Waterway

Surveys & Engineering, Ltd.

321 Cleveland Place, Virginia Beach, Virginia 23462
Tel: (757) 490-1691 FAX: (757) 490-1348

SURVEYORS REPORT

This is to certify that Waterway Surveys & Engineering, ltd. (WS&E) between the dates of March 19, 2004 & April 18, 2004 have obtained sediment samples at Ocean View Beach. These samples were collected utilizing GPS techniques sufficient for horizontal positioning and leveling to acquire the relative elevation of the samples where applicable. The offshore samples were acquired with WS&E's hydrographic system employed for positioning.

The samples were collected at approximately every 1000 feet along the shoreline with up to six samples taken along a transect of the position. There were 211 samples acquired along these transects with lettering to identify their relative positions. The locations were A) top of dune, B) toe of dune, C)mid beach, D) high water line, E) at elevation -6 feet (NAVD 88) and E) – 15 feet (NAVD 88). Samples A, B, C, & D were taken by grab samples. The samples for E and F were taken with a ponar grab sampler. All samples were provided to GET Solutions for sieve analysis for the following sizes: #4, #10, #16, #30, # 40, #50, #60, #80, #100, #140 and #200. The results of these analysis have been delivered under separate cover.

Robert L. Taliaferro, L.S.

Geotechnical
Environmental
Testing
Solutions, Inc.

September 15, 2004

TO: **Waterway Surveys and Engineering, LTD**
321 Cleveland Place
Virginia Beach, Virginia 23462

Attn: Mr. Bob Talia Ferro

RE: Laboratory Testing Services
Ocean View Sediment Analysis
Norfolk, Virginia
G E T Project No: VB04-131G

Dear Mr. Ferro:

The purpose of this report is to present the results of the gradation analysis conducted on the soil samples from the above referenced project. The test specimens were sampled by Waterway Surveys and Engineering, LTD and were delivered to our Virginia Beach Laboratory. A total of 211 representative soil samples were subjected to full sieve testing performed in accordance with ASTM D2487. This report includes the comprehensive gradation results of the submitted samples. These completed test results are presented in the "Particle Size Distribution Reports" included with this report. The soil samples included in this report are tabulated below:

Location	Sample No#	Figure#
OV-1	A through D	1A through 1D
OV-2	A through F	2A through 2F
OV-3	A through C	3A through 3C
OV-3	E through F	3E through 3F
OV-4	A through F	4A through 4F
OV-5	A through F	5A through 5F
OV-6	A through F	6A through 6F
OV-7	A through F	7A through 7F
OV-8	A through F	8A through 8F
OV-9	A through F	9A through 9F
OV-10	A through F	10A through 10F
OV-11	A through D	11A through 11D
OV-12	A through F	12A through 12F
OV-13	A through F	13A through 13F
OV-14	A through F	14A through 14F
OV-15	A through F	15A through 15F
OV-16	A through F	16A through 16F
OV-17	A through F	17A through 17F

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OV-18	A through F	18A through 18F
OV-19	A through D	19A through 19D
OV-20	A through F	20A through 20F
OV-21	A through F	21A through 21F
OV-22	A through F	22A through 22F
OV-23	A through F	23A through 23F
OV-24	A through F	24A through 24F
OV-25	A through D	25A through 25D
OV-26	A through F	26A through 26F
OV-27	A through F	27A through 27F
OV-28	A through F	28A through 28F
OV-29	A through F	29A through 29F
OV-30	A through F	30A through 30F
OV-31	A through F	31A through 31F
OV-32	A through F	23A through 32F
OV-33	A through F	33A through 33F
OV-34	A through F	34A through 34F
OV-35	A through D	35A through 35D
OV-36	A through C	36A through 36C
OV-37	A through C	37A through 37C
OV-38	A through C	38A through 38C
OV-39	A through C	39A through 39C

We appreciate the opportunity to be of continuous service to you on this project, and ask that you call this office with any questions that you may have.

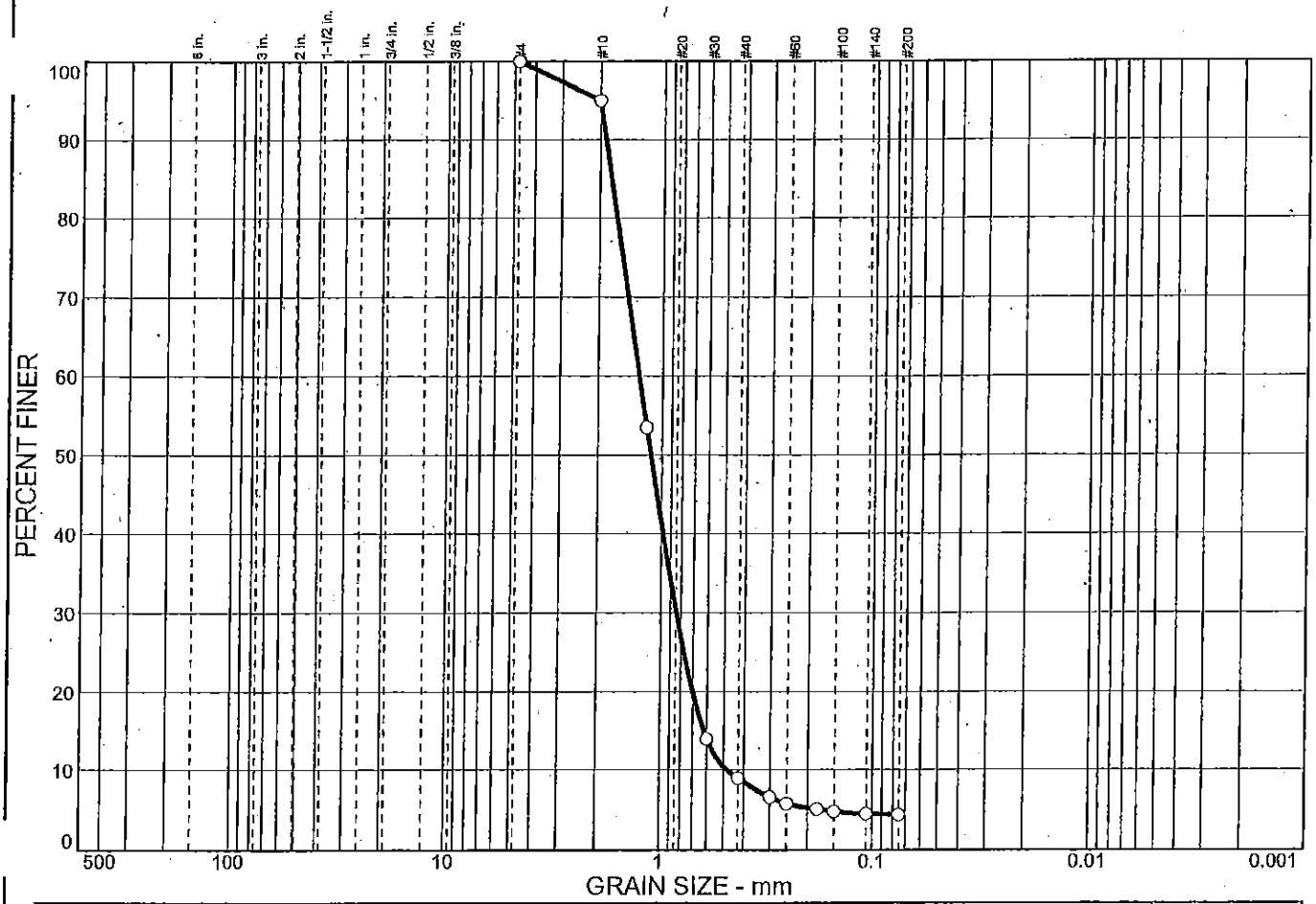
Respectfully Submitted,
G E T Solutions, Inc.

D. Mark Scholefield, P.E.
Senior Project Engineer
VA Lic. # 033932

COMMONWEALTH OF VIRGINIA
DAVID MARK SCHOLEFIELD
No. 033932
9/17/04
PROFESSIONAL ENGINEER

Copies: (2) Client
(1) Moffatt & Nichol (Attn. Mr. Ira Brotman, P.E.)

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	95.6	4.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	94.9		
#16	53.5		
#30	14.0		
#40	8.9		
#50	6.6		
#60	5.8		
#80	5.1		
#100	4.8		
#140	4.5		
#200	4.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.77 D_{60}= 1.28 D_{50}= 1.13
D_{30}= 0.844 D_{15}= 0.620 D_{10}= 0.483
C_u= 2.66 C_c= 1.15

Classification

USCS= SP AASHTO= A-1-b

Remarks

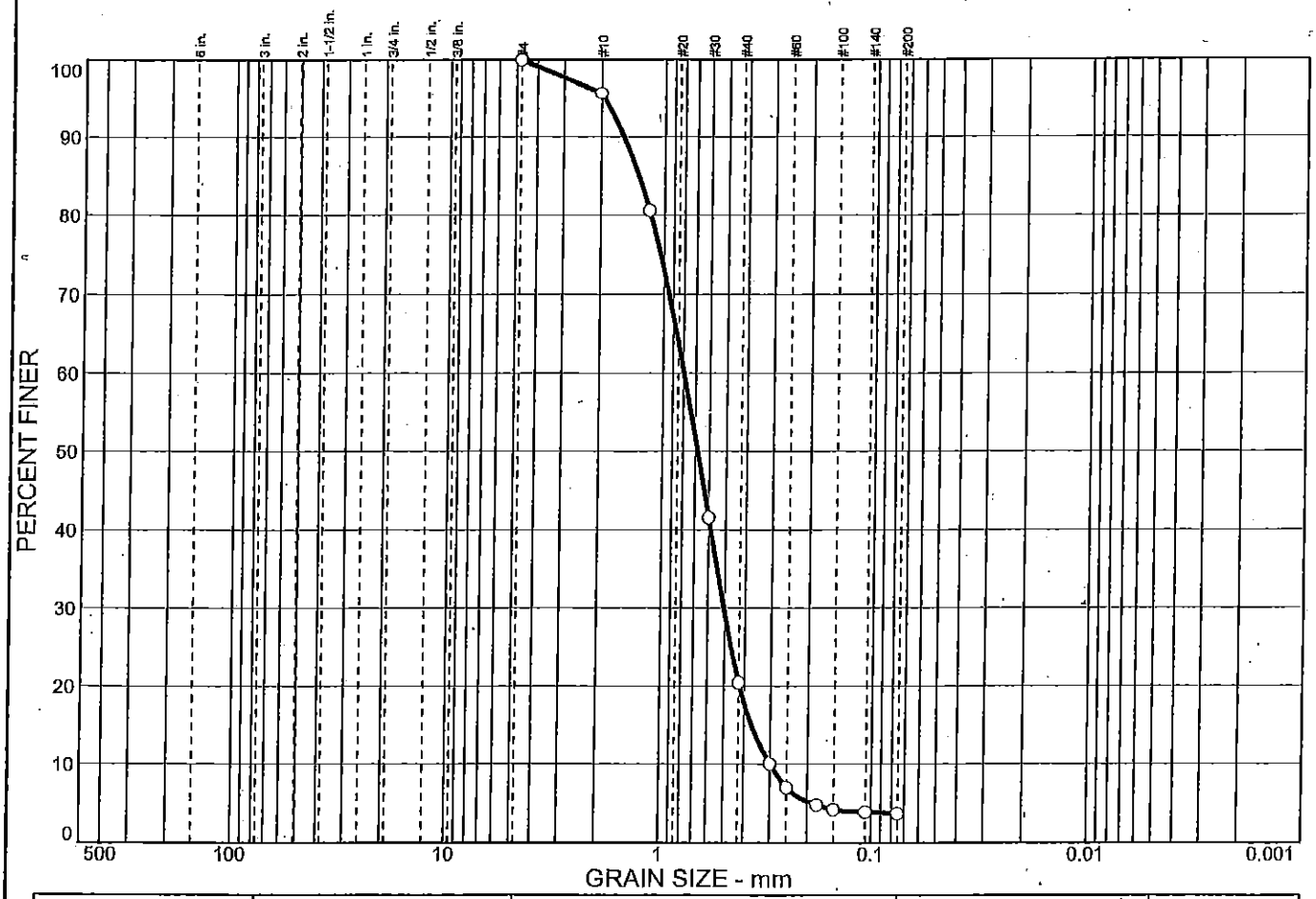
OV-1
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-1 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 1A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.3	3.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	95.7		
#16	80.6		
#30	41.5		
#40	20.4		
#50	10.0		
#60	7.0		
#80	4.8		
#100	4.2		
#140	3.9		
#200	3.7		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.33 D_{60}= 0.797 D_{50}= 0.681
D_{30}= 0.505 D_{15}= 0.369 D_{10}= 0.300
C_u= 2.66 C_c= 1.07

