99.42
200	3.75	0.07	0.37	0.27	137.19	99.69
230	4.00	0.06	0.08	0.06	137.27	99.75

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.42	2.21	1.53	0.37	-0.31	-1.55

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.17	0.44	1.37	-0.9	3.29

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O38 #2

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.37	148.37	0.59	0.05	#200 - 0.79 #230 - 0.46	0.90	10.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.09	0.06	0.09	0.06
4	-2.25	4.76	0.00	0.00	0.09	0.06
5	-2.00	4.00	0.59	0.40	0.68	0.46
7	-1.50	2.83	0.57	0.38	1.25	0.84
10	-1.00	2.00	1.13	0.76	2.38	1.60
14	-0.50	1.41	2.14	1.44	4.52	3.04
18	0.00	1.00	2.83	1.91	7.35	4.95
25	0.50	0.71	3.58	2.41	10.93	7.36
35	1.00	0.50	4.87	3.28	15.80	10.64
45	1.50	0.35	7.33	4.94	23.13	15.58
60	2.00	0.25	19.36	13.05	42.49	28.63
80	2.50	0.18	48.44	32.65	90.93	61.28
120	3.00	0.13	43.75	29.49	134.68	90.77
170	3.50	0.09	11.06	7.45	145.74	98.22
200	3.75	0.07	1.47	0.99	147.21	99.21
230	4.00	0.06	0.49	0.33	147.70	99.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.28	2.89	2.73	2.33	1.86	1.52	0.01

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.12	0.23	0.95	-1.78	6.98

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O38 #3

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
60.64	14.91	1.34	0.00	#200 - 79.46 #230 - 77.61	2.80	7.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.07	0.12	0.07	0.12
7	-1.50	2.83	0.03	0.05	0.10	0.17
10	-1.00	2.00	0.20	0.33	0.30	0.50
14	-0.50	1.41	0.50	0.82	0.80	1.32
18	0.00	1.00	0.47	0.78	1.27	2.10
25	0.50	0.71	0.35	0.58	1.62	2.68
35	1.00	0.50	0.37	0.61	1.99	3.29
45	1.50	0.35	0.39	0.64	2.38	3.93
60	2.00	0.25	0.64	1.06	3.02	4.99
80	2.50	0.18	2.22	3.66	5.24	8.65
120	3.00	0.13	4.33	7.14	9.57	15.79
170	3.50	0.09	2.08	3.43	11.65	19.22
200	3.75	0.07	0.80	1.32	12.45	20.54
230	4.00	0.06	1.12	1.85	13.57	22.39

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					3.03	2.00

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.35	0.20	1.27	-1.4	4.43

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O39 #1
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
136.37	124.36	0.68	0.00	#200 - 10.29 #230 - 9.29	1.00	17.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.57	0.42	0.57	0.42
3.5	-2.50	5.66	0.23	0.17	0.80	0.59
4	-2.25	4.76	0.00	0.00	0.80	0.59
5	-2.00	4.00	0.08	0.06	0.88	0.65
7	-1.50	2.83	0.79	0.58	1.67	1.23
10	-1.00	2.00	1.02	0.75	2.69	1.98
14	-0.50	1.41	1.25	0.92	3.94	2.90
18	0.00	1.00	1.12	0.82	5.06	3.72
25	0.50	0.71	1.06	0.78	6.12	4.50
35	1.00	0.50	1.11	0.81	7.23	5.31
45	1.50	0.35	1.17	0.86	8.40	6.17
60	2.00	0.25	4.05	2.97	12.45	9.14
80	2.50	0.18	67.32	49.37	79.77	58.51
120	3.00	0.13	30.85	22.62	110.62	81.13
170	3.50	0.09	9.97	7.31	120.59	88.44
200	3.75	0.07	1.73	1.27	122.32	89.71
230	4.00	0.06	1.36	1.00	123.68	90.71

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.20	2.86	2.41	2.16	2.07	0.81

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.29	0.20	0.9	-3.04	15.6

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O39 #2

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.62	118.07	0.35	0.38	#200 - 11.56 #230 - 10.94	1.60	31.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	1.58	1.20	1.58	1.20
11/16"	-3.50	11.31	0.00	0.00	1.58	1.20
5/16"	-3.00	8.00	2.25	1.71	3.83	2.91
3.5	-2.50	5.66	1.11	0.84	4.94	3.75
4	-2.25	4.76	1.18	0.90	6.12	4.65
5	-2.00	4.00	0.84	0.64	6.96	5.29
7	-1.50	2.83	4.16	3.16	11.12	8.45
10	-1.00	2.00	5.19	3.94	16.31	12.39
14	-0.50	1.41	8.55	6.50	24.86	18.89
18	0.00	1.00	9.65	7.33	34.51	26.22
25	0.50	0.71	9.81	7.45	44.32	33.67
35	1.00	0.50	10.06	7.64	54.38	41.31
45	1.50	0.35	8.11	6.16	62.49	47.47
60	2.00	0.25	7.99	6.07	70.48	53.54
80	2.50	0.18	16.21	12.32	86.69	65.86
120	3.00	0.13	19.53	14.84	106.22	80.70
170	3.50	0.09	8.29	6.30	114.51	87.00
200	3.75	0.07	1.89	1.44	116.40	88.44
230	4.00	0.06	0.82	0.62	117.22	89.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.26	2.81	1.71	-0.08	-0.72	-2.11

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1	0.50	1.79	-0.65	2.76

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O39 #3
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.91	106.09	0.23	0.07	#200 - 23.75 #230 - 23.33	2.80	52.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.50	1.81	2.50	1.81
3.5	-2.50	5.66	3.12	2.26	5.62	4.07
4	-2.25	4.76	3.04	2.20	8.66	6.27
5	-2.00	4.00	4.00	2.90	12.66	9.17
7	-1.50	2.83	8.87	6.43	21.53	15.60
10	-1.00	2.00	12.00	8.70	33.53	24.30
14	-0.50	1.41	10.96	7.95	44.49	32.25
18	0.00	1.00	7.71	5.59	52.20	37.84
25	0.50	0.71	6.06	4.39	58.26	42.23
35	1.00	0.50	6.26	4.54	64.52	46.77
45	1.50	0.35	7.39	5.36	71.91	52.13
60	2.00	0.25	9.70	7.03	81.61	59.16
80	2.50	0.18	12.26	8.89	93.87	68.05
120	3.00	0.13	8.02	5.82	101.89	73.87
170	3.50	0.09	2.53	1.83	104.42	75.70
200	3.75	0.07	0.76	0.55	105.18	76.25
230	4.00	0.06	0.58	0.42	105.76	76.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.31	1.30	-0.96	-1.48	-2.39

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.21	0.86	1.81	0.01	1.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O40 #1
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
150.14	142.51	0.20	0.00	#200 - 5.58 #230 - 5.21	1.20	19.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	6.02	4.01	6.02	4.01
3.5	-2.50	5.66	2.17	1.45	8.19	5.46
4	-2.25	4.76	0.53	0.35	8.72	5.81
5	-2.00	4.00	0.78	0.52	9.50	6.33
7	-1.50	2.83	2.88	1.92	12.38	8.25
10	-1.00	2.00	3.36	2.24	15.74	10.49
14	-0.50	1.41	3.92	2.61	19.66	13.10
18	0.00	1.00	3.43	2.28	23.09	15.38
25	0.50	0.71	2.95	1.96	26.04	17.34
35	1.00	0.50	3.95	2.63	29.99	19.97
45	1.50	0.35	4.80	3.20	34.79	23.17
60	2.00	0.25	7.82	5.21	42.61	28.38
80	2.50	0.18	33.06	22.02	75.67	50.40
120	3.00	0.13	49.95	33.27	125.62	83.67
170	3.50	0.09	14.10	9.39	139.72	93.06
200	3.75	0.07	2.04	1.36	141.76	94.42
230	4.00	0.06	0.55	0.37	142.31	94.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.02	2.87	2.49	1.68	0.16	-2.66

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.75	0.30	1.74	-1.64	4.67

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O40 #2
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
114.36	61.35	1.52	0.00	#200 - 49.04 #230 - 47.68	1.70	9.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.34	0.30	0.34	0.30
5	-2.00	4.00	0.67	0.59	1.01	0.89
7	-1.50	2.83	2.23	1.95	3.24	2.84
10	-1.00	2.00	2.14	1.87	5.38	4.71
14	-0.50	1.41	1.87	1.64	7.25	6.35
18	0.00	1.00	1.34	1.17	8.59	7.52
25	0.50	0.71	0.95	0.83	9.54	8.35
35	1.00	0.50	0.83	0.73	10.37	9.08
45	1.50	0.35	0.94	0.82	11.31	9.90
60	2.00	0.25	2.12	1.85	13.43	11.75
80	2.50	0.18	10.66	9.32	24.09	21.07
120	3.00	0.13	25.55	22.34	49.64	43.41
170	3.50	0.09	7.46	6.52	57.10	49.93
200	3.75	0.07	1.18	1.03	58.28	50.96
230	4.00	0.06	1.55	1.36	59.83	52.32

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.52	2.59	2.23	-0.91

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.07	0.24	1.49	-1.6	4.39

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O40 #3
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
171.31	146.38	1.90	0.18	#200 - 16.87 #230 - 15.85	1.80	33.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.74	0.43	0.74	0.43
4	-2.25	4.76	0.75	0.44	1.49	0.87
5	-2.00	4.00	1.18	0.69	2.67	1.56
7	-1.50	2.83	3.37	1.97	6.04	3.53
10	-1.00	2.00	4.82	2.81	10.86	6.34
14	-0.50	1.41	6.36	3.71	17.22	10.05
18	0.00	1.00	6.34	3.70	23.56	13.75
25	0.50	0.71	6.85	4.00	30.41	17.75
35	1.00	0.50	8.04	4.69	38.45	22.44
45	1.50	0.35	7.59	4.43	46.04	26.87
60	2.00	0.25	9.94	5.80	55.98	32.67
80	2.50	0.18	17.96	10.48	73.94	43.15
120	3.00	0.13	44.94	26.23	118.88	69.38
170	3.50	0.09	19.87	11.60	138.75	80.98
200	3.75	0.07	3.69	2.15	142.44	83.13
230	4.00	0.06	1.74	1.02	144.18	84.15

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.96	3.24	2.63	1.29	0.28	-1.24

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.79	0.29	1.52	-1.05	3.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O41 #1

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.56	162.56	0.03	0.10	#200 - 0.16 #230 - 0.13	0.50	14.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	4.16	2.56	4.16	2.56
5/8"	-4.00	16.00	0.00	0.00	4.16	2.56
11/16"	-3.50	11.31	0.56	0.34	4.72	2.90
5/16"	-3.00	8.00	1.16	0.71	5.88	3.61
3.5	-2.50	5.66	1.66	1.02	7.54	4.63
4	-2.25	4.76	0.74	0.46	8.28	5.09
5	-2.00	4.00	0.49	0.30	8.77	5.39
7	-1.50	2.83	2.13	1.31	10.90	6.70
10	-1.00	2.00	2.85	1.75	13.75	8.45
14	-0.50	1.41	4.44	2.73	18.19	11.18
18	0.00	1.00	5.93	3.65	24.12	14.83
25	0.50	0.71	7.47	4.60	31.59	19.43
35	1.00	0.50	10.67	6.56	42.26	25.99
45	1.50	0.35	16.93	10.41	59.19	36.40
60	2.00	0.25	33.65	20.70	92.84	57.10
80	2.50	0.18	42.82	26.34	135.66	83.44
120	3.00	0.13	22.75	13.99	158.41	97.43
170	3.50	0.09	3.67	2.26	162.08	99.69
200	3.75	0.07	0.24	0.15	162.32	99.84
230	4.00	0.06	0.05	0.03	162.37	99.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.52	2.34	1.83	0.92	0.13	-2.30

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.34	0.40	1.29	-1.21	4.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O41 #2

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
133.72	133.72	0.10	0.10	#200 - 0.27 #230 - 0.19	0.80	13.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.03	0.02	0.03	0.02
7	-1.50	2.83	0.35	0.26	0.38	0.28
10	-1.00	2.00	0.35	0.26	0.73	0.54
14	-0.50	1.41	0.86	0.64	1.59	1.18
18	0.00	1.00	1.15	0.86	2.74	2.04
25	0.50	0.71	1.66	1.24	4.40	3.28
35	1.00	0.50	3.65	2.73	8.05	6.01
45	1.50	0.35	9.92	7.42	17.97	13.43
60	2.00	0.25	22.58	16.89	40.55	30.32
80	2.50	0.18	48.13	35.99	88.68	66.31
120	3.00	0.13	37.67	28.17	126.35	94.48
170	3.50	0.09	6.53	4.88	132.88	99.36
200	3.75	0.07	0.49	0.37	133.37	99.73
230	4.00	0.06	0.11	0.08	133.48	99.81

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.05	2.81	2.65	2.27	1.84	1.58	0.82

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.16	0.22	0.73	-1.65	7.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O41 #3

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
117.79	113.23	0.16	0.14	#200 - 4.57 #230 - 4.16	1.10	14.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.46	1.24	1.46	1.24
3.5	-2.50	5.66	0.71	0.60	2.17	1.84
4	-2.25	4.76	0.28	0.24	2.45	2.08
5	-2.00	4.00	0.26	0.22	2.71	2.30
7	-1.50	2.83	0.83	0.70	3.54	3.00
10	-1.00	2.00	1.46	1.24	5.00	4.24
14	-0.50	1.41	1.84	1.56	6.84	5.80
18	0.00	1.00	1.77	1.50	8.61	7.30
25	0.50	0.71	1.65	1.40	10.26	8.70
35	1.00	0.50	1.75	1.49	12.01	10.19
45	1.50	0.35	2.22	1.88	14.23	12.07
60	2.00	0.25	5.28	4.48	19.51	16.55
80	2.50	0.18	30.88	26.22	50.39	42.77
120	3.00	0.13	49.23	41.79	99.62	84.56
170	3.50	0.09	11.65	9.89	111.27	94.45
200	3.75	0.07	1.16	0.98	112.43	95.43
230	4.00	0.06	0.48	0.41	112.91	95.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.64	2.99	2.89	2.59	2.16	1.94	-0.76

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.21	0.22	1.24	-2.58	9.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O42 #1
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.93	140.93	0.05	0.28	#200 - 0.38 #230 - 0.34	0.60	22.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.19	0.84	1.19	0.84
4	-2.25	4.76	0.65	0.46	1.84	1.30
5	-2.00	4.00	0.90	0.64	2.74	1.94
7	-1.50	2.83	2.37	1.68	5.11	3.62
10	-1.00	2.00	2.61	1.85	7.72	5.47
14	-0.50	1.41	4.46	3.16	12.18	8.63
18	0.00	1.00	7.29	5.17	19.47	13.80
25	0.50	0.71	13.35	9.47	32.82	23.27
35	1.00	0.50	26.43	18.75	59.25	42.02
45	1.50	0.35	29.50	20.93	88.75	62.95
60	2.00	0.25	25.21	17.89	113.96	80.84
80	2.50	0.18	16.67	11.83	130.63	92.67
120	3.00	0.13	8.35	5.92	138.98	98.59
170	3.50	0.09	1.33	0.94	140.31	99.53
200	3.75	0.07	0.12	0.09	140.43	99.62
230	4.00	0.06	0.05	0.04	140.48	99.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.70	2.13	1.84	1.19	0.55	0.12	-1.13

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.07	0.48	1.11	-0.87	4.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O42 #2

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
147.42	125.80	0.63	0.07	#200 - 15.72 #230 - 15.17	1.40	15.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.43	0.29	0.43	0.29
4	-2.25	4.76	0.68	0.46	1.11	0.75
5	-2.00	4.00	0.42	0.28	1.53	1.03
7	-1.50	2.83	0.74	0.50	2.27	1.53
10	-1.00	2.00	1.26	0.85	3.53	2.38
14	-0.50	1.41	2.20	1.49	5.73	3.87
18	0.00	1.00	2.34	1.59	8.07	5.46
25	0.50	0.71	3.04	2.06	11.11	7.52
35	1.00	0.50	4.17	2.83	15.28	10.35
45	1.50	0.35	4.32	2.93	19.60	13.28
60	2.00	0.25	7.32	4.97	26.92	18.25
80	2.50	0.18	32.31	21.92	59.23	40.17
120	3.00	0.13	50.83	34.48	110.06	74.65
170	3.50	0.09	12.35	8.38	122.41	83.03
200	3.75	0.07	1.84	1.25	124.25	84.28
230	4.00	0.06	0.81	0.55	125.06	84.83

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.69	3.02	2.64	2.15	1.77	-0.14

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.2	0.22	1.11	-2.06	7.57

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O42 #3
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
144.71	111.16	0.24	0.12	#200 - 24.26 #230 - 23.46	2.00	27.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.06	0.04	0.06	0.04
4	-2.25	4.76	0.17	0.12	0.23	0.16
5	-2.00	4.00	0.41	0.28	0.64	0.44
7	-1.50	2.83	2.31	1.60	2.95	2.04
10	-1.00	2.00	3.21	2.22	6.16	4.26
14	-0.50	1.41	4.42	3.05	10.58	7.31
18	0.00	1.00	4.94	3.41	15.52	10.72
25	0.50	0.71	6.10	4.22	21.62	14.94
35	1.00	0.50	7.35	5.08	28.97	20.02
45	1.50	0.35	8.70	6.01	37.67	26.03
60	2.00	0.25	13.11	9.06	50.78	35.09
80	2.50	0.18	18.38	12.70	69.16	47.79
120	3.00	0.13	28.78	19.89	97.94	67.68
170	3.50	0.09	9.79	6.77	107.73	74.45
200	3.75	0.07	1.86	1.29	109.59	75.74
230	4.00	0.06	1.16	0.80	110.75	76.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.61	2.56	1.41	0.60	-0.88

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.72	0.30	1.36	-0.92	3.04

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O43 #1

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.38	141.38	0.09	0.18	#200 - 0.31 #230 - 0.23	0.60	19.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.15	0.11	0.15	0.11
4	-2.25	4.76	1.04	0.74	1.19	0.85
5	-2.00	4.00	0.91	0.64	2.10	1.49
7	-1.50	2.83	1.80	1.27	3.90	2.76
10	-1.00	2.00	2.76	1.95	6.66	4.71
14	-0.50	1.41	4.07	2.88	10.73	7.59
18	0.00	1.00	4.44	3.14	15.17	10.73
25	0.50	0.71	5.40	3.82	20.57	14.55
35	1.00	0.50	8.33	5.89	28.90	20.44
45	1.50	0.35	13.15	9.30	42.05	29.74
60	2.00	0.25	23.76	16.81	65.81	46.55
80	2.50	0.18	42.85	30.31	108.66	76.86
120	3.00	0.13	26.85	18.99	135.51	95.85
170	3.50	0.09	5.00	3.54	140.51	99.39
200	3.75	0.07	0.42	0.30	140.93	99.69
230	4.00	0.06	0.11	0.08	141.04	99.77

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.69	2.47	2.06	1.25	0.62	-0.95

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.69	0.31	1.19	-1.4	4.68

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O43 #2

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.43	132.22	1.23	0.06	#200 - 16.03 #230 - 15.25	1.50	16.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.19	0.12	0.19	0.12
3.5	-2.50	5.66	1.03	0.67	1.22	0.79
4	-2.25	4.76	0.83	0.54	2.05	1.33
5	-2.00	4.00	1.35	0.87	3.40	2.20
7	-1.50	2.83	2.99	1.94	6.39	4.14
10	-1.00	2.00	3.77	2.44	10.16	6.58
14	-0.50	1.41	4.63	3.00	14.79	9.58
18	0.00	1.00	3.07	1.99	17.86	11.57
25	0.50	0.71	2.48	1.61	20.34	13.18
35	1.00	0.50	2.88	1.86	23.22	15.04
45	1.50	0.35	3.15	2.04	26.37	17.08
60	2.00	0.25	6.33	4.10	32.70	21.18
80	2.50	0.18	32.86	21.28	65.56	42.46
120	3.00	0.13	49.16	31.83	114.72	74.29
170	3.50	0.09	12.73	8.24	127.45	82.53
200	3.75	0.07	2.23	1.44	129.68	83.97
230	4.00	0.06	1.21	0.78	130.89	84.75

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.76	3.04	2.62	2.09	1.24	-1.32

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.98	0.25	1.45	-1.66	4.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O43 #3
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
175.54	135.11	0.44	0.00	#200 - 24.01 #230 - 23.28	2.30	24.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.07	0.04	0.07	0.04
4	-2.25	4.76	0.23	0.13	0.30	0.17
5	-2.00	4.00	0.68	0.39	0.98	0.56
7	-1.50	2.83	1.95	1.11	2.93	1.67
10	-1.00	2.00	2.66	1.52	5.59	3.19
14	-0.50	1.41	3.93	2.24	9.52	5.43
18	0.00	1.00	4.85	2.76	14.37	8.19
25	0.50	0.71	4.84	2.76	19.21	10.95
35	1.00	0.50	5.31	3.02	24.52	13.97
45	1.50	0.35	6.47	3.69	30.99	17.66
60	2.00	0.25	10.81	6.16	41.80	23.82
80	2.50	0.18	38.73	22.06	80.53	45.88
120	3.00	0.13	41.86	23.85	122.39	69.73
170	3.50	0.09	9.47	5.39	131.86	75.12
200	3.75	0.07	1.53	0.87	133.39	75.99
230	4.00	0.06	1.28	0.73	134.67	76.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.49	2.59	2.03	1.28	-0.60

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.95	0.26	1.23	-1.45	4.53

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O44 #1

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.87	137.16	0.26	0.00	#200 - 8.91 #230 - 8.67	0.80	13.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.68	0.45	0.68	0.45
5/16"	-3.00	8.00	0.31	0.21	0.99	0.66
3.5	-2.50	5.66	0.62	0.41	1.61	1.07
4	-2.25	4.76	0.32	0.21	1.93	1.28
5	-2.00	4.00	0.66	0.44	2.59	1.72
7	-1.50	2.83	1.11	0.74	3.70	2.46
10	-1.00	2.00	1.03	0.69	4.73	3.15
14	-0.50	1.41	1.45	0.97	6.18	4.12
18	0.00	1.00	0.95	0.63	7.13	4.75
25	0.50	0.71	0.71	0.47	7.84	5.22
35	1.00	0.50	0.82	0.55	8.66	5.77
45	1.50	0.35	0.95	0.63	9.61	6.40
60	2.00	0.25	4.87	3.25	14.48	9.65
80	2.50	0.18	66.09	44.10	80.57	53.75
120	3.00	0.13	48.45	32.33	129.02	86.08
170	3.50	0.09	6.72	4.48	135.74	90.56
200	3.75	0.07	0.80	0.53	136.54	91.09
230	4.00	0.06	0.36	0.24	136.90	91.33

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.97	2.83	2.46	2.17	2.07	0.27

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.24	0.21	1.03	-3.44	16.26

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O44 #2

Analysis Date: 01-24-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
195.31	165.48	0.39	0.12	#200 - 16.32 #230 - 15.61	1.20	18.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.17	0.09	0.17	0.09
4	-2.25	4.76	0.12	0.06	0.29	0.15
5	-2.00	4.00	0.17	0.09	0.46	0.24
7	-1.50	2.83	1.18	0.60	1.64	0.84
10	-1.00	2.00	2.35	1.20	3.99	2.04
14	-0.50	1.41	4.03	2.06	8.02	4.10
18	0.00	1.00	5.00	2.56	13.02	6.66
25	0.50	0.71	5.10	2.61	18.12	9.27
35	1.00	0.50	5.51	2.82	23.63	12.09
45	1.50	0.35	6.31	3.23	29.94	15.32
60	2.00	0.25	10.28	5.26	40.22	20.58
80	2.50	0.18	71.34	36.53	111.56	57.11
120	3.00	0.13	40.06	20.51	151.62	77.62
170	3.50	0.09	9.36	4.79	160.98	82.41
200	3.75	0.07	2.48	1.27	163.46	83.68
230	4.00	0.06	1.39	0.71	164.85	84.39

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.86	2.94	2.40	2.06	1.56	-0.32

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.04	0.24	1.07	-1.66	5.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O44 #3
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
184.42	156.19	1.01	0.23	#200 - 16.70 #230 - 16.10	2.30	50.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	9.40	5.10	9.40	5.10
11/16"	-3.50	11.31	0.00	0.00	9.40	5.10
5/16"	-3.00	8.00	1.51	0.82	10.91	5.92
3.5	-2.50	5.66	2.76	1.50	13.67	7.42
4	-2.25	4.76	1.38	0.75	15.05	8.17
5	-2.00	4.00	1.92	1.04	16.97	9.21
7	-1.50	2.83	5.65	3.06	22.62	12.27
10	-1.00	2.00	7.69	4.17	30.31	16.44
14	-0.50	1.41	11.60	6.29	41.91	22.73
18	0.00	1.00	9.67	5.24	51.58	27.97
25	0.50	0.71	9.44	5.12	61.02	33.09
35	1.00	0.50	10.72	5.81	71.74	38.90
45	1.50	0.35	11.22	6.08	82.96	44.98
60	2.00	0.25	13.80	7.48	96.76	52.46
80	2.50	0.18	25.45	13.80	122.21	66.26
120	3.00	0.13	24.07	13.05	146.28	79.31
170	3.50	0.09	5.18	2.81	151.46	82.12
200	3.75	0.07	2.18	1.18	153.64	83.30
230	4.00	0.06	1.11	0.60	154.75	83.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.83	1.84	-0.28	-1.05	-3.51

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.72	0.61	2.04	-0.82	2.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O45 #1
Analysis Date: 01-24-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
127.63	113.34	0.66	0.15	#200 - 12.66 #230 - 11.87	1.00	8.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.19	0.15	0.19	0.15
5	-2.00	4.00	0.04	0.03	0.23	0.18
7	-1.50	2.83	0.23	0.18	0.46	0.36
10	-1.00	2.00	0.44	0.34	0.90	0.70
14	-0.50	1.41	0.79	0.62	1.69	1.32
18	0.00	1.00	1.00	0.78	2.69	2.10
25	0.50	0.71	1.30	1.02	3.99	3.12
35	1.00	0.50	2.39	1.87	6.38	4.99
45	1.50	0.35	4.43	3.47	10.81	8.46
60	2.00	0.25	9.40	7.37	20.21	15.83
80	2.50	0.18	32.42	25.40	52.63	41.23
120	3.00	0.13	43.73	34.26	96.36	75.49
170	3.50	0.09	12.54	9.83	108.90	85.32
200	3.75	0.07	2.58	2.02	111.48	87.34
230	4.00	0.06	1.01	0.79	112.49	88.13

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.43	2.99	2.63	2.18	2.00	1.00

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.39	0.19	0.81	-2.01	9.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O45 #2
Analysis Date: 01-25-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
146.92	134.50	2.38	0.05	#200 - 11.94 #230 - 10.13	1.30	1.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.03	0.02	0.03	0.02
14	-0.50	1.41	0.36	0.25	0.39	0.27
18	0.00	1.00	0.52	0.35	0.91	0.62
25	0.50	0.71	0.62	0.42	1.53	1.04
35	1.00	0.50	1.37	0.93	2.90	1.97
45	1.50	0.35	2.19	1.49	5.09	3.46
60	2.00	0.25	4.76	3.24	9.85	6.70
80	2.50	0.18	22.19	15.10	32.04	21.80
120	3.00	0.13	60.24	41.00	92.28	62.80
170	3.50	0.09	30.82	20.98	123.10	83.78
200	3.75	0.07	6.29	4.28	129.39	88.06
230	4.00	0.06	2.66	1.81	132.05	89.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.51	3.29	2.84	2.54	2.31	1.74

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.73	0.15	0.62	-1.7	9.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O45 #3

Analysis Date: 01-25-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.60	129.29	0.72	0.12	#200 - 17.64 #230 - 16.97	2.00	38.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	1.50	0.97	1.50	0.97
5/8"	-4.00	16.00	1.52	0.98	3.02	1.95
11/16"	-3.50	11.31	0.00	0.00	3.02	1.95
5/16"	-3.00	8.00	2.77	1.79	5.79	3.74
3.5	-2.50	5.66	3.53	2.28	9.32	6.02
4	-2.25	4.76	1.89	1.22	11.21	7.24
5	-2.00	4.00	3.38	2.19	14.59	9.43
7	-1.50	2.83	6.91	4.47	21.50	13.90
10	-1.00	2.00	8.43	5.45	29.93	19.35
14	-0.50	1.41	11.12	7.19	41.05	26.54
18	0.00	1.00	10.80	6.99	51.85	33.53
25	0.50	0.71	9.80	6.34	61.65	39.87
35	1.00	0.50	9.03	5.84	70.68	45.71
45	1.50	0.35	7.53	4.87	78.21	50.58
60	2.00	0.25	7.31	4.73	85.52	55.31
80	2.50	0.18	12.65	8.18	98.17	63.49
120	3.00	0.13	20.83	13.47	119.00	76.96
170	3.50	0.09	6.98	4.51	125.98	81.47
200	3.75	0.07	1.38	0.89	127.36	82.36
230	4.00	0.06	1.03	0.67	128.39	83.03

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.93	1.44	-0.61	-1.31	-2.72

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.56	0.68	1.91	-0.23	2.09

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O46 #1
Analysis Date: 01-25-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.63 #230 - 0.34	Organics (%):	Carbonates (%):	Shells (%):
145.05	145.05	0.28	0.14		0.70	17.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.99	0.68	0.99	0.68
5/16"	-3.00	8.00	0.58	0.40	1.57	1.08
3.5	-2.50	5.66	1.89	1.30	3.46	2.38
4	-2.25	4.76	0.63	0.43	4.09	2.81
5	-2.00	4.00	1.55	1.07	5.64	3.88
7	-1.50	2.83	3.52	2.43	9.16	6.31
10	-1.00	2.00	5.16	3.56	14.32	9.87
14	-0.50	1.41	6.75	4.65	21.07	14.52
18	0.00	1.00	8.63	5.95	29.70	20.47
25	0.50	0.71	10.82	7.46	40.52	27.93
35	1.00	0.50	14.29	9.85	54.81	37.78
45	1.50	0.35	18.22	12.56	73.03	50.34
60	2.00	0.25	21.36	14.73	94.39	65.07
80	2.50	0.18	21.14	14.57	115.53	79.64
120	3.00	0.13	19.08	13.15	134.61	92.79
170	3.50	0.09	8.44	5.82	143.05	98.61
200	3.75	0.07	1.10	0.76	144.15	99.37
230	4.00	0.06	0.42	0.29	144.57	99.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.19	2.67	2.34	1.49	0.30	-0.38	-1.77

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.18	0.44	1.51	-0.84	3.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O46 #2
Analysis Date: 01-25-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.89	134.89	0.47	0.14	#200 - 0.66 #230 - 0.47	0.70	21.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.10	0.82	1.10	0.82
3.5	-2.50	5.66	1.54	1.14	2.64	1.96
4	-2.25	4.76	0.77	0.57	3.41	2.53
5	-2.00	4.00	0.16	0.12	3.57	2.65
7	-1.50	2.83	2.01	1.49	5.58	4.14
10	-1.00	2.00	2.33	1.73	7.91	5.87
14	-0.50	1.41	3.58	2.65	11.49	8.52
18	0.00	1.00	4.01	2.97	15.50	11.49
25	0.50	0.71	4.76	3.53	20.26	15.02
35	1.00	0.50	6.57	4.87	26.83	19.89
45	1.50	0.35	7.40	5.49	34.23	25.38
60	2.00	0.25	14.05	10.42	48.28	35.80
80	2.50	0.18	38.89	28.83	87.17	64.63
120	3.00	0.13	37.52	27.82	124.69	92.45
170	3.50	0.09	8.40	6.23	133.09	98.68
200	3.75	0.07	0.89	0.66	133.98	99.34
230	4.00	0.06	0.25	0.19	134.23	99.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.20	2.85	2.69	2.25	1.47	0.60	-1.25

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.8	0.29	1.36	-1.67	5.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O46 #3

Analysis Date: 01-25-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
81.55	32.74	6.96	0.02	#200 - 71.08 #230 - 68.42	2.30	7.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.11	0.13	0.11	0.13
10	-1.00	2.00	0.25	0.31	0.36	0.44
14	-0.50	1.41	0.63	0.77	0.99	1.21
18	0.00	1.00	0.79	0.97	1.78	2.18
25	0.50	0.71	0.59	0.72	2.37	2.90
35	1.00	0.50	0.60	0.74	2.97	3.64
45	1.50	0.35	0.63	0.77	3.60	4.41
60	2.00	0.25	1.15	1.41	4.75	5.82
80	2.50	0.18	4.74	5.81	9.49	11.63
120	3.00	0.13	8.48	10.40	17.97	22.03
170	3.50	0.09	4.00	4.90	21.97	26.93
200	3.75	0.07	1.62	1.99	23.59	28.92
230	4.00	0.06	2.17	2.66	25.76	31.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.30	2.71	1.71

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.46	0.18	1.15	-1.5	5.12

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O47 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.90	142.90	0.03	0.07	#200 - 0.14 #230 - 0.10	0.60	19.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	2.88	2.02	2.88	2.02
4	-2.25	4.76	0.40	0.28	3.28	2.30
5	-2.00	4.00	0.62	0.43	3.90	2.73
7	-1.50	2.83	2.38	1.67	6.28	4.40
10	-1.00	2.00	3.66	2.56	9.94	6.96
14	-0.50	1.41	4.63	3.24	14.57	10.20
18	0.00	1.00	5.59	3.91	20.16	14.11
25	0.50	0.71	7.75	5.42	27.91	19.53
35	1.00	0.50	12.52	8.76	40.43	28.29
45	1.50	0.35	19.41	13.58	59.84	41.87
60	2.00	0.25	33.57	23.49	93.41	65.36
80	2.50	0.18	33.57	23.49	126.98	88.85
120	3.00	0.13	13.99	9.79	140.97	98.64
170	3.50	0.09	1.61	1.13	142.58	99.77
200	3.75	0.07	0.13	0.09	142.71	99.86
230	4.00	0.06	0.06	0.04	142.77	99.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.81	2.40	2.21	1.67	0.81	0.17	-1.38

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.33	0.40	1.25	-1.31	4.49

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O47 #2
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.47 #230 - 0.28	Organics (%):	Carbonates (%):	Shells (%):
138.96	138.96	0.40	0.00		0.60	15.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.20	0.86	1.20	0.86
4	-2.25	4.76	0.68	0.49	1.88	1.35
5	-2.00	4.00	0.65	0.47	2.53	1.82
7	-1.50	2.83	1.97	1.42	4.50	3.24
10	-1.00	2.00	1.77	1.27	6.27	4.51
14	-0.50	1.41	3.22	2.32	9.49	6.83
18	0.00	1.00	4.10	2.95	13.59	9.78
25	0.50	0.71	5.25	3.78	18.84	13.56
35	1.00	0.50	7.47	5.38	26.31	18.94
45	1.50	0.35	10.81	7.78	37.12	26.72
60	2.00	0.25	19.35	13.92	56.47	40.64
80	2.50	0.18	37.71	27.14	94.18	67.78
120	3.00	0.13	33.61	24.19	127.79	91.97
170	3.50	0.09	9.30	6.69	137.09	98.66
200	3.75	0.07	1.21	0.87	138.30	99.53
230	4.00	0.06	0.26	0.19	138.56	99.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.23	2.84	2.65	2.17	1.39	0.73	-0.89

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.82	0.28	1.24	-1.51	5.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O47 #3

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
97.85	40.61	15.08	0.04	#200 - 79.85 #230 - 73.94	3.40	7.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.07	0.07	0.07	0.07
10	-1.00	2.00	0.23	0.24	0.30	0.31
14	-0.50	1.41	0.56	0.57	0.86	0.88
18	0.00	1.00	0.63	0.64	1.49	1.52
25	0.50	0.71	0.47	0.48	1.96	2.00
35	1.00	0.50	0.46	0.47	2.42	2.47
45	1.50	0.35	0.61	0.62	3.03	3.09
60	2.00	0.25	1.25	1.28	4.28	4.37
80	2.50	0.18	3.07	3.14	7.35	7.51
120	3.00	0.13	5.77	5.90	13.12	13.41
170	3.50	0.09	3.53	3.61	16.65	17.02
200	3.75	0.07	3.06	3.13	19.71	20.15
230	4.00	0.06	5.78	5.91	25.49	26.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.96	3.36	2.10

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.75	0.15	1.19	-1.53	5.11

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O48 #1

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
145.44	137.28	0.75	0.20	#200 - 6.67 #230 - 6.33	0.70	7.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.18	0.12	0.18	0.12
4	-2.25	4.76	0.03	0.02	0.21	0.14
5	-2.00	4.00	0.07	0.05	0.28	0.19
7	-1.50	2.83	0.82	0.56	1.10	0.75
10	-1.00	2.00	0.76	0.52	1.86	1.27
14	-0.50	1.41	1.39	0.96	3.25	2.23
18	0.00	1.00	1.60	1.10	4.85	3.33
25	0.50	0.71	1.82	1.25	6.67	4.58
35	1.00	0.50	2.89	1.99	9.56	6.57
45	1.50	0.35	4.76	3.27	14.32	9.84
60	2.00	0.25	11.72	8.06	26.04	17.90
80	2.50	0.18	44.80	30.80	70.84	48.70
120	3.00	0.13	52.58	36.15	123.42	84.85
170	3.50	0.09	10.97	7.54	134.39	92.39
200	3.75	0.07	1.36	0.94	135.75	93.33
230	4.00	0.06	0.49	0.34	136.24	93.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.99	2.86	2.52	2.12	1.88	0.61

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.29	0.20	0.86	-2.3	10.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O48 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
125.03	125.03	0.77	0.14	#200 - 1.18 #230 - 0.75	0.90	11.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.29	0.23	0.29	0.23
3.5	-2.50	5.66	0.00	0.00	0.29	0.23
4	-2.25	4.76	0.00	0.00	0.29	0.23
5	-2.00	4.00	0.06	0.05	0.35	0.28
7	-1.50	2.83	0.56	0.45	0.91	0.73
10	-1.00	2.00	0.42	0.34	1.33	1.07
14	-0.50	1.41	0.69	0.55	2.02	1.62
18	0.00	1.00	1.49	1.19	3.51	2.81
25	0.50	0.71	2.05	1.64	5.56	4.45
35	1.00	0.50	3.19	2.55	8.75	7.00
45	1.50	0.35	5.94	4.75	14.69	11.75
60	2.00	0.25	17.90	14.32	32.59	26.07
80	2.50	0.18	38.04	30.42	70.63	56.49
120	3.00	0.13	40.88	32.70	111.51	89.19
170	3.50	0.09	10.78	8.62	122.29	97.81
200	3.75	0.07	1.26	1.01	123.55	98.82
230	4.00	0.06	0.54	0.43	124.09	99.25

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.34	2.92	2.78	2.39	1.96	1.65	0.61

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.24	0.21	0.85	-2.08	10.37

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O48 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.68	146.02	0.66	0.17	#200 - 7.99 #230 - 7.41	1.50	21.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.52	0.33	0.52	0.33
5/16"	-3.00	8.00	1.69	1.08	2.21	1.41
3.5	-2.50	5.66	2.41	1.54	4.62	2.95
4	-2.25	4.76	1.61	1.03	6.23	3.98
5	-2.00	4.00	1.93	1.23	8.16	5.21
7	-1.50	2.83	4.47	2.85	12.63	8.06
10	-1.00	2.00	4.89	3.12	17.52	11.18
14	-0.50	1.41	4.69	2.99	22.21	14.17
18	0.00	1.00	3.50	2.23	25.71	16.40
25	0.50	0.71	2.57	1.64	28.28	18.04
35	1.00	0.50	2.17	1.38	30.45	19.42
45	1.50	0.35	2.69	1.72	33.14	21.14
60	2.00	0.25	5.72	3.65	38.86	24.79
80	2.50	0.18	32.52	20.76	71.38	45.55
120	3.00	0.13	53.89	34.39	125.27	79.94
170	3.50	0.09	16.61	10.60	141.88	90.54
200	3.75	0.07	2.31	1.47	144.19	92.01
230	4.00	0.06	0.91	0.58	145.10	92.59

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.19	2.93	2.56	2.01	-0.09	-2.04

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.81	0.29	1.71	-1.54	4.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O49 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
153.07	148.18	0.25	0.27	#200 - 3.91 #230 - 3.64	1.10	11.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	7.34	4.80	7.34	4.80
11/16"	-3.50	11.31	0.00	0.00	7.34	4.80
5/16"	-3.00	8.00	1.62	1.06	8.96	5.86
3.5	-2.50	5.66	3.63	2.37	12.59	8.23
4	-2.25	4.76	1.02	0.67	13.61	8.90
5	-2.00	4.00	1.53	1.00	15.14	9.90
7	-1.50	2.83	5.03	3.29	20.17	13.19
10	-1.00	2.00	5.30	3.46	25.47	16.65
14	-0.50	1.41	6.18	4.04	31.65	20.69
18	0.00	1.00	4.87	3.18	36.52	23.87
25	0.50	0.71	4.01	2.62	40.53	26.49
35	1.00	0.50	4.14	2.70	44.67	29.19
45	1.50	0.35	4.14	2.70	48.81	31.89
60	2.00	0.25	6.25	4.08	55.06	35.97
80	2.50	0.18	28.04	18.32	83.10	54.29
120	3.00	0.13	49.32	32.22	132.42	86.51
170	3.50	0.09	12.95	8.46	145.37	94.97
200	3.75	0.07	1.72	1.12	147.09	96.09
230	4.00	0.06	0.42	0.27	147.51	96.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.51	2.96	2.82	2.38	0.22	-1.09	-3.81

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.33	0.40	2.11	-1.26	3.4

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O49 #2
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
139.69	96.75	4.61	0.14	#200 - 37.00 #230 - 34.19	2.70	22.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.05	0.04	0.05	0.04
4	-2.25	4.76	0.00	0.00	0.05	0.04
5	-2.00	4.00	0.04	0.03	0.09	0.07
7	-1.50	2.83	0.38	0.27	0.47	0.34
10	-1.00	2.00	0.55	0.39	1.02	0.73
14	-0.50	1.41	0.97	0.69	1.99	1.42
18	0.00	1.00	1.73	1.24	3.72	2.66
25	0.50	0.71	3.15	2.25	6.87	4.91
35	1.00	0.50	3.88	2.78	10.75	7.69
45	1.50	0.35	4.22	3.02	14.97	10.71
60	2.00	0.25	6.13	4.39	21.10	15.10
80	2.50	0.18	18.46	13.21	39.56	28.31
120	3.00	0.13	34.91	24.99	74.47	53.30
170	3.50	0.09	10.57	7.57	85.04	60.87
200	3.75	0.07	2.98	2.13	88.02	63.00
230	4.00	0.06	3.93	2.81	91.95	65.81

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			2.93	2.37	2.03	0.52

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.34	0.20	1.02	-1.42	5.39

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O49 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.45	107.71	1.45	0.09	#200 - 19.69 #230 - 18.62	2.10	34.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.37	0.28	0.37	0.28
3.5	-2.50	5.66	0.00	0.00	0.37	0.28
4	-2.25	4.76	0.06	0.05	0.43	0.33
5	-2.00	4.00	0.32	0.25	0.75	0.58
7	-1.50	2.83	0.75	0.57	1.50	1.15
10	-1.00	2.00	1.93	1.48	3.43	2.63
14	-0.50	1.41	3.43	2.63	6.86	5.26
18	0.00	1.00	5.29	4.06	12.15	9.32
25	0.50	0.71	6.85	5.25	19.00	14.57
35	1.00	0.50	8.75	6.71	27.75	21.28
45	1.50	0.35	8.56	6.56	36.31	27.84
60	2.00	0.25	10.93	8.38	47.24	36.22
80	2.50	0.18	15.14	11.61	62.38	47.83
120	3.00	0.13	28.07	21.52	90.45	69.35
170	3.50	0.09	11.89	9.11	102.34	78.46
200	3.75	0.07	2.41	1.85	104.75	80.31
230	4.00	0.06	1.39	1.07	106.14	81.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.31	2.55	1.28	0.61	-0.55

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.81	0.29	1.31	-0.9	3.31

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O49 #4
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.21	137.89	0.44	0.21	#200 - 3.23 #230 - 2.86	1.80	49.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	1.49	1.06	1.49	1.06
5/8"	-4.00	16.00	0.00	0.00	1.49	1.06
11/16"	-3.50	11.31	0.31	0.22	1.80	1.28
5/16"	-3.00	8.00	0.88	0.62	2.68	1.90
3.5	-2.50	5.66	2.36	1.67	5.04	3.57
4	-2.25	4.76	0.97	0.69	6.01	4.26
5	-2.00	4.00	1.30	0.92	7.31	5.18
7	-1.50	2.83	3.94	2.79	11.25	7.97
10	-1.00	2.00	5.34	3.78	16.59	11.75
14	-0.50	1.41	7.83	5.54	24.42	17.29
18	0.00	1.00	9.43	6.68	33.85	23.97
25	0.50	0.71	11.65	8.25	45.50	32.22
35	1.00	0.50	14.38	10.18	59.88	42.40
45	1.50	0.35	16.05	11.37	75.93	53.77
60	2.00	0.25	17.33	12.27	93.26	66.04
80	2.50	0.18	19.75	13.99	113.01	80.03
120	3.00	0.13	18.52	13.12	131.53	93.15
170	3.50	0.09	4.22	2.99	135.75	96.14
200	3.75	0.07	0.89	0.63	136.64	96.77
230	4.00	0.06	0.52	0.37	137.16	97.14

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.31	2.65	2.32	1.33	0.06	-0.62	-2.05

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.98	0.51	1.51	-0.57	2.82

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O49 #5
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.80	151.43	0.61	0.21	#200 - 15.21 #230 - 14.91	2.30	40.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.38	0.78	1.38	0.78
3.5	-2.50	5.66	1.07	0.61	2.45	1.39
4	-2.25	4.76	0.96	0.54	3.41	1.93
5	-2.00	4.00	3.84	2.17	7.25	4.10
7	-1.50	2.83	7.50	4.24	14.75	8.34
10	-1.00	2.00	9.31	5.27	24.06	13.61
14	-0.50	1.41	13.34	7.55	37.40	21.16
18	0.00	1.00	10.12	5.72	47.52	26.88
25	0.50	0.71	8.40	4.75	55.92	31.63
35	1.00	0.50	11.69	6.61	67.61	38.24
45	1.50	0.35	14.28	8.08	81.89	46.32
60	2.00	0.25	16.02	9.06	97.91	55.38
80	2.50	0.18	23.68	13.39	121.59	68.77
120	3.00	0.13	22.60	12.78	144.19	81.55
170	3.50	0.09	4.70	2.66	148.89	84.21
200	3.75	0.07	1.03	0.58	149.92	84.79
230	4.00	0.06	0.53	0.30	150.45	85.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.46	2.74	1.70	-0.16	-0.84	-1.89

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.92	0.53	1.64	-0.47	2.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O50 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
136.79	106.11	2.07	0.11	#200 - 26.11 #230 - 24.05	2.60	16.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.79	0.58	0.79	0.58
4	-2.25	4.76	0.55	0.40	1.34	0.98
5	-2.00	4.00	0.50	0.37	1.84	1.35
7	-1.50	2.83	1.71	1.25	3.55	2.60
10	-1.00	2.00	2.38	1.74	5.93	4.34
14	-0.50	1.41	3.13	2.29	9.06	6.63
18	0.00	1.00	3.34	2.44	12.40	9.07
25	0.50	0.71	3.69	2.70	16.09	11.77
35	1.00	0.50	3.89	2.84	19.98	14.61
45	1.50	0.35	3.99	2.92	23.97	17.53
60	2.00	0.25	5.87	4.29	29.84	21.82
80	2.50	0.18	20.40	14.91	50.24	36.73
120	3.00	0.13	37.51	27.42	87.75	64.15
170	3.50	0.09	10.60	7.75	98.35	71.90
200	3.75	0.07	2.72	1.99	101.07	73.89
230	4.00	0.06	2.82	2.06	103.89	75.95

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.88	2.74	2.11	1.24	-0.86

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.02	0.25	1.4	-1.46	4.51

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O50 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
160.56	125.37	2.17	0.04	#200 - 24.82 #230 - 23.32	3.60	26.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.38	0.24	0.38	0.24
4	-2.25	4.76	0.09	0.06	0.47	0.30
5	-2.00	4.00	0.12	0.07	0.59	0.37
7	-1.50	2.83	1.43	0.89	2.02	1.26
10	-1.00	2.00	2.17	1.35	4.19	2.61
14	-0.50	1.41	5.04	3.14	9.23	5.75
18	0.00	1.00	5.85	3.64	15.08	9.39
25	0.50	0.71	5.93	3.69	21.01	13.08
35	1.00	0.50	7.40	4.61	28.41	17.69
45	1.50	0.35	7.70	4.80	36.11	22.49
60	2.00	0.25	9.72	6.05	45.83	28.54
80	2.50	0.18	18.18	11.32	64.01	39.86
120	3.00	0.13	33.63	20.95	97.64	60.81
170	3.50	0.09	17.46	10.87	115.10	71.68
200	3.75	0.07	5.62	3.50	120.72	75.18
230	4.00	0.06	2.41	1.50	123.13	76.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.74	2.74	1.71	0.82	-0.62

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.96	0.26	1.36	-1.01	3.24

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O50 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.51	100.95	0.88	0.23	#200 - 25.74 #230 - 24.71	1.30	23.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.26	0.20	0.26	0.20
4	-2.25	4.76	0.43	0.32	0.69	0.52
5	-2.00	4.00	0.86	0.65	1.55	1.17
7	-1.50	2.83	1.94	1.46	3.49	2.63
10	-1.00	2.00	4.16	3.14	7.65	5.77
14	-0.50	1.41	6.24	4.71	13.89	10.48
18	0.00	1.00	6.08	4.59	19.97	15.07
25	0.50	0.71	5.83	4.40	25.80	19.47
35	1.00	0.50	7.38	5.57	33.18	25.04
45	1.50	0.35	8.21	6.20	41.39	31.24
60	2.00	0.25	8.43	6.36	49.82	37.60
80	2.50	0.18	16.64	12.56	66.46	50.16
120	3.00	0.13	22.85	17.24	89.31	67.40
170	3.50	0.09	6.99	5.28	96.30	72.68
200	3.75	0.07	2.10	1.58	98.40	74.26
230	4.00	0.06	1.36	1.03	99.76	75.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.93	2.49	1.00	0.11	-1.12

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.5	0.35	1.49	-0.69	2.48

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O50 #4
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.34	125.92	0.51	0.13	#200 - 4.46 #230 - 3.91	2.30	27.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.27	0.21	0.27	0.21
3.5	-2.50	5.66	0.29	0.22	0.56	0.43
4	-2.25	4.76	0.12	0.09	0.68	0.52
5	-2.00	4.00	0.26	0.20	0.94	0.72
7	-1.50	2.83	1.25	0.96	2.19	1.68
10	-1.00	2.00	1.67	1.28	3.86	2.96
14	-0.50	1.41	2.93	2.25	6.79	5.21
18	0.00	1.00	3.29	2.52	10.08	7.73
25	0.50	0.71	4.05	3.11	14.13	10.84
35	1.00	0.50	5.15	3.95	19.28	14.79
45	1.50	0.35	5.51	4.23	24.79	19.02
60	2.00	0.25	8.31	6.38	33.10	25.40
80	2.50	0.18	34.37	26.37	67.47	51.77
120	3.00	0.13	43.12	33.08	110.59	84.85
170	3.50	0.09	11.72	8.99	122.31	93.84
200	3.75	0.07	2.21	1.70	124.52	95.54
230	4.00	0.06	0.72	0.55	125.24	96.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.67	2.99	2.85	2.47	1.97	1.14	-0.55

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.09	0.23	1.17	-1.72	5.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 2/23/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O50 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
136.79	106.11	2.07	0.11	#200 - 26.11 #230 - 24.05	2.60	16.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.79	0.58	0.79	0.58
4	-2.25	4.76	0.55	0.40	1.34	0.98
5	-2.00	4.00	0.50	0.37	1.84	1.35
7	-1.50	2.83	1.71	1.25	3.55	2.60
10	-1.00	2.00	2.38	1.74	5.93	4.34
14	-0.50	1.41	3.13	2.29	9.06	6.63
18	0.00	1.00	3.34	2.44	12.40	9.07
25	0.50	0.71	3.69	2.70	16.09	11.77
35	1.00	0.50	3.89	2.84	19.98	14.61
45	1.50	0.35	3.99	2.92	23.97	17.53
60	2.00	0.25	5.87	4.29	29.84	21.82
80	2.50	0.18	20.40	14.91	50.24	36.73
120	3.00	0.13	37.51	27.42	87.75	64.15
170	3.50	0.09	10.60	7.75	98.35	71.90
200	3.75	0.07	2.72	1.99	101.07	73.89
230	4.00	0.06	2.82	2.06	103.89	75.95

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.88	2.74	2.11	1.24	-0.86

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.02	0.25	1.4	-1.46	4.51

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O50 #2
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
160.56	125.37	2.17	0.04	#200 - 24.82 #230 - 23.32	3.60	26.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.38	0.24	0.38	0.24
4	-2.25	4.76	0.09	0.06	0.47	0.30
5	-2.00	4.00	0.12	0.07	0.59	0.37
7	-1.50	2.83	1.43	0.89	2.02	1.26
10	-1.00	2.00	2.17	1.35	4.19	2.61
14	-0.50	1.41	5.04	3.14	9.23	5.75
18	0.00	1.00	5.85	3.64	15.08	9.39
25	0.50	0.71	5.93	3.69	21.01	13.08
35	1.00	0.50	7.40	4.61	28.41	17.69
45	1.50	0.35	7.70	4.80	36.11	22.49
60	2.00	0.25	9.72	6.05	45.83	28.54
80	2.50	0.18	18.18	11.32	64.01	39.86
120	3.00	0.13	33.63	20.95	97.64	60.81
170	3.50	0.09	17.46	10.87	115.10	71.68
200	3.75	0.07	5.62	3.50	120.72	75.18
230	4.00	0.06	2.41	1.50	123.13	76.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.74	2.74	1.71	0.82	-0.62

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.96	0.26	1.36	-1.01	3.24

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O50 #3

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.51	100.95	0.88	0.23	#200 - 25.74 #230 - 24.71	1.30	23.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.26	0.20	0.26	0.20
4	-2.25	4.76	0.43	0.32	0.69	0.52
5	-2.00	4.00	0.86	0.65	1.55	1.17
7	-1.50	2.83	1.94	1.46	3.49	2.63
10	-1.00	2.00	4.16	3.14	7.65	5.77
14	-0.50	1.41	6.24	4.71	13.89	10.48
18	0.00	1.00	6.08	4.59	19.97	15.07
25	0.50	0.71	5.83	4.40	25.80	19.47
35	1.00	0.50	7.38	5.57	33.18	25.04
45	1.50	0.35	8.21	6.20	41.39	31.24
60	2.00	0.25	8.43	6.36	49.82	37.60
80	2.50	0.18	16.64	12.56	66.46	50.16
120	3.00	0.13	22.85	17.24	89.31	67.40
170	3.50	0.09	6.99	5.28	96.30	72.68
200	3.75	0.07	2.10	1.58	98.40	74.26
230	4.00	0.06	1.36	1.03	99.76	75.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.93	2.49	1.00	0.11	-1.12

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.5	0.35	1.49	-0.69	2.48

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O50 #4
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.34	125.92	0.51	0.13	#200 - 4.46 #230 - 3.91	2.30	27.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.27	0.21	0.27	0.21
3.5	-2.50	5.66	0.29	0.22	0.56	0.43
4	-2.25	4.76	0.12	0.09	0.68	0.52
5	-2.00	4.00	0.26	0.20	0.94	0.72
7	-1.50	2.83	1.25	0.96	2.19	1.68
10	-1.00	2.00	1.67	1.28	3.86	2.96
14	-0.50	1.41	2.93	2.25	6.79	5.21
18	0.00	1.00	3.29	2.52	10.08	7.73
25	0.50	0.71	4.05	3.11	14.13	10.84
35	1.00	0.50	5.15	3.95	19.28	14.79
45	1.50	0.35	5.51	4.23	24.79	19.02
60	2.00	0.25	8.31	6.38	33.10	25.40
80	2.50	0.18	34.37	26.37	67.47	51.77
120	3.00	0.13	43.12	33.08	110.59	84.85
170	3.50	0.09	11.72	8.99	122.31	93.84
200	3.75	0.07	2.21	1.70	124.52	95.54
230	4.00	0.06	0.72	0.55	125.24	96.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.67	2.99	2.85	2.47	1.97	1.14	-0.55

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.09	0.23	1.17	-1.72	5.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O51 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.25	120.78	2.76	0.00	#200 - 22.75 #230 - 20.93	2.00	28.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.15	0.77	1.15	0.77
4	-2.25	4.76	1.00	0.67	2.15	1.44
5	-2.00	4.00	1.52	1.02	3.67	2.46
7	-1.50	2.83	3.63	2.43	7.30	4.89
10	-1.00	2.00	4.93	3.30	12.23	8.19
14	-0.50	1.41	5.44	3.64	17.67	11.83
18	0.00	1.00	4.79	3.21	22.46	15.04
25	0.50	0.71	4.31	2.89	26.77	17.93
35	1.00	0.50	4.01	2.69	30.78	20.62
45	1.50	0.35	4.07	2.73	34.85	23.35
60	2.00	0.25	6.31	4.23	41.16	27.58
80	2.50	0.18	16.49	11.05	57.65	38.63
120	3.00	0.13	40.96	27.44	98.61	66.07
170	3.50	0.09	13.73	9.20	112.34	75.27
200	3.75	0.07	2.96	1.98	115.30	77.25
230	4.00	0.06	2.72	1.82	118.02	79.07

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.49	2.71	1.70	0.17	-1.48

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.77	0.29	1.64	-1.11	3.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O51 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
85.96	44.80	1.16	0.00	#200 - 50.83 #230 - 49.22	3.20	17.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.13	0.15	0.13	0.15
7	-1.50	2.83	0.53	0.62	0.66	0.77
10	-1.00	2.00	1.11	1.29	1.77	2.06
14	-0.50	1.41	1.52	1.77	3.29	3.83
18	0.00	1.00	1.47	1.71	4.76	5.54
25	0.50	0.71	1.29	1.50	6.05	7.04
35	1.00	0.50	1.42	1.65	7.47	8.69
45	1.50	0.35	1.48	1.72	8.95	10.41
60	2.00	0.25	2.24	2.61	11.19	13.02
80	2.50	0.18	5.51	6.41	16.70	19.43
120	3.00	0.13	15.48	18.01	32.18	37.44
170	3.50	0.09	8.20	9.54	40.38	46.98
200	3.75	0.07	1.88	2.19	42.26	49.17
230	4.00	0.06	1.38	1.61	43.64	50.78

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.88	2.65	2.23	-0.16

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.22	0.21	1.33	-1.42	4.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O51 #3

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.14	140.09	0.98	0.24	#200 - 12.33 #230 - 11.15	1.80	16.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.97	0.62	0.97	0.62
3.5	-2.50	5.66	0.09	0.06	1.06	0.68
4	-2.25	4.76	0.00	0.00	1.06	0.68
5	-2.00	4.00	0.47	0.30	1.53	0.98
7	-1.50	2.83	1.42	0.91	2.95	1.89
10	-1.00	2.00	2.34	1.50	5.29	3.39
14	-0.50	1.41	3.08	1.97	8.37	5.36
18	0.00	1.00	3.70	2.37	12.07	7.73
25	0.50	0.71	4.23	2.71	16.30	10.44
35	1.00	0.50	6.15	3.94	22.45	14.38
45	1.50	0.35	9.49	6.08	31.94	20.46
60	2.00	0.25	18.91	12.11	50.85	32.57
80	2.50	0.18	42.18	27.01	93.03	59.58
120	3.00	0.13	29.51	18.90	122.54	78.48
170	3.50	0.09	11.46	7.34	134.00	85.82
200	3.75	0.07	2.89	1.85	136.89	87.67
230	4.00	0.06	1.85	1.18	138.74	88.85

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.38	2.91	2.32	1.69	1.13	-0.59

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.94	0.26	1.21	-1.56	5.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
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1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O51 #4
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.96	120.94	0.66	0.42	#200 - 14.23 #230 - 13.88	2.40	41.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.42	1.74	2.42	1.74
5/16"	-3.00	8.00	2.52	1.81	4.94	3.55
3.5	-2.50	5.66	4.88	3.51	9.82	7.06
4	-2.25	4.76	2.11	1.52	11.93	8.58
5	-2.00	4.00	3.02	2.17	14.95	10.75
7	-1.50	2.83	8.93	6.43	23.88	17.18
10	-1.00	2.00	9.18	6.61	33.06	23.79
14	-0.50	1.41	12.10	8.71	45.16	32.50
18	0.00	1.00	9.08	6.53	54.24	39.03
25	0.50	0.71	7.24	5.21	61.48	44.24
35	1.00	0.50	8.48	6.10	69.96	50.34
45	1.50	0.35	10.23	7.36	80.19	57.70
60	2.00	0.25	10.34	7.44	90.53	65.14
80	2.50	0.18	15.17	10.92	105.70	76.06
120	3.00	0.13	9.58	6.89	115.28	82.95
170	3.50	0.09	3.10	2.23	118.38	85.18
200	3.75	0.07	0.82	0.59	119.20	85.77
230	4.00	0.06	0.49	0.35	119.69	86.12

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.24	2.45	0.97	-0.93	-1.59	-2.79

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.28	0.82	1.86	-0.23	2.03

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O52 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
153.93	118.98	0.47	0.00	#200 - 23.49 #230 - 23.03	1.20	8.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.34	0.22	0.34	0.22
4	-2.25	4.76	0.00	0.00	0.34	0.22
5	-2.00	4.00	0.25	0.16	0.59	0.38
7	-1.50	2.83	0.42	0.27	1.01	0.65
10	-1.00	2.00	0.35	0.23	1.36	0.88
14	-0.50	1.41	0.59	0.38	1.95	1.26
18	0.00	1.00	0.47	0.31	2.42	1.57
25	0.50	0.71	0.53	0.34	2.95	1.91
35	1.00	0.50	0.57	0.37	3.52	2.28
45	1.50	0.35	0.76	0.49	4.28	2.77
60	2.00	0.25	3.56	2.31	7.84	5.08
80	2.50	0.18	56.40	36.64	64.24	41.72
120	3.00	0.13	46.91	30.47	111.15	72.19
170	3.50	0.09	5.90	3.83	117.05	76.02
200	3.75	0.07	0.75	0.49	117.80	76.51
230	4.00	0.06	0.71	0.46	118.51	76.97

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.37	2.64	2.27	2.15	1.98

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.41	0.19	0.69	-3.82	24.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O52 #2
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
169.49	129.33	3.96	0.13	#200 - 28.43 #230 - 26.15	2.30	15.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.61	0.36	0.61	0.36
4	-2.25	4.76	0.27	0.16	0.88	0.52
5	-2.00	4.00	0.23	0.14	1.11	0.66
7	-1.50	2.83	1.50	0.89	2.61	1.55
10	-1.00	2.00	2.18	1.29	4.79	2.84
14	-0.50	1.41	5.16	3.04	9.95	5.88
18	0.00	1.00	5.84	3.45	15.79	9.33
25	0.50	0.71	5.93	3.50	21.72	12.83
35	1.00	0.50	7.04	4.15	28.76	16.98
45	1.50	0.35	6.81	4.02	35.57	21.00
60	2.00	0.25	6.61	3.90	42.18	24.90
80	2.50	0.18	14.85	8.76	57.03	33.66
120	3.00	0.13	30.28	17.87	87.31	51.53
170	3.50	0.09	24.68	14.56	111.99	66.09
200	3.75	0.07	9.29	5.48	121.28	71.57
230	4.00	0.06	3.87	2.28	125.15	73.85

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			2.96	2.01	0.88	-0.64

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.07	0.24	1.45	-1.07	3.3

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: O52 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.42	114.04	0.40	0.28	#200 - 18.69 #230 - 18.18	1.90	31.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.53	1.83	2.53	1.83
11/16"	-3.50	11.31	0.00	0.00	2.53	1.83
5/16"	-3.00	8.00	0.00	0.00	2.53	1.83
3.5	-2.50	5.66	0.00	0.00	2.53	1.83
4	-2.25	4.76	0.64	0.46	3.17	2.29
5	-2.00	4.00	0.65	0.47	3.82	2.76
7	-1.50	2.83	2.34	1.69	6.16	4.45
10	-1.00	2.00	4.35	3.14	10.51	7.59
14	-0.50	1.41	6.40	4.62	16.91	12.21
18	0.00	1.00	6.27	4.53	23.18	16.74
25	0.50	0.71	6.89	4.98	30.07	21.72
35	1.00	0.50	7.87	5.69	37.94	27.41
45	1.50	0.35	8.17	5.90	46.11	33.31
60	2.00	0.25	12.22	8.83	58.33	42.14
80	2.50	0.18	26.56	19.19	84.89	61.33
120	3.00	0.13	22.74	16.43	107.63	77.76
170	3.50	0.09	4.03	2.91	111.66	80.67
200	3.75	0.07	0.89	0.64	112.55	81.31
230	4.00	0.06	0.70	0.51	113.25	81.82

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.92	2.20	0.79	-0.08	-1.41

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.34	0.40	1.6	-1.23	4.34

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O52 #4

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.75	128.37	1.12	0.19	#200 - 15.09 #230 - 14.66	2.30	61.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	5.52	3.71	5.52	3.71
5/16"	-3.00	8.00	3.64	2.45	9.16	6.16
3.5	-2.50	5.66	2.48	1.67	11.64	7.83
4	-2.25	4.76	1.67	1.12	13.31	8.95
5	-2.00	4.00	3.01	2.02	16.32	10.97
7	-1.50	2.83	11.19	7.52	27.51	18.49
10	-1.00	2.00	10.19	6.85	37.70	25.34
14	-0.50	1.41	13.01	8.75	50.71	34.09
18	0.00	1.00	8.32	5.59	59.03	39.68
25	0.50	0.71	6.30	4.24	65.33	43.92
35	1.00	0.50	7.39	4.97	72.72	48.89
45	1.50	0.35	8.42	5.66	81.14	54.55
60	2.00	0.25	9.18	6.17	90.32	60.72
80	2.50	0.18	16.71	11.23	107.03	71.95
120	3.00	0.13	13.96	9.38	120.99	81.33
170	3.50	0.09	4.09	2.75	125.08	84.08
200	3.75	0.07	1.24	0.83	126.32	84.91
230	4.00	0.06	0.64	0.43	126.96	85.34

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.49	2.66	1.10	-1.02	-1.67	-3.24

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.28	0.82	2.01	-0.25	1.99

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O53 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
133.18	126.04	0.26	0.00	#200 - 6.06 #230 - 5.56	1.30	15.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	7.22	5.42	7.22	5.42
5/8"	-4.00	16.00	0.00	0.00	7.22	5.42
11/16"	-3.50	11.31	1.62	1.22	8.84	6.64
5/16"	-3.00	8.00	1.91	1.43	10.75	8.07
3.5	-2.50	5.66	2.08	1.56	12.83	9.63
4	-2.25	4.76	1.21	0.91	14.04	10.54
5	-2.00	4.00	1.74	1.31	15.78	11.85
7	-1.50	2.83	2.08	1.56	17.86	13.41
10	-1.00	2.00	1.87	1.40	19.73	14.81
14	-0.50	1.41	1.86	1.40	21.59	16.21
18	0.00	1.00	1.61	1.21	23.20	17.42
25	0.50	0.71	1.31	0.98	24.51	18.40
35	1.00	0.50	1.41	1.06	25.92	19.46
45	1.50	0.35	2.32	1.74	28.24	21.20
60	2.00	0.25	7.61	5.71	35.85	26.91
80	2.50	0.18	36.68	27.54	72.53	54.45
120	3.00	0.13	39.34	29.54	111.87	83.99
170	3.50	0.09	11.70	8.79	123.57	92.78
200	3.75	0.07	1.55	1.16	125.12	93.94
230	4.00	0.06	0.66	0.50	125.78	94.44

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.00	2.85	2.42	1.83	-0.57	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.52	0.35	1.66	-1.27	4.35

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O53 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
117.39	47.62	9.62	0.00	#200 - 71.30 #230 - 67.64	2.80	8.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.09	0.08	0.09	0.08
10	-1.00	2.00	0.32	0.27	0.41	0.35
14	-0.50	1.41	0.55	0.47	0.96	0.82
18	0.00	1.00	0.65	0.55	1.61	1.37
25	0.50	0.71	0.63	0.54	2.24	1.91
35	1.00	0.50	0.77	0.66	3.01	2.57
45	1.50	0.35	0.78	0.66	3.79	3.23
60	2.00	0.25	1.60	1.36	5.39	4.59
80	2.50	0.18	7.18	6.12	12.57	10.71
120	3.00	0.13	12.19	10.38	24.76	21.09
170	3.50	0.09	5.38	4.58	30.14	25.67
200	3.75	0.07	3.56	3.03	33.70	28.70
230	4.00	0.06	4.30	3.66	38.00	32.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.43	2.75	2.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.63	0.16	1.03	-1.6	6.23

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O53 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.93	118.12	1.37	0.03	#200 - 23.30 #230 - 21.64	2.10	31.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.95	0.64	0.95	0.64
3.5	-2.50	5.66	1.78	1.20	2.73	1.84
4	-2.25	4.76	1.76	1.18	4.49	3.02
5	-2.00	4.00	1.12	0.75	5.61	3.77
7	-1.50	2.83	5.63	3.78	11.24	7.55
10	-1.00	2.00	7.29	4.89	18.53	12.44
14	-0.50	1.41	7.64	5.13	26.17	17.57
18	0.00	1.00	6.26	4.20	32.43	21.77
25	0.50	0.71	6.18	4.15	38.61	25.92
35	1.00	0.50	6.75	4.53	45.36	30.45
45	1.50	0.35	6.85	4.60	52.21	35.05
60	2.00	0.25	7.79	5.23	60.00	40.28
80	2.50	0.18	11.72	7.87	71.72	48.15
120	3.00	0.13	28.26	18.98	99.98	67.13
170	3.50	0.09	11.32	7.60	111.30	74.73
200	3.75	0.07	2.94	1.97	114.24	76.70
230	4.00	0.06	2.47	1.66	116.71	78.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.53	2.55	0.39	-0.65	-1.84

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.28	0.41	1.82	-0.61	2.16

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O53 #4
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
125.78	109.77	0.55	0.14	#200 - 13.61 #230 - 13.30	2.30	53.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	10.04	7.98	10.04	7.98
5/8"	-4.00	16.00	0.00	0.00	10.04	7.98
11/16"	-3.50	11.31	2.05	1.63	12.09	9.61
5/16"	-3.00	8.00	3.35	2.66	15.44	12.27
3.5	-2.50	5.66	2.11	1.68	17.55	13.95
4	-2.25	4.76	2.75	2.19	20.30	16.14
5	-2.00	4.00	4.82	3.83	25.12	19.97
7	-1.50	2.83	10.66	8.48	35.78	28.45
10	-1.00	2.00	12.19	9.69	47.97	38.14
14	-0.50	1.41	12.94	10.29	60.91	48.43
18	0.00	1.00	8.05	6.40	68.96	54.83
25	0.50	0.71	5.47	4.35	74.43	59.18
35	1.00	0.50	5.50	4.37	79.93	63.55
45	1.50	0.35	5.78	4.60	85.71	68.15
60	2.00	0.25	6.71	5.33	92.42	73.48
80	2.50	0.18	8.41	6.69	100.83	80.17
120	3.00	0.13	5.07	4.03	105.90	84.20
170	3.50	0.09	2.05	1.63	107.95	85.83
200	3.75	0.07	0.70	0.56	108.65	86.39
230	4.00	0.06	0.39	0.31	109.04	86.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.98	2.11	-0.38	-1.70	-2.27	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.57	1.48	1.76	0.85	2.61

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O54 #1

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
55.91	14.00	0.30	0.00	#200 - 76.86 #230 - 75.50	4.10	7.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.06	0.11	0.06	0.11
14	-0.50	1.41	0.13	0.23	0.19	0.34
18	0.00	1.00	0.22	0.39	0.41	0.73
25	0.50	0.71	0.25	0.45	0.66	1.18
35	1.00	0.50	0.41	0.73	1.07	1.91
45	1.50	0.35	0.60	1.07	1.67	2.98
60	2.00	0.25	1.23	2.20	2.90	5.18
80	2.50	0.18	2.79	4.99	5.69	10.17
120	3.00	0.13	4.32	7.73	10.01	17.90
170	3.50	0.09	2.11	3.77	12.12	21.67
200	3.75	0.07	0.82	1.47	12.94	23.14
230	4.00	0.06	0.76	1.36	13.70	24.50

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					2.88	1.96

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.48	0.18	0.94	-1.24	5.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O54 #2
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.33	123.12	0.57	0.09	#200 - 11.19 #230 - 10.86	2.40	50.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	18.22	13.27	18.22	13.27
5/8"	-4.00	16.00	0.00	0.00	18.22	13.27
11/16"	-3.50	11.31	1.24	0.90	19.46	14.17
5/16"	-3.00	8.00	6.69	4.87	26.15	19.04
3.5	-2.50	5.66	6.76	4.92	32.91	23.96
4	-2.25	4.76	3.43	2.50	36.34	26.46
5	-2.00	4.00	5.49	4.00	41.83	30.46
7	-1.50	2.83	13.26	9.66	55.09	40.12
10	-1.00	2.00	11.59	8.44	66.68	48.56
14	-0.50	1.41	9.45	6.88	76.13	55.44
18	0.00	1.00	5.09	3.71	81.22	59.15
25	0.50	0.71	3.48	2.53	84.70	61.68
35	1.00	0.50	3.99	2.91	88.69	64.59
45	1.50	0.35	5.14	3.74	93.83	68.33
60	2.00	0.25	6.79	4.94	100.62	73.27
80	2.50	0.18	10.03	7.30	110.65	80.57
120	3.00	0.13	7.20	5.24	117.85	85.81
170	3.50	0.09	3.27	2.38	121.12	88.19
200	3.75	0.07	0.85	0.62	121.97	88.81
230	4.00	0.06	0.46	0.33	122.43	89.14

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.83	2.12	-0.90	-2.40	-3.31	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.9	1.87	1.95	1.15	2.66

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O55 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.52	130.17	0.24	0.17	#200 - 4.14 #230 - 3.58	0.90	9.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.97	1.46	1.97	1.46
3.5	-2.50	5.66	0.00	0.00	1.97	1.46
4	-2.25	4.76	0.00	0.00	1.97	1.46
5	-2.00	4.00	0.12	0.09	2.09	1.55
7	-1.50	2.83	0.40	0.30	2.49	1.85
10	-1.00	2.00	0.91	0.68	3.40	2.53
14	-0.50	1.41	1.03	0.77	4.43	3.30
18	0.00	1.00	1.20	0.89	5.63	4.19
25	0.50	0.71	1.43	1.06	7.06	5.25
35	1.00	0.50	2.29	1.70	9.35	6.95
45	1.50	0.35	4.30	3.20	13.65	10.15
60	2.00	0.25	11.43	8.50	25.08	18.65
80	2.50	0.18	39.29	29.21	64.37	47.86
120	3.00	0.13	47.62	35.40	111.99	83.26
170	3.50	0.09	14.98	11.14	126.97	94.40
200	3.75	0.07	1.97	1.46	128.94	95.86
230	4.00	0.06	0.76	0.56	129.70	96.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.60	3.03	2.88	2.53	2.11	1.84	0.38

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.28	0.21	1.06	-2.94	14.12

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O55 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
125.17	53.94	9.81	0.06	#200 - 68.29 #230 - 64.80	2.40	13.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.06	0.05	0.06	0.05
7	-1.50	2.83	0.10	0.08	0.16	0.13
10	-1.00	2.00	0.20	0.16	0.36	0.29
14	-0.50	1.41	0.50	0.40	0.86	0.69
18	0.00	1.00	0.59	0.47	1.45	1.16
25	0.50	0.71	0.56	0.45	2.01	1.61
35	1.00	0.50	0.56	0.45	2.57	2.06
45	1.50	0.35	0.79	0.63	3.36	2.69
60	2.00	0.25	1.71	1.37	5.07	4.06
80	2.50	0.18	7.87	6.29	12.94	10.35
120	3.00	0.13	15.50	12.38	28.44	22.73
170	3.50	0.09	7.47	5.97	35.91	28.70
200	3.75	0.07	3.77	3.01	39.68	31.71
230	4.00	0.06	4.37	3.49	44.05	35.20

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.19	2.73	2.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.69	0.15	0.95	-1.84	7.92

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O55 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
175.34	149.90	1.25	0.27	#200 - 16.80 #230 - 15.50	1.80	34.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.08	1.19	2.08	1.19
5/16"	-3.00	8.00	0.77	0.44	2.85	1.63
3.5	-2.50	5.66	0.91	0.52	3.76	2.15
4	-2.25	4.76	1.60	0.91	5.36	3.06
5	-2.00	4.00	1.32	0.75	6.68	3.81
7	-1.50	2.83	3.88	2.21	10.56	6.02
10	-1.00	2.00	5.94	3.39	16.50	9.41
14	-0.50	1.41	8.44	4.81	24.94	14.22
18	0.00	1.00	8.87	5.06	33.81	19.28
25	0.50	0.71	9.16	5.22	42.97	24.50
35	1.00	0.50	9.11	5.20	52.08	29.70
45	1.50	0.35	9.55	5.45	61.63	35.15
60	2.00	0.25	12.49	7.12	74.12	42.27
80	2.50	0.18	18.41	10.50	92.53	52.77
120	3.00	0.13	33.05	18.85	125.58	71.62
170	3.50	0.09	16.91	9.64	142.49	81.26
200	3.75	0.07	3.41	1.94	145.90	83.20
230	4.00	0.06	2.28	1.30	148.18	84.50

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.90	3.18	2.37	0.55	-0.32	-1.73