Classification

USCS= SP AASHTO= A-1-b

Remarks

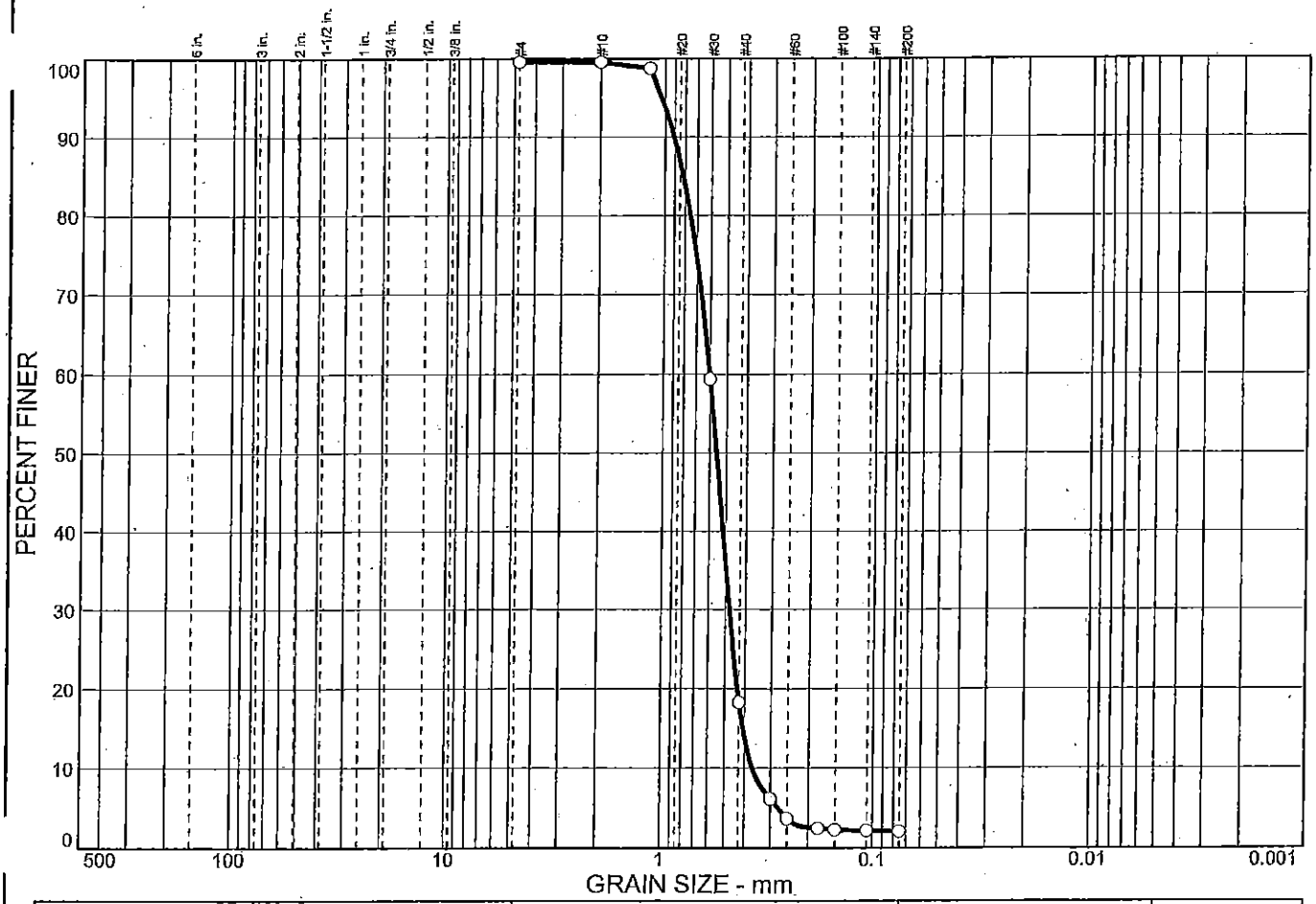
OV-1
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-1 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 1B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		97.5	2.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	99.6		
#16	98.8		
#30	59.4		
#40	18.2		
#50	6.2		
#60	3.7		
#80	2.5		
#100	2.3		
#140	2.2		
#200	2.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.820 D_{60}= 0.603 D_{50}= 0.556
D_{30}= 0.476 D_{15}= 0.407 D_{10}= 0.367
C_u= 1.64 C_c= 1.02

Classification

USCS= SP AASHTO= A-1-b

Remarks

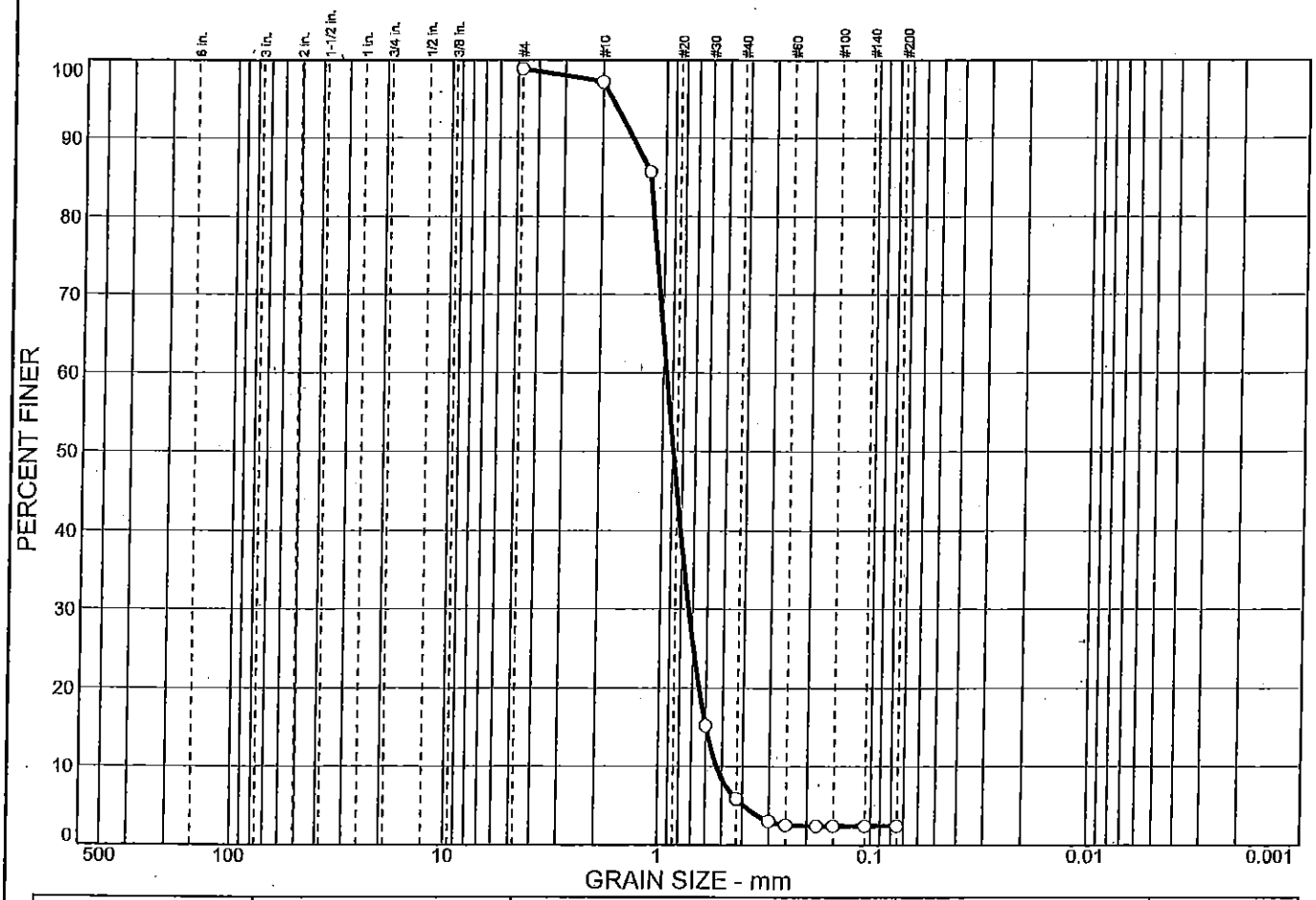
OV-1
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/28/04
Location: OV-1 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 1C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		96.4	2.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.9		
#10	97.3		
#16	85.7		
#30	15.1		
#40	5.9		
#50	3.1		
#60	2.6		
#80	2.5		
#100	2.5		
#140	2.5		
#200	2.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.17 D_{60}= 0.965 D_{50}= 0.887
D_{30}= 0.734 D_{15}= 0.599 D_{10}= 0.530
C_u= 1.82 C_c= 1.05