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.41	0.38	1.74	-0.87	2.98

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O55 #4
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
133.76	120.05	0.83	0.25	#200 - 11.53 #230 - 11.11	2.20	38.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	5.37	4.01	5.37	4.01
5/16"	-3.00	8.00	3.42	2.56	8.79	6.57
3.5	-2.50	5.66	5.78	4.32	14.57	10.89
4	-2.25	4.76	1.04	0.78	15.61	11.67
5	-2.00	4.00	2.16	1.61	17.77	13.28
7	-1.50	2.83	7.31	5.47	25.08	18.75
10	-1.00	2.00	7.54	5.64	32.62	24.39
14	-0.50	1.41	7.06	5.28	39.68	29.67
18	0.00	1.00	5.02	3.75	44.70	33.42
25	0.50	0.71	4.37	3.27	49.07	36.69
35	1.00	0.50	5.30	3.96	54.37	40.65
45	1.50	0.35	6.96	5.20	61.33	45.85
60	2.00	0.25	10.47	7.83	71.80	53.68
80	2.50	0.18	20.05	14.99	91.85	68.67
120	3.00	0.13	20.69	15.47	112.54	84.14
170	3.50	0.09	4.77	3.57	117.31	87.71
200	3.75	0.07	1.01	0.76	118.32	88.47
230	4.00	0.06	0.56	0.42	118.88	88.89

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.00	2.70	1.77	-0.94	-1.75	-3.31

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.61	0.66	2.13	-0.57	2.01

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O56 #1

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
104.43	96.71	0.31	0.00	#200 - 8.47 #230 - 7.70	1.90	12.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.14	1.09	1.14	1.09
5/16"	-3.00	8.00	0.00	0.00	1.14	1.09
3.5	-2.50	5.66	0.71	0.68	1.85	1.77
4	-2.25	4.76	0.27	0.26	2.12	2.03
5	-2.00	4.00	0.63	0.60	2.75	2.63
7	-1.50	2.83	1.08	1.03	3.83	3.66
10	-1.00	2.00	1.48	1.42	5.31	5.08
14	-0.50	1.41	1.40	1.34	6.71	6.42
18	0.00	1.00	1.55	1.48	8.26	7.90
25	0.50	0.71	1.57	1.50	9.83	9.40
35	1.00	0.50	1.95	1.87	11.78	11.27
45	1.50	0.35	2.80	2.68	14.58	13.95
60	2.00	0.25	6.21	5.95	20.79	19.90
80	2.50	0.18	24.24	23.21	45.03	43.11
120	3.00	0.13	36.67	35.11	81.70	78.22
170	3.50	0.09	11.94	11.43	93.64	89.65
200	3.75	0.07	1.96	1.88	95.60	91.53
230	4.00	0.06	0.80	0.77	96.40	92.30

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.25	2.95	2.60	2.11	1.67	-1.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.15	0.23	1.35	-2.34	8.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O56 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
126.31	67.48	16.84	0.07	#200 - 65.53 #230 - 59.98	1.70	11.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.02	0.02	0.02
10	-1.00	2.00	0.27	0.21	0.29	0.23
14	-0.50	1.41	0.78	0.62	1.07	0.85
18	0.00	1.00	0.80	0.63	1.87	1.48
25	0.50	0.71	0.93	0.74	2.80	2.22
35	1.00	0.50	1.14	0.90	3.94	3.12
45	1.50	0.35	1.22	0.97	5.16	4.09
60	2.00	0.25	1.99	1.58	7.15	5.67
80	2.50	0.18	6.08	4.81	13.23	10.48
120	3.00	0.13	12.58	9.96	25.81	20.44
170	3.50	0.09	9.82	7.77	35.63	28.21
200	3.75	0.07	7.91	6.26	43.54	34.47
230	4.00	0.06	7.01	5.55	50.55	40.02

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.29	2.78	1.79

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.79	0.14	1.05	-1.63	5.81

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O56 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
187.08	146.41	3.23	0.22	#200 - 26.80 #230 - 23.67	2.10	42.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.22	0.12	0.22	0.12
4	-2.25	4.76	0.43	0.23	0.65	0.35
5	-2.00	4.00	0.82	0.44	1.47	0.79
7	-1.50	2.83	2.33	1.25	3.80	2.04
10	-1.00	2.00	3.85	2.06	7.65	4.10
14	-0.50	1.41	5.34	2.85	12.99	6.95
18	0.00	1.00	8.05	4.30	21.04	11.25
25	0.50	0.71	9.59	5.13	30.63	16.38
35	1.00	0.50	10.85	5.80	41.48	22.18
45	1.50	0.35	12.32	6.59	53.80	28.77
60	2.00	0.25	15.58	8.33	69.38	37.10
80	2.50	0.18	15.19	8.12	84.57	45.22
120	3.00	0.13	16.57	8.86	101.14	54.08
170	3.50	0.09	27.64	14.77	128.78	68.85
200	3.75	0.07	8.13	4.35	136.91	73.20
230	4.00	0.06	5.85	3.13	142.76	76.33

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.89	2.77	1.21	0.46	-0.84

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.8	0.29	1.51	-0.65	2.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O56 #4

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
165.09	142.54	0.87	0.32	#200 - 15.16 #230 - 14.51	2.40	42.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	5.64	3.42	5.64	3.42
5/8"	-4.00	16.00	2.47	1.50	8.11	4.92
11/16"	-3.50	11.31	0.37	0.22	8.48	5.14
5/16"	-3.00	8.00	1.35	0.82	9.83	5.96
3.5	-2.50	5.66	3.98	2.41	13.81	8.37
4	-2.25	4.76	1.80	1.09	15.61	9.46
5	-2.00	4.00	2.71	1.64	18.32	11.10
7	-1.50	2.83	7.02	4.25	25.34	15.35
10	-1.00	2.00	8.83	5.35	34.17	20.70
14	-0.50	1.41	11.57	7.01	45.74	27.71
18	0.00	1.00	9.41	5.70	55.15	33.41
25	0.50	0.71	8.31	5.03	63.46	38.44
35	1.00	0.50	9.30	5.63	72.76	44.07
45	1.50	0.35	10.01	6.06	82.77	50.13
60	2.00	0.25	11.74	7.11	94.51	57.24
80	2.50	0.18	19.44	11.78	113.95	69.02
120	3.00	0.13	17.77	10.76	131.72	79.78
170	3.50	0.09	6.20	3.76	137.92	83.54
200	3.75	0.07	2.14	1.30	140.06	84.84
230	4.00	0.06	1.08	0.65	141.14	85.49

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.59	2.78	1.49	-0.69	-1.44	-3.82

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.5	0.71	1.87	-0.17	2.24

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O57 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
124.26	119.90	0.29	0.00	#200 - 4.34 #230 - 3.73	1.20	18.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.97	1.59	1.97	1.59
5/16"	-3.00	8.00	1.45	1.17	3.42	2.76
3.5	-2.50	5.66	1.13	0.91	4.55	3.67
4	-2.25	4.76	0.45	0.36	5.00	4.03
5	-2.00	4.00	0.57	0.46	5.57	4.49
7	-1.50	2.83	1.34	1.08	6.91	5.57
10	-1.00	2.00	1.98	1.59	8.89	7.16
14	-0.50	1.41	2.01	1.62	10.90	8.78
18	0.00	1.00	1.92	1.55	12.82	10.33
25	0.50	0.71	1.81	1.46	14.63	11.79
35	1.00	0.50	1.98	1.59	16.61	13.38
45	1.50	0.35	2.77	2.23	19.38	15.61
60	2.00	0.25	6.59	5.30	25.97	20.91
80	2.50	0.18	29.24	23.53	55.21	44.44
120	3.00	0.13	47.65	38.35	102.86	82.79
170	3.50	0.09	14.33	11.53	117.19	94.32
200	3.75	0.07	1.66	1.34	118.85	95.66
230	4.00	0.06	0.76	0.61	119.61	96.27

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.63	3.05	2.90	2.57	2.09	1.54	-1.76

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.05	0.24	1.54	-2.26	7.66

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O57 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.22	77.92	12.81	0.06	#200 - 58.63 #230 - 54.28	2.20	11.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.23	0.16	0.23	0.16
10	-1.00	2.00	0.42	0.30	0.65	0.46
14	-0.50	1.41	0.81	0.57	1.46	1.03
18	0.00	1.00	1.04	0.73	2.50	1.76
25	0.50	0.71	1.34	0.94	3.84	2.70
35	1.00	0.50	1.85	1.30	5.69	4.00
45	1.50	0.35	2.13	1.50	7.82	5.50
60	2.00	0.25	3.05	2.14	10.87	7.64
80	2.50	0.18	8.46	5.95	19.33	13.59
120	3.00	0.13	20.50	14.41	39.83	28.00
170	3.50	0.09	11.82	8.31	51.65	36.31
200	3.75	0.07	7.19	5.06	58.84	41.37
230	4.00	0.06	6.18	4.35	65.02	45.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.90	2.58	1.33

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.64	0.16	1.05	-1.58	5.81

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O57 #3

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.97	123.25	1.45	0.03	#200 - 17.44 #230 - 15.43	1.90	33.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.59	0.41	0.59	0.41
4	-2.25	4.76	0.32	0.22	0.91	0.63
5	-2.00	4.00	0.73	0.51	1.64	1.14
7	-1.50	2.83	2.50	1.74	4.14	2.88
10	-1.00	2.00	4.82	3.35	8.96	6.23
14	-0.50	1.41	6.95	4.83	15.91	11.06
18	0.00	1.00	7.89	5.48	23.80	16.54
25	0.50	0.71	8.32	5.78	32.12	22.32
35	1.00	0.50	8.63	5.99	40.75	28.31
45	1.50	0.35	8.59	5.97	49.34	34.28
60	2.00	0.25	9.85	6.84	59.19	41.12
80	2.50	0.18	15.41	10.70	74.60	51.82
120	3.00	0.13	25.70	17.85	100.30	69.67
170	3.50	0.09	14.40	10.00	114.70	79.67
200	3.75	0.07	4.16	2.89	118.86	82.56
230	4.00	0.06	2.89	2.01	121.75	84.57

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.93	3.27	2.41	0.72	-0.05	-1.18

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.59	0.33	1.55	-0.64	2.39

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O57 #4
Analysis Date: 02-01-12
Analyzed By:

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.00	143.02			#200 - 19.49 #230 - 19.16	1.80	44.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.52	1.43	2.52	1.43
5/16"	-3.00	8.00	3.03	1.72	5.55	3.15
3.5	-2.50	5.66	6.30	3.58	11.85	6.73
4	-2.25	4.76	3.66	2.08	15.51	8.81
5	-2.00	4.00	4.69	2.66	20.20	11.47
7	-1.50	2.83	11.21	6.37	31.41	17.84
10	-1.00	2.00	11.05	6.28	42.46	24.12
14	-0.50	1.41	13.64	7.75	56.10	31.87
18	0.00	1.00	9.53	5.41	65.63	37.28
25	0.50	0.71	8.17	4.64	73.80	41.92
35	1.00	0.50	9.66	5.49	83.46	47.41
45	1.50	0.35	9.82	5.58	93.28	52.99
60	2.00	0.25	10.72	6.09	104.00	59.08
80	2.50	0.18	17.19	9.77	121.19	68.85
120	3.00	0.13	15.67	8.90	136.86	77.75
170	3.50	0.09	3.76	2.14	140.62	79.89
200	3.75	0.07	1.09	0.62	141.71	80.51
230	4.00	0.06	0.58	0.33	142.29	80.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.85	1.23	-0.94	-1.64	-2.74

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.28	0.82	1.93	-0.17	1.88

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O58 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
124.41	87.11	8.59	0.01	#200 - 42.78 #230 - 36.89	2.10	25.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.89	0.72	0.89	0.72
4	-2.25	4.76	0.10	0.08	0.99	0.80
5	-2.00	4.00	0.19	0.15	1.18	0.95
7	-1.50	2.83	0.52	0.42	1.70	1.37
10	-1.00	2.00	1.11	0.89	2.81	2.26
14	-0.50	1.41	1.29	1.04	4.10	3.30
18	0.00	1.00	1.94	1.56	6.04	4.86
25	0.50	0.71	3.11	2.50	9.15	7.36
35	1.00	0.50	4.64	3.73	13.79	11.09
45	1.50	0.35	5.44	4.37	19.23	15.46
60	2.00	0.25	7.11	5.71	26.34	21.17
80	2.50	0.18	9.90	7.96	36.24	29.13
120	3.00	0.13	15.85	12.74	52.09	41.87
170	3.50	0.09	12.09	9.72	64.18	51.59
200	3.75	0.07	7.00	5.63	71.18	57.22
230	4.00	0.06	7.33	5.89	78.51	63.11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.42	2.24	1.55	0.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.24	0.21	1.39	-1.22	4.41

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O58 #2
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
200.68	166.51	2.31	0.00	#200 - 19.83 #230 - 18.18	1.60	26.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	1.97	0.98	1.97	0.98
11/16"	-3.50	11.31	1.00	0.50	2.97	1.48
5/16"	-3.00	8.00	0.36	0.18	3.33	1.66
3.5	-2.50	5.66	1.26	0.63	4.59	2.29
4	-2.25	4.76	0.83	0.41	5.42	2.70
5	-2.00	4.00	1.03	0.51	6.45	3.21
7	-1.50	2.83	4.08	2.03	10.53	5.24
10	-1.00	2.00	6.41	3.19	16.94	8.43
14	-0.50	1.41	11.51	5.74	28.45	14.17
18	0.00	1.00	11.01	5.49	39.46	19.66
25	0.50	0.71	10.29	5.13	49.75	24.79
35	1.00	0.50	9.91	4.94	59.66	29.73
45	1.50	0.35	9.75	4.86	69.41	34.59
60	2.00	0.25	12.45	6.20	81.86	40.79
80	2.50	0.18	19.34	9.64	101.20	50.43
120	3.00	0.13	31.02	15.46	132.22	65.89
170	3.50	0.09	21.15	10.54	153.37	76.43
200	3.75	0.07	7.51	3.74	160.88	80.17
230	4.00	0.06	3.32	1.65	164.20	81.82

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.43	2.48	0.52	-0.33	-1.56

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.43	0.37	1.8	-0.84	3.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: O59 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
116.08	113.83	0.21	0.22	#200 - 2.69 #230 - 2.32	1.30	55.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.51	0.44	0.51	0.44
3.5	-2.50	5.66	0.89	0.77	1.40	1.21
4	-2.25	4.76	2.22	1.91	3.62	3.12
5	-2.00	4.00	3.05	2.63	6.67	5.75
7	-1.50	2.83	7.70	6.63	14.37	12.38
10	-1.00	2.00	11.44	9.86	25.81	22.24
14	-0.50	1.41	12.58	10.84	38.39	33.08
18	0.00	1.00	10.50	9.05	48.89	42.13
25	0.50	0.71	7.83	6.75	56.72	48.88
35	1.00	0.50	5.95	5.13	62.67	54.01
45	1.50	0.35	3.90	3.36	66.57	57.37
60	2.00	0.25	4.05	3.49	70.62	60.86
80	2.50	0.18	10.61	9.14	81.23	70.00
120	3.00	0.13	22.24	19.16	103.47	89.16
170	3.50	0.09	8.71	7.50	112.18	96.66
200	3.75	0.07	0.76	0.65	112.94	97.31
230	4.00	0.06	0.43	0.37	113.37	97.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.39	2.87	2.63	0.61	-0.87	-1.32	-2.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.71	0.61	1.84	-0.06	1.6

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O59 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.19	94.71	6.37	0.00	#200 - 41.86 #230 - 37.87	2.00	13.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.14	0.10	0.14	0.10
4	-2.25	4.76	0.00	0.00	0.14	0.10
5	-2.00	4.00	0.05	0.04	0.19	0.14
7	-1.50	2.83	0.64	0.45	0.83	0.59
10	-1.00	2.00	1.14	0.80	1.97	1.39
14	-0.50	1.41	2.09	1.47	4.06	2.86
18	0.00	1.00	2.54	1.79	6.60	4.65
25	0.50	0.71	2.32	1.63	8.92	6.28
35	1.00	0.50	2.47	1.74	11.39	8.02
45	1.50	0.35	3.36	2.36	14.75	10.38
60	2.00	0.25	5.80	4.08	20.55	14.46
80	2.50	0.18	9.27	6.52	29.82	20.98
120	3.00	0.13	14.75	10.37	44.57	31.35
170	3.50	0.09	26.26	18.47	70.83	49.82
200	3.75	0.07	11.83	8.32	82.66	58.14
230	4.00	0.06	5.68	3.99	88.34	62.13

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.51	2.69	2.12	0.11

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.53	0.17	1.27	-1.51	4.76

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O59 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
171.61	164.92	0.30	0.17	#200 - 4.81 #230 - 4.25	1.30	34.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.12	0.07	0.12	0.07
4	-2.25	4.76	0.34	0.20	0.46	0.27
5	-2.00	4.00	0.30	0.17	0.76	0.44
7	-1.50	2.83	0.98	0.57	1.74	1.01
10	-1.00	2.00	2.35	1.37	4.09	2.38
14	-0.50	1.41	4.30	2.51	8.39	4.89
18	0.00	1.00	6.24	3.64	14.63	8.53
25	0.50	0.71	7.19	4.19	21.82	12.72
35	1.00	0.50	9.63	5.61	31.45	18.33
45	1.50	0.35	17.23	10.04	48.68	28.37
60	2.00	0.25	31.36	18.27	80.04	46.64
80	2.50	0.18	51.21	29.84	131.25	76.48
120	3.00	0.13	23.74	13.83	154.99	90.31
170	3.50	0.09	6.78	3.95	161.77	94.26
200	3.75	0.07	1.60	0.93	163.37	95.19
230	4.00	0.06	0.96	0.56	164.33	95.75

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.70	2.77	2.48	2.06	1.33	0.79	-0.48

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.74	0.30	1.07	-1.15	4.39

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O59 #4
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.30	131.76	0.26	0.21	#200 - 13.55 #230 - 13.31	1.80	42.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.10	0.73	1.10	0.73
5/16"	-3.00	8.00	0.71	0.47	1.81	1.20
3.5	-2.50	5.66	2.14	1.41	3.95	2.61
4	-2.25	4.76	2.58	1.71	6.53	4.32
5	-2.00	4.00	3.08	2.04	9.61	6.36
7	-1.50	2.83	10.25	6.77	19.86	13.13
10	-1.00	2.00	9.62	6.36	29.48	19.49
14	-0.50	1.41	11.30	7.47	40.78	26.96
18	0.00	1.00	9.08	6.00	49.86	32.96
25	0.50	0.71	8.23	5.44	58.09	38.40
35	1.00	0.50	8.78	5.80	66.87	44.20
45	1.50	0.35	8.72	5.76	75.59	49.96
60	2.00	0.25	11.08	7.32	86.67	57.28
80	2.50	0.18	20.31	13.42	106.98	70.70
120	3.00	0.13	19.26	12.73	126.24	83.43
170	3.50	0.09	3.82	2.52	130.06	85.95
200	3.75	0.07	0.75	0.50	130.81	86.45
230	4.00	0.06	0.37	0.24	131.18	86.69

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.11	2.67	1.50	-0.63	-1.27	-2.17

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.67	0.63	1.79	-0.34	1.95

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O60 #1

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
180.24	138.01	0.80	0.00	#200 - 24.97 #230 - 23.85	1.70	19.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.01	0.01	0.01	0.01
3.5	-2.50	5.66	0.26	0.14	0.27	0.15
4	-2.25	4.76	0.14	0.08	0.41	0.23
5	-2.00	4.00	0.14	0.08	0.55	0.31
7	-1.50	2.83	1.01	0.56	1.56	0.87
10	-1.00	2.00	2.06	1.14	3.62	2.01
14	-0.50	1.41	2.87	1.59	6.49	3.60
18	0.00	1.00	3.80	2.11	10.29	5.71
25	0.50	0.71	4.48	2.49	14.77	8.20
35	1.00	0.50	5.57	3.09	20.34	11.29
45	1.50	0.35	5.30	2.94	25.64	14.23
60	2.00	0.25	6.41	3.56	32.05	17.79
80	2.50	0.18	32.14	17.83	64.19	35.62
120	3.00	0.13	54.55	30.27	118.74	65.89
170	3.50	0.09	13.51	7.50	132.25	73.39
200	3.75	0.07	2.95	1.64	135.20	75.03
230	4.00	0.06	2.01	1.12	137.21	76.15

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.75	2.74	2.20	1.75	-0.17

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.18	0.22	1.14	-1.65	5.54

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 5/31/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O60 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
172.63	116.45	7.07	0.01	#200 - 40.66 #230 - 36.63	2.20	7.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.08	0.05	0.08	0.05
5	-2.00	4.00	0.12	0.07	0.20	0.12
7	-1.50	2.83	0.31	0.18	0.51	0.30
10	-1.00	2.00	0.67	0.39	1.18	0.69
14	-0.50	1.41	1.41	0.82	2.59	1.51
18	0.00	1.00	1.57	0.91	4.16	2.42
25	0.50	0.71	1.24	0.72	5.40	3.14
35	1.00	0.50	2.12	1.23	7.52	4.37
45	1.50	0.35	2.21	1.28	9.73	5.65
60	2.00	0.25	2.72	1.58	12.45	7.23
80	2.50	0.18	7.77	4.50	20.22	11.73
120	3.00	0.13	23.33	13.51	43.55	25.24
170	3.50	0.09	43.68	25.30	87.23	50.54
200	3.75	0.07	15.19	8.80	102.42	59.34
230	4.00	0.06	6.95	4.03	109.37	63.37

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.49	2.99	2.66	1.25

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.85	0.14	1	-2.32	8.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 5/31/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: O60 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
159.06	140.22	0.76	0.06	#200 - 13.13 #230 - 12.39	1.60	30.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.08	1.31	2.08	1.31
3.5	-2.50	5.66	0.75	0.47	2.83	1.78
4	-2.25	4.76	0.72	0.45	3.55	2.23
5	-2.00	4.00	1.47	0.92	5.02	3.15
7	-1.50	2.83	3.36	2.11	8.38	5.26
10	-1.00	2.00	5.48	3.45	13.86	8.71
14	-0.50	1.41	6.85	4.31	20.71	13.02
18	0.00	1.00	6.74	4.24	27.45	17.26
25	0.50	0.71	7.51	4.72	34.96	21.98
35	1.00	0.50	8.93	5.61	43.89	27.59
45	1.50	0.35	9.91	6.23	53.80	33.82
60	2.00	0.25	13.01	8.18	66.81	42.00
80	2.50	0.18	29.78	18.72	96.59	60.72
120	3.00	0.13	32.10	20.18	128.69	80.90
170	3.50	0.09	7.65	4.81	136.34	85.71
200	3.75	0.07	1.85	1.16	138.19	86.87
230	4.00	0.06	1.17	0.74	139.36	87.61

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.32	2.85	2.21	0.77	-0.15	-1.56

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.45	0.37	1.58	-1.01	3.24

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 5/31/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O192 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
123.91	123.91	0.00	0.25	#200 - 0.27 #230 - 0.25	0.40	15.91	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.60	0.48	0.60	0.48
3.5	-2.50	5.66	0.21	0.17	0.81	0.65
4	-2.25	4.76	0.08	0.06	0.89	0.71
5	-2.00	4.00	0.41	0.33	1.30	1.04
7	-1.50	2.83	1.88	1.52	3.18	2.56
10	-1.00	2.00	2.45	1.98	5.63	4.54
14	-0.50	1.41	4.94	3.99	10.57	8.53
18	0.00	1.00	5.51	4.45	16.08	12.98
25	0.50	0.71	5.90	4.76	21.98	17.74
35	1.00	0.50	7.67	6.19	29.65	23.93
45	1.50	0.35	10.75	8.68	40.40	32.61
60	2.00	0.25	23.64	19.08	64.04	51.69
80	2.50	0.18	40.61	32.77	104.65	84.46
120	3.00	0.13	16.24	13.11	120.89	97.57
170	3.50	0.09	2.52	2.03	123.41	99.60
200	3.75	0.07	0.16	0.13	123.57	99.73
230	4.00	0.06	0.03	0.02	123.60	99.75

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.49	2.36	1.96	1.06	0.32	-0.94

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.55	0.34	1.19	-1.35	4.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: O192 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.39	137.39	0.07	0.13	#200 - 0.23 #230 - 0.19	0.75	44.23	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	3.24	2.36	3.24	2.36
5/16"	-3.00	8.00	6.75	4.91	9.99	7.27
3.5	-2.50	5.66	8.66	6.30	18.65	13.57
4	-2.25	4.76	5.36	3.90	24.01	17.47
5	-2.00	4.00	4.57	3.33	28.58	20.80
7	-1.50	2.83	10.38	7.56	38.96	28.36
10	-1.00	2.00	12.23	8.90	51.19	37.26
14	-0.50	1.41	13.78	10.03	64.97	47.29
18	0.00	1.00	13.48	9.81	78.45	57.10
25	0.50	0.71	11.89	8.65	90.34	65.75
35	1.00	0.50	10.18	7.41	100.52	73.16
45	1.50	0.35	8.27	6.02	108.79	79.18
60	2.00	0.25	10.15	7.39	118.94	86.57
80	2.50	0.18	11.33	8.25	130.27	94.82
120	3.00	0.13	5.88	4.28	136.15	99.10
170	3.50	0.09	0.87	0.63	137.02	99.73
200	3.75	0.07	0.06	0.04	137.08	99.77
230	4.00	0.06	0.06	0.04	137.14	99.81

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.52	1.83	1.15	-0.36	-1.72	-2.34	-3.23

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.32	1.25	1.8	0.01	2.03

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O192 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.03 #230 - 0.02	Organics (%):	Carbonates (%):	Shells (%):
138.29	138.29	0.02	0.00		0.31	10.62	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.07	0.77	1.07	0.77
3.5	-2.50	5.66	0.00	0.00	1.07	0.77
4	-2.25	4.76	0.33	0.24	1.40	1.01
5	-2.00	4.00	0.47	0.34	1.87	1.35
7	-1.50	2.83	0.61	0.44	2.48	1.79
10	-1.00	2.00	0.98	0.71	3.46	2.50
14	-0.50	1.41	1.97	1.42	5.43	3.92
18	0.00	1.00	2.85	2.06	8.28	5.98
25	0.50	0.71	3.58	2.59	11.86	8.57
35	1.00	0.50	5.55	4.01	17.41	12.58
45	1.50	0.35	11.96	8.65	29.37	21.23
60	2.00	0.25	38.18	27.61	67.55	48.84
80	2.50	0.18	52.86	38.22	120.41	87.06
120	3.00	0.13	15.21	11.00	135.62	98.06
170	3.50	0.09	2.47	1.79	138.09	99.85
200	3.75	0.07	0.16	0.12	138.25	99.97
230	4.00	0.06	0.02	0.01	138.27	99.98

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.86	2.46	2.34	2.02	1.57	1.20	-0.24

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.78	0.29	0.97	-2.3	10.22

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O192 #4
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.15	140.15	0.02	0.16	#200 - 0.16 #230 - 0.16	0.48	23.56	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.16	0.83	1.16	0.83
4	-2.25	4.76	1.46	1.04	2.62	1.87
5	-2.00	4.00	1.19	0.85	3.81	2.72
7	-1.50	2.83	2.67	1.91	6.48	4.63
10	-1.00	2.00	4.04	2.88	10.52	7.51
14	-0.50	1.41	5.95	4.25	16.47	11.76
18	0.00	1.00	7.89	5.63	24.36	17.39
25	0.50	0.71	10.34	7.38	34.70	24.77
35	1.00	0.50	14.89	10.62	49.59	35.39
45	1.50	0.35	19.75	14.09	69.34	49.48
60	2.00	0.25	31.39	22.40	100.73	71.88
80	2.50	0.18	28.28	20.18	129.01	92.06
120	3.00	0.13	10.20	7.28	139.21	99.34
170	3.50	0.09	0.65	0.46	139.86	99.80
200	3.75	0.07	0.05	0.04	139.91	99.84
230	4.00	0.06	0.00	0.00	139.91	99.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.70	2.30	2.08	1.51	0.51	-0.12	-1.44

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.16	0.45	1.25	-1.03	3.58

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: O192 #5
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
155.13	155.13	0.10	0.00	#200 - 0.11 #230 - 0.06	0.38	12.48	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.33	0.86	1.33	0.86
3.5	-2.50	5.66	0.72	0.46	2.05	1.32
4	-2.25	4.76	0.50	0.32	2.55	1.64
5	-2.00	4.00	0.18	0.12	2.73	1.76
7	-1.50	2.83	0.71	0.46	3.44	2.22
10	-1.00	2.00	1.29	0.83	4.73	3.05
14	-0.50	1.41	2.07	1.33	6.80	4.38
18	0.00	1.00	2.97	1.91	9.77	6.29
25	0.50	0.71	4.36	2.81	14.13	9.10
35	1.00	0.50	8.49	5.47	22.62	14.57
45	1.50	0.35	17.40	11.22	40.02	25.79
60	2.00	0.25	35.21	22.70	75.23	48.49
80	2.50	0.18	54.25	34.97	129.48	83.46
120	3.00	0.13	20.89	13.47	150.37	96.93
170	3.50	0.09	4.23	2.73	154.60	99.66
200	3.75	0.07	0.35	0.23	154.95	99.89
230	4.00	0.06	0.08	0.05	155.03	99.94

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.93	2.52	2.38	2.02	1.46	1.06	-0.34

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.76	0.30	1.05	-2.11	9.12

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y66 #1

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
37.86	5.61	0.11	0.00	#200 - 86.19 #230 - 85.48	9.20	11.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.04	0.11	0.04	0.11
18	0.00	1.00	0.10	0.26	0.14	0.37
25	0.50	0.71	0.13	0.34	0.27	0.71
35	1.00	0.50	0.16	0.42	0.43	1.13
45	1.50	0.35	0.22	0.58	0.65	1.71
60	2.00	0.25	0.29	0.77	0.94	2.48
80	2.50	0.18	0.76	2.01	1.70	4.49
120	3.00	0.13	1.53	4.04	3.23	8.53
170	3.50	0.09	1.45	3.83	4.68	12.36
200	3.75	0.07	0.55	1.45	5.23	13.81
230	4.00	0.06	0.27	0.71	5.50	14.52

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						2.56

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.65	0.16	0.94	-1.39	4.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y66 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gravel portion contains rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.92	143.81	0.44	0.42	#200 - 6.66 #230 - 6.05	2.80	20.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.04	1.34	2.04	1.34
5/16"	-3.00	8.00	5.06	3.33	7.10	4.67
3.5	-2.50	5.66	7.62	5.02	14.72	9.69
4	-2.25	4.76	3.50	2.30	18.22	11.99
5	-2.00	4.00	5.77	3.80	23.99	15.79
7	-1.50	2.83	10.62	6.99	34.61	22.78
10	-1.00	2.00	9.52	6.27	44.13	29.05
14	-0.50	1.41	8.92	5.87	53.05	34.92
18	0.00	1.00	8.76	5.77	61.81	40.69
25	0.50	0.71	9.54	6.28	71.35	46.97
35	1.00	0.50	10.11	6.65	81.46	53.62
45	1.50	0.35	8.93	5.88	90.39	59.50
60	2.00	0.25	6.81	4.48	97.20	63.98
80	2.50	0.18	8.87	5.84	106.07	69.82
120	3.00	0.13	21.18	13.94	127.25	83.76
170	3.50	0.09	12.32	8.11	139.57	91.87
200	3.75	0.07	2.24	1.47	141.81	93.34
230	4.00	0.06	0.92	0.61	142.73	93.95

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.01	2.69	0.73	-1.32	-1.98	-2.97

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.41	0.75	2.11	-0.17	1.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y66 #3

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gravel portion contains rock and shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.23	125.66	0.59	0.35	#200 - 4.61 #230 - 4.30	2.30	46.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.27	1.74	2.27	1.74
11/16"	-3.50	11.31	6.56	5.04	8.83	6.78
5/16"	-3.00	8.00	8.82	6.77	17.65	13.55
3.5	-2.50	5.66	8.68	6.67	26.33	20.22
4	-2.25	4.76	4.56	3.50	30.89	23.72
5	-2.00	4.00	4.97	3.82	35.86	27.54
7	-1.50	2.83	12.66	9.72	48.52	37.26
10	-1.00	2.00	10.97	8.42	59.49	45.68
14	-0.50	1.41	13.24	10.17	72.73	55.85
18	0.00	1.00	10.55	8.10	83.28	63.95
25	0.50	0.71	7.82	6.00	91.10	69.95
35	1.00	0.50	5.86	4.50	96.96	74.45
45	1.50	0.35	4.04	3.10	101.00	77.55
60	2.00	0.25	3.87	2.97	104.87	80.52
80	2.50	0.18	6.44	4.95	111.31	85.47
120	3.00	0.13	8.12	6.24	119.43	91.71
170	3.50	0.09	3.84	2.95	123.27	94.66
200	3.75	0.07	0.95	0.73	124.22	95.39
230	4.00	0.06	0.40	0.31	124.62	95.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.62	2.35	1.09	-0.79	-2.17	-2.82	-3.68

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.67	1.59	2.04	0.35	2.18

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y66 #4

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.67	133.67	0.42	0.22	#200 - 7.95 #230 - 7.46	2.20	18.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	3.30	2.30	3.30	2.30
5/16"	-3.00	8.00	1.64	1.14	4.94	3.44
3.5	-2.50	5.66	6.69	4.66	11.63	8.10
4	-2.25	4.76	3.86	2.69	15.49	10.79
5	-2.00	4.00	3.30	2.30	18.79	13.09
7	-1.50	2.83	7.75	5.39	26.54	18.48
10	-1.00	2.00	8.26	5.75	34.80	24.23
14	-0.50	1.41	8.01	5.58	42.81	29.81
18	0.00	1.00	7.30	5.08	50.11	34.89
25	0.50	0.71	6.85	4.77	56.96	39.66
35	1.00	0.50	6.80	4.73	63.76	44.39
45	1.50	0.35	6.81	4.74	70.57	49.13
60	2.00	0.25	8.71	6.06	79.28	55.19
80	2.50	0.18	14.41	10.03	93.69	65.22
120	3.00	0.13	27.60	19.21	121.29	84.43
170	3.50	0.09	9.67	6.73	130.96	91.16
200	3.75	0.07	1.28	0.89	132.24	92.05
230	4.00	0.06	0.70	0.49	132.94	92.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.99	2.75	1.57	-0.93	-1.73	-2.83

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.7	0.62	2.09	-0.46	1.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y66 #5

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gravel portion contains rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
144.91	142.11	0.04	0.65	#200 - 2.66 #230 - 2.60	0.70	2.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.70	1.86	2.70	1.86
3.5	-2.50	5.66	2.83	1.95	5.53	3.81
4	-2.25	4.76	0.00	0.00	5.53	3.81
5	-2.00	4.00	1.13	0.78	6.66	4.59
7	-1.50	2.83	2.01	1.39	8.67	5.98
10	-1.00	2.00	1.64	1.13	10.31	7.11
14	-0.50	1.41	2.60	1.79	12.91	8.90
18	0.00	1.00	5.21	3.60	18.12	12.50
25	0.50	0.71	11.95	8.25	30.07	20.75
35	1.00	0.50	26.34	18.18	56.41	38.93
45	1.50	0.35	35.43	24.45	91.84	63.38
60	2.00	0.25	28.22	19.47	120.06	82.85
80	2.50	0.18	16.46	11.36	136.52	94.21
120	3.00	0.13	3.88	2.68	140.40	96.89
170	3.50	0.09	0.57	0.39	140.97	97.28
200	3.75	0.07	0.08	0.06	141.05	97.34
230	4.00	0.06	0.08	0.06	141.13	97.40

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.65	2.05	1.80	1.23	0.62	0.21	-1.85

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.98	0.51	1.21	-1.57	6.01

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y66 #6

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gravel portion contains rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
119.33	115.57	0.06	0.46	#200 - 3.77 #230 - 3.66	0.20	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	7.30	6.12	7.30	6.12
3.5	-2.50	5.66	16.39	13.74	23.69	19.86
4	-2.25	4.76	11.26	9.44	34.95	29.30
5	-2.00	4.00	9.19	7.70	44.14	37.00
7	-1.50	2.83	18.54	15.54	62.68	52.54
10	-1.00	2.00	13.31	11.15	75.99	63.69
14	-0.50	1.41	6.87	5.76	82.86	69.45
18	0.00	1.00	4.44	3.72	87.30	73.17
25	0.50	0.71	3.76	3.15	91.06	76.32
35	1.00	0.50	4.48	3.75	95.54	80.07
45	1.50	0.35	3.48	2.92	99.02	82.99
60	2.00	0.25	3.32	2.78	102.34	85.77
80	2.50	0.18	5.91	4.95	108.25	90.72
120	3.00	0.13	5.16	4.32	113.41	95.04
170	3.50	0.09	1.16	0.97	114.57	96.01
200	3.75	0.07	0.26	0.22	114.83	96.23
230	4.00	0.06	0.13	0.11	114.96	96.34

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.00	1.68	0.29	-1.58	-2.36	-2.64	-3.23

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-1.07	2.10	1.77	0.95	2.78

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y67 #1

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.03	159.98	0.75	0.38	#200 - 3.67 #230 - 3.32	4.60	41.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	6.37	3.88	6.37	3.88
5/16"	-3.00	8.00	6.91	4.21	13.28	8.09
3.5	-2.50	5.66	15.92	9.71	29.20	17.80
4	-2.25	4.76	4.55	2.77	33.75	20.57
5	-2.00	4.00	8.32	5.07	42.07	25.64
7	-1.50	2.83	17.71	10.80	59.78	36.44
10	-1.00	2.00	15.51	9.46	75.29	45.90
14	-0.50	1.41	13.09	7.98	88.38	53.88
18	0.00	1.00	9.00	5.49	97.38	59.37
25	0.50	0.71	8.91	5.43	106.29	64.80
35	1.00	0.50	10.06	6.13	116.35	70.93
45	1.50	0.35	9.24	5.63	125.59	76.56
60	2.00	0.25	7.19	4.38	132.78	80.94
80	2.50	0.18	9.46	5.77	142.24	86.71
120	3.00	0.13	8.77	5.35	151.01	92.06
170	3.50	0.09	5.47	3.33	156.48	95.39
200	3.75	0.07	1.54	0.94	158.02	96.33
230	4.00	0.06	0.58	0.35	158.60	96.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.44	2.27	1.36	-0.74	-2.03	-2.59	-3.37

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.48	1.39	2.01	0.32	2.02

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y67 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
118.34	105.12	0.95	0.00	#200 - 12.98 #230 - 11.97	1.60	18.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.16	0.14	0.16	0.14
7	-1.50	2.83	0.39	0.33	0.55	0.47
10	-1.00	2.00	0.53	0.45	1.08	0.92
14	-0.50	1.41	1.60	1.35	2.68	2.27
18	0.00	1.00	1.88	1.59	4.56	3.86
25	0.50	0.71	2.65	2.24	7.21	6.10
35	1.00	0.50	3.93	3.32	11.14	9.42
45	1.50	0.35	5.97	5.04	17.11	14.46
60	2.00	0.25	8.22	6.95	25.33	21.41
80	2.50	0.18	17.64	14.91	42.97	36.32
120	3.00	0.13	35.81	30.26	78.78	66.58
170	3.50	0.09	20.53	17.35	99.31	83.93
200	3.75	0.07	3.66	3.09	102.97	87.02
230	4.00	0.06	1.20	1.01	104.17	88.03

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.51	3.24	2.73	2.12	1.61	0.25

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.35	0.20	1.02	-1.53	5.5

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y67 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
128.74	123.89	0.11	0.32	#200 - 4.42 #230 - 4.16	1.90	24.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	3.47	2.70	3.47	2.70
5/8"	-4.00	16.00	0.00	0.00	3.47	2.70
11/16"	-3.50	11.31	0.00	0.00	3.47	2.70
5/16"	-3.00	8.00	5.78	4.49	9.25	7.19
3.5	-2.50	5.66	7.74	6.01	16.99	13.20
4	-2.25	4.76	4.07	3.16	21.06	16.36
5	-2.00	4.00	4.28	3.32	25.34	19.68
7	-1.50	2.83	8.08	6.28	33.42	25.96
10	-1.00	2.00	8.61	6.69	42.03	32.65
14	-0.50	1.41	8.28	6.43	50.31	39.08
18	0.00	1.00	7.35	5.71	57.66	44.79
25	0.50	0.71	7.23	5.62	64.89	50.41
35	1.00	0.50	8.58	6.66	73.47	57.07
45	1.50	0.35	11.93	9.27	85.40	66.34
60	2.00	0.25	13.04	10.13	98.44	76.47
80	2.50	0.18	10.99	8.54	109.43	85.01
120	3.00	0.13	9.14	7.10	118.57	92.11
170	3.50	0.09	3.78	2.94	122.35	95.05
200	3.75	0.07	0.68	0.53	123.03	95.58
230	4.00	0.06	0.34	0.26	123.37	95.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.49	2.44	1.93	0.46	-1.58	-2.28	-3.61

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.04	0.97	1.9	0.03	1.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y67 #4

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
153.47	138.93	1.12	0.23	#200 - 11.06 #230 - 10.45	1.20	2.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.04	0.03	0.04	0.03
10	-1.00	2.00	0.13	0.08	0.17	0.11
14	-0.50	1.41	0.41	0.27	0.58	0.38
18	0.00	1.00	0.85	0.55	1.43	0.93
25	0.50	0.71	1.93	1.26	3.36	2.19
35	1.00	0.50	3.66	2.38	7.02	4.57
45	1.50	0.35	4.87	3.17	11.89	7.74
60	2.00	0.25	7.91	5.15	19.80	12.89
80	2.50	0.18	63.07	41.10	82.87	53.99
120	3.00	0.13	40.39	26.32	123.26	80.31
170	3.50	0.09	11.10	7.23	134.36	87.54
200	3.75	0.07	2.15	1.40	136.51	88.94
230	4.00	0.06	0.94	0.61	137.45	89.55

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.26	2.90	2.45	2.15	2.04	1.07

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.35	0.20	0.66	-1.46	7.47

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y68 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.43	127.18	0.20	0.25	#200 - 6.20 #230 - 5.77	1.30	40.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	10.13	7.54	10.13	7.54
5/8"	-4.00	16.00	2.81	2.09	12.94	9.63
11/16"	-3.50	11.31	4.08	3.04	17.02	12.67
5/16"	-3.00	8.00	1.67	1.24	18.69	13.91
3.5	-2.50	5.66	3.51	2.61	22.20	16.52
4	-2.25	4.76	1.58	1.18	23.78	17.70
5	-2.00	4.00	1.22	0.91	25.00	18.61
7	-1.50	2.83	2.70	2.01	27.70	20.62
10	-1.00	2.00	3.63	2.70	31.33	23.32
14	-0.50	1.41	5.58	4.15	36.91	27.47
18	0.00	1.00	7.12	5.30	44.03	32.77
25	0.50	0.71	9.71	7.22	53.74	39.99
35	1.00	0.50	14.19	10.56	67.93	50.55
45	1.50	0.35	14.65	10.90	82.58	61.45
60	2.00	0.25	14.92	11.10	97.50	72.55
80	2.50	0.18	14.19	10.56	111.69	83.11
120	3.00	0.13	9.92	7.38	121.61	90.49
170	3.50	0.09	3.50	2.60	125.11	93.09
200	3.75	0.07	0.96	0.71	126.07	93.80
230	4.00	0.06	0.58	0.43	126.65	94.23

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.56	2.12	0.97	-0.80	-2.60	

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.2	0.87	1.86	-0.24	2.6

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y68 #2

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.83	135.05	0.75	0.05	#200 - 12.39 #230 - 11.60	2.10	16.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.23	0.15	0.23	0.15
4	-2.25	4.76	0.04	0.03	0.27	0.18
5	-2.00	4.00	0.24	0.16	0.51	0.34
7	-1.50	2.83	0.61	0.40	1.12	0.74
10	-1.00	2.00	0.85	0.56	1.97	1.30
14	-0.50	1.41	1.98	1.30	3.95	2.60
18	0.00	1.00	2.43	1.60	6.38	4.20
25	0.50	0.71	3.61	2.38	9.99	6.58
35	1.00	0.50	6.30	4.15	16.29	10.73
45	1.50	0.35	10.94	7.21	27.23	17.94
60	2.00	0.25	16.52	10.88	43.75	28.82
80	2.50	0.18	29.49	19.42	73.24	48.24
120	3.00	0.13	36.39	23.97	109.63	72.21
170	3.50	0.09	19.44	12.80	129.07	85.01
200	3.75	0.07	3.95	2.60	133.02	87.61
230	4.00	0.06	1.20	0.79	134.22	88.40

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.46	3.11	2.54	1.82	1.37	0.17

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.17	0.22	1.04	-1.36	5.4

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: Y68 #3
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
174.13	168.40	0.42	0.02	#200 - 3.95 #230 - 3.58	2.40	30.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	40.56	23.29	40.56	23.29
5/8"	-4.00	16.00	7.75	4.45	48.31	27.74
11/16"	-3.50	11.31	10.28	5.90	58.59	33.64
5/16"	-3.00	8.00	7.59	4.36	66.18	38.00
3.5	-2.50	5.66	10.42	5.98	76.60	43.98
4	-2.25	4.76	3.66	2.10	80.26	46.08
5	-2.00	4.00	2.27	1.30	82.53	47.38
7	-1.50	2.83	7.23	4.15	89.76	51.53
10	-1.00	2.00	7.18	4.12	96.94	55.65
14	-0.50	1.41	7.77	4.46	104.71	60.11
18	0.00	1.00	7.43	4.27	112.14	64.38
25	0.50	0.71	8.39	4.82	120.53	69.20
35	1.00	0.50	8.80	5.05	129.33	74.25
45	1.50	0.35	6.91	3.97	136.24	78.22
60	2.00	0.25	6.19	3.55	142.43	81.77
80	2.50	0.18	7.43	4.27	149.86	86.04
120	3.00	0.13	9.30	5.34	159.16	91.38
170	3.50	0.09	6.93	3.98	166.09	95.36
200	3.75	0.07	1.21	0.69	167.30	96.05
230	4.00	0.06	0.65	0.37	167.95	96.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.45	2.26	1.09	-1.68	-4.15		

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.45	2.73	2.21	1.21	2.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y68 #4

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
39.11	11.88	0.51	0.00	#200 - 73.75 #230 - 70.94	4.50	7.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.03	0.08	0.03	0.08
10	-1.00	2.00	0.00	0.00	0.03	0.08
14	-0.50	1.41	0.05	0.13	0.08	0.21
18	0.00	1.00	0.13	0.33	0.21	0.54
25	0.50	0.71	0.11	0.28	0.32	0.82
35	1.00	0.50	0.08	0.20	0.40	1.02
45	1.50	0.35	0.11	0.28	0.51	1.30
60	2.00	0.25	0.15	0.38	0.66	1.68
80	2.50	0.18	0.22	0.56	0.88	2.24
120	3.00	0.13	2.15	5.50	3.03	7.74
170	3.50	0.09	5.22	13.35	8.25	21.09
200	3.75	0.07	2.02	5.16	10.27	26.25
230	4.00	0.06	1.10	2.81	11.37	29.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.69	3.31	2.75

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	3.11	0.12	0.76	-3.02	14.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: Y68 #5
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
166.31	155.08	0.78	0.23	#200 - 8.09 #230 - 7.46	0.60	2.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.01	0.02	0.01
10	-1.00	2.00	0.22	0.13	0.24	0.14
14	-0.50	1.41	0.45	0.27	0.69	0.41
18	0.00	1.00	1.31	0.79	2.00	1.20
25	0.50	0.71	3.46	2.08	5.46	3.28
35	1.00	0.50	5.86	3.52	11.32	6.80
45	1.50	0.35	7.17	4.31	18.49	11.11
60	2.00	0.25	10.99	6.61	29.48	17.72
80	2.50	0.18	59.71	35.90	89.19	53.62
120	3.00	0.13	50.56	30.40	139.75	84.02
170	3.50	0.09	11.29	6.79	151.04	90.81
200	3.75	0.07	1.83	1.10	152.87	91.91
230	4.00	0.06	1.04	0.63	153.91	92.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.00	2.85	2.45	2.10	1.87	0.74

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.3	0.20	0.73	-1.4	5.97

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y69 #1

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.48	138.97	1.87	0.38	#200 - 12.82 #230 - 11.64	2.90	27.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.68	1.09	1.68	1.09
5/16"	-3.00	8.00	1.65	1.07	3.33	2.16
3.5	-2.50	5.66	2.01	1.30	5.34	3.46
4	-2.25	4.76	0.60	0.39	5.94	3.85
5	-2.00	4.00	1.99	1.29	7.93	5.14
7	-1.50	2.83	4.31	2.79	12.24	7.93
10	-1.00	2.00	5.70	3.69	17.94	11.62
14	-0.50	1.41	8.32	5.39	26.26	17.01
18	0.00	1.00	8.07	5.22	34.33	22.23
25	0.50	0.71	9.46	6.12	43.79	28.35
35	1.00	0.50	14.95	9.68	58.74	38.03
45	1.50	0.35	13.94	9.02	72.68	47.05
60	2.00	0.25	11.60	7.51	84.28	54.56
80	2.50	0.18	19.08	12.35	103.36	66.91
120	3.00	0.13	16.64	10.77	120.00	77.68
170	3.50	0.09	10.77	6.97	130.77	84.65
200	3.75	0.07	3.91	2.53	134.68	87.18
230	4.00	0.06	1.83	1.18	136.51	88.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.45	2.88	1.70	0.23	-0.59	-2.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.1	0.47	1.74	-0.66	2.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y69 #2
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
160.72	138.18	1.01	0.18	#200 - 16.34 #230 - 14.85	1.70	17.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.10	0.68	1.10	0.68
4	-2.25	4.76	0.09	0.06	1.19	0.74
5	-2.00	4.00	0.44	0.27	1.63	1.01
7	-1.50	2.83	2.04	1.27	3.67	2.28
10	-1.00	2.00	2.21	1.38	5.88	3.66
14	-0.50	1.41	2.96	1.84	8.84	5.50
18	0.00	1.00	3.70	2.30	12.54	7.80
25	0.50	0.71	5.45	3.39	17.99	11.19
35	1.00	0.50	9.89	6.15	27.88	17.34
45	1.50	0.35	12.21	7.60	40.09	24.94
60	2.00	0.25	13.09	8.14	53.18	33.08
80	2.50	0.18	21.95	13.66	75.13	46.74
120	3.00	0.13	32.05	19.94	107.18	66.68
170	3.50	0.09	22.81	14.19	129.99	80.87
200	3.75	0.07	4.49	2.79	134.48	83.66
230	4.00	0.06	2.40	1.49	136.88	85.15

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.81	3.29	2.58	1.50	0.89	-0.64

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.98	0.25	1.33	-1.2	4.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y69 #3

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		With Gravel

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
188.73	179.42	0.67	0.07	#200 - 5.70 #230 - 5.36	2.10	31.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	22.40	11.87	22.40	11.87
5/8"	-4.00	16.00	12.45	6.60	34.85	18.47
11/16"	-3.50	11.31	8.70	4.61	43.55	23.08
5/16"	-3.00	8.00	19.75	10.46	63.30	33.54
3.5	-2.50	5.66	10.55	5.59	73.85	39.13
4	-2.25	4.76	5.66	3.00	79.51	42.13
5	-2.00	4.00	4.87	2.58	84.38	44.71
7	-1.50	2.83	11.99	6.35	96.37	51.06
10	-1.00	2.00	10.34	5.48	106.71	56.54
14	-0.50	1.41	10.16	5.38	116.87	61.92
18	0.00	1.00	7.53	3.99	124.40	65.91
25	0.50	0.71	7.54	4.00	131.94	69.91
35	1.00	0.50	7.68	4.07	139.62	73.98
45	1.50	0.35	5.31	2.81	144.93	76.79
60	2.00	0.25	4.13	2.19	149.06	78.98
80	2.50	0.18	8.35	4.42	157.41	83.40
120	3.00	0.13	11.97	6.34	169.38	89.74
170	3.50	0.09	7.02	3.72	176.40	93.46
200	3.75	0.07	1.58	0.84	177.98	94.30
230	4.00	0.06	0.64	0.34	178.62	94.64

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.55	1.18	-1.58	-3.41	-4.09	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-1.33	2.51	2.25	0.94	2.5

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y69 #4
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
216.94	199.98	0.49	0.18	#200 - 8.91 #230 - 8.22	0.30	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.29	0.13	0.29	0.13
10	-1.00	2.00	0.44	0.20	0.73	0.33
14	-0.50	1.41	0.60	0.28	1.33	0.61
18	0.00	1.00	1.08	0.50	2.41	1.11
25	0.50	0.71	2.13	0.98	4.54	2.09
35	1.00	0.50	3.75	1.73	8.29	3.82
45	1.50	0.35	5.21	2.40	13.50	6.22
60	2.00	0.25	12.80	5.90	26.30	12.12
80	2.50	0.18	78.50	36.19	104.80	48.31
120	3.00	0.13	73.56	33.91	178.36	82.22
170	3.50	0.09	15.99	7.37	194.35	89.59
200	3.75	0.07	3.25	1.50	197.60	91.09
230	4.00	0.06	1.50	0.69	199.10	91.78

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.12	2.89	2.52	2.18	2.05	1.25

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.41	0.19	0.66	-1.88	10.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y70 #1
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.77	127.08	2.71	0.30	#200 - 18.28 #230 - 16.71	2.00	17.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.01	0.01	0.01	0.01
4	-2.25	4.76	0.19	0.13	0.20	0.14
5	-2.00	4.00	0.15	0.10	0.35	0.24
7	-1.50	2.83	0.21	0.14	0.56	0.38
10	-1.00	2.00	0.70	0.47	1.26	0.85
14	-0.50	1.41	1.48	0.99	2.74	1.84
18	0.00	1.00	1.80	1.21	4.54	3.05
25	0.50	0.71	2.41	1.62	6.95	4.67
35	1.00	0.50	5.96	4.01	12.91	8.68
45	1.50	0.35	9.06	6.09	21.97	14.77
60	2.00	0.25	11.83	7.95	33.80	22.72
80	2.50	0.18	25.34	17.03	59.14	39.75
120	3.00	0.13	33.00	22.18	92.14	61.93
170	3.50	0.09	23.01	15.47	115.15	77.40
200	3.75	0.07	6.43	4.32	121.58	81.72
230	4.00	0.06	2.34	1.57	123.92	83.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.42	2.73	2.07	1.58	0.54

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.33	0.20	1.01	-1.31	5.24

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y70 #2
Analysis Date: 02-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gravel portion consists of coral, shell, and rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
165.56	158.94	0.36	0.08	#200 - 4.66 #230 - 4.31	3.90	28.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	11.20	6.76	11.20	6.76
11/16"	-3.50	11.31	10.19	6.15	21.39	12.91
5/16"	-3.00	8.00	21.30	12.87	42.69	25.78
3.5	-2.50	5.66	11.49	6.94	54.18	32.72
4	-2.25	4.76	4.91	2.97	59.09	35.69
5	-2.00	4.00	5.02	3.03	64.11	38.72
7	-1.50	2.83	10.92	6.60	75.03	45.32
10	-1.00	2.00	10.62	6.41	85.65	51.73
14	-0.50	1.41	9.21	5.56	94.86	57.29
18	0.00	1.00	7.10	4.29	101.96	61.58
25	0.50	0.71	6.34	3.83	108.30	65.41
35	1.00	0.50	7.24	4.37	115.54	69.78
45	1.50	0.35	6.59	3.98	122.13	73.76
60	2.00	0.25	6.29	3.80	128.42	77.56
80	2.50	0.18	10.00	6.04	138.42	83.60
120	3.00	0.13	12.54	7.57	150.96	91.17
170	3.50	0.09	5.80	3.50	156.76	94.67
200	3.75	0.07	1.11	0.67	157.87	95.34
230	4.00	0.06	0.58	0.35	158.45	95.69

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.62	2.53	1.66	-1.13	-3.03	-3.38	-4.07

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.89	1.85	2.37	0.33	1.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y70 #3

Analysis Date: 02-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
146.52	131.08	0.75	0.13	#200 - 11.77 #230 - 11.18	1.30	4.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.34	0.23	0.34	0.23
4	-2.25	4.76	0.00	0.00	0.34	0.23
5	-2.00	4.00	0.17	0.12	0.51	0.35
7	-1.50	2.83	0.43	0.29	0.94	0.64
10	-1.00	2.00	0.28	0.19	1.22	0.83
14	-0.50	1.41	0.50	0.34	1.72	1.17
18	0.00	1.00	0.70	0.48	2.42	1.65
25	0.50	0.71	1.20	0.82	3.62	2.47
35	1.00	0.50	2.07	1.41	5.69	3.88
45	1.50	0.35	3.16	2.16	8.85	6.04
60	2.00	0.25	6.20	4.23	15.05	10.27
80	2.50	0.18	43.47	29.67	58.52	39.94
120	3.00	0.13	53.43	36.47	111.95	76.41
170	3.50	0.09	14.30	9.76	126.25	86.17
200	3.75	0.07	3.02	2.06	129.27	88.23
230	4.00	0.06	0.87	0.59	130.14	88.82

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.39	2.98	2.64	2.25	2.10	1.26

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.45	0.18	0.76	-2.71	15.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 3/7/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y71 #1

Analysis Date: 03-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
96.01	85.19	0.28	0.02	#200 - 12.27 #230 - 11.57	1.50	10.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.29	1.34	1.29	1.34
4	-2.25	4.76	1.12	1.17	2.41	2.51
5	-2.00	4.00	1.25	1.30	3.66	3.81
7	-1.50	2.83	4.29	4.47	7.95	8.28
10	-1.00	2.00	4.22	4.40	12.17	12.68
14	-0.50	1.41	3.67	3.82	15.84	16.50
18	0.00	1.00	2.82	2.94	18.66	19.44
25	0.50	0.71	2.13	2.22	20.79	21.66
35	1.00	0.50	2.06	2.15	22.85	23.81
45	1.50	0.35	2.43	2.53	25.28	26.34
60	2.00	0.25	5.20	5.42	30.48	31.76
80	2.50	0.18	17.90	18.64	48.38	50.40
120	3.00	0.13	26.99	28.11	75.37	78.51
170	3.50	0.09	7.68	8.00	83.05	86.51
200	3.75	0.07	1.17	1.22	84.22	87.73
230	4.00	0.06	0.67	0.70	84.89	88.43

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.34	2.94	2.49	1.24	-0.57	-1.87

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.6	0.33	1.72	-1.1	2.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y71 #2

Analysis Date: 03-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
43.85	10.80	0.23	0.00	#200 - 77.46 #230 - 75.89	11.50	8.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.13	0.30	0.13	0.30
10	-1.00	2.00	0.49	1.12	0.62	1.42
14	-0.50	1.41	0.34	0.78	0.96	2.20
18	0.00	1.00	0.47	1.07	1.43	3.27
25	0.50	0.71	0.49	1.12	1.92	4.39
35	1.00	0.50	0.61	1.39	2.53	5.78
45	1.50	0.35	0.73	1.66	3.26	7.44
60	2.00	0.25	0.84	1.92	4.10	9.36
80	2.50	0.18	1.57	3.58	5.67	12.94
120	3.00	0.13	2.50	5.70	8.17	18.64
170	3.50	0.09	1.08	2.46	9.25	21.10
200	3.75	0.07	0.63	1.44	9.88	22.54
230	4.00	0.06	0.69	1.57	10.57	24.11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					2.77	0.72

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.95	0.26	1.45	-0.83	2.79

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y72 #1

Analysis Date: 03-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
34.26	14.04	0.14	0.00	#200 - 59.87 #230 - 59.43	3.50	11.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.04	0.12	0.04	0.12
14	-0.50	1.41	0.11	0.32	0.15	0.44
18	0.00	1.00	0.13	0.38	0.28	0.82
25	0.50	0.71	0.22	0.64	0.50	1.46
35	1.00	0.50	0.57	1.66	1.07	3.12
45	1.50	0.35	1.19	3.47	2.26	6.59
60	2.00	0.25	1.75	5.11	4.01	11.70
80	2.50	0.18	3.65	10.65	7.66	22.35
120	3.00	0.13	4.11	12.00	11.77	34.35
170	3.50	0.09	1.65	4.82	13.42	39.17
200	3.75	0.07	0.33	0.96	13.75	40.13
230	4.00	0.06	0.15	0.44	13.90	40.57

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.61	2.20	1.27

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.27	0.21	0.84	-1.06	4.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y72 #2
Analysis Date: 03-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
180.87	174.91	0.38	0.09	#200 - 3.88 #230 - 3.59	1.70	25.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	26.24	14.51	26.24	14.51
5/8"	-4.00	16.00	9.42	5.21	35.66	19.72
11/16"	-3.50	11.31	8.65	4.78	44.31	24.50
5/16"	-3.00	8.00	13.54	7.49	57.85	31.99
3.5	-2.50	5.66	7.20	3.98	65.05	35.97
4	-2.25	4.76	3.16	1.75	68.21	37.72
5	-2.00	4.00	6.48	3.58	74.69	41.30
7	-1.50	2.83	14.51	8.02	89.20	49.32
10	-1.00	2.00	16.98	9.39	106.18	58.71
14	-0.50	1.41	16.86	9.32	123.04	68.03
18	0.00	1.00	12.27	6.78	135.31	74.81
25	0.50	0.71	5.54	3.06	140.85	77.87
35	1.00	0.50	2.87	1.59	143.72	79.46
45	1.50	0.35	2.78	1.54	146.50	81.00
60	2.00	0.25	4.42	2.44	150.92	83.44
80	2.50	0.18	8.62	4.77	159.54	88.21
120	3.00	0.13	9.47	5.24	169.01	93.45
170	3.50	0.09	3.96	2.19	172.97	95.64
200	3.75	0.07	0.86	0.48	173.83	96.12
230	4.00	0.06	0.53	0.29	174.36	96.41

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.35	2.06	0.03	-1.46	-3.47	-4.18	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-1.46	2.75	2.02	1.17	3.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y72 #3

Analysis Date: 03-01-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
122.24	116.74	0.41	0.12	#200 - 5.43 #230 - 4.96	1.20	1.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.02	0.02	0.02	0.02
14	-0.50	1.41	0.02	0.02	0.04	0.04
18	0.00	1.00	0.10	0.08	0.14	0.12
25	0.50	0.71	0.11	0.09	0.25	0.21
35	1.00	0.50	0.33	0.27	0.58	0.48
45	1.50	0.35	3.52	2.88	4.10	3.36
60	2.00	0.25	14.43	11.80	18.53	15.16
80	2.50	0.18	55.82	45.66	74.35	60.82
120	3.00	0.13	29.37	24.03	103.72	84.85
170	3.50	0.09	9.83	8.04	113.55	92.89
200	3.75	0.07	2.05	1.68	115.60	94.57
230	4.00	0.06	0.58	0.47	116.18	95.04

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.98	2.98	2.80	2.38	2.11	2.01	1.57

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.39	0.19	0.5	-0.12	4.88

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y72 #4
Analysis Date: 03-01-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.74	134.31	1.74	0.01	#200 - 14.04 #230 - 11.48	1.00	0.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.05	0.03	0.05	0.03
10	-1.00	2.00	0.06	0.04	0.11	0.07
14	-0.50	1.41	0.02	0.01	0.13	0.08
18	0.00	1.00	0.03	0.02	0.16	0.10
25	0.50	0.71	0.15	0.10	0.31	0.20
35	1.00	0.50	0.70	0.47	1.01	0.67
45	1.50	0.35	1.96	1.31	2.97	1.98
60	2.00	0.25	7.05	4.71	10.02	6.69
80	2.50	0.18	36.12	24.12	46.14	30.81
120	3.00	0.13	54.17	36.18	100.31	66.99
170	3.50	0.09	22.83	15.25	123.14	82.24
200	3.75	0.07	5.57	3.72	128.71	85.96
230	4.00	0.06	3.84	2.56	132.55	88.52

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.62	3.26	2.77	2.38	2.19	1.82

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.68	0.16	0.55	-0.66	6.57

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y73 #1
Analysis Date: 03-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
145.93	143.01	0.23	0.29	#200 - 2.59 #230 - 2.45	1.80	43.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	20.30	13.91	20.30	13.91
5/16"	-3.00	8.00	7.57	5.19	27.87	19.10
3.5	-2.50	5.66	10.68	7.32	38.55	26.42
4	-2.25	4.76	7.03	4.82	45.58	31.24
5	-2.00	4.00	4.25	2.91	49.83	34.15
7	-1.50	2.83	14.59	10.00	64.42	44.15
10	-1.00	2.00	15.65	10.72	80.07	54.87
14	-0.50	1.41	16.30	11.17	96.37	66.04
18	0.00	1.00	10.19	6.98	106.56	73.02
25	0.50	0.71	6.31	4.32	112.87	77.34
35	1.00	0.50	5.78	3.96	118.65	81.30
45	1.50	0.35	5.75	3.94	124.40	85.24
60	2.00	0.25	5.66	3.88	130.06	89.12
80	2.50	0.18	6.24	4.28	136.30	93.40
120	3.00	0.13	4.00	2.74	140.30	96.14
170	3.50	0.09	1.49	1.02	141.79	97.16
200	3.75	0.07	0.37	0.25	142.16	97.41
230	4.00	0.06	0.20	0.14	142.36	97.55

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.79	1.34	0.23	-1.23	-2.60	-3.30	-3.98

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.13	2.19	1.91	0.44	2.37

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: Y73 #2
Analysis Date: 03-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
129.95	120.39	0.51	0.14	#200 - 8.75 #230 - 7.90	1.10	2.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.06	0.05	0.06	0.05
10	-1.00	2.00	0.29	0.22	0.35	0.27
14	-0.50	1.41	0.23	0.18	0.58	0.45
18	0.00	1.00	0.49	0.38	1.07	0.83
25	0.50	0.71	0.77	0.59	1.84	1.42
35	1.00	0.50	1.55	1.19	3.39	2.61
45	1.50	0.35	4.11	3.16	7.50	5.77
60	2.00	0.25	9.23	7.10	16.73	12.87
80	2.50	0.18	41.73	32.11	58.46	44.98
120	3.00	0.13	46.66	35.91	105.12	80.89
170	3.50	0.09	11.31	8.70	116.43	89.59
200	3.75	0.07	2.16	1.66	118.59	91.25
230	4.00	0.06	1.11	0.85	119.70	92.10

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.18	2.92	2.57	2.19	2.05	1.38

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.45	0.18	0.63	-1.6	9.28

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y73 #3

Analysis Date: 03-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
113.13	103.45	0.64	0.00	#200 - 9.91 #230 - 9.11	0.90	1.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.06	0.05	0.06	0.05
10	-1.00	2.00	0.12	0.11	0.18	0.16
14	-0.50	1.41	0.18	0.16	0.36	0.32
18	0.00	1.00	0.38	0.34	0.74	0.66
25	0.50	0.71	0.77	0.68	1.51	1.34
35	1.00	0.50	1.53	1.35	3.04	2.69
45	1.50	0.35	2.45	2.17	5.49	4.86
60	2.00	0.25	5.71	5.05	11.20	9.91
80	2.50	0.18	33.77	29.85	44.97	39.76
120	3.00	0.13	43.49	38.44	88.46	78.20
170	3.50	0.09	10.79	9.54	99.25	87.74
200	3.75	0.07	2.66	2.35	101.91	90.09
230	4.00	0.06	0.90	0.80	102.81	90.89

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.30	2.96	2.63	2.25	2.10	1.51

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.51	0.18	0.62	-1.62	9.34

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y73 #4

Analysis Date: 03-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.03	144.49	0.81	0.14	#200 - 7.36 #230 - 6.84	0.80	1.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.09	0.06	0.09	0.06
14	-0.50	1.41	0.26	0.17	0.35	0.23
18	0.00	1.00	0.55	0.36	0.90	0.59
25	0.50	0.71	1.32	0.86	2.22	1.45
35	1.00	0.50	2.52	1.64	4.74	3.09
45	1.50	0.35	3.67	2.38	8.41	5.47
60	2.00	0.25	8.30	5.39	16.71	10.86
80	2.50	0.18	58.67	38.09	75.38	48.95
120	3.00	0.13	53.50	34.73	128.88	83.68
170	3.50	0.09	11.36	7.38	140.24	91.06
200	3.75	0.07	2.43	1.58	142.67	92.64
230	4.00	0.06	0.80	0.52	143.47	93.16

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.02	2.88	2.52	2.19	2.07	1.40

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.43	0.19	0.59	-1.47	8.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y74 #1

Analysis Date: 03-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.12	165.85	0.24	0.08	#200 - 1.68 #230 - 1.57	1.70	48.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	3.76	2.24	3.76	2.24
11/16"	-3.50	11.31	19.03	11.32	22.79	13.56
5/16"	-3.00	8.00	24.69	14.69	47.48	28.25
3.5	-2.50	5.66	14.68	8.73	62.16	36.98
4	-2.25	4.76	5.92	3.52	68.08	40.50
5	-2.00	4.00	8.72	5.19	76.80	45.69
7	-1.50	2.83	16.81	10.00	93.61	55.69
10	-1.00	2.00	15.64	9.30	109.25	64.99
14	-0.50	1.41	13.36	7.95	122.61	72.94
18	0.00	1.00	9.92	5.90	132.53	78.84
25	0.50	0.71	8.40	5.00	140.93	83.84
35	1.00	0.50	6.70	3.99	147.63	87.83
45	1.50	0.35	3.72	2.21	151.35	90.04
60	2.00	0.25	2.62	1.56	153.97	91.60
80	2.50	0.18	4.06	2.41	158.03	94.01
120	3.00	0.13	5.30	3.15	163.33	97.16
170	3.50	0.09	1.65	0.98	164.98	98.14
200	3.75	0.07	0.31	0.18	165.29	98.32
230	4.00	0.06	0.18	0.11	165.47	98.43

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.66	0.52	-0.33	-1.78	-3.11	-3.42	-3.88

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-1.54	2.91	1.86	0.74	2.81

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y74 #2

Analysis Date: 03-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.34 #230 - 0.21	Organics (%):	Carbonates (%):	Shells (%):
171.43	171.43	0.36	0.00		0.30	4.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.29	0.17	0.29	0.17
7	-1.50	2.83	0.21	0.12	0.50	0.29
10	-1.00	2.00	0.37	0.22	0.87	0.51
14	-0.50	1.41	0.98	0.57	1.85	1.08
18	0.00	1.00	1.75	1.02	3.60	2.10
25	0.50	0.71	3.29	1.92	6.89	4.02
35	1.00	0.50	5.91	3.45	12.80	7.47
45	1.50	0.35	10.08	5.88	22.88	13.35
60	2.00	0.25	25.88	15.10	48.76	28.45
80	2.50	0.18	71.71	41.83	120.47	70.28
120	3.00	0.13	42.27	24.66	162.74	94.94
170	3.50	0.09	7.51	4.38	170.25	99.32
200	3.75	0.07	0.59	0.34	170.84	99.66
230	4.00	0.06	0.23	0.13	171.07	99.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.01	2.78	2.60	2.26	1.89	1.59	0.64

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.14	0.23	0.74	-1.72	7.97

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y74 #3
Analysis Date: 03-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.02	140.02	0.44	0.00	#200 - 0.42 #230 - 0.32	0.40	6.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.85	0.61	0.85	0.61
3.5	-2.50	5.66	0.80	0.57	1.65	1.18
4	-2.25	4.76	0.68	0.49	2.33	1.67
5	-2.00	4.00	0.11	0.08	2.44	1.75
7	-1.50	2.83	0.34	0.24	2.78	1.99
10	-1.00	2.00	0.32	0.23	3.10	2.22
14	-0.50	1.41	0.74	0.53	3.84	2.75
18	0.00	1.00	1.12	0.80	4.96	3.55
25	0.50	0.71	2.03	1.45	6.99	5.00
35	1.00	0.50	3.63	2.59	10.62	7.59
45	1.50	0.35	6.96	4.97	17.58	12.56
60	2.00	0.25	16.85	12.03	34.43	24.59
80	2.50	0.18	71.23	50.87	105.66	75.46
120	3.00	0.13	29.76	21.25	135.42	96.71
170	3.50	0.09	3.67	2.62	139.09	99.33
200	3.75	0.07	0.35	0.25	139.44	99.58
230	4.00	0.06	0.14	0.10	139.58	99.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.96	2.70	2.50	2.25	2.00	1.64	0.50

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.07	0.24	0.93	-3.16	15.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y74 #4

Analysis Date: 03-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.60	141.60	0.97	0.00	#200 - 0.88 #230 - 0.70	0.60	14.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.57	0.40	0.57	0.40
3.5	-2.50	5.66	0.78	0.55	1.35	0.95
4	-2.25	4.76	0.39	0.28	1.74	1.23
5	-2.00	4.00	0.92	0.65	2.66	1.88
7	-1.50	2.83	2.73	1.93	5.39	3.81
10	-1.00	2.00	2.32	1.64	7.71	5.45
14	-0.50	1.41	3.47	2.45	11.18	7.90
18	0.00	1.00	4.14	2.92	15.32	10.82
25	0.50	0.71	5.20	3.67	20.52	14.49
35	1.00	0.50	7.78	5.49	28.30	19.98
45	1.50	0.35	16.78	11.85	45.08	31.83
60	2.00	0.25	26.47	18.69	71.55	50.52
80	2.50	0.18	45.02	31.79	116.57	82.31
120	3.00	0.13	20.47	14.46	137.04	96.77
170	3.50	0.09	2.87	2.03	139.91	98.80
200	3.75	0.07	0.46	0.32	140.37	99.12
230	4.00	0.06	0.26	0.18	140.63	99.30

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.94	2.56	2.39	1.99	1.21	0.64	-1.14

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.61	0.33	1.21	-1.57	5.47

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y75 #1

Analysis Date: 03-05-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.35	152.35	1.01	0.07	#200 - 0.85 #230 - 0.74	0.40	1.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.11	0.07	0.11	0.07
14	-0.50	1.41	0.23	0.15	0.34	0.22
18	0.00	1.00	0.63	0.41	0.97	0.63
25	0.50	0.71	1.31	0.86	2.28	1.49
35	1.00	0.50	4.90	3.22	7.18	4.71
45	1.50	0.35	20.56	13.50	27.74	18.21
60	2.00	0.25	44.98	29.52	72.72	47.73
80	2.50	0.18	61.00	40.04	133.72	87.77
120	3.00	0.13	15.82	10.38	149.54	98.15
170	3.50	0.09	1.21	0.79	150.75	98.94
200	3.75	0.07	0.32	0.21	151.07	99.15
230	4.00	0.06	0.16	0.11	151.23	99.26

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.85	2.45	2.34	2.03	1.62	1.42	1.01

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.95	0.26	0.56	-0.81	5.28

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y75 #2
Analysis Date: 03-05-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.72	142.72	0.54	0.02	#200 - 0.47 #230 - 0.38	0.50	2.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.22	0.15	0.22	0.15
10	-1.00	2.00	0.15	0.11	0.37	0.26
14	-0.50	1.41	0.52	0.36	0.89	0.62
18	0.00	1.00	1.00	0.70	1.89	1.32
25	0.50	0.71	2.32	1.63	4.21	2.95
35	1.00	0.50	7.83	5.49	12.04	8.44
45	1.50	0.35	22.13	15.51	34.17	23.95
60	2.00	0.25	55.96	39.21	90.13	63.16
80	2.50	0.18	40.89	28.65	131.02	91.81
120	3.00	0.13	10.07	7.06	141.09	98.87
170	3.50	0.09	0.75	0.53	141.84	99.40
200	3.75	0.07	0.18	0.13	142.02	99.53
230	4.00	0.06	0.13	0.09	142.15	99.62

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.73	2.36	2.21	1.83	1.51	1.24	0.69

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.79	0.29	0.61	-1.05	6.53

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y75 #3
Analysis Date: 03-05-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
111.49	106.27	0.65	0.04	#200 - 6.21 #230 - 5.31	0.90	2.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.05	0.04	0.05	0.04
18	0.00	1.00	0.31	0.28	0.36	0.32
25	0.50	0.71	0.69	0.62	1.05	0.94
35	1.00	0.50	1.61	1.44	2.66	2.38
45	1.50	0.35	2.81	2.52	5.47	4.90
60	2.00	0.25	4.93	4.42	10.40	9.32
80	2.50	0.18	33.53	30.07	43.93	39.39
120	3.00	0.13	46.15	41.39	90.08	80.78
170	3.50	0.09	12.43	11.15	102.51	91.93
200	3.75	0.07	2.07	1.86	104.58	93.79
230	4.00	0.06	1.00	0.90	105.58	94.69

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.14	2.93	2.63	2.26	2.11	1.51

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.53	0.17	0.57	-1.24	6.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y76 #1

Analysis Date: 03-05-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.21	147.97	0.17	0.30	#200 - 4.62 #230 - 4.44	1.30	10.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	4.75	3.08	4.75	3.08
4	-2.25	4.76	1.84	1.19	6.59	4.27
5	-2.00	4.00	4.78	3.10	11.37	7.37
7	-1.50	2.83	13.20	8.56	24.57	15.93
10	-1.00	2.00	14.11	9.15	38.68	25.08
14	-0.50	1.41	9.34	6.06	48.02	31.14
18	0.00	1.00	4.76	3.09	52.78	34.23
25	0.50	0.71	3.42	2.22	56.20	36.45
35	1.00	0.50	2.92	1.89	59.12	38.34
45	1.50	0.35	3.33	2.16	62.45	40.50
60	2.00	0.25	7.11	4.61	69.56	45.11
80	2.50	0.18	32.22	20.89	101.78	66.00
120	3.00	0.13	34.63	22.46	136.41	88.46
170	3.50	0.09	9.60	6.23	146.01	94.69
200	3.75	0.07	1.06	0.69	147.07	95.38
230	4.00	0.06	0.27	0.18	147.34	95.56

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.61	2.90	2.70	2.12	-1.00	-1.50	-2.19

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1	0.50	1.95	-0.52	1.66

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y76 #2
Analysis Date: 03-05-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.48	118.23	0.63	0.02	#200 - 10.79 #230 - 9.90	1.10	2.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.35	0.27	0.35	0.27
5	-2.00	4.00	0.00	0.00	0.35	0.27
7	-1.50	2.83	0.00	0.00	0.35	0.27
10	-1.00	2.00	0.09	0.07	0.44	0.34
14	-0.50	1.41	0.20	0.15	0.64	0.49
18	0.00	1.00	0.38	0.29	1.02	0.78
25	0.50	0.71	0.83	0.64	1.85	1.42
35	1.00	0.50	1.51	1.16	3.36	2.58
45	1.50	0.35	2.24	1.72	5.60	4.30
60	2.00	0.25	4.91	3.76	10.51	8.06
80	2.50	0.18	36.42	27.91	46.93	35.97
120	3.00	0.13	54.96	42.12	101.89	78.09
170	3.50	0.09	12.48	9.56	114.37	87.65
200	3.75	0.07	2.04	1.56	116.41	89.21
230	4.00	0.06	1.16	0.89	117.57	90.10

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.31	2.96	2.67	2.30	2.14	1.59

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.53	0.17	0.63	-2.56	17.06

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y76 #3
Analysis Date: 03-05-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
102.10	94.74	0.59	0.03	#200 - 8.34 #230 - 7.81	0.70	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.05	0.05	0.05	0.05
14	-0.50	1.41	0.19	0.19	0.24	0.24
18	0.00	1.00	0.71	0.70	0.95	0.94
25	0.50	0.71	1.28	1.25	2.23	2.19
35	1.00	0.50	2.37	2.32	4.60	4.51
45	1.50	0.35	3.47	3.40	8.07	7.91
60	2.00	0.25	4.85	4.75	12.92	12.66
80	2.50	0.18	32.70	32.03	45.62	44.69
120	3.00	0.13	36.41	35.66	82.03	80.35
170	3.50	0.09	9.97	9.76	92.00	90.11
200	3.75	0.07	1.58	1.55	93.58	91.66
230	4.00	0.06	0.54	0.53	94.12	92.19

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.19	2.92	2.57	2.19	2.05	1.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.43	0.19	0.67	-1.5	6.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y76 #4

Analysis Date: 03-05-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
174.10	164.16	0.23	0.35	#200 - 6.67 #230 - 6.19	1.00	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.11	0.06	0.11	0.06
7	-1.50	2.83	0.00	0.00	0.11	0.06
10	-1.00	2.00	0.12	0.07	0.23	0.13
14	-0.50	1.41	0.57	0.33	0.80	0.46
18	0.00	1.00	1.64	0.94	2.44	1.40
25	0.50	0.71	3.61	2.07	6.05	3.47
35	1.00	0.50	6.52	3.74	12.57	7.21
45	1.50	0.35	10.11	5.81	22.68	13.02
60	2.00	0.25	13.19	7.58	35.87	20.60
80	2.50	0.18	66.23	38.04	102.10	58.64
120	3.00	0.13	46.22	26.55	148.32	85.19
170	3.50	0.09	12.51	7.19	160.83	92.38
200	3.75	0.07	1.66	0.95	162.49	93.33
230	4.00	0.06	0.83	0.48	163.32	93.81

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.98	2.81	2.39	2.06	1.70	0.70

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.24	0.21	0.75	-1.33	5.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y77 #1

Analysis Date: 03-05-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
26.71	1.75	0.08	0.00	#200 - 94.33 #230 - 93.77	15.50	7.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.04	0.15	0.04	0.15
18	0.00	1.00	0.07	0.26	0.11	0.41
25	0.50	0.71	0.10	0.37	0.21	0.78
35	1.00	0.50	0.11	0.41	0.32	1.19
45	1.50	0.35	0.09	0.34	0.41	1.53
60	2.00	0.25	0.14	0.52	0.55	2.05
80	2.50	0.18	0.19	0.71	0.74	2.76
120	3.00	0.13	0.30	1.12	1.04	3.88
170	3.50	0.09	0.30	1.12	1.34	5.00
200	3.75	0.07	0.18	0.67	1.52	5.67
230	4.00	0.06	0.15	0.56	1.67	6.23

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.50

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.32	0.20	1.27	-0.76	2.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y77 #2

Analysis Date: 03-05-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
120.23	113.80	1.32	0.00	#200 - 8.63 #230 - 6.47	0.50	0.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.00	0.00	0.00	0.00
18	0.00	1.00	0.05	0.04	0.05	0.04
25	0.50	0.71	0.11	0.09	0.16	0.13
35	1.00	0.50	0.04	0.03	0.20	0.16
45	1.50	0.35	0.16	0.13	0.36	0.29
60	2.00	0.25	2.00	1.66	2.36	1.95
80	2.50	0.18	31.97	26.59	34.33	28.54
120	3.00	0.13	53.53	44.52	87.86	73.06
170	3.50	0.09	18.23	15.16	106.09	88.22
200	3.75	0.07	3.79	3.15	109.88	91.37
230	4.00	0.06	2.60	2.16	112.48	93.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.36	3.06	2.74	2.43	2.26	2.06

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.72	0.15	0.45	0.06	4.81

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y77 #3

Analysis Date: 03-05-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
146.91	146.91	1.28	0.07	#200 - 1.28 #230 - 0.94	0.20	0.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.05	0.03	0.05	0.03
14	-0.50	1.41	0.08	0.05	0.13	0.08
18	0.00	1.00	0.07	0.05	0.20	0.13
25	0.50	0.71	0.23	0.16	0.43	0.29
35	1.00	0.50	2.32	1.58	2.75	1.87
45	1.50	0.35	13.98	9.52	16.73	11.39
60	2.00	0.25	35.63	24.25	52.36	35.64
80	2.50	0.18	51.98	35.38	104.34	71.02
120	3.00	0.13	31.83	21.67	136.17	92.69
170	3.50	0.09	7.37	5.02	143.54	97.71
200	3.75	0.07	1.48	1.01	145.02	98.72
230	4.00	0.06	0.50	0.34	145.52	99.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.23	2.80	2.59	2.20	1.78	1.60	1.16

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.18	0.22	0.58	-0.2	3.76

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y77 #4

Analysis Date: 03-05-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
127.18	119.53	0.42	0.00	#200 - 7.22 #230 - 6.36	0.40	1.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.10	0.08	0.10	0.08
14	-0.50	1.41	0.13	0.10	0.23	0.18
18	0.00	1.00	0.61	0.48	0.84	0.66
25	0.50	0.71	1.29	1.01	2.13	1.67
35	1.00	0.50	2.43	1.91	4.56	3.58
45	1.50	0.35	3.97	3.12	8.53	6.70
60	2.00	0.25	7.67	6.03	16.20	12.73
80	2.50	0.18	45.70	35.93	61.90	48.66
120	3.00	0.13	43.52	34.22	105.42	82.88
170	3.50	0.09	10.56	8.30	115.98	91.18
200	3.75	0.07	2.03	1.60	118.01	92.78
230	4.00	0.06	1.10	0.86	119.11	93.64

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.07	2.88	2.52	2.17	2.05	1.23

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.42	0.19	0.63	-1.34	7.12

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y78 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		ROCKS

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
167.75	166.80	0.06	0.26	#200 - 0.86 #230 - 0.86	6.10	20.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	33.04	19.70	33.04	19.70
11/16"	-3.50	11.31	5.47	3.26	38.51	22.96
5/16"	-3.00	8.00	14.36	8.56	52.87	31.52
3.5	-2.50	5.66	10.88	6.49	63.75	38.01
4	-2.25	4.76	7.49	4.46	71.24	42.47
5	-2.00	4.00	8.89	5.30	80.13	47.77
7	-1.50	2.83	22.35	13.32	102.48	61.09
10	-1.00	2.00	17.86	10.65	120.34	71.74
14	-0.50	1.41	11.60	6.92	131.94	78.66
18	0.00	1.00	6.45	3.85	138.39	82.51
25	0.50	0.71	6.02	3.59	144.41	86.10
35	1.00	0.50	5.10	3.04	149.51	89.14
45	1.50	0.35	4.52	2.69	154.03	91.83
60	2.00	0.25	4.57	2.72	158.60	94.55
80	2.50	0.18	4.47	2.66	163.07	97.21
120	3.00	0.13	2.58	1.54	165.65	98.75
170	3.50	0.09	0.52	0.31	166.17	99.06
200	3.75	0.07	0.13	0.08	166.30	99.14
230	4.00	0.06	0.00	0.00	166.30	99.14

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.08	0.21	-0.76	-1.92	-3.38	-4.05	-4.19

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-1.83	3.56	1.86	0.62	2.7

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y78 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.52	141.52	2.69	0.00	#200 - 2.58 #230 - 1.90	1.10	2.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.05	0.04	0.05	0.04
7	-1.50	2.83	0.23	0.16	0.28	0.20
10	-1.00	2.00	0.42	0.30	0.70	0.50
14	-0.50	1.41	0.71	0.50	1.41	1.00
18	0.00	1.00	1.25	0.88	2.66	1.88
25	0.50	0.71	2.13	1.51	4.79	3.39
35	1.00	0.50	2.24	1.58	7.03	4.97
45	1.50	0.35	3.53	2.49	10.56	7.46
60	2.00	0.25	8.62	6.09	19.18	13.55
80	2.50	0.18	44.64	31.54	63.82	45.09
120	3.00	0.13	58.00	40.98	121.82	86.07
170	3.50	0.09	13.75	9.72	135.57	95.79
200	3.75	0.07	2.30	1.63	137.87	97.42
230	4.00	0.06	0.96	0.68	138.83	98.10

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.46	2.97	2.86	2.56	2.18	2.04	1.01

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.42	0.19	0.73	-2.09	9.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y78 #3
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.01	132.47	0.60	0.00	#200 - 7.88 #230 - 7.15	0.80	1.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.02	0.01	0.02	0.01
14	-0.50	1.41	0.07	0.05	0.09	0.06
18	0.00	1.00	0.29	0.20	0.38	0.26
25	0.50	0.71	0.52	0.37	0.90	0.63
35	1.00	0.50	1.15	0.81	2.05	1.44
45	1.50	0.35	2.10	1.48	4.15	2.92
60	2.00	0.25	4.44	3.13	8.59	6.05
80	2.50	0.18	35.58	25.05	44.17	31.10
120	3.00	0.13	63.57	44.76	107.74	75.86
170	3.50	0.09	19.10	13.45	126.84	89.31
200	3.75	0.07	3.99	2.81	130.83	92.12
230	4.00	0.06	1.04	0.73	131.87	92.85

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.30	2.99	2.71	2.38	2.20	1.83

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.63	0.16	0.53	-1.29	8.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y79 #1
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
127.93	100.65	0.16	0.25	#200 - 22.09 #230 - 21.70	0.80	9.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	4.31	3.37	4.31	3.37
5/16"	-3.00	8.00	0.00	0.00	4.31	3.37
3.5	-2.50	5.66	0.26	0.20	4.57	3.57
4	-2.25	4.76	0.28	0.22	4.85	3.79
5	-2.00	4.00	0.69	0.54	5.54	4.33
7	-1.50	2.83	1.48	1.16	7.02	5.49
10	-1.00	2.00	2.60	2.03	9.62	7.52
14	-0.50	1.41	3.35	2.62	12.97	10.14
18	0.00	1.00	3.25	2.54	16.22	12.68
25	0.50	0.71	3.38	2.64	19.60	15.32
35	1.00	0.50	5.52	4.31	25.12	19.63
45	1.50	0.35	9.81	7.67	34.93	27.30
60	2.00	0.25	22.92	17.92	57.85	45.22
80	2.50	0.18	22.82	17.84	80.67	63.06
120	3.00	0.13	14.21	11.11	94.88	74.17
170	3.50	0.09	3.89	3.04	98.77	77.21
200	3.75	0.07	0.90	0.70	99.67	77.91
230	4.00	0.06	0.50	0.39	100.17	78.30

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.14	2.13	1.35	0.58	-1.71

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.37	0.39	1.62	-1.63	5.44

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y79 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
41.10	8.64	0.08	0.00	#200 - 79.41 #230 - 79.19	4.90	6.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.05	0.02	0.05
10	-1.00	2.00	0.08	0.19	0.10	0.24
14	-0.50	1.41	0.14	0.34	0.24	0.58
18	0.00	1.00	0.17	0.41	0.41	0.99
25	0.50	0.71	0.20	0.49	0.61	1.48
35	1.00	0.50	0.28	0.68	0.89	2.16
45	1.50	0.35	0.55	1.34	1.44	3.50
60	2.00	0.25	1.53	3.72	2.97	7.22
80	2.50	0.18	3.29	8.00	6.26	15.22
120	3.00	0.13	1.60	3.89	7.86	19.11
170	3.50	0.09	0.49	1.19	8.35	20.30
200	3.75	0.07	0.12	0.29	8.47	20.59
230	4.00	0.06	0.09	0.22	8.56	20.81

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					2.60	1.70

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.05	0.24	0.9	-1.38	5.82

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y79 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.85	147.99	0.34	0.00	#200 - 6.46 #230 - 5.86	1.00	2.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.03	0.02	0.03	0.02
14	-0.50	1.41	0.19	0.12	0.22	0.14
18	0.00	1.00	0.29	0.18	0.51	0.32
25	0.50	0.71	0.45	0.29	0.96	0.61
35	1.00	0.50	1.02	0.65	1.98	1.26
45	1.50	0.35	2.07	1.32	4.05	2.58
60	2.00	0.25	7.21	4.60	11.26	7.18
80	2.50	0.18	50.66	32.30	61.92	39.48
120	3.00	0.13	63.58	40.54	125.50	80.02
170	3.50	0.09	18.53	11.81	144.03	91.83
200	3.75	0.07	2.68	1.71	146.71	93.54
230	4.00	0.06	0.94	0.60	147.65	94.14

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.17	2.94	2.63	2.28	2.14	1.76

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.56	0.17	0.52	-1.22	8.65

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y80 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
133.39	127.84	0.07	0.02	#200 - 4.39 #230 - 4.24			

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.01	0.01	0.01
14	-0.50	1.41	0.03	0.02	0.04	0.03
18	0.00	1.00	0.15	0.11	0.19	0.14
25	0.50	0.71	0.17	0.13	0.36	0.27
35	1.00	0.50	0.56	0.42	0.92	0.69
45	1.50	0.35	1.86	1.39	2.78	2.08
60	2.00	0.25	9.14	6.85	11.92	8.93
80	2.50	0.18	60.47	45.33	72.39	54.26
120	3.00	0.13	46.88	35.15	119.27	89.41
170	3.50	0.09	7.41	5.56	126.68	94.97
200	3.75	0.07	0.86	0.64	127.54	95.61
230	4.00	0.06	0.20	0.15	127.74	95.76

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.51	2.92	2.80	2.45	2.18	2.08	1.71

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.44	0.18	0.43	-0.77	7.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y80 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.78	158.33	0.03	0.02	#200 - 4.19 #230 - 3.96	0.50	2.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.07	0.04	0.07	0.04
18	0.00	1.00	0.40	0.24	0.47	0.28
25	0.50	0.71	1.37	0.83	1.84	1.11
35	1.00	0.50	4.76	2.89	6.60	4.00
45	1.50	0.35	8.32	5.05	14.92	9.05
60	2.00	0.25	14.39	8.73	29.31	17.78
80	2.50	0.18	76.87	46.65	106.18	64.43
120	3.00	0.13	43.23	26.23	149.41	90.66
170	3.50	0.09	7.69	4.67	157.10	95.33
200	3.75	0.07	0.79	0.48	157.89	95.81
230	4.00	0.06	0.38	0.23	158.27	96.04

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.46	2.87	2.70	2.35	2.08	1.90	1.10

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.28	0.21	0.57	-1.1	5.58

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: Y80 #3
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
113.45	103.43	0.16	0.00	#200 - 9.35 #230 - 8.95	1.40	3.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.05	0.04	0.05	0.04
18	0.00	1.00	0.18	0.16	0.23	0.20
25	0.50	0.71	0.33	0.29	0.56	0.49
35	1.00	0.50	0.88	0.78	1.44	1.27
45	1.50	0.35	1.98	1.75	3.42	3.02
60	2.00	0.25	4.33	3.82	7.75	6.84
80	2.50	0.18	35.62	31.40	43.37	38.24
120	3.00	0.13	47.59	41.95	90.96	80.19
170	3.50	0.09	10.31	9.09	101.27	89.28
200	3.75	0.07	1.55	1.37	102.82	90.65
230	4.00	0.06	0.45	0.40	103.27	91.05

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.21	2.94	2.64	2.29	2.15	1.76

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.54	0.17	0.5	-1.19	7.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y81 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.40	116.43	0.15	0.08	#200 - 11.77 #230 - 10.91	1.50	3.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.25	0.19	0.25	0.19
5	-2.00	4.00	0.23	0.18	0.48	0.37
7	-1.50	2.83	0.11	0.08	0.59	0.45
10	-1.00	2.00	0.34	0.26	0.93	0.71
14	-0.50	1.41	0.55	0.42	1.48	1.13
18	0.00	1.00	0.73	0.56	2.21	1.69
25	0.50	0.71	1.03	0.79	3.24	2.48
35	1.00	0.50	1.69	1.30	4.93	3.78
45	1.50	0.35	4.12	3.16	9.05	6.94
60	2.00	0.25	9.70	7.44	18.75	14.38
80	2.50	0.18	41.07	31.50	59.82	45.88
120	3.00	0.13	41.09	31.51	100.91	77.39
170	3.50	0.09	11.61	8.90	112.52	86.29
200	3.75	0.07	2.53	1.94	115.05	88.23
230	4.00	0.06	1.12	0.86	116.17	89.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.37	2.96	2.57	2.17	2.03	1.19

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.39	0.19	0.76	-2.21	12.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y81 #2
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
112.81	104.66	0.43	0.11	#200 - 8.34 #230 - 7.70	1.00	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.01	0.01	0.01
14	-0.50	1.41	0.04	0.04	0.05	0.05
18	0.00	1.00	0.27	0.24	0.32	0.29
25	0.50	0.71	0.65	0.58	0.97	0.87
35	1.00	0.50	1.50	1.33	2.47	2.20
45	1.50	0.35	2.56	2.27	5.03	4.47
60	2.00	0.25	5.55	4.92	10.58	9.39
80	2.50	0.18	35.86	31.79	46.44	41.18
120	3.00	0.13	43.40	38.47	89.84	79.65
170	3.50	0.09	11.04	9.79	100.88	89.44
200	3.75	0.07	2.51	2.22	103.39	91.66
230	4.00	0.06	0.72	0.64	104.11	92.30

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.22	2.94	2.61	2.25	2.10	1.55

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.52	0.17	0.57	-1.15	6.79

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y81 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.27	129.18	0.31	0.07	#200 - 9.50 #230 - 8.86	1.10	2.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.13	0.09	0.13	0.09
14	-0.50	1.41	0.37	0.26	0.50	0.35
18	0.00	1.00	0.61	0.43	1.11	0.78
25	0.50	0.71	0.99	0.70	2.10	1.48
35	1.00	0.50	2.17	1.54	4.27	3.02
45	1.50	0.35	3.47	2.46	7.74	5.48
60	2.00	0.25	6.54	4.63	14.28	10.11
80	2.50	0.18	49.35	34.93	63.63	45.04
120	3.00	0.13	50.11	35.47	113.74	80.51
170	3.50	0.09	11.70	8.28	125.44	88.79
200	3.75	0.07	2.42	1.71	127.86	90.50
230	4.00	0.06	0.91	0.64	128.77	91.14

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.21	2.92	2.57	2.21	2.08	1.40

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.46	0.18	0.61	-1.6	8.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y81 #4

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
124.71	109.50	0.10	0.13	#200 - 12.99 #230 - 12.42	1.20	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.03	0.02	0.03	0.02
14	-0.50	1.41	0.40	0.32	0.43	0.34
18	0.00	1.00	1.01	0.81	1.44	1.15
25	0.50	0.71	1.91	1.53	3.35	2.68
35	1.00	0.50	3.34	2.68	6.69	5.36
45	1.50	0.35	5.73	4.59	12.42	9.95
60	2.00	0.25	8.46	6.78	20.88	16.73
80	2.50	0.18	44.71	35.85	65.59	52.58
120	3.00	0.13	33.09	26.53	98.68	79.11
170	3.50	0.09	8.59	6.89	107.27	86.00
200	3.75	0.07	1.26	1.01	108.53	87.01
230	4.00	0.06	0.71	0.57	109.24	87.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.35	2.92	2.46	2.12	1.95	0.93

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.3	0.20	0.7	-1.32	5.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y82 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
121.08	89.92	0.32	-0.02	#200 - 26.81 #230 - 25.98	2.30	1.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.10	0.08	0.10	0.08
10	-1.00	2.00	0.19	0.16	0.29	0.24
14	-0.50	1.41	0.57	0.47	0.86	0.71
18	0.00	1.00	0.79	0.65	1.65	1.36
25	0.50	0.71	1.05	0.87	2.70	2.23
35	1.00	0.50	1.88	1.55	4.58	3.78
45	1.50	0.35	2.90	2.40	7.48	6.18
60	2.00	0.25	4.79	3.96	12.27	10.14
80	2.50	0.18	35.36	29.20	47.63	39.34
120	3.00	0.13	30.62	25.29	78.25	64.63
170	3.50	0.09	8.01	6.62	86.26	71.25
200	3.75	0.07	2.35	1.94	88.61	73.19
230	4.00	0.06	1.01	0.83	89.62	74.02

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			2.71	2.25	2.10	1.25

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.4	0.19	0.73	-1.73	8.59

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y82 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.02	107.63	0.19	0.00	#200 - 23.20 #230 - 22.16	3.10	1.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.12	0.09	0.12	0.09
14	-0.50	1.41	0.42	0.30	0.54	0.39
18	0.00	1.00	0.53	0.38	1.07	0.77
25	0.50	0.71	0.51	0.37	1.58	1.14
35	1.00	0.50	0.84	0.61	2.42	1.75
45	1.50	0.35	1.72	1.25	4.14	3.00
60	2.00	0.25	5.32	3.85	9.46	6.85
80	2.50	0.18	53.05	38.44	62.51	45.29
120	3.00	0.13	32.28	23.39	94.79	68.68
170	3.50	0.09	9.21	6.67	104.00	75.35
200	3.75	0.07	2.00	1.45	106.00	76.80
230	4.00	0.06	1.44	1.04	107.44	77.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.47	2.60	2.24	2.12	1.76

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.44	0.18	0.58	-1.48	10.67

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y83 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
51.09	6.35	0.04	0.00	#200 - 87.76 #230 - 87.66	12.60	7.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.15	0.29	0.15	0.29
10	-1.00	2.00	0.14	0.27	0.29	0.56
14	-0.50	1.41	0.16	0.31	0.45	0.87
18	0.00	1.00	0.12	0.23	0.57	1.10
25	0.50	0.71	0.09	0.18	0.66	1.28
35	1.00	0.50	0.20	0.39	0.86	1.67
45	1.50	0.35	0.34	0.67	1.20	2.34
60	2.00	0.25	0.62	1.21	1.82	3.55
80	2.50	0.18	1.72	3.37	3.54	6.92
120	3.00	0.13	1.96	3.84	5.50	10.76
170	3.50	0.09	0.64	1.25	6.14	12.01
200	3.75	0.07	0.12	0.23	6.26	12.24
230	4.00	0.06	0.05	0.10	6.31	12.34

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						2.22

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.07	0.24	1.19	-1.64	5.36

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y83 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.10	128.62	0.47	0.08	#200 - 5.59 #230 - 4.52	0.80	1.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.01	0.01	0.01	0.01
18	0.00	1.00	0.02	0.01	0.03	0.02
25	0.50	0.71	0.09	0.07	0.12	0.09
35	1.00	0.50	0.42	0.31	0.54	0.40
45	1.50	0.35	3.88	2.89	4.42	3.29
60	2.00	0.25	24.63	18.37	29.05	21.66
80	2.50	0.18	50.31	37.52	79.36	59.18
120	3.00	0.13	34.95	26.06	114.31	85.24
170	3.50	0.09	10.13	7.55	124.44	92.79
200	3.75	0.07	2.17	1.62	126.61	94.41
230	4.00	0.06	1.43	1.07	128.04	95.48

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.89	2.98	2.80	2.38	2.04	1.85	1.55

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.37	0.19	0.53	0.15	3.47

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y83 #3
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.75 #230 - 0.71	Organics (%):	Carbonates (%):	Shells (%):
153.98	153.98	0.26	0.53		0.30	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.02	1.31	2.02	1.31
3.5	-2.50	5.66	3.81	2.47	5.83	3.78
4	-2.25	4.76	2.59	1.68	8.42	5.46
5	-2.00	4.00	4.53	2.94	12.95	8.40
7	-1.50	2.83	6.49	4.21	19.44	12.61
10	-1.00	2.00	5.45	3.54	24.89	16.15
14	-0.50	1.41	9.16	5.95	34.05	22.10
18	0.00	1.00	12.01	7.80	46.06	29.90
25	0.50	0.71	20.47	13.29	66.53	43.19
35	1.00	0.50	29.49	19.15	96.02	62.34
45	1.50	0.35	26.65	17.31	122.67	79.65
60	2.00	0.25	16.77	10.89	139.44	90.54
80	2.50	0.18	9.96	6.47	149.40	97.01
120	3.00	0.13	2.89	1.88	152.29	98.89
170	3.50	0.09	0.43	0.28	152.72	99.17
200	3.75	0.07	0.12	0.08	152.84	99.25
230	4.00	0.06	0.06	0.04	152.90	99.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.34	1.70	1.37	0.68	-0.31	-1.02	-2.32

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.4	0.76	1.37	-0.71	3

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y83 #4
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.67	122.27	0.36	0.00	#200 - 7.43 #230 - 6.70	1.10	1.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.05	0.04	0.05	0.04
14	-0.50	1.41	0.01	0.01	0.06	0.05
18	0.00	1.00	0.07	0.05	0.13	0.10
25	0.50	0.71	0.11	0.08	0.24	0.18
35	1.00	0.50	0.30	0.23	0.54	0.41
45	1.50	0.35	0.88	0.67	1.42	1.08
60	2.00	0.25	4.50	3.44	5.92	4.52
80	2.50	0.18	43.20	33.06	49.12	37.58
120	3.00	0.13	54.21	41.49	103.33	79.07
170	3.50	0.09	15.57	11.92	118.90	90.99
200	3.75	0.07	2.06	1.58	120.96	92.57
230	4.00	0.06	0.95	0.73	121.91	93.30

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.21	2.95	2.65	2.31	2.17	2.01

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.6	0.16	0.45	-0.58	7.44

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y84 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.66	143.31	0.31	0.00	#200 - 7.87 #230 - 7.54	1.50	12.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.88	0.57	0.88	0.57
3.5	-2.50	5.66	0.94	0.61	1.82	1.18
4	-2.25	4.76	0.60	0.39	2.42	1.57
5	-2.00	4.00	1.00	0.65	3.42	2.22
7	-1.50	2.83	2.91	1.88	6.33	4.10
10	-1.00	2.00	3.00	1.94	9.33	6.04
14	-0.50	1.41	3.02	1.95	12.35	7.99
18	0.00	1.00	2.06	1.33	14.41	9.32
25	0.50	0.71	3.38	2.19	17.79	11.51
35	1.00	0.50	5.17	3.34	22.96	14.85
45	1.50	0.35	3.93	2.54	26.89	17.39
60	2.00	0.25	8.18	5.29	35.07	22.68
80	2.50	0.18	41.67	26.94	76.74	49.62
120	3.00	0.13	50.56	32.69	127.30	82.31
170	3.50	0.09	13.58	8.78	140.88	91.09
200	3.75	0.07	1.61	1.04	142.49	92.13
230	4.00	0.06	0.51	0.33	143.00	92.46

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.10	2.89	2.51	2.04	1.23	-1.27

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.01	0.25	1.35	-1.93	6.26

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: Y84 #2
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
122.91	117.88	0.24	0.00	#200 - 4.55 #230 - 4.30	0.50	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.03	0.02	0.03	0.02
14	-0.50	1.41	0.03	0.02	0.06	0.04
18	0.00	1.00	0.08	0.07	0.14	0.11
25	0.50	0.71	0.21	0.17	0.35	0.28
35	1.00	0.50	0.54	0.44	0.89	0.72
45	1.50	0.35	1.71	1.39	2.60	2.11
60	2.00	0.25	8.68	7.06	11.28	9.17
80	2.50	0.18	65.33	53.15	76.61	62.32
120	3.00	0.13	32.93	26.79	109.54	89.11
170	3.50	0.09	7.03	5.72	116.57	94.83
200	3.75	0.07	0.76	0.62	117.33	95.45
230	4.00	0.06	0.31	0.25	117.64	95.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.57	2.90	2.74	2.38	2.15	2.06	1.70

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.4	0.19	0.43	-0.56	7.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y84 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
153.64	148.16	0.12	0.10	#200 - 3.98 #230 - 3.73	0.40	1.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.00	0.00	0.00	0.00
18	0.00	1.00	0.00	0.00	0.00	0.00
25	0.50	0.71	0.18	0.12	0.18	0.12
35	1.00	0.50	0.46	0.30	0.64	0.42
45	1.50	0.35	1.13	0.74	1.77	1.16
60	2.00	0.25	11.31	7.36	13.08	8.52
80	2.50	0.18	77.19	50.24	90.27	58.76
120	3.00	0.13	48.32	31.45	138.59	90.21
170	3.50	0.09	8.14	5.30	146.73	95.51
200	3.75	0.07	0.78	0.51	147.51	96.02
230	4.00	0.06	0.38	0.25	147.89	96.27

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.45	2.90	2.76	2.41	2.16	2.07	1.76

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.43	0.19	0.4	-0.12	5.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y84 #4

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.55	144.31	0.17	0.01	#200 - 3.83 #230 - 3.63	0.40	1.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.02	0.01	0.02	0.01
14	-0.50	1.41	0.00	0.00	0.02	0.01
18	0.00	1.00	0.15	0.10	0.17	0.11
25	0.50	0.71	0.49	0.33	0.66	0.44
35	1.00	0.50	2.08	1.39	2.74	1.83
45	1.50	0.35	4.11	2.75	6.85	4.58
60	2.00	0.25	8.57	5.73	15.42	10.31
80	2.50	0.18	78.35	52.39	93.77	62.70
120	3.00	0.13	40.75	27.25	134.52	89.95
170	3.50	0.09	8.35	5.58	142.87	95.53
200	3.75	0.07	0.95	0.64	143.82	96.17
230	4.00	0.06	0.30	0.20	144.12	96.37

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.45	2.89	2.73	2.38	2.14	2.05	1.54

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.37	0.19	0.48	-0.91	6.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y85 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.74	138.19	0.08	0.02	#200 - 2.10 #230 - 1.89	1.00	7.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.43	1.73	2.43	1.73
5/16"	-3.00	8.00	8.00	5.68	10.43	7.41
3.5	-2.50	5.66	11.22	7.97	21.65	15.38
4	-2.25	4.76	3.66	2.60	25.31	17.98
5	-2.00	4.00	4.13	2.93	29.44	20.91
7	-1.50	2.83	10.10	7.18	39.54	28.09
10	-1.00	2.00	4.52	3.21	44.06	31.30
14	-0.50	1.41	2.13	1.51	46.19	32.81
18	0.00	1.00	1.06	0.75	47.25	33.56
25	0.50	0.71	0.87	0.62	48.12	34.18
35	1.00	0.50	1.08	0.77	49.20	34.95
45	1.50	0.35	2.33	1.66	51.53	36.61
60	2.00	0.25	7.01	4.98	58.54	41.59
80	2.50	0.18	29.81	21.18	88.35	62.77
120	3.00	0.13	40.43	28.73	128.78	91.50
170	3.50	0.09	8.30	5.90	137.08	97.40
200	3.75	0.07	0.71	0.50	137.79	97.90
230	4.00	0.06	0.29	0.21	138.08	98.11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.30	2.87	2.71	2.20	-1.72	-2.44	-3.21

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.84	0.56	2.36	-0.69	1.75

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: Y85 #2
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.62	132.62	2.68	0.11	#200 - 2.90 #230 - 2.15	1.30	5.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.27	0.20	0.27	0.20
10	-1.00	2.00	0.32	0.24	0.59	0.44
14	-0.50	1.41	0.49	0.37	1.08	0.81
18	0.00	1.00	0.85	0.64	1.93	1.45
25	0.50	0.71	0.73	0.55	2.66	2.00
35	1.00	0.50	1.90	1.43	4.56	3.43
45	1.50	0.35	2.42	1.82	6.98	5.25
60	2.00	0.25	6.33	4.77	13.31	10.02
80	2.50	0.18	43.02	32.44	56.33	42.46
120	3.00	0.13	56.58	42.66	112.91	85.12
170	3.50	0.09	13.77	10.38	126.68	95.50
200	3.75	0.07	2.12	1.60	128.80	97.10
230	4.00	0.06	1.00	0.75	129.80	97.85

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.48	2.99	2.88	2.59	2.23	2.09	1.43

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.49	0.18	0.66	-2.27	12.53

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: Y85 #3
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
181.02	181.02	3.18	0.05	#200 - 2.44 #230 - 1.82	0.80	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.07	0.04	0.07	0.04
10	-1.00	2.00	0.00	0.00	0.07	0.04
14	-0.50	1.41	0.04	0.02	0.11	0.06
18	0.00	1.00	0.36	0.20	0.47	0.26
25	0.50	0.71	1.13	0.62	1.60	0.88
35	1.00	0.50	1.92	1.06	3.52	1.94
45	1.50	0.35	3.11	1.72	6.63	3.66
60	2.00	0.25	6.63	3.66	13.26	7.32
80	2.50	0.18	39.78	21.98	53.04	29.30
120	3.00	0.13	97.90	54.08	150.94	83.38
170	3.50	0.09	22.20	12.26	173.14	95.64
200	3.75	0.07	3.48	1.92	176.62	97.56
230	4.00	0.06	1.13	0.62	177.75	98.18

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.47	3.03	2.92	2.69	2.40	2.20	1.68

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.62	0.16	0.53	-1.73	9.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y85 #4

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
173.18	163.36	1.15	0.09	#200 - 7.27 #230 - 6.42	1.00	2.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.03	0.02	0.03	0.02
18	0.00	1.00	0.16	0.09	0.19	0.11
25	0.50	0.71	0.32	0.18	0.51	0.29
35	1.00	0.50	0.91	0.53	1.42	0.82
45	1.50	0.35	2.07	1.20	3.49	2.02
60	2.00	0.25	4.25	2.45	7.74	4.47
80	2.50	0.18	50.43	29.12	58.17	33.59
120	3.00	0.13	72.93	42.11	131.10	75.70
170	3.50	0.09	24.90	14.38	156.00	90.08
200	3.75	0.07	4.59	2.65	160.59	92.73
230	4.00	0.06	1.47	0.85	162.06	93.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.29	2.99	2.69	2.35	2.20	2.01

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.64	0.16	0.49	-0.76	6.51

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y86 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
108.79	72.05	1.47	0.34	#200 - 37.52 #230 - 35.47	4.20	3.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.13	0.12	0.13	0.12
18	0.00	1.00	0.29	0.27	0.42	0.39
25	0.50	0.71	0.69	0.63	1.11	1.02
35	1.00	0.50	1.63	1.50	2.74	2.52
45	1.50	0.35	3.51	3.23	6.25	5.75
60	2.00	0.25	6.89	6.33	13.14	12.08
80	2.50	0.18	17.53	16.11	30.67	28.19
120	3.00	0.13	28.10	25.83	58.77	54.02
170	3.50	0.09	6.52	5.99	65.29	60.01
200	3.75	0.07	2.69	2.47	67.98	62.48
230	4.00	0.06	2.23	2.05	70.21	64.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			2.92	2.40	2.12	1.38

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.48	0.18	0.71	-0.87	4.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y86 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
50.38	17.30	2.87	0.75	#200 - 73.25 #230 - 72.10	19.90	9.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.03	0.06	0.03	0.06
18	0.00	1.00	0.28	0.56	0.31	0.62
25	0.50	0.71	0.91	1.81	1.22	2.43
35	1.00	0.50	1.92	3.81	3.14	6.24
45	1.50	0.35	2.27	4.51	5.41	10.75
60	2.00	0.25	1.94	3.85	7.35	14.60
80	2.50	0.18	1.88	3.73	9.23	18.33
120	3.00	0.13	1.79	3.55	11.02	21.88
170	3.50	0.09	1.53	3.04	12.55	24.92
200	3.75	0.07	0.92	1.83	13.47	26.75
230	4.00	0.06	0.58	1.15	14.05	27.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.51	2.19	0.84

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.96	0.26	1.09	0.01	2.02

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y86 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
135.22	117.21	1.08	0.06	#200 - 16.75 #230 - 14.18	1.50	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.01	0.01	0.01
14	-0.50	1.41	0.06	0.04	0.07	0.05
18	0.00	1.00	0.00	0.00	0.07	0.05
25	0.50	0.71	0.07	0.05	0.14	0.10
35	1.00	0.50	0.12	0.09	0.26	0.19
45	1.50	0.35	0.15	0.11	0.41	0.30
60	2.00	0.25	1.04	0.77	1.45	1.07
80	2.50	0.18	23.83	17.62	25.28	18.69
120	3.00	0.13	60.35	44.63	85.63	63.32
170	3.50	0.09	21.77	16.10	107.40	79.42
200	3.75	0.07	5.18	3.83	112.58	83.25
230	4.00	0.06	3.47	2.57	116.05	85.82

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.82	3.36	2.85	2.57	2.42	2.11

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.8	0.14	0.44	-0.19	6.65

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y87 #1
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.87	140.19	0.40	0.22	#200 - 6.68 #230 - 6.34	3.90	35.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	7.00	4.70	7.00	4.70
5/8"	-4.00	16.00	0.12	0.08	7.12	4.78
11/16"	-3.50	11.31	4.81	3.23	11.93	8.01
5/16"	-3.00	8.00	4.47	3.00	16.40	11.01
3.5	-2.50	5.66	7.99	5.37	24.39	16.38
4	-2.25	4.76	2.27	1.52	26.66	17.90
5	-2.00	4.00	3.23	2.17	29.89	20.07
7	-1.50	2.83	7.62	5.12	37.51	25.19
10	-1.00	2.00	7.45	5.00	44.96	30.19
14	-0.50	1.41	6.37	4.28	51.33	34.47
18	0.00	1.00	3.49	2.34	54.82	36.81
25	0.50	0.71	2.96	1.99	57.78	38.80
35	1.00	0.50	3.61	2.42	61.39	41.22
45	1.50	0.35	3.99	2.68	65.38	43.90
60	2.00	0.25	5.95	4.00	71.33	47.90
80	2.50	0.18	20.45	13.74	91.78	61.64
120	3.00	0.13	32.86	22.07	124.64	83.71
170	3.50	0.09	12.63	8.48	137.27	92.19
200	3.75	0.07	1.68	1.13	138.95	93.32
230	4.00	0.06	0.51	0.34	139.46	93.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.02	2.80	2.08	-1.52	-2.54	-3.97

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.56	0.68	2.25	-0.28	1.71

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y87 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
144.62	138.75	0.32	0.06	#200 - 4.64 #230 - 4.33	0.50	1.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.00	0.00	0.00	0.00
18	0.00	1.00	0.04	0.03	0.04	0.03
25	0.50	0.71	0.11	0.08	0.15	0.11
35	1.00	0.50	0.27	0.19	0.42	0.30
45	1.50	0.35	0.91	0.63	1.33	0.93
60	2.00	0.25	11.22	7.76	12.55	8.69
80	2.50	0.18	69.55	48.09	82.10	56.78
120	3.00	0.13	46.52	32.17	128.62	88.95
170	3.50	0.09	8.39	5.80	137.01	94.75
200	3.75	0.07	0.88	0.61	137.89	95.36
230	4.00	0.06	0.45	0.31	138.34	95.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.60	2.92	2.78	2.43	2.17	2.08	1.76

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.44	0.18	0.41	-0.04	5.02

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y87 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		FINE SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.62	142.62	1.06	0.20	#200 - 1.23 #230 - 0.95	0.50	1.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.01	0.01	0.01	0.01
18	0.00	1.00	0.16	0.11	0.17	0.12
25	0.50	0.71	0.33	0.23	0.50	0.35
35	1.00	0.50	0.66	0.46	1.16	0.81
45	1.50	0.35	1.23	0.86	2.39	1.67
60	2.00	0.25	10.02	7.03	12.41	8.70
80	2.50	0.18	79.50	55.74	91.91	64.44
120	3.00	0.13	40.91	28.68	132.82	93.12
170	3.50	0.09	7.26	5.09	140.08	98.21
200	3.75	0.07	0.80	0.56	140.88	98.77
230	4.00	0.06	0.40	0.28	141.28	99.05

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.18	2.84	2.68	2.37	2.15	2.07	1.74

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.4	0.19	0.42	-0.53	7.73

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y88 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.85	149.45	0.89	0.22	#200 - 6.96 #230 - 6.10	0.70	36.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	1.44	0.91	1.44	0.91
5/8"	-4.00	16.00	0.00	0.00	1.44	0.91
11/16"	-3.50	11.31	0.00	0.00	1.44	0.91
5/16"	-3.00	8.00	0.52	0.33	1.96	1.24
3.5	-2.50	5.66	3.66	2.32	5.62	3.56
4	-2.25	4.76	2.48	1.57	8.10	5.13
5	-2.00	4.00	2.48	1.57	10.58	6.70
7	-1.50	2.83	8.82	5.59	19.40	12.29
10	-1.00	2.00	8.19	5.19	27.59	17.48
14	-0.50	1.41	8.13	5.15	35.72	22.63
18	0.00	1.00	5.85	3.71	41.57	26.34
25	0.50	0.71	4.81	3.05	46.38	29.39
35	1.00	0.50	5.17	3.28	51.55	32.67
45	1.50	0.35	4.99	3.16	56.54	35.83
60	2.00	0.25	4.22	2.67	60.76	38.50
80	2.50	0.18	14.23	9.01	74.99	47.51
120	3.00	0.13	37.21	23.57	112.20	71.08
170	3.50	0.09	28.92	18.32	141.12	89.40
200	3.75	0.07	5.75	3.64	146.87	93.04
230	4.00	0.06	1.35	0.86	148.22	93.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.35	3.11	2.55	-0.18	-1.14	-2.27

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.42	0.37	1.95	-0.7	2.09

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y88 #2
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.73	126.90	0.23	0.11	#200 - 5.55 #230 - 4.66	0.50	8.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.13	0.10	0.13	0.10
4	-2.25	4.76	0.24	0.18	0.37	0.28
5	-2.00	4.00	0.03	0.02	0.40	0.30
7	-1.50	2.83	0.52	0.39	0.92	0.69
10	-1.00	2.00	1.38	1.04	2.30	1.73
14	-0.50	1.41	1.61	1.21	3.91	2.94
18	0.00	1.00	1.31	0.99	5.22	3.93
25	0.50	0.71	1.23	0.93	6.45	4.86
35	1.00	0.50	1.50	1.13	7.95	5.99
45	1.50	0.35	1.18	0.89	9.13	6.88
60	2.00	0.25	1.26	0.95	10.39	7.83
80	2.50	0.18	11.32	8.53	21.71	16.36
120	3.00	0.13	70.69	53.26	92.40	69.62
170	3.50	0.09	29.54	22.26	121.94	91.88
200	3.75	0.07	3.41	2.57	125.35	94.45
230	4.00	0.06	1.18	0.89	126.53	95.34

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.90	3.32	3.12	2.82	2.58	2.48	0.56

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.63	0.16	0.91	-3.02	13.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y88 #3
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		TRACE BRN SAND, MOSTLY WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
117.28	114.81	0.13	0.00	#200 - 2.49 #230 - 2.23	0.80	21.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	4.73	4.03	4.73	4.03
5/16"	-3.00	8.00	4.67	3.98	9.40	8.01
3.5	-2.50	5.66	9.74	8.30	19.14	16.31
4	-2.25	4.76	4.20	3.58	23.34	19.89
5	-2.00	4.00	4.21	3.59	27.55	23.48
7	-1.50	2.83	11.90	10.15	39.45	33.63
10	-1.00	2.00	11.03	9.40	50.48	43.03
14	-0.50	1.41	9.17	7.82	59.65	50.85
18	0.00	1.00	5.91	5.04	65.56	55.89
25	0.50	0.71	5.77	4.92	71.33	60.81
35	1.00	0.50	7.84	6.68	79.17	67.49
45	1.50	0.35	5.34	4.55	84.51	72.04
60	2.00	0.25	3.13	2.67	87.64	74.71
80	2.50	0.18	5.99	5.11	93.63	79.82
120	3.00	0.13	12.79	10.91	106.42	90.73
170	3.50	0.09	6.89	5.87	113.31	96.60
200	3.75	0.07	1.07	0.91	114.38	97.51
230	4.00	0.06	0.30	0.26	114.68	97.77

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.36	2.69	2.03	-0.55	-1.93	-2.52	-3.38

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.23	1.17	2.14	0.21	1.81

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y89 #1
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		GRAY SAND AND SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.48	140.48	0.25	0.16	#200 - 0.42 #230 - 0.35	1.20	14.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.77	0.55	0.77	0.55
5/16"	-3.00	8.00	5.68	4.04	6.45	4.59
3.5	-2.50	5.66	2.66	1.89	9.11	6.48
4	-2.25	4.76	0.79	0.56	9.90	7.04
5	-2.00	4.00	2.81	2.00	12.71	9.04
7	-1.50	2.83	7.17	5.10	19.88	14.14
10	-1.00	2.00	8.65	6.16	28.53	20.30
14	-0.50	1.41	9.75	6.94	38.28	27.24
18	0.00	1.00	7.07	5.03	45.35	32.27
25	0.50	0.71	7.86	5.60	53.21	37.87
35	1.00	0.50	11.13	7.92	64.34	45.79
45	1.50	0.35	13.01	9.26	77.35	55.05
60	2.00	0.25	11.00	7.83	88.35	62.88
80	2.50	0.18	22.15	15.77	110.50	78.65
120	3.00	0.13	24.42	17.38	134.92	96.03
170	3.50	0.09	4.59	3.27	139.51	99.30
200	3.75	0.07	0.40	0.28	139.91	99.58
230	4.00	0.06	0.10	0.07	140.01	99.65

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.97	2.65	2.38	1.23	-0.66	-1.35	-2.89

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.79	0.58	1.84	-0.63	2.31

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y89 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
PT		PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
59.63	2.93	0.25	0.00	#200 - 95.85 #230 - 95.50	29.60	9.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.02	0.03	0.02	0.03
18	0.00	1.00	0.06	0.10	0.08	0.13
25	0.50	0.71	0.08	0.13	0.16	0.26
35	1.00	0.50	0.16	0.27	0.32	0.53
45	1.50	0.35	0.29	0.49	0.61	1.02
60	2.00	0.25	0.40	0.67	1.01	1.69
80	2.50	0.18	0.40	0.67	1.41	2.36
120	3.00	0.13	0.51	0.86	1.92	3.22
170	3.50	0.09	0.38	0.64	2.30	3.86
200	3.75	0.07	0.17	0.29	2.47	4.15
230	4.00	0.06	0.21	0.35	2.68	4.50

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.29	0.20	1.06	-0.5	2.7

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y89 #3
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		BROWN SILT, FINE WHITE SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.24	105.83	2.11	0.00	#200 - 22.49 #230 - 20.37	1.00	1.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.08	0.06	0.08	0.06
14	-0.50	1.41	0.03	0.02	0.11	0.08
18	0.00	1.00	0.05	0.04	0.16	0.12
25	0.50	0.71	0.05	0.04	0.21	0.16
35	1.00	0.50	0.08	0.06	0.29	0.22
45	1.50	0.35	0.13	0.10	0.42	0.32
60	2.00	0.25	1.45	1.11	1.87	1.43
80	2.50	0.18	32.82	25.20	34.69	26.63
120	3.00	0.13	42.54	32.66	77.23	59.29
170	3.50	0.09	18.03	13.84	95.26	73.13
200	3.75	0.07	5.70	4.38	100.96	77.51
230	4.00	0.06	2.76	2.12	103.72	79.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.61	2.86	2.47	2.29	2.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.73	0.15	0.49	-0.31	7.46

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y90 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SAND AND SILT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.75	136.74	0.37	0.09	#200 - 9.17 #230 - 8.42	1.00	1.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.11	0.07	0.11	0.07
7	-1.50	2.83	0.32	0.22	0.43	0.29
10	-1.00	2.00	0.26	0.17	0.69	0.46
14	-0.50	1.41	0.45	0.30	1.14	0.76
18	0.00	1.00	0.42	0.28	1.56	1.04
25	0.50	0.71	0.49	0.33	2.05	1.37
35	1.00	0.50	0.90	0.61	2.95	1.98
45	1.50	0.35	2.46	1.65	5.41	3.63
60	2.00	0.25	13.08	8.79	18.49	12.42
80	2.50	0.18	62.68	42.14	81.17	54.56
120	3.00	0.13	40.98	27.55	122.15	82.11
170	3.50	0.09	10.98	7.38	133.13	89.49
200	3.75	0.07	1.99	1.34	135.12	90.83
230	4.00	0.06	1.12	0.75	136.24	91.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.13	2.87	2.45	2.15	2.04	1.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.39	0.19	0.62	-2.1	14.68

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y90 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		SAND AND PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
160.80	160.80	0.39	0.06	#200 - 0.39 #230 - 0.29	0.30	0.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.09	0.68	1.09	0.68
3.5	-2.50	5.66	2.21	1.37	3.30	2.05
4	-2.25	4.76	1.09	0.68	4.39	2.73
5	-2.00	4.00	0.46	0.29	4.85	3.02
7	-1.50	2.83	0.53	0.33	5.38	3.35
10	-1.00	2.00	1.04	0.65	6.42	4.00
14	-0.50	1.41	1.46	0.91	7.88	4.91
18	0.00	1.00	2.86	1.78	10.74	6.69
25	0.50	0.71	6.91	4.30	17.65	10.99
35	1.00	0.50	15.85	9.86	33.50	20.85
45	1.50	0.35	33.77	21.00	67.27	41.85
60	2.00	0.25	42.50	26.43	109.77	68.28
80	2.50	0.18	33.04	20.55	142.81	88.83
120	3.00	0.13	14.58	9.07	157.39	97.90
170	3.50	0.09	2.37	1.47	159.76	99.37
200	3.75	0.07	0.39	0.24	160.15	99.61
230	4.00	0.06	0.16	0.10	160.31	99.71

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.84	2.38	2.16	1.65	1.10	0.75	-0.47

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.48	0.36	1.1	-1.86	8.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y90 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		COARSE SAND, ABUNDANT PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
194.81	194.81	0.45	0.21	#200 - 0.50 #230 - 0.42	0.40	0.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	17.57	9.02	17.57	9.02
5/16"	-3.00	8.00	17.22	8.84	34.79	17.86
3.5	-2.50	5.66	7.06	3.62	41.85	21.48
4	-2.25	4.76	4.45	2.28	46.30	23.76
5	-2.00	4.00	5.30	2.72	51.60	26.48
7	-1.50	2.83	10.11	5.19	61.71	31.67
10	-1.00	2.00	6.62	3.40	68.33	35.07
14	-0.50	1.41	8.33	4.28	76.66	39.35
18	0.00	1.00	11.32	5.81	87.98	45.16
25	0.50	0.71	19.92	10.23	107.90	55.39
35	1.00	0.50	28.95	14.86	136.85	70.25
45	1.50	0.35	26.10	13.40	162.95	83.65
60	2.00	0.25	13.64	7.00	176.59	90.65
80	2.50	0.18	9.17	4.71	185.76	95.36
120	3.00	0.13	5.78	2.97	191.54	98.33
170	3.50	0.09	1.88	0.97	193.42	99.30
200	3.75	0.07	0.39	0.20	193.81	99.50
230	4.00	0.06	0.15	0.08	193.96	99.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.46	1.53	1.18	0.24	-2.14	-3.11	-3.83

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.36	1.28	1.99	-0.36	1.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y90 #4

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.72	149.72	1.33	0.25	#200 - 1.36 #230 - 1.13	0.40	1.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.10	0.07	0.10	0.07
5	-2.00	4.00	0.00	0.00	0.10	0.07
7	-1.50	2.83	0.00	0.00	0.10	0.07
10	-1.00	2.00	0.07	0.05	0.17	0.12
14	-0.50	1.41	0.07	0.05	0.24	0.17
18	0.00	1.00	0.12	0.08	0.36	0.25
25	0.50	0.71	0.48	0.32	0.84	0.57
35	1.00	0.50	0.97	0.65	1.81	1.22
45	1.50	0.35	1.65	1.10	3.46	2.32
60	2.00	0.25	9.09	6.07	12.55	8.39
80	2.50	0.18	82.69	55.23	95.24	63.62
120	3.00	0.13	44.24	29.55	139.48	93.17
170	3.50	0.09	7.34	4.90	146.82	98.07
200	3.75	0.07	0.85	0.57	147.67	98.64
230	4.00	0.06	0.35	0.23	148.02	98.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.19	2.84	2.69	2.38	2.15	2.07	1.72

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.39	0.19	0.45	-1.72	17.27

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y90 #5

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		SAND, TRACE SILT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
130.67	125.94	0.24	0.00	#200 - 4.02 #230 - 3.81	0.30	1.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.02	0.02	0.02	0.02
14	-0.50	1.41	0.01	0.01	0.03	0.03
18	0.00	1.00	0.11	0.08	0.14	0.11
25	0.50	0.71	0.22	0.17	0.36	0.28
35	1.00	0.50	0.55	0.42	0.91	0.70
45	1.50	0.35	1.10	0.84	2.01	1.54
60	2.00	0.25	4.35	3.33	6.36	4.87
80	2.50	0.18	67.44	51.61	73.80	56.48
120	3.00	0.13	43.16	33.03	116.96	89.51
170	3.50	0.09	7.62	5.83	124.58	95.34
200	3.75	0.07	0.84	0.64	125.42	95.98
230	4.00	0.06	0.28	0.21	125.70	96.19

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.47	2.92	2.78	2.44	2.20	2.11	2.00

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.46	0.18	0.41	-0.67	8.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y91 #1
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.67	105.11	1.00	0.05	#200 - 23.32 #230 - 20.98	2.00	20.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	2.77	2.10	2.77	2.10
4	-2.25	4.76	0.44	0.33	3.21	2.43
5	-2.00	4.00	0.92	0.70	4.13	3.13
7	-1.50	2.83	3.42	2.60	7.55	5.73
10	-1.00	2.00	3.91	2.97	11.46	8.70
14	-0.50	1.41	2.66	2.02	14.12	10.72
18	0.00	1.00	1.80	1.37	15.92	12.09
25	0.50	0.71	1.75	1.33	17.67	13.42
35	1.00	0.50	1.88	1.43	19.55	14.85
45	1.50	0.35	2.44	1.85	21.99	16.70
60	2.00	0.25	4.27	3.24	26.26	19.94
80	2.50	0.18	9.65	7.33	35.91	27.27
120	3.00	0.13	21.39	16.25	57.30	43.52
170	3.50	0.09	36.49	27.71	93.79	71.23
200	3.75	0.07	7.17	5.45	100.96	76.68
230	4.00	0.06	3.08	2.34	104.04	79.02

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.67	3.12	2.35	1.31	-1.64

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.17	0.22	1.73	-1.54	4.13

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y91 #2
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.94	168.70	0.51	0.15	#200 - 5.76 #230 - 5.10	1.20	30.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	9.14	5.17	9.14	5.17
5/8"	-4.00	16.00	0.00	0.00	9.14	5.17
11/16"	-3.50	11.31	11.01	6.22	20.15	11.39
5/16"	-3.00	8.00	3.16	1.79	23.31	13.18
3.5	-2.50	5.66	9.45	5.34	32.76	18.52
4	-2.25	4.76	2.89	1.63	35.65	20.15
5	-2.00	4.00	4.47	2.53	40.12	22.68
7	-1.50	2.83	13.36	7.55	53.48	30.23
10	-1.00	2.00	11.78	6.66	65.26	36.89
14	-0.50	1.41	12.76	7.21	78.02	44.10
18	0.00	1.00	7.65	4.32	85.67	48.42
25	0.50	0.71	6.29	3.55	91.96	51.97
35	1.00	0.50	3.56	2.01	95.52	53.98
45	1.50	0.35	1.42	0.80	96.94	54.78
60	2.00	0.25	2.01	1.14	98.95	55.92
80	2.50	0.18	11.57	6.54	110.52	62.46
120	3.00	0.13	29.31	16.56	139.83	79.02
170	3.50	0.09	22.35	12.63	162.18	91.65
200	3.75	0.07	4.58	2.59	166.76	94.24
230	4.00	0.06	1.16	0.66	167.92	94.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.20	2.88	0.22	-1.85	-2.74	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.16	0.90	2.38	0.13	1.6

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y91 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		BROWN SAND, LITTLE WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
167.06	158.31	0.74	0.08	#200 - 7.92 #230 - 5.75	0.30	7.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.25	1.35	2.25	1.35
3.5	-2.50	5.66	0.50	0.30	2.75	1.65
4	-2.25	4.76	0.05	0.03	2.80	1.68
5	-2.00	4.00	0.55	0.33	3.35	2.01
7	-1.50	2.83	1.36	0.81	4.71	2.82
10	-1.00	2.00	1.16	0.69	5.87	3.51
14	-0.50	1.41	0.88	0.53	6.75	4.04
18	0.00	1.00	0.74	0.44	7.49	4.48
25	0.50	0.71	0.66	0.40	8.15	4.88
35	1.00	0.50	0.53	0.32	8.68	5.20
45	1.50	0.35	0.55	0.33	9.23	5.53
60	2.00	0.25	1.12	0.67	10.35	6.20
80	2.50	0.18	15.44	9.24	25.79	15.44
120	3.00	0.13	71.06	42.54	96.85	57.98
170	3.50	0.09	48.29	28.91	145.14	86.89
200	3.75	0.07	8.67	5.19	153.81	92.08
230	4.00	0.06	3.63	2.17	157.44	94.25

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.45	3.29	2.91	2.61	2.51	0.69

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.68	0.16	1.15	-3.54	16.43

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: Y91 #4
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
185.69	180.07	0.24	0.21	#200 - 3.73 #230 - 3.37	1.50	64.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	10.30	5.55	10.30	5.55
5/8"	-4.00	16.00	3.63	1.95	13.93	7.50
11/16"	-3.50	11.31	1.64	0.88	15.57	8.38
5/16"	-3.00	8.00	14.36	7.73	29.93	16.11
3.5	-2.50	5.66	14.18	7.64	44.11	23.75
4	-2.25	4.76	8.25	4.44	52.36	28.19
5	-2.00	4.00	9.60	5.17	61.96	33.36
7	-1.50	2.83	19.59	10.55	81.55	43.91
10	-1.00	2.00	20.34	10.95	101.89	54.86
14	-0.50	1.41	15.00	8.08	116.89	62.94
18	0.00	1.00	9.43	5.08	126.32	68.02
25	0.50	0.71	9.97	5.37	136.29	73.39
35	1.00	0.50	3.43	1.85	139.72	75.24
45	1.50	0.35	1.35	0.73	141.07	75.97
60	2.00	0.25	1.40	0.75	142.47	76.72
80	2.50	0.18	6.61	3.56	149.08	80.28
120	3.00	0.13	17.63	9.49	166.71	89.77
170	3.50	0.09	9.76	5.26	176.47	95.03
200	3.75	0.07	2.31	1.24	178.78	96.27
230	4.00	0.06	0.66	0.36	179.44	96.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.50	2.70	0.94	-1.22	-2.43	-3.01	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.84	1.79	2.11	0.88	2.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y91 #5

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		SAND, TRACE SILT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.89	134.19	0.16	0.05	#200 - 3.76 #230 - 3.56	0.60	1.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.07	0.05	0.07	0.05
10	-1.00	2.00	0.01	0.01	0.08	0.06
14	-0.50	1.41	0.03	0.02	0.11	0.08
18	0.00	1.00	0.07	0.05	0.18	0.13
25	0.50	0.71	0.11	0.08	0.29	0.21
35	1.00	0.50	0.39	0.28	0.68	0.49
45	1.50	0.35	1.42	1.02	2.10	1.51
60	2.00	0.25	9.81	7.06	11.91	8.57
80	2.50	0.18	67.70	48.74	79.61	57.31
120	3.00	0.13	46.34	33.36	125.95	90.67
170	3.50	0.09	7.15	5.15	133.10	95.82
200	3.75	0.07	0.58	0.42	133.68	96.24
230	4.00	0.06	0.28	0.20	133.96	96.44

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.42	2.90	2.77	2.43	2.17	2.08	1.75

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.43	0.19	0.42	-0.95	11.31

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y92 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		SILT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
83.92	9.21	1.44	0.00	#200 - 92.84 #230 - 90.74	7.20	5.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.03	0.04	0.03	0.04
10	-1.00	2.00	0.04	0.05	0.07	0.09
14	-0.50	1.41	0.10	0.12	0.17	0.21
18	0.00	1.00	0.13	0.15	0.30	0.36
25	0.50	0.71	0.18	0.21	0.48	0.57
35	1.00	0.50	0.06	0.07	0.54	0.64
45	1.50	0.35	0.11	0.13	0.65	0.77
60	2.00	0.25	0.10	0.12	0.75	0.89
80	2.50	0.18	0.28	0.33	1.03	1.22
120	3.00	0.13	1.13	1.35	2.16	2.57
170	3.50	0.09	2.03	2.42	4.19	4.99
200	3.75	0.07	1.82	2.17	6.01	7.16
230	4.00	0.06	1.76	2.10	7.77	9.26

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.50

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	3.08	0.12	1.06	-2.37	8.62

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y92 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
GW		ROCKS AND SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
201.17	192.87	0.17	0.25	#200 - 4.73 #230 - 4.46	1.00	1.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	38.92	19.35	38.92	19.35
5/8"	-4.00	16.00	16.28	8.09	55.20	27.44
11/16"	-3.50	11.31	22.45	11.16	77.65	38.60
5/16"	-3.00	8.00	13.19	6.56	90.84	45.16
3.5	-2.50	5.66	13.95	6.93	104.79	52.09
4	-2.25	4.76	5.93	2.95	110.72	55.04
5	-2.00	4.00	3.22	1.60	113.94	56.64
7	-1.50	2.83	5.91	2.94	119.85	59.58
10	-1.00	2.00	4.39	2.18	124.24	61.76
14	-0.50	1.41	3.68	1.83	127.92	63.59
18	0.00	1.00	4.36	2.17	132.28	65.76
25	0.50	0.71	6.63	3.30	138.91	69.06
35	1.00	0.50	7.99	3.97	146.90	73.03
45	1.50	0.35	8.50	4.23	155.40	77.26
60	2.00	0.25	7.59	3.77	162.99	81.03
80	2.50	0.18	9.34	4.64	172.33	85.67
120	3.00	0.13	12.40	6.16	184.73	91.83
170	3.50	0.09	5.79	2.88	190.52	94.71
200	3.75	0.07	1.13	0.56	191.65	95.27
230	4.00	0.06	0.55	0.27	192.20	95.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.63	2.32	1.23	-2.65	-4.08		

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-1.73	3.32	2.37	1.15	2.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y92 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		BROWN SILT, GRAY SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
200.48	192.63	0.46	0.15	#200 - 4.81 #230 - 4.30	0.60	12.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	3.88	1.94	3.88	1.94
5/8"	-4.00	16.00	0.00	0.00	3.88	1.94
11/16"	-3.50	11.31	1.77	0.88	5.65	2.82
5/16"	-3.00	8.00	2.11	1.05	7.76	3.87
3.5	-2.50	5.66	3.53	1.76	11.29	5.63
4	-2.25	4.76	0.32	0.16	11.61	5.79
5	-2.00	4.00	1.43	0.71	13.04	6.50
7	-1.50	2.83	4.60	2.29	17.64	8.79
10	-1.00	2.00	4.66	2.32	22.30	11.11
14	-0.50	1.41	3.88	1.94	26.18	13.05
18	0.00	1.00	3.38	1.69	29.56	14.74
25	0.50	0.71	8.42	4.20	37.98	18.94
35	1.00	0.50	5.57	2.78	43.55	21.72
45	1.50	0.35	1.36	0.68	44.91	22.40
60	2.00	0.25	4.03	2.01	48.94	24.41
80	2.50	0.18	64.04	31.94	112.98	56.35
120	3.00	0.13	55.27	27.57	168.25	83.92
170	3.50	0.09	18.80	9.38	187.05	93.30
200	3.75	0.07	3.78	1.89	190.83	95.19
230	4.00	0.06	1.03	0.51	191.86	95.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.72	3.00	2.84	2.40	2.01	0.15	-2.68

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.71	0.31	1.61	-1.51	4.75

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y93 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
58.03	24.37	0.34	0.00	#200 - 60.16 #230 - 58.61	6.10	4.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.20	0.34	0.20	0.34
14	-0.50	1.41	0.47	0.81	0.67	1.15
18	0.00	1.00	0.53	0.91	1.20	2.06
25	0.50	0.71	0.58	1.00	1.78	3.06
35	1.00	0.50	0.58	1.00	2.36	4.06
45	1.50	0.35	0.54	0.93	2.90	4.99
60	2.00	0.25	1.90	3.27	4.80	8.26
80	2.50	0.18	9.50	16.37	14.30	24.63
120	3.00	0.13	5.91	10.18	20.21	34.81
170	3.50	0.09	1.81	3.12	22.02	37.93
200	3.75	0.07	1.11	1.91	23.13	39.84
230	4.00	0.06	0.90	1.55	24.03	41.39

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.52	2.24	1.50

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.28	0.21	0.96	-1.38	5.66

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y93 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
98.95	84.66	3.20	0.00	#200 - 21.48 #230 - 17.69	2.80	1.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.03	0.03	0.03	0.03
10	-1.00	2.00	0.05	0.05	0.08	0.08
14	-0.50	1.41	0.10	0.10	0.18	0.18
18	0.00	1.00	0.18	0.18	0.36	0.36
25	0.50	0.71	0.26	0.26	0.62	0.62
35	1.00	0.50	0.36	0.36	0.98	0.98
45	1.50	0.35	0.79	0.80	1.77	1.78
60	2.00	0.25	3.02	3.05	4.79	4.83
80	2.50	0.18	12.87	13.01	17.66	17.84
120	3.00	0.13	28.70	29.00	46.36	46.84
170	3.50	0.09	22.89	23.13	69.25	69.97
200	3.75	0.07	8.46	8.55	77.71	78.52
230	4.00	0.06	3.75	3.79	81.46	82.31

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.65	3.07	2.62	2.43	2.01

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.87	0.14	0.62	-1.4	8.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y93 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		SILTY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.52	147.92	3.74	0.09	#200 - 15.68 #230 - 12.44	0.80	0.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.24	0.15	0.24	0.15
5	-2.00	4.00	0.09	0.05	0.33	0.20
7	-1.50	2.83	0.11	0.07	0.44	0.27
10	-1.00	2.00	0.20	0.12	0.64	0.39
14	-0.50	1.41	0.19	0.12	0.83	0.51
18	0.00	1.00	0.34	0.21	1.17	0.72
25	0.50	0.71	0.66	0.40	1.83	1.12
35	1.00	0.50	1.21	0.74	3.04	1.86
45	1.50	0.35	1.52	0.92	4.56	2.78
60	2.00	0.25	4.53	2.75	9.09	5.53
80	2.50	0.18	19.58	11.90	28.67	17.43
120	3.00	0.13	62.85	38.20	91.52	55.63
170	3.50	0.09	38.23	23.24	129.75	78.87
200	3.75	0.07	8.96	5.45	138.71	84.32
230	4.00	0.06	5.33	3.24	144.04	87.56

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.74	3.42	2.93	2.60	2.44	1.90

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.8	0.14	0.67	-2.51	16.44

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y94 #1

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		SILTY SAND W/ SMALL ROCKS AND SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
129.08	113.68	0.57	0.31	#200 - 13.49 #230 - 12.68	1.90	13.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.11	0.09	0.11	0.09
4	-2.25	4.76	0.33	0.26	0.44	0.35
5	-2.00	4.00	1.20	0.93	1.64	1.28
7	-1.50	2.83	2.77	2.15	4.41	3.43
10	-1.00	2.00	1.98	1.53	6.39	4.96
14	-0.50	1.41	4.27	3.31	10.66	8.27
18	0.00	1.00	4.75	3.68	15.41	11.95
25	0.50	0.71	5.92	4.59	21.33	16.54
35	1.00	0.50	8.70	6.74	30.03	23.28
45	1.50	0.35	14.01	10.85	44.04	34.13
60	2.00	0.25	11.70	9.06	55.74	43.19
80	2.50	0.18	13.61	10.54	69.35	53.73
120	3.00	0.13	24.70	19.14	94.05	72.87
170	3.50	0.09	14.73	11.41	108.78	84.28
200	3.75	0.07	2.88	2.23	111.66	86.51
230	4.00	0.06	1.05	0.81	112.71	87.32

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.49	3.09	2.32	1.08	0.44	-0.99

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.7	0.31	1.41	-0.86	3.06

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y94 #2
Analysis Date: 03-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		ROCKS, SILT, SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.87	167.48	0.36	0.35	#200 - 6.17 #230 - 5.86	1.70	22.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	13.76	7.78	13.76	7.78
5/16"	-3.00	8.00	9.45	5.34	23.21	13.12
3.5	-2.50	5.66	8.37	4.73	31.58	17.85
4	-2.25	4.76	6.38	3.61	37.96	21.46
5	-2.00	4.00	8.15	4.61	46.11	26.07
7	-1.50	2.83	19.88	11.24	65.99	37.31
10	-1.00	2.00	17.56	9.93	83.55	47.24
14	-0.50	1.41	15.07	8.52	98.62	55.76
18	0.00	1.00	9.90	5.60	108.52	61.36
25	0.50	0.71	7.49	4.23	116.01	65.59
35	1.00	0.50	6.07	3.43	122.08	69.02
45	1.50	0.35	6.09	3.44	128.17	72.46
60	2.00	0.25	9.00	5.09	137.17	77.55
80	2.50	0.18	10.29	5.82	147.46	83.37
120	3.00	0.13	11.26	6.37	158.72	89.74
170	3.50	0.09	6.22	3.52	164.94	93.26
200	3.75	0.07	1.01	0.57	165.95	93.83
230	4.00	0.06	0.55	0.31	166.50	94.14

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.55	1.75	-0.84	-2.06	-2.70	-3.77

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.59	1.51	2.1	0.33	2.01

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y94 #3

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		SILTY SAND, SMALL PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
169.24	147.95	0.60	0.16	#200 - 13.73 #230 - 13.09	1.00	5.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.95	0.56	0.95	0.56
4	-2.25	4.76	1.43	0.84	2.38	1.40
5	-2.00	4.00	1.41	0.83	3.79	2.23
7	-1.50	2.83	4.61	2.72	8.40	4.95
10	-1.00	2.00	4.10	2.42	12.50	7.37
14	-0.50	1.41	5.63	3.33	18.13	10.70
18	0.00	1.00	8.53	5.04	26.66	15.74
25	0.50	0.71	14.54	8.59	41.20	24.33
35	1.00	0.50	13.87	8.20	55.07	32.53
45	1.50	0.35	10.91	6.45	65.98	38.98
60	2.00	0.25	22.66	13.39	88.64	52.37
80	2.50	0.18	25.21	14.90	113.85	67.27
120	3.00	0.13	21.22	12.54	135.07	79.81
170	3.50	0.09	8.92	5.27	143.99	85.08
200	3.75	0.07	2.01	1.19	146.00	86.27
230	4.00	0.06	1.08	0.64	147.08	86.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.40	2.81	1.91	0.54	0.02	-1.49

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.32	0.40	1.45	-0.69	2.81

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y94 #4

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
48.74	14.02	0.32	0.00	#200 - 72.96 #230 - 71.89	12.10	7.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.05	0.10	0.05	0.10
10	-1.00	2.00	0.57	1.17	0.62	1.27
14	-0.50	1.41	1.12	2.30	1.74	3.57
18	0.00	1.00	1.27	2.61	3.01	6.18
25	0.50	0.71	1.30	2.67	4.31	8.85
35	1.00	0.50	1.36	2.79	5.67	11.64
45	1.50	0.35	1.20	2.46	6.87	14.10
60	2.00	0.25	1.00	2.05	7.87	16.15
80	2.50	0.18	1.12	2.30	8.99	18.45
120	3.00	0.13	1.78	3.65	10.77	22.10
170	3.50	0.09	1.55	3.18	12.32	25.28
200	3.75	0.07	0.86	1.76	13.18	27.04
230	4.00	0.06	0.52	1.07	13.70	28.11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.46	1.96	-0.23

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.48	0.36	1.54	-0.13	1.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y95 #1
Analysis Date: 03-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		SILTY ROCKS, LITTLE SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
158.28	149.64	0.35	0.47	#200 - 6.44 #230 - 6.16	2.90	10.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	9.01	5.69	9.01	5.69
3.5	-2.50	5.66	14.84	9.38	23.85	15.07
4	-2.25	4.76	9.51	6.01	33.36	21.08
5	-2.00	4.00	13.07	8.26	46.43	29.34
7	-1.50	2.83	23.09	14.59	69.52	43.93
10	-1.00	2.00	16.93	10.70	86.45	54.63
14	-0.50	1.41	12.41	7.84	98.86	62.47
18	0.00	1.00	6.71	4.24	105.57	66.71
25	0.50	0.71	5.12	3.23	110.69	69.94
35	1.00	0.50	4.39	2.77	115.08	72.71
45	1.50	0.35	3.63	2.29	118.71	75.00
60	2.00	0.25	4.09	2.58	122.80	77.58
80	2.50	0.18	8.90	5.62	131.70	83.20
120	3.00	0.13	10.56	6.67	142.26	89.87
170	3.50	0.09	4.57	2.89	146.83	92.76
200	3.75	0.07	1.27	0.80	148.10	93.56
230	4.00	0.06	0.45	0.28	148.55	93.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.56	1.50	-1.22	-2.13	-2.46	-3.15

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.72	1.65	1.95	0.76	2.32

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y95 #2

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		MEDIUM QUARTZ, FEW ANGULAR PEBBLES, DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
145.26	140.45	0.22	0.52	#200 - 4.35 #230 - 3.98	1.80	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.10	0.07	0.10	0.07
3.5	-2.50	5.66	0.00	0.00	0.10	0.07
4	-2.25	4.76	0.00	0.00	0.10	0.07
5	-2.00	4.00	0.00	0.00	0.10	0.07
7	-1.50	2.83	0.68	0.47	0.78	0.54
10	-1.00	2.00	0.38	0.26	1.16	0.80
14	-0.50	1.41	0.75	0.52	1.91	1.32
18	0.00	1.00	1.61	1.11	3.52	2.43
25	0.50	0.71	5.35	3.68	8.87	6.11
35	1.00	0.50	16.04	11.04	24.91	17.15
45	1.50	0.35	28.10	19.34	53.01	36.49
60	2.00	0.25	35.13	24.18	88.14	60.67
80	2.50	0.18	31.72	21.84	119.86	82.51
120	3.00	0.13	14.97	10.31	134.83	92.82
170	3.50	0.09	3.32	2.29	138.15	95.11
200	3.75	0.07	0.78	0.54	138.93	95.65
230	4.00	0.06	0.54	0.37	139.47	96.02

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.48	2.57	2.33	1.78	1.20	0.95	0.35

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.69	0.31	0.83	-0.7	5.1

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y95 #3

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		QUARTZ, FEW ANGULAR PEBBLES, MORE DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
139.18	131.77	0.83	0.24	#200 - 6.65 #230 - 6.15	1.00	1.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.11	0.08	0.11	0.08
7	-1.50	2.83	0.22	0.16	0.33	0.24
10	-1.00	2.00	0.37	0.27	0.70	0.51
14	-0.50	1.41	0.34	0.24	1.04	0.75
18	0.00	1.00	1.14	0.82	2.18	1.57
25	0.50	0.71	3.49	2.51	5.67	4.08
35	1.00	0.50	6.38	4.58	12.05	8.66
45	1.50	0.35	7.97	5.73	20.02	14.39
60	2.00	0.25	10.96	7.87	30.98	22.26
80	2.50	0.18	59.19	42.53	90.17	64.79
120	3.00	0.13	29.41	21.13	119.58	85.92
170	3.50	0.09	8.75	6.29	128.33	92.21
200	3.75	0.07	1.58	1.14	129.91	93.35
230	4.00	0.06	0.69	0.50	130.60	93.85

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.95	2.74	2.33	2.03	1.60	0.60

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.18	0.22	0.78	-1.41	6.46

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y95 #4

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		BROWN SAND, WHITE SHELL, SHARK TOOTH

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
128.57	120.31	0.64	0.00	#200 - 8.01 #230 - 6.93	1.00	10.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.10	1.63	2.10	1.63
11/16"	-3.50	11.31	0.00	0.00	2.10	1.63
5/16"	-3.00	8.00	0.12	0.09	2.22	1.72
3.5	-2.50	5.66	2.30	1.79	4.52	3.51
4	-2.25	4.76	1.29	1.00	5.81	4.51
5	-2.00	4.00	1.36	1.06	7.17	5.57
7	-1.50	2.83	2.38	1.85	9.55	7.42
10	-1.00	2.00	2.16	1.68	11.71	9.10
14	-0.50	1.41	1.68	1.31	13.39	10.41
18	0.00	1.00	1.15	0.89	14.54	11.30
25	0.50	0.71	1.04	0.81	15.58	12.11
35	1.00	0.50	1.26	0.98	16.84	13.09
45	1.50	0.35	2.12	1.65	18.96	14.74
60	2.00	0.25	6.49	5.05	25.45	19.79
80	2.50	0.18	33.84	26.32	59.29	46.11
120	3.00	0.13	41.71	32.44	101.00	78.55
170	3.50	0.09	14.59	11.35	115.59	89.90
200	3.75	0.07	2.69	2.09	118.28	91.99
230	4.00	0.06	1.39	1.08	119.67	93.07

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.24	2.95	2.56	2.10	1.62	-2.13

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2	0.25	1.64	-2.13	6.85

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y96 #1

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		SILTY SAND/PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.17	147.78	0.50	0.36	#200 - 3.16 #230 - 2.94	4.80	13.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	1.41	0.93	1.41	0.93
11/16"	-3.50	11.31	8.06	5.33	9.47	6.26
5/16"	-3.00	8.00	12.19	8.06	21.66	14.32
3.5	-2.50	5.66	7.49	4.95	29.15	19.27
4	-2.25	4.76	5.16	3.41	34.31	22.68
5	-2.00	4.00	4.28	2.83	38.59	25.51
7	-1.50	2.83	14.52	9.61	53.11	35.12
10	-1.00	2.00	11.62	7.69	64.73	42.81
14	-0.50	1.41	13.38	8.85	78.11	51.66
18	0.00	1.00	8.41	5.56	86.52	57.22
25	0.50	0.71	4.93	3.26	91.45	60.48
35	1.00	0.50	5.41	3.58	96.86	64.06
45	1.50	0.35	7.99	5.29	104.85	69.35
60	2.00	0.25	9.28	6.14	114.13	75.49
80	2.50	0.18	15.58	10.31	129.71	85.80
120	3.00	0.13	11.84	7.83	141.55	93.63
170	3.50	0.09	4.01	2.65	145.56	96.28
200	3.75	0.07	0.84	0.56	146.40	96.84
230	4.00	0.06	0.34	0.22	146.74	97.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.26	2.41	1.96	-0.59	-2.05	-2.83	-3.62

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.36	1.28	2.17	0.09	1.74

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y96 #2

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
65.98	27.42	0.40	0.00	#200 - 61.67 #230 - 59.05	6.30	4.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.08	0.12	0.08	0.12
14	-0.50	1.41	0.36	0.55	0.44	0.67
18	0.00	1.00	0.64	0.97	1.08	1.64
25	0.50	0.71	0.93	1.41	2.01	3.05
35	1.00	0.50	1.50	2.27	3.51	5.32
45	1.50	0.35	2.83	4.29	6.34	9.61
60	2.00	0.25	4.09	6.20	10.43	15.81
80	2.50	0.18	4.45	6.74	14.88	22.55
120	3.00	0.13	4.82	7.31	19.70	29.86
170	3.50	0.09	3.74	5.67	23.44	35.53
200	3.75	0.07	1.85	2.80	25.29	38.33
230	4.00	0.06	1.73	2.62	27.02	40.95

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.67	2.01	0.93

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.23	0.21	1.09	-0.59	2.95

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y96 #3

Analysis Date: 03-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.27	132.95	0.73	0.00	#200 - 6.89 #230 - 6.41	1.00	1.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.01	0.02	0.01
10	-1.00	2.00	0.14	0.10	0.16	0.11
14	-0.50	1.41	0.41	0.29	0.57	0.40
18	0.00	1.00	0.24	0.17	0.81	0.57
25	0.50	0.71	0.34	0.24	1.15	0.81
35	1.00	0.50	0.34	0.24	1.49	1.05
45	1.50	0.35	0.31	0.22	1.80	1.27
60	2.00	0.25	0.81	0.57	2.61	1.84
80	2.50	0.18	56.97	40.33	59.58	42.17
120	3.00	0.13	59.96	42.44	119.54	84.61
170	3.50	0.09	10.38	7.35	129.92	91.96
200	3.75	0.07	1.62	1.15	131.54	93.11
230	4.00	0.06	0.68	0.48	132.22	93.59

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.99	2.89	2.59	2.29	2.18	2.04

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.55	0.17	0.46	-2.3	19.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y97 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		SILTY ROCKS AND SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.57	152.77	0.34	0.40	#200 - 3.31 #230 - 3.07	2.20	34.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	16.06	10.26	16.06	10.26
11/16"	-3.50	11.31	9.15	5.84	25.21	16.10
5/16"	-3.00	8.00	10.84	6.92	36.05	23.02
3.5	-2.50	5.66	5.79	3.70	41.84	26.72
4	-2.25	4.76	9.56	6.11	51.40	32.83
5	-2.00	4.00	22.39	14.30	73.79	47.13
7	-1.50	2.83	14.96	9.55	88.75	56.68
10	-1.00	2.00	5.91	3.77	94.66	60.45
14	-0.50	1.41	16.32	10.42	110.98	70.87
18	0.00	1.00	11.31	7.22	122.29	78.09
25	0.50	0.71	6.19	3.95	128.48	82.04
35	1.00	0.50	4.36	2.78	132.84	84.82
45	1.50	0.35	3.19	2.04	136.03	86.86
60	2.00	0.25	3.08	1.97	139.11	88.83
80	2.50	0.18	4.31	2.75	143.42	91.58
120	3.00	0.13	5.29	3.38	148.71	94.96
170	3.50	0.09	2.04	1.30	150.75	96.26
200	3.75	0.07	0.68	0.43	151.43	96.69
230	4.00	0.06	0.38	0.24	151.81	96.93

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.02	0.85	-0.21	-1.85	-2.73	-3.51	-4.13

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.46	2.75	1.94	0.67	2.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y97 #2
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.17	139.58	0.98	0.20	#200 - 8.99 #230 - 8.51	1.10	1.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.03	0.02	0.03	0.02
7	-1.50	2.83	0.00	0.00	0.03	0.02
10	-1.00	2.00	0.12	0.08	0.15	0.10
14	-0.50	1.41	0.33	0.22	0.48	0.32
18	0.00	1.00	0.82	0.54	1.30	0.86
25	0.50	0.71	1.85	1.22	3.15	2.08
35	1.00	0.50	3.29	2.18	6.44	4.26
45	1.50	0.35	4.25	2.81	10.69	7.07
60	2.00	0.25	7.01	4.64	17.70	11.71
80	2.50	0.18	57.28	37.89	74.98	49.60
120	3.00	0.13	49.41	32.69	124.39	82.29
170	3.50	0.09	11.17	7.39	135.56	89.68
200	3.75	0.07	2.01	1.33	137.57	91.01
230	4.00	0.06	0.73	0.48	138.30	91.49

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.12	2.89	2.51	2.18	2.06	1.13

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.39	0.19	0.64	-1.62	8.09

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y97 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
147.17	135.42			#200 - 9.85 #230 - 9.01	1.00	2.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.08	0.05	0.08	0.05
10	-1.00	2.00	0.16	0.11	0.24	0.16
14	-0.50	1.41	0.73	0.50	0.97	0.66
18	0.00	1.00	1.76	1.20	2.73	1.86
25	0.50	0.71	4.17	2.83	6.90	4.69
35	1.00	0.50	6.67	4.53	13.57	9.22
45	1.50	0.35	8.04	5.46	21.61	14.68
60	2.00	0.25	10.31	7.01	31.92	21.69
80	2.50	0.18	52.16	35.44	84.08	57.13
120	3.00	0.13	37.53	25.50	121.61	82.63
170	3.50	0.09	9.33	6.34	130.94	88.97
200	3.75	0.07	1.73	1.18	132.67	90.15
230	4.00	0.06	1.24	0.84	133.91	90.99

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.11	2.85	2.40	2.05	1.59	0.53

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.2	0.22	0.81	-1.23	5

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y98 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		ROCKS

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
163.16	157.53	0.42	0.40	#200 - 4.38 #230 - 4.09	2.70	17.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	15.89	9.74	15.89	9.74
5/16"	-3.00	8.00	9.38	5.75	25.27	15.49
3.5	-2.50	5.66	9.75	5.98	35.02	21.47
4	-2.25	4.76	5.11	3.13	40.13	24.60
5	-2.00	4.00	8.75	5.36	48.88	29.96
7	-1.50	2.83	21.66	13.28	70.54	43.24
10	-1.00	2.00	16.15	9.90	86.69	53.14
14	-0.50	1.41	10.26	6.29	96.95	59.43
18	0.00	1.00	5.75	3.52	102.70	62.95
25	0.50	0.71	5.14	3.15	107.84	66.10
35	1.00	0.50	5.86	3.59	113.70	69.69
45	1.50	0.35	5.54	3.40	119.24	73.09
60	2.00	0.25	5.23	3.21	124.47	76.30
80	2.50	0.18	10.98	6.73	135.45	83.03
120	3.00	0.13	12.25	7.51	147.70	90.54
170	3.50	0.09	6.92	4.24	154.62	94.78
200	3.75	0.07	1.37	0.84	155.99	95.62
230	4.00	0.06	0.47	0.29	156.46	95.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.57	2.56	1.80	-1.16	-2.23	-2.96	-3.86

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.67	1.59	2.21	0.4	1.92

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y98 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		SANDY PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
73.38	43.18	1.94	0.00	#200 - 49.67 #230 - 43.81	7.60	5.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.03	0.04	0.03	0.04
7	-1.50	2.83	0.25	0.34	0.28	0.38
10	-1.00	2.00	0.82	1.12	1.10	1.50
14	-0.50	1.41	1.28	1.74	2.38	3.24
18	0.00	1.00	1.46	1.99	3.84	5.23
25	0.50	0.71	1.27	1.73	5.11	6.96
35	1.00	0.50	1.24	1.69	6.35	8.65
45	1.50	0.35	1.16	1.58	7.51	10.23
60	2.00	0.25	1.23	1.68	8.74	11.91
80	2.50	0.18	1.44	1.96	10.18	13.87
120	3.00	0.13	4.34	5.91	14.52	19.78
170	3.50	0.09	15.94	21.72	30.46	41.50
200	3.75	0.07	6.48	8.83	36.94	50.33
230	4.00	0.06	4.30	5.86	41.24	56.19

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.74	3.12	2.68	-0.06

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.65	0.16	1.38	-1.57	4.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y98 #3
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.11	122.13	1.27	0.35	#200 - 15.23 #230 - 14.71	6.30	2.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.15	0.11	0.15	0.11
10	-1.00	2.00	0.67	0.47	0.82	0.58
14	-0.50	1.41	0.93	0.66	1.75	1.24
18	0.00	1.00	1.34	0.95	3.09	2.19
25	0.50	0.71	2.92	2.07	6.01	4.26
35	1.00	0.50	6.85	4.85	12.86	9.11
45	1.50	0.35	12.77	9.05	25.63	18.16
60	2.00	0.25	23.47	16.63	49.10	34.79
80	2.50	0.18	46.20	32.74	95.30	67.53
120	3.00	0.13	18.43	13.06	113.73	80.59
170	3.50	0.09	4.56	3.23	118.29	83.82
200	3.75	0.07	1.34	0.95	119.63	84.77
230	4.00	0.06	0.73	0.52	120.36	85.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.55	2.79	2.23	1.71	1.38	0.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.98	0.25	0.8	-1.07	5.36

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y101 #1
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM W/ GRAVEL		PEATY SAND, ROCKS, WOOD, EGGSHELL?