Classification

USCS= SP AASHTO= A-1-b

Remarks

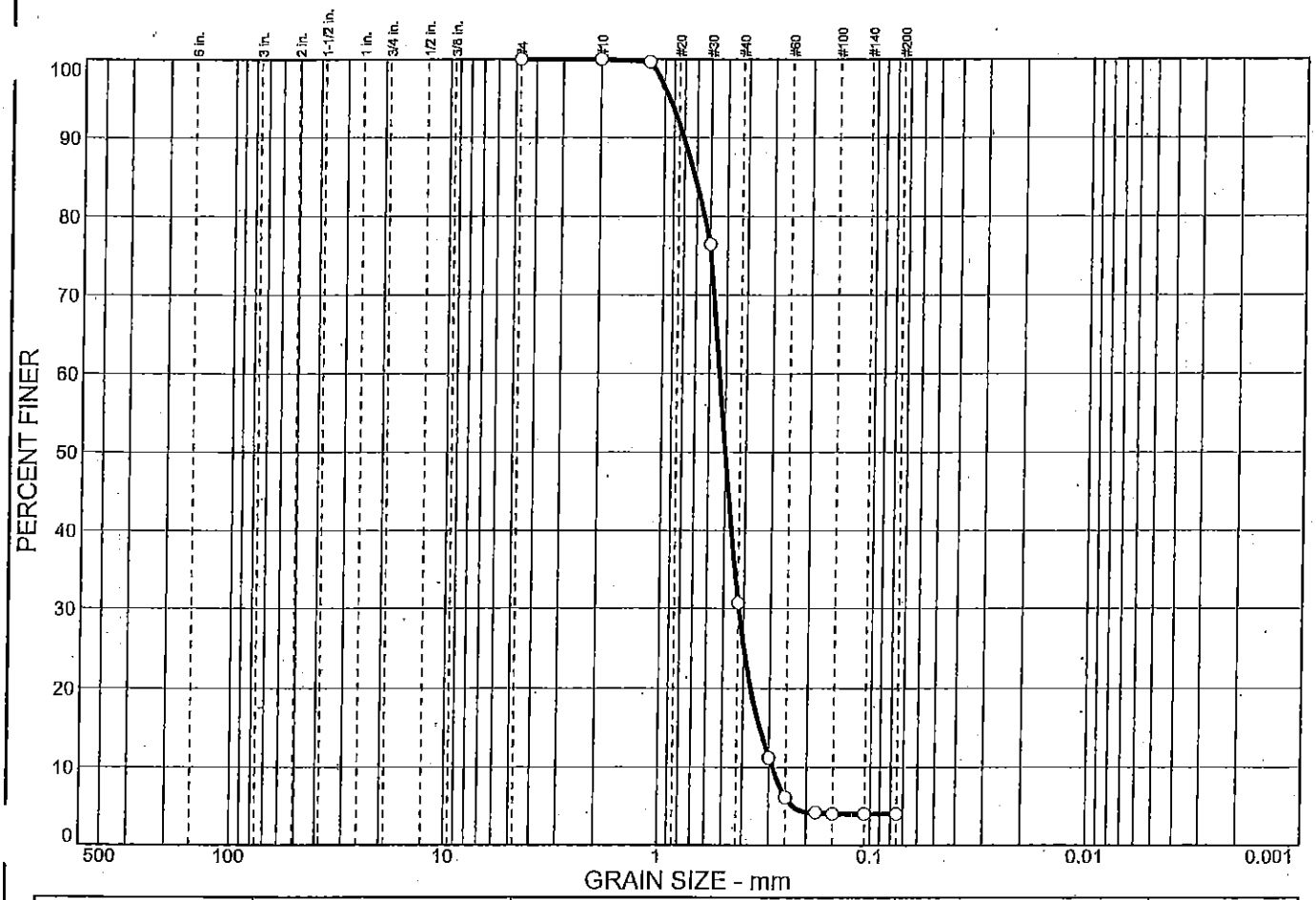
OV-1
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/28/04
Location: OV-1 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 1D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.0	4.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.7		
#30	76.5		
#40	30.7		
#50	11.2		
#60	6.1		
#80	4.2		
#100	4.0		
#140	4.0		
#200	4.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.715 D_{60}= 0.536 D_{50}= 0.500
D_{30}= 0.422 D_{15}= 0.333 D_{10}= 0.289
C_u= 1.85 C_c= 1.15

Classification

USCS= SP AASHTO= A-1-b

Remarks

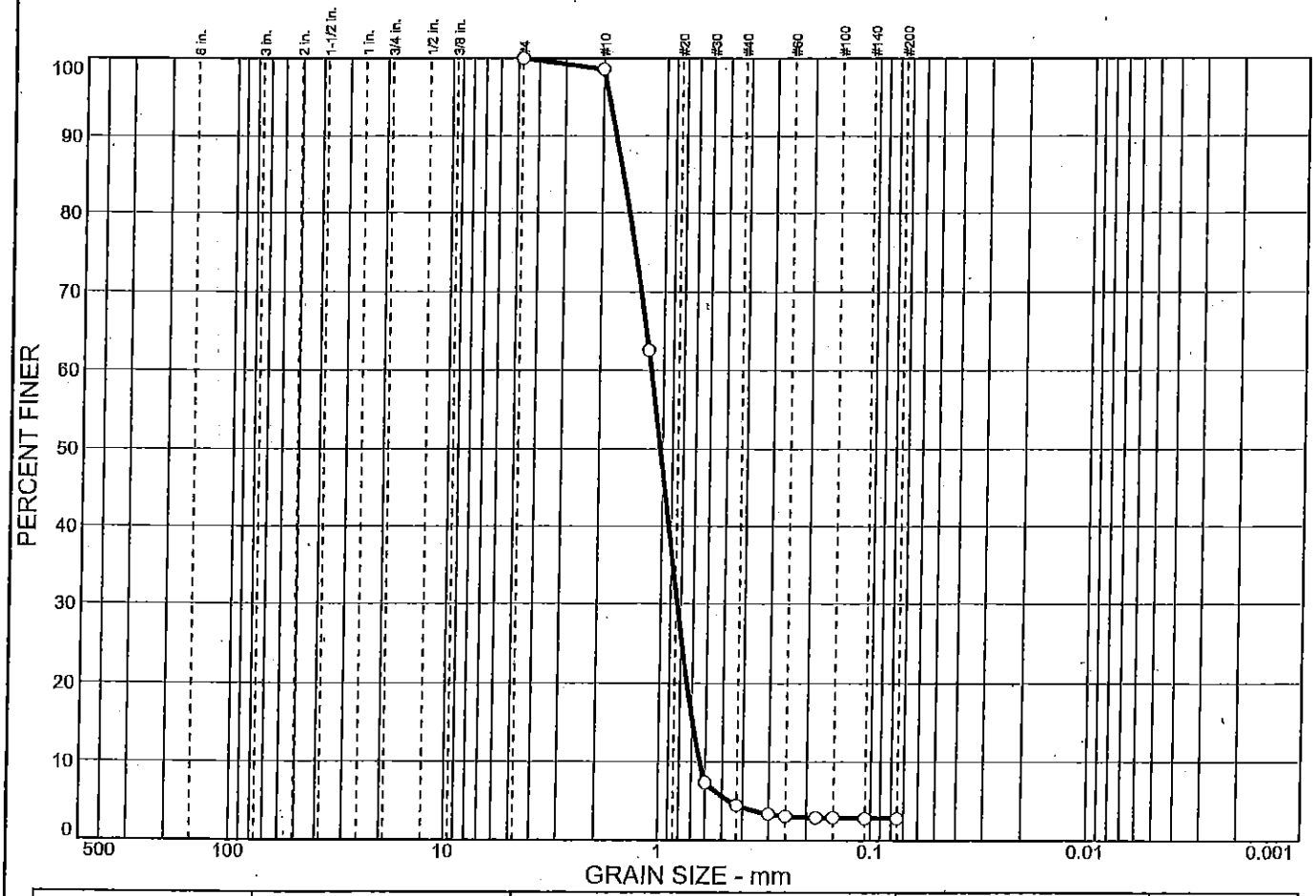
OV-2
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-2 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 2A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.2	2.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.6		
#16	62.5		
#30	7.4		
#40	4.5		
#50	3.4		
#60	3.1		
#80	2.9		
#100	2.9		
#140	2.8		
#200	2.8		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.60 D_{60}= 1.15 D_{50}= 1.03
D_{30}= 0.836 D_{15}= 0.694 D_{10}= 0.638
C_u= 1.80 C_c= 0.96

Classification

USCS= SP AASHTO= A-1-b

Remarks

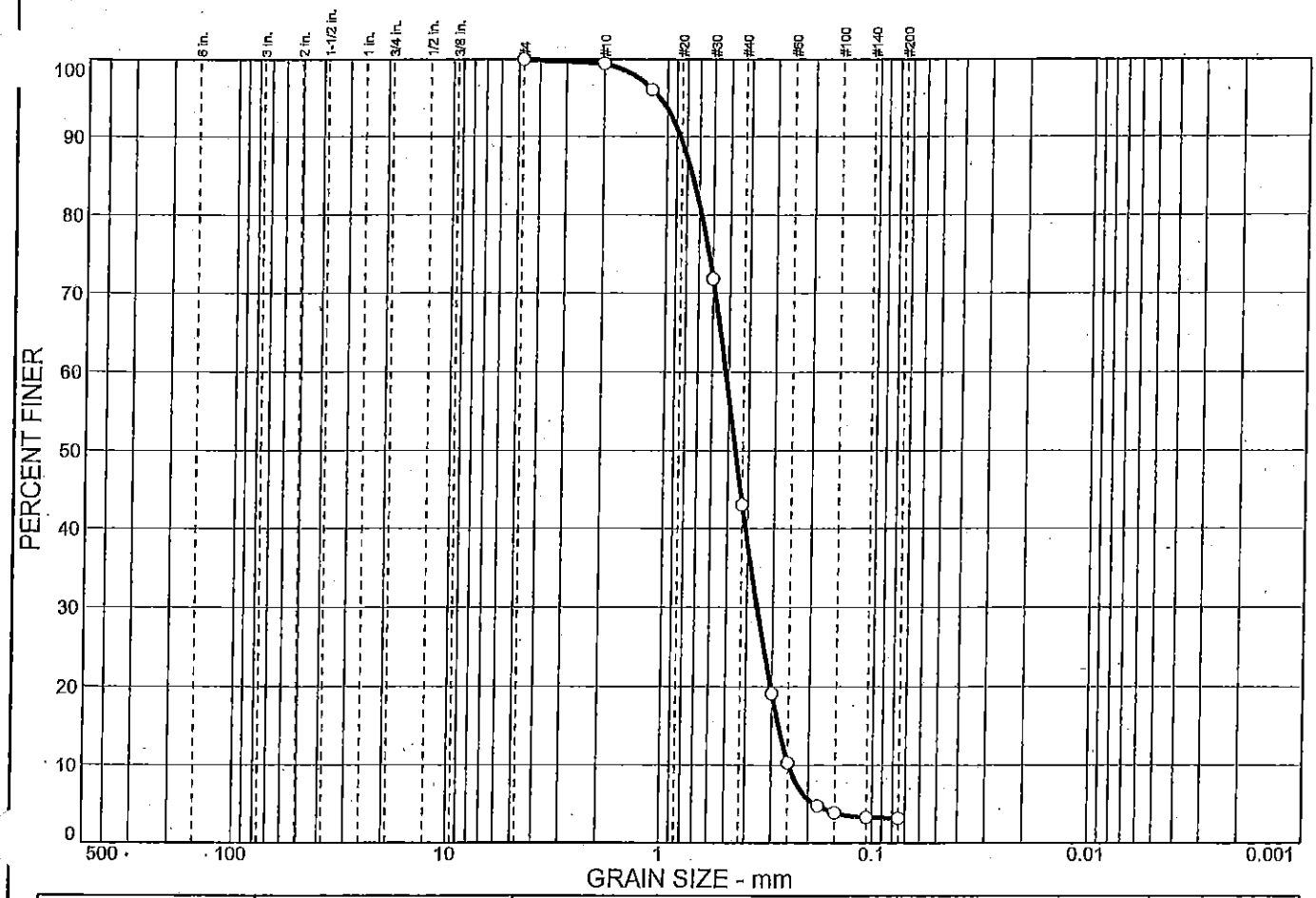
OV-2
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-2 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 2B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.8	3.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.5		
#16	96.1		
#30	71.8		
#40	43.0		
#50	19.1		
#60	10.3		
#80	4.8		
#100	3.9		
#140	3.3		
#200	3.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.757 D_{60}= 0.518 D_{50}= 0.462
D_{30}= 0.357 D_{15}= 0.278 D_{10}= 0.248
C_u= 2.09 C_c= 0.99