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.87	125.31	0.85	0.24	#200 - 20.76 #230 - 18.83	7.50	6.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	6.41	4.19	6.41	4.19
5/16"	-3.00	8.00	5.63	3.68	12.04	7.87
3.5	-2.50	5.66	8.30	5.43	20.34	13.30
4	-2.25	4.76	4.29	2.81	24.63	16.11
5	-2.00	4.00	3.06	2.00	27.69	18.11
7	-1.50	2.83	4.68	3.06	32.37	21.17
10	-1.00	2.00	4.38	2.87	36.75	24.04
14	-0.50	1.41	3.06	2.00	39.81	26.04
18	0.00	1.00	3.72	2.43	43.53	28.47
25	0.50	0.71	5.35	3.50	48.88	31.97
35	1.00	0.50	9.62	6.29	58.50	38.26
45	1.50	0.35	17.21	11.26	75.71	49.52
60	2.00	0.25	12.84	8.40	88.55	57.92
80	2.50	0.18	14.27	9.33	102.82	67.25
120	3.00	0.13	8.69	5.68	111.51	72.93
170	3.50	0.09	5.94	3.89	117.45	76.82
200	3.75	0.07	3.70	2.42	121.15	79.24
230	4.00	0.06	2.95	1.93	124.10	81.17

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.27	1.53	-0.76	-2.26	-3.39

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.43	0.74	2.23	-0.46	1.97

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y101 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
35.30	1.27	0.03	0.00	#200 - 96.69 #230 - 96.49	13.10	11.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.01	0.03	0.01	0.03
10	-1.00	2.00	0.07	0.20	0.08	0.23
14	-0.50	1.41	0.04	0.11	0.12	0.34
18	0.00	1.00	0.06	0.17	0.18	0.51
25	0.50	0.71	0.10	0.28	0.28	0.79
35	1.00	0.50	0.11	0.31	0.39	1.10
45	1.50	0.35	0.17	0.48	0.56	1.58
60	2.00	0.25	0.14	0.40	0.70	1.98
80	2.50	0.18	0.20	0.57	0.90	2.55
120	3.00	0.13	0.14	0.40	1.04	2.95
170	3.50	0.09	0.10	0.28	1.14	3.23
200	3.75	0.07	0.03	0.08	1.17	3.31
230	4.00	0.06	0.07	0.20	1.24	3.51

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.58	0.33	1.4	-0.37	2.43

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y101 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SAND, LITTLE PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.95	134.40	0.81	0.07	#200 - 8.23 #230 - 6.62	0.80	0.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.04	0.03	0.04	0.03
10	-1.00	2.00	0.04	0.03	0.08	0.06
14	-0.50	1.41	0.05	0.03	0.13	0.09
18	0.00	1.00	0.19	0.13	0.32	0.22
25	0.50	0.71	0.51	0.36	0.83	0.58
35	1.00	0.50	1.72	1.20	2.55	1.78
45	1.50	0.35	3.95	2.76	6.50	4.54
60	2.00	0.25	7.16	5.01	13.66	9.55
80	2.50	0.18	36.81	25.75	50.47	35.30
120	3.00	0.13	57.68	40.35	108.15	75.65
170	3.50	0.09	19.14	13.39	127.29	89.04
200	3.75	0.07	3.90	2.73	131.19	91.77
230	4.00	0.06	2.30	1.61	133.49	93.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.31	2.99	2.68	2.30	2.13	1.55

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.59	0.17	0.59	-1.06	6.7

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y103 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		SAND, FEW FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
161.01	146.96	3.28	0.14	#200 - 12.90 #230 - 10.91	0.00	1.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.31	0.19	0.31	0.19
10	-1.00	2.00	0.52	0.32	0.83	0.51
14	-0.50	1.41	0.27	0.17	1.10	0.68
18	0.00	1.00	0.51	0.32	1.61	1.00
25	0.50	0.71	0.96	0.60	2.57	1.60
35	1.00	0.50	2.05	1.27	4.62	2.87
45	1.50	0.35	4.99	3.10	9.61	5.97
60	2.00	0.25	15.86	9.85	25.47	15.82
80	2.50	0.18	53.70	33.35	79.17	49.17
120	3.00	0.13	39.03	24.24	118.20	73.41
170	3.50	0.09	16.33	10.14	134.53	83.55
200	3.75	0.07	5.72	3.55	140.25	87.10
230	4.00	0.06	3.21	1.99	143.46	89.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.53	3.08	2.52	2.14	2.00	1.34

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.43	0.19	0.72	-1.3	8.36

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y103 #2
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		ROCKS, COARSE QUARTZ SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.63 #230 - 0.55	Organics (%):	Carbonates (%):	Shells (%):
185.51	185.51	0.41	0.32		0.30	0.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	7.05	3.80	7.05	3.80
11/16"	-3.50	11.31	16.43	8.86	23.48	12.66
5/16"	-3.00	8.00	16.85	9.08	40.33	21.74
3.5	-2.50	5.66	10.33	5.57	50.66	27.31
4	-2.25	4.76	4.78	2.58	55.44	29.89
5	-2.00	4.00	4.77	2.57	60.21	32.46
7	-1.50	2.83	4.85	2.61	65.06	35.07
10	-1.00	2.00	3.81	2.05	68.87	37.12
14	-0.50	1.41	4.64	2.50	73.51	39.62
18	0.00	1.00	7.84	4.23	81.35	43.85
25	0.50	0.71	14.33	7.72	95.68	51.57
35	1.00	0.50	23.68	12.76	119.36	64.33
45	1.50	0.35	27.26	14.69	146.62	79.02
60	2.00	0.25	22.11	11.92	168.73	90.94
80	2.50	0.18	10.73	5.78	179.46	96.72
120	3.00	0.13	3.54	1.91	183.00	98.63
170	3.50	0.09	1.06	0.57	184.06	99.20
200	3.75	0.07	0.31	0.17	184.37	99.37
230	4.00	0.06	0.14	0.08	184.51	99.45

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.35	1.71	1.36	0.40	-2.71	-3.32	-3.93

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.44	1.36	2.17	-0.38	1.66

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y103 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		WHITE MEDIUM SAND, SOME DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.92	131.36	0.17	0.09	#200 - 8.64 #230 - 7.65	0.80	1.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.01	0.01	0.01
14	-0.50	1.41	0.05	0.04	0.06	0.05
18	0.00	1.00	0.18	0.13	0.24	0.18
25	0.50	0.71	0.60	0.42	0.84	0.60
35	1.00	0.50	1.35	0.95	2.19	1.55
45	1.50	0.35	2.60	1.83	4.79	3.38
60	2.00	0.25	6.05	4.26	10.84	7.64
80	2.50	0.18	36.41	25.66	47.25	33.30
120	3.00	0.13	61.77	43.52	109.02	76.82
170	3.50	0.09	17.33	12.21	126.35	89.03
200	3.75	0.07	3.31	2.33	129.66	91.36
230	4.00	0.06	1.40	0.99	131.06	92.35

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.29	2.98	2.69	2.34	2.16	1.69

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.6	0.16	0.54	-1.11	6.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y103 #4

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SAND, DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
170.30	155.77	0.48	0.09	#200 - 9.71 #230 - 8.91	1.00	1.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.13	0.08	0.13	0.08
18	0.00	1.00	0.65	0.38	0.78	0.46
25	0.50	0.71	1.28	0.75	2.06	1.21
35	1.00	0.50	2.59	1.52	4.65	2.73
45	1.50	0.35	4.00	2.35	8.65	5.08
60	2.00	0.25	8.40	4.93	17.05	10.01
80	2.50	0.18	66.10	38.81	83.15	48.82
120	3.00	0.13	50.63	29.73	133.78	78.55
170	3.50	0.09	16.08	9.44	149.86	87.99
200	3.75	0.07	3.91	2.30	153.77	90.29
230	4.00	0.06	1.36	0.80	155.13	91.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.29	2.94	2.52	2.19	2.08	1.48

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.46	0.18	0.6	-1.07	6.67

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y107 #1

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
61.68	7.74	0.18	0.00	#200 - 87.99 #230 - 87.76	10.80	9.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.12	0.19	0.12	0.19
7	-1.50	2.83	0.08	0.13	0.20	0.32
10	-1.00	2.00	0.29	0.47	0.49	0.79
14	-0.50	1.41	0.52	0.84	1.01	1.63
18	0.00	1.00	0.81	1.31	1.82	2.94
25	0.50	0.71	0.96	1.56	2.78	4.50
35	1.00	0.50	0.97	1.57	3.75	6.07
45	1.50	0.35	0.91	1.48	4.66	7.55
60	2.00	0.25	0.77	1.25	5.43	8.80
80	2.50	0.18	0.70	1.13	6.13	9.93
120	3.00	0.13	0.65	1.05	6.78	10.98
170	3.50	0.09	0.41	0.66	7.19	11.64
200	3.75	0.07	0.23	0.37	7.42	12.01
230	4.00	0.06	0.14	0.23	7.56	12.24

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						0.66

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.08	0.47	1.41	0.01	2.3

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y107 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SAND, TRACE FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.16	136.22	0.69	0.05	#200 - 6.16 #230 - 5.37	1.50	0.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.01	0.01	0.01
14	-0.50	1.41	0.00	0.00	0.01	0.01
18	0.00	1.00	0.02	0.01	0.03	0.02
25	0.50	0.71	0.05	0.03	0.08	0.05
35	1.00	0.50	0.08	0.06	0.16	0.11
45	1.50	0.35	0.85	0.59	1.01	0.70
60	2.00	0.25	17.03	11.90	18.04	12.60
80	2.50	0.18	72.62	50.73	90.66	63.33
120	3.00	0.13	31.12	21.74	121.78	85.07
170	3.50	0.09	9.93	6.94	131.71	92.01
200	3.75	0.07	2.62	1.83	134.33	93.84
230	4.00	0.06	1.13	0.79	135.46	94.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.98	2.77	2.37	2.12	2.03	1.68

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.41	0.19	0.46	0.58	4.42

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y110 #1
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		SAND AND SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
172.16	172.16	0.25	0.06	#200 - 0.31 #230 - 0.21	1.10	13.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	12.12	7.04	12.12	7.04
5/8"	-4.00	16.00	8.13	4.72	20.25	11.76
11/16"	-3.50	11.31	9.56	5.55	29.81	17.31
5/16"	-3.00	8.00	2.91	1.69	32.72	19.00
3.5	-2.50	5.66	2.64	1.53	35.36	20.53
4	-2.25	4.76	0.53	0.31	35.89	20.84
5	-2.00	4.00	1.22	0.71	37.11	21.55
7	-1.50	2.83	5.13	2.98	42.24	24.53
10	-1.00	2.00	4.68	2.72	46.92	27.25
14	-0.50	1.41	3.43	1.99	50.35	29.24
18	0.00	1.00	3.29	1.91	53.64	31.15
25	0.50	0.71	4.13	2.40	57.77	33.55
35	1.00	0.50	6.66	3.87	64.43	37.42
45	1.50	0.35	12.46	7.24	76.89	44.66
60	2.00	0.25	20.01	11.62	96.90	56.28
80	2.50	0.18	38.12	22.14	135.02	78.42
120	3.00	0.13	29.90	17.37	164.92	95.79
170	3.50	0.09	6.27	3.64	171.19	99.43
200	3.75	0.07	0.45	0.26	171.64	99.69
230	4.00	0.06	0.17	0.10	171.81	99.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.66	2.42	1.73	-1.41	-3.62	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.5	0.71	2.21	-0.63	2.36

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y110 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		COARSE QUARTZ SAND, FEW PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
184.95	184.95	1.09	0.00	#200 - 0.63 #230 - 0.58	0.40	1.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	6.03	3.26	6.03	3.26
3.5	-2.50	5.66	4.68	2.53	10.71	5.79
4	-2.25	4.76	0.65	0.35	11.36	6.14
5	-2.00	4.00	1.66	0.90	13.02	7.04
7	-1.50	2.83	2.89	1.56	15.91	8.60
10	-1.00	2.00	2.18	1.18	18.09	9.78
14	-0.50	1.41	3.75	2.03	21.84	11.81
18	0.00	1.00	6.56	3.55	28.40	15.36
25	0.50	0.71	13.05	7.06	41.45	22.42
35	1.00	0.50	30.20	16.33	71.65	38.75
45	1.50	0.35	49.86	26.96	121.51	65.71
60	2.00	0.25	39.40	21.30	160.91	87.01
80	2.50	0.18	17.55	9.49	178.46	96.50
120	3.00	0.13	4.12	2.23	182.58	98.73
170	3.50	0.09	0.91	0.49	183.49	99.22
200	3.75	0.07	0.27	0.15	183.76	99.37
230	4.00	0.06	0.10	0.05	183.86	99.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.42	1.93	1.72	1.21	0.58	0.05	-2.66

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.88	0.54	1.34	-1.57	5.32

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y110 #3
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SAND, SOME YELLOW FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.72	123.87	0.22	-0.11	#200 - 8.93 #230 - 8.12	0.60	1.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.02	0.01	0.02	0.01
14	-0.50	1.41	0.01	0.01	0.03	0.02
18	0.00	1.00	0.04	0.03	0.07	0.05
25	0.50	0.71	0.12	0.09	0.19	0.14
35	1.00	0.50	0.33	0.24	0.52	0.38
45	1.50	0.35	1.02	0.76	1.54	1.14
60	2.00	0.25	4.73	3.51	6.27	4.65
80	2.50	0.18	40.46	30.03	46.73	34.68
120	3.00	0.13	56.44	41.89	103.17	76.57
170	3.50	0.09	17.18	12.75	120.35	89.32
200	3.75	0.07	2.36	1.75	122.71	91.07
230	4.00	0.06	1.09	0.81	123.80	91.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.29	2.98	2.68	2.34	2.19	2.01

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.62	0.16	0.45	-0.45	5.96

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y110 #4

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		SAND, SOME YELLOW FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.09	169.51	0.49	0.00	#200 - 4.58 #230 - 4.01	0.70	1.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.03	0.02	0.03	0.02
18	0.00	1.00	0.07	0.04	0.10	0.06
25	0.50	0.71	0.08	0.05	0.18	0.11
35	1.00	0.50	0.27	0.15	0.45	0.26
45	1.50	0.35	0.93	0.53	1.38	0.79
60	2.00	0.25	3.51	1.99	4.89	2.78
80	2.50	0.18	37.76	21.44	42.65	24.22
120	3.00	0.13	98.26	55.80	140.91	80.02
170	3.50	0.09	23.38	13.28	164.29	93.30
200	3.75	0.07	3.73	2.12	168.02	95.42
230	4.00	0.06	1.00	0.57	169.02	95.99

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.70	3.15	2.96	2.73	2.51	2.31	2.05

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.7	0.15	0.4	-0.63	7.25

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y114 #1
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		SAND, ROCKS, SHELL, FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
121.12	119.29	0.01	0.07	#200 - 1.71 #230 - 1.60	1.40	23.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	5.41	4.47	5.41	4.47
5/8"	-4.00	16.00	5.96	4.92	11.37	9.39
11/16"	-3.50	11.31	4.95	4.09	16.32	13.48
5/16"	-3.00	8.00	4.24	3.50	20.56	16.98
3.5	-2.50	5.66	7.26	5.99	27.82	22.97
4	-2.25	4.76	0.90	0.74	28.72	23.71
5	-2.00	4.00	2.42	2.00	31.14	25.71
7	-1.50	2.83	5.27	4.35	36.41	30.06
10	-1.00	2.00	4.67	3.86	41.08	33.92
14	-0.50	1.41	3.37	2.78	44.45	36.70
18	0.00	1.00	3.13	2.58	47.58	39.28
25	0.50	0.71	3.47	2.86	51.05	42.14
35	1.00	0.50	5.38	4.44	56.43	46.58
45	1.50	0.35	7.87	6.50	64.30	53.08
60	2.00	0.25	12.78	10.55	77.08	63.63
80	2.50	0.18	23.30	19.24	100.38	82.87
120	3.00	0.13	15.60	12.88	115.98	95.75
170	3.50	0.09	2.85	2.35	118.83	98.10
200	3.75	0.07	0.23	0.19	119.06	98.29
230	4.00	0.06	0.13	0.11	119.19	98.40

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.97	2.54	2.30	1.26	-2.09	-3.14	-4.22

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.14	0.91	2.3	-0.36	1.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y114 #2

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
71.05	7.14	0.00	0.00	#200 - 90.35 #230 - 89.96	15.60	11.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.05	0.07	0.05	0.07
10	-1.00	2.00	0.10	0.14	0.15	0.21
14	-0.50	1.41	0.56	0.79	0.71	1.00
18	0.00	1.00	0.47	0.66	1.18	1.66
25	0.50	0.71	0.47	0.66	1.65	2.32
35	1.00	0.50	0.53	0.75	2.18	3.07
45	1.50	0.35	0.74	1.04	2.92	4.11
60	2.00	0.25	0.76	1.07	3.68	5.18
80	2.50	0.18	0.99	1.39	4.67	6.57
120	3.00	0.13	0.97	1.37	5.64	7.94
170	3.50	0.09	0.82	1.15	6.46	9.09
200	3.75	0.07	0.40	0.56	6.86	9.65
230	4.00	0.06	0.28	0.39	7.14	10.04

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						1.92

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.7	0.31	1.42	-0.4	2.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y115 #1
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		FINE WHITE SAND, DARK FINES, LITTLE PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
159.75	136.81	2.14	0.00	#200 - 17.90 #230 - 15.70	0.80	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.01	0.01	0.01
14	-0.50	1.41	0.00	0.00	0.01	0.01
18	0.00	1.00	0.03	0.02	0.04	0.03
25	0.50	0.71	0.08	0.05	0.12	0.08
35	1.00	0.50	0.09	0.06	0.21	0.14
45	1.50	0.35	0.15	0.09	0.36	0.23
60	2.00	0.25	3.60	2.25	3.96	2.48
80	2.50	0.18	47.30	29.61	51.26	32.09
120	3.00	0.13	54.93	34.38	106.19	66.47
170	3.50	0.09	19.94	12.48	126.13	78.95
200	3.75	0.07	5.03	3.15	131.16	82.10
230	4.00	0.06	3.51	2.20	134.67	84.30

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.97	3.34	2.76	2.38	2.23	2.04

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.68	0.16	0.47	0.28	4.12

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y115 #2
Analysis Date: 03-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		1 BIG ROCK, COARSE QUARTZ SAND, PEBBLES, DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
166.00	164.02	0.06	0.52	#200 - 1.78 #230 - 1.74	0.40	0.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	31.05	18.70	31.05	18.70
5/8"	-4.00	16.00	0.00	0.00	31.05	18.70
11/16"	-3.50	11.31	0.00	0.00	31.05	18.70
5/16"	-3.00	8.00	1.55	0.93	32.60	19.63
3.5	-2.50	5.66	1.01	0.61	33.61	20.24
4	-2.25	4.76	0.51	0.31	34.12	20.55
5	-2.00	4.00	0.99	0.60	35.11	21.15
7	-1.50	2.83	1.99	1.20	37.10	22.35
10	-1.00	2.00	2.12	1.28	39.22	23.63
14	-0.50	1.41	3.75	2.26	42.97	25.89
18	0.00	1.00	6.13	3.69	49.10	29.58
25	0.50	0.71	12.08	7.28	61.18	36.86
35	1.00	0.50	19.91	11.99	81.09	48.85
45	1.50	0.35	24.64	14.84	105.73	63.69
60	2.00	0.25	32.24	19.42	137.97	83.11
80	2.50	0.18	20.76	12.51	158.73	95.62
120	3.00	0.13	3.56	2.14	162.29	97.76
170	3.50	0.09	0.64	0.39	162.93	98.15
200	3.75	0.07	0.11	0.07	163.04	98.22
230	4.00	0.06	0.06	0.04	163.10	98.26

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.48	2.04	1.79	1.04	-0.70		

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.04	0.97	1.4	0.93	2.25

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y115 #3

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		QUARTZ SAND, DARK PEATY FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
169.72	167.27	0.00	0.11	#200 - 1.58 #230 - 1.56	0.30	0.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.13	0.08	0.13	0.08
7	-1.50	2.83	0.21	0.12	0.34	0.20
10	-1.00	2.00	0.30	0.18	0.64	0.38
14	-0.50	1.41	0.40	0.24	1.04	0.62
18	0.00	1.00	0.67	0.39	1.71	1.01
25	0.50	0.71	1.94	1.14	3.65	2.15
35	1.00	0.50	5.78	3.41	9.43	5.56
45	1.50	0.35	17.17	10.12	26.60	15.68
60	2.00	0.25	82.31	48.50	108.91	64.18
80	2.50	0.18	48.97	28.85	157.88	93.03
120	3.00	0.13	8.32	4.90	166.20	97.93
170	3.50	0.09	0.72	0.42	166.92	98.35
200	3.75	0.07	0.12	0.07	167.04	98.42
230	4.00	0.06	0.04	0.02	167.08	98.44

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.70	2.34	2.19	1.85	1.60	1.50	0.92

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.82	0.28	0.54	-1.66	11.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y115 #4

Analysis Date: 03-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		QUARTZ SAND, DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
167.94	157.67	0.47	0.00	#200 - 6.84 #230 - 6.39	0.40	1.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.04	0.02	0.04	0.02
10	-1.00	2.00	0.02	0.01	0.06	0.03
14	-0.50	1.41	0.09	0.05	0.15	0.08
18	0.00	1.00	0.22	0.13	0.37	0.21
25	0.50	0.71	0.33	0.20	0.70	0.41
35	1.00	0.50	1.27	0.76	1.97	1.17
45	1.50	0.35	2.63	1.57	4.60	2.74
60	2.00	0.25	4.78	2.85	9.38	5.59
80	2.50	0.18	61.21	36.45	70.59	42.04
120	3.00	0.13	70.27	41.84	140.86	83.88
170	3.50	0.09	13.53	8.06	154.39	91.94
200	3.75	0.07	2.05	1.22	156.44	93.16
230	4.00	0.06	0.76	0.45	157.20	93.61

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.01	2.89	2.60	2.27	2.14	1.90

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.53	0.17	0.48	-1.3	10.02

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y119 #1

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		COARSE QUARTZ SAND, PEBBLES, CLAYBALLS

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.21	115.32	0.12	0.01	#200 - 14.39 #230 - 14.16	4.90	9.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.37	1.02	1.37	1.02
4	-2.25	4.76	0.73	0.54	2.10	1.56
5	-2.00	4.00	0.99	0.74	3.09	2.30
7	-1.50	2.83	5.08	3.79	8.17	6.09
10	-1.00	2.00	6.32	4.71	14.49	10.80
14	-0.50	1.41	3.03	2.26	17.52	13.06
18	0.00	1.00	1.62	1.21	19.14	14.27
25	0.50	0.71	1.31	0.98	20.45	15.25
35	1.00	0.50	1.57	1.17	22.02	16.42
45	1.50	0.35	2.64	1.97	24.66	18.39
60	2.00	0.25	8.38	6.24	33.04	24.63
80	2.50	0.18	38.60	28.76	71.64	53.39
120	3.00	0.13	34.72	25.87	106.36	79.26
170	3.50	0.09	7.77	5.79	114.13	85.05
200	3.75	0.07	0.75	0.56	114.88	85.61
230	4.00	0.06	0.31	0.23	115.19	85.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.41	2.92	2.44	2.01	0.82	-1.64

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.77	0.29	1.53	-1.52	4.04

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y119 #2

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		PEATY MEDIUM SAND, TRACE PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.28	139.70	0.80	0.06	#200 - 11.67 #230 - 11.18	1.30	1.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.49	0.31	0.49	0.31
5	-2.00	4.00	0.70	0.45	1.19	0.76
7	-1.50	2.83	0.74	0.47	1.93	1.23
10	-1.00	2.00	0.62	0.40	2.55	1.63
14	-0.50	1.41	0.70	0.45	3.25	2.08
18	0.00	1.00	0.64	0.41	3.89	2.49
25	0.50	0.71	1.00	0.64	4.89	3.13
35	1.00	0.50	2.75	1.76	7.64	4.89
45	1.50	0.35	7.34	4.70	14.98	9.59
60	2.00	0.25	20.95	13.41	35.93	23.00
80	2.50	0.18	47.11	30.14	83.04	53.14
120	3.00	0.13	44.29	28.34	127.33	81.48
170	3.50	0.09	9.13	5.84	136.46	87.32
200	3.75	0.07	1.58	1.01	138.04	88.33
230	4.00	0.06	0.76	0.49	138.80	88.82

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.22	2.89	2.45	2.03	1.74	1.01

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.23	0.21	0.86	-2.39	11.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y119 #3

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.37	118.93	0.54	0.12	#200 - 14.33 #230 - 13.94	4.10	2.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.16	0.12	0.16	0.12
5	-2.00	4.00	0.36	0.26	0.52	0.38
7	-1.50	2.83	1.06	0.77	1.58	1.15
10	-1.00	2.00	0.80	0.58	2.38	1.73
14	-0.50	1.41	1.31	0.95	3.69	2.68
18	0.00	1.00	1.25	0.91	4.94	3.59
25	0.50	0.71	1.65	1.20	6.59	4.79
35	1.00	0.50	2.74	1.99	9.33	6.78
45	1.50	0.35	5.72	4.16	15.05	10.94
60	2.00	0.25	18.40	13.39	33.45	24.33
80	2.50	0.18	48.32	35.18	81.77	59.51
120	3.00	0.13	28.21	20.54	109.98	80.05
170	3.50	0.09	6.47	4.71	116.45	84.76
200	3.75	0.07	1.25	0.91	117.70	85.67
230	4.00	0.06	0.53	0.39	118.23	86.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.42	2.88	2.36	2.01	1.69	0.55

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.12	0.23	0.9	-2.12	9.3

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: Y120 #1
Analysis Date: 03-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		SHELL AND ROCK

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.06	173.58	0.06	0.01	#200 - 1.57 #230 - 1.46	2.00	8.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	47.14	26.77	47.14	26.77
5/8"	-4.00	16.00	15.04	8.54	62.18	35.31
11/16"	-3.50	11.31	0.00	0.00	62.18	35.31
5/16"	-3.00	8.00	5.58	3.17	67.76	38.48
3.5	-2.50	5.66	5.07	2.88	72.83	41.36
4	-2.25	4.76	1.74	0.99	74.57	42.35
5	-2.00	4.00	2.77	1.57	77.34	43.92
7	-1.50	2.83	8.36	4.75	85.70	48.67
10	-1.00	2.00	6.14	3.49	91.84	52.16
14	-0.50	1.41	3.44	1.95	95.28	54.11
18	0.00	1.00	2.43	1.38	97.71	55.49
25	0.50	0.71	2.68	1.52	100.39	57.01
35	1.00	0.50	3.52	2.00	103.91	59.01
45	1.50	0.35	4.54	2.58	108.45	61.59
60	2.00	0.25	7.54	4.28	115.99	65.87
80	2.50	0.18	25.99	14.76	141.98	80.63
120	3.00	0.13	25.54	14.51	167.52	95.14
170	3.50	0.09	5.40	3.07	172.92	98.21
200	3.75	0.07	0.39	0.22	173.31	98.43
230	4.00	0.06	0.19	0.11	173.50	98.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.00	2.62	2.31	-1.31			

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.95	1.93	2.43	0.9	1.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y120 #2

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
144.45	140.01	0.10	0.00	#200 - 3.33 #230 - 3.16	0.30	1.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.36	0.25	0.36	0.25
10	-1.00	2.00	0.16	0.11	0.52	0.36
14	-0.50	1.41	0.39	0.27	0.91	0.63
18	0.00	1.00	0.58	0.40	1.49	1.03
25	0.50	0.71	1.99	1.38	3.48	2.41
35	1.00	0.50	7.79	5.39	11.27	7.80
45	1.50	0.35	13.93	9.64	25.20	17.44
60	2.00	0.25	19.57	13.55	44.77	30.99
80	2.50	0.18	51.56	35.69	96.33	66.68
120	3.00	0.13	36.09	24.98	132.42	91.66
170	3.50	0.09	6.42	4.44	138.84	96.10
200	3.75	0.07	0.83	0.57	139.67	96.67
230	4.00	0.06	0.24	0.17	139.91	96.84

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.38	2.85	2.67	2.27	1.78	1.43	0.74

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.12	0.23	0.73	-1.19	5.78

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y120 #3

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
155.51	144.33	0.29	0.00	#200 - 7.96 #230 - 7.36	0.90	2.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.01	0.01	0.01	0.01
10	-1.00	2.00	0.04	0.03	0.05	0.04
14	-0.50	1.41	0.04	0.03	0.09	0.07
18	0.00	1.00	0.12	0.08	0.21	0.15
25	0.50	0.71	0.21	0.14	0.42	0.29
35	1.00	0.50	0.80	0.51	1.22	0.80
45	1.50	0.35	1.84	1.18	3.06	1.98
60	2.00	0.25	3.76	2.42	6.82	4.40
80	2.50	0.18	54.39	34.98	61.21	39.38
120	3.00	0.13	66.44	42.72	127.65	82.10
170	3.50	0.09	13.75	8.84	141.40	90.94
200	3.75	0.07	1.71	1.10	143.11	92.04
230	4.00	0.06	0.93	0.60	144.04	92.64

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.11	2.92	2.62	2.29	2.17	2.01

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.56	0.17	0.45	-1	9.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y121 #1

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		SAND, PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
147.83	145.89	0.05	0.14	#200 - 1.61 #230 - 1.50	0.70	8.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.15	1.45	2.15	1.45
5/16"	-3.00	8.00	2.35	1.59	4.50	3.04
3.5	-2.50	5.66	6.82	4.61	11.32	7.65
4	-2.25	4.76	1.86	1.26	13.18	8.91
5	-2.00	4.00	2.34	1.58	15.52	10.49
7	-1.50	2.83	6.33	4.28	21.85	14.77
10	-1.00	2.00	4.57	3.09	26.42	17.86
14	-0.50	1.41	3.87	2.62	30.29	20.48
18	0.00	1.00	2.47	1.67	32.76	22.15
25	0.50	0.71	2.66	1.80	35.42	23.95
35	1.00	0.50	4.97	3.36	40.39	27.31
45	1.50	0.35	9.97	6.74	50.36	34.05
60	2.00	0.25	13.85	9.37	64.21	43.42
80	2.50	0.18	42.16	28.52	106.37	71.94
120	3.00	0.13	31.66	21.42	138.03	93.36
170	3.50	0.09	6.66	4.51	144.69	97.87
200	3.75	0.07	0.77	0.52	145.46	98.39
230	4.00	0.06	0.17	0.11	145.63	98.50

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.18	2.78	2.57	2.12	0.66	-1.30	-2.79

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.26	0.42	1.89	-1.2	3.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y121 #2

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
81.24	46.19	1.16	0.00	#200 - 45.92 #230 - 44.58	12.90	6.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.58	0.71	0.58	0.71
10	-1.00	2.00	1.89	2.33	2.47	3.04
14	-0.50	1.41	2.62	3.23	5.09	6.27
18	0.00	1.00	2.70	3.32	7.79	9.59
25	0.50	0.71	2.61	3.21	10.40	12.80
35	1.00	0.50	2.87	3.53	13.27	16.33
45	1.50	0.35	3.34	4.11	16.61	20.44
60	2.00	0.25	4.33	5.33	20.94	25.77
80	2.50	0.18	6.97	8.58	27.91	34.35
120	3.00	0.13	9.00	11.08	36.91	45.43
170	3.50	0.09	5.56	6.84	42.47	52.27
200	3.75	0.07	1.47	1.81	43.94	54.08
230	4.00	0.06	1.09	1.34	45.03	55.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.33	1.93	0.95	-0.70

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.7	0.31	1.45	-0.65	2.35

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y121 #3

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		MEDIUM SAND, DARK FINES, TRACE PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
145.31	138.91	1.02	0.00	#200 - 6.19 #230 - 5.10	1.00	1.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.05	0.03	0.05	0.03
7	-1.50	2.83	0.01	0.01	0.06	0.04
10	-1.00	2.00	0.01	0.01	0.07	0.05
14	-0.50	1.41	0.06	0.04	0.13	0.09
18	0.00	1.00	0.15	0.10	0.28	0.19
25	0.50	0.71	0.21	0.14	0.49	0.33
35	1.00	0.50	0.45	0.31	0.94	0.64
45	1.50	0.35	1.74	1.20	2.68	1.84
60	2.00	0.25	9.20	6.33	11.88	8.17
80	2.50	0.18	50.04	34.44	61.92	42.61
120	3.00	0.13	48.72	33.53	110.64	76.14
170	3.50	0.09	20.57	14.16	131.21	90.30
200	3.75	0.07	5.10	3.51	136.31	93.81
230	4.00	0.06	1.58	1.09	137.89	94.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.28	2.98	2.61	2.24	2.11	1.75

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.59	0.17	0.54	-0.64	7.34

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y121 #4

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		COARSE SAND, DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
181.62	176.33	0.28	0.24	#200 - 3.52 #230 - 3.28	0.80	0.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.65	0.91	1.65	0.91
3.5	-2.50	5.66	0.43	0.24	2.08	1.15
4	-2.25	4.76	0.29	0.16	2.37	1.31
5	-2.00	4.00	0.89	0.49	3.26	1.80
7	-1.50	2.83	1.83	1.01	5.09	2.81
10	-1.00	2.00	1.50	0.83	6.59	3.64
14	-0.50	1.41	1.81	1.00	8.40	4.64
18	0.00	1.00	3.19	1.76	11.59	6.40
25	0.50	0.71	9.06	4.99	20.65	11.39
35	1.00	0.50	19.10	10.52	39.75	21.91
45	1.50	0.35	19.91	10.96	59.66	32.87
60	2.00	0.25	21.25	11.70	80.91	44.57
80	2.50	0.18	56.41	31.06	137.32	75.63
120	3.00	0.13	31.15	17.15	168.47	92.78
170	3.50	0.09	5.97	3.29	174.44	96.07
200	3.75	0.07	0.74	0.41	175.18	96.48
230	4.00	0.06	0.43	0.24	175.61	96.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.34	2.74	2.49	2.09	1.14	0.72	-0.40

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.7	0.31	1.16	-1.61	6.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y122 #1

Analysis Date: 03-15-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		VERY PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
139.37	108.37	0.54	0.00	#200 - 23.42 #230 - 22.62	2.50	2.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.01	0.01	0.01	0.01
10	-1.00	2.00	0.14	0.10	0.15	0.11
14	-0.50	1.41	0.44	0.32	0.59	0.43
18	0.00	1.00	0.51	0.37	1.10	0.80
25	0.50	0.71	0.49	0.35	1.59	1.15
35	1.00	0.50	0.51	0.37	2.10	1.52
45	1.50	0.35	0.66	0.47	2.76	1.99
60	2.00	0.25	9.84	7.06	12.60	9.05
80	2.50	0.18	57.81	41.48	70.41	50.53
120	3.00	0.13	28.01	20.10	98.42	70.63
170	3.50	0.09	6.98	5.01	105.40	75.64
200	3.75	0.07	1.31	0.94	106.71	76.58
230	4.00	0.06	1.12	0.80	107.83	77.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.44	2.49	2.19	2.08	1.71

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.38	0.19	0.55	-1.57	12.38

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y122 #2

Analysis Date: 03-15-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.48	156.79	0.52	0.34	#200 - 5.69 #230 - 5.33	0.60	0.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.13	0.08	0.13	0.08
14	-0.50	1.41	0.73	0.44	0.86	0.52
18	0.00	1.00	1.88	1.14	2.74	1.66
25	0.50	0.71	6.05	3.68	8.79	5.34
35	1.00	0.50	14.64	8.90	23.43	14.24
45	1.50	0.35	28.09	17.08	51.52	31.32
60	2.00	0.25	37.96	23.08	89.48	54.40
80	2.50	0.18	41.25	25.08	130.73	79.48
120	3.00	0.13	17.10	10.40	147.83	89.88
170	3.50	0.09	5.92	3.60	153.75	93.48
200	3.75	0.07	1.36	0.83	155.11	94.31
230	4.00	0.06	0.60	0.36	155.71	94.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.72	2.41	1.90	1.31	1.05	0.45

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.79	0.29	0.79	-0.32	3.31

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y122 #3

Analysis Date: 03-15-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		QUARTZ SAND, SOME PEAT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.39	156.72	0.31	0.01	#200 - 3.99 #230 - 3.69	0.50	0.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.02	0.01	0.02	0.01
7	-1.50	2.83	0.28	0.17	0.30	0.18
10	-1.00	2.00	0.75	0.46	1.05	0.64
14	-0.50	1.41	0.84	0.52	1.89	1.16
18	0.00	1.00	0.54	0.33	2.43	1.49
25	0.50	0.71	0.48	0.30	2.91	1.79
35	1.00	0.50	0.95	0.59	3.86	2.38
45	1.50	0.35	2.94	1.81	6.80	4.19
60	2.00	0.25	17.59	10.83	24.39	15.02
80	2.50	0.18	90.47	55.71	114.86	70.73
120	3.00	0.13	34.24	21.09	149.10	91.82
170	3.50	0.09	6.06	3.73	155.16	95.55
200	3.75	0.07	0.75	0.46	155.91	96.01
230	4.00	0.06	0.48	0.30	156.39	96.31

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.43	2.81	2.60	2.31	2.09	2.01	1.54

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.27	0.21	0.59	-2.67	17.3

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y126 #1

Analysis Date: 03-15-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		BLUE/GRAY SHELL, PEBBLES, SILT, SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
204.34	186.64	0.79	0.09	#200 - 9.63 #230 - 9.12	2.60	20.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	5.56	2.72	5.56	2.72
5/16"	-3.00	8.00	2.06	1.01	7.62	3.73
3.5	-2.50	5.66	5.03	2.46	12.65	6.19
4	-2.25	4.76	4.98	2.44	17.63	8.63
5	-2.00	4.00	4.69	2.30	22.32	10.93
7	-1.50	2.83	12.52	6.13	34.84	17.06
10	-1.00	2.00	9.72	4.76	44.56	21.82
14	-0.50	1.41	11.87	5.81	56.43	27.63
18	0.00	1.00	7.95	3.89	64.38	31.52
25	0.50	0.71	7.37	3.61	71.75	35.13
35	1.00	0.50	8.72	4.27	80.47	39.40
45	1.50	0.35	9.18	4.49	89.65	43.89
60	2.00	0.25	11.56	5.66	101.21	49.55
80	2.50	0.18	31.17	15.25	132.38	64.80
120	3.00	0.13	34.54	16.90	166.92	81.70
170	3.50	0.09	14.50	7.10	181.42	88.80
200	3.75	0.07	3.20	1.57	184.62	90.37
230	4.00	0.06	1.04	0.51	185.66	90.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.16	2.80	2.01	-0.73	-1.59	-2.74

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.86	0.55	2.07	-0.59	2.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y126 #2

Analysis Date: 03-15-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.41	150.41	0.73	0.02	#200 - 11.74 #230 - 11.14	1.20	2.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.64	0.97	1.64	0.97
4	-2.25	4.76	0.00	0.00	1.64	0.97
5	-2.00	4.00	0.25	0.15	1.89	1.12
7	-1.50	2.83	0.92	0.55	2.81	1.67
10	-1.00	2.00	1.24	0.74	4.05	2.41
14	-0.50	1.41	1.21	0.72	5.26	3.13
18	0.00	1.00	1.31	0.78	6.57	3.91
25	0.50	0.71	2.21	1.31	8.78	5.22
35	1.00	0.50	3.20	1.90	11.98	7.12
45	1.50	0.35	4.08	2.42	16.06	9.54
60	2.00	0.25	8.58	5.09	24.64	14.63
80	2.50	0.18	64.01	38.01	88.65	52.64
120	3.00	0.13	48.68	28.91	137.33	81.55
170	3.50	0.09	9.75	5.79	147.08	87.34
200	3.75	0.07	1.55	0.92	148.63	88.26
230	4.00	0.06	1.01	0.60	149.64	88.86

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.21	2.89	2.47	2.14	2.02	0.42

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.22	0.21	0.98	-2.74	12.39

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y126 #3

Analysis Date: 03-15-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.15	146.56	0.74	0.03	#200 - 7.20 #230 - 6.64	1.00	1.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.03	0.02	0.03	0.02
10	-1.00	2.00	0.08	0.05	0.11	0.07
14	-0.50	1.41	0.30	0.19	0.41	0.26
18	0.00	1.00	0.81	0.52	1.22	0.78
25	0.50	0.71	2.01	1.29	3.23	2.07
35	1.00	0.50	3.23	2.07	6.46	4.14
45	1.50	0.35	4.13	2.64	10.59	6.78
60	2.00	0.25	7.10	4.55	17.69	11.33
80	2.50	0.18	62.60	40.09	80.29	51.42
120	3.00	0.13	49.89	31.95	130.18	83.37
170	3.50	0.09	12.62	8.08	142.80	91.45
200	3.75	0.07	2.11	1.35	144.91	92.80
230	4.00	0.06	0.87	0.56	145.78	93.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.04	2.87	2.48	2.17	2.06	1.16

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.4	0.19	0.63	-1.54	7.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: Y129 #1
Analysis Date: 03-15-12
Analyzed By: WD

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		BLUE/GRAY OYSTER SHELLS, SAND, PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
182.53	170.22	0.44	0.08	#200 - 7.35 #230 - 7.03	2.00	25.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	7.64	4.19	7.64	4.19
5/8"	-4.00	16.00	2.42	1.33	10.06	5.52
11/16"	-3.50	11.31	8.90	4.88	18.96	10.40
5/16"	-3.00	8.00	8.79	4.82	27.75	15.22
3.5	-2.50	5.66	5.49	3.01	33.24	18.23
4	-2.25	4.76	6.61	3.62	39.85	21.85
5	-2.00	4.00	6.41	3.51	46.26	25.36
7	-1.50	2.83	13.21	7.24	59.47	32.60
10	-1.00	2.00	10.86	5.95	70.33	38.55
14	-0.50	1.41	12.00	6.57	82.33	45.12
18	0.00	1.00	8.39	4.60	90.72	49.72
25	0.50	0.71	6.79	3.72	97.51	53.44
35	1.00	0.50	6.28	3.44	103.79	56.88
45	1.50	0.35	7.30	4.00	111.09	60.88
60	2.00	0.25	10.11	5.54	121.20	66.42
80	2.50	0.18	20.29	11.12	141.49	77.54
120	3.00	0.13	17.66	9.68	159.15	87.22
170	3.50	0.09	8.28	4.54	167.43	91.76
200	3.75	0.07	1.62	0.89	169.05	92.65
230	4.00	0.06	0.59	0.32	169.64	92.97

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.83	2.39	0.04	-2.03	-2.87	-4.10

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.21	1.16	2.22	0.15	1.75

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y129 #2
Analysis Date: 03-15-12
Analyzed By: WD

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		PEATY SAND, DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
178.04	165.61	0.84	0.00	#200 - 8.13 #230 - 7.45	1.10	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.12	0.07	0.12	0.07
7	-1.50	2.83	0.19	0.11	0.31	0.18
10	-1.00	2.00	0.64	0.36	0.95	0.54
14	-0.50	1.41	0.54	0.30	1.49	0.84
18	0.00	1.00	0.89	0.50	2.38	1.34
25	0.50	0.71	1.75	0.98	4.13	2.32
35	1.00	0.50	2.80	1.57	6.93	3.89
45	1.50	0.35	3.94	2.21	10.87	6.10
60	2.00	0.25	9.30	5.22	20.17	11.32
80	2.50	0.18	64.55	36.26	84.72	47.58
120	3.00	0.13	64.05	35.98	148.77	83.56
170	3.50	0.09	12.53	7.04	161.30	90.60
200	3.75	0.07	2.26	1.27	163.56	91.87
230	4.00	0.06	1.21	0.68	164.77	92.55

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.03	2.88	2.53	2.19	2.06	1.25

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.41	0.19	0.68	-2.19	11.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y132 #1

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
CL		CLAY

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
41.23	9.19	0.21	0.00	#200 - 78.56 #230 - 78.22	16.80	18.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.66	1.60	0.66	1.60
4	-2.25	4.76	0.11	0.27	0.77	1.87
5	-2.00	4.00	0.34	0.82	1.11	2.69
7	-1.50	2.83	0.57	1.38	1.68	4.07
10	-1.00	2.00	0.43	1.04	2.11	5.11
14	-0.50	1.41	1.13	2.74	3.24	7.85
18	0.00	1.00	0.75	1.82	3.99	9.67
25	0.50	0.71	0.70	1.70	4.69	11.37
35	1.00	0.50	0.65	1.58	5.34	12.95
45	1.50	0.35	0.61	1.48	5.95	14.43
60	2.00	0.25	0.53	1.29	6.48	15.72
80	2.50	0.18	0.83	2.01	7.31	17.73
120	3.00	0.13	0.82	1.99	8.13	19.72
170	3.50	0.09	0.48	1.16	8.61	20.88
200	3.75	0.07	0.23	0.56	8.84	21.44
230	4.00	0.06	0.14	0.34	8.98	21.78

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					2.07	-1.05

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.45	0.73	1.89	-0.01	1.89

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y132 #2
Analysis Date: 03-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		BLUE/GRAY OYSTER SHELLS, SAND, PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.38	147.55	0.17	0.05	#200 - 3.44 #230 - 3.30	2.20	37.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	2.83	1.86	2.83	1.86
5/8"	-4.00	16.00	2.65	1.74	5.48	3.60
11/16"	-3.50	11.31	12.20	8.01	17.68	11.61
5/16"	-3.00	8.00	13.22	8.68	30.90	20.29
3.5	-2.50	5.66	12.93	8.49	43.83	28.78
4	-2.25	4.76	5.23	3.43	49.06	32.21
5	-2.00	4.00	8.55	5.61	57.61	37.82
7	-1.50	2.83	15.69	10.30	73.30	48.12
10	-1.00	2.00	15.07	9.89	88.37	58.01
14	-0.50	1.41	11.77	7.72	100.14	65.73
18	0.00	1.00	9.49	6.23	109.63	71.96
25	0.50	0.71	7.92	5.20	117.55	77.16
35	1.00	0.50	7.54	4.95	125.09	82.11
45	1.50	0.35	5.05	3.31	130.14	85.42
60	2.00	0.25	4.02	2.64	134.16	88.06
80	2.50	0.18	4.69	3.08	138.85	91.14
120	3.00	0.13	5.68	3.73	144.53	94.87
170	3.50	0.09	2.13	1.40	146.66	96.27
200	3.75	0.07	0.44	0.29	147.10	96.56
230	4.00	0.06	0.21	0.14	147.31	96.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.05	1.29	0.29	-1.40	-2.72	-3.25	-3.91

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.22	2.33	1.9	0.64	2.59

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y132 #3

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SILTY SAND, DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.61	155.97	1.08	0.02	#200 - 8.90 #230 - 8.15	1.20	2.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.05	0.03	0.05	0.03
7	-1.50	2.83	0.03	0.02	0.08	0.05
10	-1.00	2.00	0.03	0.02	0.11	0.07
14	-0.50	1.41	0.26	0.15	0.37	0.22
18	0.00	1.00	0.54	0.32	0.91	0.54
25	0.50	0.71	1.11	0.66	2.02	1.20
35	1.00	0.50	2.20	1.30	4.22	2.50
45	1.50	0.35	3.06	1.81	7.28	4.31
60	2.00	0.25	7.45	4.42	14.73	8.73
80	2.50	0.18	67.76	40.19	82.49	48.92
120	3.00	0.13	51.57	30.59	134.06	79.51
170	3.50	0.09	15.99	9.48	150.05	88.99
200	3.75	0.07	3.55	2.11	153.60	91.10
230	4.00	0.06	1.26	0.75	154.86	91.85

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.24	2.93	2.52	2.20	2.09	1.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.47	0.18	0.59	-1.36	9.1

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y132 #4

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SILTY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
192.14	179.98	0.75	0.09	#200 - 7.61 #230 - 6.82	1.00	2.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.08	0.04	0.08	0.04
14	-0.50	1.41	0.37	0.19	0.45	0.23
18	0.00	1.00	1.36	0.71	1.81	0.94
25	0.50	0.71	3.18	1.66	4.99	2.60
35	1.00	0.50	4.96	2.58	9.95	5.18
45	1.50	0.35	6.19	3.22	16.14	8.40
60	2.00	0.25	12.99	6.76	29.13	15.16
80	2.50	0.18	74.94	39.00	104.07	54.16
120	3.00	0.13	57.83	30.10	161.90	84.26
170	3.50	0.09	12.99	6.76	174.89	91.02
200	3.75	0.07	2.64	1.37	177.53	92.39
230	4.00	0.06	1.52	0.79	179.05	93.18

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.00	2.85	2.45	2.13	2.01	0.97

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.34	0.20	0.67	-1.36	6.5

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y135 #1

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		SAND, CLAY BALLS

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
155.38	143.08	0.45	0.12	#200 - 8.70 #230 - 8.35	1.50	15.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	3.58	2.30	3.58	2.30
5/16"	-3.00	8.00	0.25	0.16	3.83	2.46
3.5	-2.50	5.66	0.81	0.52	4.64	2.98
4	-2.25	4.76	0.27	0.17	4.91	3.15
5	-2.00	4.00	0.65	0.42	5.56	3.57
7	-1.50	2.83	1.96	1.26	7.52	4.83
10	-1.00	2.00	1.79	1.15	9.31	5.98
14	-0.50	1.41	2.63	1.69	11.94	7.67
18	0.00	1.00	2.61	1.68	14.55	9.35
25	0.50	0.71	3.50	2.25	18.05	11.60
35	1.00	0.50	6.54	4.21	24.59	15.81
45	1.50	0.35	12.42	7.99	37.01	23.80
60	2.00	0.25	19.51	12.56	56.52	36.36
80	2.50	0.18	50.12	32.26	106.64	68.62
120	3.00	0.13	26.79	17.24	133.43	85.86
170	3.50	0.09	7.12	4.58	140.55	90.44
200	3.75	0.07	1.34	0.86	141.89	91.30
230	4.00	0.06	0.55	0.35	142.44	91.65

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.95	2.69	2.21	1.55	1.01	-1.43

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.72	0.30	1.43	-2.09	7.66

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y135 #2
Analysis Date: 03-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		BLUE/GRAY SHELL, LARGE ROCKS, PEBBLES, LITTLE SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
180.25	172.99	0.23	0.11	#200 - 4.46 #230 - 4.26	1.80	19.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	14.66	8.13	14.66	8.13
5/8"	-4.00	16.00	14.97	8.31	29.63	16.44
11/16"	-3.50	11.31	4.77	2.65	34.40	19.09
5/16"	-3.00	8.00	12.52	6.95	46.92	26.04
3.5	-2.50	5.66	10.55	5.85	57.47	31.89
4	-2.25	4.76	5.71	3.17	63.18	35.06
5	-2.00	4.00	10.67	5.92	73.85	40.98
7	-1.50	2.83	18.55	10.29	92.40	51.27
10	-1.00	2.00	19.24	10.67	111.64	61.94
14	-0.50	1.41	14.17	7.86	125.81	69.80
18	0.00	1.00	9.36	5.19	135.17	74.99
25	0.50	0.71	5.38	2.98	140.55	77.97
35	1.00	0.50	3.47	1.93	144.02	79.90
45	1.50	0.35	3.55	1.97	147.57	81.87
60	2.00	0.25	4.89	2.71	152.46	84.58
80	2.50	0.18	7.81	4.33	160.27	88.91
120	3.00	0.13	8.79	4.88	169.06	93.79
170	3.50	0.09	2.57	1.43	171.63	95.22
200	3.75	0.07	0.58	0.32	172.21	95.54
230	4.00	0.06	0.36	0.20	172.57	95.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.42	1.89	0.00	-1.56	-3.07	-4.01	

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.44	2.71	1.98	0.97	3.03

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y135 #3

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		SILTY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.34	145.78	0.82	0.00	#200 - 8.37 #230 - 7.87	1.10	2.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.44	1.55	2.44	1.55
3.5	-2.50	5.66	0.00	0.00	2.44	1.55
4	-2.25	4.76	0.00	0.00	2.44	1.55
5	-2.00	4.00	0.50	0.32	2.94	1.87
7	-1.50	2.83	0.95	0.60	3.89	2.47
10	-1.00	2.00	1.21	0.77	5.10	3.24
14	-0.50	1.41	1.10	0.70	6.20	3.94
18	0.00	1.00	1.15	0.73	7.35	4.67
25	0.50	0.71	1.72	1.09	9.07	5.76
35	1.00	0.50	3.57	2.27	12.64	8.03
45	1.50	0.35	9.50	6.04	22.14	14.07
60	2.00	0.25	14.26	9.06	36.40	23.13
80	2.50	0.18	66.09	42.00	102.49	65.13
120	3.00	0.13	31.92	20.29	134.41	85.42
170	3.50	0.09	7.87	5.00	142.28	90.42
200	3.75	0.07	1.90	1.21	144.18	91.63
230	4.00	0.06	0.78	0.50	144.96	92.13

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.97	2.74	2.32	2.02	1.61	0.15

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.06	0.24	1.1	-2.73	12.42

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y135 #4

Analysis Date: 03-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SLIGHTLY SILTY/PEATY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
173.27	159.31	0.68	0.00	#200 - 9.16 #230 - 8.46	1.00	1.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.09	0.05	0.09	0.05
10	-1.00	2.00	0.11	0.06	0.20	0.11
14	-0.50	1.41	0.34	0.20	0.54	0.31
18	0.00	1.00	0.80	0.46	1.34	0.77
25	0.50	0.71	2.12	1.22	3.46	1.99
35	1.00	0.50	3.40	1.96	6.86	3.95
45	1.50	0.35	4.71	2.72	11.57	6.67
60	2.00	0.25	9.37	5.41	20.94	12.08
80	2.50	0.18	59.17	34.15	80.11	46.23
120	3.00	0.13	61.89	35.72	142.00	81.95
170	3.50	0.09	12.86	7.42	154.86	89.37
200	3.75	0.07	2.55	1.47	157.41	90.84
230	4.00	0.06	1.22	0.70	158.63	91.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.14	2.90	2.55	2.19	2.06	1.19

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.42	0.19	0.64	-1.61	8.18

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y136 #1
Analysis Date: 03-15-12
Analyzed By: WD

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		BIG ROCKS, SHELLS, PEBBLES, LITTLE SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
200.31	198.09	0.07	0.21	#200 - 1.42 #230 - 1.37	1.70	31.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	3.51	1.75	3.51	1.75
5/8"	-4.00	16.00	11.12	5.55	14.63	7.30
11/16"	-3.50	11.31	29.82	14.89	44.45	22.19
5/16"	-3.00	8.00	15.59	7.78	60.04	29.97
3.5	-2.50	5.66	16.70	8.34	76.74	38.31
4	-2.25	4.76	7.17	3.58	83.91	41.89
5	-2.00	4.00	6.66	3.32	90.57	45.21
7	-1.50	2.83	14.38	7.18	104.95	52.39
10	-1.00	2.00	9.63	4.81	114.58	57.20
14	-0.50	1.41	9.37	4.68	123.95	61.88
18	0.00	1.00	7.34	3.66	131.29	65.54
25	0.50	0.71	9.98	4.98	141.27	70.52
35	1.00	0.50	14.84	7.41	156.11	77.93
45	1.50	0.35	11.92	5.95	168.03	83.88
60	2.00	0.25	8.94	4.46	176.97	88.34
80	2.50	0.18	11.54	5.76	188.51	94.10
120	3.00	0.13	7.09	3.54	195.60	97.64
170	3.50	0.09	1.60	0.80	197.20	98.44
200	3.75	0.07	0.29	0.14	197.49	98.58
230	4.00	0.06	0.10	0.05	197.59	98.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.63	1.51	0.80	-1.67	-3.32	-3.71	-4.10

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.27	2.41	2.18	0.42	1.85

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y136 #2

Analysis Date: 03-15-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		SAND, LITTLE FINES, TRACE SHELL/PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.87	148.80	0.71	0.00	#200 - 10.01 #230 - 9.08	2.10	6.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.74	0.45	0.74	0.45
4	-2.25	4.76	0.05	0.03	0.79	0.48
5	-2.00	4.00	0.59	0.36	1.38	0.84
7	-1.50	2.83	1.27	0.78	2.65	1.62
10	-1.00	2.00	1.12	0.69	3.77	2.31
14	-0.50	1.41	1.00	0.61	4.77	2.92
18	0.00	1.00	1.02	0.63	5.79	3.55
25	0.50	0.71	1.53	0.94	7.32	4.49
35	1.00	0.50	2.32	1.42	9.64	5.91
45	1.50	0.35	3.42	2.10	13.06	8.01
60	2.00	0.25	7.01	4.30	20.07	12.31
80	2.50	0.18	43.58	26.76	63.65	39.07
120	3.00	0.13	63.45	38.96	127.10	78.03
170	3.50	0.09	16.15	9.92	143.25	87.95
200	3.75	0.07	3.33	2.04	146.58	89.99
230	4.00	0.06	1.51	0.93	148.09	90.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.30	2.96	2.64	2.24	2.07	0.68

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.39	0.19	0.96	-2.76	12.61

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y136 #3

Analysis Date: 03-15-12

Analyzed By: WD

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		SAND, LITTLE PEAT, DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.91	128.89	0.72	-0.19	#200 - 10.17 #230 - 9.49	1.10	2.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.28	0.20	0.28	0.20
7	-1.50	2.83	0.07	0.05	0.35	0.25
10	-1.00	2.00	0.17	0.12	0.52	0.37
14	-0.50	1.41	0.22	0.16	0.74	0.53
18	0.00	1.00	0.54	0.38	1.28	0.91
25	0.50	0.71	1.18	0.83	2.46	1.74
35	1.00	0.50	2.07	1.46	4.53	3.20
45	1.50	0.35	3.07	2.16	7.60	5.36
60	2.00	0.25	6.82	4.81	14.42	10.17
80	2.50	0.18	57.19	40.30	71.61	50.47
120	3.00	0.13	41.84	29.48	113.45	79.95
170	3.50	0.09	11.33	7.98	124.78	87.93
200	3.75	0.07	2.70	1.90	127.48	89.83
230	4.00	0.06	0.96	0.68	128.44	90.51

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.25	2.92	2.49	2.18	2.07	1.42

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.42	0.19	0.65	-2	12.62

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y141 #1
Analysis Date: 03-15-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		LARGE ROCKS, PEBBLES, LITTLE SHELL, TRACE SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.91	175.44	0.05	0.18	#200 - 1.07 #230 - 1.02	1.30	39.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	16.43	9.29	16.43	9.29
5/16"	-3.00	8.00	9.71	5.49	26.14	14.78
3.5	-2.50	5.66	21.24	12.01	47.38	26.79
4	-2.25	4.76	8.45	4.78	55.83	31.57
5	-2.00	4.00	11.88	6.72	67.71	38.29
7	-1.50	2.83	23.15	13.09	90.86	51.38
10	-1.00	2.00	22.26	12.58	113.12	63.96
14	-0.50	1.41	16.10	9.10	129.22	73.06
18	0.00	1.00	10.17	5.75	139.39	78.81
25	0.50	0.71	7.25	4.10	146.64	82.91
35	1.00	0.50	6.48	3.66	153.12	86.57
45	1.50	0.35	3.32	1.88	156.44	88.45
60	2.00	0.25	2.95	1.67	159.39	90.12
80	2.50	0.18	5.95	3.36	165.34	93.48
120	3.00	0.13	7.93	4.48	173.27	97.96
170	3.50	0.09	1.56	0.88	174.83	98.84
200	3.75	0.07	0.16	0.09	174.99	98.93
230	4.00	0.06	0.09	0.05	175.08	98.98

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.67	0.65	-0.33	-1.55	-2.57	-2.95	-3.85

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.27	2.41	1.78	0.77	2.96

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y141 #2

Analysis Date: 03-15-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		GRAY MEDIUM SAND, TRACE SILT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.85	148.75	0.30	0.00	#200 - 2.43 #230 - 2.27	0.50	9.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.98	1.96	2.98	1.96
11/16"	-3.50	11.31	0.99	0.65	3.97	2.61
5/16"	-3.00	8.00	0.00	0.00	3.97	2.61
3.5	-2.50	5.66	0.00	0.00	3.97	2.61
4	-2.25	4.76	0.19	0.13	4.16	2.74
5	-2.00	4.00	0.12	0.08	4.28	2.82
7	-1.50	2.83	0.27	0.18	4.55	3.00
10	-1.00	2.00	0.39	0.26	4.94	3.26
14	-0.50	1.41	0.58	0.38	5.52	3.64
18	0.00	1.00	0.61	0.40	6.13	4.04
25	0.50	0.71	0.69	0.45	6.82	4.49
35	1.00	0.50	1.16	0.76	7.98	5.25
45	1.50	0.35	2.45	1.61	10.43	6.86
60	2.00	0.25	8.89	5.85	19.32	12.71
80	2.50	0.18	79.19	52.15	98.51	64.86
120	3.00	0.13	42.13	27.74	140.64	92.60
170	3.50	0.09	6.87	4.52	147.51	97.12
200	3.75	0.07	0.69	0.45	148.20	97.57
230	4.00	0.06	0.25	0.16	148.45	97.73

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.27	2.84	2.68	2.36	2.12	2.03	0.84

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.16	0.22	1.19	-4.09	20.99

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y141 #3

Analysis Date: 03-15-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		PEATY SAND , DARK FINES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.51	128.68	0.65	0.00	#200 - 8.40 #230 - 7.56	0.80	1.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.13	0.09	0.13	0.09
10	-1.00	2.00	0.27	0.19	0.40	0.28
14	-0.50	1.41	0.18	0.13	0.58	0.41
18	0.00	1.00	0.23	0.17	0.81	0.58
25	0.50	0.71	0.46	0.33	1.27	0.91
35	1.00	0.50	0.77	0.56	2.04	1.47
45	1.50	0.35	1.48	1.07	3.52	2.54
60	2.00	0.25	4.64	3.35	8.16	5.89
80	2.50	0.18	35.92	25.93	44.08	31.82
120	3.00	0.13	62.16	44.88	106.24	76.70
170	3.50	0.09	17.78	12.84	124.02	89.54
200	3.75	0.07	2.85	2.06	126.87	91.60
230	4.00	0.06	1.16	0.84	128.03	92.44

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.28	2.98	2.70	2.37	2.19	1.87

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.61	0.16	0.56	-2.16	15.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y153 #1

Analysis Date: 03-20-12

Analyzed By:

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.11	136.73	0.81	0.00	#200 - 6.13 #230 - 5.02	0.50	16.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.69	1.18	1.69	1.18
5/16"	-3.00	8.00	0.79	0.55	2.48	1.73
3.5	-2.50	5.66	2.17	1.52	4.65	3.25
4	-2.25	4.76	0.54	0.38	5.19	3.63
5	-2.00	4.00	1.00	0.70	6.19	4.33
7	-1.50	2.83	2.88	2.01	9.07	6.34
10	-1.00	2.00	2.43	1.70	11.50	8.04
14	-0.50	1.41	1.97	1.38	13.47	9.42
18	0.00	1.00	1.26	0.88	14.73	10.30
25	0.50	0.71	1.18	0.82	15.91	11.12
35	1.00	0.50	1.00	0.70	16.91	11.82
45	1.50	0.35	0.91	0.64	17.82	12.46
60	2.00	0.25	1.77	1.24	19.59	13.70
80	2.50	0.18	22.26	15.55	41.85	29.25
120	3.00	0.13	52.60	36.75	94.45	66.00
170	3.50	0.09	33.41	23.35	127.86	89.35
200	3.75	0.07	6.47	4.52	134.33	93.87
230	4.00	0.06	1.59	1.11	135.92	94.98

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.39	3.19	2.78	2.36	2.07	-1.83

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.28	0.21	1.59	-2.3	7.47

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y153 #2
Analysis Date: 03-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
142.53	138.90	0.07	0.02	#200 - 2.97 #230 - 2.62	1.00	48.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	12.75	8.95	12.75	8.95
5/8"	-4.00	16.00	0.00	0.00	12.75	8.95
11/16"	-3.50	11.31	4.25	2.98	17.00	11.93
5/16"	-3.00	8.00	13.88	9.74	30.88	21.67
3.5	-2.50	5.66	8.89	6.24	39.77	27.91
4	-2.25	4.76	5.02	3.52	44.79	31.43
5	-2.00	4.00	5.25	3.68	50.04	35.11
7	-1.50	2.83	10.10	7.09	60.14	42.20
10	-1.00	2.00	9.14	6.41	69.28	48.61
14	-0.50	1.41	5.30	3.72	74.58	52.33
18	0.00	1.00	3.96	2.78	78.54	55.11
25	0.50	0.71	3.84	2.69	82.38	57.80
35	1.00	0.50	1.83	1.28	84.21	59.08
45	1.50	0.35	0.83	0.58	85.04	59.66
60	2.00	0.25	1.10	0.77	86.14	60.43
80	2.50	0.18	5.47	3.84	91.61	64.27
120	3.00	0.13	28.95	20.31	120.56	84.58
170	3.50	0.09	15.65	10.98	136.21	95.56
200	3.75	0.07	2.09	1.47	138.30	97.03
230	4.00	0.06	0.50	0.35	138.80	97.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.47	2.99	2.76	-0.81	-2.73	-3.29	

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.29	1.22	2.47	0.48	1.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y153 #3

Analysis Date: 03-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		BROWN SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.08	147.91	0.10	0.00	#200 - 4.23 #230 - 4.07	0.60	2.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.46	0.30	0.46	0.30
4	-2.25	4.76	0.00	0.00	0.46	0.30
5	-2.00	4.00	0.04	0.03	0.50	0.33
7	-1.50	2.83	0.06	0.04	0.56	0.37
10	-1.00	2.00	0.11	0.07	0.67	0.44
14	-0.50	1.41	0.08	0.05	0.75	0.49
18	0.00	1.00	0.08	0.05	0.83	0.54
25	0.50	0.71	0.10	0.06	0.93	0.60
35	1.00	0.50	0.29	0.19	1.22	0.79
45	1.50	0.35	1.19	0.77	2.41	1.56
60	2.00	0.25	13.11	8.51	15.52	10.07
80	2.50	0.18	90.24	58.57	105.76	68.64
120	3.00	0.13	34.00	22.07	139.76	90.71
170	3.50	0.09	6.94	4.50	146.70	95.21
200	3.75	0.07	0.86	0.56	147.56	95.77
230	4.00	0.06	0.25	0.16	147.81	95.93

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.48	2.85	2.64	2.34	2.13	2.05	1.70

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.34	0.20	0.51	-3.85	40.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y154 #1

Analysis Date: 03-20-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
172.06	154.73	0.33	0.09	#200 - 11.84 #230 - 10.37	0.90	20.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.23	0.71	1.23	0.71
5/16"	-3.00	8.00	2.25	1.31	3.48	2.02
3.5	-2.50	5.66	3.64	2.12	7.12	4.14
4	-2.25	4.76	1.83	1.06	8.95	5.20
5	-2.00	4.00	2.69	1.56	11.64	6.76
7	-1.50	2.83	4.56	2.65	16.20	9.41
10	-1.00	2.00	3.93	2.28	20.13	11.69
14	-0.50	1.41	3.70	2.15	23.83	13.84
18	0.00	1.00	3.41	1.98	27.24	15.82
25	0.50	0.71	3.49	2.03	30.73	17.85
35	1.00	0.50	4.43	2.57	35.16	20.42
45	1.50	0.35	6.81	3.96	41.97	24.38
60	2.00	0.25	13.85	8.05	55.82	32.43
80	2.50	0.18	25.76	14.97	81.58	47.40
120	3.00	0.13	31.65	18.39	113.23	65.79
170	3.50	0.09	31.36	18.23	144.59	84.02
200	3.75	0.07	7.13	4.14	151.72	88.16
230	4.00	0.06	2.53	1.47	154.25	89.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.50	3.25	2.57	1.54	0.04	-2.30

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.76	0.30	1.85	-1.34	3.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y154 #2

Analysis Date: 03-20-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.18	161.75	0.30	0.30	#200 - 4.84 #230 - 4.28	1.00	64.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	4.77	2.84	4.77	2.84
11/16"	-3.50	11.31	4.92	2.93	9.69	5.77
5/16"	-3.00	8.00	4.05	2.41	13.74	8.18
3.5	-2.50	5.66	5.85	3.48	19.59	11.66
4	-2.25	4.76	3.61	2.15	23.20	13.81
5	-2.00	4.00	4.62	2.75	27.82	16.56
7	-1.50	2.83	16.02	9.53	43.84	26.09
10	-1.00	2.00	16.05	9.54	59.89	35.63
14	-0.50	1.41	16.94	10.07	76.83	45.70
18	0.00	1.00	11.01	6.55	87.84	52.25
25	0.50	0.71	11.36	6.75	99.20	59.00
35	1.00	0.50	7.21	4.29	106.41	63.29
45	1.50	0.35	2.78	1.65	109.19	64.94
60	2.00	0.25	1.92	1.14	111.11	66.08
80	2.50	0.18	7.47	4.44	118.58	70.52
120	3.00	0.13	20.75	12.34	139.33	82.86
170	3.50	0.09	16.60	9.87	155.93	92.73
200	3.75	0.07	4.08	2.43	160.01	95.16
230	4.00	0.06	0.94	0.56	160.95	95.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.73	3.06	2.68	-0.17	-1.56	-2.05	-3.63

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.07	0.95	2.25	0.05	1.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y154 #3

Analysis Date: 03-20-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.01	131.55	0.04	0.05	#200 - 5.13 #230 - 4.75	1.80	14.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	2.69	1.95	2.69	1.95
5/8"	-4.00	16.00	0.00	0.00	2.69	1.95
11/16"	-3.50	11.31	8.33	6.04	11.02	7.99
5/16"	-3.00	8.00	6.01	4.35	17.03	12.34
3.5	-2.50	5.66	2.78	2.01	19.81	14.35
4	-2.25	4.76	2.55	1.85	22.36	16.20
5	-2.00	4.00	6.69	4.85	29.05	21.05
7	-1.50	2.83	7.13	5.17	36.18	26.22
10	-1.00	2.00	2.66	1.93	38.84	28.15
14	-0.50	1.41	2.03	1.47	40.87	29.62
18	0.00	1.00	3.23	2.34	44.10	31.96
25	0.50	0.71	3.24	2.35	47.34	34.31
35	1.00	0.50	3.08	2.23	50.42	36.54
45	1.50	0.35	3.10	2.25	53.52	38.79
60	2.00	0.25	4.69	3.40	58.21	42.19
80	2.50	0.18	17.33	12.56	75.54	54.75
120	3.00	0.13	38.60	27.97	114.14	82.72
170	3.50	0.09	14.86	10.77	129.00	93.49
200	3.75	0.07	1.91	1.38	130.91	94.87
230	4.00	0.06	0.53	0.38	131.44	95.25

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.84	3.06	2.86	2.31	-1.62	-2.28	-3.87

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.83	0.56	2.39	-0.64	1.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y154 #4

Analysis Date: 03-20-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		FINE SAND, SILT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.85	131.47	0.11	0.00	#200 - 4.93 #230 - 4.72	0.50	2.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.07	0.05	0.07	0.05
4	-2.25	4.76	0.06	0.04	0.13	0.09
5	-2.00	4.00	0.12	0.09	0.25	0.18
7	-1.50	2.83	0.54	0.39	0.79	0.57
10	-1.00	2.00	0.54	0.39	1.33	0.96
14	-0.50	1.41	0.37	0.27	1.70	1.23
18	0.00	1.00	0.31	0.22	2.01	1.45
25	0.50	0.71	0.32	0.23	2.33	1.68
35	1.00	0.50	0.68	0.49	3.01	2.17
45	1.50	0.35	1.31	0.95	4.32	3.12
60	2.00	0.25	4.63	3.36	8.95	6.48
80	2.50	0.18	64.60	46.86	73.55	53.34
120	3.00	0.13	46.55	33.77	120.10	87.11
170	3.50	0.09	9.86	7.15	129.96	94.26
200	3.75	0.07	1.11	0.81	131.07	95.07
230	4.00	0.06	0.29	0.21	131.36	95.28

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.73	2.95	2.82	2.46	2.20	2.10	1.78

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.42	0.19	0.63	-3.46	23.4

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y156 #1
Analysis Date: 03-20-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		BROWN SAND, SHELL AND ROCK

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
147.57	127.70	0.23	0.24	#200 - 15.24 #230 - 13.86	1.40	48.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.77	1.20	1.77	1.20
5/16"	-3.00	8.00	6.32	4.28	8.09	5.48
3.5	-2.50	5.66	5.06	3.43	13.15	8.91
4	-2.25	4.76	2.29	1.55	15.44	10.46
5	-2.00	4.00	4.10	2.78	19.54	13.24
7	-1.50	2.83	7.92	5.37	27.46	18.61
10	-1.00	2.00	7.61	5.16	35.07	23.77
14	-0.50	1.41	5.59	3.79	40.66	27.56
18	0.00	1.00	4.45	3.02	45.11	30.58
25	0.50	0.71	4.77	3.23	49.88	33.81
35	1.00	0.50	7.88	5.34	57.76	39.15
45	1.50	0.35	8.43	5.71	66.19	44.86
60	2.00	0.25	5.14	3.48	71.33	48.34
80	2.50	0.18	7.34	4.97	78.67	53.31
120	3.00	0.13	14.70	9.96	93.37	63.27
170	3.50	0.09	25.15	17.04	118.52	80.31
200	3.75	0.07	6.57	4.45	125.09	84.76
230	4.00	0.06	2.03	1.38	127.12	86.14

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.71	3.34	2.17	-0.84	-1.74	-3.06

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.89	0.54	2.29	-0.45	1.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y156 #2
Analysis Date: 03-20-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
191.25	175.85	0.56	0.03	#200 - 9.51 #230 - 8.37	1.00	30.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	6.64	3.47	6.64	3.47
11/16"	-3.50	11.31	6.38	3.34	13.02	6.81
5/16"	-3.00	8.00	7.13	3.73	20.15	10.54
3.5	-2.50	5.66	8.27	4.32	28.42	14.86
4	-2.25	4.76	3.09	1.62	31.51	16.48
5	-2.00	4.00	3.38	1.77	34.89	18.25
7	-1.50	2.83	8.62	4.51	43.51	22.76
10	-1.00	2.00	7.64	3.99	51.15	26.75
14	-0.50	1.41	6.34	3.32	57.49	30.07
18	0.00	1.00	3.65	1.91	61.14	31.98
25	0.50	0.71	2.70	1.41	63.84	33.39
35	1.00	0.50	2.09	1.09	65.93	34.48
45	1.50	0.35	1.53	0.80	67.46	35.28
60	2.00	0.25	2.71	1.42	70.17	36.70
80	2.50	0.18	18.42	9.63	88.59	46.33
120	3.00	0.13	45.37	23.72	133.96	70.05
170	3.50	0.09	32.72	17.11	166.68	87.16
200	3.75	0.07	6.37	3.33	173.05	90.49
230	4.00	0.06	2.18	1.14	175.23	91.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.41	3.14	2.58	-1.22	-2.32	-3.77

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.98	0.51	2.57	-0.73	1.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y156 #3
Analysis Date: 03-20-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
159.45	155.24	0.08	0.26	#200 - 3.27 #230 - 2.96	1.00	46.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	6.71	4.21	6.71	4.21
11/16"	-3.50	11.31	6.70	4.20	13.41	8.41
5/16"	-3.00	8.00	8.63	5.41	22.04	13.82
3.5	-2.50	5.66	6.54	4.10	28.58	17.92
4	-2.25	4.76	2.58	1.62	31.16	19.54
5	-2.00	4.00	4.13	2.59	35.29	22.13
7	-1.50	2.83	10.43	6.54	45.72	28.67
10	-1.00	2.00	10.16	6.37	55.88	35.04
14	-0.50	1.41	7.18	4.50	63.06	39.54
18	0.00	1.00	5.94	3.73	69.00	43.27
25	0.50	0.71	13.29	8.33	82.29	51.60
35	1.00	0.50	8.11	5.09	90.40	56.69
45	1.50	0.35	2.62	1.64	93.02	58.33
60	2.00	0.25	1.51	0.95	94.53	59.28
80	2.50	0.18	7.07	4.43	101.60	63.71
120	3.00	0.13	34.88	21.88	136.48	85.59
170	3.50	0.09	15.57	9.76	152.05	95.35
200	3.75	0.07	2.20	1.38	154.25	96.73
230	4.00	0.06	0.50	0.31	154.75	97.04

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.48	2.96	2.76	0.40	-1.78	-2.73	-3.91

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.23	0.85	2.47	-0.25	1.67

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y156 #4
Analysis Date: 03-20-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		FINE SAND, TRACE SILT

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
150.88	145.42	0.06	0.00	#200 - 3.84 #230 - 3.65	0.50	3.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.07	0.05	0.07	0.05
7	-1.50	2.83	0.18	0.12	0.25	0.17
10	-1.00	2.00	0.26	0.17	0.51	0.34
14	-0.50	1.41	0.27	0.18	0.78	0.52
18	0.00	1.00	0.16	0.11	0.94	0.63
25	0.50	0.71	0.18	0.12	1.12	0.75
35	1.00	0.50	0.47	0.31	1.59	1.06
45	1.50	0.35	1.36	0.90	2.95	1.96
60	2.00	0.25	10.98	7.28	13.93	9.24
80	2.50	0.18	87.59	58.05	101.52	67.29
120	3.00	0.13	35.48	23.52	137.00	90.81
170	3.50	0.09	7.26	4.81	144.26	95.62
200	3.75	0.07	0.82	0.54	145.08	96.16
230	4.00	0.06	0.28	0.19	145.36	96.35

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.44	2.86	2.66	2.35	2.14	2.06	1.71

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.36	0.19	0.48	-2.49	22.73

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y157 #1
Analysis Date: 03-20-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		BROWN SAND, SOME WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
177.10	168.97	0.23	0.00	#200 - 5.05 #230 - 4.73	0.90	46.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	6.23	3.52	6.23	3.52
5/8"	-4.00	16.00	7.86	4.44	14.09	7.96
11/16"	-3.50	11.31	9.40	5.31	23.49	13.27
5/16"	-3.00	8.00	7.23	4.08	30.72	17.35
3.5	-2.50	5.66	7.05	3.98	37.77	21.33
4	-2.25	4.76	2.19	1.24	39.96	22.57
5	-2.00	4.00	3.23	1.82	43.19	24.39
7	-1.50	2.83	6.91	3.90	50.10	28.29
10	-1.00	2.00	5.84	3.30	55.94	31.59
14	-0.50	1.41	6.85	3.87	62.79	35.46
18	0.00	1.00	4.75	2.68	67.54	38.14
25	0.50	0.71	3.60	2.03	71.14	40.17
35	1.00	0.50	4.46	2.52	75.60	42.69
45	1.50	0.35	9.82	5.54	85.42	48.23
60	2.00	0.25	37.16	20.98	122.58	69.21
80	2.50	0.18	27.80	15.70	150.38	84.91
120	3.00	0.13	10.64	6.01	161.02	90.92
170	3.50	0.09	5.30	2.99	166.32	93.91
200	3.75	0.07	1.85	1.04	168.17	94.95
230	4.00	0.06	0.57	0.32	168.74	95.27

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.79	2.47	2.18	1.54	-1.92	-3.17	-4.17

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.14	0.91	2.29	-0.43	1.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y157 #2

Analysis Date: 03-20-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		SILTY BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
166.99	148.87	1.61	0.00	#200 - 14.65 #230 - 11.82	1.40	11.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	3.16	1.89	3.16	1.89
5/16"	-3.00	8.00	0.35	0.21	3.51	2.10
3.5	-2.50	5.66	2.42	1.45	5.93	3.55
4	-2.25	4.76	1.94	1.16	7.87	4.71
5	-2.00	4.00	1.42	0.85	9.29	5.56
7	-1.50	2.83	2.93	1.75	12.22	7.31
10	-1.00	2.00	2.65	1.59	14.87	8.90
14	-0.50	1.41	2.43	1.46	17.30	10.36
18	0.00	1.00	1.71	1.02	19.01	11.38
25	0.50	0.71	1.48	0.89	20.49	12.27
35	1.00	0.50	1.51	0.90	22.00	13.17
45	1.50	0.35	2.77	1.66	24.77	14.83
60	2.00	0.25	7.90	4.73	32.67	19.56
80	2.50	0.18	12.10	7.25	44.77	26.81
120	3.00	0.13	35.96	21.53	80.73	48.34
170	3.50	0.09	52.15	31.23	132.88	79.57
200	3.75	0.07	9.65	5.78	142.53	85.35
230	4.00	0.06	4.73	2.83	147.26	88.18

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.69	3.43	3.03	2.38	1.62	-2.16

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.24	0.21	1.79	-1.96	5.85

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y157 #3
Analysis Date: 03-20-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		BROWN SAND, SOME WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
178.74	162.45	1.50	0.00	#200 - 11.53 #230 - 9.95	1.50	33.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	7.52	4.21	7.52	4.21
11/16"	-3.50	11.31	3.85	2.15	11.37	6.36
5/16"	-3.00	8.00	4.20	2.35	15.57	8.71
3.5	-2.50	5.66	2.68	1.50	18.25	10.21
4	-2.25	4.76	4.43	2.48	22.68	12.69
5	-2.00	4.00	5.91	3.31	28.59	16.00
7	-1.50	2.83	10.26	5.74	38.85	21.74
10	-1.00	2.00	7.48	4.18	46.33	25.92
14	-0.50	1.41	6.90	3.86	53.23	29.78
18	0.00	1.00	3.05	1.71	56.28	31.49
25	0.50	0.71	2.09	1.17	58.37	32.66
35	1.00	0.50	1.81	1.01	60.18	33.67
45	1.50	0.35	1.77	0.99	61.95	34.66
60	2.00	0.25	2.94	1.64	64.89	36.30
80	2.50	0.18	14.78	8.27	79.67	44.57
120	3.00	0.13	34.53	19.32	114.20	63.89
170	3.50	0.09	36.26	20.29	150.46	84.18
200	3.75	0.07	7.66	4.29	158.12	88.47
230	4.00	0.06	2.83	1.58	160.95	90.05

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.50	3.27	2.64	-1.11	-2.00	-3.82

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.06	0.48	2.54	-0.74	1.99

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y157 #4
Analysis Date: 03-20-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		WHITE SHELL, FEW BLACK PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
144.10	137.72	0.19	0.00	#200 - 5.23 #230 - 4.56	1.00	42.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	5.19	3.60	5.19	3.60
11/16"	-3.50	11.31	8.77	6.09	13.96	9.69
5/16"	-3.00	8.00	11.13	7.72	25.09	17.41
3.5	-2.50	5.66	11.54	8.01	36.63	25.42
4	-2.25	4.76	6.08	4.22	42.71	29.64
5	-2.00	4.00	7.03	4.88	49.74	34.52
7	-1.50	2.83	10.54	7.31	60.28	41.83
10	-1.00	2.00	8.80	6.11	69.08	47.94
14	-0.50	1.41	5.66	3.93	74.74	51.87
18	0.00	1.00	3.83	2.66	78.57	54.53
25	0.50	0.71	3.20	2.22	81.77	56.75
35	1.00	0.50	2.02	1.40	83.79	58.15
45	1.50	0.35	1.31	0.91	85.10	59.06
60	2.00	0.25	1.62	1.12	86.72	60.18
80	2.50	0.18	6.39	4.43	93.11	64.61
120	3.00	0.13	24.24	16.82	117.35	81.43
170	3.50	0.09	16.68	11.58	134.03	93.01
200	3.75	0.07	2.53	1.76	136.56	94.77
230	4.00	0.06	0.97	0.67	137.53	95.44

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.84	3.11	2.81	-0.74	-2.53	-3.09	-3.89

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.23	1.17	2.66	0.13	1.41

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y158 #1

Analysis Date: 03-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		GRAY SILTY SAND, PEBBLES

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.58	146.15	1.08	0.00	#200 - 12.25 #230 - 10.77	0.70	4.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.25	1.38	2.25	1.38
3.5	-2.50	5.66	4.18	2.57	6.43	3.95
4	-2.25	4.76	1.37	0.84	7.80	4.79
5	-2.00	4.00	0.82	0.50	8.62	5.29
7	-1.50	2.83	3.30	2.03	11.92	7.32
10	-1.00	2.00	2.53	1.56	14.45	8.88
14	-0.50	1.41	1.54	0.95	15.99	9.83
18	0.00	1.00	0.98	0.60	16.97	10.43
25	0.50	0.71	0.76	0.47	17.73	10.90
35	1.00	0.50	1.39	0.85	19.12	11.75
45	1.50	0.35	2.38	1.46	21.50	13.21
60	2.00	0.25	6.22	3.83	27.72	17.04
80	2.50	0.18	36.51	22.46	64.23	39.50
120	3.00	0.13	39.03	24.01	103.26	63.51
170	3.50	0.09	31.87	19.60	135.13	83.11
200	3.75	0.07	7.54	4.64	142.67	87.75
230	4.00	0.06	2.40	1.48	145.07	89.23

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.55	3.29	2.72	2.18	1.86	-2.15

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.14	0.23	1.64	-2.01	6.13

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y158 #2

Analysis Date: 03-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		GRAY SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
145.21	132.13	0.41	0.00	#200 - 10.87 #230 - 9.29	1.20	29.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	5.34	3.68	5.34	3.68
5/16"	-3.00	8.00	3.02	2.08	8.36	5.76
3.5	-2.50	5.66	5.10	3.51	13.46	9.27
4	-2.25	4.76	2.56	1.76	16.02	11.03
5	-2.00	4.00	4.09	2.82	20.11	13.85
7	-1.50	2.83	6.94	4.78	27.05	18.63
10	-1.00	2.00	6.01	4.14	33.06	22.77
14	-0.50	1.41	4.33	2.98	37.39	25.75
18	0.00	1.00	2.88	1.98	40.27	27.73
25	0.50	0.71	2.04	1.40	42.31	29.13
35	1.00	0.50	1.67	1.15	43.98	30.28
45	1.50	0.35	1.55	1.07	45.53	31.35
60	2.00	0.25	2.63	1.81	48.16	33.16
80	2.50	0.18	14.11	9.72	62.27	42.88
120	3.00	0.13	37.11	25.56	99.38	68.44
170	3.50	0.09	25.46	17.53	124.84	85.97
200	3.75	0.07	4.59	3.16	129.43	89.13
230	4.00	0.06	2.29	1.58	131.72	90.71

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.44	3.19	2.64	-0.63	-1.78	-3.18

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.28	0.41	2.35	-0.88	2.2

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y158 #3

Analysis Date: 03-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
178.28	173.82	0.27	0.07	#200 - 3.01 #230 - 2.73	1.30	59.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	4.79	2.69	4.79	2.69
11/16"	-3.50	11.31	14.27	8.00	19.06	10.69
5/16"	-3.00	8.00	7.25	4.07	26.31	14.76
3.5	-2.50	5.66	4.85	2.72	31.16	17.48
4	-2.25	4.76	4.19	2.35	35.35	19.83
5	-2.00	4.00	7.10	3.98	42.45	23.81
7	-1.50	2.83	20.76	11.64	63.21	35.45
10	-1.00	2.00	21.83	12.24	85.04	47.69
14	-0.50	1.41	17.11	9.60	102.15	57.29
18	0.00	1.00	9.70	5.44	111.85	62.73
25	0.50	0.71	8.28	4.64	120.13	67.37
35	1.00	0.50	4.97	2.79	125.10	70.16
45	1.50	0.35	2.10	1.18	127.20	71.34
60	2.00	0.25	1.23	0.69	128.43	72.03
80	2.50	0.18	7.15	4.01	135.58	76.04
120	3.00	0.13	22.98	12.89	158.56	88.93
170	3.50	0.09	12.24	6.87	170.80	95.80
200	3.75	0.07	2.13	1.19	172.93	96.99
230	4.00	0.06	0.50	0.28	173.43	97.27

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.44	2.81	2.37	-0.88	-1.95	-2.77	-3.86

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.43	1.35	2.29	0.28	1.92

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y158 #4

Analysis Date: 03-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		BROWN SILTY SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.55	141.96	0.18	0.03	#200 - 6.32 #230 - 5.22	0.60	8.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.76	0.51	0.76	0.51
3.5	-2.50	5.66	1.46	0.98	2.22	1.49
4	-2.25	4.76	1.15	0.77	3.37	2.26
5	-2.00	4.00	1.15	0.77	4.52	3.03
7	-1.50	2.83	2.90	1.94	7.42	4.97
10	-1.00	2.00	3.07	2.05	10.49	7.02
14	-0.50	1.41	2.83	1.89	13.32	8.91
18	0.00	1.00	2.27	1.52	15.59	10.43
25	0.50	0.71	3.60	2.41	19.19	12.84
35	1.00	0.50	2.76	1.85	21.95	14.69
45	1.50	0.35	1.00	0.67	22.95	15.36
60	2.00	0.25	1.27	0.85	24.22	16.21
80	2.50	0.18	17.66	11.81	41.88	28.02
120	3.00	0.13	69.47	46.45	111.35	74.47
170	3.50	0.09	24.83	16.60	136.18	91.07
200	3.75	0.07	3.91	2.61	140.09	93.68
230	4.00	0.06	1.64	1.10	141.73	94.78

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.29	3.02	2.74	2.37	1.88	-1.49

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.22	0.21	1.47	-2.03	6.24

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y160 #1

Analysis Date: 03-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		GRAY SILTY SAND, PEBBLES, SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
165.59	147.07	0.18	0.04	#200 - 11.55 #230 - 11.33	3.70	27.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.51	0.91	1.51	0.91
5/16"	-3.00	8.00	7.79	4.70	9.30	5.61
3.5	-2.50	5.66	4.28	2.58	13.58	8.19
4	-2.25	4.76	4.10	2.48	17.68	10.67
5	-2.00	4.00	3.33	2.01	21.01	12.68
7	-1.50	2.83	8.31	5.02	29.32	17.70
10	-1.00	2.00	7.30	4.41	36.62	22.11
14	-0.50	1.41	6.01	3.63	42.63	25.74
18	0.00	1.00	3.59	2.17	46.22	27.91
25	0.50	0.71	3.07	1.85	49.29	29.76
35	1.00	0.50	4.30	2.60	53.59	32.36
45	1.50	0.35	11.05	6.67	64.64	39.03
60	2.00	0.25	24.66	14.89	89.30	53.92
80	2.50	0.18	31.04	18.75	120.34	72.67
120	3.00	0.13	20.44	12.34	140.78	85.01
170	3.50	0.09	4.75	2.87	145.53	87.88
200	3.75	0.07	0.94	0.57	146.47	88.45
230	4.00	0.06	0.36	0.22	146.83	88.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.96	2.59	1.87	-0.60	-1.67	-3.06

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.81	0.57	2.01	-0.79	2.23

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y160 #2
Analysis Date: 03-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		GRAY SILTY SAND, PEBBLES, SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.18	151.88	0.17	0.03	#200 - 14.17 #230 - 13.94	1.60	18.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.96	1.11	1.96	1.11
3.5	-2.50	5.66	1.98	1.12	3.94	2.23
4	-2.25	4.76	2.46	1.40	6.40	3.63
5	-2.00	4.00	3.55	2.01	9.95	5.64
7	-1.50	2.83	4.28	2.43	14.23	8.07
10	-1.00	2.00	5.01	2.84	19.24	10.91
14	-0.50	1.41	3.66	2.08	22.90	12.99
18	0.00	1.00	2.39	1.36	25.29	14.35
25	0.50	0.71	2.66	1.51	27.95	15.86
35	1.00	0.50	4.03	2.29	31.98	18.15
45	1.50	0.35	19.07	10.82	51.05	28.97
60	2.00	0.25	60.45	34.31	111.50	63.28
80	2.50	0.18	28.21	16.01	139.71	79.29
120	3.00	0.13	8.94	5.07	148.65	84.36
170	3.50	0.09	2.01	1.14	150.66	85.50
200	3.75	0.07	0.59	0.33	151.25	85.83
230	4.00	0.06	0.40	0.23	151.65	86.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.96	2.37	1.81	1.32	0.53	-2.08

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.25	0.42	1.44	-1.53	4.51

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Y160 #3
Analysis Date: 03-20-12
Analyzed By: LA

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		WHITE SHELL, GRAY SAND

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
170.59	165.48	0.35	0.12	#200 - 3.50 #230 - 3.32	0.80	29.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	19.39	11.37	19.39	11.37
11/16"	-3.50	11.31	11.26	6.60	30.65	17.97
5/16"	-3.00	8.00	10.56	6.19	41.21	24.16
3.5	-2.50	5.66	7.09	4.16	48.30	28.32
4	-2.25	4.76	3.83	2.25	52.13	30.57
5	-2.00	4.00	4.41	2.59	56.54	33.16
7	-1.50	2.83	5.82	3.41	62.36	36.57
10	-1.00	2.00	5.36	3.14	67.72	39.71
14	-0.50	1.41	5.97	3.50	73.69	43.21
18	0.00	1.00	4.15	2.43	77.84	45.64
25	0.50	0.71	3.91	2.29	81.75	47.93
35	1.00	0.50	6.33	3.71	88.08	51.64
45	1.50	0.35	14.92	8.75	103.00	60.39
60	2.00	0.25	28.11	16.48	131.11	76.87
80	2.50	0.18	21.40	12.54	152.51	89.41
120	3.00	0.13	8.36	4.90	160.87	94.31
170	3.50	0.09	2.84	1.66	163.71	95.97
200	3.75	0.07	0.91	0.53	164.62	96.50
230	4.00	0.06	0.30	0.18	164.92	96.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.21	2.28	1.94	0.78	-2.90	-3.65	-4.14

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.35	1.27	2.51	-0.28	1.5

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Y160 #4

Analysis Date: 03-20-12

Analyzed By: LA

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		SILTY BROWN SAND, WHITE SHELL

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.15	142.71	0.25	0.04	#200 - 10.84 #230 - 9.40	1.30	36.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.49	1.58	2.49	1.58
5/16"	-3.00	8.00	4.42	2.81	6.91	4.39
3.5	-2.50	5.66	5.79	3.68	12.70	8.07
4	-2.25	4.76	4.46	2.84	17.16	10.91
5	-2.00	4.00	5.52	3.51	22.68	14.42
7	-1.50	2.83	11.31	7.20	33.99	21.62
10	-1.00	2.00	9.16	5.83	43.15	27.45
14	-0.50	1.41	5.95	3.79	49.10	31.24
18	0.00	1.00	3.40	2.16	52.50	33.40
25	0.50	0.71	2.37	1.51	54.87	34.91
35	1.00	0.50	2.26	1.44	57.13	36.35
45	1.50	0.35	2.61	1.66	59.74	38.01
60	2.00	0.25	3.79	2.41	63.53	40.42
80	2.50	0.18	12.37	7.87	75.90	48.29
120	3.00	0.13	32.41	20.62	108.31	68.91
170	3.50	0.09	27.01	17.19	135.32	86.10
200	3.75	0.07	4.81	3.06	140.13	89.16
230	4.00	0.06	2.27	1.44	142.40	90.60

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.44	3.18	2.54	-1.21	-1.89	-2.92

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.02	0.49	2.35	-0.55	1.69

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/6/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z165 #1
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Silty gray sand/shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.48	135.20	0.63	0.04	#200 - 13.77 #230 - 12.95	2.80	22.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.58	1.02	1.58	1.02
3.5	-2.50	5.66	2.88	1.86	4.46	2.88
4	-2.25	4.76	1.18	0.76	5.64	3.64
5	-2.00	4.00	1.53	0.99	7.17	4.63
7	-1.50	2.83	3.19	2.06	10.36	6.69
10	-1.00	2.00	3.61	2.34	13.97	9.03
14	-0.50	1.41	4.78	3.09	18.75	12.12
18	0.00	1.00	5.77	3.74	24.52	15.86
25	0.50	0.71	8.44	5.46	32.96	21.32
35	1.00	0.50	11.84	7.66	44.80	28.98
45	1.50	0.35	8.78	5.68	53.58	34.66
60	2.00	0.25	8.26	5.35	61.84	40.01
80	2.50	0.18	25.17	16.29	87.01	56.30
120	3.00	0.13	29.87	19.34	116.88	75.64
170	3.50	0.09	13.11	8.49	129.99	84.13
200	3.75	0.07	3.25	2.10	133.24	86.23
230	4.00	0.06	1.27	0.82	134.51	87.05

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.49	2.98	2.31	0.74	0.01	-1.91

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.49	0.36	1.66	-1.01	3.23

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z165 #2

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Silty gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
203.10	186.01	0.71	0.09	#200 - 10.19 #230 - 8.84	1.40	5.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.26	0.13	0.26	0.13
4	-2.25	4.76	0.11	0.05	0.37	0.18
5	-2.00	4.00	0.50	0.25	0.87	0.43
7	-1.50	2.83	0.39	0.19	1.26	0.62
10	-1.00	2.00	0.56	0.28	1.82	0.90
14	-0.50	1.41	0.59	0.29	2.41	1.19
18	0.00	1.00	0.91	0.45	3.32	1.64
25	0.50	0.71	1.70	0.84	5.02	2.48
35	1.00	0.50	3.94	1.94	8.96	4.42
45	1.50	0.35	7.43	3.66	16.39	8.08
60	2.00	0.25	12.79	6.30	29.18	14.38
80	2.50	0.18	28.28	13.92	57.46	28.30
120	3.00	0.13	86.19	42.44	143.65	70.74
170	3.50	0.09	33.40	16.45	177.05	87.19
200	3.75	0.07	5.32	2.62	182.37	89.81
230	4.00	0.06	2.75	1.35	185.12	91.16

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.40	3.13	2.76	2.38	2.06	1.08

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.54	0.17	0.82	-2.36	11.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z165 #3

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Tan sand, little tan silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.73	158.26	0.45	0.01	#200 - 4.53 #230 - 4.21	0.30	1.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.03	0.02	0.03	0.02
10	-1.00	2.00	0.03	0.02	0.06	0.04
14	-0.50	1.41	0.20	0.12	0.26	0.16
18	0.00	1.00	0.25	0.15	0.51	0.31
25	0.50	0.71	0.41	0.25	0.92	0.56
35	1.00	0.50	0.79	0.48	1.71	1.04
45	1.50	0.35	6.27	3.81	7.98	4.85
60	2.00	0.25	82.50	50.08	90.48	54.93
80	2.50	0.18	50.89	30.89	141.37	85.82
120	3.00	0.13	12.06	7.32	153.43	93.14
170	3.50	0.09	2.97	1.80	156.40	94.94
200	3.75	0.07	0.87	0.53	157.27	95.47
230	4.00	0.06	0.53	0.32	157.80	95.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.53	2.47	2.32	1.95	1.70	1.61	1.50

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2	0.25	0.46	0.12	8.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z165 #4

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Tan sand, woody peat

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
193.45	189.70	0.22	0.04	#200 - 2.32 #230 - 2.10	1.20	1.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.27	0.14	0.27	0.14
10	-1.00	2.00	0.59	0.30	0.86	0.44
14	-0.50	1.41	0.48	0.25	1.34	0.69
18	0.00	1.00	0.44	0.23	1.78	0.92
25	0.50	0.71	0.43	0.22	2.21	1.14
35	1.00	0.50	0.72	0.37	2.93	1.51
45	1.50	0.35	13.90	7.19	16.83	8.70
60	2.00	0.25	121.14	62.62	137.97	71.32
80	2.50	0.18	40.65	21.01	178.62	92.33
120	3.00	0.13	7.56	3.91	186.18	96.24
170	3.50	0.09	2.02	1.04	188.20	97.28
200	3.75	0.07	0.78	0.40	188.98	97.68
230	4.00	0.06	0.42	0.22	189.40	97.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.84	2.30	2.09	1.83	1.63	1.56	1.24

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.86	0.28	0.48	-1.35	16.7

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z166 #1

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		tan sand, few rocks/shell fragments

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
178.30	172.83	0.20	0.16	#200 - 3.56 #230 - 3.34	1.10	10.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.11	1.18	2.11	1.18
5/16"	-3.00	8.00	3.39	1.90	5.50	3.08
3.5	-2.50	5.66	1.91	1.07	7.41	4.15
4	-2.25	4.76	0.76	0.43	8.17	4.58
5	-2.00	4.00	1.04	0.58	9.21	5.16
7	-1.50	2.83	2.05	1.15	11.26	6.31
10	-1.00	2.00	2.81	1.58	14.07	7.89
14	-0.50	1.41	3.48	1.95	17.55	9.84
18	0.00	1.00	3.86	2.16	21.41	12.00
25	0.50	0.71	4.20	2.36	25.61	14.36
35	1.00	0.50	5.96	3.34	31.57	17.70
45	1.50	0.35	11.25	6.31	42.82	24.01
60	2.00	0.25	25.92	14.54	68.74	38.55
80	2.50	0.18	64.39	36.11	133.13	74.66
120	3.00	0.13	29.96	16.80	163.09	91.46
170	3.50	0.09	7.52	4.22	170.61	95.68
200	3.75	0.07	1.35	0.76	171.96	96.44
230	4.00	0.06	0.39	0.22	172.35	96.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.42	2.78	2.51	2.16	1.53	0.75	-2.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.65	0.32	1.5	-1.95	6.44

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z166 #2
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		gray/blue sand, shell, rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.98	154.26	0.07	0.32	#200 - 2.25 #230 - 2.12	1.20	27.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	3.33	2.12	3.33	2.12
5/16"	-3.00	8.00	11.31	7.20	14.64	9.32
3.5	-2.50	5.66	12.96	8.26	27.60	17.58
4	-2.25	4.76	6.38	4.06	33.98	21.64
5	-2.00	4.00	5.40	3.44	39.38	25.08
7	-1.50	2.83	13.75	8.76	53.13	33.84
10	-1.00	2.00	10.68	6.80	63.81	40.64
14	-0.50	1.41	10.35	6.59	74.16	47.23
18	0.00	1.00	10.33	6.58	84.49	53.81
25	0.50	0.71	8.93	5.69	93.42	59.50
35	1.00	0.50	7.81	4.98	101.23	64.48
45	1.50	0.35	6.25	3.98	107.48	68.46
60	2.00	0.25	8.32	5.30	115.80	73.76
80	2.50	0.18	15.83	10.08	131.63	83.84
120	3.00	0.13	17.77	11.32	149.40	95.16
170	3.50	0.09	3.55	2.26	152.95	97.42
200	3.75	0.07	0.52	0.33	153.47	97.75
230	4.00	0.06	0.21	0.13	153.68	97.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.99	2.51	2.06	-0.29	-2.01	-2.60	-3.30

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.2	1.15	2.11	0.07	1.67

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z166 #3

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		gray/blue sand, shell, rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
185.83	165.91	0.35	0.22	#200 - 11.47 #230 - 11.13	2.10	28.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	6.42	3.45	6.42	3.45
5/16"	-3.00	8.00	2.73	1.47	9.15	4.92
3.5	-2.50	5.66	5.84	3.14	14.99	8.06
4	-2.25	4.76	2.45	1.32	17.44	9.38
5	-2.00	4.00	4.02	2.16	21.46	11.54
7	-1.50	2.83	9.64	5.19	31.10	16.73
10	-1.00	2.00	11.29	6.08	42.39	22.81
14	-0.50	1.41	13.66	7.35	56.05	30.16
18	0.00	1.00	12.25	6.59	68.30	36.75
25	0.50	0.71	11.26	6.06	79.56	42.81
35	1.00	0.50	9.68	5.21	89.24	48.02
45	1.50	0.35	7.87	4.24	97.11	52.26
60	2.00	0.25	8.63	4.64	105.74	56.90
80	2.50	0.18	22.44	12.08	128.18	68.98
120	3.00	0.13	27.46	14.78	155.64	83.76
170	3.50	0.09	7.42	3.99	163.06	87.75
200	3.75	0.07	1.45	0.78	164.51	88.53
230	4.00	0.06	0.64	0.34	165.15	88.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.03	2.70	1.23	-0.85	-1.57	-2.99

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.52	0.70	2.03	-0.38	2.02

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z166 #4

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
88.95	23.74	0.26	0.00	#200 - 75.54 #230 - 73.62	7.80	5.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.03	0.03	0.03	0.03
5	-2.00	4.00	0.00	0.00	0.03	0.03
7	-1.50	2.83	0.00	0.00	0.03	0.03
10	-1.00	2.00	0.02	0.02	0.05	0.05
14	-0.50	1.41	0.43	0.48	0.48	0.53
18	0.00	1.00	0.41	0.46	0.89	0.99
25	0.50	0.71	0.44	0.49	1.33	1.48
35	1.00	0.50	0.63	0.71	1.96	2.19
45	1.50	0.35	0.76	0.85	2.72	3.04
60	2.00	0.25	1.07	1.20	3.79	4.24
80	2.50	0.18	2.36	2.65	6.15	6.89
120	3.00	0.13	6.57	7.39	12.72	14.28
170	3.50	0.09	6.75	7.59	19.47	21.87
200	3.75	0.07	2.30	2.59	21.77	24.46
230	4.00	0.06	1.71	1.92	23.48	26.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.82	3.11	2.14

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.69	0.15	1.02	-1.69	5.99

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z167 #1

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray/blue sand, shell, rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
170.05	158.19	0.35	0.06	#200 - 7.51 #230 - 7.24	1.90	25.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.10	1.23	2.10	1.23
5/16"	-3.00	8.00	5.30	3.12	7.40	4.35
3.5	-2.50	5.66	6.11	3.59	13.51	7.94
4	-2.25	4.76	4.60	2.71	18.11	10.65
5	-2.00	4.00	5.70	3.35	23.81	14.00
7	-1.50	2.83	13.13	7.72	36.94	21.72
10	-1.00	2.00	14.44	8.49	51.38	30.21
14	-0.50	1.41	18.16	10.68	69.54	40.89
18	0.00	1.00	14.82	8.72	84.36	49.61
25	0.50	0.71	11.49	6.76	95.85	56.37
35	1.00	0.50	10.49	6.17	106.34	62.54
45	1.50	0.35	8.39	4.93	114.73	67.47
60	2.00	0.25	8.13	4.78	122.86	72.25
80	2.50	0.18	13.62	8.01	136.48	80.26
120	3.00	0.13	15.12	8.89	151.60	89.15
170	3.50	0.09	4.69	2.76	156.29	91.91
200	3.75	0.07	0.99	0.58	157.28	92.49
230	4.00	0.06	0.46	0.27	157.74	92.76

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.71	2.17	0.03	-1.31	-1.87	-2.91

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.03	0.98	1.87	0.07	1.99

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z167 #2
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
83.97	26.73	0.46	0.00	#200 - 70.62 #230 - 68.71	12.90	5.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.23	0.27	0.23	0.27
10	-1.00	2.00	0.94	1.12	1.17	1.39
14	-0.50	1.41	1.30	1.55	2.47	2.94
18	0.00	1.00	1.45	1.73	3.92	4.67
25	0.50	0.71	2.01	2.39	5.93	7.06
35	1.00	0.50	3.86	4.60	9.79	11.66
45	1.50	0.35	4.50	5.36	14.29	17.02
60	2.00	0.25	2.62	3.12	16.91	20.14
80	2.50	0.18	1.79	2.13	18.70	22.27
120	3.00	0.13	1.57	1.87	20.27	24.14
170	3.50	0.09	2.44	2.91	22.71	27.05
200	3.75	0.07	1.96	2.33	24.67	29.38
230	4.00	0.06	1.60	1.91	26.27	31.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.15	1.40	0.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.53	0.35	1.45	-0.05	2.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: Z167 #3
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Tan coarse sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
193.19	190.48	0.04	0.26	#200 - 1.70 #230 - 1.66	0.40	0.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.43	0.22	0.43	0.22
4	-2.25	4.76	0.31	0.16	0.74	0.38
5	-2.00	4.00	0.92	0.48	1.66	0.86
7	-1.50	2.83	2.26	1.17	3.92	2.03
10	-1.00	2.00	2.37	1.23	6.29	3.26
14	-0.50	1.41	4.40	2.28	10.69	5.54
18	0.00	1.00	6.58	3.41	17.27	8.95
25	0.50	0.71	12.70	6.57	29.97	15.52
35	1.00	0.50	27.35	14.16	57.32	29.68
45	1.50	0.35	40.87	21.16	98.19	50.84
60	2.00	0.25	41.95	21.71	140.14	72.55
80	2.50	0.18	35.04	18.14	175.18	90.69
120	3.00	0.13	12.57	6.51	187.75	97.20
170	3.50	0.09	1.89	0.98	189.64	98.18
200	3.75	0.07	0.23	0.12	189.87	98.30
230	4.00	0.06	0.07	0.04	189.94	98.34

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.83	2.32	2.07	1.48	0.83	0.52	-0.62

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.33	0.40	1	-1.02	4.59

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z167 #4

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Fine tan sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.92	135.27	1.55	0.05	#200 - 13.98 #230 - 12.04	0.70	1.10	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.02	0.01	0.02	0.01
18	0.00	1.00	0.07	0.05	0.09	0.06
25	0.50	0.71	0.11	0.07	0.20	0.13
35	1.00	0.50	0.18	0.12	0.38	0.25
45	1.50	0.35	0.30	0.20	0.68	0.45
60	2.00	0.25	3.57	2.35	4.25	2.80
80	2.50	0.18	50.76	33.41	55.01	36.21
120	3.00	0.13	55.94	36.82	110.95	73.03
170	3.50	0.09	15.57	10.25	126.52	83.28
200	3.75	0.07	4.17	2.74	130.69	86.02
230	4.00	0.06	2.95	1.94	133.64	87.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.57	3.10	2.69	2.33	2.20	2.03

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.63	0.16	0.46	0.17	5.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z168 #1

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray/blue sand, shell, rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.69	145.77	0.13	0.12	#200 - 10.90 #230 - 10.61	4.60	15.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	3.32	2.04	3.32	2.04
5/16"	-3.00	8.00	2.21	1.36	5.53	3.40
3.5	-2.50	5.66	3.60	2.21	9.13	5.61
4	-2.25	4.76	1.22	0.75	10.35	6.36
5	-2.00	4.00	3.53	2.17	13.88	8.53
7	-1.50	2.83	7.22	4.44	21.10	12.97
10	-1.00	2.00	7.03	4.32	28.13	17.29
14	-0.50	1.41	9.13	5.61	37.26	22.90
18	0.00	1.00	6.79	4.17	44.05	27.07
25	0.50	0.71	5.50	3.38	49.55	30.45
35	1.00	0.50	6.46	3.97	56.01	34.42
45	1.50	0.35	7.78	4.78	63.79	39.20
60	2.00	0.25	10.88	6.69	74.67	45.89
80	2.50	0.18	34.18	21.01	108.85	66.90
120	3.00	0.13	25.84	15.88	134.69	82.78
170	3.50	0.09	8.61	5.29	143.30	88.07
200	3.75	0.07	1.67	1.03	144.97	89.10
230	4.00	0.06	0.47	0.29	145.44	89.39

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.12	2.76	2.10	-0.25	-1.15	-2.64

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.02	0.49	1.93	-0.81	2.48

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z168 #2
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
114.04	32.04	0.07	-0.05	#200 - 73.17 #230 - 71.91	3.70	2.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.20	0.18	0.20	0.18
10	-1.00	2.00	0.20	0.18	0.40	0.36
14	-0.50	1.41	0.32	0.28	0.72	0.64
18	0.00	1.00	0.38	0.33	1.10	0.97
25	0.50	0.71	0.50	0.44	1.60	1.41
35	1.00	0.50	0.78	0.68	2.38	2.09
45	1.50	0.35	1.15	1.01	3.53	3.10
60	2.00	0.25	2.14	1.88	5.67	4.98
80	2.50	0.18	10.78	9.45	16.45	14.43
120	3.00	0.13	9.01	7.90	25.46	22.33
170	3.50	0.09	3.56	3.12	29.02	25.45
200	3.75	0.07	1.57	1.38	30.59	26.83
230	4.00	0.06	1.44	1.26	32.03	28.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.43	2.60	2.00

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.4	0.19	0.94	-1.58	7.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z168 #3
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Brown sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
161.27	151.83	0.30	0.00	#200 - 6.92 #230 - 6.05	0.80	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.32	0.20	0.32	0.20
5	-2.00	4.00	0.00	0.00	0.32	0.20
7	-1.50	2.83	0.00	0.00	0.32	0.20
10	-1.00	2.00	0.06	0.04	0.38	0.24
14	-0.50	1.41	0.12	0.07	0.50	0.31
18	0.00	1.00	0.28	0.17	0.78	0.48
25	0.50	0.71	0.32	0.20	1.10	0.68
35	1.00	0.50	0.92	0.57	2.02	1.25
45	1.50	0.35	2.23	1.38	4.25	2.63
60	2.00	0.25	5.86	3.63	10.11	6.26
80	2.50	0.18	75.70	46.94	85.81	53.20
120	3.00	0.13	47.13	29.22	132.94	82.42
170	3.50	0.09	13.71	8.50	146.65	90.92
200	3.75	0.07	3.48	2.16	150.13	93.08
230	4.00	0.06	1.40	0.87	151.53	93.95

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.09	2.87	2.47	2.20	2.10	1.83

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.48	0.18	0.55	-1.95	18.88

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z168 #4

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Gray sand, shell, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.28	164.28	0.22	0.13	#200 - 0.31 #230 - 0.26	0.30	0.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.24	0.15	0.24	0.15
7	-1.50	2.83	0.08	0.05	0.32	0.20
10	-1.00	2.00	0.12	0.07	0.44	0.27
14	-0.50	1.41	0.27	0.16	0.71	0.43
18	0.00	1.00	0.46	0.28	1.17	0.71
25	0.50	0.71	1.28	0.78	2.45	1.49
35	1.00	0.50	5.76	3.51	8.21	5.00
45	1.50	0.35	28.58	17.40	36.79	22.40
60	2.00	0.25	71.37	43.44	108.16	65.84
80	2.50	0.18	40.70	24.77	148.86	90.61
120	3.00	0.13	13.22	8.05	162.08	98.66
170	3.50	0.09	1.45	0.88	163.53	99.54
200	3.75	0.07	0.24	0.15	163.77	99.69
230	4.00	0.06	0.08	0.05	163.85	99.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.77	2.37	2.18	1.82	1.53	1.32	1.00

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.82	0.28	0.56	-0.93	8.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z169 #1

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand, shell, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
197.23	171.30	0.19	0.17	#200 - 14.02 #230 - 13.40	2.50	12.00	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.02	1.02	2.02	1.02
11/16"	-3.50	11.31	2.02	1.02	4.04	2.04
5/16"	-3.00	8.00	0.82	0.42	4.86	2.46
3.5	-2.50	5.66	2.57	1.30	7.43	3.76
4	-2.25	4.76	1.67	0.85	9.10	4.61
5	-2.00	4.00	3.73	1.89	12.83	6.50
7	-1.50	2.83	5.04	2.56	17.87	9.06
10	-1.00	2.00	4.13	2.09	22.00	11.15
14	-0.50	1.41	5.58	2.83	27.58	13.98
18	0.00	1.00	5.10	2.59	32.68	16.57
25	0.50	0.71	8.55	4.34	41.23	20.91
35	1.00	0.50	20.35	10.32	61.58	31.23
45	1.50	0.35	24.36	12.35	85.94	43.58
60	2.00	0.25	17.84	9.05	103.78	52.63
80	2.50	0.18	27.93	14.16	131.71	66.79
120	3.00	0.13	23.75	12.04	155.46	78.83
170	3.50	0.09	11.02	5.59	166.48	84.42
200	3.75	0.07	3.07	1.56	169.55	85.98
230	4.00	0.06	1.22	0.62	170.77	86.60

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.46	2.84	1.85	0.70	-0.11	-2.20

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.18	0.44	1.72	-1.08	3.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z169 #2

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand, shell, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
163.23	134.71	0.07	0.22	#200 - 18.46 #230 - 17.74	1.70	1.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	2.24	1.37	2.24	1.37
4	-2.25	4.76	1.32	0.81	3.56	2.18
5	-2.00	4.00	1.94	1.19	5.50	3.37
7	-1.50	2.83	3.66	2.24	9.16	5.61
10	-1.00	2.00	3.30	2.02	12.46	7.63
14	-0.50	1.41	2.79	1.71	15.25	9.34
18	0.00	1.00	3.13	1.92	18.38	11.26
25	0.50	0.71	4.47	2.74	22.85	14.00
35	1.00	0.50	8.20	5.02	31.05	19.02
45	1.50	0.35	11.81	7.24	42.86	26.26
60	2.00	0.25	16.03	9.82	58.89	36.08
80	2.50	0.18	36.85	22.58	95.74	58.66
120	3.00	0.13	25.65	15.71	121.39	74.37
170	3.50	0.09	9.34	5.72	130.73	80.09
200	3.75	0.07	2.37	1.45	133.10	81.54
230	4.00	0.06	1.18	0.72	134.28	82.26

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.06	2.31	1.41	0.70	-1.64

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.64	0.32	1.47	-1.32	4.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z169 #3
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Coarser quartz sand, little organic silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
190.91	179.98	0.18	0.75	#200 - 7.04 #230 - 6.59	0.80	1.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.47	0.77	1.47	0.77
5/16"	-3.00	8.00	5.25	2.75	6.72	3.52
3.5	-2.50	5.66	2.58	1.35	9.30	4.87
4	-2.25	4.76	1.59	0.83	10.89	5.70
5	-2.00	4.00	2.03	1.06	12.92	6.76
7	-1.50	2.83	4.89	2.56	17.81	9.32
10	-1.00	2.00	5.53	2.90	23.34	12.22
14	-0.50	1.41	8.31	4.35	31.65	16.57
18	0.00	1.00	10.05	5.26	41.70	21.83
25	0.50	0.71	25.20	13.20	66.90	35.03
35	1.00	0.50	44.07	23.08	110.97	58.11
45	1.50	0.35	33.46	17.53	144.43	75.64
60	2.00	0.25	15.78	8.27	160.21	83.91
80	2.50	0.18	6.53	3.42	166.74	87.33
120	3.00	0.13	3.96	2.07	170.70	89.40
170	3.50	0.09	4.50	2.36	175.20	91.76
200	3.75	0.07	2.30	1.20	177.50	92.96
230	4.00	0.06	0.86	0.45	178.36	93.41

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.01	1.48	0.82	0.12	-0.57	-2.46

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.55	0.68	1.44	-0.75	4.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z169 #4

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser sand, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
200.05	200.05	1.36	0.24	#200 - 1.10 #230 - 0.94	0.50	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	6.48	3.24	6.48	3.24
11/16"	-3.50	11.31	3.96	1.98	10.44	5.22
5/16"	-3.00	8.00	6.01	3.00	16.45	8.22
3.5	-2.50	5.66	11.25	5.62	27.70	13.84
4	-2.25	4.76	2.90	1.45	30.60	15.29
5	-2.00	4.00	6.87	3.43	37.47	18.72
7	-1.50	2.83	14.34	7.17	51.81	25.89
10	-1.00	2.00	13.15	6.57	64.96	32.46
14	-0.50	1.41	13.47	6.73	78.43	39.19
18	0.00	1.00	15.02	7.51	93.45	46.70
25	0.50	0.71	18.44	9.22	111.89	55.92
35	1.00	0.50	21.67	10.83	133.56	66.75
45	1.50	0.35	20.54	10.27	154.10	77.02
60	2.00	0.25	17.23	8.61	171.33	85.63
80	2.50	0.18	17.53	8.76	188.86	94.39
120	3.00	0.13	7.18	3.59	196.04	97.98
170	3.50	0.09	1.44	0.72	197.48	98.70
200	3.75	0.07	0.41	0.20	197.89	98.90
230	4.00	0.06	0.32	0.16	198.21	99.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.58	1.91	1.40	0.18	-1.56	-2.20	-3.56

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.13	1.09	1.88	-0.36	2.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z170 #1

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
138.77	122.85	0.17	0.00	#200 - 12.43 #230 - 11.59	2.00	8.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.72	0.52	0.72	0.52
3.5	-2.50	5.66	0.72	0.52	1.44	1.04
4	-2.25	4.76	0.27	0.19	1.71	1.23
5	-2.00	4.00	0.31	0.22	2.02	1.45
7	-1.50	2.83	0.86	0.62	2.88	2.07
10	-1.00	2.00	0.65	0.47	3.53	2.54
14	-0.50	1.41	1.34	0.97	4.87	3.51
18	0.00	1.00	1.43	1.03	6.30	4.54
25	0.50	0.71	2.52	1.82	8.82	6.36
35	1.00	0.50	4.09	2.95	12.91	9.31
45	1.50	0.35	5.44	3.92	18.35	13.23
60	2.00	0.25	9.13	6.58	27.48	19.81
80	2.50	0.18	40.84	29.43	68.32	49.24
120	3.00	0.13	35.78	25.78	104.10	75.02
170	3.50	0.09	13.64	9.83	117.74	84.85
200	3.75	0.07	3.78	2.72	121.52	87.57
230	4.00	0.06	1.16	0.84	122.68	88.41

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.46	3.00	2.51	2.09	1.71	0.13

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.2	0.22	1.12	-2.26	9.63

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z170 #2
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		Rock with gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
236.81	226.72	0.17	0.04	#200 - 4.51 #230 - 4.39	2.10	8.60	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	3.88	1.64	3.88	1.64
5/8"	-4.00	16.00	24.11	10.18	27.99	11.82
11/16"	-3.50	11.31	6.11	2.58	34.10	14.40
5/16"	-3.00	8.00	15.82	6.68	49.92	21.08
3.5	-2.50	5.66	19.66	8.30	69.58	29.38
4	-2.25	4.76	12.94	5.46	82.52	34.84
5	-2.00	4.00	14.26	6.02	96.78	40.86
7	-1.50	2.83	30.91	13.05	127.69	53.91
10	-1.00	2.00	29.22	12.34	156.91	66.25
14	-0.50	1.41	20.29	8.57	177.20	74.82
18	0.00	1.00	10.85	4.58	188.05	79.40
25	0.50	0.71	5.63	2.38	193.68	81.78
35	1.00	0.50	5.14	2.17	198.82	83.95
45	1.50	0.35	4.76	2.01	203.58	85.96
60	2.00	0.25	4.19	1.77	207.77	87.73
80	2.50	0.18	5.67	2.39	213.44	90.12
120	3.00	0.13	9.10	3.84	222.54	93.96
170	3.50	0.09	2.94	1.24	225.48	95.20
200	3.75	0.07	0.68	0.29	226.16	95.49
230	4.00	0.06	0.29	0.12	226.45	95.61

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.42	1.01	-0.48	-1.65	-2.76	-3.38	-4.17

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.52	2.87	1.86	0.84	3.27

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z170 #3

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Gray sand, organic silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
83.54	13.51	0.20	0.00	#200 - 86.34 #230 - 84.07	9.30	6.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.02	0.02	0.02
10	-1.00	2.00	0.04	0.05	0.06	0.07
14	-0.50	1.41	0.28	0.34	0.34	0.41
18	0.00	1.00	0.19	0.23	0.53	0.64
25	0.50	0.71	0.20	0.24	0.73	0.88
35	1.00	0.50	0.12	0.14	0.85	1.02
45	1.50	0.35	0.17	0.20	1.02	1.22
60	2.00	0.25	0.25	0.30	1.27	1.52
80	2.50	0.18	0.37	0.44	1.64	1.96
120	3.00	0.13	1.31	1.57	2.95	3.53
170	3.50	0.09	5.02	6.01	7.97	9.54
200	3.75	0.07	3.44	4.12	11.41	13.66
230	4.00	0.06	1.90	2.27	13.31	15.93

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.12

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	3.08	0.12	1.01	-2.57	9.49

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z170 #4

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarse quartz sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.21	164.21	0.14	0.18	#200 - 0.33 #230 - 0.28	0.50	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.77	0.47	0.77	0.47
3.5	-2.50	5.66	1.51	0.92	2.28	1.39
4	-2.25	4.76	1.19	0.72	3.47	2.11
5	-2.00	4.00	1.58	0.96	5.05	3.07
7	-1.50	2.83	3.40	2.07	8.45	5.14
10	-1.00	2.00	2.50	1.52	10.95	6.66
14	-0.50	1.41	3.12	1.90	14.07	8.56
18	0.00	1.00	4.41	2.69	18.48	11.25
25	0.50	0.71	8.16	4.97	26.64	16.22
35	1.00	0.50	17.97	10.94	44.61	27.16
45	1.50	0.35	35.36	21.53	79.97	48.69
60	2.00	0.25	45.05	27.43	125.02	76.12
80	2.50	0.18	30.18	18.38	155.20	94.50
120	3.00	0.13	7.43	4.52	162.63	99.02
170	3.50	0.09	0.87	0.53	163.50	99.55
200	3.75	0.07	0.19	0.12	163.69	99.67
230	4.00	0.06	0.09	0.05	163.78	99.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.56	2.21	1.98	1.52	0.90	0.48	-1.53

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.25	0.42	1.15	-1.57	5.75

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z171 #1

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand, shell, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
181.80	172.94	0.08	0.24	#200 - 5.33 #230 - 5.14	1.90	19.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	9.38	5.16	9.38	5.16
5/8"	-4.00	16.00	0.00	0.00	9.38	5.16
11/16"	-3.50	11.31	8.85	4.87	18.23	10.03
5/16"	-3.00	8.00	1.14	0.63	19.37	10.66
3.5	-2.50	5.66	2.22	1.22	21.59	11.88
4	-2.25	4.76	0.27	0.15	21.86	12.03
5	-2.00	4.00	1.43	0.79	23.29	12.82
7	-1.50	2.83	3.19	1.75	26.48	14.57
10	-1.00	2.00	3.45	1.90	29.93	16.47
14	-0.50	1.41	5.09	2.80	35.02	19.27
18	0.00	1.00	5.72	3.15	40.74	22.42
25	0.50	0.71	7.44	4.09	48.18	26.51
35	1.00	0.50	11.65	6.41	59.83	32.92
45	1.50	0.35	14.52	7.99	74.35	40.91
60	2.00	0.25	17.30	9.52	91.65	50.43
80	2.50	0.18	41.08	22.60	132.73	73.03
120	3.00	0.13	29.93	16.46	162.66	89.49
170	3.50	0.09	8.09	4.45	170.75	93.94
200	3.75	0.07	1.32	0.73	172.07	94.67
230	4.00	0.06	0.35	0.19	172.42	94.86

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.83	2.56	1.98	0.32	-1.12	

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.95	0.52	1.81	-0.88	3.42

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z171 #2
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
186.01	186.01	0.56	0.70	#200 - 1.14 #230 - 0.99	0.80	3.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	18.24	9.81	18.24	9.81
11/16"	-3.50	11.31	2.44	1.31	20.68	11.12
5/16"	-3.00	8.00	2.70	1.45	23.38	12.57
3.5	-2.50	5.66	9.67	5.20	33.05	17.77
4	-2.25	4.76	3.96	2.13	37.01	19.90
5	-2.00	4.00	8.57	4.61	45.58	24.51
7	-1.50	2.83	16.23	8.73	61.81	33.24
10	-1.00	2.00	14.39	7.74	76.20	40.98
14	-0.50	1.41	11.66	6.27	87.86	47.25
18	0.00	1.00	10.57	5.68	98.43	52.93
25	0.50	0.71	10.27	5.52	108.70	58.45
35	1.00	0.50	16.16	8.69	124.86	67.14
45	1.50	0.35	19.97	10.74	144.83	77.88
60	2.00	0.25	16.17	8.69	161.00	86.57
80	2.50	0.18	12.12	6.52	173.12	93.09
120	3.00	0.13	8.02	4.31	181.14	97.40
170	3.50	0.09	2.27	1.22	183.41	98.62
200	3.75	0.07	0.45	0.24	183.86	98.86
230	4.00	0.06	0.28	0.15	184.14	99.01

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.72	1.85	1.37	-0.26	-1.97	-2.67	-4.12

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.42	1.34	2.08	-0.23	2.01

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: Z171 #3
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Tan sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
161.50	143.12	0.23	0.00	#200 - 12.12 #230 - 11.53	1.10	1.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.68	0.42	0.68	0.42
10	-1.00	2.00	0.41	0.25	1.09	0.67
14	-0.50	1.41	0.54	0.33	1.63	1.00
18	0.00	1.00	0.64	0.40	2.27	1.40
25	0.50	0.71	1.12	0.69	3.39	2.09
35	1.00	0.50	2.04	1.26	5.43	3.35
45	1.50	0.35	3.62	2.24	9.05	5.59
60	2.00	0.25	9.30	5.76	18.35	11.35
80	2.50	0.18	67.92	42.06	86.27	53.41
120	3.00	0.13	39.94	24.73	126.21	78.14
170	3.50	0.09	12.83	7.94	139.04	86.08
200	3.75	0.07	2.90	1.80	141.94	87.88
230	4.00	0.06	0.95	0.59	142.89	88.47

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.37	2.94	2.46	2.16	2.06	1.37

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.37	0.19	0.69	-2.15	12.58

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z171 #4

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Fine clean sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
184.67	184.67	0.44	0.00	#200 - 0.31 #230 - 0.21	0.40	0.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.11	0.06	0.11	0.06
7	-1.50	2.83	0.38	0.21	0.49	0.27
10	-1.00	2.00	0.37	0.20	0.86	0.47
14	-0.50	1.41	0.27	0.15	1.13	0.62
18	0.00	1.00	0.33	0.18	1.46	0.80
25	0.50	0.71	0.53	0.29	1.99	1.09
35	1.00	0.50	1.18	0.64	3.17	1.73
45	1.50	0.35	10.45	5.66	13.62	7.39
60	2.00	0.25	102.06	55.27	115.68	62.66
80	2.50	0.18	49.39	26.75	165.07	89.41
120	3.00	0.13	16.84	9.12	181.91	98.53
170	3.50	0.09	1.82	0.99	183.73	99.52
200	3.75	0.07	0.32	0.17	184.05	99.69
230	4.00	0.06	0.18	0.10	184.23	99.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.81	2.40	2.23	1.89	1.66	1.58	1.29

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.93	0.26	0.5	-1.61	15.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z172 #1
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Gray sand, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
170.92	159.85	0.08	0.10	#200 - 6.80 #230 - 6.64	1.58	6.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	21.42	12.53	21.42	12.53
11/16"	-3.50	11.31	16.24	9.50	37.66	22.03
5/16"	-3.00	8.00	10.98	6.42	48.64	28.45
3.5	-2.50	5.66	6.14	3.59	54.78	32.04
4	-2.25	4.76	2.68	1.57	57.46	33.61
5	-2.00	4.00	4.69	2.74	62.15	36.35
7	-1.50	2.83	8.82	5.16	70.97	41.51
10	-1.00	2.00	6.67	3.90	77.64	45.41
14	-0.50	1.41	5.69	3.33	83.33	48.74
18	0.00	1.00	5.37	3.14	88.70	51.88
25	0.50	0.71	5.93	3.47	94.63	55.35
35	1.00	0.50	8.15	4.77	102.78	60.12
45	1.50	0.35	8.29	4.85	111.07	64.97
60	2.00	0.25	7.06	4.13	118.13	69.10
80	2.50	0.18	17.31	10.13	135.44	79.23
120	3.00	0.13	18.51	10.83	153.95	90.06
170	3.50	0.09	4.60	2.69	158.55	92.75
200	3.75	0.07	0.77	0.45	159.32	93.20
230	4.00	0.06	0.28	0.16	159.60	93.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.72	2.29	-0.30	-3.27	-3.82	-4.15

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.68	1.60	2.61	0.04	1.46

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z172 #2

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
194.45	177.09	0.19	0.07	#200 - 9.64 #230 - 9.08	1.18	1.48	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.30	0.15	0.30	0.15
5	-2.00	4.00	0.14	0.07	0.44	0.22
7	-1.50	2.83	0.46	0.24	0.90	0.46
10	-1.00	2.00	0.45	0.23	1.35	0.69
14	-0.50	1.41	0.59	0.30	1.94	0.99
18	0.00	1.00	1.24	0.64	3.18	1.63
25	0.50	0.71	2.66	1.37	5.84	3.00
35	1.00	0.50	4.20	2.16	10.04	5.16
45	1.50	0.35	5.56	2.86	15.60	8.02
60	2.00	0.25	11.58	5.96	27.18	13.98
80	2.50	0.18	84.27	43.34	111.45	57.32
120	3.00	0.13	50.57	26.01	162.02	83.33
170	3.50	0.09	11.84	6.09	173.86	89.42
200	3.75	0.07	1.82	0.94	175.68	90.36
230	4.00	0.06	1.09	0.56	176.77	90.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.06	2.84	2.42	2.13	2.02	0.96

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.3	0.20	0.73	-2.24	11.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z172 #3

Analysis Date: 04-01-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
153.16	139.20	0.13	0.05	#200 - 9.74 #230 - 9.27	0.73	1.19	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.21	0.14	0.21	0.14
7	-1.50	2.83	0.22	0.14	0.43	0.28
10	-1.00	2.00	0.22	0.14	0.65	0.42
14	-0.50	1.41	0.63	0.41	1.28	0.83
18	0.00	1.00	1.14	0.74	2.42	1.57
25	0.50	0.71	3.41	2.23	5.83	3.80
35	1.00	0.50	6.00	3.92	11.83	7.72
45	1.50	0.35	7.43	4.85	19.26	12.57
60	2.00	0.25	9.50	6.20	28.76	18.77
80	2.50	0.18	59.03	38.54	87.79	57.31
120	3.00	0.13	38.11	24.88	125.90	82.19
170	3.50	0.09	10.48	6.84	136.38	89.03
200	3.75	0.07	1.89	1.23	138.27	90.26
230	4.00	0.06	0.72	0.47	138.99	90.73

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.13	2.86	2.41	2.08	1.78	0.65

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.24	0.21	0.78	-1.57	7.11

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z172 #4
Analysis Date: 04-01-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
201.75	184.18	0.17	0.00	#200 - 9.48 #230 - 8.79	1.23	2.23	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.18	0.09	0.18	0.09
10	-1.00	2.00	0.23	0.11	0.41	0.20
14	-0.50	1.41	0.66	0.33	1.07	0.53
18	0.00	1.00	0.72	0.36	1.79	0.89
25	0.50	0.71	1.06	0.53	2.85	1.42
35	1.00	0.50	1.79	0.89	4.64	2.31
45	1.50	0.35	3.28	1.63	7.92	3.94
60	2.00	0.25	19.66	9.74	27.58	13.68
80	2.50	0.18	82.26	40.77	109.84	54.45
120	3.00	0.13	55.65	27.58	165.49	82.03
170	3.50	0.09	14.52	7.20	180.01	89.23
200	3.75	0.07	2.60	1.29	182.61	90.52
230	4.00	0.06	1.40	0.69	184.01	91.21

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.14	2.87	2.45	2.14	2.03	1.55

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.39	0.19	0.6	-1.61	10.78

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z173 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
193.95	169.43	0.62	0.00	#200 - 14.65 #230 - 12.96	1.83	13.74	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.88	0.45	0.88	0.45
3.5	-2.50	5.66	0.15	0.08	1.03	0.53
4	-2.25	4.76	0.17	0.09	1.20	0.62
5	-2.00	4.00	0.17	0.09	1.37	0.71
7	-1.50	2.83	0.74	0.38	2.11	1.09
10	-1.00	2.00	0.63	0.32	2.74	1.41
14	-0.50	1.41	1.32	0.68	4.06	2.09
18	0.00	1.00	1.81	0.93	5.87	3.02
25	0.50	0.71	3.10	1.60	8.97	4.62
35	1.00	0.50	3.54	1.83	12.51	6.45
45	1.50	0.35	2.83	1.46	15.34	7.91
60	2.00	0.25	3.22	1.66	18.56	9.57
80	2.50	0.18	18.44	9.51	37.00	19.08
120	3.00	0.13	80.38	41.44	117.38	60.52
170	3.50	0.09	39.96	20.60	157.34	81.12
200	3.75	0.07	8.20	4.23	165.54	85.35
230	4.00	0.06	3.27	1.69	168.81	87.04

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.67	3.35	2.87	2.57	2.34	0.60

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.61	0.16	0.99	-2.86	13.42

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z173 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand, rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
226.37	209.66	0.01	0.29	#200 - 7.83 #230 - 7.69	0.94	3.83	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.43	0.63	1.43	0.63
3.5	-2.50	5.66	4.94	2.18	6.37	2.81
4	-2.25	4.76	3.15	1.39	9.52	4.20
5	-2.00	4.00	9.55	4.22	19.07	8.42
7	-1.50	2.83	12.28	5.42	31.35	13.84
10	-1.00	2.00	13.08	5.78	44.43	19.62
14	-0.50	1.41	12.23	5.40	56.66	25.02
18	0.00	1.00	13.86	6.12	70.52	31.14
25	0.50	0.71	19.07	8.42	89.59	39.56
35	1.00	0.50	29.24	12.92	118.83	52.48
45	1.50	0.35	34.70	15.33	153.53	67.81
60	2.00	0.25	33.90	14.98	187.43	82.79
80	2.50	0.18	12.37	5.46	199.80	88.25
120	3.00	0.13	5.56	2.46	205.36	90.71
170	3.50	0.09	2.60	1.15	207.96	91.86
200	3.75	0.07	0.71	0.31	208.67	92.17
230	4.00	0.06	0.32	0.14	208.99	92.31

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.11	1.74	0.90	-0.50	-1.31	-2.20

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.42	0.75	1.49	-0.47	2.4

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z173 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Tan sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
210.20	198.26	0.04	0.35	#200 - 6.09 #230 - 6.04	1.48	0.75	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.53	0.25	0.53	0.25
5	-2.00	4.00	0.15	0.07	0.68	0.32
7	-1.50	2.83	0.52	0.25	1.20	0.57
10	-1.00	2.00	1.76	0.84	2.96	1.41
14	-0.50	1.41	3.99	1.90	6.95	3.31
18	0.00	1.00	6.24	2.97	13.19	6.28
25	0.50	0.71	9.86	4.69	23.05	10.97
35	1.00	0.50	21.16	10.07	44.21	21.04
45	1.50	0.35	38.22	18.18	82.43	39.22
60	2.00	0.25	61.60	29.31	144.03	68.53
80	2.50	0.18	44.14	21.00	188.17	89.53
120	3.00	0.13	7.73	3.68	195.90	93.21
170	3.50	0.09	1.22	0.58	197.12	93.79
200	3.75	0.07	0.25	0.12	197.37	93.91
230	4.00	0.06	0.11	0.05	197.48	93.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.37	2.15	1.68	1.11	0.75	-0.22

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.47	0.36	0.85	-1.16	5.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z173 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
87.27	7.07	0.07	0.00	#200 - 94.08 #230 - 91.97	4.31	6.83	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.03	0.03	0.03	0.03
18	0.00	1.00	0.09	0.10	0.12	0.13
25	0.50	0.71	0.07	0.08	0.19	0.21
35	1.00	0.50	0.04	0.05	0.23	0.26
45	1.50	0.35	0.06	0.07	0.29	0.33
60	2.00	0.25	0.14	0.16	0.43	0.49
80	2.50	0.18	0.46	0.53	0.89	1.02
120	3.00	0.13	1.22	1.40	2.11	2.42
170	3.50	0.09	1.63	1.87	3.74	4.29
200	3.75	0.07	1.42	1.63	5.16	5.92
230	4.00	0.06	1.84	2.11	7.00	8.03

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.61

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	3.18	0.11	0.82	-2.2	9.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z174 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, oyster shells

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
193.32	190.80	0.11	0.00	#200 - 1.42 #230 - 1.34	1.09	11.09	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	17.77	9.19	17.77	9.19
5/16"	-3.00	8.00	2.04	1.06	19.81	10.25
3.5	-2.50	5.66	1.95	1.01	21.76	11.26
4	-2.25	4.76	1.07	0.55	22.83	11.81
5	-2.00	4.00	0.73	0.38	23.56	12.19
7	-1.50	2.83	1.91	0.99	25.47	13.18
10	-1.00	2.00	1.76	0.91	27.23	14.09
14	-0.50	1.41	1.76	0.91	28.99	15.00
18	0.00	1.00	1.50	0.78	30.49	15.78
25	0.50	0.71	1.60	0.83	32.09	16.61
35	1.00	0.50	2.49	1.29	34.58	17.90
45	1.50	0.35	4.75	2.46	39.33	20.36
60	2.00	0.25	12.20	6.31	51.53	26.67
80	2.50	0.18	76.01	39.32	127.54	65.99
120	3.00	0.13	54.73	28.31	182.27	94.30
170	3.50	0.09	7.63	3.95	189.90	98.25
200	3.75	0.07	0.64	0.33	190.54	98.58
230	4.00	0.06	0.15	0.08	190.69	98.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.09	2.82	2.66	2.30	1.87	0.13	-3.84

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.51	0.35	2.05	-1.83	4.82

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z174 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Coarser quartz sand, stiff clay

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
194.71	158.28	0.45	0.18	#200 - 19.64 #230 - 19.13	1.46	1.55	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.11	0.06	0.11	0.06
7	-1.50	2.83	0.20	0.10	0.31	0.16
10	-1.00	2.00	0.39	0.20	0.70	0.36
14	-0.50	1.41	0.79	0.41	1.49	0.77
18	0.00	1.00	1.53	0.79	3.02	1.56
25	0.50	0.71	5.50	2.82	8.52	4.38
35	1.00	0.50	29.68	15.24	38.20	19.62
45	1.50	0.35	52.83	27.13	91.03	46.75
60	2.00	0.25	32.34	16.61	123.37	63.36
80	2.50	0.18	13.77	7.07	137.14	70.43
120	3.00	0.13	12.73	6.54	149.87	76.97
170	3.50	0.09	5.17	2.66	155.04	79.63
200	3.75	0.07	1.43	0.73	156.47	80.36
230	4.00	0.06	1.00	0.51	157.47	80.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.85	1.60	1.10	0.88	0.52

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.5	0.35	0.8	0.3	4.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z174 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Coarser quartz sand, lots of stiff clay

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
190.73	165.34	0.37	0.14	#200 - 13.90 #230 - 13.65	1.09	1.19	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.01	0.02	0.01
10	-1.00	2.00	0.01	0.01	0.03	0.02
14	-0.50	1.41	0.18	0.09	0.21	0.11
18	0.00	1.00	0.44	0.23	0.65	0.34
25	0.50	0.71	0.75	0.39	1.40	0.73
35	1.00	0.50	2.89	1.52	4.29	2.25
45	1.50	0.35	20.22	10.60	24.51	12.85
60	2.00	0.25	57.97	30.39	82.48	43.24
80	2.50	0.18	58.65	30.75	141.13	73.99
120	3.00	0.13	17.56	9.21	158.69	83.20
170	3.50	0.09	4.46	2.34	163.15	85.54
200	3.75	0.07	1.07	0.56	164.22	86.10
230	4.00	0.06	0.48	0.25	164.70	86.35

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.17	2.55	2.11	1.70	1.55	1.13

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2	0.25	0.56	-0.15	4.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z174 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Coarser quartz sand, stiff clay

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
190.47	162.36	0.45	0.39	#200 - 15.71 #230 - 15.39	0.95	1.11	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.64	0.34	0.64	0.34
10	-1.00	2.00	0.76	0.40	1.40	0.74
14	-0.50	1.41	1.55	0.81	2.95	1.55
18	0.00	1.00	3.57	1.87	6.52	3.42
25	0.50	0.71	8.11	4.26	14.63	7.68
35	1.00	0.50	19.98	10.49	34.61	18.17
45	1.50	0.35	47.68	25.03	82.29	43.20
60	2.00	0.25	48.15	25.28	130.44	68.48
80	2.50	0.18	15.04	7.90	145.48	76.38
120	3.00	0.13	10.90	5.72	156.38	82.10
170	3.50	0.09	3.41	1.79	159.79	83.89
200	3.75	0.07	0.77	0.40	160.56	84.29
230	4.00	0.06	0.61	0.32	161.17	84.61

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.57	2.41	1.63	1.14	0.90	0.19

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.47	0.36	0.8	-0.33	4.61

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z175 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM W/ GRAVEL		Gray sand, shells

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
177.64	149.96	0.27	0.27	#200 - 16.33 #230 - 16.00	1.46	21.29	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.79	0.44	0.79	0.44
5/16"	-3.00	8.00	11.47	6.46	12.26	6.90
3.5	-2.50	5.66	10.18	5.73	22.44	12.63
4	-2.25	4.76	6.43	3.62	28.87	16.25
5	-2.00	4.00	5.07	2.85	33.94	19.10
7	-1.50	2.83	12.25	6.90	46.19	26.00
10	-1.00	2.00	9.63	5.42	55.82	31.42
14	-0.50	1.41	10.05	5.66	65.87	37.08
18	0.00	1.00	7.27	4.09	73.14	41.17
25	0.50	0.71	7.07	3.98	80.21	45.15
35	1.00	0.50	8.48	4.77	88.69	49.92
45	1.50	0.35	10.21	5.75	98.90	55.67
60	2.00	0.25	12.01	6.76	110.91	62.43
80	2.50	0.18	16.53	9.31	127.44	71.74
120	3.00	0.13	14.63	8.24	142.07	79.98
170	3.50	0.09	5.29	2.98	147.36	82.96
200	3.75	0.07	1.26	0.71	148.62	83.67
230	4.00	0.06	0.59	0.33	149.21	84.00

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	4.00	2.70	1.01	-1.57	-2.27	-3.15

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.04	0.97	2.1	-0.07	1.65

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z175 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt, little sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
35.45	0.81	0.02	0.00	#200 - 98.02 #230 - 97.77	10.17	7.76	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.03	0.08	0.03	0.08
14	-0.50	1.41	0.04	0.11	0.07	0.19
18	0.00	1.00	0.09	0.25	0.16	0.44
25	0.50	0.71	0.07	0.20	0.23	0.64
35	1.00	0.50	0.07	0.20	0.30	0.84
45	1.50	0.35	0.05	0.14	0.35	0.98
60	2.00	0.25	0.08	0.23	0.43	1.21
80	2.50	0.18	0.07	0.20	0.50	1.41
120	3.00	0.13	0.07	0.20	0.57	1.61
170	3.50	0.09	0.08	0.23	0.65	1.84
200	3.75	0.07	0.05	0.14	0.70	1.98
230	4.00	0.06	0.09	0.25	0.79	2.23

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.67	0.31	1.58	-0.15	1.76

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z175 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Peaty silt / soil-like, wood

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
75.33	64.03	0.46	0.07	#200 - 17.01 #230 - 15.67	21.44	3.88	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.26	0.35	0.26	0.35
3.5	-2.50	5.66	0.43	0.57	0.69	0.92
4	-2.25	4.76	1.13	1.50	1.82	2.42
5	-2.00	4.00	0.56	0.74	2.38	3.16
7	-1.50	2.83	1.61	2.14	3.99	5.30
10	-1.00	2.00	0.82	1.09	4.81	6.39
14	-0.50	1.41	0.89	1.18	5.70	7.57
18	0.00	1.00	1.02	1.35	6.72	8.92
25	0.50	0.71	1.52	2.02	8.24	10.94
35	1.00	0.50	3.25	4.31	11.49	15.25
45	1.50	0.35	5.74	7.62	17.23	22.87
60	2.00	0.25	8.85	11.75	26.08	34.62
80	2.50	0.18	14.50	19.25	40.58	53.87
120	3.00	0.13	12.91	17.14	53.49	71.01
170	3.50	0.09	6.83	9.07	60.32	80.08
200	3.75	0.07	2.19	2.91	62.51	82.99
230	4.00	0.06	1.01	1.34	63.52	84.33