Classification

USCS= SP AASHTO= A-1-b

Remarks

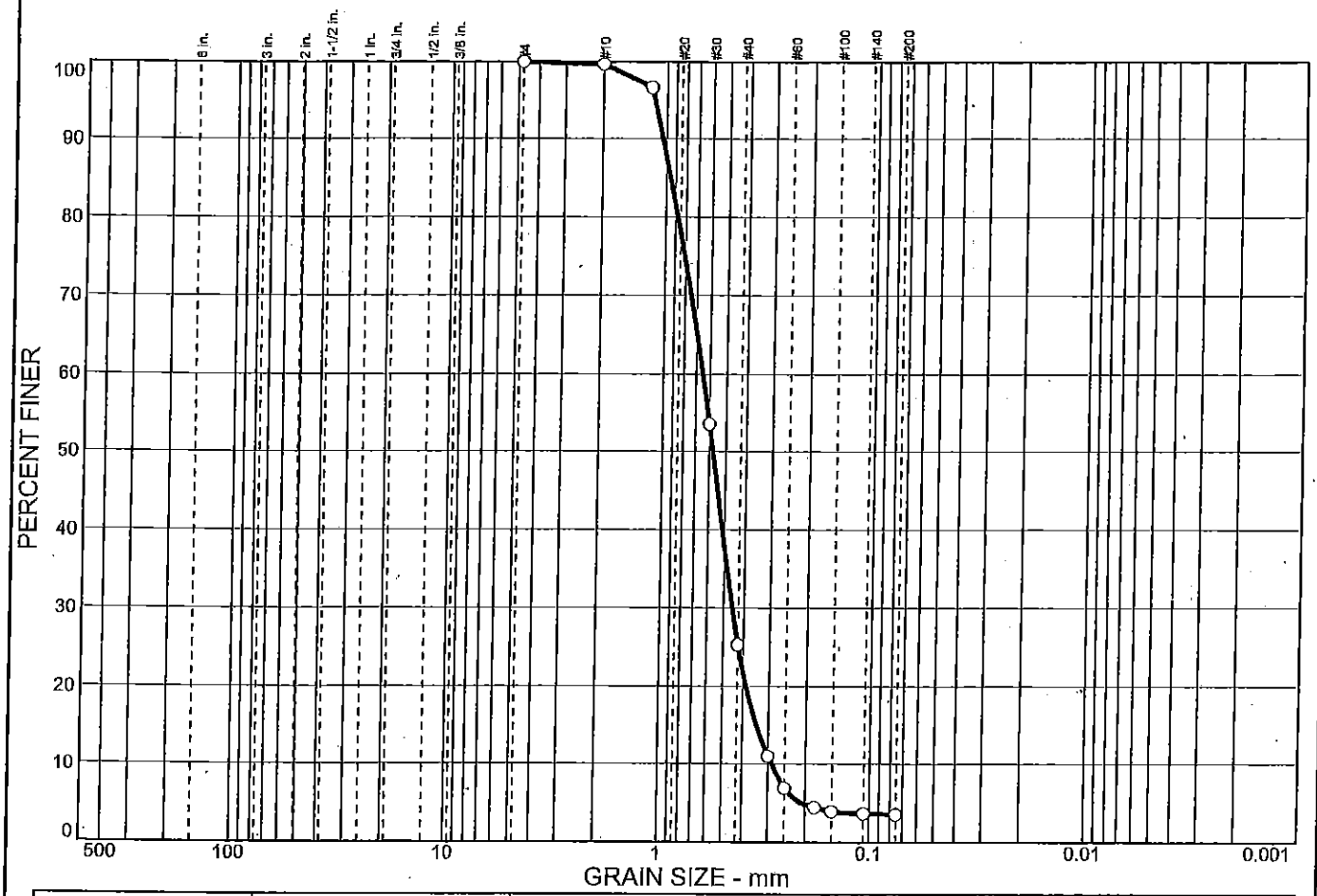
OV-2
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/28/04
Location: OV-2 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 2C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.5	3.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.7		
#16	96.7		
#30	53.5		
#40	25.3		
#50	11.0		
#60	6.9		
#80	4.4		
#100	3.9		
#140	3.6		
#200	3.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.955 D_{60}= 0.651 D_{50}= 0.576
D_{30}= 0.454 D_{15}= 0.343 D_{10}= 0.289
C_u= 2.25 C_c= 1.10

Classification

USCS= SP AASHTO= A-1-b

Remarks

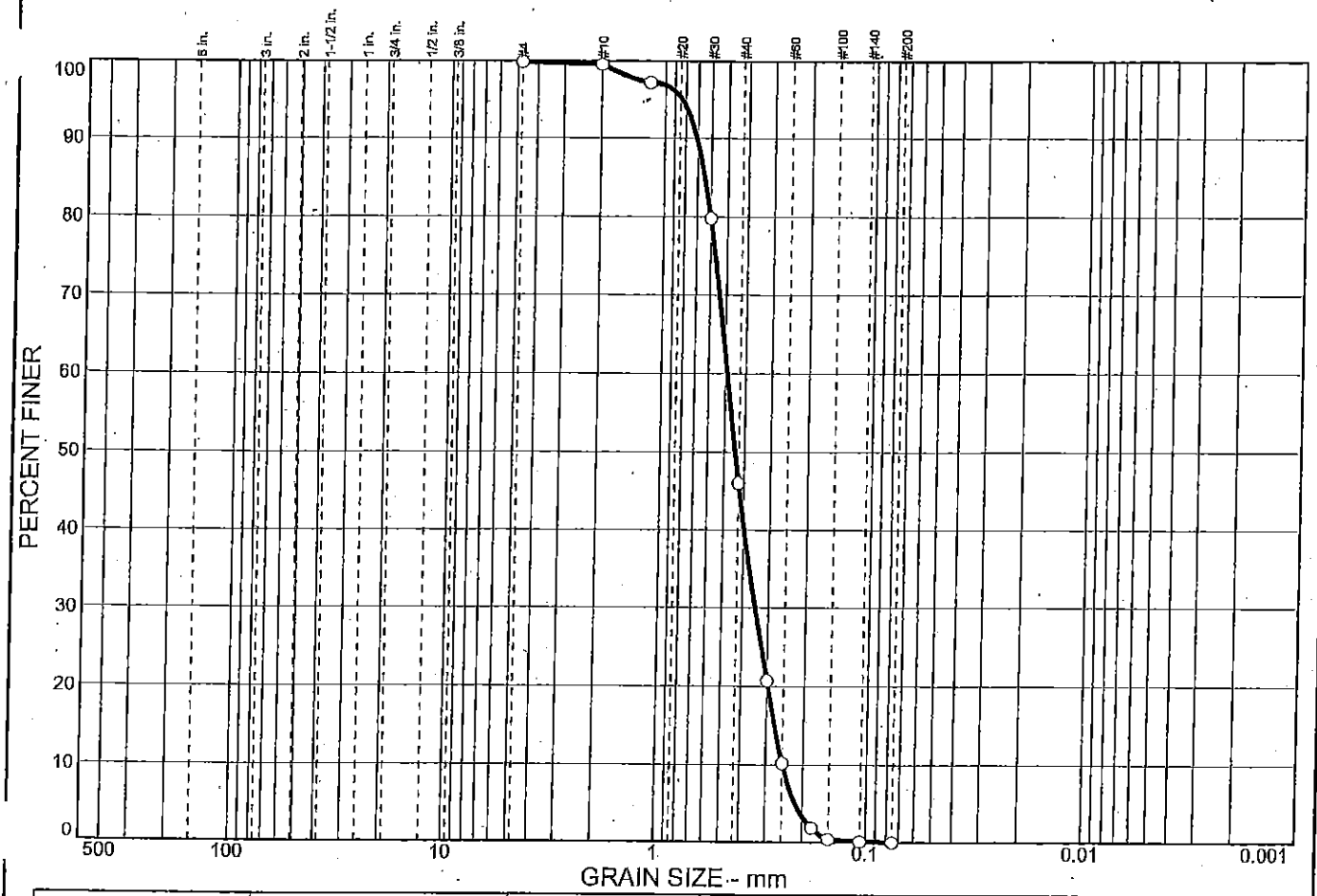
OV-2
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/28/04
Location: OV-2 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 2D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.9	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.6		
#16	97.3		
#30	79.8		
#40	46.0		
#50	20.7		
#60	10.2		
#80	1.9		
#100	0.4		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.646 D_{60}= 0.489 D_{50}= 0.443
D_{30}= 0.347 D_{15}= 0.273 D_{10}= 0.249
C_u= 1.96 C_c= 0.99

Classification

USCS= SP AASHTO= A-1-b

Remarks

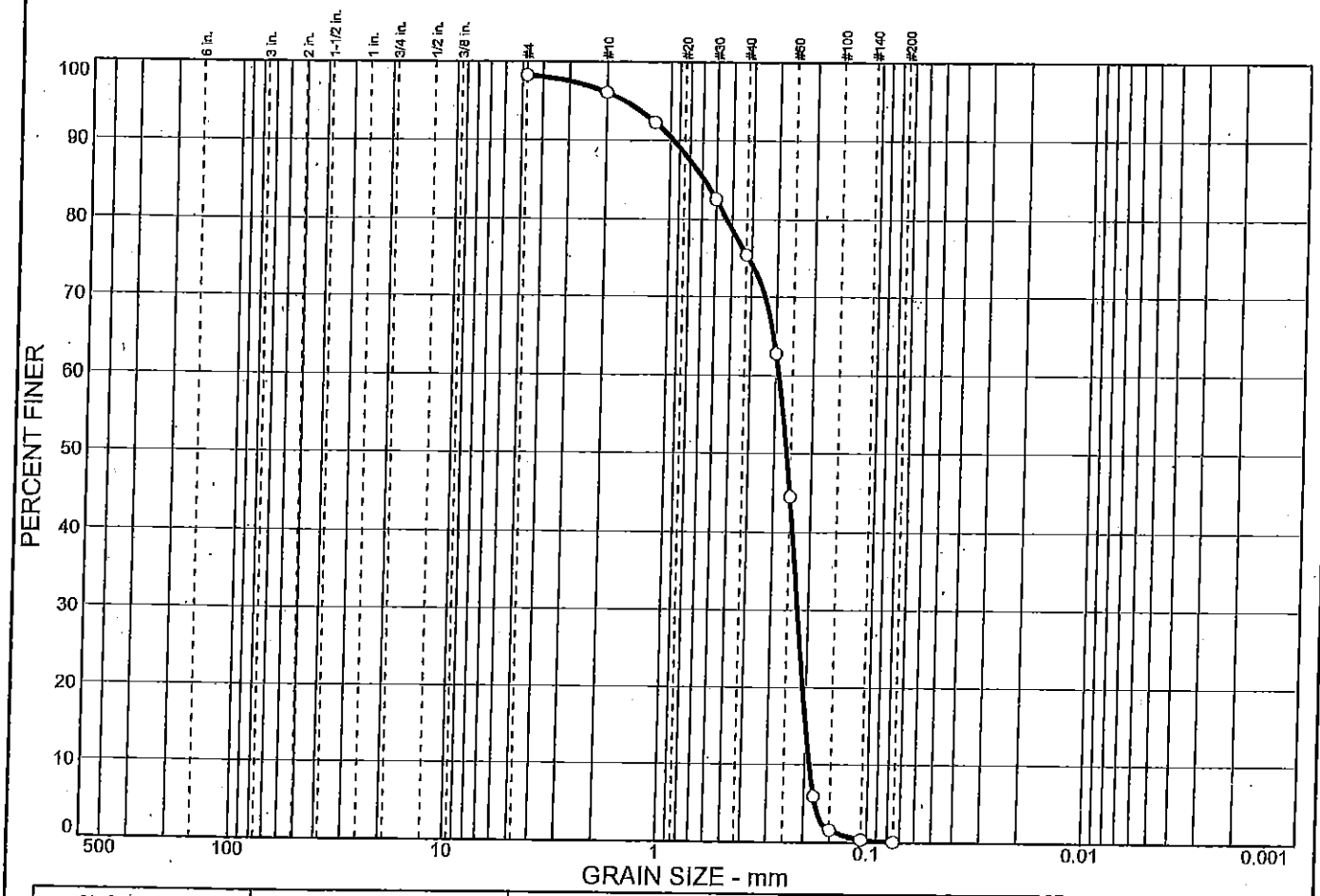
OV-2
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-2 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 2E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		98.2	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.3		
#10	96.1		
#16	92.2		
#30	82.5		
#40	75.4		
#50	62.8		
#60	44.5		
#80	6.0		
#100	1.6		
#140	0.4		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.687 D_{60}= 0.290 D_{50}= 0.262
D_{30}= 0.224 D_{15}= 0.199 D_{10}= 0.190
C_u= 1.53 C_c= 0.92

Classification

USCS= SP AASHTO= A-3

Remarks

OV-2
Sample F

Sample No.: F
Location: OV-2

Source of Sample:

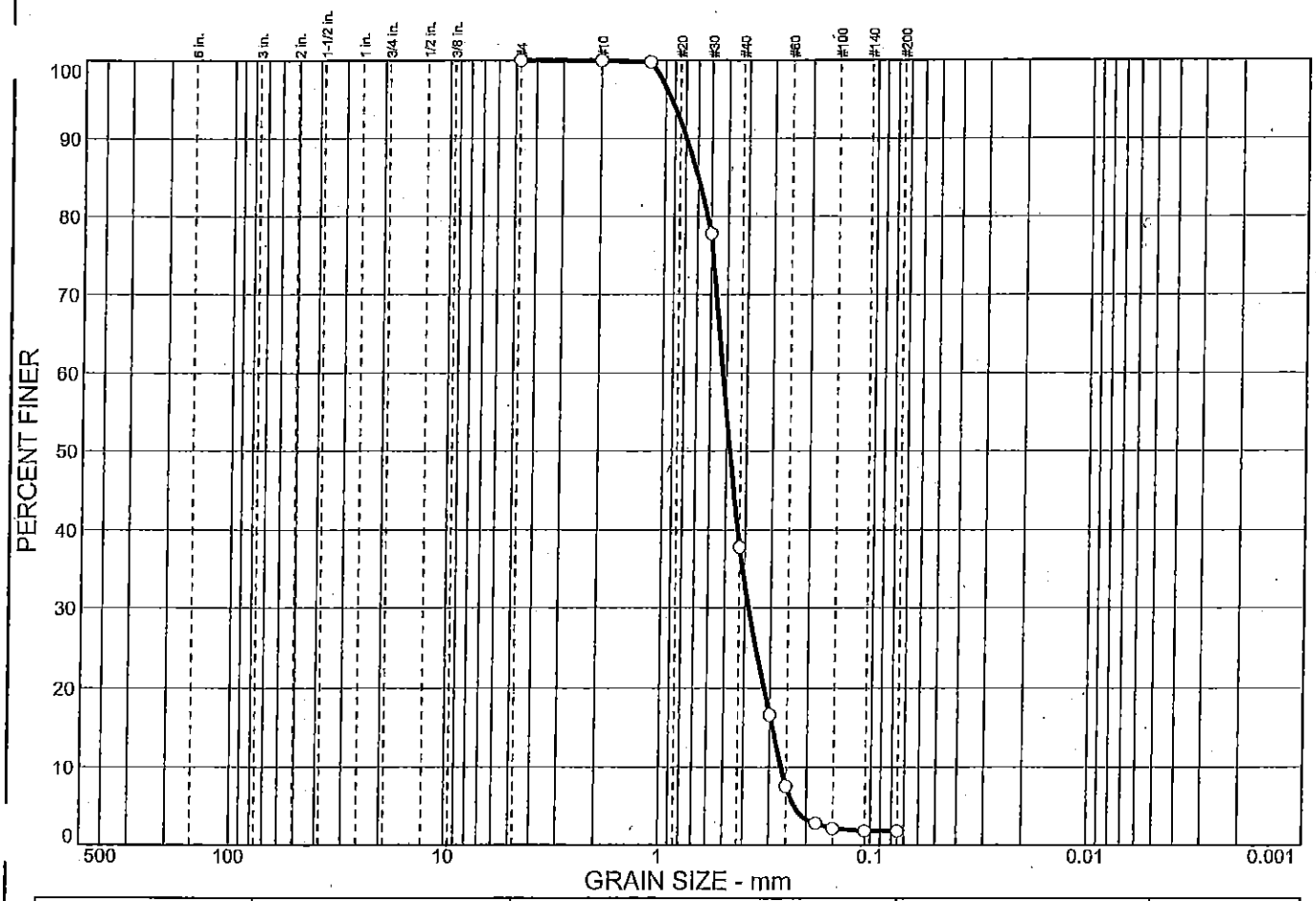
Date: 6/2/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G **Figure** 2F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	98.2	1.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	77.8		
#40	37.8		
#50	16.6		
#60	7.6		
#80	2.8		
#100	2.1		
#140	1.8		
#200	1.8		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.701 D_{60}= 0.521 D_{50}= 0.479
D_{30}= 0.384 D_{15}= 0.291 D_{10}= 0.264
C_u= 1.97 C_c= 1.07

Classification

USCS= SP AASHTO= A-1-b

Remarks

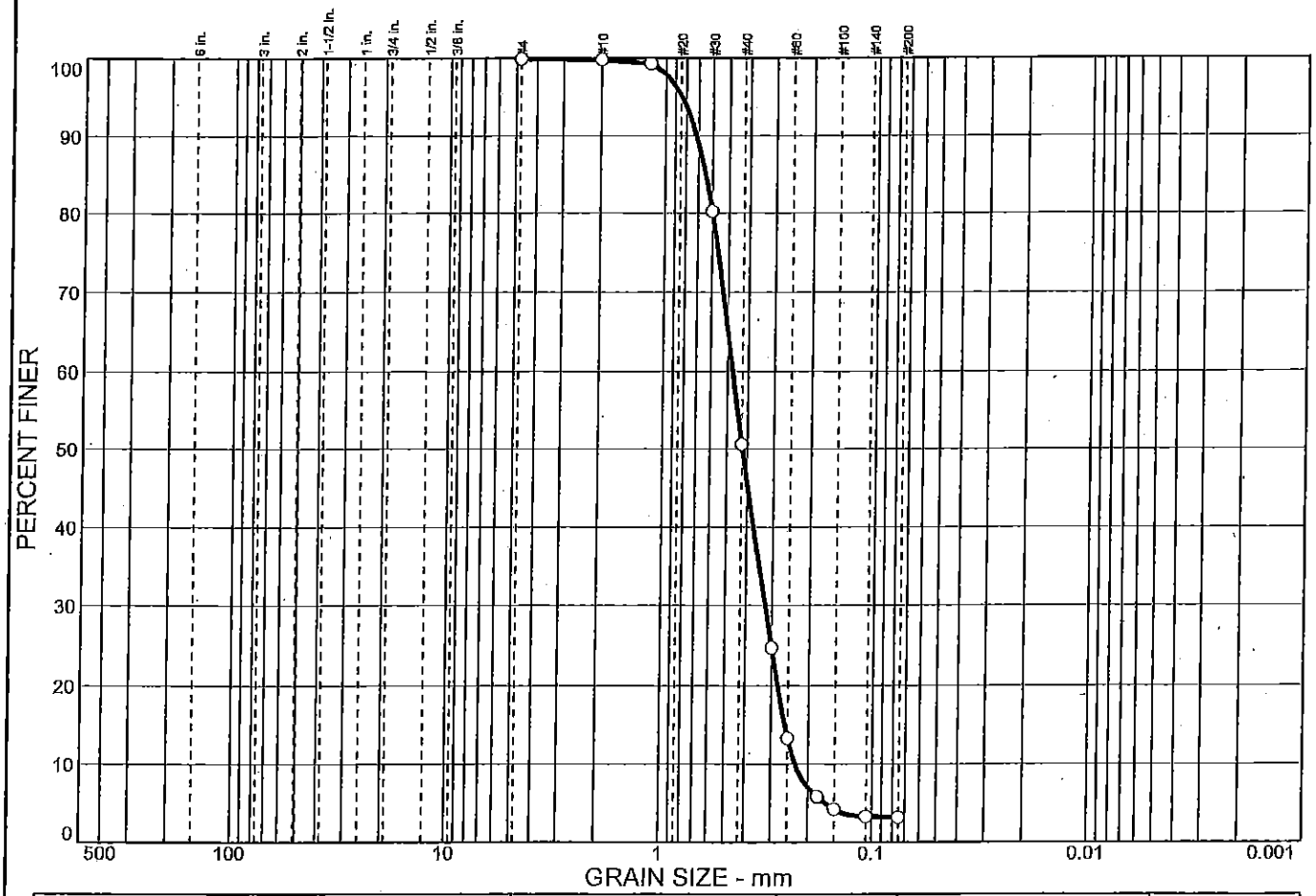
OV-3
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-3 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 3A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		96.7	3.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.8		
#16	99.3		
#30	80.2		
#40	50.6		
#50	24.7		
#60	13.3		
#80	5.8		
#100	4.2		
#140	3.3		
#200	3.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.647 D_{60}= 0.472 D_{50}= 0.422
D_{30}= 0.324 D_{15}= 0.258 D_{10}= 0.230
C_u= 2.05 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

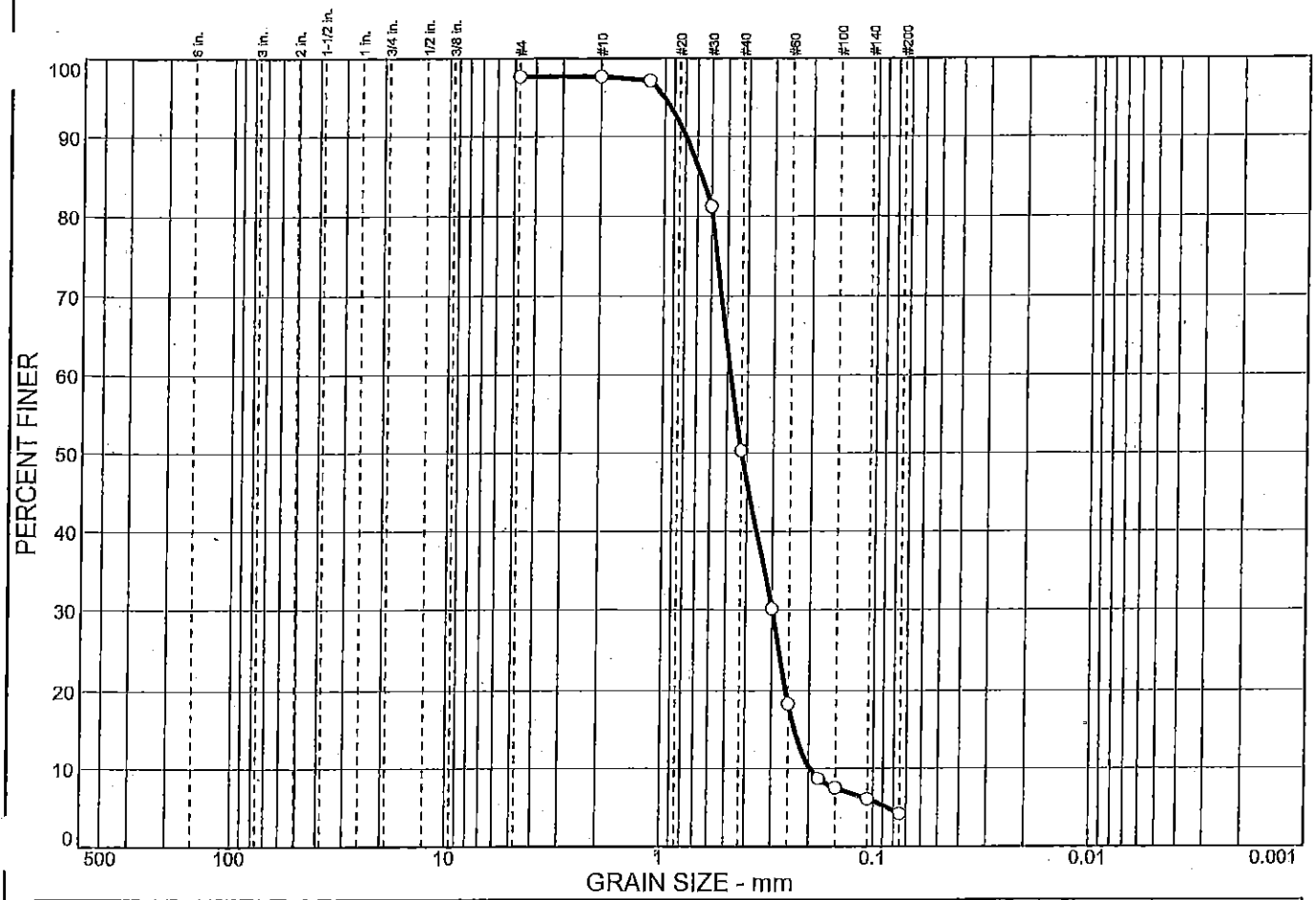
OV-3
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-3 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 3B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		93.5	4.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	97.7		
#10	97.7		
#16	97.2		
#30	81.2		
#40	50.3		
#50	30.1		
#60	18.3		
#80	8.7		
#100	7.5		
#140	6.1		
#200	4.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.670 D_{60}= 0.479 D_{50}= 0.423
D_{30}= 0.300 D_{15}= 0.234 D_{10}= 0.197
C_u= 2.43 C_c= 0.95

Classification

USCS= SP AASHTO= A-1-b

Remarks

OV-3
Sample C

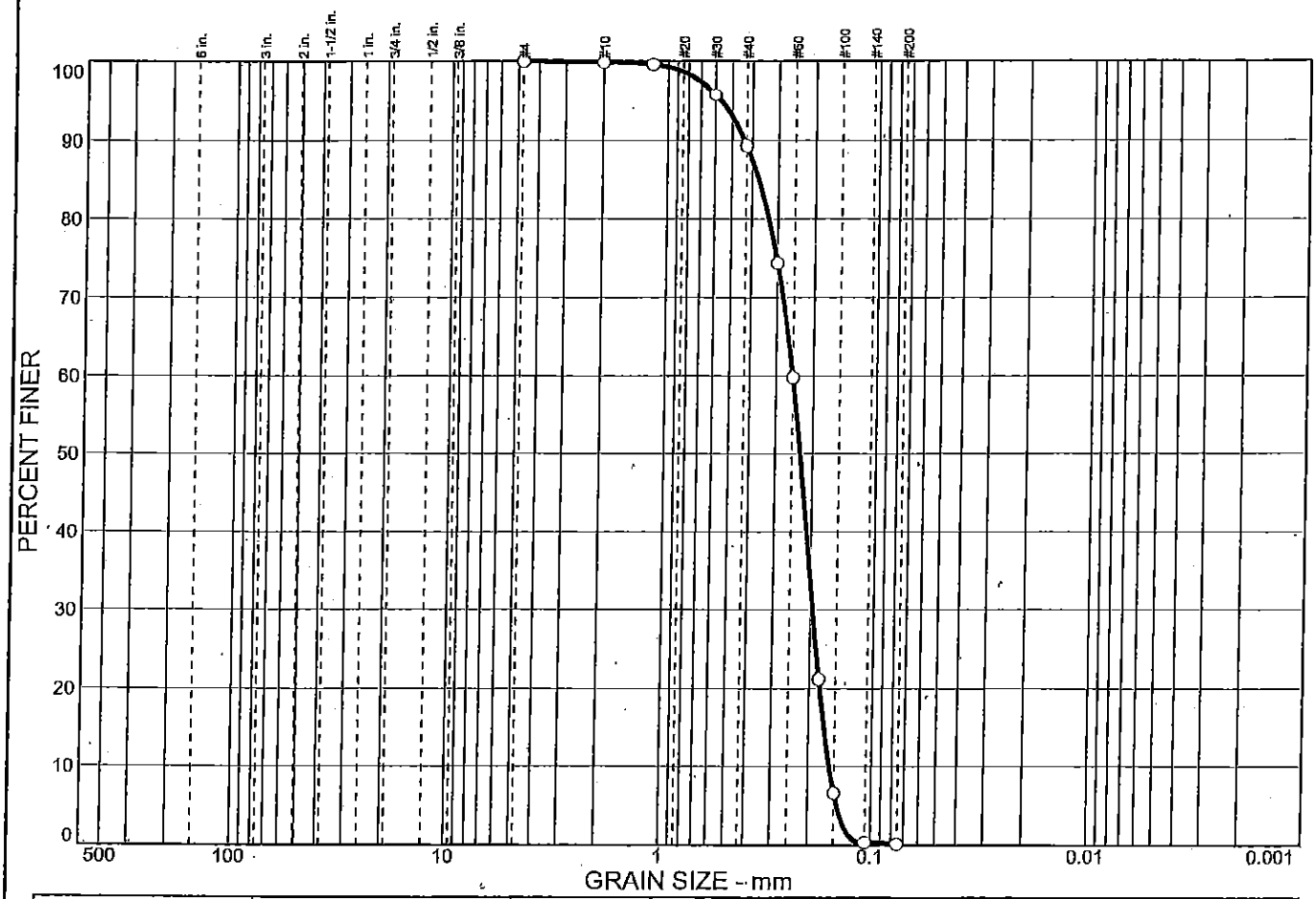
Sample No.: C **Source of Sample:** **Date:** 4/28/04
Location: OV-3 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G **Figure** 3C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.6		
#30	95.8		
#40	89.3		
#50	74.4		
#60	59.8		
#80	21.2		
#100	6.6		
#140	0.4		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.372 D_{60}= 0.250 D_{50}= 0.229
D_{30}= 0.195 D_{15}= 0.169 D_{10}= 0.158
C_u= 1.58 C_c= 0.95

Classification

USCS= SP AASHTO= A-3

Remarks

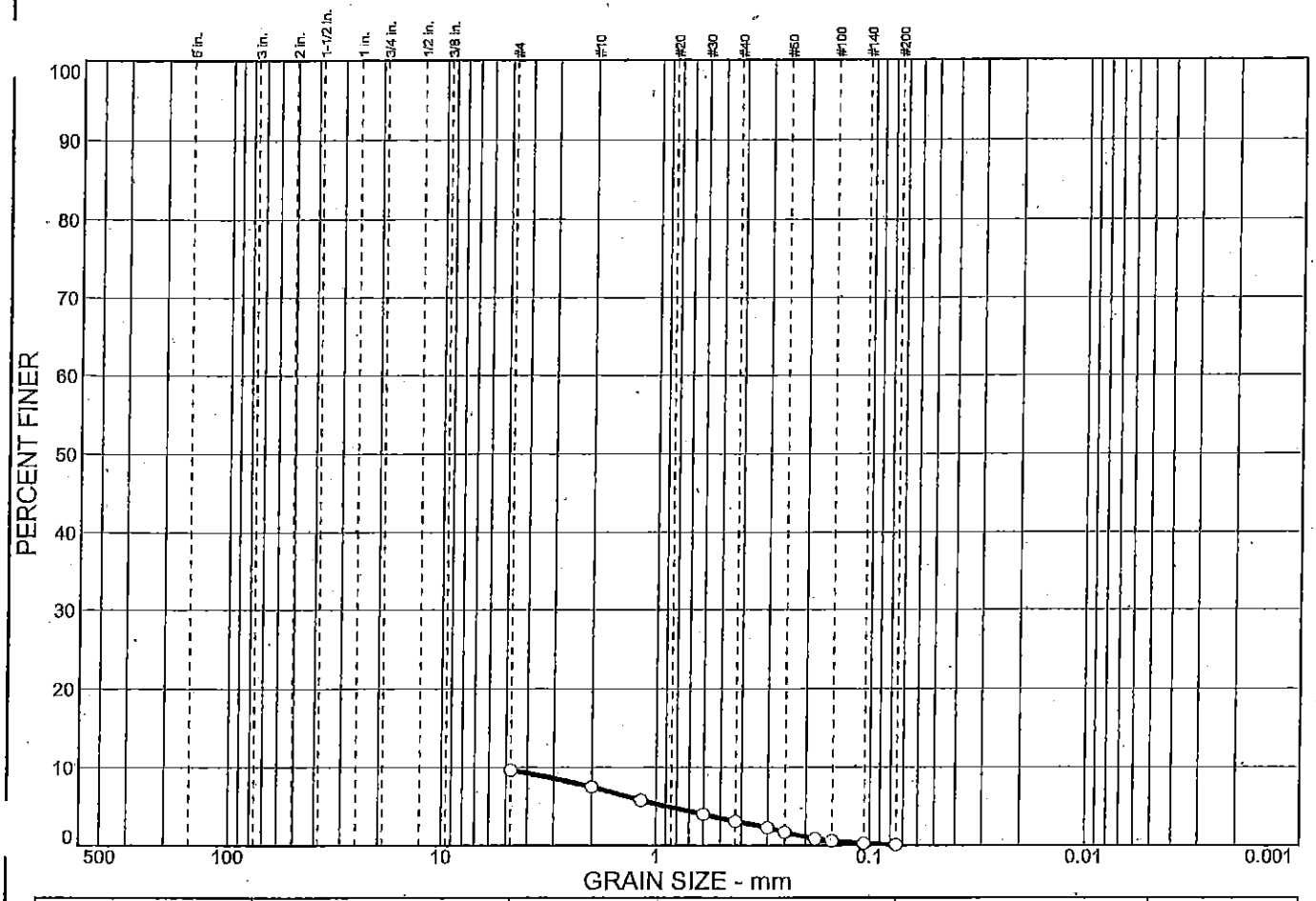
OV-3
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-3 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 3E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		9.5	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	9.6		
#10	7.5		
#16	5.8		
#30	4.0		
#40	3.1		
#50	2.3		
#60	1.7		
#80	0.9		
#100	0.6		
#140	0.3		
#200	0.1		

* (no specification provided)

Soil Description

Large Marine Shell with Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= GP AASHTO= A-1-a

Remarks

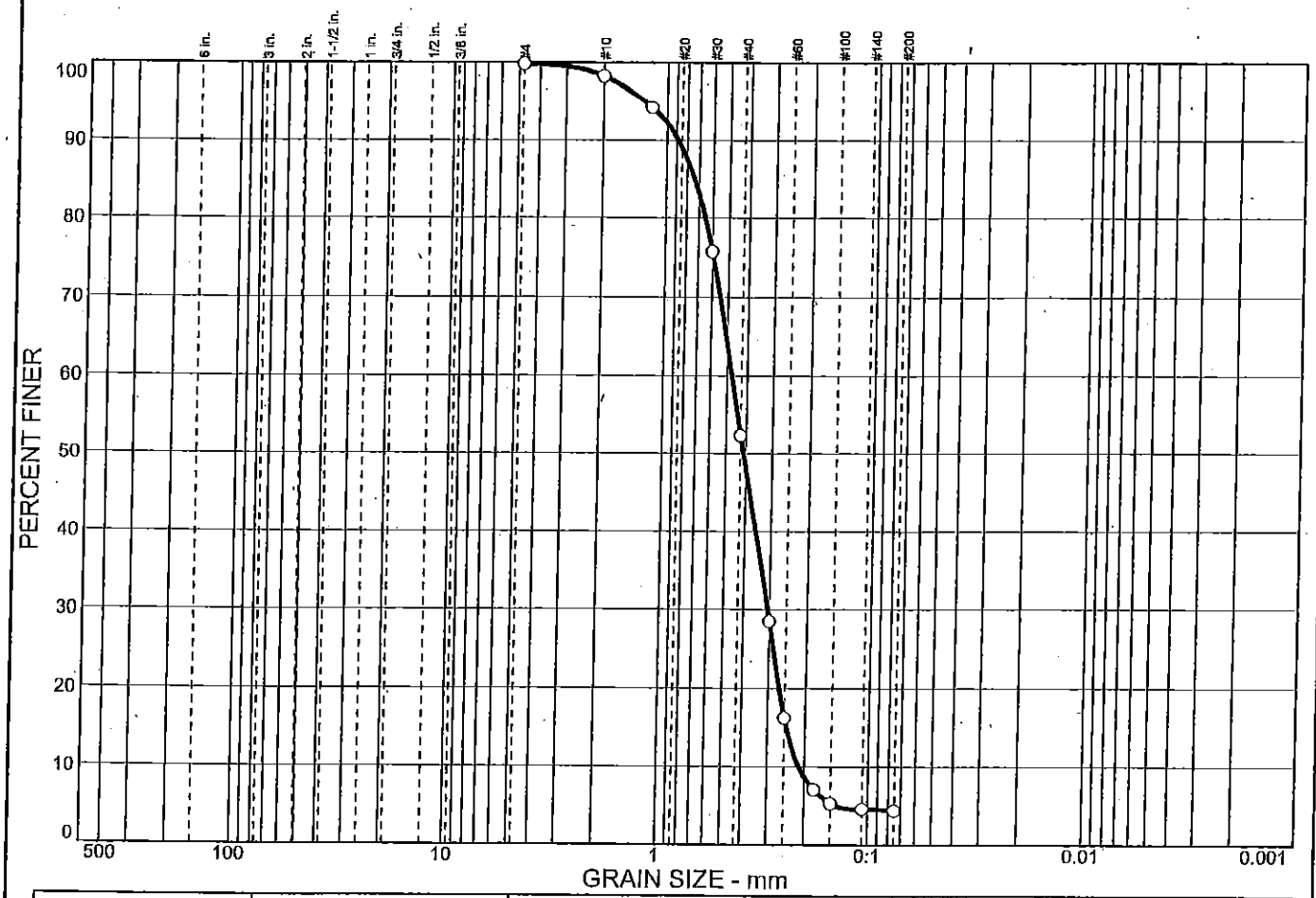
OV-3
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-3 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 3F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		95.4	4.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	98.3		
#16	94.2		
#30	75.8		
#40	52.3		
#50	28.5		
#60	16.2		
#80	7.1		
#100	5.3		
#140	4.6		
#200	4.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.737 D_{60}= 0.473 D_{50}= 0.411
D_{30}= 0.306 D_{15}= 0.244 D_{10}= 0.213
C_u= 2.22 C_c= 0.93