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.94	3.22	2.40	1.59	1.05	-1.57

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.84	0.28	1.44	-1.48	4.99

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z175 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
141.50	127.99	0.18	0.30	#200 - 11.00 #230 - 9.99	1.07	0.98	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.26	0.18	0.26	0.18
5	-2.00	4.00	0.00	0.00	0.26	0.18
7	-1.50	2.83	0.20	0.14	0.46	0.32
10	-1.00	2.00	0.29	0.20	0.75	0.52
14	-0.50	1.41	0.53	0.37	1.28	0.89
18	0.00	1.00	1.30	0.92	2.58	1.81
25	0.50	0.71	3.06	2.16	5.64	3.97
35	1.00	0.50	7.44	5.26	13.08	9.23
45	1.50	0.35	13.97	9.87	27.05	19.10
60	2.00	0.25	20.77	14.68	47.82	33.78
80	2.50	0.18	36.18	25.57	84.00	59.35
120	3.00	0.13	29.37	20.76	113.37	80.11
170	3.50	0.09	10.34	7.31	123.71	87.42
200	3.75	0.07	2.24	1.58	125.95	89.00
230	4.00	0.06	1.43	1.01	127.38	90.01

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.27	2.88	2.32	1.70	1.34	0.60

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.1	0.23	0.87	-0.98	5.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z176 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
162.36	159.27	0.06	0.33	#200 - 2.44 #230 - 2.28	1.32	11.28	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	2.15	1.32	2.15	1.32
5/8"	-4.00	16.00	0.00	0.00	2.15	1.32
11/16"	-3.50	11.31	1.41	0.87	3.56	2.19
5/16"	-3.00	8.00	3.19	1.96	6.75	4.15
3.5	-2.50	5.66	5.83	3.59	12.58	7.74
4	-2.25	4.76	3.93	2.42	16.51	10.16
5	-2.00	4.00	3.77	2.32	20.28	12.48
7	-1.50	2.83	6.07	3.74	26.35	16.22
10	-1.00	2.00	6.85	4.22	33.20	20.44
14	-0.50	1.41	8.68	5.35	41.88	25.79
18	0.00	1.00	8.09	4.98	49.97	30.77
25	0.50	0.71	7.59	4.67	57.56	35.44
35	1.00	0.50	9.50	5.85	67.06	41.29
45	1.50	0.35	10.55	6.50	77.61	47.79
60	2.00	0.25	12.00	7.39	89.61	55.18
80	2.50	0.18	30.36	18.70	119.97	73.88
120	3.00	0.13	30.49	18.78	150.46	92.66
170	3.50	0.09	7.11	4.38	157.57	97.04
200	3.75	0.07	0.85	0.52	158.42	97.56
230	4.00	0.06	0.26	0.16	158.68	97.72

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.27	2.77	2.53	1.65	-0.57	-1.53	-2.88

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.86	0.55	1.9	-0.62	2.23

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z176 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Organic silt, rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
63.34	13.00	0.04	-0.38	#200 - 79.80 #230 - 79.17	7.84	7.41	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.21	0.33	0.21	0.33
7	-1.50	2.83	0.80	1.26	1.01	1.59
10	-1.00	2.00	0.86	1.36	1.87	2.95
14	-0.50	1.41	1.63	2.57	3.50	5.52
18	0.00	1.00	1.75	2.76	5.25	8.28
25	0.50	0.71	0.91	1.44	6.16	9.72
35	1.00	0.50	0.61	0.96	6.77	10.68
45	1.50	0.35	0.52	0.82	7.29	11.50
60	2.00	0.25	0.55	0.87	7.84	12.37
80	2.50	0.18	0.94	1.48	8.78	13.85
120	3.00	0.13	2.20	3.47	10.98	17.32
170	3.50	0.09	1.27	2.01	12.25	19.33
200	3.75	0.07	0.55	0.87	12.80	20.20
230	4.00	0.06	0.40	0.63	13.20	20.83

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					2.81	-0.60

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.03	0.49	1.8	-0.01	1.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z176 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
135.38	102.02	0.20	0.12	#200 - 25.62 #230 - 24.88	6.93	4.83	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.70	1.26	1.70	1.26
3.5	-2.50	5.66	1.99	1.47	3.69	2.73
4	-2.25	4.76	0.74	0.55	4.43	3.28
5	-2.00	4.00	1.54	1.14	5.97	4.42
7	-1.50	2.83	4.74	3.50	10.71	7.92
10	-1.00	2.00	3.97	2.93	14.68	10.85
14	-0.50	1.41	6.67	4.93	21.35	15.78
18	0.00	1.00	6.40	4.73	27.75	20.51
25	0.50	0.71	6.33	4.68	34.08	25.19
35	1.00	0.50	7.96	5.88	42.04	31.07
45	1.50	0.35	9.13	6.74	51.17	37.81
60	2.00	0.25	10.58	7.82	61.75	45.63
80	2.50	0.18	15.24	11.26	76.99	56.89
120	3.00	0.13	15.36	11.35	92.35	68.24
170	3.50	0.09	6.17	4.56	98.52	72.80
200	3.75	0.07	2.14	1.58	100.66	74.38
230	4.00	0.06	1.00	0.74	101.66	75.12

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.96	2.19	0.48	-0.48	-1.92

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.08	0.47	1.73	-0.63	2.48

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z176 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
47.08	1.21	0.01	0.00	#200 - 98.18 #230 - 97.46	15.27	6.12	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.02	0.04	0.02	0.04
18	0.00	1.00	0.07	0.15	0.09	0.19
25	0.50	0.71	0.09	0.19	0.18	0.38
35	1.00	0.50	0.03	0.06	0.21	0.44
45	1.50	0.35	0.05	0.11	0.26	0.55
60	2.00	0.25	0.09	0.19	0.35	0.74
80	2.50	0.18	0.11	0.23	0.46	0.97
120	3.00	0.13	0.15	0.32	0.61	1.29
170	3.50	0.09	0.10	0.21	0.71	1.50
200	3.75	0.07	0.15	0.32	0.86	1.82
230	4.00	0.06	0.34	0.72	1.20	2.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.57	0.17	1.39	-0.86	2.49

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z177 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
182.95	167.17	0.28	0.05	#200 - 9.03 #230 - 8.81	2.22	38.74	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	7.84	4.29	7.84	4.29
5/16"	-3.00	8.00	8.17	4.47	16.01	8.76
3.5	-2.50	5.66	9.22	5.04	25.23	13.80
4	-2.25	4.76	5.42	2.96	30.65	16.76
5	-2.00	4.00	5.44	2.97	36.09	19.73
7	-1.50	2.83	14.21	7.77	50.30	27.50
10	-1.00	2.00	14.49	7.92	64.79	35.42
14	-0.50	1.41	19.79	10.82	84.58	46.24
18	0.00	1.00	17.76	9.71	102.34	55.95
25	0.50	0.71	11.71	6.40	114.05	62.35
35	1.00	0.50	8.59	4.70	122.64	67.05
45	1.50	0.35	7.22	3.95	129.86	71.00
60	2.00	0.25	7.14	3.90	137.00	74.90
80	2.50	0.18	11.25	6.15	148.25	81.05
120	3.00	0.13	12.34	6.75	160.59	87.80
170	3.50	0.09	4.71	2.57	165.30	90.37
200	3.75	0.07	1.09	0.60	166.39	90.97
230	4.00	0.06	0.41	0.22	166.80	91.19

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.72	2.01	-0.31	-1.66	-2.31	-3.42

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.34	1.27	1.96	0.17	2.11

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z177 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt, rock, gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
60.66	10.44	0.06	0.00	#200 - 83.56 #230 - 82.87	6.42	4.59	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.09	0.15	0.09	0.15
7	-1.50	2.83	0.44	0.73	0.53	0.88
10	-1.00	2.00	0.35	0.58	0.88	1.46
14	-0.50	1.41	0.48	0.79	1.36	2.25
18	0.00	1.00	0.37	0.61	1.73	2.86
25	0.50	0.71	0.24	0.40	1.97	3.26
35	1.00	0.50	0.18	0.30	2.15	3.56
45	1.50	0.35	0.24	0.40	2.39	3.96
60	2.00	0.25	0.48	0.79	2.87	4.75
80	2.50	0.18	2.45	4.04	5.32	8.79
120	3.00	0.13	2.62	4.32	7.94	13.11
170	3.50	0.09	1.22	2.01	9.16	15.12
200	3.75	0.07	0.80	1.32	9.96	16.44
230	4.00	0.06	0.42	0.69	10.38	17.13

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					3.67	2.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.99	0.25	1.56	-1.2	3.35

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z177 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, rock, trace organic material

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
235.92	232.77	0.05	0.33	#200 - 1.83 #230 - 1.69	0.24	0.31	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	43.70	18.52	43.70	18.52
5/16"	-3.00	8.00	41.34	17.52	85.04	36.04
3.5	-2.50	5.66	16.10	6.82	101.14	42.86
4	-2.25	4.76	9.15	3.88	110.29	46.74
5	-2.00	4.00	8.89	3.77	119.18	50.51
7	-1.50	2.83	16.83	7.13	136.01	57.64
10	-1.00	2.00	12.30	5.21	148.31	62.85
14	-0.50	1.41	9.95	4.22	158.26	67.07
18	0.00	1.00	7.38	3.13	165.64	70.20
25	0.50	0.71	8.59	3.64	174.23	73.84
35	1.00	0.50	13.76	5.83	187.99	79.67
45	1.50	0.35	19.44	8.24	207.43	87.91
60	2.00	0.25	13.69	5.80	221.12	93.71
80	2.50	0.18	5.73	2.43	226.85	96.14
120	3.00	0.13	2.87	1.22	229.72	97.36
170	3.50	0.09	1.28	0.54	231.00	97.90
200	3.75	0.07	0.63	0.27	231.63	98.17
230	4.00	0.06	0.32	0.14	231.95	98.31

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.27	1.26	0.60	-2.03	-3.32	-3.60	-4.05

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-1.5	2.83	2.05	0.56	1.96

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z177 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
64.15	10.89	0.01	0.00	#200 - 83.71 #230 - 83.02	23.35	5.16	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.27	0.42	0.27	0.42
5	-2.00	4.00	0.00	0.00	0.27	0.42
7	-1.50	2.83	0.11	0.17	0.38	0.59
10	-1.00	2.00	0.09	0.14	0.47	0.73
14	-0.50	1.41	0.28	0.44	0.75	1.17
18	0.00	1.00	0.27	0.42	1.02	1.59
25	0.50	0.71	0.23	0.36	1.25	1.95
35	1.00	0.50	0.35	0.55	1.60	2.50
45	1.50	0.35	0.44	0.69	2.04	3.19
60	2.00	0.25	0.61	0.95	2.65	4.14
80	2.50	0.18	1.29	2.01	3.94	6.15
120	3.00	0.13	3.50	5.46	7.44	11.61
170	3.50	0.09	2.29	3.57	9.73	15.18
200	3.75	0.07	0.71	1.11	10.44	16.29
230	4.00	0.06	0.44	0.69	10.88	16.98

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					3.68	2.21

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.29	0.20	1.38	-1.71	5.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z177 #5
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Tan sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
185.16	178.80	0.23	0.00	#200 - 4.10 #230 - 3.58	1.28	0.96	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.30	0.16	0.30	0.16
10	-1.00	2.00	0.23	0.12	0.53	0.28
14	-0.50	1.41	0.26	0.14	0.79	0.42
18	0.00	1.00	0.23	0.12	1.02	0.54
25	0.50	0.71	0.39	0.21	1.41	0.75
35	1.00	0.50	1.06	0.57	2.47	1.32
45	1.50	0.35	4.69	2.53	7.16	3.85
60	2.00	0.25	21.46	11.59	28.62	15.44
80	2.50	0.18	83.18	44.92	111.80	60.36
120	3.00	0.13	50.86	27.47	162.66	87.83
170	3.50	0.09	12.41	6.70	175.07	94.53
200	3.75	0.07	2.54	1.37	177.61	95.90
230	4.00	0.06	0.96	0.52	178.57	96.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.59	2.93	2.77	2.38	2.11	2.01	1.55

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.37	0.19	0.56	-1.46	12.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z178 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
181.23	162.11	0.05	0.20	#200 - 11.34 #230 - 10.77	3.97	16.24	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.45	0.80	1.45	0.80
5/16"	-3.00	8.00	0.76	0.42	2.21	1.22
3.5	-2.50	5.66	4.38	2.42	6.59	3.64
4	-2.25	4.76	0.95	0.52	7.54	4.16
5	-2.00	4.00	1.76	0.97	9.30	5.13
7	-1.50	2.83	3.60	1.99	12.90	7.12
10	-1.00	2.00	4.25	2.35	17.15	9.47
14	-0.50	1.41	4.45	2.46	21.60	11.93
18	0.00	1.00	4.14	2.28	25.74	14.21
25	0.50	0.71	4.88	2.69	30.62	16.90
35	1.00	0.50	7.60	4.19	38.22	21.09
45	1.50	0.35	11.34	6.26	49.56	27.35
60	2.00	0.25	18.93	10.45	68.49	37.80
80	2.50	0.18	45.83	25.29	114.32	63.09
120	3.00	0.13	33.76	18.63	148.08	81.72
170	3.50	0.09	10.73	5.92	158.81	87.64
200	3.75	0.07	1.84	1.02	160.65	88.66
230	4.00	0.06	1.04	0.57	161.69	89.23

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.19	2.82	2.24	1.31	0.33	-2.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.57	0.34	1.61	-1.46	4.43

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z178 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt, gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
70.01	19.42	0.66	0.00	#200 - 78.76 #230 - 73.20	7.00	3.86	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.01	0.01	0.01	0.01
10	-1.00	2.00	0.04	0.06	0.05	0.07
14	-0.50	1.41	0.06	0.09	0.11	0.16
18	0.00	1.00	0.07	0.10	0.18	0.26
25	0.50	0.71	0.08	0.11	0.26	0.37
35	1.00	0.50	0.04	0.06	0.30	0.43
45	1.50	0.35	0.08	0.11	0.38	0.54
60	2.00	0.25	0.15	0.21	0.53	0.75
80	2.50	0.18	0.39	0.56	0.92	1.31
120	3.00	0.13	1.61	2.30	2.53	3.61
170	3.50	0.09	6.00	8.57	8.53	12.18
200	3.75	0.07	6.34	9.06	14.87	21.24
230	4.00	0.06	3.89	5.56	18.76	26.80

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.92	3.61	3.08

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	3.37	0.10	0.63	-3.74	22.73

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: Z178 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Tan sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
160.25	141.93	0.04	0.00	#200 - 12.24 #230 - 11.45	0.69	1.93	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.01	0.01	0.01
14	-0.50	1.41	0.03	0.02	0.04	0.03
18	0.00	1.00	0.09	0.06	0.13	0.09
25	0.50	0.71	0.07	0.04	0.20	0.13
35	1.00	0.50	0.09	0.06	0.29	0.19
45	1.50	0.35	0.28	0.17	0.57	0.36
60	2.00	0.25	26.23	16.37	26.80	16.73
80	2.50	0.18	83.76	52.27	110.56	69.00
120	3.00	0.13	22.22	13.87	132.78	82.87
170	3.50	0.09	5.85	3.65	138.63	86.52
200	3.75	0.07	1.99	1.24	140.62	87.76
230	4.00	0.06	1.27	0.79	141.89	88.55

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.15	2.72	2.32	2.08	1.98	1.64

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.3	0.20	0.43	0.69	6.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z178 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Tan sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
166.74	155.08	0.19	0.00	#200 - 7.72 #230 - 7.11	0.56	2.38	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.01	0.01	0.01
14	-0.50	1.41	0.04	0.02	0.05	0.03
18	0.00	1.00	0.08	0.05	0.13	0.08
25	0.50	0.71	0.08	0.05	0.21	0.13
35	1.00	0.50	0.10	0.06	0.31	0.19
45	1.50	0.35	0.33	0.20	0.64	0.39
60	2.00	0.25	9.91	5.94	10.55	6.33
80	2.50	0.18	101.60	60.93	112.15	67.26
120	3.00	0.13	32.58	19.54	144.73	86.80
170	3.50	0.09	6.92	4.15	151.65	90.95
200	3.75	0.07	2.22	1.33	153.87	92.28
230	4.00	0.06	1.02	0.61	154.89	92.89

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.93	2.70	2.36	2.15	2.08	1.89

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.39	0.19	0.39	0.62	8.25

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z179 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
180.45	164.07	0.21	0.17	#200 - 9.61 #230 - 9.37	5.25	11.26	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.26	0.14	0.26	0.14
3.5	-2.50	5.66	1.95	1.08	2.21	1.22
4	-2.25	4.76	1.61	0.89	3.82	2.11
5	-2.00	4.00	1.29	0.71	5.11	2.82
7	-1.50	2.83	6.11	3.39	11.22	6.21
10	-1.00	2.00	6.54	3.62	17.76	9.83
14	-0.50	1.41	8.22	4.56	25.98	14.39
18	0.00	1.00	7.90	4.38	33.88	18.77
25	0.50	0.71	9.05	5.02	42.93	23.79
35	1.00	0.50	11.72	6.49	54.65	30.28
45	1.50	0.35	13.05	7.23	67.70	37.51
60	2.00	0.25	17.05	9.45	84.75	46.96
80	2.50	0.18	48.84	27.07	133.59	74.03
120	3.00	0.13	21.12	11.70	154.71	85.73
170	3.50	0.09	7.08	3.92	161.79	89.65
200	3.75	0.07	1.33	0.74	163.12	90.39
230	4.00	0.06	0.43	0.24	163.55	90.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.93	2.54	2.06	0.59	-0.32	-1.68

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.31	0.40	1.5	-0.92	2.92

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z179 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.12	154.27	0.15	0.01	#200 - 6.25 #230 - 6.10	1.02	9.18	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.34	0.21	0.34	0.21
4	-2.25	4.76	0.41	0.25	0.75	0.46
5	-2.00	4.00	0.46	0.28	1.21	0.74
7	-1.50	2.83	2.50	1.52	3.71	2.26
10	-1.00	2.00	2.43	1.48	6.14	3.74
14	-0.50	1.41	2.77	1.69	8.91	5.43
18	0.00	1.00	2.48	1.51	11.39	6.94
25	0.50	0.71	2.58	1.57	13.97	8.51
35	1.00	0.50	3.09	1.88	17.06	10.39
45	1.50	0.35	6.77	4.13	23.83	14.52
60	2.00	0.25	49.68	30.27	73.51	44.79
80	2.50	0.18	59.68	36.36	133.19	81.15
120	3.00	0.13	17.62	10.74	150.81	91.89
170	3.50	0.09	2.66	1.62	153.47	93.51
200	3.75	0.07	0.40	0.24	153.87	93.75
230	4.00	0.06	0.24	0.15	154.11	93.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.63	2.42	2.07	1.67	1.52	-0.63

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.81	0.29	0.99	-2.16	8.18

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z179 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt, soil-like

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
80.32	35.71	0.44	0.00	#200 - 57.44 #230 - 56.08	5.89	5.49	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.19	0.24	0.19	0.24
5	-2.00	4.00	0.00	0.00	0.19	0.24
7	-1.50	2.83	0.71	0.88	0.90	1.12
10	-1.00	2.00	1.30	1.62	2.20	2.74
14	-0.50	1.41	1.47	1.83	3.67	4.57
18	0.00	1.00	1.46	1.82	5.13	6.39
25	0.50	0.71	1.40	1.74	6.53	8.13
35	1.00	0.50	1.60	1.99	8.13	10.12
45	1.50	0.35	1.66	2.07	9.79	12.19
60	2.00	0.25	2.86	3.56	12.65	15.75
80	2.50	0.18	4.80	5.98	17.45	21.73
120	3.00	0.13	7.76	9.66	25.21	31.39
170	3.50	0.09	6.62	8.24	31.83	39.63
200	3.75	0.07	2.35	2.93	34.18	42.56
230	4.00	0.06	1.09	1.36	35.27	43.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.67	2.02	-0.38

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.99	0.25	1.49	-1.03	3.06

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z179 #4
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
209.02	204.58	0.06	0.57	#200 - 2.82 #230 - 2.73	1.45	0.55	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	6.82	3.26	6.82	3.26
11/16"	-3.50	11.31	4.52	2.16	11.34	5.42
5/16"	-3.00	8.00	12.24	5.86	23.58	11.28
3.5	-2.50	5.66	5.41	2.59	28.99	13.87
4	-2.25	4.76	4.12	1.97	33.11	15.84
5	-2.00	4.00	7.05	3.37	40.16	19.21
7	-1.50	2.83	14.77	7.07	54.93	26.28
10	-1.00	2.00	16.54	7.91	71.47	34.19
14	-0.50	1.41	15.89	7.60	87.36	41.79
18	0.00	1.00	15.28	7.31	102.64	49.10
25	0.50	0.71	18.22	8.72	120.86	57.82
35	1.00	0.50	25.08	12.00	145.94	69.82
45	1.50	0.35	26.91	12.87	172.85	82.69
60	2.00	0.25	20.64	9.87	193.49	92.56
80	2.50	0.18	6.41	3.07	199.90	95.63
120	3.00	0.13	2.25	1.08	202.15	96.71
170	3.50	0.09	0.74	0.35	202.89	97.06
200	3.75	0.07	0.25	0.12	203.14	97.18
230	4.00	0.06	0.19	0.09	203.33	97.27

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.40	1.57	1.20	0.05	-1.59	-2.24	-3.60

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.34	1.27	1.78	-0.42	2.25

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z180 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand, shell, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
158.14	154.53	0.08	0.32	#200 - 2.79 #230 - 2.64	2.08	14.19	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.95	1.87	2.95	1.87
5/16"	-3.00	8.00	1.04	0.66	3.99	2.53
3.5	-2.50	5.66	4.90	3.10	8.89	5.63
4	-2.25	4.76	3.47	2.19	12.36	7.82
5	-2.00	4.00	3.46	2.19	15.82	10.01
7	-1.50	2.83	6.31	3.99	22.13	14.00
10	-1.00	2.00	5.91	3.74	28.04	17.74
14	-0.50	1.41	6.68	4.22	34.72	21.96
18	0.00	1.00	5.66	3.58	40.38	25.54
25	0.50	0.71	7.03	4.45	47.41	29.99
35	1.00	0.50	10.42	6.59	57.83	36.58
45	1.50	0.35	10.15	6.42	67.98	43.00
60	2.00	0.25	13.52	8.55	81.50	51.55
80	2.50	0.18	39.93	25.25	121.43	76.80
120	3.00	0.13	24.29	15.36	145.72	92.16
170	3.50	0.09	7.13	4.51	152.85	96.67
200	3.75	0.07	0.86	0.54	153.71	97.21
230	4.00	0.06	0.23	0.15	153.94	97.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.31	2.73	2.46	1.91	-0.08	-1.23	-2.60

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.05	0.48	1.85	-0.92	2.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z180 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Fine gray sand, little silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
174.73	161.48	0.33	0.00	#200 - 8.32 #230 - 7.76	1.98	8.31	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.01	0.01	0.01	0.01
5	-2.00	4.00	0.11	0.06	0.12	0.07
7	-1.50	2.83	0.33	0.19	0.45	0.26
10	-1.00	2.00	0.82	0.47	1.27	0.73
14	-0.50	1.41	1.13	0.65	2.40	1.38
18	0.00	1.00	1.88	1.08	4.28	2.46
25	0.50	0.71	2.50	1.43	6.78	3.89
35	1.00	0.50	3.72	2.13	10.50	6.02
45	1.50	0.35	6.00	3.43	16.50	9.45
60	2.00	0.25	11.66	6.67	28.16	16.12
80	2.50	0.18	43.52	24.91	71.68	41.03
120	3.00	0.13	67.70	38.75	139.38	79.78
170	3.50	0.09	18.15	10.39	157.53	90.17
200	3.75	0.07	2.64	1.51	160.17	91.68
230	4.00	0.06	0.98	0.56	161.15	92.24

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.20	2.94	2.62	2.18	1.99	0.76

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.39	0.19	0.81	-2	8.58

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z180 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt, soil-like

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
65.33	3.61	0.13	0.00	#200 - 94.80 #230 - 94.66	14.73	10.26	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.03	0.05	0.03	0.05
10	-1.00	2.00	0.17	0.26	0.20	0.31
14	-0.50	1.41	0.38	0.58	0.58	0.89
18	0.00	1.00	0.30	0.46	0.88	1.35
25	0.50	0.71	0.18	0.28	1.06	1.63
35	1.00	0.50	0.24	0.37	1.30	2.00
45	1.50	0.35	0.24	0.37	1.54	2.37
60	2.00	0.25	0.20	0.31	1.74	2.68
80	2.50	0.18	0.40	0.61	2.14	3.29
120	3.00	0.13	0.70	1.07	2.84	4.36
170	3.50	0.09	0.36	0.55	3.20	4.91
200	3.75	0.07	0.19	0.29	3.39	5.20
230	4.00	0.06	0.09	0.14	3.48	5.34

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.52	0.35	1.58	-0.36	1.78

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z181 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		Rock, shell, little sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
198.81	193.02	0.35	0.00	#200 - 3.26 #230 - 3.08	3.11	31.64	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	9.53	4.79	9.53	4.79
5/8"	-4.00	16.00	4.37	2.20	13.90	6.99
11/16"	-3.50	11.31	11.93	6.00	25.83	12.99
5/16"	-3.00	8.00	16.98	8.54	42.81	21.53
3.5	-2.50	5.66	13.04	6.56	55.85	28.09
4	-2.25	4.76	9.33	4.69	65.18	32.78
5	-2.00	4.00	8.33	4.19	73.51	36.97
7	-1.50	2.83	20.87	10.50	94.38	47.47
10	-1.00	2.00	22.58	11.36	116.96	58.83
14	-0.50	1.41	19.67	9.89	136.63	68.72
18	0.00	1.00	15.18	7.64	151.81	76.36
25	0.50	0.71	9.78	4.92	161.59	81.28
35	1.00	0.50	6.71	3.38	168.30	84.66
45	1.50	0.35	5.42	2.73	173.72	87.39
60	2.00	0.25	4.61	2.32	178.33	89.71
80	2.50	0.18	5.23	2.63	183.56	92.34
120	3.00	0.13	6.03	3.03	189.59	95.37
170	3.50	0.09	2.11	1.06	191.70	96.43
200	3.75	0.07	0.61	0.31	192.31	96.74
230	4.00	0.06	0.36	0.18	192.67	96.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.94	0.90	-0.09	-1.39	-2.74	-3.32	-4.23

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.34	2.53	1.77	0.84	3.12

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z181 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
166.85	154.60	0.48	0.40	#200 - 8.37 #230 - 8.05	1.81	17.76	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	10.82	6.48	10.82	6.48
5/16"	-3.00	8.00	5.18	3.10	16.00	9.58
3.5	-2.50	5.66	12.16	7.29	28.16	16.87
4	-2.25	4.76	4.65	2.79	32.81	19.66
5	-2.00	4.00	6.13	3.67	38.94	23.33
7	-1.50	2.83	10.42	6.25	49.36	29.58
10	-1.00	2.00	9.74	5.84	59.10	35.42
14	-0.50	1.41	9.52	5.71	68.62	41.13
18	0.00	1.00	8.46	5.07	77.08	46.20
25	0.50	0.71	6.68	4.00	83.76	50.20
35	1.00	0.50	5.88	3.52	89.64	53.72
45	1.50	0.35	5.58	3.34	95.22	57.06
60	2.00	0.25	6.98	4.18	102.20	61.24
80	2.50	0.18	23.10	13.84	125.30	75.08
120	3.00	0.13	20.78	12.45	146.08	87.53
170	3.50	0.09	5.57	3.34	151.65	90.87
200	3.75	0.07	1.27	0.76	152.92	91.63
230	4.00	0.06	0.53	0.32	153.45	91.95

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.86	2.50	0.47	-1.87	-2.56	-3.67

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.03	0.98	2.28	-0.13	1.61

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z181 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Fine tan sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
184.65	184.65	4.33	0.19	#200 - 3.13 #230 - 2.56	0.10	1.35	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.23	0.12	0.23	0.12
10	-1.00	2.00	0.12	0.06	0.35	0.18
14	-0.50	1.41	0.56	0.30	0.91	0.48
18	0.00	1.00	0.84	0.45	1.75	0.93
25	0.50	0.71	1.98	1.07	3.73	2.00
35	1.00	0.50	3.81	2.06	7.54	4.06
45	1.50	0.35	5.62	3.04	13.16	7.10
60	2.00	0.25	16.97	9.19	30.13	16.29
80	2.50	0.18	96.95	52.50	127.08	68.79
120	3.00	0.13	39.43	21.35	166.51	90.14
170	3.50	0.09	10.11	5.48	176.62	95.62
200	3.75	0.07	2.30	1.25	178.92	96.87
230	4.00	0.06	1.05	0.57	179.97	97.44

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.44	2.86	2.65	2.32	2.08	1.98	1.15

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.28	0.21	0.62	-1.55	9.49

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z181 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Tan coarser quartz sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
174.24	174.24	3.00	0.27	#200 - 2.42 #230 - 1.98	0.72	2.24	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.73	0.42	0.73	0.42
5	-2.00	4.00	0.44	0.25	1.17	0.67
7	-1.50	2.83	1.31	0.75	2.48	1.42
10	-1.00	2.00	2.43	1.39	4.91	2.81
14	-0.50	1.41	3.83	2.20	8.74	5.01
18	0.00	1.00	5.87	3.37	14.61	8.38
25	0.50	0.71	9.56	5.49	24.17	13.87
35	1.00	0.50	18.62	10.69	42.79	24.56
45	1.50	0.35	27.04	15.52	69.83	40.08
60	2.00	0.25	22.33	12.82	92.16	52.90
80	2.50	0.18	35.42	20.33	127.58	73.23
120	3.00	0.13	36.05	20.69	163.63	93.92
170	3.50	0.09	5.28	3.03	168.91	96.95
200	3.75	0.07	1.10	0.63	170.01	97.58
230	4.00	0.06	0.76	0.44	170.77	98.02

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.18	2.76	2.54	1.89	1.01	0.60	-0.50

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.64	0.32	1.12	-0.9	3.75

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z185 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand, shell hash, clay balls

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
197.42	178.81	1.06	0.15	#200 - 11.56 #230 - 10.12	2.05	18.20	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.40	0.20	0.40	0.20
3.5	-2.50	5.66	0.40	0.20	0.80	0.40
4	-2.25	4.76	0.98	0.50	1.78	0.90
5	-2.00	4.00	1.38	0.70	3.16	1.60
7	-1.50	2.83	3.28	1.66	6.44	3.26
10	-1.00	2.00	4.85	2.46	11.29	5.72
14	-0.50	1.41	5.57	2.82	16.86	8.54
18	0.00	1.00	6.27	3.18	23.13	11.72
25	0.50	0.71	7.29	3.69	30.42	15.41
35	1.00	0.50	10.27	5.20	40.69	20.61
45	1.50	0.35	12.92	6.54	53.61	27.15
60	2.00	0.25	15.89	8.05	69.50	35.20
80	2.50	0.18	27.31	13.83	96.81	49.03
120	3.00	0.13	47.58	24.10	144.39	73.13
170	3.50	0.09	24.27	12.29	168.66	85.42
200	3.75	0.07	5.96	3.02	174.62	88.44
230	4.00	0.06	2.84	1.44	177.46	89.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.44	3.08	2.52	1.34	0.56	-1.15

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.87	0.27	1.44	-1.16	3.68

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z185 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
174.41	160.61	0.23	0.05	#200 - 8.55 #230 - 8.10	1.53	12.57	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	3.88	2.22	3.88	2.22
5/16"	-3.00	8.00	6.37	3.65	10.25	5.87
3.5	-2.50	5.66	3.92	2.25	14.17	8.12
4	-2.25	4.76	3.10	1.78	17.27	9.90
5	-2.00	4.00	4.85	2.78	22.12	12.68
7	-1.50	2.83	8.79	5.04	30.91	17.72
10	-1.00	2.00	9.78	5.61	40.69	23.33
14	-0.50	1.41	11.09	6.36	51.78	29.69
18	0.00	1.00	11.04	6.33	62.82	36.02
25	0.50	0.71	10.58	6.07	73.40	42.09
35	1.00	0.50	9.75	5.59	83.15	47.68
45	1.50	0.35	9.74	5.58	92.89	53.26
60	2.00	0.25	13.27	7.61	106.16	60.87
80	2.50	0.18	22.22	12.74	128.38	73.61
120	3.00	0.13	22.64	12.98	151.02	86.59
170	3.50	0.09	7.19	4.12	158.21	90.71
200	3.75	0.07	1.29	0.74	159.50	91.45
230	4.00	0.06	0.79	0.45	160.29	91.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.90	2.55	1.21	-0.87	-1.67	-3.12

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.54	0.69	2	-0.43	2.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z185 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Sandy silt, organic material

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
86.29	42.91	1.15	0.00	#200 - 55.57 #230 - 51.60	7.54	4.49	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.01	1.17	1.01	1.17
3.5	-2.50	5.66	0.00	0.00	1.01	1.17
4	-2.25	4.76	0.00	0.00	1.01	1.17
5	-2.00	4.00	0.00	0.00	1.01	1.17
7	-1.50	2.83	0.67	0.78	1.68	1.95
10	-1.00	2.00	1.44	1.67	3.12	3.62
14	-0.50	1.41	2.62	3.04	5.74	6.66
18	0.00	1.00	2.17	2.51	7.91	9.17
25	0.50	0.71	2.21	2.56	10.12	11.73
35	1.00	0.50	2.39	2.77	12.51	14.50
45	1.50	0.35	2.32	2.69	14.83	17.19
60	2.00	0.25	2.20	2.55	17.03	19.74
80	2.50	0.18	3.28	3.80	20.31	23.54
120	3.00	0.13	4.82	5.59	25.13	29.13
170	3.50	0.09	7.00	8.11	32.13	37.24
200	3.75	0.07	6.20	7.19	38.33	44.43
230	4.00	0.06	3.43	3.97	41.76	48.40

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.63	1.28	-0.77

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.9	0.27	1.81	-0.9	2.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z185 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Sandy silt, organic matter

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
48.05	16.34	0.12	0.00	#200 - 68.96 #230 - 66.23	8.63	6.88	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.17	0.35	0.17	0.35
10	-1.00	2.00	0.96	2.00	1.13	2.35
14	-0.50	1.41	1.42	2.96	2.55	5.31
18	0.00	1.00	1.51	3.14	4.06	8.45
25	0.50	0.71	1.42	2.96	5.48	11.41
35	1.00	0.50	1.33	2.77	6.81	14.18
45	1.50	0.35	1.25	2.60	8.06	16.78
60	2.00	0.25	1.36	2.83	9.42	19.61
80	2.50	0.18	1.06	2.21	10.48	21.82
120	3.00	0.13	0.95	1.98	11.43	23.80
170	3.50	0.09	1.98	4.12	13.41	27.92
200	3.75	0.07	1.50	3.12	14.91	31.04
230	4.00	0.06	1.31	2.73	16.22	33.77

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				3.15	1.35	-0.55

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.5	0.35	1.69	-0.11	1.68

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z186 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand, shell hash

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
174.00	169.43	0.26	0.23	#200 - 3.29 #230 - 3.00	0.87	10.31	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.50	0.29	0.50	0.29
3.5	-2.50	5.66	0.00	0.00	0.50	0.29
4	-2.25	4.76	0.31	0.18	0.81	0.47
5	-2.00	4.00	0.27	0.16	1.08	0.63
7	-1.50	2.83	0.63	0.36	1.71	0.99
10	-1.00	2.00	0.82	0.47	2.53	1.46
14	-0.50	1.41	2.33	1.34	4.86	2.80
18	0.00	1.00	2.97	1.71	7.83	4.51
25	0.50	0.71	6.10	3.51	13.93	8.02
35	1.00	0.50	14.86	8.54	28.79	16.56
45	1.50	0.35	23.23	13.35	52.02	29.91
60	2.00	0.25	25.91	14.89	77.93	44.80
80	2.50	0.18	41.70	23.97	119.63	68.77
120	3.00	0.13	35.80	20.57	155.43	89.34
170	3.50	0.09	10.84	6.23	166.27	95.57
200	3.75	0.07	1.99	1.14	168.26	96.71
230	4.00	0.06	0.51	0.29	168.77	97.00

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.45	2.87	2.65	2.11	1.32	0.97	0.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.87	0.27	1.02	-1.22	5.67

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z186 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand, shell hash, silt balls

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
164.64	144.21	0.79	0.03	#200 - 14.14 #230 - 12.91	2.44	19.71	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.22	0.13	0.22	0.13
3.5	-2.50	5.66	2.34	1.42	2.56	1.55
4	-2.25	4.76	0.72	0.44	3.28	1.99
5	-2.00	4.00	1.08	0.66	4.36	2.65
7	-1.50	2.83	3.75	2.28	8.11	4.93
10	-1.00	2.00	4.84	2.94	12.95	7.87
14	-0.50	1.41	6.51	3.95	19.46	11.82
18	0.00	1.00	7.20	4.37	26.66	16.19
25	0.50	0.71	6.19	3.76	32.85	19.95
35	1.00	0.50	6.71	4.08	39.56	24.03
45	1.50	0.35	7.88	4.79	47.44	28.82
60	2.00	0.25	11.23	6.82	58.67	35.64
80	2.50	0.18	30.81	18.71	89.48	54.35
120	3.00	0.13	35.49	21.56	124.97	75.91
170	3.50	0.09	13.49	8.19	138.46	84.10
200	3.75	0.07	2.89	1.76	141.35	85.86
230	4.00	0.06	2.02	1.23	143.37	87.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.49	2.98	2.38	1.10	-0.02	-1.49

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.64	0.32	1.57	-1.06	3.21

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z186 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.53	152.53	2.29	0.58	#200 - 2.52 #230 - 2.09	1.12	1.32	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.50	0.33	0.50	0.33
10	-1.00	2.00	0.66	0.43	1.16	0.76
14	-0.50	1.41	0.87	0.57	2.03	1.33
18	0.00	1.00	1.20	0.79	3.23	2.12
25	0.50	0.71	2.38	1.56	5.61	3.68
35	1.00	0.50	6.90	4.52	12.51	8.20
45	1.50	0.35	24.53	16.08	37.04	24.28
60	2.00	0.25	32.82	21.52	69.86	45.80
80	2.50	0.18	53.35	34.98	123.21	80.78
120	3.00	0.13	18.66	12.23	141.87	93.01
170	3.50	0.09	5.40	3.54	147.27	96.55
200	3.75	0.07	1.42	0.93	148.69	97.48
230	4.00	0.06	0.66	0.43	149.35	97.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.28	2.63	2.42	2.06	1.52	1.24	0.65

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.93	0.26	0.77	-1.02	6.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z186 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
183.55	183.55	0.96	0.39	#200 - 1.06 #230 - 0.91	0.30	1.05	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.03	0.02	0.03	0.02
14	-0.50	1.41	0.16	0.09	0.19	0.11
18	0.00	1.00	0.38	0.21	0.57	0.32
25	0.50	0.71	0.99	0.54	1.56	0.86
35	1.00	0.50	4.96	2.70	6.52	3.56
45	1.50	0.35	55.52	30.25	62.04	33.81
60	2.00	0.25	70.29	38.29	132.33	72.10
80	2.50	0.18	33.83	18.43	166.16	90.53
120	3.00	0.13	12.60	6.86	178.76	97.39
170	3.50	0.09	2.38	1.30	181.14	98.69
200	3.75	0.07	0.45	0.25	181.59	98.94
230	4.00	0.06	0.28	0.15	181.87	99.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.83	2.32	2.08	1.71	1.35	1.21	1.02

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.74	0.30	0.54	0.34	4.28

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z191 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
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Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand, pebbles

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
166.35	166.35	0.18	0.36	#200 - 0.50 #230 - 0.47	1.61	25.51	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.03	1.22	2.03	1.22
11/16"	-3.50	11.31	1.95	1.17	3.98	2.39
5/16"	-3.00	8.00	5.57	3.35	9.55	5.74
3.5	-2.50	5.66	6.72	4.04	16.27	9.78
4	-2.25	4.76	3.02	1.82	19.29	11.60
5	-2.00	4.00	4.72	2.84	24.01	14.44
7	-1.50	2.83	10.14	6.10	34.15	20.54
10	-1.00	2.00	10.42	6.26	44.57	26.80
14	-0.50	1.41	12.89	7.75	57.46	34.55
18	0.00	1.00	12.98	7.80	70.44	42.35
25	0.50	0.71	22.47	13.51	92.91	55.86
35	1.00	0.50	32.38	19.46	125.29	75.32
45	1.50	0.35	21.96	13.20	147.25	88.52
60	2.00	0.25	9.60	5.77	156.85	94.29
80	2.50	0.18	5.70	3.43	162.55	97.72
120	3.00	0.13	2.35	1.41	164.90	99.13
170	3.50	0.09	0.53	0.32	165.43	99.45
200	3.75	0.07	0.09	0.05	165.52	99.50
230	4.00	0.06	0.05	0.03	165.57	99.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.10	1.33	0.99	0.28	-1.14	-1.87	-3.11

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.11	1.08	1.56	-0.59	2.71

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z191 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand, shell, silt balls

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.91	133.66	0.85	0.08	#200 - 16.37 #230 - 15.96	3.06	17.55	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.64	0.41	0.64	0.41
4	-2.25	4.76	0.35	0.22	0.99	0.63
5	-2.00	4.00	0.88	0.56	1.87	1.19
7	-1.50	2.83	2.22	1.41	4.09	2.60
10	-1.00	2.00	3.03	1.92	7.12	4.52
14	-0.50	1.41	6.06	3.84	13.18	8.36
18	0.00	1.00	7.82	4.95	21.00	13.31
25	0.50	0.71	12.62	7.99	33.62	21.30
35	1.00	0.50	18.84	11.93	52.46	33.23
45	1.50	0.35	18.08	11.45	70.54	44.68
60	2.00	0.25	14.20	8.99	84.74	53.67
80	2.50	0.18	20.61	13.05	105.35	66.72
120	3.00	0.13	18.96	12.01	124.31	78.73
170	3.50	0.09	6.39	4.05	130.70	82.78
200	3.75	0.07	1.35	0.85	132.05	83.63
230	4.00	0.06	0.64	0.41	132.69	84.04

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.98	2.84	1.80	0.66	0.17	-0.94

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.3	0.41	1.31	-0.53	2.86

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z191 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Rock, oyster shells, trace sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
197.59	194.84	0.10	0.03	#200 - 1.54 #230 - 1.46	1.50	8.58	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	8.99	4.55	8.99	4.55
11/16"	-3.50	11.31	15.25	7.72	24.24	12.27
5/16"	-3.00	8.00	13.31	6.74	37.55	19.01
3.5	-2.50	5.66	23.47	11.88	61.02	30.89
4	-2.25	4.76	10.84	5.49	71.86	36.38
5	-2.00	4.00	15.38	7.78	87.24	44.16
7	-1.50	2.83	32.36	16.38	119.60	60.54
10	-1.00	2.00	26.40	13.36	146.00	73.90
14	-0.50	1.41	17.49	8.85	163.49	82.75
18	0.00	1.00	9.82	4.97	173.31	87.72
25	0.50	0.71	4.56	2.31	177.87	90.03
35	1.00	0.50	3.32	1.68	181.19	91.71
45	1.50	0.35	3.43	1.74	184.62	93.45
60	2.00	0.25	3.34	1.69	187.96	95.14
80	2.50	0.18	3.10	1.57	191.06	96.71
120	3.00	0.13	2.65	1.34	193.71	98.05
170	3.50	0.09	0.69	0.35	194.40	98.40
200	3.75	0.07	0.12	0.06	194.52	98.46
230	4.00	0.06	0.16	0.08	194.68	98.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.96	-0.37	-0.94	-1.82	-2.75	-3.22	-3.97

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-1.72	3.29	1.53	0.85	3.88

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z191 #4
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
72.45	32.10	1.44	0.00	#200 - 59.30 #230 - 57.69	21.44	8.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.27	0.37	0.27	0.37
10	-1.00	2.00	0.80	1.10	1.07	1.47
14	-0.50	1.41	2.31	3.19	3.38	4.66
18	0.00	1.00	3.03	4.18	6.41	8.84
25	0.50	0.71	2.88	3.98	9.29	12.82
35	1.00	0.50	2.64	3.64	11.93	16.46
45	1.50	0.35	2.13	2.94	14.06	19.40
60	2.00	0.25	1.88	2.59	15.94	21.99
80	2.50	0.18	2.41	3.33	18.35	25.32
120	3.00	0.13	3.65	5.04	22.00	30.36
170	3.50	0.09	5.25	7.25	27.25	37.61
200	3.75	0.07	2.24	3.09	29.49	40.70
230	4.00	0.06	1.17	1.61	30.66	42.31

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				2.45	0.94	-0.46

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.63	0.32	1.57	-0.26	1.73

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z191 #5
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
188.21	188.21	4.73	0.58	#200 - 4.14 #230 - 3.09	0.47	0.54	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.13	0.07	0.13	0.07
7	-1.50	2.83	0.08	0.04	0.21	0.11
10	-1.00	2.00	0.28	0.15	0.49	0.26
14	-0.50	1.41	0.63	0.33	1.12	0.59
18	0.00	1.00	2.04	1.08	3.16	1.67
25	0.50	0.71	5.41	2.87	8.57	4.54
35	1.00	0.50	14.62	7.77	23.19	12.31
45	1.50	0.35	37.24	19.79	60.43	32.10
60	2.00	0.25	51.49	27.36	111.92	59.46
80	2.50	0.18	30.41	16.16	142.33	75.62
120	3.00	0.13	25.19	13.38	167.52	89.00
170	3.50	0.09	10.01	5.32	177.53	94.32
200	3.75	0.07	2.89	1.54	180.42	95.86
230	4.00	0.06	1.97	1.05	182.39	96.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.61	2.81	2.48	1.83	1.32	1.09	0.53

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.84	0.28	0.83	-0.15	3.63

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z193 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Fine brown sand, silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
117.11	100.16	0.89	0.10	#200 - 17.06 #230 - 15.34	2.17	10.84	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.05	0.04	0.05	0.04
5	-2.00	4.00	0.06	0.05	0.11	0.09
7	-1.50	2.83	0.19	0.16	0.30	0.25
10	-1.00	2.00	0.14	0.12	0.44	0.37
14	-0.50	1.41	0.40	0.34	0.84	0.71
18	0.00	1.00	0.57	0.49	1.41	1.20
25	0.50	0.71	0.82	0.70	2.23	1.90
35	1.00	0.50	2.36	2.02	4.59	3.92
45	1.50	0.35	4.47	3.82	9.06	7.74
60	2.00	0.25	6.68	5.70	15.74	13.44
80	2.50	0.18	18.01	15.38	33.75	28.82
120	3.00	0.13	34.20	29.20	67.95	58.02
170	3.50	0.09	24.03	20.52	91.98	78.54
200	3.75	0.07	5.15	4.40	97.13	82.94
230	4.00	0.06	2.02	1.72	99.15	84.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.90	3.41	2.86	2.38	2.08	1.14

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.59	0.17	0.81	-1.69	7.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z193 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
137.31	137.31	0.51	0.15	#200 - 0.65 #230 - 0.53	1.17	26.92	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	15.65	11.40	15.65	11.40
5/8"	-4.00	16.00	5.59	4.07	21.24	15.47
11/16"	-3.50	11.31	9.26	6.74	30.50	22.21
5/16"	-3.00	8.00	5.07	3.69	35.57	25.90
3.5	-2.50	5.66	9.76	7.11	45.33	33.01
4	-2.25	4.76	2.83	2.06	48.16	35.07
5	-2.00	4.00	3.21	2.34	51.37	37.41
7	-1.50	2.83	6.38	4.65	57.75	42.06
10	-1.00	2.00	6.39	4.65	64.14	46.71
14	-0.50	1.41	6.06	4.41	70.20	51.12
18	0.00	1.00	5.90	4.30	76.10	55.42
25	0.50	0.71	6.88	5.01	82.98	60.43
35	1.00	0.50	9.57	6.97	92.55	67.40
45	1.50	0.35	11.32	8.24	103.87	75.64
60	2.00	0.25	13.24	9.64	117.11	85.28
80	2.50	0.18	11.79	8.59	128.90	93.87
120	3.00	0.13	5.25	3.82	134.15	97.69
170	3.50	0.09	1.96	1.43	136.11	99.12
200	3.75	0.07	0.32	0.23	136.43	99.35
230	4.00	0.06	0.17	0.12	136.60	99.47

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.65	1.93	1.46	-0.63	-3.12	-3.96	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.83	1.78	2.12	0.41	1.87

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z193 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand/silt, pebbles

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
148.26	122.56	0.09	0.46	#200 - 18.09 #230 - 17.83	2.93	3.12	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.08	0.73	1.08	0.73
3.5	-2.50	5.66	3.21	2.17	4.29	2.90
4	-2.25	4.76	1.14	0.77	5.43	3.67
5	-2.00	4.00	2.40	1.62	7.83	5.29
7	-1.50	2.83	6.16	4.15	13.99	9.44
10	-1.00	2.00	7.75	5.23	21.74	14.67
14	-0.50	1.41	7.24	4.88	28.98	19.55
18	0.00	1.00	6.03	4.07	35.01	23.62
25	0.50	0.71	6.42	4.33	41.43	27.95
35	1.00	0.50	8.58	5.79	50.01	33.74
45	1.50	0.35	11.32	7.64	61.33	41.38
60	2.00	0.25	15.16	10.23	76.49	51.61
80	2.50	0.18	20.78	14.02	97.27	65.63
120	3.00	0.13	18.97	12.80	116.24	78.43
170	3.50	0.09	4.44	2.99	120.68	81.42
200	3.75	0.07	0.72	0.49	121.40	81.91
230	4.00	0.06	0.39	0.26	121.79	82.17

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		2.87	1.92	0.16	-0.86	-2.04

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.97	0.51	1.7	-0.65	2.31

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z193 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
36.92	5.95	0.05	0.00	#200 - 84.68 #230 - 84.00	24.11	7.05	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.01	0.03	0.01	0.03
10	-1.00	2.00	0.05	0.14	0.06	0.17
14	-0.50	1.41	0.18	0.49	0.24	0.66
18	0.00	1.00	0.16	0.43	0.40	1.09
25	0.50	0.71	0.18	0.49	0.58	1.58
35	1.00	0.50	0.15	0.41	0.73	1.99
45	1.50	0.35	0.13	0.35	0.86	2.34
60	2.00	0.25	0.18	0.49	1.04	2.83
80	2.50	0.18	0.86	2.33	1.90	5.16
120	3.00	0.13	2.00	5.42	3.90	10.58
170	3.50	0.09	1.28	3.47	5.18	14.05
200	3.75	0.07	0.47	1.27	5.65	15.32
230	4.00	0.06	0.25	0.68	5.90	16.00

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					4.00	2.47

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.48	0.18	1.14	-1.59	5.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z193 #5
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Tan sand, little organic material/silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
128.71	118.18	1.42	-0.17	#200 - 12.03 #230 - 9.12	0.85	0.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.14	0.11	0.14	0.11
10	-1.00	2.00	0.12	0.09	0.26	0.20
14	-0.50	1.41	0.29	0.23	0.55	0.43
18	0.00	1.00	0.39	0.30	0.94	0.73
25	0.50	0.71	0.79	0.61	1.73	1.34
35	1.00	0.50	1.18	0.92	2.91	2.26
45	1.50	0.35	1.30	1.01	4.21	3.27
60	2.00	0.25	2.22	1.72	6.43	4.99
80	2.50	0.18	26.55	20.63	32.98	25.62
120	3.00	0.13	52.79	41.01	85.77	66.63
170	3.50	0.09	22.32	17.34	108.09	83.97
200	3.75	0.07	5.15	4.00	113.24	87.97
230	4.00	0.06	3.74	2.91	116.98	90.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.50	3.24	2.80	2.48	2.27	2.00

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.71	0.15	0.64	-1.9	11.67

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z193 #6

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		White sand, brown silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
145.41	102.51	2.62	0.08	#200 - 34.33 #230 - 31.37	1.94	1.67	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.00	0.00	0.00	0.00
18	0.00	1.00	0.03	0.02	0.03	0.02
25	0.50	0.71	0.04	0.03	0.07	0.05
35	1.00	0.50	0.04	0.03	0.11	0.08
45	1.50	0.35	0.07	0.05	0.18	0.13
60	2.00	0.25	0.51	0.35	0.69	0.48
80	2.50	0.18	27.11	18.64	27.80	19.12
120	3.00	0.13	40.42	27.80	68.22	46.92
170	3.50	0.09	20.52	14.11	88.74	61.03
200	3.75	0.07	6.74	4.64	95.48	65.67
230	4.00	0.06	4.30	2.96	99.78	68.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.11	2.61	2.42	2.12

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.82	0.14	0.48	0.23	3.27

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z200 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Blue/gray oyster shells, sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
105.84	105.74	0.56	0.17	#200 - 0.93 #230 - 0.78	1.35	31.13	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	7.07	6.68	7.07	6.68
5/16"	-3.00	8.00	9.66	9.13	16.73	15.81
3.5	-2.50	5.66	7.27	6.87	24.00	22.68
4	-2.25	4.76	3.78	3.57	27.78	26.25
5	-2.00	4.00	4.43	4.19	32.21	30.44
7	-1.50	2.83	9.76	9.22	41.97	39.66
10	-1.00	2.00	8.21	7.76	50.18	47.42
14	-0.50	1.41	7.80	7.37	57.98	54.79
18	0.00	1.00	6.23	5.89	64.21	60.68
25	0.50	0.71	6.31	5.96	70.52	66.64
35	1.00	0.50	6.20	5.86	76.72	72.50
45	1.50	0.35	5.90	5.57	82.62	78.07
60	2.00	0.25	5.27	4.98	87.89	83.05
80	2.50	0.18	5.89	5.57	93.78	88.62
120	3.00	0.13	8.56	8.09	102.34	96.71
170	3.50	0.09	2.19	2.07	104.53	98.78
200	3.75	0.07	0.31	0.29	104.84	99.07
230	4.00	0.06	0.16	0.15	105.00	99.22

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.89	2.09	1.22	-0.82	-2.34	-2.99	-3.69

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.6	1.52	2.1	0.22	1.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z200 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Fine gray sand, silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.14	123.88	1.04	0.03	#200 - 10.08 #230 - 8.47	1.34	5.84	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.94	0.70	0.94	0.70
5/16"	-3.00	8.00	0.00	0.00	0.94	0.70
3.5	-2.50	5.66	0.15	0.11	1.09	0.81
4	-2.25	4.76	0.00	0.00	1.09	0.81
5	-2.00	4.00	0.00	0.00	1.09	0.81
7	-1.50	2.83	0.10	0.07	1.19	0.88
10	-1.00	2.00	0.11	0.08	1.30	0.96
14	-0.50	1.41	0.16	0.12	1.46	1.08
18	0.00	1.00	0.12	0.09	1.58	1.17
25	0.50	0.71	0.10	0.07	1.68	1.24
35	1.00	0.50	0.17	0.13	1.85	1.37
45	1.50	0.35	0.25	0.19	2.10	1.56
60	2.00	0.25	0.75	0.56	2.85	2.12
80	2.50	0.18	25.61	19.09	28.46	21.21
120	3.00	0.13	57.98	43.22	86.44	64.43
170	3.50	0.09	28.08	20.93	114.52	85.36
200	3.75	0.07	6.12	4.56	120.64	89.92
230	4.00	0.06	2.16	1.61	122.80	91.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.47	3.25	2.83	2.54	2.36	2.08

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.74	0.15	0.78	-5.23	42.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z200 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
CL		Clay

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
59.65	4.50	0.02	0.00	#200 - 92.88 #230 - 92.49	5.65	8.11	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.05	0.08	0.05	0.08
18	0.00	1.00	0.03	0.05	0.08	0.13
25	0.50	0.71	0.05	0.08	0.13	0.21
35	1.00	0.50	0.06	0.10	0.19	0.31
45	1.50	0.35	0.04	0.07	0.23	0.38
60	2.00	0.25	0.10	0.17	0.33	0.55
80	2.50	0.18	0.30	0.50	0.63	1.05
120	3.00	0.13	1.15	1.93	1.78	2.98
170	3.50	0.09	1.92	3.22	3.70	6.20
200	3.75	0.07	0.55	0.92	4.25	7.12
230	4.00	0.06	0.23	0.39	4.48	7.51

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.31

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.95	0.13	0.78	-2.45	10.55

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z200 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Coarser quartz sand, few shell/small pebbles

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
171.56	158.48	0.41	0.37	#200 - 8.59 #230 - 8.26	1.33	2.87	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.06	0.03	0.06	0.03
4	-2.25	4.76	0.18	0.10	0.24	0.13
5	-2.00	4.00	0.10	0.06	0.34	0.19
7	-1.50	2.83	0.57	0.33	0.91	0.52
10	-1.00	2.00	0.65	0.38	1.56	0.90
14	-0.50	1.41	2.75	1.60	4.31	2.50
18	0.00	1.00	8.49	4.95	12.80	7.45
25	0.50	0.71	27.04	15.76	39.84	23.21
35	1.00	0.50	56.73	33.07	96.57	56.28
45	1.50	0.35	39.77	23.18	136.34	79.46
60	2.00	0.25	8.29	4.83	144.63	84.29
80	2.50	0.18	3.60	2.10	148.23	86.39
120	3.00	0.13	4.43	2.58	152.66	88.97
170	3.50	0.09	2.94	1.71	155.60	90.68
200	3.75	0.07	1.26	0.73	156.86	91.41
230	4.00	0.06	0.57	0.33	157.43	91.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	1.97	1.40	0.91	0.53	0.27	-0.25

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.91	0.53	0.82	0.66	5.57

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z200 #5
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
182.89	173.11	0.17	0.20	#200 - 5.97 #230 - 5.64	2.78	3.68	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	7.40	4.05	7.40	4.05
11/16"	-3.50	11.31	0.00	0.00	7.40	4.05
5/16"	-3.00	8.00	13.83	7.56	21.23	11.61
3.5	-2.50	5.66	18.63	10.19	39.86	21.80
4	-2.25	4.76	11.41	6.24	51.27	28.04
5	-2.00	4.00	15.76	8.62	67.03	36.66
7	-1.50	2.83	27.78	15.19	94.81	51.85
10	-1.00	2.00	23.38	12.78	118.19	64.63
14	-0.50	1.41	13.71	7.50	131.90	72.13
18	0.00	1.00	7.45	4.07	139.35	76.20
25	0.50	0.71	6.03	3.30	145.38	79.50
35	1.00	0.50	5.83	3.19	151.21	82.69
45	1.50	0.35	4.27	2.33	155.48	85.02
60	2.00	0.25	2.58	1.41	158.06	86.43
80	2.50	0.18	3.79	2.07	161.85	88.50
120	3.00	0.13	5.52	3.02	167.37	91.52
170	3.50	0.09	3.48	1.90	170.85	93.42
200	3.75	0.07	1.12	0.61	171.97	94.03
230	4.00	0.06	0.60	0.33	172.57	94.36

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	1.28	-0.15	-1.56	-2.37	-2.78	-3.87

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.28	2.43	1.76	0.97	3.53

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z213 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Brown sand, silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
189.03	176.88	1.13	0.02	#200 - 8.04 #230 - 7.04	1.07	12.02	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.36	0.19	0.36	0.19
3.5	-2.50	5.66	2.22	1.17	2.58	1.36
4	-2.25	4.76	0.66	0.35	3.24	1.71
5	-2.00	4.00	0.68	0.36	3.92	2.07
7	-1.50	2.83	1.12	0.59	5.04	2.66
10	-1.00	2.00	1.65	0.87	6.69	3.53
14	-0.50	1.41	2.12	1.12	8.81	4.65
18	0.00	1.00	2.42	1.28	11.23	5.93
25	0.50	0.71	3.64	1.93	14.87	7.86
35	1.00	0.50	7.92	4.19	22.79	12.05
45	1.50	0.35	11.22	5.94	34.01	17.99
60	2.00	0.25	13.87	7.34	47.88	25.33
80	2.50	0.18	43.93	23.24	91.81	48.57
120	3.00	0.13	54.37	28.76	146.18	77.33
170	3.50	0.09	22.66	11.99	168.84	89.32
200	3.75	0.07	4.99	2.64	173.83	91.96
230	4.00	0.06	1.89	1.00	175.72	92.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.28	2.96	2.52	1.98	1.33	-0.36

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.14	0.23	1.22	-1.97	7.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z213 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Blue/gray shell, sand, silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
128.58	124.60	0.19	0.00	#200 - 3.56 #230 - 3.24	1.08	36.58	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	5.05	3.93	5.05	3.93
5/16"	-3.00	8.00	5.27	4.10	10.32	8.03
3.5	-2.50	5.66	2.75	2.14	13.07	10.17
4	-2.25	4.76	2.83	2.20	15.90	12.37
5	-2.00	4.00	3.98	3.10	19.88	15.47
7	-1.50	2.83	6.40	4.98	26.28	20.45
10	-1.00	2.00	7.67	5.97	33.95	26.42
14	-0.50	1.41	9.66	7.51	43.61	33.93
18	0.00	1.00	11.30	8.79	54.91	42.72
25	0.50	0.71	11.86	9.22	66.77	51.94
35	1.00	0.50	12.17	9.46	78.94	61.40
45	1.50	0.35	10.87	8.45	89.81	69.85
60	2.00	0.25	10.49	8.16	100.30	78.01
80	2.50	0.18	9.97	7.75	110.27	85.76
120	3.00	0.13	9.05	7.04	119.32	92.80
170	3.50	0.09	3.87	3.01	123.19	95.81
200	3.75	0.07	0.81	0.63	124.00	96.44
230	4.00	0.06	0.41	0.32	124.41	96.76

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.37	2.39	1.82	0.39	-1.12	-1.95	-3.37

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.15	0.90	1.9	-0.3	2.25

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z213 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Larger material is shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
161.93	144.90	0.28	0.04	#200 - 11.02 #230 - 10.74	1.51	31.43	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	22.78	14.07	22.78	14.07
5/8"	-4.00	16.00	0.00	0.00	22.78	14.07
11/16"	-3.50	11.31	2.82	1.74	25.60	15.81
5/16"	-3.00	8.00	4.11	2.54	29.71	18.35
3.5	-2.50	5.66	7.32	4.52	37.03	22.87
4	-2.25	4.76	1.82	1.12	38.85	23.99
5	-2.00	4.00	3.39	2.09	42.24	26.08
7	-1.50	2.83	8.07	4.98	50.31	31.06
10	-1.00	2.00	7.77	4.80	58.08	35.86
14	-0.50	1.41	10.40	6.42	68.48	42.28
18	0.00	1.00	7.28	4.50	75.76	46.78
25	0.50	0.71	4.31	2.66	80.07	49.44
35	1.00	0.50	3.65	2.25	83.72	51.69
45	1.50	0.35	4.05	2.50	87.77	54.19
60	2.00	0.25	6.93	4.28	94.70	58.47
80	2.50	0.18	17.56	10.84	112.26	69.31
120	3.00	0.13	23.75	14.67	136.01	83.98
170	3.50	0.09	6.96	4.30	142.97	88.28
200	3.75	0.07	1.13	0.70	144.10	88.98
230	4.00	0.06	0.46	0.28	144.56	89.26

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.00	2.69	0.62	-2.13	-3.46	

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.24	1.18	2.1	0.7	1.88

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z213 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Larger material is shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
166.27	158.36	0.24	0.20	#200 - 5.41 #230 - 5.12	1.35	55.35	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	6.89	4.14	6.89	4.14
5/8"	-4.00	16.00	0.00	0.00	6.89	4.14
11/16"	-3.50	11.31	4.27	2.57	11.16	6.71
5/16"	-3.00	8.00	6.29	3.78	17.45	10.49
3.5	-2.50	5.66	4.53	2.72	21.98	13.21
4	-2.25	4.76	2.44	1.47	24.42	14.68
5	-2.00	4.00	3.10	1.86	27.52	16.54
7	-1.50	2.83	8.66	5.21	36.18	21.75
10	-1.00	2.00	10.94	6.58	47.12	28.33
14	-0.50	1.41	11.15	6.71	58.27	35.04
18	0.00	1.00	9.78	5.88	68.05	40.92
25	0.50	0.71	8.34	5.02	76.39	45.94
35	1.00	0.50	9.02	5.42	85.41	51.36
45	1.50	0.35	9.80	5.89	95.21	57.25
60	2.00	0.25	17.68	10.63	112.89	67.88
80	2.50	0.18	23.25	13.98	136.14	81.86
120	3.00	0.13	17.70	10.65	153.84	92.51
170	3.50	0.09	2.83	1.70	156.67	94.21
200	3.75	0.07	0.64	0.38	157.31	94.59
230	4.00	0.06	0.48	0.29	157.79	94.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.60	2.25	0.87	-1.25	-2.07	-4.00

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.22	0.86	1.93	-0.15	1.98

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: Z214 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.63	145.40	0.93	0.09	#200 - 6.34 #230 - 5.44	0.84	8.14	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.50	0.33	0.50	0.33
4	-2.25	4.76	0.34	0.22	0.84	0.55
5	-2.00	4.00	0.40	0.26	1.24	0.81
7	-1.50	2.83	1.46	0.96	2.70	1.77
10	-1.00	2.00	2.09	1.37	4.79	3.14
14	-0.50	1.41	2.87	1.88	7.66	5.02
18	0.00	1.00	2.65	1.74	10.31	6.76
25	0.50	0.71	3.40	2.23	13.71	8.99
35	1.00	0.50	5.87	3.85	19.58	12.84
45	1.50	0.35	8.01	5.25	27.59	18.09
60	2.00	0.25	11.54	7.56	39.13	25.65
80	2.50	0.18	36.30	23.78	75.43	49.43
120	3.00	0.13	43.84	28.72	119.27	78.15
170	3.50	0.09	19.54	12.80	138.81	90.95
200	3.75	0.07	4.14	2.71	142.95	93.66
230	4.00	0.06	1.38	0.90	144.33	94.56

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.23	2.95	2.51	1.96	1.30	-0.51

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.15	0.23	1.17	-1.69	6

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z214 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
155.97	155.89	0.29	0.29	#200 - 0.61 #230 - 0.54	1.41	13.81	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	5.42	3.48	5.42	3.48
3.5	-2.50	5.66	9.52	6.10	14.94	9.58
4	-2.25	4.76	4.91	3.15	19.85	12.73
5	-2.00	4.00	5.42	3.48	25.27	16.21
7	-1.50	2.83	16.63	10.66	41.90	26.87
10	-1.00	2.00	23.24	14.90	65.14	41.77
14	-0.50	1.41	24.41	15.65	89.55	57.42
18	0.00	1.00	21.51	13.79	111.06	71.21
25	0.50	0.71	18.05	11.57	129.11	82.78
35	1.00	0.50	11.61	7.44	140.72	90.22
45	1.50	0.35	5.46	3.50	146.18	93.72
60	2.00	0.25	2.29	1.47	148.47	95.19
80	2.50	0.18	2.30	1.47	150.77	96.66
120	3.00	0.13	3.11	1.99	153.88	98.65
170	3.50	0.09	0.97	0.62	154.85	99.27
200	3.75	0.07	0.19	0.12	155.04	99.39
230	4.00	0.06	0.11	0.07	155.15	99.46

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.94	0.58	0.16	-0.74	-1.59	-2.02	-2.88

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.69	1.61	1.35	0.41	3.23

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Project Name: Carteret County
Sample Name: Z214 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
140.06	104.23	2.43	0.03	#200 - 30.14 #230 - 27.34	3.07	17.14	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.19	0.14	0.19	0.14
4	-2.25	4.76	0.40	0.29	0.59	0.43
5	-2.00	4.00	0.05	0.04	0.64	0.47
7	-1.50	2.83	0.82	0.59	1.46	1.06
10	-1.00	2.00	0.56	0.40	2.02	1.46
14	-0.50	1.41	0.83	0.59	2.85	2.05
18	0.00	1.00	1.32	0.94	4.17	2.99
25	0.50	0.71	1.78	1.27	5.95	4.26
35	1.00	0.50	2.29	1.64	8.24	5.90
45	1.50	0.35	2.13	1.52	10.37	7.42
60	2.00	0.25	3.20	2.28	13.57	9.70
80	2.50	0.18	14.16	10.11	27.73	19.81
120	3.00	0.13	39.53	28.22	67.26	48.03
170	3.50	0.09	23.49	16.77	90.75	64.80
200	3.75	0.07	7.09	5.06	97.84	69.86
230	4.00	0.06	3.92	2.80	101.76	72.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.06	2.59	2.31	0.73

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.59	0.17	1.04	-2.3	9.46

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z214 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.74	163.89	0.29	0.11	#200 - 3.31 #230 - 3.12	1.21	35.15	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.14	1.27	2.14	1.27
11/16"	-3.50	11.31	4.59	2.72	6.73	3.99
5/16"	-3.00	8.00	1.95	1.16	8.68	5.15
3.5	-2.50	5.66	5.13	3.04	13.81	8.19
4	-2.25	4.76	1.59	0.94	15.40	9.13
5	-2.00	4.00	2.95	1.75	18.35	10.88
7	-1.50	2.83	7.52	4.46	25.87	15.34
10	-1.00	2.00	9.07	5.38	34.94	20.72
14	-0.50	1.41	12.08	7.16	47.02	27.88
18	0.00	1.00	12.89	7.64	59.91	35.52
25	0.50	0.71	12.31	7.30	72.22	42.82
35	1.00	0.50	14.75	8.74	86.97	51.56
45	1.50	0.35	21.24	12.59	108.21	64.15
60	2.00	0.25	24.31	14.41	132.52	78.56
80	2.50	0.18	16.48	9.77	149.00	88.33
120	3.00	0.13	10.19	6.04	159.19	94.37
170	3.50	0.09	3.25	1.93	162.44	96.30
200	3.75	0.07	0.65	0.39	163.09	96.69
230	4.00	0.06	0.32	0.19	163.41	96.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.16	2.28	1.88	0.91	-0.70	-1.44	-3.06

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.42	0.75	1.79	-0.66	2.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Project Name: Carteret County
Sample Name: Z214 #5
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
145.56	130.20	0.54	0.05	#200 - 11.48 #230 - 10.97	1.52	16.22	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.97	1.35	1.97	1.35
3.5	-2.50	5.66	2.19	1.50	4.16	2.85
4	-2.25	4.76	1.36	0.93	5.52	3.78
5	-2.00	4.00	1.06	0.73	6.58	4.51
7	-1.50	2.83	3.19	2.19	9.77	6.70
10	-1.00	2.00	2.71	1.86	12.48	8.56
14	-0.50	1.41	3.58	2.46	16.06	11.02
18	0.00	1.00	2.84	1.95	18.90	12.97
25	0.50	0.71	2.87	1.97	21.77	14.94
35	1.00	0.50	4.36	3.00	26.13	17.94
45	1.50	0.35	7.74	5.32	33.87	23.26
60	2.00	0.25	14.98	10.29	48.85	33.55
80	2.50	0.18	41.63	28.60	90.48	62.15
120	3.00	0.13	27.77	19.08	118.25	81.23
170	3.50	0.09	8.70	5.98	126.95	87.21
200	3.75	0.07	1.90	1.31	128.85	88.52
230	4.00	0.06	0.74	0.51	129.59	89.03

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.23	2.84	2.29	1.58	0.68	-1.89

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.68	0.31	1.55	-1.59	4.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z215 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
173.21	164.02	0.13	0.14	#200 - 6.03 #230 - 5.53	1.05	8.32	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.56	0.32	0.56	0.32
3.5	-2.50	5.66	0.17	0.10	0.73	0.42
4	-2.25	4.76	0.00	0.00	0.73	0.42
5	-2.00	4.00	0.25	0.14	0.98	0.56
7	-1.50	2.83	0.26	0.15	1.24	0.71
10	-1.00	2.00	0.75	0.43	1.99	1.14
14	-0.50	1.41	1.45	0.84	3.44	1.98
18	0.00	1.00	2.41	1.39	5.85	3.37
25	0.50	0.71	5.38	3.11	11.23	6.48
35	1.00	0.50	9.68	5.59	20.91	12.07
45	1.50	0.35	9.74	5.62	30.65	17.69
60	2.00	0.25	11.66	6.73	42.31	24.42
80	2.50	0.18	62.58	36.13	104.89	60.55
120	3.00	0.13	39.67	22.90	144.56	83.45
170	3.50	0.09	15.26	8.81	159.82	92.26
200	3.75	0.07	2.96	1.71	162.78	93.97
230	4.00	0.06	0.87	0.50	163.65	94.47

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.03	2.82	2.35	2.01	1.35	0.26

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.13	0.23	0.97	-1.75	7.88

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z215 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Gray sand, oyster shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
208.54	186.84	0.51	0.03	#200 - 11.64 #230 - 10.69	1.97	14.47	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	12.50	5.99	12.50	5.99
5/8"	-4.00	16.00	4.46	2.14	16.96	8.13
11/16"	-3.50	11.31	3.45	1.65	20.41	9.78
5/16"	-3.00	8.00	5.74	2.75	26.15	12.53
3.5	-2.50	5.66	5.40	2.59	31.55	15.12
4	-2.25	4.76	2.02	0.97	33.57	16.09
5	-2.00	4.00	2.98	1.43	36.55	17.52
7	-1.50	2.83	5.88	2.82	42.43	20.34
10	-1.00	2.00	6.96	3.34	49.39	23.68
14	-0.50	1.41	7.80	3.74	57.19	27.42
18	0.00	1.00	9.13	4.38	66.32	31.80
25	0.50	0.71	9.90	4.75	76.22	36.55
35	1.00	0.50	9.17	4.40	85.39	40.95
45	1.50	0.35	9.22	4.42	94.61	45.37
60	2.00	0.25	11.66	5.59	106.27	50.96
80	2.50	0.18	23.15	11.10	129.42	62.06
120	3.00	0.13	34.19	16.39	163.61	78.45
170	3.50	0.09	16.62	7.97	180.23	86.42
200	3.75	0.07	4.05	1.94	184.28	88.36
230	4.00	0.06	1.98	0.95	186.26	89.31

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.35	2.89	1.91	-0.82	-2.27	

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.57	0.67	2.13	-0.28	2.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z215 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt, fine gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
70.82	11.29	0.24	0.00	#200 - 86.12 #230 - 84.41	5.52	7.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.05	0.07	0.05	0.07
10	-1.00	2.00	0.08	0.11	0.13	0.18
14	-0.50	1.41	0.18	0.25	0.31	0.43
18	0.00	1.00	0.10	0.14	0.41	0.57
25	0.50	0.71	0.11	0.16	0.52	0.73
35	1.00	0.50	0.08	0.11	0.60	0.84
45	1.50	0.35	0.13	0.18	0.73	1.02
60	2.00	0.25	0.18	0.25	0.91	1.27
80	2.50	0.18	0.33	0.47	1.24	1.74
120	3.00	0.13	1.92	2.71	3.16	4.45
170	3.50	0.09	4.72	6.66	7.88	11.11
200	3.75	0.07	1.96	2.77	9.84	13.88
230	4.00	0.06	1.21	1.71	11.05	15.59

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.04

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	3.02	0.12	0.97	-2.8	11.49

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z215 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM W/ GRAVEL		Gray sand, shell, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
132.89	112.65	0.22	0.08	#200 - 16.33 #230 - 15.46	2.41	7.16	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	2.47	1.86	2.47	1.86
5/8"	-4.00	16.00	0.00	0.00	2.47	1.86
11/16"	-3.50	11.31	4.09	3.08	6.56	4.94
5/16"	-3.00	8.00	3.13	2.36	9.69	7.30
3.5	-2.50	5.66	7.51	5.65	17.20	12.95
4	-2.25	4.76	2.89	2.17	20.09	15.12
5	-2.00	4.00	4.13	3.11	24.22	18.23
7	-1.50	2.83	11.87	8.93	36.09	27.16
10	-1.00	2.00	9.76	7.34	45.85	34.50
14	-0.50	1.41	7.24	5.45	53.09	39.95
18	0.00	1.00	5.23	3.94	58.32	43.89
25	0.50	0.71	5.64	4.24	63.96	48.13
35	1.00	0.50	9.03	6.80	72.99	54.93
45	1.50	0.35	9.14	6.88	82.13	61.81
60	2.00	0.25	7.84	5.90	89.97	67.71
80	2.50	0.18	7.00	5.27	96.97	72.98
120	3.00	0.13	6.82	5.13	103.79	78.11
170	3.50	0.09	5.53	4.16	109.32	82.27
200	3.75	0.07	1.86	1.40	111.18	83.67
230	4.00	0.06	1.15	0.87	112.33	84.54

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.84	2.70	0.64	-1.62	-2.18	-3.49

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.14	1.10	2.05	0.19	1.94

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z215 #5

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
167.50	151.79	0.14	0.25	#200 - 10.10 #230 - 9.69	0.90	1.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.01	0.01	0.01	0.01
5	-2.00	4.00	0.00	0.00	0.01	0.01
7	-1.50	2.83	0.18	0.11	0.19	0.12
10	-1.00	2.00	0.17	0.10	0.36	0.22
14	-0.50	1.41	0.50	0.30	0.86	0.52
18	0.00	1.00	0.63	0.38	1.49	0.90
25	0.50	0.71	1.69	1.01	3.18	1.91
35	1.00	0.50	6.04	3.61	9.22	5.52
45	1.50	0.35	19.81	11.83	29.03	17.35
60	2.00	0.25	40.90	24.42	69.93	41.77
80	2.50	0.18	50.28	30.02	120.21	71.79
120	3.00	0.13	21.60	12.90	141.81	84.69
170	3.50	0.09	6.94	4.14	148.75	88.83
200	3.75	0.07	1.79	1.07	150.54	89.90
230	4.00	0.06	0.69	0.41	151.23	90.31

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.97	2.62	2.14	1.66	1.44	0.93

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.01	0.25	0.7	-0.61	5.28

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z231 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
183.95	166.21	0.16	0.07	#200 - 11.24 #230 - 9.82	0.60	11.58	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.55	0.30	0.55	0.30
3.5	-2.50	5.66	1.38	0.75	1.93	1.05
4	-2.25	4.76	0.58	0.32	2.51	1.37
5	-2.00	4.00	1.02	0.55	3.53	1.92
7	-1.50	2.83	2.58	1.40	6.11	3.32
10	-1.00	2.00	2.32	1.26	8.43	4.58
14	-0.50	1.41	2.45	1.33	10.88	5.91
18	0.00	1.00	2.80	1.52	13.68	7.43
25	0.50	0.71	2.86	1.55	16.54	8.98
35	1.00	0.50	3.93	2.14	20.47	11.12
45	1.50	0.35	6.37	3.46	26.84	14.58
60	2.00	0.25	11.89	6.46	38.73	21.04
80	2.50	0.18	36.44	19.81	75.17	40.85
120	3.00	0.13	56.33	30.62	131.50	71.47
170	3.50	0.09	26.29	14.29	157.79	85.76
200	3.75	0.07	5.52	3.00	163.31	88.76
230	4.00	0.06	2.61	1.42	165.92	90.18

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.44	3.12	2.65	2.10	1.61	-0.84

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.2	0.22	1.3	-2.01	7.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z231 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Gray sand, rock, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
163.78	154.81	0.20	0.42	#200 - 6.19 #230 - 6.01	11.89	22.02	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	11.38	6.95	11.38	6.95
5/16"	-3.00	8.00	10.64	6.50	22.02	13.45
3.5	-2.50	5.66	5.15	3.14	27.17	16.59
4	-2.25	4.76	5.45	3.33	32.62	19.92
5	-2.00	4.00	6.60	4.03	39.22	23.95
7	-1.50	2.83	11.90	7.27	51.12	31.22
10	-1.00	2.00	14.01	8.55	65.13	39.77
14	-0.50	1.41	16.03	9.79	81.16	49.56
18	0.00	1.00	15.30	9.34	96.46	58.90
25	0.50	0.71	9.00	5.50	105.46	64.40
35	1.00	0.50	6.33	3.86	111.79	68.26
45	1.50	0.35	5.21	3.18	117.00	71.44
60	2.00	0.25	6.35	3.88	123.35	75.32
80	2.50	0.18	14.43	8.81	137.78	84.13
120	3.00	0.13	11.79	7.20	149.57	91.33
170	3.50	0.09	3.36	2.05	152.93	93.38
200	3.75	0.07	0.70	0.43	153.63	93.81
230	4.00	0.06	0.29	0.18	153.92	93.99

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.49	1.96	-0.48	-1.93	-2.59	-3.71

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.44	1.36	2.06	0.15	1.97

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z231 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Fine tan sand, organic material

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
183.48	167.61	0.07	0.08	#200 - 9.37 #230 - 8.78	1.94	11.89	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.46	0.25	0.46	0.25
10	-1.00	2.00	0.26	0.14	0.72	0.39
14	-0.50	1.41	0.36	0.20	1.08	0.59
18	0.00	1.00	0.53	0.29	1.61	0.88
25	0.50	0.71	0.90	0.49	2.51	1.37
35	1.00	0.50	1.96	1.07	4.47	2.44
45	1.50	0.35	5.09	2.77	9.56	5.21
60	2.00	0.25	28.99	15.80	38.55	21.01
80	2.50	0.18	78.46	42.76	117.01	63.77
120	3.00	0.13	38.22	20.83	155.23	84.60
170	3.50	0.09	9.31	5.07	164.54	89.67
200	3.75	0.07	1.77	0.96	166.31	90.63
230	4.00	0.06	1.08	0.59	167.39	91.22

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.99	2.77	2.34	2.05	1.84	1.46

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.27	0.21	0.61	-1.61	11.5

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z232 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
163.48	142.82	0.22	0.09	#200 - 13.57 #230 - 12.87	2.23	10.19	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	6.86	4.20	6.86	4.20
11/16"	-3.50	11.31	0.00	0.00	6.86	4.20
5/16"	-3.00	8.00	0.33	0.20	7.19	4.40
3.5	-2.50	5.66	1.15	0.70	8.34	5.10
4	-2.25	4.76	0.87	0.53	9.21	5.63
5	-2.00	4.00	0.78	0.48	9.99	6.11
7	-1.50	2.83	3.25	1.99	13.24	8.10
10	-1.00	2.00	2.42	1.48	15.66	9.58
14	-0.50	1.41	3.99	2.44	19.65	12.02
18	0.00	1.00	4.29	2.62	23.94	14.64
25	0.50	0.71	5.83	3.57	29.77	18.21
35	1.00	0.50	9.74	5.96	39.51	24.17
45	1.50	0.35	9.03	5.52	48.54	29.69
60	2.00	0.25	9.56	5.85	58.10	35.54
80	2.50	0.18	34.71	21.23	92.81	56.77
120	3.00	0.13	31.66	19.37	124.47	76.14
170	3.50	0.09	13.67	8.36	138.14	84.50
200	3.75	0.07	3.16	1.93	141.30	86.43
230	4.00	0.06	1.15	0.70	142.45	87.13

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.47	2.97	2.34	1.08	0.19	-2.57

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.5	0.35	1.88	-1.57	4.92

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z232 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand, silt, rocks, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
127.56	82.95	0.14	0.00	#200 - 35.31 #230 - 35.09	7.65	16.04	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.60	0.47	0.60	0.47
3.5	-2.50	5.66	5.46	4.28	6.06	4.75
4	-2.25	4.76	3.96	3.10	10.02	7.85
5	-2.00	4.00	3.31	2.59	13.33	10.44
7	-1.50	2.83	12.16	9.53	25.49	19.97
10	-1.00	2.00	12.02	9.42	37.51	29.39
14	-0.50	1.41	9.92	7.78	47.43	37.17
18	0.00	1.00	7.00	5.49	54.43	42.66
25	0.50	0.71	4.04	3.17	58.47	45.83
35	1.00	0.50	2.44	1.91	60.91	47.74
45	1.50	0.35	1.92	1.51	62.83	49.25
60	2.00	0.25	2.16	1.69	64.99	50.94
80	2.50	0.18	4.42	3.47	69.41	54.41
120	3.00	0.13	9.10	7.13	78.51	61.54
170	3.50	0.09	3.41	2.67	81.92	64.21
200	3.75	0.07	0.61	0.48	82.53	64.69
230	4.00	0.06	0.28	0.22	82.81	64.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			1.72	-1.23	-1.71	-2.48

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.25	1.19	1.88	0.59	2.07

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z232 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
51.85	8.59	0.03	0.00	#200 - 83.65 #230 - 83.50	14.72	10.21	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.12	0.23	0.12	0.23
7	-1.50	2.83	0.75	1.45	0.87	1.68
10	-1.00	2.00	0.40	0.77	1.27	2.45
14	-0.50	1.41	0.56	1.08	1.83	3.53
18	0.00	1.00	0.26	0.50	2.09	4.03
25	0.50	0.71	0.26	0.50	2.35	4.53
35	1.00	0.50	0.33	0.64	2.68	5.17
45	1.50	0.35	0.52	1.00	3.20	6.17
60	2.00	0.25	0.69	1.33	3.89	7.50
80	2.50	0.18	1.35	2.60	5.24	10.10
120	3.00	0.13	2.18	4.20	7.42	14.30
170	3.50	0.09	0.86	1.66	8.28	15.96
200	3.75	0.07	0.20	0.39	8.48	16.35
230	4.00	0.06	0.08	0.15	8.56	16.50

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					3.53	0.87

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.46	0.36	1.71	-0.77	2.19

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z232 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
64.17	51.45	0.22	0.00	#200 - 22.28 #230 - 20.18	8.59	2.33	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.24	0.37	0.24	0.37
10	-1.00	2.00	0.30	0.47	0.54	0.84
14	-0.50	1.41	0.40	0.62	0.94	1.46
18	0.00	1.00	0.38	0.59	1.32	2.05
25	0.50	0.71	0.35	0.55	1.67	2.60
35	1.00	0.50	0.35	0.55	2.02	3.15
45	1.50	0.35	0.42	0.65	2.44	3.80
60	2.00	0.25	0.82	1.28	3.26	5.08
80	2.50	0.18	8.94	13.93	12.20	19.01
120	3.00	0.13	22.12	34.47	34.32	53.48
170	3.50	0.09	12.08	18.82	46.40	72.30
200	3.75	0.07	3.48	5.42	49.88	77.72
230	4.00	0.06	1.35	2.10	51.23	79.82

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.62	2.95	2.59	2.39	1.97

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.72	0.15	0.8	-2.69	13.44

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z232 #5

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Fine tan sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
180.56	160.95	0.28	0.06	#200 - 13.52 #230 - 11.08	0.93	1.27	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.05	0.03	0.05	0.03
10	-1.00	2.00	0.14	0.08	0.19	0.11
14	-0.50	1.41	0.60	0.33	0.79	0.44
18	0.00	1.00	1.22	0.68	2.01	1.12
25	0.50	0.71	2.17	1.20	4.18	2.32
35	1.00	0.50	3.61	2.00	7.79	4.32
45	1.50	0.35	7.53	4.17	15.32	8.49
60	2.00	0.25	16.71	9.25	32.03	17.74
80	2.50	0.18	40.31	22.32	72.34	40.06
120	3.00	0.13	52.52	29.09	124.86	69.15
170	3.50	0.09	24.40	13.51	149.26	82.66
200	3.75	0.07	6.90	3.82	156.16	86.48
230	4.00	0.06	4.40	2.44	160.56	88.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.59	3.22	2.67	2.16	1.91	1.08

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.47	0.18	0.78	-1.09	5.34

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z233 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
150.92	148.10	0.01	0.20	#200 - 2.19 #230 - 2.09	0.87	47.01	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	12.53	8.30	12.53	8.30
11/16"	-3.50	11.31	10.23	6.78	22.76	15.08
5/16"	-3.00	8.00	3.18	2.11	25.94	17.19
3.5	-2.50	5.66	9.44	6.25	35.38	23.44
4	-2.25	4.76	1.82	1.21	37.20	24.65
5	-2.00	4.00	2.32	1.54	39.52	26.19
7	-1.50	2.83	5.22	3.46	44.74	29.65
10	-1.00	2.00	4.82	3.19	49.56	32.84
14	-0.50	1.41	5.53	3.66	55.09	36.50
18	0.00	1.00	5.90	3.91	60.99	40.41
25	0.50	0.71	8.41	5.57	69.40	45.98
35	1.00	0.50	15.58	10.32	84.98	56.30
45	1.50	0.35	13.83	9.16	98.81	65.46
60	2.00	0.25	11.91	7.89	110.72	73.35
80	2.50	0.18	18.68	12.38	129.40	85.73
120	3.00	0.13	13.65	9.04	143.05	94.77
170	3.50	0.09	4.04	2.68	147.09	97.45
200	3.75	0.07	0.55	0.36	147.64	97.81
230	4.00	0.06	0.15	0.10	147.79	97.91

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.04	2.43	2.07	0.69	-2.19	-3.28	-4.10

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.06	1.04	2.36	-0.45	1.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z233 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
158.89	136.80	0.05	0.00	#200 - 14.89 #230 - 13.95	1.38	8.59	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	4.24	2.67	4.24	2.67
5/16"	-3.00	8.00	0.00	0.00	4.24	2.67
3.5	-2.50	5.66	0.34	0.21	4.58	2.88
4	-2.25	4.76	0.11	0.07	4.69	2.95
5	-2.00	4.00	0.07	0.04	4.76	2.99
7	-1.50	2.83	0.38	0.24	5.14	3.23
10	-1.00	2.00	0.50	0.31	5.64	3.54
14	-0.50	1.41	0.81	0.51	6.45	4.05
18	0.00	1.00	1.25	0.79	7.70	4.84
25	0.50	0.71	1.80	1.13	9.50	5.97
35	1.00	0.50	2.86	1.80	12.36	7.77
45	1.50	0.35	4.22	2.66	16.58	10.43
60	2.00	0.25	7.22	4.54	23.80	14.97
80	2.50	0.18	29.59	18.62	53.39	33.59
120	3.00	0.13	58.01	36.51	111.40	70.10
170	3.50	0.09	20.00	12.59	131.40	82.69
200	3.75	0.07	3.85	2.42	135.25	85.11
230	4.00	0.06	1.50	0.94	136.75	86.05

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.64	3.19	2.72	2.27	2.03	0.07

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.28	0.21	1.37	-3.03	13

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
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Project Name: Carteret County
Sample Name: Z233 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Gray sand, rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
170.72	162.76	0.09	0.17	#200 - 5.04 #230 - 4.88	0.97	11.56	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	23.69	13.88	23.69	13.88
5/16"	-3.00	8.00	14.37	8.42	38.06	22.30
3.5	-2.50	5.66	5.02	2.94	43.08	25.24
4	-2.25	4.76	2.72	1.59	45.80	26.83
5	-2.00	4.00	4.98	2.92	50.78	29.75
7	-1.50	2.83	14.07	8.24	64.85	37.99
10	-1.00	2.00	12.85	7.53	77.70	45.52
14	-0.50	1.41	12.82	7.51	90.52	53.03
18	0.00	1.00	7.92	4.64	98.44	57.67
25	0.50	0.71	5.31	3.11	103.75	60.78
35	1.00	0.50	6.03	3.53	109.78	64.31
45	1.50	0.35	5.91	3.46	115.69	67.77
60	2.00	0.25	6.94	4.07	122.63	71.84
80	2.50	0.18	21.54	12.62	144.17	84.46
120	3.00	0.13	13.29	7.78	157.46	92.24
170	3.50	0.09	3.93	2.30	161.39	94.54
200	3.75	0.07	0.72	0.42	162.11	94.96
230	4.00	0.06	0.27	0.16	162.38	95.12

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.81	2.48	2.13	-0.70	-2.54	-3.37	-3.98

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.57	1.48	2.33	0.12	1.64

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z233 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Tan sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.86	139.98	0.11	0.06	#200 - 12.60 #230 - 11.47	0.98	1.51	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.09	0.06	0.09	0.06
10	-1.00	2.00	0.02	0.01	0.11	0.07
14	-0.50	1.41	0.34	0.22	0.45	0.29
18	0.00	1.00	0.35	0.22	0.80	0.51
25	0.50	0.71	0.67	0.42	1.47	0.93
35	1.00	0.50	1.33	0.84	2.80	1.77
45	1.50	0.35	2.70	1.71	5.50	3.48
60	2.00	0.25	8.23	5.21	13.73	8.69
80	2.50	0.18	50.99	32.30	64.72	40.99
120	3.00	0.13	50.53	32.01	115.25	73.00
170	3.50	0.09	18.95	12.00	134.20	85.00
200	3.75	0.07	3.79	2.40	137.99	87.40
230	4.00	0.06	1.78	1.13	139.77	88.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.46	3.08	2.64	2.25	2.11	1.65

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.54	0.17	0.59	-1.28	8.79

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z233 #5

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Coarser tan quartz sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
153.74	138.99	0.09	0.47	#200 - 10.29 #230 - 10.13	1.10	1.78	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.22	0.14	0.22	0.14
5	-2.00	4.00	0.00	0.00	0.22	0.14
7	-1.50	2.83	1.03	0.67	1.25	0.81
10	-1.00	2.00	1.68	1.09	2.93	1.90
14	-0.50	1.41	5.85	3.81	8.78	5.71
18	0.00	1.00	10.45	6.80	19.23	12.51
25	0.50	0.71	13.53	8.80	32.76	21.31
35	1.00	0.50	14.77	9.61	47.53	30.92
45	1.50	0.35	13.01	8.46	60.54	39.38
60	2.00	0.25	21.12	13.74	81.66	53.12
80	2.50	0.18	37.72	24.53	119.38	77.65
120	3.00	0.13	14.84	9.65	134.22	87.30
170	3.50	0.09	3.03	1.97	137.25	89.27
200	3.75	0.07	0.67	0.44	137.92	89.71
230	4.00	0.06	0.25	0.16	138.17	89.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.83	2.45	1.89	0.69	0.20	-0.59

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.41	0.38	1.13	-0.6	2.62

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z234 #1
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
167.09	150.18	0.07	0.14	#200 - 10.95 #230 - 10.32	1.63	17.73	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.23	0.74	1.23	0.74
5/16"	-3.00	8.00	0.00	0.00	1.23	0.74
3.5	-2.50	5.66	0.86	0.51	2.09	1.25
4	-2.25	4.76	0.00	0.00	2.09	1.25
5	-2.00	4.00	1.26	0.75	3.35	2.00
7	-1.50	2.83	2.65	1.59	6.00	3.59
10	-1.00	2.00	3.08	1.84	9.08	5.43
14	-0.50	1.41	4.53	2.71	13.61	8.14
18	0.00	1.00	6.43	3.85	20.04	11.99
25	0.50	0.71	7.09	4.24	27.13	16.23
35	1.00	0.50	8.69	5.20	35.82	21.43
45	1.50	0.35	10.18	6.09	46.00	27.52
60	2.00	0.25	14.41	8.62	60.41	36.14
80	2.50	0.18	35.67	21.35	96.08	57.49
120	3.00	0.13	38.24	22.89	134.32	80.38
170	3.50	0.09	12.37	7.40	146.69	87.78
200	3.75	0.07	2.13	1.27	148.82	89.05
230	4.00	0.06	1.05	0.63	149.87	89.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.24	2.88	2.32	1.29	0.47	-1.12

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.74	0.30	1.42	-1.38	4.69

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z234 #2
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
161.72	147.17	0.14	0.15	#200 - 9.45 #230 - 9.24	2.27	32.47	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	8.25	5.10	8.25	5.10
11/16"	-3.50	11.31	3.43	2.12	11.68	7.22
5/16"	-3.00	8.00	7.36	4.55	19.04	11.77
3.5	-2.50	5.66	13.24	8.19	32.28	19.96
4	-2.25	4.76	5.32	3.29	37.60	23.25
5	-2.00	4.00	5.91	3.65	43.51	26.90
7	-1.50	2.83	13.88	8.58	57.39	35.48
10	-1.00	2.00	12.74	7.88	70.13	43.36
14	-0.50	1.41	15.35	9.49	85.48	52.85
18	0.00	1.00	11.71	7.24	97.19	60.09
25	0.50	0.71	7.33	4.53	104.52	64.62
35	1.00	0.50	6.06	3.75	110.58	68.37
45	1.50	0.35	5.44	3.36	116.02	71.73
60	2.00	0.25	4.99	3.09	121.01	74.82
80	2.50	0.18	9.09	5.62	130.10	80.44
120	3.00	0.13	11.35	7.02	141.45	87.46
170	3.50	0.09	4.16	2.57	145.61	90.03
200	3.75	0.07	0.84	0.52	146.45	90.55
230	4.00	0.06	0.34	0.21	146.79	90.76

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.75	2.02	-0.65	-2.13	-2.74	-4.00

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.65	1.57	2.11	0.27	2.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z234 #3

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Coarser gray sand, rocks

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
216.55	205.89	0.05	0.48	#200 - 5.51 #230 - 5.40	0.73	2.19	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	10.14	4.68	10.14	4.68
11/16"	-3.50	11.31	8.39	3.87	18.53	8.55
5/16"	-3.00	8.00	4.82	2.23	23.35	10.78
3.5	-2.50	5.66	4.74	2.19	28.09	12.97
4	-2.25	4.76	2.16	1.00	30.25	13.97
5	-2.00	4.00	3.96	1.83	34.21	15.80
7	-1.50	2.83	9.98	4.61	44.19	20.41
10	-1.00	2.00	14.53	6.71	58.72	27.12
14	-0.50	1.41	15.44	7.13	74.16	34.25
18	0.00	1.00	16.67	7.70	90.83	41.95
25	0.50	0.71	23.12	10.68	113.95	52.63
35	1.00	0.50	32.84	15.17	146.79	67.80
45	1.50	0.35	24.15	11.15	170.94	78.95
60	2.00	0.25	11.75	5.43	182.69	84.38
80	2.50	0.18	9.48	4.38	192.17	88.76
120	3.00	0.13	9.16	4.23	201.33	92.99
170	3.50	0.09	2.73	1.26	204.06	94.25
200	3.75	0.07	0.51	0.24	204.57	94.49
230	4.00	0.06	0.24	0.11	204.81	94.60

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	1.97	1.32	0.38	-1.16	-1.98	-3.96

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.13	1.09	1.87	-0.54	2.64

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z234 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Fine gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.19	140.68	0.22	0.07	#200 - 9.72 #230 - 8.99	1.06	2.26	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.30	0.19	0.30	0.19
4	-2.25	4.76	0.74	0.48	1.04	0.67
5	-2.00	4.00	0.55	0.36	1.59	1.03
7	-1.50	2.83	1.39	0.90	2.98	1.93
10	-1.00	2.00	1.94	1.26	4.92	3.19
14	-0.50	1.41	4.20	2.72	9.12	5.91
18	0.00	1.00	3.36	2.18	12.48	8.09
25	0.50	0.71	3.10	2.01	15.58	10.10
35	1.00	0.50	4.14	2.68	19.72	12.78
45	1.50	0.35	7.86	5.10	27.58	17.88
60	2.00	0.25	20.36	13.20	47.94	31.08
80	2.50	0.18	46.21	29.97	94.15	61.05
120	3.00	0.13	27.72	17.98	121.87	79.03
170	3.50	0.09	14.25	9.24	136.12	88.27
200	3.75	0.07	3.10	2.01	139.22	90.28
230	4.00	0.06	1.13	0.73	140.35	91.01

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.27	2.89	2.32	1.77	1.32	-0.67

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.99	0.25	1.17	-1.57	5.63

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z235 #1

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Shell sand, rock, silt balls

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
177.46	160.06	0.50	0.00	#200 - 10.71 #230 - 10.08	4.60	18.46	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	4.75	2.68	4.75	2.68
5/16"	-3.00	8.00	1.24	0.70	5.99	3.38
3.5	-2.50	5.66	1.95	1.10	7.94	4.48
4	-2.25	4.76	1.62	0.91	9.56	5.39
5	-2.00	4.00	3.56	2.01	13.12	7.40
7	-1.50	2.83	7.91	4.46	21.03	11.86
10	-1.00	2.00	8.18	4.61	29.21	16.47
14	-0.50	1.41	7.32	4.12	36.53	20.59
18	0.00	1.00	6.43	3.62	42.96	24.21
25	0.50	0.71	6.42	3.62	49.38	27.83
35	1.00	0.50	7.25	4.09	56.63	31.92
45	1.50	0.35	8.54	4.81	65.17	36.73
60	2.00	0.25	12.09	6.81	77.26	43.54
80	2.50	0.18	32.49	18.31	109.75	61.85
120	3.00	0.13	34.89	19.66	144.64	81.51
170	3.50	0.09	11.43	6.44	156.07	87.95
200	3.75	0.07	2.37	1.34	158.44	89.29
230	4.00	0.06	1.12	0.63	159.56	89.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.19	2.83	2.18	0.11	-1.05	-2.36

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.18	0.44	1.92	-0.93	2.76

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z235 #2

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Sand, little silty organic matter

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
146.96	135.83	0.71	-0.05	#200 - 8.63 #230 - 8.00	1.31	4.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.10	0.07	0.10	0.07
7	-1.50	2.83	0.62	0.42	0.72	0.49
10	-1.00	2.00	0.85	0.58	1.57	1.07
14	-0.50	1.41	1.06	0.72	2.63	1.79
18	0.00	1.00	1.41	0.96	4.04	2.75
25	0.50	0.71	2.98	2.03	7.02	4.78
35	1.00	0.50	5.49	3.74	12.51	8.52
45	1.50	0.35	7.08	4.82	19.59	13.34
60	2.00	0.25	10.31	7.02	29.90	20.36
80	2.50	0.18	61.05	41.54	90.95	61.90
120	3.00	0.13	31.01	21.10	121.96	83.00
170	3.50	0.09	10.24	6.97	132.20	89.97
200	3.75	0.07	2.06	1.40	134.26	91.37
230	4.00	0.06	0.93	0.63	135.19	92.00

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.07	2.81	2.36	2.06	1.69	0.53

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.18	0.22	0.85	-1.71	7.46

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z235 #3
Analysis Date: 04-05-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM W/ GRAVEL		Brown sand, white shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.66	149.34	0.30	0.00	#200 - 5.91 #230 - 5.48	1.37	14.39	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	5.43	3.44	5.43	3.44
5/8"	-4.00	16.00	4.11	2.61	9.54	6.05
11/16"	-3.50	11.31	1.56	0.99	11.10	7.04
5/16"	-3.00	8.00	15.10	9.58	26.20	16.62
3.5	-2.50	5.66	5.77	3.66	31.97	20.28
4	-2.25	4.76	2.44	1.55	34.41	21.83
5	-2.00	4.00	2.90	1.84	37.31	23.67
7	-1.50	2.83	4.55	2.89	41.86	26.56
10	-1.00	2.00	4.09	2.59	45.95	29.15
14	-0.50	1.41	3.36	2.13	49.31	31.28
18	0.00	1.00	2.38	1.51	51.69	32.79
25	0.50	0.71	1.74	1.10	53.43	33.89
35	1.00	0.50	1.52	0.96	54.95	34.85
45	1.50	0.35	1.82	1.15	56.77	36.00
60	2.00	0.25	6.40	4.06	63.17	40.06
80	2.50	0.18	44.92	28.49	108.09	68.55
120	3.00	0.13	30.96	19.64	139.05	88.19
170	3.50	0.09	8.06	5.11	147.11	93.30
200	3.75	0.07	1.25	0.79	148.36	94.09
230	4.00	0.06	0.68	0.43	149.04	94.52

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.89	2.66	2.17	-1.77	-3.03	-4.10

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.64	0.64	2.39	-0.61	1.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z235 #4

Analysis Date: 04-05-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Sand, silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.88	123.02	0.94	-0.01	#200 - 10.82 #230 - 9.49	0.89	3.62	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.21	0.16	0.21	0.16
5	-2.00	4.00	0.00	0.00	0.21	0.16
7	-1.50	2.83	0.19	0.14	0.40	0.30
10	-1.00	2.00	0.37	0.27	0.77	0.57
14	-0.50	1.41	0.41	0.30	1.18	0.87
18	0.00	1.00	0.32	0.24	1.50	1.11
25	0.50	0.71	0.43	0.32	1.93	1.43
35	1.00	0.50	0.93	0.69	2.86	2.12
45	1.50	0.35	2.59	1.92	5.45	4.04
60	2.00	0.25	6.24	4.63	11.69	8.67
80	2.50	0.18	42.65	31.62	54.34	40.29
120	3.00	0.13	42.41	31.44	96.75	71.73
170	3.50	0.09	18.83	13.96	115.58	85.69
200	3.75	0.07	4.71	3.49	120.29	89.18
230	4.00	0.06	1.80	1.33	122.09	90.51

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.44	3.12	2.65	2.26	2.12	1.60

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.55	0.17	0.69	-2.15	13.89

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z255 #1
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Sand, large shell, rock, silt balls

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.87	143.30	0.11	0.00	#200 - 4.65 #230 - 4.47	1.68	18.98	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	10.82	7.22	10.82	7.22
11/16"	-3.50	11.31	4.87	3.25	15.69	10.47
5/16"	-3.00	8.00	4.47	2.98	20.16	13.45
3.5	-2.50	5.66	9.35	6.24	29.51	19.69
4	-2.25	4.76	5.10	3.40	34.61	23.09
5	-2.00	4.00	5.38	3.59	39.99	26.68
7	-1.50	2.83	11.78	7.86	51.77	34.54
10	-1.00	2.00	7.90	5.27	59.67	39.81
14	-0.50	1.41	5.78	3.86	65.45	43.67
18	0.00	1.00	4.52	3.02	69.97	46.69
25	0.50	0.71	5.40	3.60	75.37	50.29
35	1.00	0.50	6.82	4.55	82.19	54.84
45	1.50	0.35	7.17	4.78	89.36	59.62
60	2.00	0.25	6.93	4.62	96.29	64.24
80	2.50	0.18	16.26	10.85	112.55	75.09
120	3.00	0.13	24.36	16.25	136.91	91.34
170	3.50	0.09	5.06	3.38	141.97	94.72
200	3.75	0.07	0.95	0.63	142.92	95.35
230	4.00	0.06	0.27	0.18	143.19	95.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.61	2.77	2.50	0.46	-2.12	-2.80	-4.08

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.07	1.05	2.43	-0.19	1.61

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z255 #2

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
64.27	13.38	1.57	0.11	#200 - 82.59 #230 - 81.73	14.52	6.17	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.10	0.16	0.10	0.16
10	-1.00	2.00	0.19	0.30	0.29	0.46
14	-0.50	1.41	0.74	1.15	1.03	1.61
18	0.00	1.00	1.36	2.12	2.39	3.73
25	0.50	0.71	1.65	2.57	4.04	6.30
35	1.00	0.50	1.39	2.16	5.43	8.46
45	1.50	0.35	1.14	1.77	6.57	10.23
60	2.00	0.25	0.98	1.52	7.55	11.75
80	2.50	0.18	0.99	1.54	8.54	13.29
120	3.00	0.13	0.94	1.46	9.48	14.75
170	3.50	0.09	1.03	1.60	10.51	16.35
200	3.75	0.07	0.68	1.06	11.19	17.41
230	4.00	0.06	0.55	0.86	11.74	18.27

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
					3.39	0.25

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.37	0.39	1.46	0.13	1.9

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z255 #3

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
175.51	139.88	3.99	0.00	#200 - 26.68 #230 - 22.59	0.91	0.98	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.22	0.13	0.22	0.13
7	-1.50	2.83	0.66	0.38	0.88	0.51
10	-1.00	2.00	0.20	0.11	1.08	0.62
14	-0.50	1.41	0.20	0.11	1.28	0.73
18	0.00	1.00	0.23	0.13	1.51	0.86
25	0.50	0.71	0.41	0.23	1.92	1.09
35	1.00	0.50	0.70	0.40	2.62	1.49
45	1.50	0.35	1.11	0.63	3.73	2.12
60	2.00	0.25	3.44	1.96	7.17	4.08
80	2.50	0.18	29.58	16.85	36.75	20.93
120	3.00	0.13	54.08	30.81	90.83	51.74
170	3.50	0.09	27.28	15.54	118.11	67.28
200	3.75	0.07	10.60	6.04	128.71	73.32
230	4.00	0.06	7.18	4.09	135.89	77.41

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.85	2.97	2.57	2.35	2.03

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.77	0.15	0.71	-2.42	16.01

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z255 #4

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Coarser quartz sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
149.85	146.61	0.17	0.03	#200 - 2.57 #230 - 2.32	0.41	0.68	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.05	0.03	0.05	0.03
10	-1.00	2.00	0.02	0.01	0.07	0.04
14	-0.50	1.41	0.06	0.04	0.13	0.08
18	0.00	1.00	0.08	0.05	0.21	0.13
25	0.50	0.71	0.33	0.22	0.54	0.35
35	1.00	0.50	1.73	1.15	2.27	1.50
45	1.50	0.35	11.73	7.83	14.00	9.33
60	2.00	0.25	42.65	28.46	56.65	37.79
80	2.50	0.18	62.22	41.52	118.87	79.31
120	3.00	0.13	20.65	13.78	139.52	93.09
170	3.50	0.09	5.48	3.66	145.00	96.75
200	3.75	0.07	1.02	0.68	146.02	97.43
230	4.00	0.06	0.38	0.25	146.40	97.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.26	2.67	2.45	2.15	1.78	1.62	1.22

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.12	0.23	0.53	-0.18	5.2

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z255 #5

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
179.07	174.64	0.15	0.40	#200 - 3.24 #230 - 2.94	0.49	0.91	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.43	0.24	0.43	0.24
4	-2.25	4.76	0.23	0.13	0.66	0.37
5	-2.00	4.00	0.09	0.05	0.75	0.42
7	-1.50	2.83	0.80	0.45	1.55	0.87
10	-1.00	2.00	0.96	0.54	2.51	1.41
14	-0.50	1.41	2.07	1.16	4.58	2.57
18	0.00	1.00	4.42	2.47	9.00	5.04
25	0.50	0.71	11.48	6.41	20.48	11.45
35	1.00	0.50	24.69	13.79	45.17	25.24
45	1.50	0.35	38.17	21.32	83.34	46.56
60	2.00	0.25	37.87	21.15	121.21	67.71
80	2.50	0.18	27.30	15.25	148.51	82.96
120	3.00	0.13	19.32	10.79	167.83	93.75
170	3.50	0.09	4.52	2.52	172.35	96.27
200	3.75	0.07	0.88	0.49	173.23	96.76
230	4.00	0.06	0.54	0.30	173.77	97.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.25	2.55	2.24	1.58	0.99	0.66	-0.01

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.51	0.35	0.94	-0.65	4.48

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z256 #1

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Coarser quartz sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.24	150.98	0.17	0.02	#200 - 3.65 #230 - 3.48	0.53	3.26	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.02	0.01	0.02	0.01
10	-1.00	2.00	0.10	0.06	0.12	0.07
14	-0.50	1.41	0.15	0.10	0.27	0.17
18	0.00	1.00	0.14	0.09	0.41	0.26
25	0.50	0.71	0.31	0.20	0.72	0.46
35	1.00	0.50	1.09	0.70	1.81	1.16
45	1.50	0.35	4.73	3.03	6.54	4.19
60	2.00	0.25	50.01	32.01	56.55	36.20
80	2.50	0.18	75.56	48.36	132.11	84.56
120	3.00	0.13	14.96	9.58	147.07	94.14
170	3.50	0.09	2.95	1.89	150.02	96.03
200	3.75	0.07	0.50	0.32	150.52	96.35
230	4.00	0.06	0.26	0.17	150.78	96.52

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.23	2.49	2.40	2.14	1.83	1.68	1.51

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.11	0.23	0.45	-0.63	9.27

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z256 #2
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		Brown sand, white shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
175.27	167.54	0.31	0.09	#200 - 4.87 #230 - 4.66	1.22	56.16	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	4.48	2.56	4.48	2.56
5/8"	-4.00	16.00	16.04	9.15	20.52	11.71
11/16"	-3.50	11.31	12.54	7.15	33.06	18.86
5/16"	-3.00	8.00	7.04	4.02	40.10	22.88
3.5	-2.50	5.66	10.96	6.25	51.06	29.13
4	-2.25	4.76	2.82	1.61	53.88	30.74
5	-2.00	4.00	3.34	1.91	57.22	32.65
7	-1.50	2.83	6.10	3.48	63.32	36.13
10	-1.00	2.00	6.88	3.93	70.20	40.06
14	-0.50	1.41	6.49	3.70	76.69	43.76
18	0.00	1.00	5.97	3.41	82.66	47.17
25	0.50	0.71	7.56	4.31	90.22	51.48
35	1.00	0.50	11.11	6.34	101.33	57.82
45	1.50	0.35	9.16	5.23	110.49	63.05
60	2.00	0.25	8.03	4.58	118.52	67.63
80	2.50	0.18	15.16	8.65	133.68	76.28
120	3.00	0.13	28.79	16.43	162.47	92.71
170	3.50	0.09	3.59	2.05	166.06	94.76
200	3.75	0.07	0.65	0.37	166.71	95.13
230	4.00	0.06	0.37	0.21	167.08	95.34

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.66	2.73	2.43	0.33	-2.83	-3.70	-4.18

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.36	1.28	2.51	-0.08	1.56

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z256 #3

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coaser quartz sand, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
188.77	184.72	0.04	0.43	#200 - 2.61 #230 - 2.58	0.35	0.64	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.51	1.33	2.51	1.33
3.5	-2.50	5.66	4.05	2.15	6.56	3.48
4	-2.25	4.76	2.37	1.26	8.93	4.74
5	-2.00	4.00	5.24	2.78	14.17	7.52
7	-1.50	2.83	12.85	6.81	27.02	14.33
10	-1.00	2.00	11.53	6.11	38.55	20.44
14	-0.50	1.41	12.01	6.36	50.56	26.80
18	0.00	1.00	11.67	6.18	62.23	32.98
25	0.50	0.71	16.76	8.88	78.99	41.86
35	1.00	0.50	30.08	15.93	109.07	57.79
45	1.50	0.35	30.56	16.19	139.63	73.98
60	2.00	0.25	21.36	11.32	160.99	85.30
80	2.50	0.18	14.99	7.94	175.98	93.24
120	3.00	0.13	6.57	3.48	182.55	96.72
170	3.50	0.09	0.98	0.52	183.53	97.24
200	3.75	0.07	0.28	0.15	183.81	97.39
230	4.00	0.06	0.06	0.03	183.87	97.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.75	1.94	1.55	0.76	-0.64	-1.36	-2.23

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.4	0.76	1.48	-0.5	2.46

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z256 #4

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand, organic silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
185.04	166.41	0.41	0.04	#200 - 10.79 #230 - 10.33	1.57	9.58	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.78	1.50	2.78	1.50
3.5	-2.50	5.66	0.85	0.46	3.63	1.96
4	-2.25	4.76	2.81	1.52	6.44	3.48
5	-2.00	4.00	1.89	1.02	8.33	4.50
7	-1.50	2.83	4.74	2.56	13.07	7.06
10	-1.00	2.00	4.72	2.55	17.79	9.61
14	-0.50	1.41	4.25	2.30	22.04	11.91
18	0.00	1.00	3.84	2.08	25.88	13.99
25	0.50	0.71	4.25	2.30	30.13	16.29
35	1.00	0.50	6.44	3.48	36.57	19.77
45	1.50	0.35	9.85	5.32	46.42	25.09
60	2.00	0.25	23.13	12.50	69.55	37.59
80	2.50	0.18	46.69	25.23	116.24	62.82
120	3.00	0.13	38.42	20.76	154.66	83.58
170	3.50	0.09	8.95	4.84	163.61	88.42
200	3.75	0.07	1.46	0.79	165.07	89.21
230	4.00	0.06	0.85	0.46	165.92	89.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.04	2.79	2.25	1.49	0.44	-1.90

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.61	0.33	1.55	-1.48	4.39

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z257 #1
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Coaser quartz sand, rock, silt balls

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
158.87	147.02	0.22	0.00	#200 - 7.85 #230 - 7.61	1.75	9.31	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.65	1.67	2.65	1.67
5/16"	-3.00	8.00	2.18	1.37	4.83	3.04
3.5	-2.50	5.66	4.58	2.88	9.41	5.92
4	-2.25	4.76	1.04	0.65	10.45	6.57
5	-2.00	4.00	2.62	1.65	13.07	8.22
7	-1.50	2.83	3.59	2.26	16.66	10.48
10	-1.00	2.00	3.07	1.93	19.73	12.41
14	-0.50	1.41	3.89	2.45	23.62	14.86
18	0.00	1.00	3.84	2.42	27.46	17.28
25	0.50	0.71	5.22	3.29	32.68	20.57
35	1.00	0.50	7.47	4.70	40.15	25.27
45	1.50	0.35	8.21	5.17	48.36	30.44
60	2.00	0.25	11.43	7.19	59.79	37.63
80	2.50	0.18	46.69	29.39	106.48	67.02
120	3.00	0.13	30.54	19.22	137.02	86.24
170	3.50	0.09	8.22	5.17	145.24	91.41
200	3.75	0.07	1.18	0.74	146.42	92.15
230	4.00	0.06	0.38	0.24	146.80	92.39

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.94	2.71	2.21	0.97	-0.26	-2.66

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.41	0.38	1.78	-1.39	3.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z257 #2
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Coaser quartz sand, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
158.17	150.16	0.27	0.03	#200 - 5.83 #230 - 5.27	0.91	1.74	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	1.78	1.13	1.78	1.13
5/16"	-3.00	8.00	0.82	0.52	2.60	1.65
3.5	-2.50	5.66	3.08	1.95	5.68	3.60
4	-2.25	4.76	0.94	0.59	6.62	4.19
5	-2.00	4.00	0.67	0.42	7.29	4.61
7	-1.50	2.83	3.04	1.92	10.33	6.53
10	-1.00	2.00	4.06	2.57	14.39	9.10
14	-0.50	1.41	5.65	3.57	20.04	12.67
18	0.00	1.00	8.35	5.28	28.39	17.95
25	0.50	0.71	11.55	7.30	39.94	25.25
35	1.00	0.50	19.05	12.04	58.99	37.29
45	1.50	0.35	20.63	13.04	79.62	50.33
60	2.00	0.25	17.14	10.84	96.76	61.17
80	2.50	0.18	22.84	14.44	119.60	75.61
120	3.00	0.13	20.86	13.19	140.46	88.80
170	3.50	0.09	6.98	4.41	147.44	93.21
200	3.75	0.07	1.52	0.96	148.96	94.17
230	4.00	0.06	0.88	0.56	149.84	94.73

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.82	2.48	1.49	0.48	-0.18	-1.90

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.17	0.44	1.54	-0.95	3.76

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z257 #3
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coaser tan quartz sand, silt balls

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.22	172.13	0.05	0.49	#200 - 2.96 #230 - 2.85	0.30	0.57	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.94	0.53	0.94	0.53
4	-2.25	4.76	0.48	0.27	1.42	0.80
5	-2.00	4.00	1.34	0.76	2.76	1.56
7	-1.50	2.83	5.64	3.20	8.40	4.76
10	-1.00	2.00	7.07	4.01	15.47	8.77
14	-0.50	1.41	9.84	5.58	25.31	14.35
18	0.00	1.00	10.35	5.87	35.66	20.22
25	0.50	0.71	14.45	8.20	50.11	28.42
35	1.00	0.50	27.80	15.78	77.91	44.20
45	1.50	0.35	39.02	22.14	116.93	66.34
60	2.00	0.25	24.72	14.03	141.65	80.37
80	2.50	0.18	18.64	10.58	160.29	90.95
120	3.00	0.13	8.55	4.85	168.84	95.80
170	3.50	0.09	1.79	1.02	170.63	96.82
200	3.75	0.07	0.39	0.22	171.02	97.04
230	4.00	0.06	0.19	0.11	171.21	97.15

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.92	2.17	1.81	1.13	0.29	-0.36	-1.47

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.9	0.54	1.21	-0.62	3.09

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z257 #4
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Coaser quartz sand/rock, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.28	144.27	0.32	0.24	#200 - 8.72 #230 - 8.11	1.22	1.40	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.59	0.38	0.59	0.38
10	-1.00	2.00	1.43	0.92	2.02	1.30
14	-0.50	1.41	4.52	2.89	6.54	4.19
18	0.00	1.00	8.05	5.15	14.59	9.34
25	0.50	0.71	9.19	5.88	23.78	15.22
35	1.00	0.50	10.33	6.61	34.11	21.83
45	1.50	0.35	9.67	6.19	43.78	28.02
60	2.00	0.25	15.17	9.71	58.95	37.73
80	2.50	0.18	42.72	27.34	101.67	65.07
120	3.00	0.13	30.74	19.67	132.41	84.74
170	3.50	0.09	8.50	5.44	140.91	90.18
200	3.75	0.07	1.72	1.10	142.63	91.28
230	4.00	0.06	0.95	0.61	143.58	91.89

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.98	2.75	2.22	1.26	0.56	-0.42

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.8	0.29	1.13	-0.88	3.04

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z258 #1
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Sand, dark fines, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
181.14	169.83	0.64	-0.01	#200 - 6.90 #230 - 6.60	4.68	18.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	4.75	2.62	4.75	2.62
5/16"	-3.00	8.00	4.06	2.24	8.81	4.86
3.5	-2.50	5.66	2.34	1.29	11.15	6.15
4	-2.25	4.76	1.25	0.69	12.40	6.84
5	-2.00	4.00	2.50	1.38	14.90	8.22
7	-1.50	2.83	5.17	2.85	20.07	11.07
10	-1.00	2.00	6.74	3.72	26.81	14.79
14	-0.50	1.41	8.17	4.51	34.98	19.30
18	0.00	1.00	7.46	4.12	42.44	23.42
25	0.50	0.71	7.19	3.97	49.63	27.39
35	1.00	0.50	8.85	4.89	58.48	32.28
45	1.50	0.35	11.88	6.56	70.36	38.84
60	2.00	0.25	18.13	10.01	88.49	48.85
80	2.50	0.18	44.64	24.64	133.13	73.49
120	3.00	0.13	27.10	14.96	160.23	88.45
170	3.50	0.09	7.12	3.93	167.35	92.38
200	3.75	0.07	1.31	0.72	168.66	93.10
230	4.00	0.06	0.55	0.30	169.21	93.40

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.85	2.55	2.02	0.20	-0.87	-2.95

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.12	0.46	1.85	-1.08	3.2

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z258 #2

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
53.86	0.96	0.01	0.00	#200 - 98.37 #230 - 98.24	17.50	9.90	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.02	0.01	0.02
14	-0.50	1.41	0.03	0.06	0.04	0.08
18	0.00	1.00	0.09	0.17	0.13	0.25
25	0.50	0.71	0.12	0.22	0.25	0.47
35	1.00	0.50	0.14	0.26	0.39	0.73
45	1.50	0.35	0.08	0.15	0.47	0.88
60	2.00	0.25	0.11	0.20	0.58	1.08
80	2.50	0.18	0.11	0.20	0.69	1.28
120	3.00	0.13	0.08	0.15	0.77	1.43
170	3.50	0.09	0.05	0.09	0.82	1.52
200	3.75	0.07	0.06	0.11	0.88	1.63
230	4.00	0.06	0.07	0.13	0.95	1.76

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.57	0.34	1.37	0.12	1.96

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z258 #3

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Fine tan sand, dark silt, wood

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
70.24	51.10	1.39	0.00	#200 - 33.43 #230 - 29.23	7.66	1.83	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.50	0.71	0.50	0.71
4	-2.25	4.76	0.00	0.00	0.50	0.71
5	-2.00	4.00	0.06	0.09	0.56	0.80
7	-1.50	2.83	0.43	0.61	0.99	1.41
10	-1.00	2.00	0.25	0.36	1.24	1.77
14	-0.50	1.41	0.49	0.70	1.73	2.47
18	0.00	1.00	0.45	0.64	2.18	3.11
25	0.50	0.71	0.45	0.64	2.63	3.75
35	1.00	0.50	0.60	0.85	3.23	4.60
45	1.50	0.35	0.79	1.12	4.02	5.72
60	2.00	0.25	1.35	1.92	5.37	7.64
80	2.50	0.18	7.84	11.16	13.21	18.80
120	3.00	0.13	16.73	23.82	29.94	42.62
170	3.50	0.09	11.94	17.00	41.88	59.62
200	3.75	0.07	4.88	6.95	46.76	66.57
230	4.00	0.06	2.95	4.20	49.71	70.77

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.22	2.63	2.37	1.18

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.66	0.16	1.1	-2.61	11.46

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z258 #4
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser tan quartz sand, rock, trace organic matter

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
166.89	163.97	0.02	0.57	#200 - 2.40 #230 - 2.33	0.60	0.97	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.63	1.58	2.63	1.58
5/16"	-3.00	8.00	6.09	3.65	8.72	5.23
3.5	-2.50	5.66	6.79	4.07	15.51	9.30
4	-2.25	4.76	4.32	2.59	19.83	11.89
5	-2.00	4.00	4.19	2.51	24.02	14.40
7	-1.50	2.83	9.98	5.98	34.00	20.38
10	-1.00	2.00	7.80	4.67	41.80	25.05
14	-0.50	1.41	6.07	3.64	47.87	28.69
18	0.00	1.00	6.46	3.87	54.33	32.56
25	0.50	0.71	9.78	5.86	64.11	38.42
35	1.00	0.50	21.86	13.10	85.97	51.52
45	1.50	0.35	39.37	23.59	125.34	75.11
60	2.00	0.25	20.00	11.98	145.34	87.09
80	2.50	0.18	10.09	6.05	155.43	93.14
120	3.00	0.13	5.94	3.56	161.37	96.70
170	3.50	0.09	1.27	0.76	162.64	97.46
200	3.75	0.07	0.24	0.14	162.88	97.60
230	4.00	0.06	0.12	0.07	163.00	97.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.76	1.87	1.50	0.94	-1.01	-1.87	-3.03

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.29	0.82	1.71	-0.71	2.45

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z258 #5

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

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Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Tan sand, dark fines, wood

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
173.63	163.43	0.46	0.09	#200 - 6.78 #230 - 6.25	1.33	1.46	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.09	0.05	0.09	0.05
4	-2.25	4.76	0.30	0.17	0.39	0.22
5	-2.00	4.00	0.45	0.26	0.84	0.48
7	-1.50	2.83	1.31	0.75	2.15	1.23
10	-1.00	2.00	1.07	0.62	3.22	1.85
14	-0.50	1.41	1.69	0.97	4.91	2.82
18	0.00	1.00	1.48	0.85	6.39	3.67
25	0.50	0.71	2.35	1.35	8.74	5.02
35	1.00	0.50	5.80	3.34	14.54	8.36
45	1.50	0.35	12.78	7.36	27.32	15.72
60	2.00	0.25	32.78	18.88	60.10	34.60
80	2.50	0.18	61.71	35.54	121.81	70.14
120	3.00	0.13	28.55	16.44	150.36	86.58
170	3.50	0.09	9.33	5.37	159.69	91.95
200	3.75	0.07	2.21	1.27	161.90	93.22
230	4.00	0.06	0.92	0.53	162.82	93.75

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.92	2.65	2.22	1.75	1.51	0.49

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.03	0.24	0.91	-1.79	8.32

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z259 #1

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
201.55	197.43	0.23	0.01	#200 - 2.33 #230 - 2.19	1.41	18.58	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	8.99	4.46	8.99	4.46
5/16"	-3.00	8.00	13.41	6.65	22.40	11.11
3.5	-2.50	5.66	16.04	7.96	38.44	19.07
4	-2.25	4.76	10.28	5.10	48.72	24.17
5	-2.00	4.00	12.56	6.23	61.28	30.40
7	-1.50	2.83	16.61	8.24	77.89	38.64
10	-1.00	2.00	12.85	6.38	90.74	45.02
14	-0.50	1.41	8.77	4.35	99.51	49.37
18	0.00	1.00	5.39	2.67	104.90	52.04
25	0.50	0.71	3.47	1.72	108.37	53.76
35	1.00	0.50	3.55	1.76	111.92	55.52
45	1.50	0.35	5.16	2.56	117.08	58.08
60	2.00	0.25	12.09	6.00	129.17	64.08
80	2.50	0.18	41.37	20.53	170.54	84.61
120	3.00	0.13	20.85	10.34	191.39	94.95
170	3.50	0.09	4.78	2.37	196.17	97.32
200	3.75	0.07	0.71	0.35	196.88	97.67
230	4.00	0.06	0.29	0.14	197.17	97.81

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.01	2.49	2.27	-0.38	-2.22	-2.69	-3.46

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.13	1.09	2.31	-0.02	1.4

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z259 #2
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Tan sand, yellow silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
169.82	155.65	0.50	0.00	#200 - 9.36 #230 - 8.65	0.73	1.59	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.15	0.09	0.15	0.09
10	-1.00	2.00	0.12	0.07	0.27	0.16
14	-0.50	1.41	0.46	0.27	0.73	0.43
18	0.00	1.00	1.08	0.64	1.81	1.07
25	0.50	0.71	3.08	1.81	4.89	2.88
35	1.00	0.50	5.43	3.20	10.32	6.08
45	1.50	0.35	7.42	4.37	17.74	10.45
60	2.00	0.25	12.32	7.25	30.06	17.70
80	2.50	0.18	65.45	38.54	95.51	56.24
120	3.00	0.13	44.50	26.20	140.01	82.44
170	3.50	0.09	11.86	6.98	151.87	89.42
200	3.75	0.07	2.08	1.22	153.95	90.64
230	4.00	0.06	1.20	0.71	155.15	91.35

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.11	2.86	2.42	2.09	1.88	0.83

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.29	0.20	0.72	-1.35	6.42

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z259 #3

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Gray sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
178.94	166.07	0.51	0.12	#200 - 8.36 #230 - 7.58	0.99	1.48	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.10	0.06	0.10	0.06
10	-1.00	2.00	0.46	0.26	0.56	0.32
14	-0.50	1.41	1.05	0.59	1.61	0.91
18	0.00	1.00	1.30	0.73	2.91	1.64
25	0.50	0.71	2.32	1.30	5.23	2.94
35	1.00	0.50	6.44	3.60	11.67	6.54
45	1.50	0.35	11.13	6.22	22.80	12.76
60	2.00	0.25	12.39	6.92	35.19	19.68
80	2.50	0.18	61.33	34.27	96.52	53.95
120	3.00	0.13	46.79	26.15	143.31	80.10
170	3.50	0.09	16.91	9.45	160.22	89.55
200	3.75	0.07	3.74	2.09	163.96	91.64
230	4.00	0.06	1.39	0.78	165.35	92.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.21	2.90	2.44	2.08	1.73	0.79

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.3	0.20	0.78	-1.3	5.95

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z259 #4

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Coarser quartz sand, trace fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
157.46	148.67	0.36	0.14	#200 - 7.25 #230 - 5.94	0.36	0.91	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.06	0.04	0.06	0.04
7	-1.50	2.83	0.41	0.26	0.47	0.30
10	-1.00	2.00	0.39	0.25	0.86	0.55
14	-0.50	1.41	0.98	0.62	1.84	1.17
18	0.00	1.00	1.12	0.71	2.96	1.88
25	0.50	0.71	2.77	1.76	5.73	3.64
35	1.00	0.50	9.81	6.23	15.54	9.87
45	1.50	0.35	27.07	17.19	42.61	27.06
60	2.00	0.25	31.16	19.79	73.77	46.85
80	2.50	0.18	23.14	14.70	96.91	61.55
120	3.00	0.13	36.94	23.46	133.85	85.01
170	3.50	0.09	8.83	5.61	142.68	90.62
200	3.75	0.07	3.35	2.13	146.03	92.75
230	4.00	0.06	2.06	1.31	148.09	94.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.98	2.79	2.11	1.44	1.18	0.61

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2	0.25	0.89	-0.56	3.98

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z276 #1

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand, rock, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
153.80	151.19	0.14	0.37	#200 - 2.24 #230 - 2.14	0.99	13.53	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	16.35	10.63	16.35	10.63
5/16"	-3.00	8.00	1.27	0.83	17.62	11.46
3.5	-2.50	5.66	3.21	2.09	20.83	13.55
4	-2.25	4.76	1.41	0.92	22.24	14.47
5	-2.00	4.00	1.90	1.24	24.14	15.71
7	-1.50	2.83	3.35	2.18	27.49	17.89
10	-1.00	2.00	4.05	2.63	31.54	20.52
14	-0.50	1.41	4.83	3.14	36.37	23.66
18	0.00	1.00	5.37	3.49	41.74	27.15
25	0.50	0.71	9.46	6.15	51.20	33.30
35	1.00	0.50	15.89	10.33	67.09	43.63
45	1.50	0.35	17.73	11.53	84.82	55.16
60	2.00	0.25	18.00	11.70	102.82	66.86
80	2.50	0.18	28.54	18.56	131.36	85.42
120	3.00	0.13	15.48	10.07	146.84	95.49
170	3.50	0.09	3.04	1.98	149.88	97.47
200	3.75	0.07	0.44	0.29	150.32	97.76
230	4.00	0.06	0.16	0.10	150.48	97.86

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.46	2.22	1.28	-0.31	-1.93	-3.90

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.59	0.66	2.07	-0.97	2.77

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z276 #2

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Quartz sand, rock, oyster shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
165.21	161.66	0.11	0.15	#200 - 2.46 #230 - 2.33	1.47	29.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	2.35	1.42	2.35	1.42
11/16"	-3.50	11.31	6.95	4.21	9.30	5.63
5/16"	-3.00	8.00	16.35	9.90	25.65	15.53
3.5	-2.50	5.66	10.11	6.12	35.76	21.65
4	-2.25	4.76	6.62	4.01	42.38	25.66
5	-2.00	4.00	7.48	4.53	49.86	30.19
7	-1.50	2.83	17.95	10.86	67.81	41.05
10	-1.00	2.00	18.75	11.35	86.56	52.40
14	-0.50	1.41	14.92	9.03	101.48	61.43
18	0.00	1.00	11.41	6.91	112.89	68.34
25	0.50	0.71	11.51	6.97	124.40	75.31
35	1.00	0.50	10.75	6.51	135.15	81.82
45	1.50	0.35	7.30	4.42	142.45	86.24
60	2.00	0.25	6.52	3.95	148.97	90.19
80	2.50	0.18	6.13	3.71	155.10	93.90
120	3.00	0.13	4.69	2.84	159.79	96.74
170	3.50	0.09	1.00	0.61	160.79	97.35
200	3.75	0.07	0.31	0.19	161.10	97.54
230	4.00	0.06	0.21	0.13	161.31	97.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.69	1.25	0.48	-1.11	-2.29	-2.96	-3.57

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.95	1.93	1.81	0.34	2.32

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z276 #3

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Silt, organic material

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
96.25	6.77	0.37	0.00	#200 - 94.76 #230 - 93.35	18.36	10.81	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.07	0.07	0.07	0.07
14	-0.50	1.41	0.23	0.24	0.30	0.31
18	0.00	1.00	0.23	0.24	0.53	0.55
25	0.50	0.71	0.15	0.16	0.68	0.71
35	1.00	0.50	0.15	0.16	0.83	0.87
45	1.50	0.35	0.10	0.10	0.93	0.97
60	2.00	0.25	0.07	0.07	1.00	1.04
80	2.50	0.18	0.15	0.16	1.15	1.20
120	3.00	0.13	0.62	0.64	1.77	1.84
170	3.50	0.09	1.79	1.86	3.56	3.70
200	3.75	0.07	1.48	1.54	5.04	5.24
230	4.00	0.06	1.36	1.41	6.40	6.65

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.71

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.9	0.13	1.31	-1.83	5.14

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z276 #4

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Tan sand, little silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
126.71	115.99	1.14	0.00	#200 - 12.25 #230 - 9.37	0.59	0.87	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.03	0.02	0.03	0.02
10	-1.00	2.00	0.01	0.01	0.04	0.03
14	-0.50	1.41	0.12	0.09	0.16	0.12
18	0.00	1.00	0.16	0.13	0.32	0.25
25	0.50	0.71	0.15	0.12	0.47	0.37
35	1.00	0.50	0.12	0.09	0.59	0.46
45	1.50	0.35	0.17	0.13	0.76	0.59
60	2.00	0.25	0.73	0.58	1.49	1.17
80	2.50	0.18	18.86	14.88	20.35	16.05
120	3.00	0.13	63.77	50.33	84.12	66.38
170	3.50	0.09	21.55	17.01	105.67	83.39
200	3.75	0.07	5.53	4.36	111.20	87.75
230	4.00	0.06	3.65	2.88	114.85	90.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.53	3.25	2.84	2.59	2.50	2.13

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.82	0.14	0.46	-1.15	13.16

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z277 #1

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, rock, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.37	163.10	0.35	0.36	#200 - 3.90 #230 - 3.70	1.93	7.70	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.82	1.67	2.82	1.67
5/16"	-3.00	8.00	5.10	3.03	7.92	4.70
3.5	-2.50	5.66	13.25	7.87	21.17	12.57
4	-2.25	4.76	5.25	3.12	26.42	15.69
5	-2.00	4.00	9.25	5.49	35.67	21.18
7	-1.50	2.83	19.77	11.74	55.44	32.92
10	-1.00	2.00	14.78	8.78	70.22	41.70
14	-0.50	1.41	12.43	7.38	82.65	49.08
18	0.00	1.00	8.25	4.90	90.90	53.98
25	0.50	0.71	6.88	4.09	97.78	58.07
35	1.00	0.50	6.78	4.03	104.56	62.10
45	1.50	0.35	7.42	4.41	111.98	66.51
60	2.00	0.25	8.94	5.31	120.92	71.82
80	2.50	0.18	23.58	14.00	144.50	85.82
120	3.00	0.13	14.26	8.47	158.76	94.29
170	3.50	0.09	2.52	1.50	161.28	95.79
200	3.75	0.07	0.53	0.31	161.81	96.10
230	4.00	0.06	0.33	0.20	162.14	96.30

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.24	2.44	2.11	-0.41	-1.84	-2.24	-2.98

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.15	1.11	2.02	0.12	1.65

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z277 #2

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Silt, rock, peaty material

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
111.43	69.96	0.35	0.07	#200 - 38.11 #230 - 37.59	8.23	5.18	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.61	0.55	0.61	0.55
3.5	-2.50	5.66	4.14	3.72	4.75	4.27
4	-2.25	4.76	3.09	2.77	7.84	7.04
5	-2.00	4.00	2.55	2.29	10.39	9.33
7	-1.50	2.83	6.75	6.06	17.14	15.39
10	-1.00	2.00	4.59	4.12	21.73	19.51
14	-0.50	1.41	3.73	3.35	25.46	22.86
18	0.00	1.00	3.21	2.88	28.67	25.74
25	0.50	0.71	3.25	2.92	31.92	28.66
35	1.00	0.50	3.85	3.46	35.77	32.12
45	1.50	0.35	4.51	4.05	40.28	36.17
60	2.00	0.25	5.65	5.07	45.93	41.24
80	2.50	0.18	8.16	7.32	54.09	48.56
120	3.00	0.13	11.04	9.91	65.13	58.47
170	3.50	0.09	2.89	2.59	68.02	61.06
200	3.75	0.07	0.93	0.83	68.95	61.89
230	4.00	0.06	0.58	0.52	69.53	62.41

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			2.57	-0.13	-1.43	-2.43

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.51	0.70	2.01	-0.22	1.62

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z277 #3

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand, few rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
202.61	197.86	0.12	0.29	#200 - 2.82 #230 - 2.69	0.34	0.69	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.94	0.96	1.94	0.96
4	-2.25	4.76	0.99	0.49	2.93	1.45
5	-2.00	4.00	0.93	0.46	3.86	1.91
7	-1.50	2.83	2.41	1.19	6.27	3.10
10	-1.00	2.00	1.85	0.91	8.12	4.01
14	-0.50	1.41	3.06	1.51	11.18	5.52
18	0.00	1.00	5.16	2.55	16.34	8.07
25	0.50	0.71	12.22	6.03	28.56	14.10
35	1.00	0.50	30.98	15.29	59.54	29.39
45	1.50	0.35	50.79	25.07	110.33	54.46
60	2.00	0.25	47.65	23.52	157.98	77.98
80	2.50	0.18	27.55	13.60	185.53	91.58
120	3.00	0.13	8.75	4.32	194.28	95.90
170	3.50	0.09	2.11	1.04	196.39	96.94
200	3.75	0.07	0.49	0.24	196.88	97.18
230	4.00	0.06	0.27	0.13	197.15	97.31

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.90	2.22	1.94	1.41	0.86	0.56	-0.67

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.26	0.42	1.02	-1.33	6.15

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z277 #4

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		Gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
154.56	149.75	0.07	0.14	#200 - 3.48 #230 - 3.29	0.33	1.17	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.09	0.06	0.09	0.06
14	-0.50	1.41	0.07	0.05	0.16	0.11
18	0.00	1.00	0.12	0.08	0.28	0.19
25	0.50	0.71	0.53	0.34	0.81	0.53
35	1.00	0.50	2.81	1.82	3.62	2.35
45	1.50	0.35	15.64	10.12	19.26	12.47
60	2.00	0.25	56.11	36.30	75.37	48.77
80	2.50	0.18	54.19	35.06	129.56	83.83
120	3.00	0.13	16.27	10.53	145.83	94.36
170	3.50	0.09	2.85	1.84	148.68	96.20
200	3.75	0.07	0.49	0.32	149.17	96.52
230	4.00	0.06	0.30	0.19	149.47	96.71

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.17	2.51	2.37	2.02	1.67	1.55	1.13

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2	0.25	0.52	-0.2	5.06

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z278 #1

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt, gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
59.27	5.95	0.32	0.00	#200 - 90.84 #230 - 90.50	16.94	8.50	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.01	0.02	0.01	0.02
14	-0.50	1.41	0.14	0.24	0.15	0.26
18	0.00	1.00	0.19	0.32	0.34	0.58
25	0.50	0.71	0.12	0.20	0.46	0.78
35	1.00	0.50	0.21	0.35	0.67	1.13
45	1.50	0.35	0.44	0.74	1.11	1.87
60	2.00	0.25	0.63	1.06	1.74	2.93
80	2.50	0.18	1.21	2.04	2.95	4.97
120	3.00	0.13	1.23	2.08	4.18	7.05
170	3.50	0.09	0.82	1.38	5.00	8.43
200	3.75	0.07	0.43	0.73	5.43	9.16
230	4.00	0.06	0.20	0.34	5.63	9.50

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						2.51

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.27	0.21	1.08	-0.96	3.64

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z278 #2

Analysis Date: 04-10-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser quartz sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.78	173.16	0.08	0.21	#200 - 2.47 #230 - 2.32	0.45	0.83	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.29	1.30	2.29	1.30
5/16"	-3.00	8.00	0.99	0.56	3.28	1.86
3.5	-2.50	5.66	1.08	0.61	4.36	2.47
4	-2.25	4.76	1.01	0.57	5.37	3.04
5	-2.00	4.00	0.67	0.38	6.04	3.42
7	-1.50	2.83	2.89	1.63	8.93	5.05
10	-1.00	2.00	2.46	1.39	11.39	6.44
14	-0.50	1.41	2.82	1.60	14.21	8.04
18	0.00	1.00	3.03	1.71	17.24	9.75
25	0.50	0.71	6.04	3.42	23.28	13.17
35	1.00	0.50	13.72	7.76	37.00	20.93
45	1.50	0.35	24.27	13.73	61.27	34.66
60	2.00	0.25	36.54	20.67	97.81	55.33
80	2.50	0.18	46.74	26.44	144.55	81.77
120	3.00	0.13	24.51	13.86	169.06	95.63
170	3.50	0.09	2.92	1.65	171.98	97.28
200	3.75	0.07	0.45	0.25	172.43	97.53
230	4.00	0.06	0.27	0.15	172.70	97.68

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.58	2.37	1.87	1.15	0.68	-1.52

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.51	0.35	1.32	-1.89	7.08

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z278 #3
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Sand, dark silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
173.08	160.38	0.73	0.03	#200 - 8.24 #230 - 7.78	0.90	2.11	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.21	0.12	0.21	0.12
7	-1.50	2.83	0.06	0.03	0.27	0.15
10	-1.00	2.00	0.24	0.14	0.51	0.29
14	-0.50	1.41	0.82	0.47	1.33	0.76
18	0.00	1.00	1.21	0.70	2.54	1.46
25	0.50	0.71	2.70	1.56	5.24	3.02
35	1.00	0.50	5.85	3.38	11.09	6.40
45	1.50	0.35	8.68	5.02	19.77	11.42
60	2.00	0.25	14.21	8.21	33.98	19.63
80	2.50	0.18	85.17	49.21	119.15	68.84
120	3.00	0.13	29.68	17.15	148.83	85.99
170	3.50	0.09	7.96	4.60	156.79	90.59
200	3.75	0.07	2.02	1.17	158.81	91.76
230	4.00	0.06	0.79	0.46	159.60	92.22

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.94	2.68	2.31	2.05	1.78	0.79

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.18	0.22	0.71	-1.57	8.09

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z278 #4
Analysis Date: 04-10-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Brown sand, white shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
178.92	168.19	0.41	0.00	#200 - 6.59 #230 - 6.21	1.16	13.34	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	4.13	2.31	4.13	2.31
11/16"	-3.50	11.31	7.85	4.39	11.98	6.70
5/16"	-3.00	8.00	3.53	1.97	15.51	8.67
3.5	-2.50	5.66	2.87	1.60	18.38	10.27
4	-2.25	4.76	0.53	0.30	18.91	10.57
5	-2.00	4.00	1.37	0.77	20.28	11.34
7	-1.50	2.83	3.84	2.15	24.12	13.49
10	-1.00	2.00	3.97	2.22	28.09	15.71
14	-0.50	1.41	4.12	2.30	32.21	18.01
18	0.00	1.00	3.60	2.01	35.81	20.02
25	0.50	0.71	3.20	1.79	39.01	21.81
35	1.00	0.50	3.78	2.11	42.79	23.92
45	1.50	0.35	5.74	3.21	48.53	27.13
60	2.00	0.25	17.51	9.79	66.04	36.92
80	2.50	0.18	52.19	29.17	118.23	66.09
120	3.00	0.13	42.12	23.54	160.35	89.63
170	3.50	0.09	5.81	3.25	166.16	92.88
200	3.75	0.07	0.94	0.53	167.10	93.41
230	4.00	0.06	0.68	0.38	167.78	93.79

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.88	2.69	2.22	1.17	-0.94	-3.69

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.28	0.41	2.08	-1.46	3.8

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z279 #1

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, shell, few rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
186.25	181.87	0.13	0.14	#200 - 2.73 #230 - 2.56	0.87	19.53	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	13.80	7.41	13.80	7.41
5/16"	-3.00	8.00	8.17	4.39	21.97	11.80
3.5	-2.50	5.66	3.36	1.80	25.33	13.60
4	-2.25	4.76	3.13	1.68	28.46	15.28
5	-2.00	4.00	2.52	1.35	30.98	16.63
7	-1.50	2.83	4.17	2.24	35.15	18.87
10	-1.00	2.00	3.94	2.12	39.09	20.99
14	-0.50	1.41	4.36	2.34	43.45	23.33
18	0.00	1.00	4.06	2.18	47.51	25.51
25	0.50	0.71	4.86	2.61	52.37	28.12
35	1.00	0.50	6.46	3.47	58.83	31.59
45	1.50	0.35	7.50	4.03	66.33	35.62
60	2.00	0.25	13.23	7.10	79.56	42.72
80	2.50	0.18	59.21	31.79	138.77	74.51
120	3.00	0.13	33.25	17.85	172.02	92.36
170	3.50	0.09	8.10	4.35	180.12	96.71
200	3.75	0.07	1.04	0.56	181.16	97.27
230	4.00	0.06	0.32	0.17	181.48	97.44

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.30	2.77	2.51	2.11	-0.12	-2.12	-3.74

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.98	0.51	2.22	-1.1	2.72

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z279 #2
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		Rock, shell hash, little sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
222.79	216.63	0.21	0.31	#200 - 3.34 #230 - 3.19	3.66	14.72	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	16.47	7.39	16.47	7.39
5/8"	-4.00	16.00	2.60	1.17	19.07	8.56
11/16"	-3.50	11.31	28.81	12.93	47.88	21.49
5/16"	-3.00	8.00	16.65	7.47	64.53	28.96
3.5	-2.50	5.66	22.35	10.03	86.88	38.99
4	-2.25	4.76	9.87	4.43	96.75	43.42
5	-2.00	4.00	8.71	3.91	105.46	47.33
7	-1.50	2.83	20.64	9.26	126.10	56.59
10	-1.00	2.00	17.78	7.98	143.88	64.57
14	-0.50	1.41	16.50	7.41	160.38	71.98
18	0.00	1.00	13.12	5.89	173.50	77.87
25	0.50	0.71	6.16	2.76	179.66	80.63
35	1.00	0.50	3.45	1.55	183.11	82.18
45	1.50	0.35	3.13	1.40	186.24	83.58
60	2.00	0.25	3.86	1.73	190.10	85.31
80	2.50	0.18	7.36	3.30	197.46	88.61
120	3.00	0.13	14.12	6.34	211.58	94.95
170	3.50	0.09	3.33	1.49	214.91	96.44
200	3.75	0.07	0.48	0.22	215.39	96.66
230	4.00	0.06	0.33	0.15	215.72	96.81

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.02	1.62	-0.24	-1.86	-3.27	-3.71	

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-1.57	2.97	1.99	1.12	3.17

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z279 #3
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Sand, peaty organic matter

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
155.47	144.91	0.56	-0.12	#200 - 7.54 #230 - 7.03	3.43	6.52	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.27	0.17	0.27	0.17
5	-2.00	4.00	0.00	0.00	0.27	0.17
7	-1.50	2.83	0.17	0.11	0.44	0.28
10	-1.00	2.00	0.57	0.37	1.01	0.65
14	-0.50	1.41	0.99	0.64	2.00	1.29
18	0.00	1.00	1.13	0.73	3.13	2.02
25	0.50	0.71	1.71	1.10	4.84	3.12
35	1.00	0.50	3.32	2.14	8.16	5.26
45	1.50	0.35	5.83	3.75	13.99	9.01
60	2.00	0.25	11.29	7.26	25.28	16.27
80	2.50	0.18	60.92	39.18	86.20	55.45
120	3.00	0.13	44.47	28.60	130.67	84.05
170	3.50	0.09	11.01	7.08	141.68	91.13
200	3.75	0.07	2.07	1.33	143.75	92.46
230	4.00	0.06	0.79	0.51	144.54	92.97

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.00	2.84	2.43	2.11	1.98	0.94

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.3	0.20	0.75	-2.04	10.29

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z279 #4

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Gray sand, shell hash

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
170.84	161.75	0.12	0.03	#200 - 5.72 #230 - 5.42	0.76	8.76	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.96	0.56	0.96	0.56
5/16"	-3.00	8.00	2.26	1.32	3.22	1.88
3.5	-2.50	5.66	1.03	0.60	4.25	2.48
4	-2.25	4.76	0.56	0.33	4.81	2.81
5	-2.00	4.00	1.34	0.78	6.15	3.59
7	-1.50	2.83	2.88	1.69	9.03	5.28
10	-1.00	2.00	4.32	2.53	13.35	7.81
14	-0.50	1.41	6.78	3.97	20.13	11.78
18	0.00	1.00	7.23	4.23	27.36	16.01
25	0.50	0.71	7.26	4.25	34.62	20.26
35	1.00	0.50	8.38	4.91	43.00	25.17
45	1.50	0.35	8.95	5.24	51.95	30.41
60	2.00	0.25	12.02	7.04	63.97	37.45
80	2.50	0.18	46.59	27.27	110.56	64.72
120	3.00	0.13	41.90	24.53	152.46	89.25
170	3.50	0.09	7.37	4.31	159.83	93.56
200	3.75	0.07	1.23	0.72	161.06	94.28
230	4.00	0.06	0.52	0.30	161.58	94.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.89	2.71	2.23	0.98	0.00	-1.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.58	0.33	1.53	-1.39	4.33

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z298 #1
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Sand, shell, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
167.70	167.70	0.07	0.28	#200 - 0.32 #230 - 0.31	3.29	13.32	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	2.67	1.59	2.67	1.59
5/16"	-3.00	8.00	17.07	10.18	19.74	11.77
3.5	-2.50	5.66	6.89	4.11	26.63	15.88
4	-2.25	4.76	4.84	2.89	31.47	18.77
5	-2.00	4.00	7.81	4.66	39.28	23.43
7	-1.50	2.83	13.52	8.06	52.80	31.49
10	-1.00	2.00	12.12	7.23	64.92	38.72
14	-0.50	1.41	9.93	5.92	74.85	44.64
18	0.00	1.00	9.86	5.88	84.71	50.52
25	0.50	0.71	18.46	11.01	103.17	61.53
35	1.00	0.50	26.99	16.09	130.16	77.62
45	1.50	0.35	19.74	11.77	149.90	89.39
60	2.00	0.25	9.66	5.76	159.56	95.15
80	2.50	0.18	5.50	3.28	165.06	98.43
120	3.00	0.13	1.78	1.06	166.84	99.49
170	3.50	0.09	0.26	0.16	167.10	99.65
200	3.75	0.07	0.05	0.03	167.15	99.68
230	4.00	0.06	0.01	0.01	167.16	99.69

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.99	1.27	0.92	-0.04	-1.90	-2.49	-3.33

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	-0.46	1.38	1.7	-0.26	1.93

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z298 #2

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, rock, shell with silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
182.20	178.80	0.06	0.04	#200 - 2.05 #230 - 1.94	4.38	19.15	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	4.51	2.48	4.51	2.48
5/16"	-3.00	8.00	7.16	3.93	11.67	6.41
3.5	-2.50	5.66	8.62	4.73	20.29	11.14
4	-2.25	4.76	5.91	3.24	26.20	14.38
5	-2.00	4.00	5.87	3.22	32.07	17.60
7	-1.50	2.83	12.54	6.88	44.61	24.48
10	-1.00	2.00	13.06	7.17	57.67	31.65
14	-0.50	1.41	7.60	4.17	65.27	35.82
18	0.00	1.00	4.39	2.41	69.66	38.23
25	0.50	0.71	5.10	2.80	74.76	41.03
35	1.00	0.50	7.94	4.36	82.70	45.39
45	1.50	0.35	13.12	7.20	95.82	52.59
60	2.00	0.25	20.27	11.13	116.09	63.72
80	2.50	0.18	33.37	18.32	149.46	82.04
120	3.00	0.13	24.44	13.41	173.90	95.45
170	3.50	0.09	3.90	2.14	177.80	97.59
200	3.75	0.07	0.66	0.36	178.46	97.95
230	4.00	0.06	0.20	0.11	178.66	98.06

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.98	2.57	2.31	1.32	-1.46	-2.12	-3.18

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.46	0.73	2.09	-0.48	1.79

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z298 #3

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt with gray sand

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
68.72	3.72	0.34	0.00	#200 - 96.87 #230 - 95.08	14.91	6.11	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.07	0.10	0.07	0.10
14	-0.50	1.41	0.21	0.31	0.28	0.41
18	0.00	1.00	0.13	0.19	0.41	0.60
25	0.50	0.71	0.10	0.15	0.51	0.75
35	1.00	0.50	0.05	0.07	0.56	0.82
45	1.50	0.35	0.05	0.07	0.61	0.89
60	2.00	0.25	0.03	0.04	0.64	0.93
80	2.50	0.18	0.06	0.09	0.70	1.02
120	3.00	0.13	0.07	0.10	0.77	1.12
170	3.50	0.09	0.33	0.48	1.10	1.60
200	3.75	0.07	1.05	1.53	2.15	3.13
230	4.00	0.06	1.23	1.79	3.38	4.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.92	0.13	1.56	-1.64	4.05

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z298 #4

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW-SM		Dark coarser quartz sand, woody organic matter

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
131.94	124.55	0.18	0.16	#200 - 6.52 #230 - 5.89	1.39	0.99	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.33	0.25	0.33	0.25
3.5	-2.50	5.66	0.50	0.38	0.83	0.63
4	-2.25	4.76	0.13	0.10	0.96	0.73
5	-2.00	4.00	0.42	0.32	1.38	1.05
7	-1.50	2.83	0.75	0.57	2.13	1.62
10	-1.00	2.00	1.10	0.83	3.23	2.45
14	-0.50	1.41	1.32	1.00	4.55	3.45
18	0.00	1.00	1.52	1.15	6.07	4.60
25	0.50	0.71	2.41	1.83	8.48	6.43
35	1.00	0.50	10.61	8.04	19.09	14.47
45	1.50	0.35	32.51	24.64	51.60	39.11
60	2.00	0.25	38.59	29.25	90.19	68.36
80	2.50	0.18	16.32	12.37	106.51	80.73
120	3.00	0.13	10.00	7.58	116.51	88.31
170	3.50	0.09	5.36	4.06	121.87	92.37
200	3.75	0.07	1.46	1.11	123.33	93.48
230	4.00	0.06	0.83	0.63	124.16	94.11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.72	2.27	1.69	1.21	1.03	0.11