Classification

USCS= SP AASHTO= A-3

Remarks

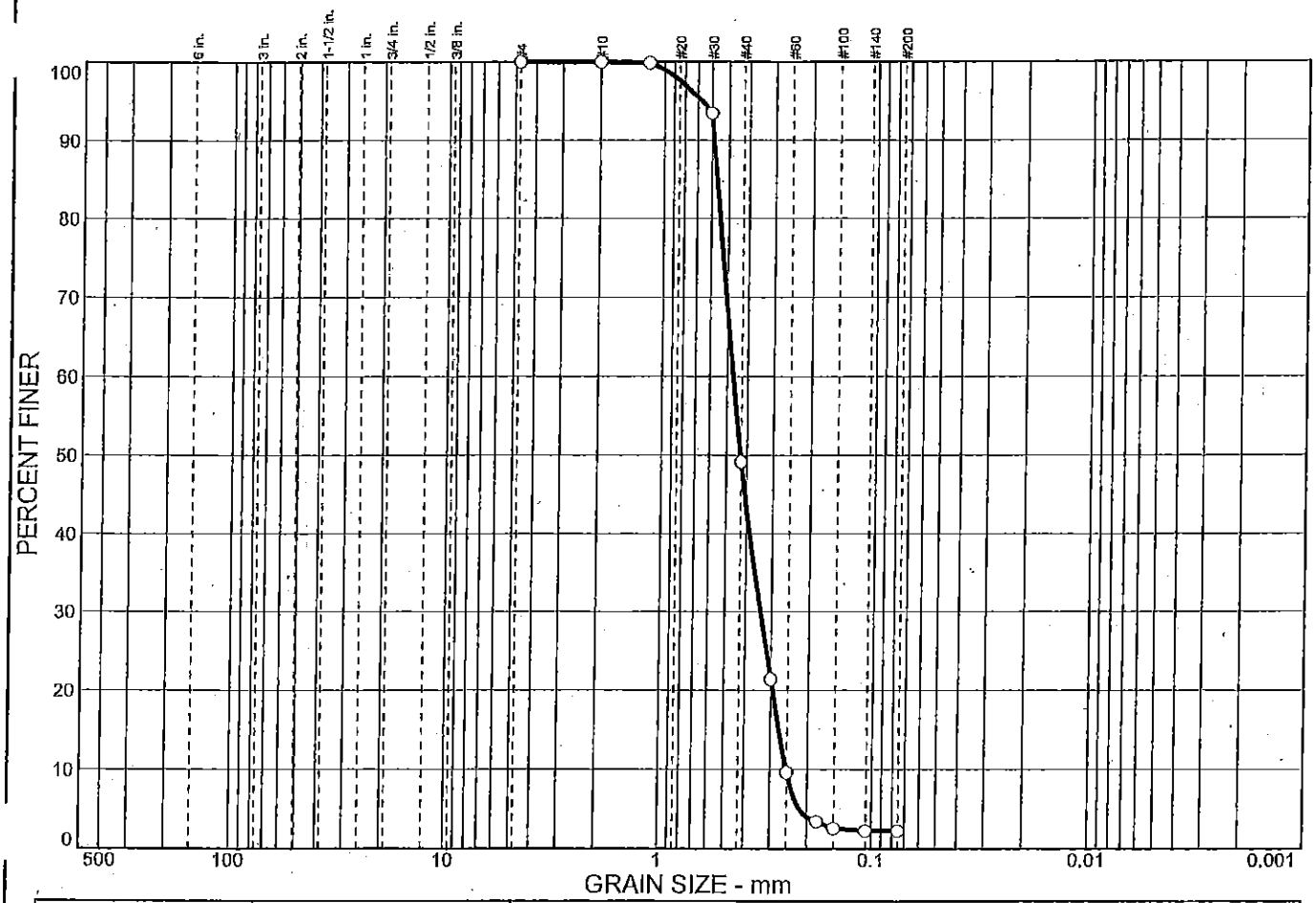
OV-4
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-4 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 4A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.7	2.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	93.4		
#40	49.1		
#50	21.4		
#60	9.6		
#80	3.5		
#100	2.6		
#140	2.3		
#200	2.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.565 D_{60}= 0.468 D_{50}= 0.429
D_{30}= 0.339 D_{15}= 0.274 D_{10}= 0.252
C_u= 1.86 C_c= 0.97

Classification

USCS= SP AASHTO= A-1-b

Remarks

OV-4
Sample B

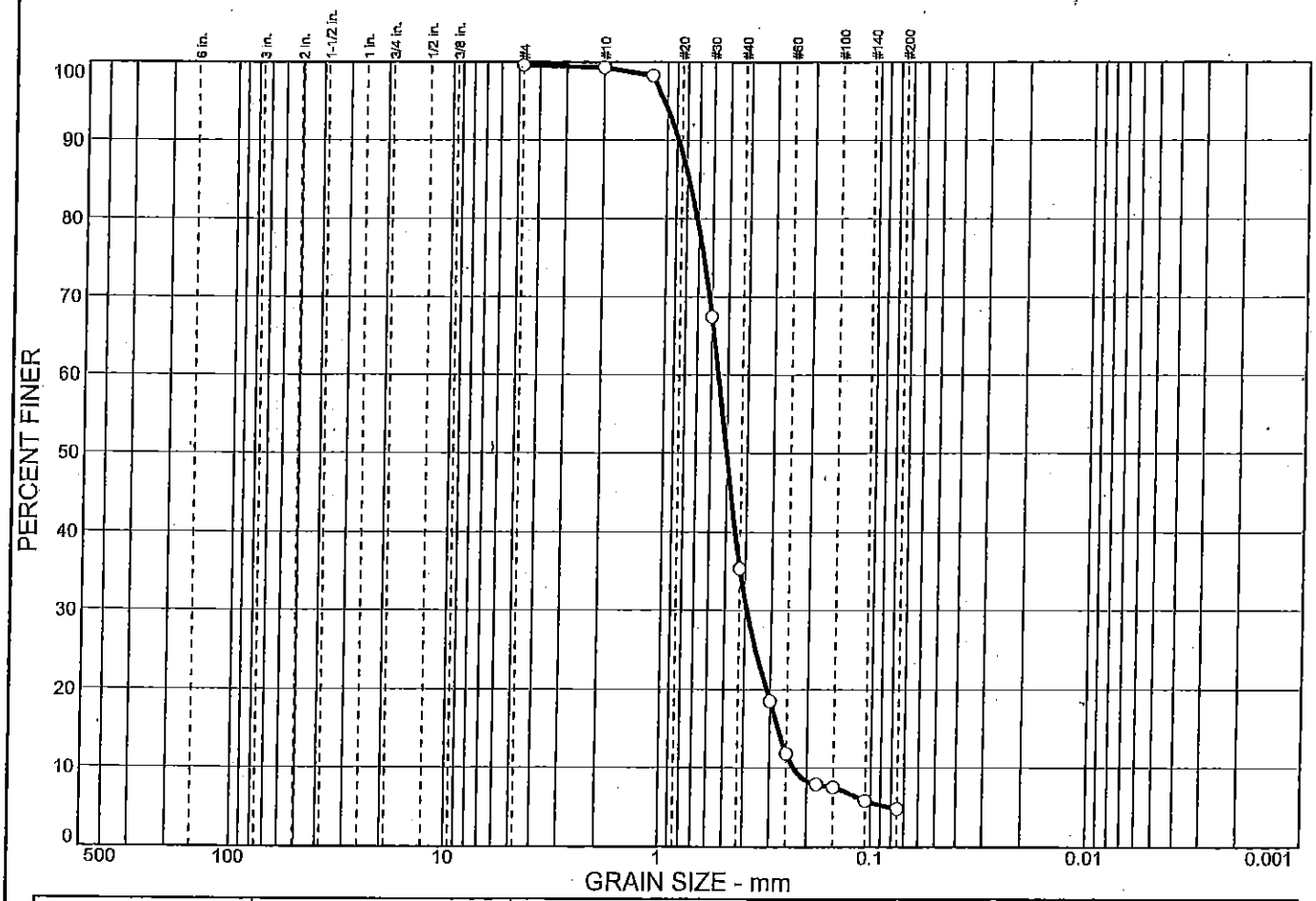
Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-4 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G **Figure** 4B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		94.8	4.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	99.3		
#16	98.3		
#30	67.4		
#40	35.3		
#50	18.5		
#60	11.8		
#80	7.9		
#100	7.5		
#140	5.8		
#200	4.8		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.785 D_{60}= 0.554 D_{50}= 0.501
D_{30}= 0.392 D_{15}= 0.274 D_{10}= 0.232
C_u= 2.39 C_c= 1.20