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.6	0.33	0.97	-1.22	7.49

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z299 #1
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, blue/gray shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.20 #230 - 0.10	Organics (%):	Carbonates (%):	Shells (%):
154.18	154.18	0.16	0.00		0.85	17.33	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	6.11	3.96	6.11	3.96
5/8"	-4.00	16.00	1.50	0.97	7.61	4.93
11/16"	-3.50	11.31	0.98	0.64	8.59	5.57
5/16"	-3.00	8.00	3.19	2.07	11.78	7.64
3.5	-2.50	5.66	1.71	1.11	13.49	8.75
4	-2.25	4.76	1.28	0.83	14.77	9.58
5	-2.00	4.00	1.46	0.95	16.23	10.53
7	-1.50	2.83	3.04	1.97	19.27	12.50
10	-1.00	2.00	3.99	2.59	23.26	15.09
14	-0.50	1.41	4.77	3.09	28.03	18.18
18	0.00	1.00	4.87	3.16	32.90	21.34
25	0.50	0.71	5.61	3.64	38.51	24.98
35	1.00	0.50	8.88	5.76	47.39	30.74
45	1.50	0.35	17.06	11.06	64.45	41.80
60	2.00	0.25	22.13	14.35	86.58	56.15
80	2.50	0.18	39.14	25.39	125.72	81.54
120	3.00	0.13	24.17	15.68	149.89	97.22
170	3.50	0.09	3.64	2.36	153.53	99.58
200	3.75	0.07	0.34	0.22	153.87	99.80
230	4.00	0.06	0.15	0.10	154.02	99.90

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.93	2.58	2.37	1.79	0.50	-0.85	-3.95

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.06	0.48	1.63	-1.04	3.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z299 #2

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
117.58	78.64	2.21	0.14	#200 - 38.56 #230 - 35.12	2.47	2.23	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.27	0.23	0.27	0.23
10	-1.00	2.00	1.17	1.00	1.44	1.23
14	-0.50	1.41	2.06	1.75	3.50	2.98
18	0.00	1.00	2.09	1.78	5.59	4.76
25	0.50	0.71	2.16	1.84	7.75	6.60
35	1.00	0.50	3.41	2.90	11.16	9.50
45	1.50	0.35	5.43	4.62	16.59	14.12
60	2.00	0.25	6.87	5.84	23.46	19.96
80	2.50	0.18	5.78	4.92	29.24	24.88
120	3.00	0.13	14.45	12.29	43.69	37.17
170	3.50	0.09	19.57	16.64	63.26	53.81
200	3.75	0.07	8.97	7.63	72.23	61.44
230	4.00	0.06	4.04	3.44	76.27	64.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
			3.39	2.50	1.66	0.07

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.39	0.19	1.27	-1.16	3.63

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z299 #3
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
75.72	4.18	0.11	0.00	#200 - 95.16 #230 - 94.62	20.03	8.08	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.05	0.07	0.05	0.07
14	-0.50	1.41	0.13	0.17	0.18	0.24
18	0.00	1.00	0.19	0.25	0.37	0.49
25	0.50	0.71	0.18	0.24	0.55	0.73
35	1.00	0.50	0.19	0.25	0.74	0.98
45	1.50	0.35	0.17	0.22	0.91	1.20
60	2.00	0.25	0.16	0.21	1.07	1.41
80	2.50	0.18	0.27	0.36	1.34	1.77
120	3.00	0.13	1.05	1.39	2.39	3.16
170	3.50	0.09	0.94	1.24	3.33	4.40
200	3.75	0.07	0.33	0.44	3.66	4.84
230	4.00	0.06	0.41	0.54	4.07	5.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.82

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.41	0.19	1.32	-1.13	3.22

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z299 #4

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SM		Sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
134.46	111.39	1.55	0.02	#200 - 20.81 #230 - 18.34	3.09	1.37	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.01	0.01	0.01	0.01
7	-1.50	2.83	0.03	0.02	0.04	0.03
10	-1.00	2.00	0.02	0.01	0.06	0.04
14	-0.50	1.41	0.16	0.12	0.22	0.16
18	0.00	1.00	0.22	0.16	0.44	0.32
25	0.50	0.71	0.32	0.24	0.76	0.56
35	1.00	0.50	0.40	0.30	1.16	0.86
45	1.50	0.35	0.52	0.39	1.68	1.25
60	2.00	0.25	0.64	0.48	2.32	1.73
80	2.50	0.18	12.20	9.07	14.52	10.80
120	3.00	0.13	57.74	42.94	72.26	53.74
170	3.50	0.09	27.14	20.18	99.40	73.92
200	3.75	0.07	7.09	5.27	106.49	79.19
230	4.00	0.06	3.32	2.47	109.81	81.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
		3.55	2.96	2.67	2.56	2.18

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.87	0.14	0.51	-1.89	14.84

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
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Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z300 #1
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Gray sand, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
143.72	143.72	0.11	0.08	#200 - 0.19 #230 - 0.13	0.99	15.84	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.23	0.16	0.23	0.16
5/16"	-3.00	8.00	1.38	0.96	1.61	1.12
3.5	-2.50	5.66	0.66	0.46	2.27	1.58
4	-2.25	4.76	1.03	0.72	3.30	2.30
5	-2.00	4.00	1.22	0.85	4.52	3.15
7	-1.50	2.83	3.32	2.31	7.84	5.46
10	-1.00	2.00	4.19	2.92	12.03	8.38
14	-0.50	1.41	4.23	2.94	16.26	11.32
18	0.00	1.00	3.97	2.76	20.23	14.08
25	0.50	0.71	5.21	3.63	25.44	17.71
35	1.00	0.50	8.69	6.05	34.13	23.76
45	1.50	0.35	13.39	9.32	47.52	33.08
60	2.00	0.25	17.83	12.41	65.35	45.49
80	2.50	0.18	46.03	32.03	111.38	77.52
120	3.00	0.13	26.97	18.77	138.35	96.29
170	3.50	0.09	4.72	3.28	143.07	99.57
200	3.75	0.07	0.35	0.24	143.42	99.81
230	4.00	0.06	0.08	0.06	143.50	99.87

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.97	2.67	2.46	2.07	1.07	0.26	-1.60

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.55	0.34	1.4	-1.48	4.68

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z300 #2

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
ML-CL		Peaty silt material

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
56.88	27.14	1.57	0.37	#200 - 56.63 #230 - 55.42	18.97	8.61	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.23	0.40	0.23	0.40
10	-1.00	2.00	0.65	1.14	0.88	1.54
14	-0.50	1.41	2.39	4.20	3.27	5.74
18	0.00	1.00	2.77	4.87	6.04	10.61
25	0.50	0.71	2.37	4.17	8.41	14.78
35	1.00	0.50	2.38	4.18	10.79	18.96
45	1.50	0.35	2.32	4.08	13.11	23.04
60	2.00	0.25	2.12	3.73	15.23	26.77
80	2.50	0.18	2.70	4.75	17.93	31.52
120	3.00	0.13	3.40	5.98	21.33	37.50
170	3.50	0.09	2.28	4.01	23.61	41.51
200	3.75	0.07	1.06	1.86	24.67	43.37
230	4.00	0.06	0.69	1.21	25.36	44.58

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
				1.76	0.65	-0.59

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.37	0.39	1.48	-0.09	1.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z300 #3
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Sand, trace fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.45	162.69	0.13	0.45	#200 - 4.33 #230 - 3.96	0.35	0.74	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	2.91	1.73	2.91	1.73
3.5	-2.50	5.66	0.00	0.00	2.91	1.73
4	-2.25	4.76	0.21	0.12	3.12	1.85
5	-2.00	4.00	0.66	0.39	3.78	2.24
7	-1.50	2.83	1.76	1.04	5.54	3.28
10	-1.00	2.00	2.91	1.73	8.45	5.01
14	-0.50	1.41	4.19	2.49	12.64	7.50
18	0.00	1.00	6.64	3.94	19.28	11.44
25	0.50	0.71	10.76	6.39	30.04	17.83
35	1.00	0.50	17.54	10.41	47.58	28.24
45	1.50	0.35	23.69	14.06	71.27	42.30
60	2.00	0.25	23.14	13.74	94.41	56.04
80	2.50	0.18	36.69	21.78	131.10	77.82
120	3.00	0.13	22.95	13.62	154.05	91.44
170	3.50	0.09	5.89	3.50	159.94	94.94
200	3.75	0.07	1.23	0.73	161.17	95.67
230	4.00	0.06	0.63	0.37	161.80	96.04

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.52	2.73	2.44	1.78	0.84	0.36	-1.00

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.45	0.37	1.3	-1.23	4.98

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z300 #4
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Sand, dark fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
187.57	176.29	0.68	0.19	#200 - 7.16 #230 - 6.58	1.01	1.51	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.14	0.07	0.14	0.07
14	-0.50	1.41	0.74	0.39	0.88	0.46
18	0.00	1.00	1.15	0.61	2.03	1.07
25	0.50	0.71	2.58	1.38	4.61	2.45
35	1.00	0.50	4.77	2.54	9.38	4.99
45	1.50	0.35	6.85	3.65	16.23	8.64
60	2.00	0.25	12.11	6.46	28.34	15.10
80	2.50	0.18	76.38	40.72	104.72	55.82
120	3.00	0.13	51.27	27.33	155.99	83.15
170	3.50	0.09	15.09	8.04	171.08	91.19
200	3.75	0.07	3.09	1.65	174.17	92.84
230	4.00	0.06	1.08	0.58	175.25	93.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.05	2.85	2.43	2.12	2.01	1.00

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.34	0.20	0.68	-1.39	6.83

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z301 #1

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW WITH GRAVEL		Gray sand, rock, shell

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
176.59	171.10	0.17	0.14	#200 - 3.53 #230 - 3.34	1.66	9.69	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	4.54	2.57	4.54	2.57
5/8"	-4.00	16.00	0.00	0.00	4.54	2.57
11/16"	-3.50	11.31	13.35	7.56	17.89	10.13
5/16"	-3.00	8.00	7.09	4.01	24.98	14.14
3.5	-2.50	5.66	11.41	6.46	36.39	20.60
4	-2.25	4.76	5.24	2.97	41.63	23.57
5	-2.00	4.00	5.12	2.90	46.75	26.47
7	-1.50	2.83	10.94	6.20	57.69	32.67
10	-1.00	2.00	9.93	5.62	67.62	38.29
14	-0.50	1.41	9.35	5.29	76.97	43.58
18	0.00	1.00	8.18	4.63	85.15	48.21
25	0.50	0.71	6.80	3.85	91.95	52.06
35	1.00	0.50	6.78	3.84	98.73	55.90
45	1.50	0.35	8.67	4.91	107.40	60.81
60	2.00	0.25	16.91	9.58	124.31	70.39
80	2.50	0.18	25.09	14.21	149.40	84.60
120	3.00	0.13	16.76	9.49	166.16	94.09
170	3.50	0.09	3.64	2.06	169.80	96.15
200	3.75	0.07	0.56	0.32	170.36	96.47
230	4.00	0.06	0.33	0.19	170.69	96.66

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.22	2.48	2.16	0.23	-2.13	-2.86	-4.01

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.14	1.10	2.21	-0.07	1.64

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: Z301 #2
Analysis Date: 04-15-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		Coarser brown sand, rock

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
226.23	222.02	0.10	0.48	#200 - 2.45 #230 - 2.39	0.66	0.96	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	3.97	1.75	3.97	1.75
3.5	-2.50	5.66	0.90	0.40	4.87	2.15
4	-2.25	4.76	1.61	0.71	6.48	2.86
5	-2.00	4.00	1.22	0.54	7.70	3.40
7	-1.50	2.83	3.03	1.34	10.73	4.74
10	-1.00	2.00	3.94	1.74	14.67	6.48
14	-0.50	1.41	7.66	3.39	22.33	9.87
18	0.00	1.00	11.16	4.93	33.49	14.80
25	0.50	0.71	20.20	8.93	53.69	23.73
35	1.00	0.50	37.38	16.52	91.07	40.25
45	1.50	0.35	46.68	20.63	137.75	60.88
60	2.00	0.25	43.54	19.25	181.29	80.13
80	2.50	0.18	30.42	13.45	211.71	93.58
120	3.00	0.13	7.63	3.37	219.34	96.95
170	3.50	0.09	1.06	0.47	220.40	97.42
200	3.75	0.07	0.30	0.13	220.70	97.55
230	4.00	0.06	0.13	0.06	220.83	97.61

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.71	2.14	1.87	1.24	0.54	0.07	-1.43

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1	0.50	1.2	-1.29	5.2

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: Z301 #3

Analysis Date: 04-15-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP-SM		Tan sand, trace fines

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
158.12	149.33	0.60	0.04	#200 - 6.62 #230 - 5.98	0.94	1.05	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.09	0.06	0.09	0.06
7	-1.50	2.83	0.28	0.18	0.37	0.24
10	-1.00	2.00	0.48	0.30	0.85	0.54
14	-0.50	1.41	0.59	0.37	1.44	0.91
18	0.00	1.00	1.23	0.78	2.67	1.69
25	0.50	0.71	2.86	1.81	5.53	3.50
35	1.00	0.50	4.97	3.14	10.50	6.64
45	1.50	0.35	8.14	5.15	18.64	11.79
60	2.00	0.25	16.91	10.69	35.55	22.48
80	2.50	0.18	66.88	42.30	102.43	64.78
120	3.00	0.13	34.83	22.03	137.26	86.81
170	3.50	0.09	8.91	5.63	146.17	92.44
200	3.75	0.07	1.48	0.94	147.65	93.38
230	4.00	0.06	1.01	0.64	148.66	94.02

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.94	2.73	2.33	2.03	1.70	0.74

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.2	0.22	0.75	-1.56	7.7

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: B1-1 #1

Analysis Date: 04-26-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
152.99	152.99	0.02	0.31	#200 - 0.33 #230 - 0.33	0.66	25.30	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.56	0.37	0.56	0.37
3.5	-2.50	5.66	1.73	1.13	2.29	1.50
4	-2.25	4.76	0.92	0.60	3.21	2.10
5	-2.00	4.00	0.95	0.62	4.16	2.72
7	-1.50	2.83	2.00	1.31	6.16	4.03
10	-1.00	2.00	3.69	2.41	9.85	6.44
14	-0.50	1.41	6.75	4.41	16.60	10.85
18	0.00	1.00	10.05	6.57	26.65	17.42
25	0.50	0.71	16.59	10.84	43.24	28.26
35	1.00	0.50	26.22	17.14	69.46	45.40
45	1.50	0.35	28.61	18.70	98.07	64.10
60	2.00	0.25	27.07	17.69	125.14	81.79
80	2.50	0.18	20.27	13.25	145.41	95.04
120	3.00	0.13	6.74	4.41	152.15	99.45
170	3.50	0.09	0.31	0.20	152.46	99.65
200	3.75	0.07	0.03	0.02	152.49	99.67
230	4.00	0.06	0.00	0.00	152.49	99.67

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.50	2.08	1.81	1.12	0.35	-0.11	-1.30

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.96	0.51	1.16	-0.94	4.04

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: B1-1 #2
Analysis Date: 04-26-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.74	151.74	0.02	0.18	#200 - 0.20 #230 - 0.20	0.56	14.82	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.55	0.36	0.55	0.36
7	-1.50	2.83	1.60	1.05	2.15	1.41
10	-1.00	2.00	2.48	1.63	4.63	3.04
14	-0.50	1.41	4.75	3.13	9.38	6.17
18	0.00	1.00	5.17	3.41	14.55	9.58
25	0.50	0.71	6.07	4.00	20.62	13.58
35	1.00	0.50	12.86	8.48	33.48	22.06
45	1.50	0.35	26.88	17.71	60.36	39.77
60	2.00	0.25	32.65	21.52	93.01	61.29
80	2.50	0.18	42.70	28.14	135.71	89.43
120	3.00	0.13	14.68	9.67	150.39	99.10
170	3.50	0.09	1.01	0.67	151.40	99.77
200	3.75	0.07	0.04	0.03	151.44	99.80
230	4.00	0.06	0.00	0.00	151.44	99.80

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.79	2.40	2.24	1.74	1.08	0.64	-0.69

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.52	0.35	1.01	-1.21	4.36

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: B1-2 #1
Analysis Date: 04-26-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
171.53	171.53	0.01	0.00	#200 - 0.00 #230 - 0.00	0.60	15.86	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.72	0.42	0.72	0.42
4	-2.25	4.76	0.09	0.05	0.81	0.47
5	-2.00	4.00	0.44	0.26	1.25	0.73
7	-1.50	2.83	1.14	0.66	2.39	1.39
10	-1.00	2.00	1.71	1.00	4.10	2.39
14	-0.50	1.41	2.70	1.57	6.80	3.96
18	0.00	1.00	3.33	1.94	10.13	5.90
25	0.50	0.71	5.19	3.03	15.32	8.93
35	1.00	0.50	12.33	7.19	27.65	16.12
45	1.50	0.35	37.90	22.10	65.55	38.22
60	2.00	0.25	62.82	36.62	128.37	74.84
80	2.50	0.18	32.64	19.03	161.01	93.87
120	3.00	0.13	9.88	5.76	170.89	99.63
170	3.50	0.09	0.60	0.35	171.49	99.98
200	3.75	0.07	0.03	0.02	171.52	100.00
230	4.00	0.06	0.00	0.00	171.52	100.00

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.60	2.24	2.00	1.66	1.20	0.99	-0.23

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.52	0.35	0.86	-1.76	7.86

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: B1-2 #2

Analysis Date: 04-26-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
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Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.04 #230 - 0.03	Organics (%):	Carbonates (%):	Shells (%):
159.93	159.93	0.03	0.00		0.54	12.34	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.88	0.55	0.88	0.55
4	-2.25	4.76	0.26	0.16	1.14	0.71
5	-2.00	4.00	0.19	0.12	1.33	0.83
7	-1.50	2.83	0.64	0.40	1.97	1.23
10	-1.00	2.00	0.94	0.59	2.91	1.82
14	-0.50	1.41	2.30	1.44	5.21	3.26
18	0.00	1.00	2.89	1.81	8.10	5.07
25	0.50	0.71	4.32	2.70	12.42	7.77
35	1.00	0.50	8.85	5.53	21.27	13.30
45	1.50	0.35	18.83	11.77	40.10	25.07
60	2.00	0.25	42.82	26.77	82.92	51.84
80	2.50	0.18	56.57	35.37	139.49	87.21
120	3.00	0.13	18.73	11.71	158.22	98.92
170	3.50	0.09	1.62	1.01	159.84	99.93
200	3.75	0.07	0.05	0.03	159.89	99.96
230	4.00	0.06	0.01	0.01	159.90	99.97

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.83	2.45	2.33	1.97	1.50	1.11	-0.02

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.77	0.29	0.89	-1.95	8.52

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: B1-3 #1
Analysis Date: 04-26-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.25	168.25	0.01	0.39	#200 - 0.40 #230 - 0.39	0.68	29.19	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.73	0.43	0.73	0.43
3.5	-2.50	5.66	2.49	1.48	3.22	1.91
4	-2.25	4.76	1.82	1.08	5.04	2.99
5	-2.00	4.00	1.11	0.66	6.15	3.65
7	-1.50	2.83	3.97	2.36	10.12	6.01
10	-1.00	2.00	5.67	3.37	15.79	9.38
14	-0.50	1.41	9.57	5.69	25.36	15.07
18	0.00	1.00	13.17	7.83	38.53	22.90
25	0.50	0.71	16.81	9.99	55.34	32.89
35	1.00	0.50	25.47	15.14	80.81	48.03
45	1.50	0.35	29.70	17.65	110.51	65.68
60	2.00	0.25	31.87	18.94	142.38	84.62
80	2.50	0.18	19.17	11.39	161.55	96.01
120	3.00	0.13	5.63	3.35	167.18	99.36
170	3.50	0.09	0.40	0.24	167.58	99.60
200	3.75	0.07	0.00	0.00	167.58	99.60
230	4.00	0.06	0.01	0.01	167.59	99.61

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.46	1.98	1.75	1.06	0.11	-0.44	-1.71

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.81	0.57	1.25	-0.87	3.45

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: B1-3 #2
Analysis Date: 04-26-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SW		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
197.27	197.27	0.04	0.22	#200 - 0.25 #230 - 0.24	0.70	24.68	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	1.62	0.82	1.62	0.82
3.5	-2.50	5.66	1.82	0.92	3.44	1.74
4	-2.25	4.76	1.62	0.82	5.06	2.56
5	-2.00	4.00	2.19	1.11	7.25	3.67
7	-1.50	2.83	3.94	2.00	11.19	5.67
10	-1.00	2.00	5.25	2.66	16.44	8.33
14	-0.50	1.41	10.16	5.15	26.60	13.48
18	0.00	1.00	12.85	6.51	39.45	19.99
25	0.50	0.71	16.23	8.23	55.68	28.22
35	1.00	0.50	24.36	12.35	80.04	40.57
45	1.50	0.35	33.12	16.79	113.16	57.36
60	2.00	0.25	37.58	19.05	150.74	76.41
80	2.50	0.18	35.37	17.93	186.11	94.34
120	3.00	0.13	9.91	5.02	196.02	99.36
170	3.50	0.09	0.71	0.36	196.73	99.72
200	3.75	0.07	0.05	0.03	196.78	99.75
230	4.00	0.06	0.01	0.01	196.79	99.76

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.57	2.21	1.96	1.28	0.30	-0.31	-1.67

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.99	0.50	1.29	-1.01	3.71

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: B1-4 #1

Analysis Date: 04-26-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.04 #230 - 0.04	Organics (%):	Carbonates (%):	Shells (%):
144.07	144.07	0.04	0.00		0.42	4.80	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.02	0.01	0.02	0.01
14	-0.50	1.41	0.13	0.09	0.15	0.10
18	0.00	1.00	0.05	0.03	0.20	0.13
25	0.50	0.71	0.36	0.25	0.56	0.38
35	1.00	0.50	1.33	0.92	1.89	1.30
45	1.50	0.35	2.57	1.78	4.46	3.08
60	2.00	0.25	25.03	17.37	29.49	20.45
80	2.50	0.18	77.25	53.62	106.74	74.07
120	3.00	0.13	33.00	22.91	139.74	96.98
170	3.50	0.09	4.16	2.89	143.90	99.87
200	3.75	0.07	0.13	0.09	144.03	99.96
230	4.00	0.06	0.00	0.00	144.03	99.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.96	2.72	2.52	2.28	2.04	1.87	1.56

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.27	0.21	0.44	-0.91	7.47

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: B1-4 #2
Analysis Date: 04-26-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
151.13	151.13	0.00	0.00	#200 - 0.03 #230 - 0.00	0.49	8.35	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.02	0.01	0.02	0.01
7	-1.50	2.83	0.15	0.10	0.17	0.11
10	-1.00	2.00	0.33	0.22	0.50	0.33
14	-0.50	1.41	0.58	0.38	1.08	0.71
18	0.00	1.00	0.89	0.59	1.97	1.30
25	0.50	0.71	1.15	0.76	3.12	2.06
35	1.00	0.50	2.15	1.42	5.27	3.48
45	1.50	0.35	8.18	5.41	13.45	8.89
60	2.00	0.25	37.96	25.12	51.41	34.01
80	2.50	0.18	74.37	49.21	125.78	83.22
120	3.00	0.13	23.57	15.60	149.35	98.82
170	3.50	0.09	1.69	1.12	151.04	99.94
200	3.75	0.07	0.04	0.03	151.08	99.97
230	4.00	0.06	0.05	0.03	151.13	100.00

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.88	2.53	2.42	2.16	1.82	1.64	1.14

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.09	0.23	0.57	-2	11.38

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

Project Name: Carteret County

Sample Name: B1-5 #1

Analysis Date: 04-26-12

Analyzed By: MB

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.03 #230 - 0.02	Organics (%):	Carbonates (%):	Shells (%):
154.46	154.46	0.00	0.00		0.47	7.17	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.19	0.12	0.19	0.12
7	-1.50	2.83	0.02	0.01	0.21	0.13
10	-1.00	2.00	0.50	0.32	0.71	0.45
14	-0.50	1.41	1.22	0.79	1.93	1.24
18	0.00	1.00	0.84	0.54	2.77	1.78
25	0.50	0.71	1.35	0.87	4.12	2.65
35	1.00	0.50	3.77	2.44	7.89	5.09
45	1.50	0.35	14.37	9.30	22.26	14.39
60	2.00	0.25	32.38	20.96	54.64	35.35
80	2.50	0.18	68.21	44.16	122.85	79.51
120	3.00	0.13	28.70	18.58	151.55	98.09
170	3.50	0.09	2.82	1.83	154.37	99.92
200	3.75	0.07	0.07	0.05	154.44	99.97
230	4.00	0.06	0.02	0.01	154.46	99.98

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.92	2.62	2.45	2.17	1.75	1.54	0.98

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.06	0.24	0.66	-1.81	9.15

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Granularmetric Report

Depths and elevations based on measured values

COASTAL TECH
Coastal Geology & Sediments Laboratory

1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Carteret County
Sample Name: B1-5 #2
Analysis Date: 04-26-12
Analyzed By: MB

Easting (ft):	Northing (ft):	Coordinate System:	Elevation (ft):

USCS:	Munsell:	Comments:
SP		

Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
168.85	168.85	0.04	0.04	#200 - 0.07 #230 - 0.06	0.48	9.21	

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03	0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
11/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.01	0.01	0.01	0.01
7	-1.50	2.83	0.27	0.16	0.28	0.17
10	-1.00	2.00	0.32	0.19	0.60	0.36
14	-0.50	1.41	0.33	0.20	0.93	0.56
18	0.00	1.00	0.57	0.34	1.50	0.90
25	0.50	0.71	1.17	0.69	2.67	1.59
35	1.00	0.50	3.62	2.14	6.29	3.73
45	1.50	0.35	19.10	11.31	25.39	15.04
60	2.00	0.25	67.08	39.73	92.47	54.77
80	2.50	0.18	60.40	35.77	152.87	90.54
120	3.00	0.13	14.90	8.82	167.77	99.36
170	3.50	0.09	0.93	0.55	168.70	99.91
200	3.75	0.07	0.03	0.02	168.73	99.93
230	4.00	0.06	0.02	0.01	168.75	99.94

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.75	2.41	2.28	1.94	1.63	1.51	1.06

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.91	0.27	0.54	-1.48	9.91

GRANULARMETRIC REPORT CARTERET WITH ALPINE.GPJ FL DEP ROSS.GDT 4/30/12

Appendix 2

CD-ROM Containing gINT
And Other Digital Files

Appendix 3
Potential Borrow Area
Composite Curves

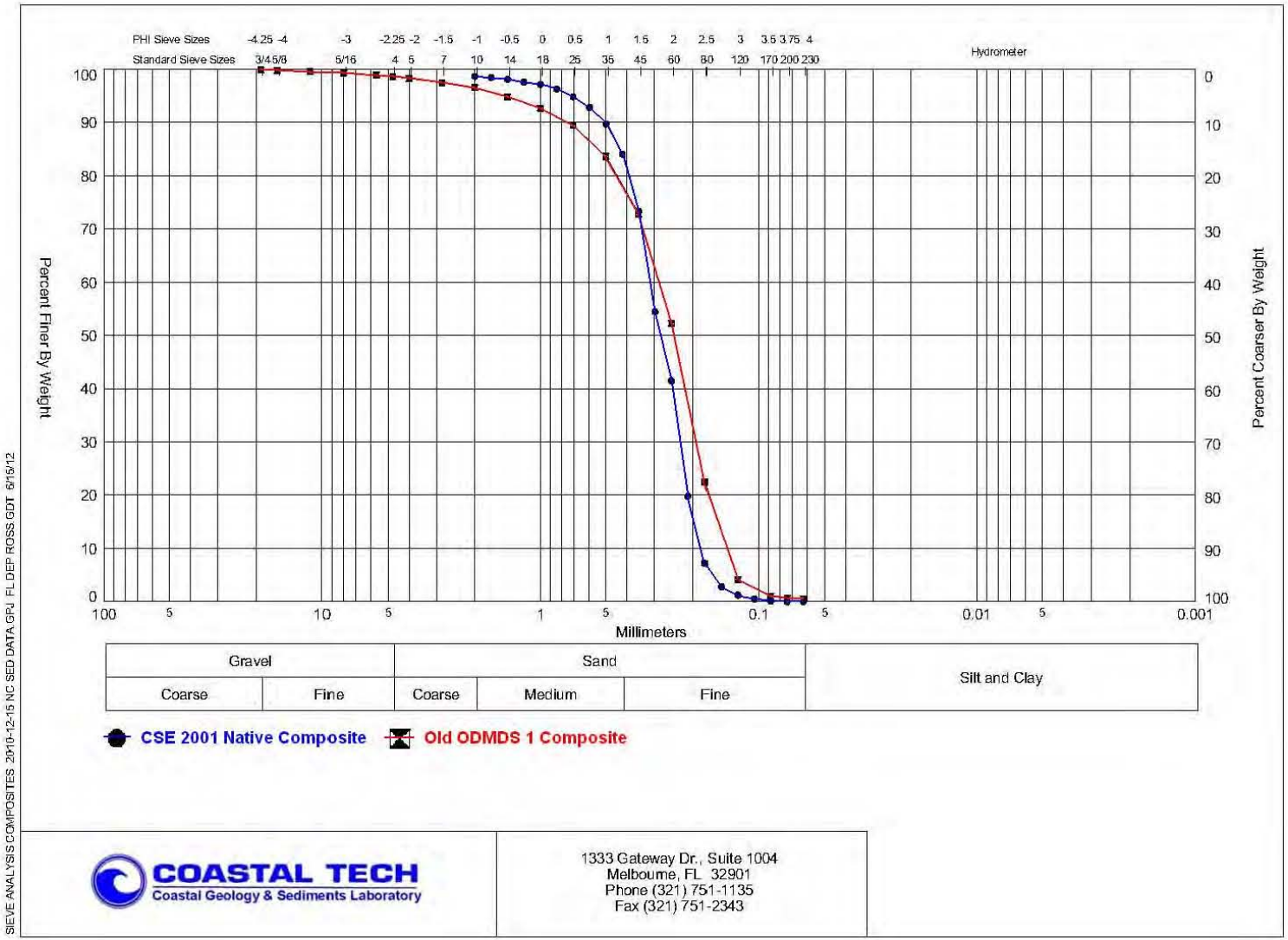


Figure A3.1 – Composite Curves of Old ODMDS 1 and CSE 2001 Native Beach

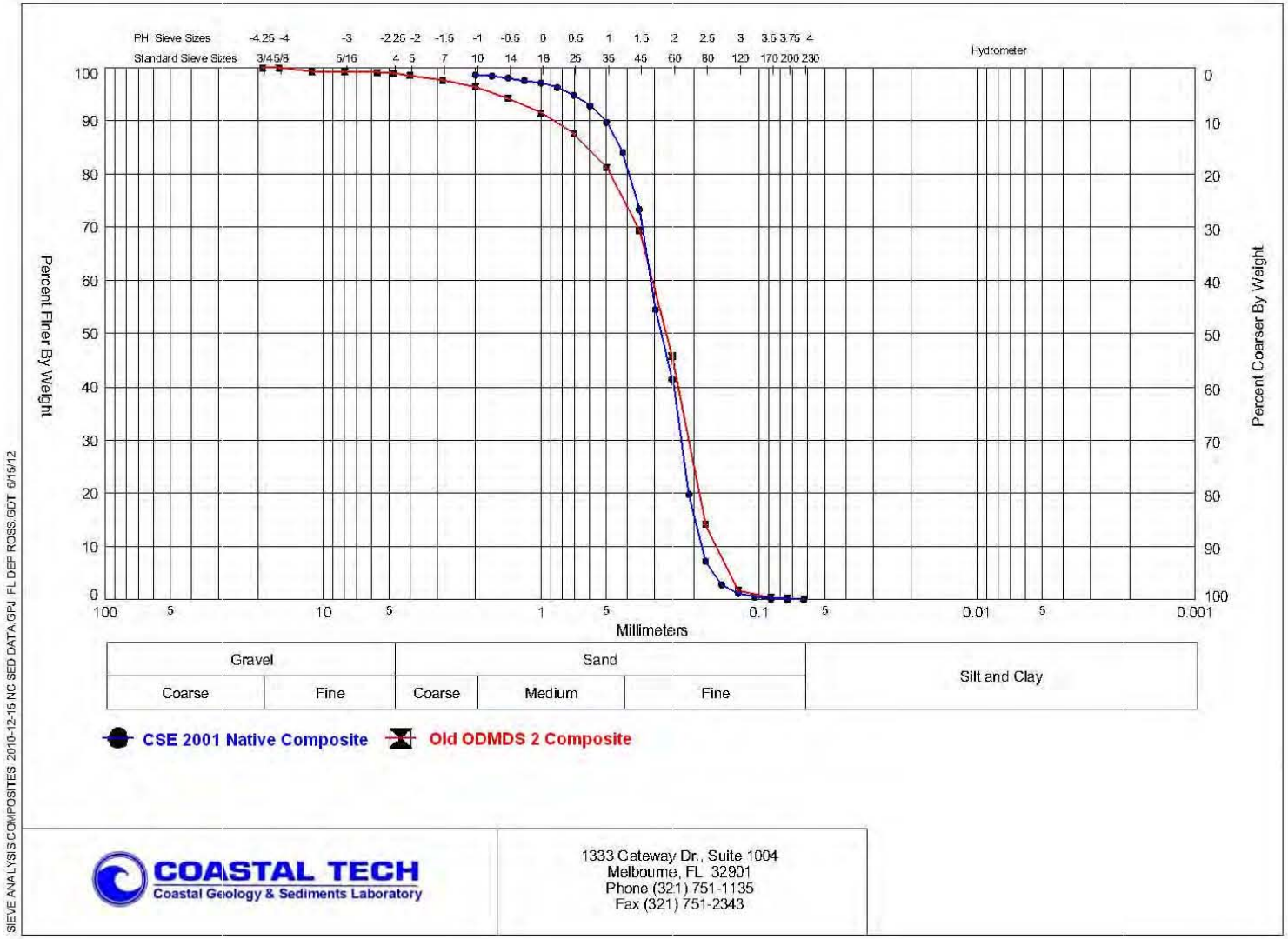


Figure A3.2 – Composite Curves of Old ODMDS 2 and CSE 2001 Native Beach

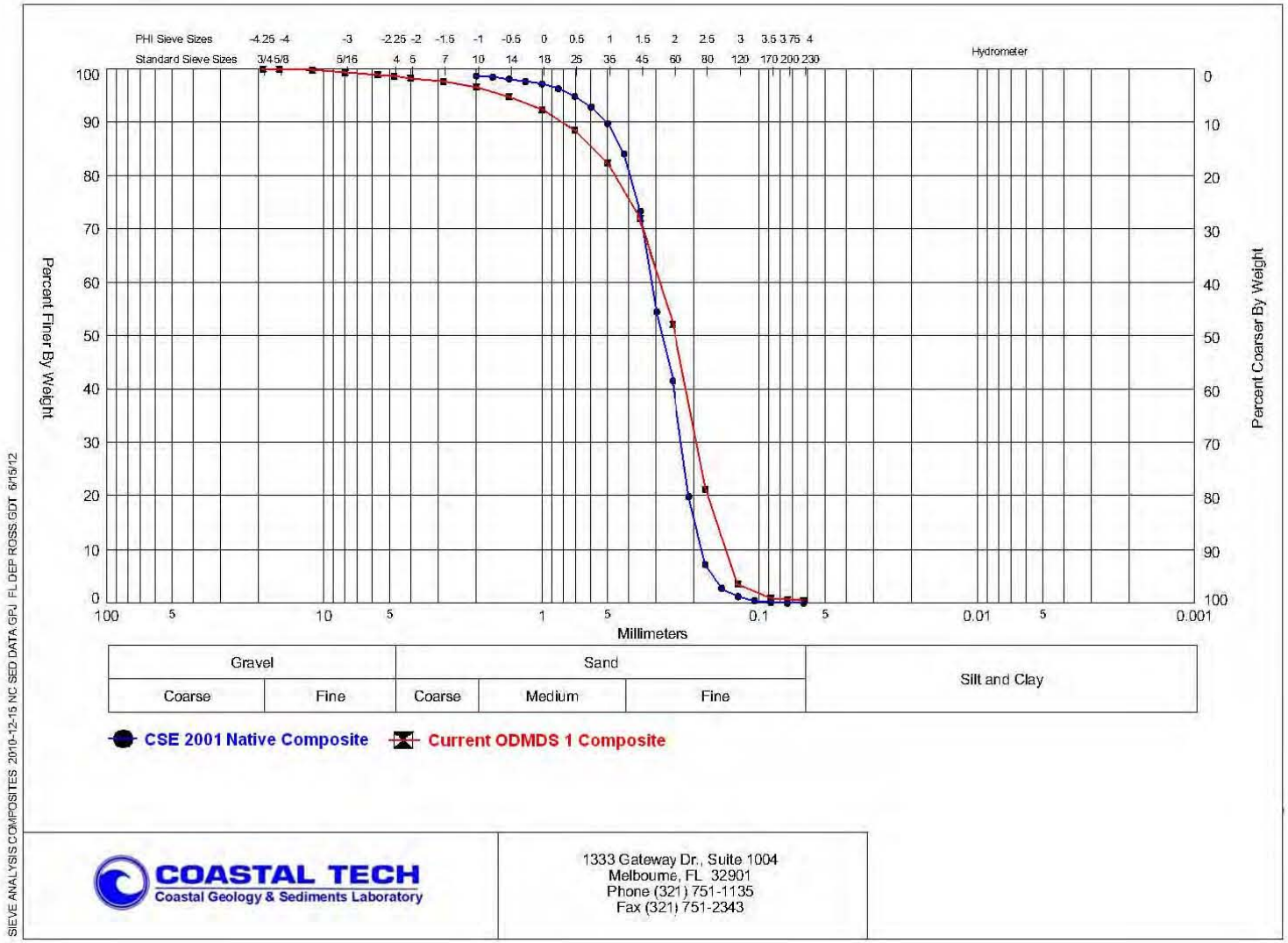


Figure A3.3 – Composite Curves of Current ODMDS 1 and CSE 2001 Native Beach

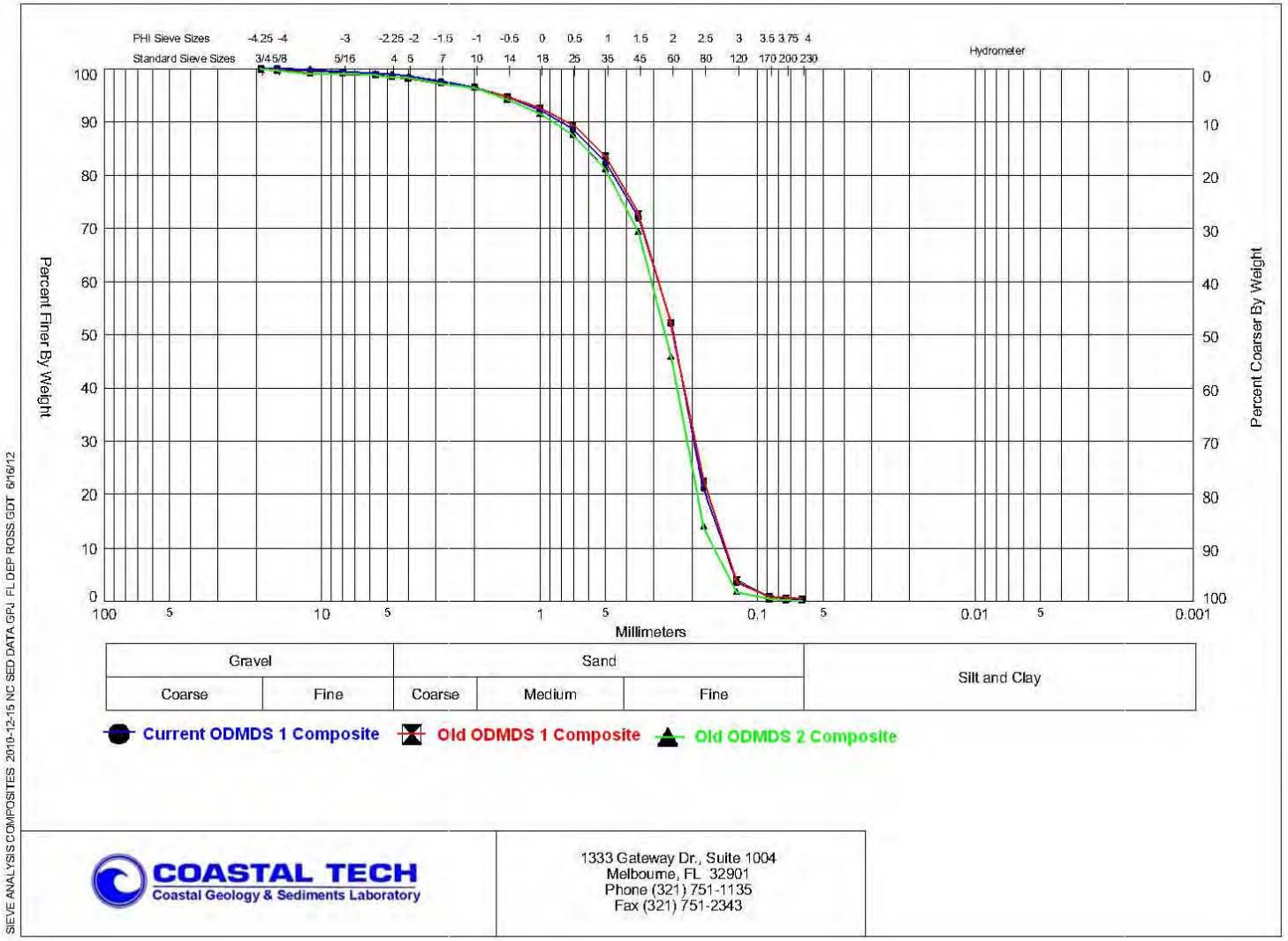


Figure A3.4 – Composite Curves of Old ODMDS 1, Old ODMDS 2, and Current ODMDS 1

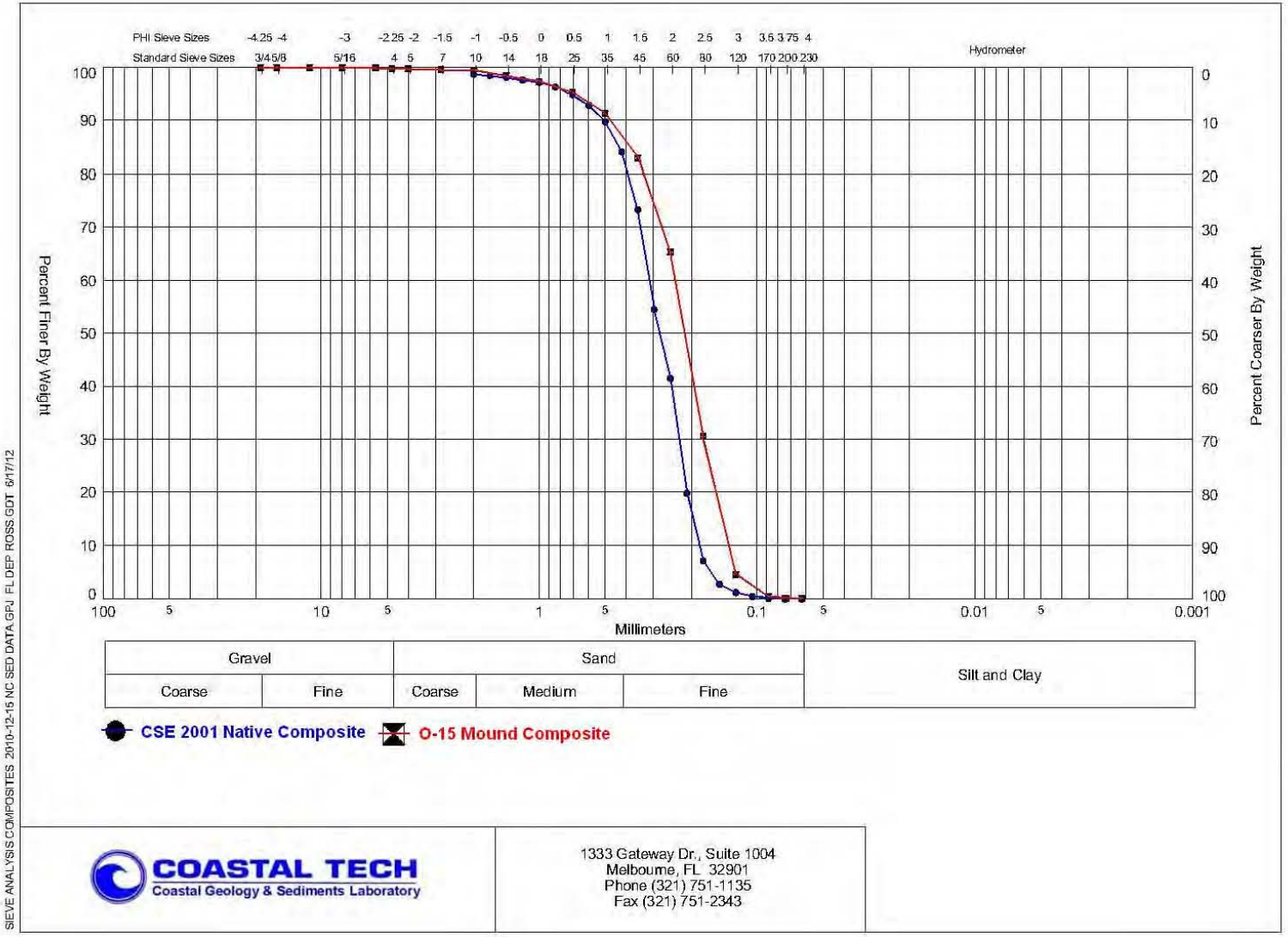


Figure A3.5 – Composite Curves of Mound O-15 and CSE 2001 Native Beach

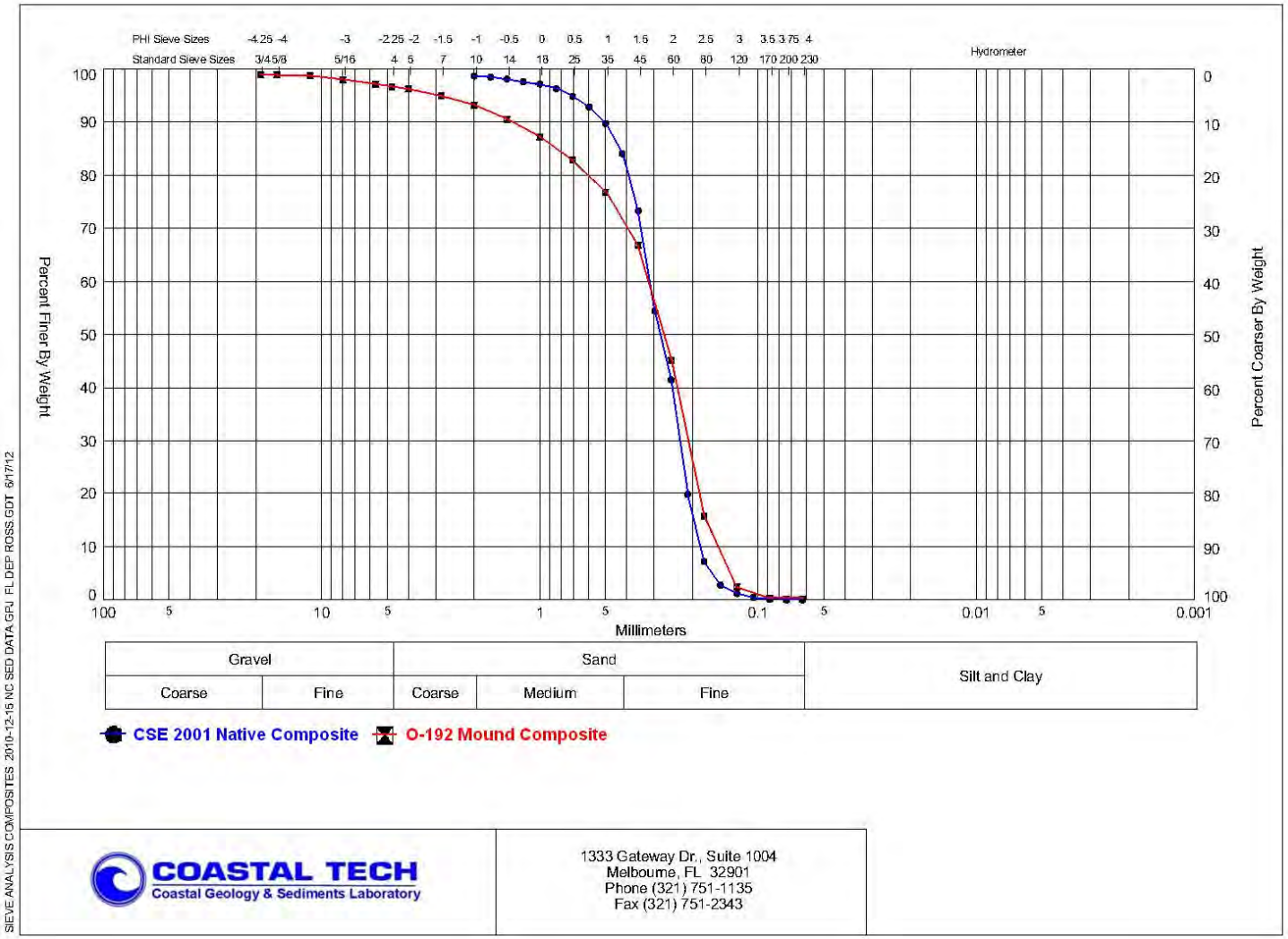


Figure A3.6 – Composite Curves of Mound O-192 and CSE 2001 Native Beach

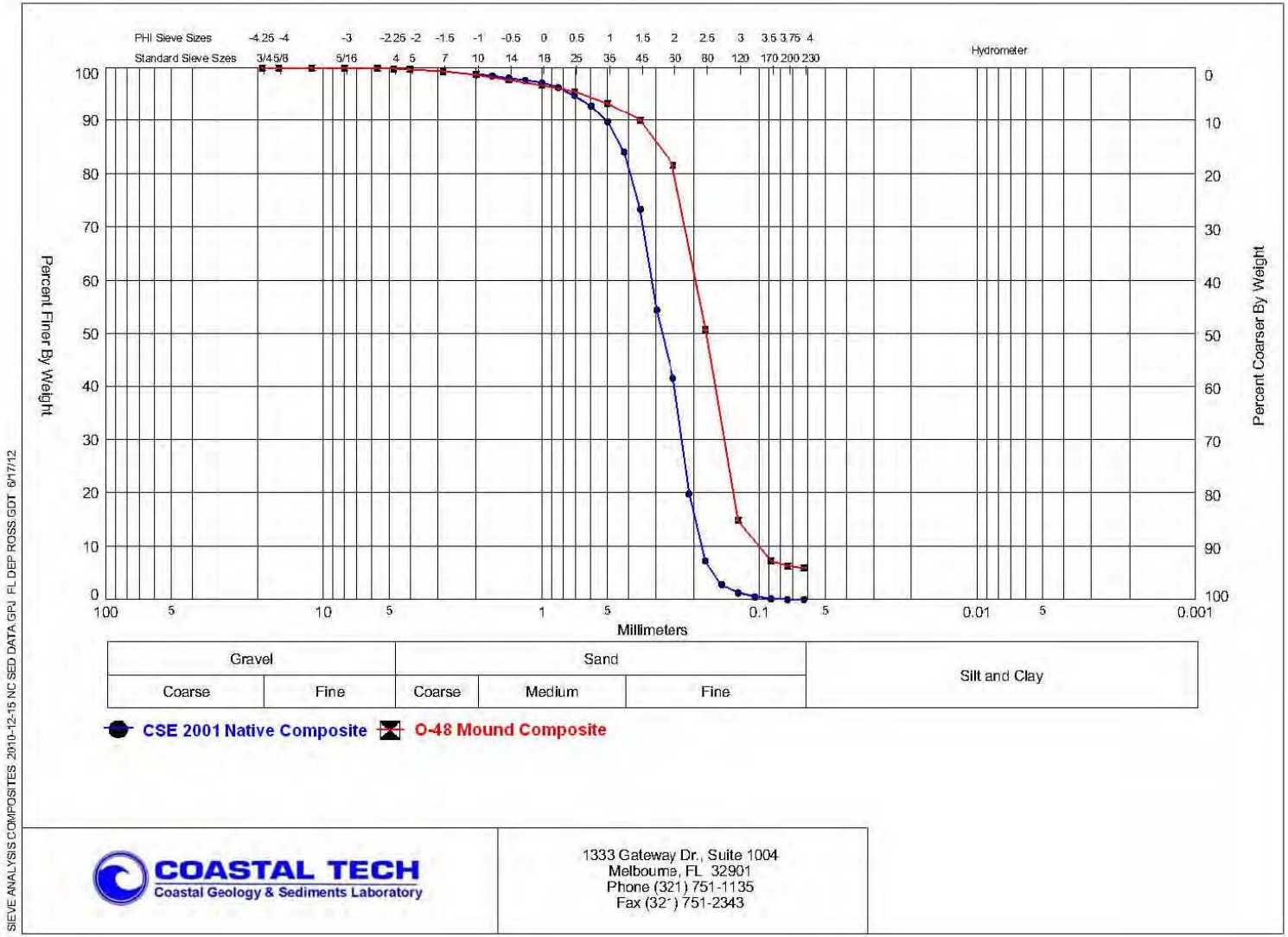


Figure A3.7 – Composite Curves of Mound O-48 and CSE 2001 Native Beach

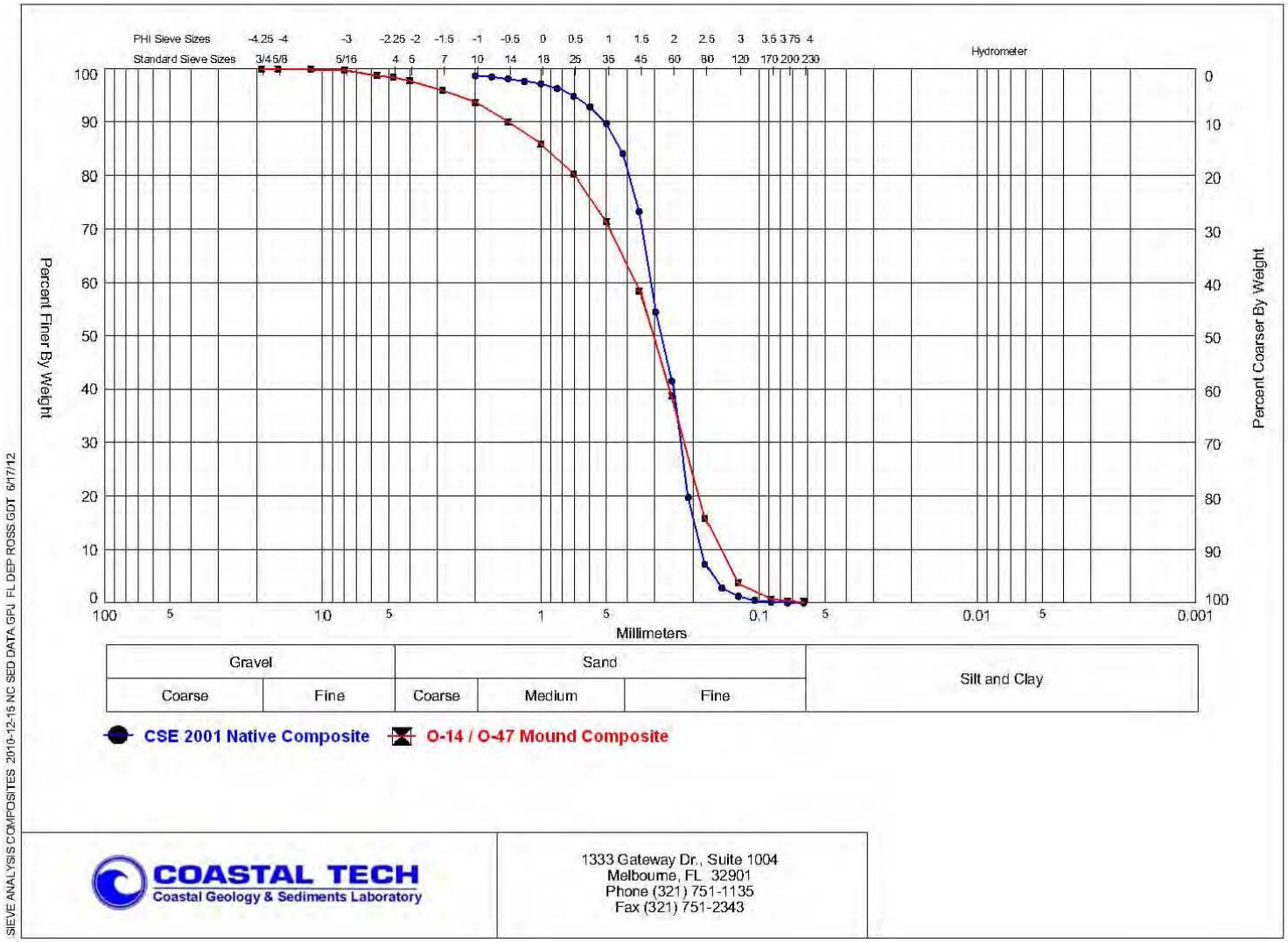


Figure A3.8 – Composite Curves of Mound O-14/O-47 and CSE 2001 Native Beach

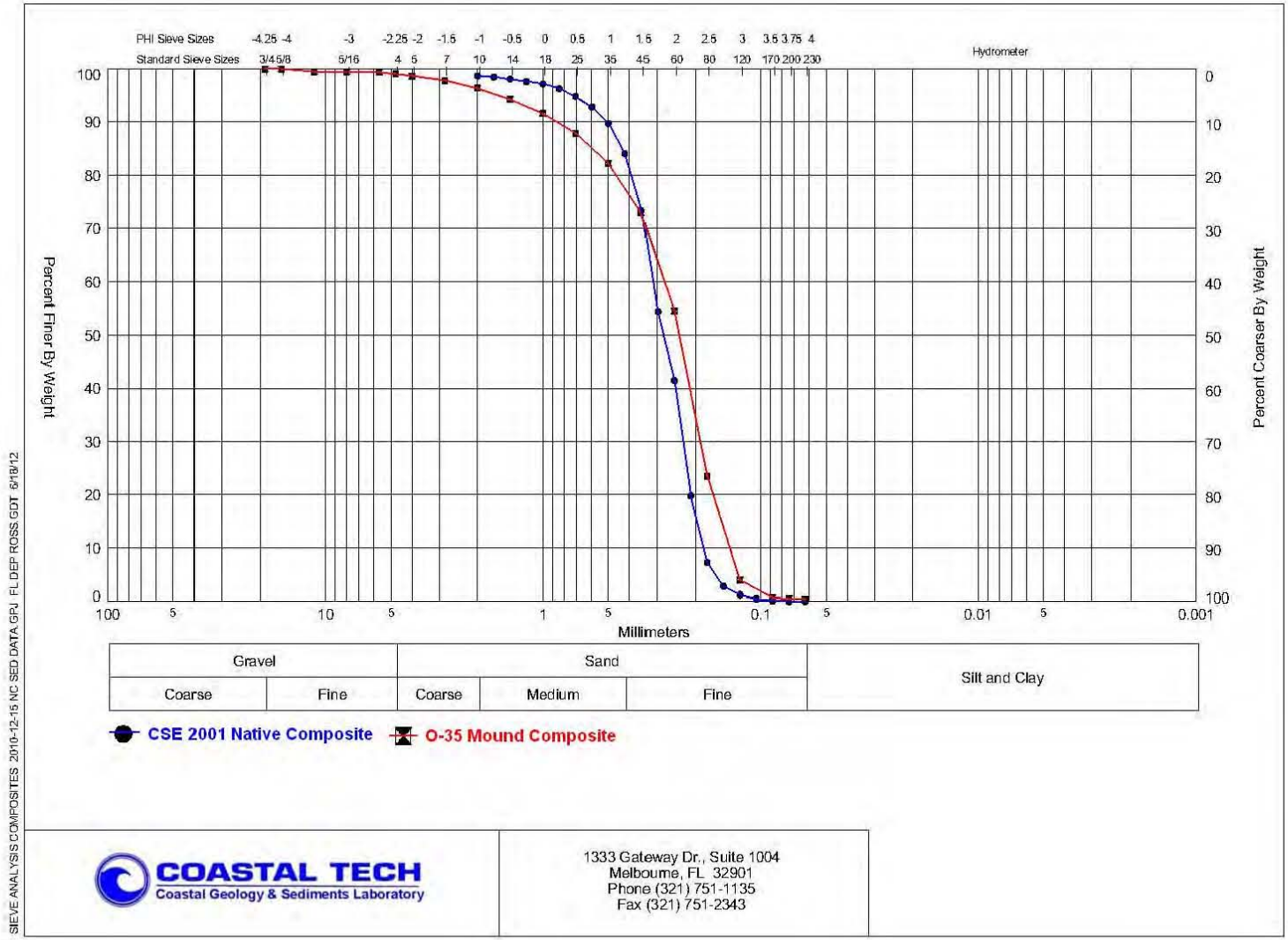


Figure A3.9 – Composite Curves of Mound O-35 and CSE 2001 Native Beach

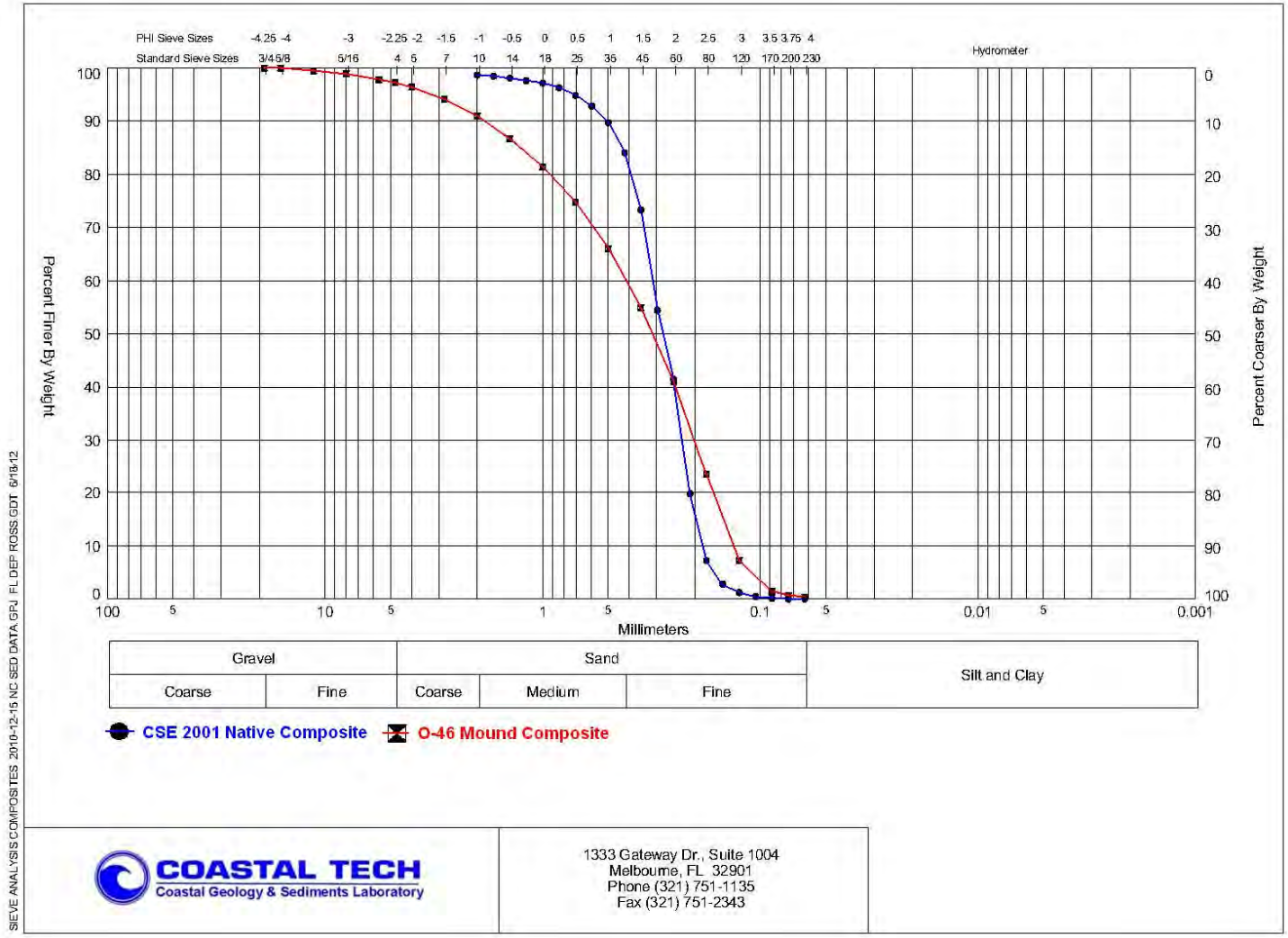


Figure A3.10 – Composite Curves of Mound O-46 and CSE 2001 Native Beach

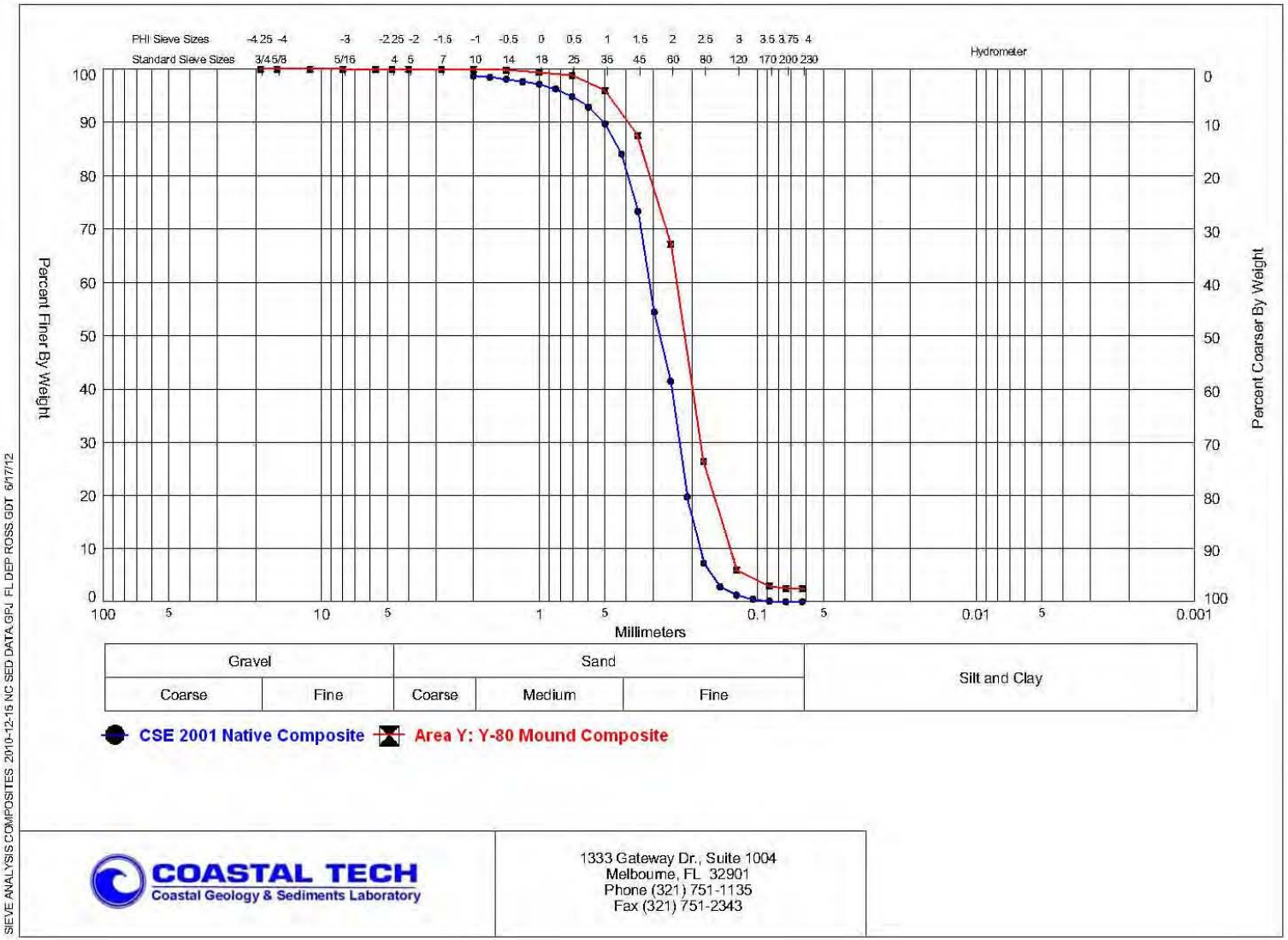


Figure A3.11 – Composite Curves of Area Y: Y-80 Mound and CSE 2001 Native Beach

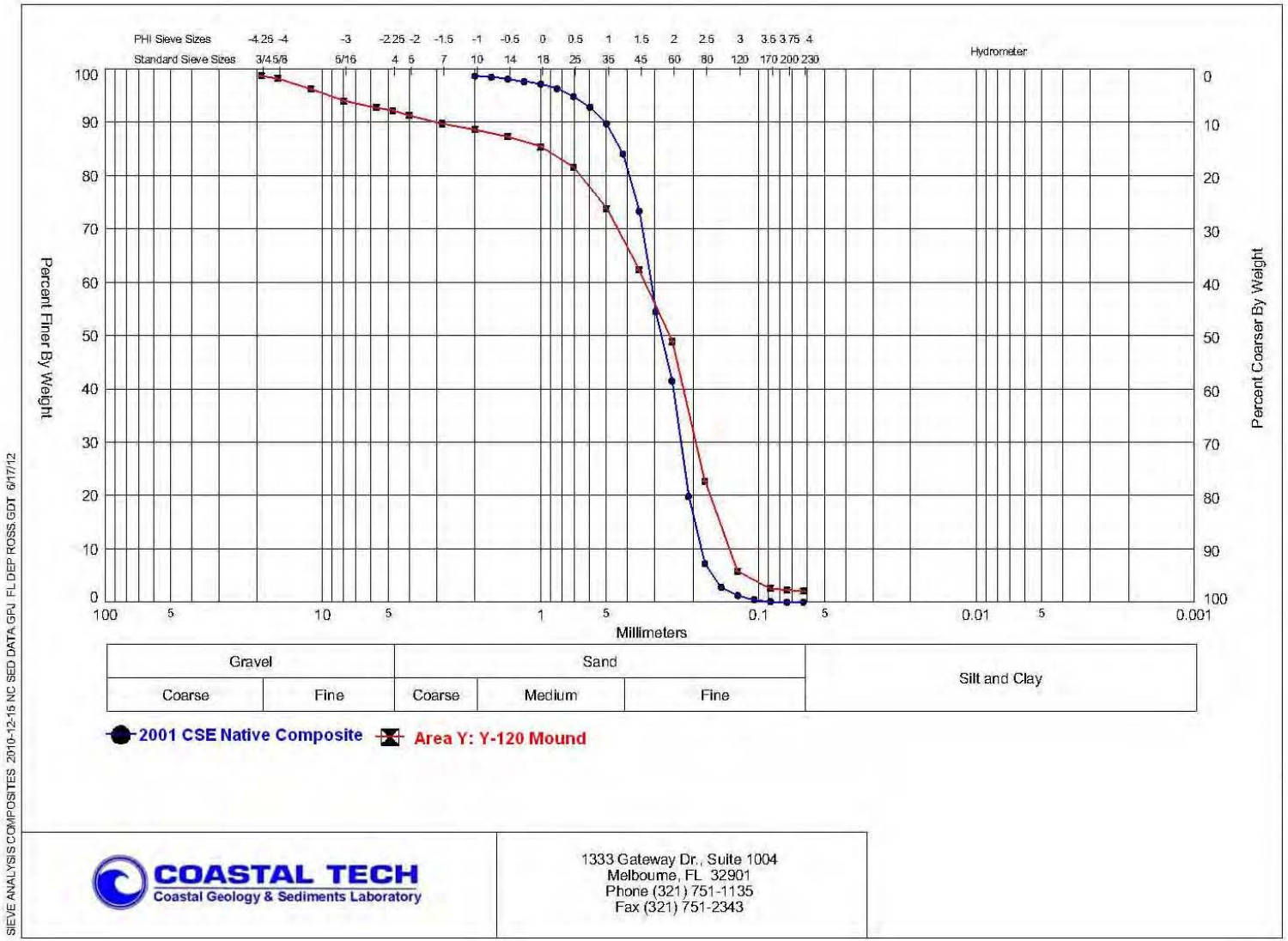


Figure A3.12 – Composite Curves of Area Y: Y-120 Mound and CSE 2001 Native Beach

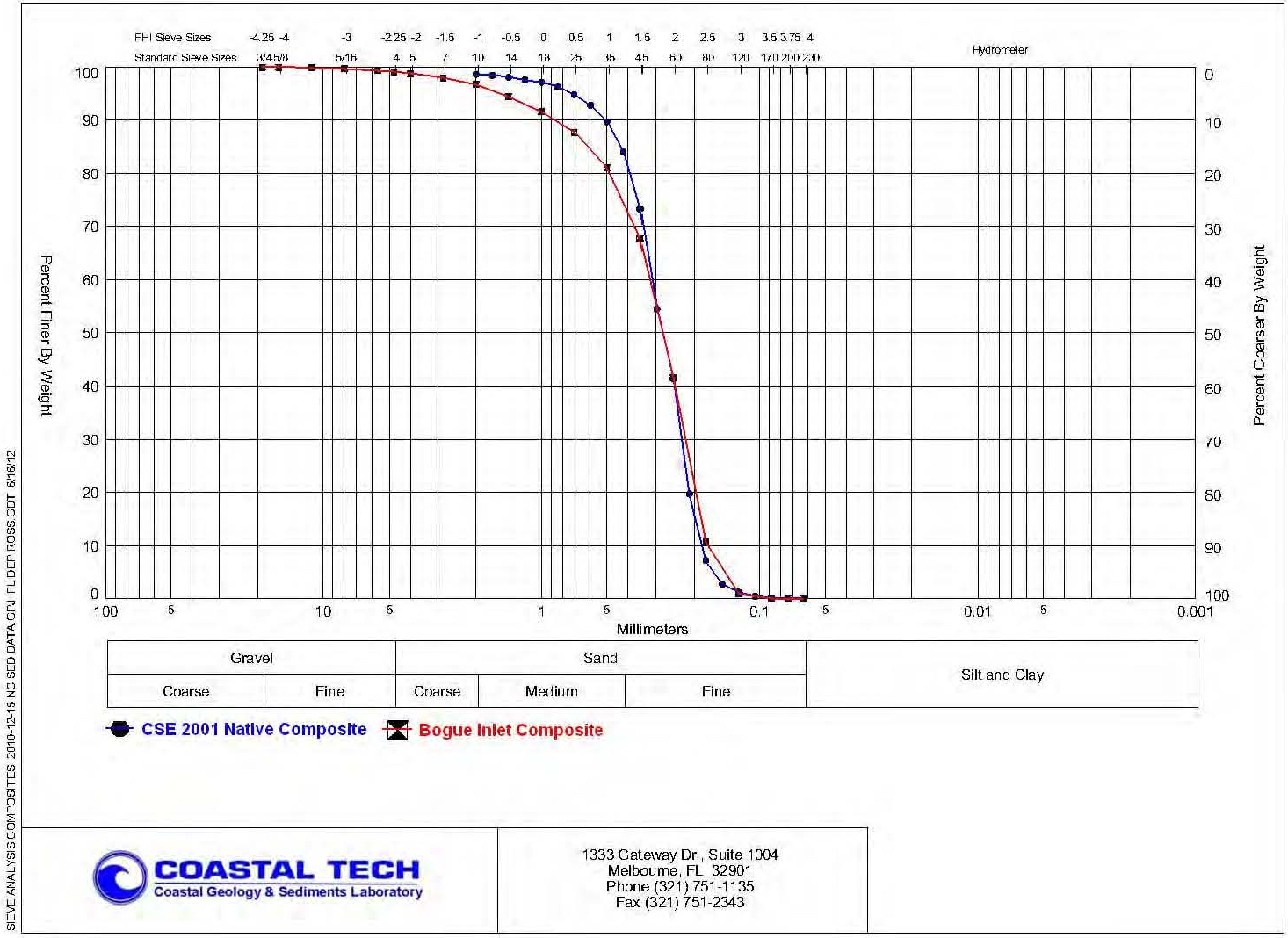


Figure A3.13 – Composite Curves of Bogue Inlet Channel and CSE 2001 Native Beach

Appendix 4

Potential Borrow Area
Overfill Factor Calculations

Bogue Banks

Sand Sample	Descriptive Statistics			James Method (1975)		
	Mean (mm)	*Mean (phi)*	*Std. Dev. (phi)*	$(M_b-M_n)/s_n$	s_b/s_n	**Overfill Factor**
2001 Native Composite	0.30	1.75	0.61	--	--	**--**
Old ODMDS1 Composite	0.30	1.76	1.11	0.02	1.82	1.30
Old ODMDS2 Composite	0.32	1.63	1.1	-0.20	1.80	1.25
Current ODMDS1 Composite	0.30	1.73	1.12	-0.03	1.84	1.25
Bogue Inlet Composite	0.33	1.59	1.03	-0.26	1.69	1.15
Y80 Composite	0.23	2.13	0.60	0.62	0.98	2.50
Y120 Composite	0.40	1.31	1.64	-0.72	2.69	1.30
Mound 15 Composite	0.24	2.07	0.80	0.52	1.31	1.60
Mound 192 Composite	0.36	1.47	1.26	-0.46	2.07	1.25
Mound O-14 Composite	0.38	1.40	1.28	-0.57	2.10	1.20
Mound O-35 Composite	0.30	1.76	1.14	0.02	1.87	1.30
Mound O-46 Composite	0.40	1.31	1.50	-0.72	2.46	1.25
Mound O-48 Composite	0.20	2.29	0.86	0.89	1.41	2.25