Classification

USCS= SP AASHTO= A-1-b

Remarks

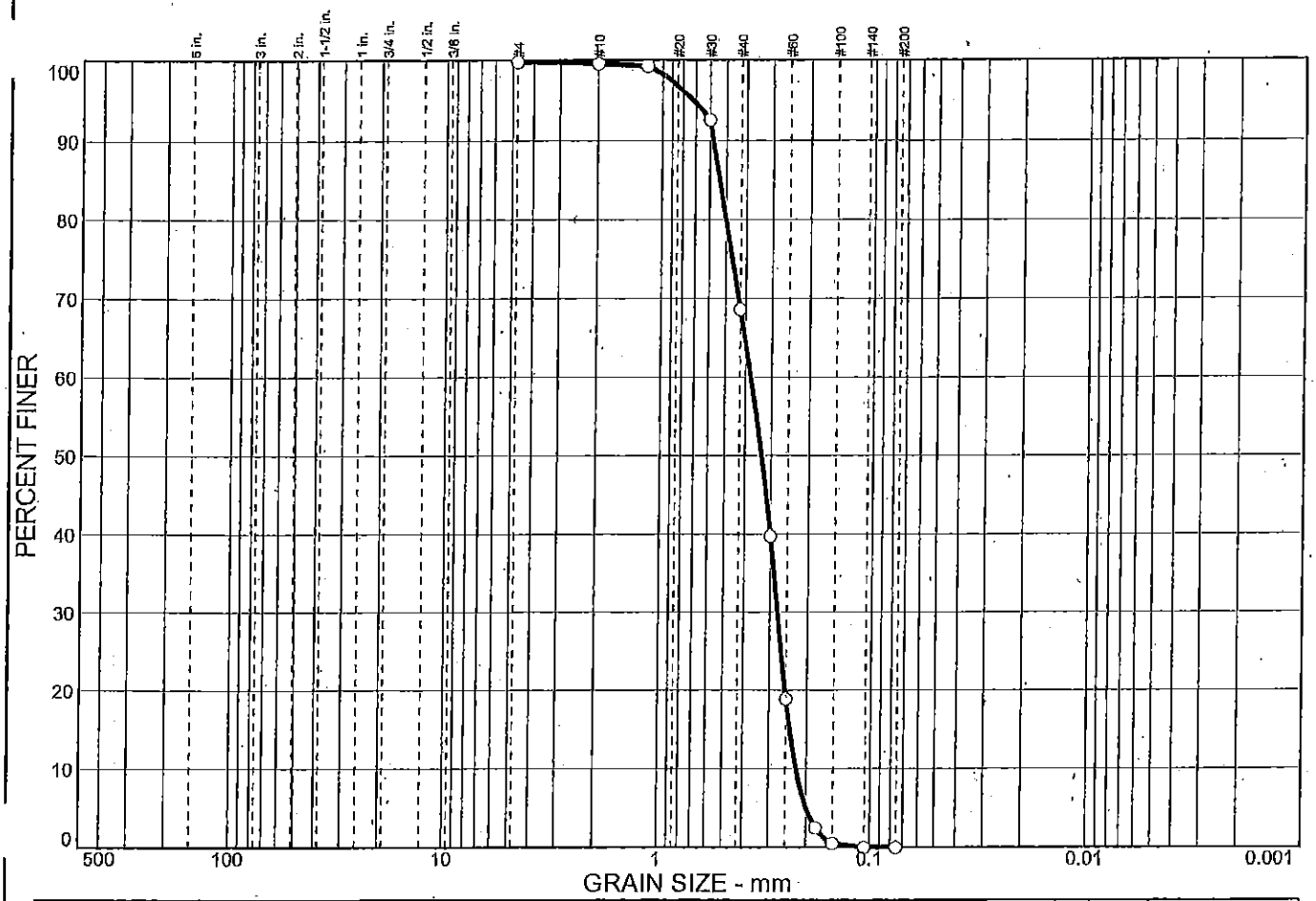
OV-4
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/28/04
Location: OV-4 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 4C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.8	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.6		
#16	99.3		
#30	92.5		
#40	68.6		
#50	39.7		
#60	18.8		
#80	2.5		
#100	0.5		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.538 D_{60}= 0.376 D_{50}= 0.333
D_{30}= 0.276 D_{15}= 0.240 D_{10}= 0.223
C_u= 1.69 C_c= 0.91

Classification

USCS= SP AASHTO= A-3

Remarks

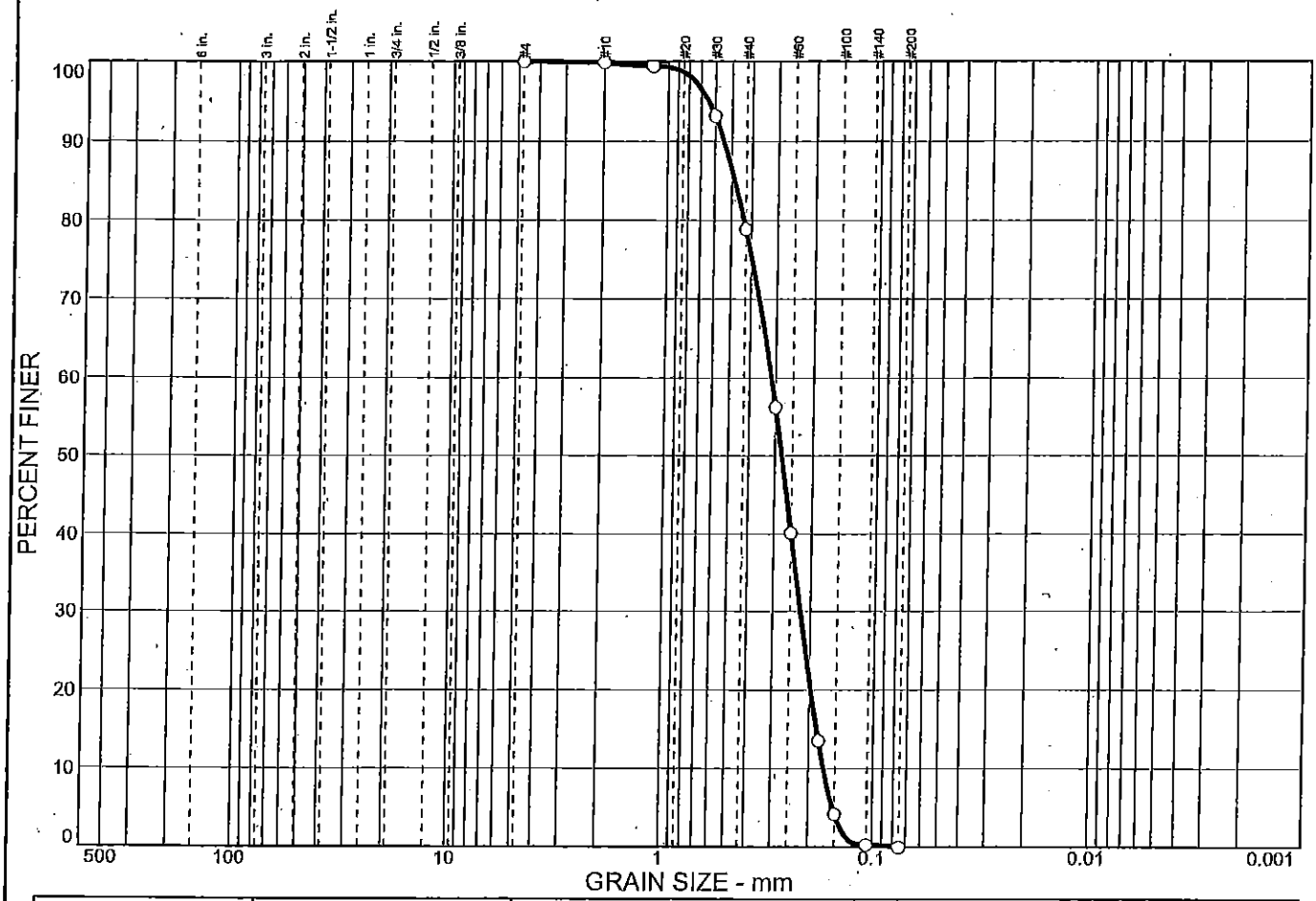
OV-4
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/2/04
Location: OV-4 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 4D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.4		
#30	93.1		
#40	78.9		
#50	56.2		
#60	40.1		
#80	13.5		
#100	4.2		
#140	0.3		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.482 D_{60}= 0.315 D_{50}= 0.279
D_{30}= 0.223 D_{15}= 0.184 D_{10}= 0.170
C_u= 1.85 C_c= 0.93

Classification

USCS= SP AASHTO= A-3

Remarks

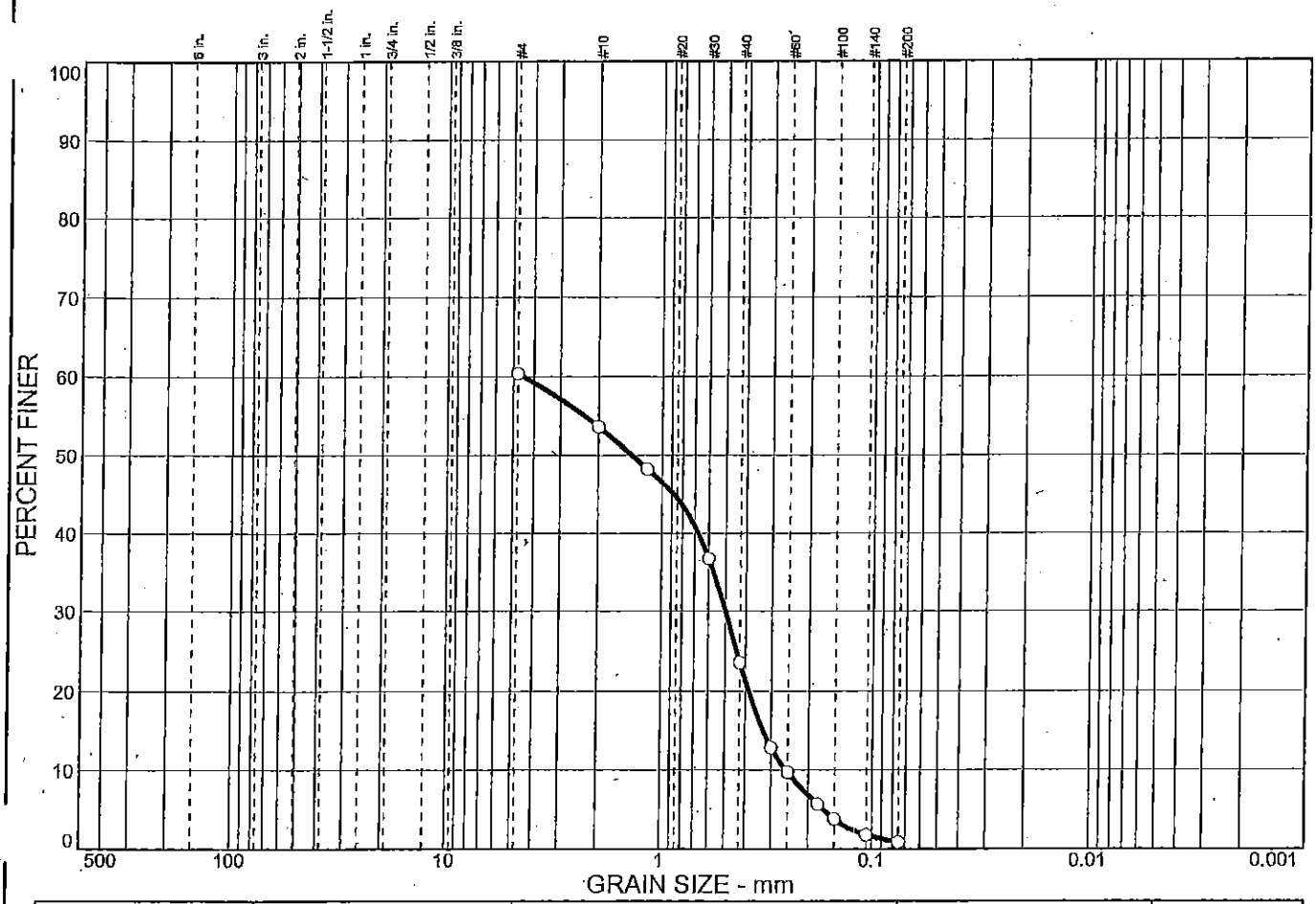
OV-4
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-4 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 4E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		59.5	0.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	60.4		
#10	53.7		
#16	48.2		
#30	36.7		
#40	23.6		
#50	12.8		
#60	9.7		
#80	5.7		
#100	3.8		
#140	1.8		
#200	0.9		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND with Large Marine Shell

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= 4.48 D_{50}= 1.40
D_{30}= 0.500 D_{15}= 0.328 D_{10}= 0.255
C_u= 17.54 C_c= 0.22

Classification

USCS= SP AASHTO= A-1-b

Remarks

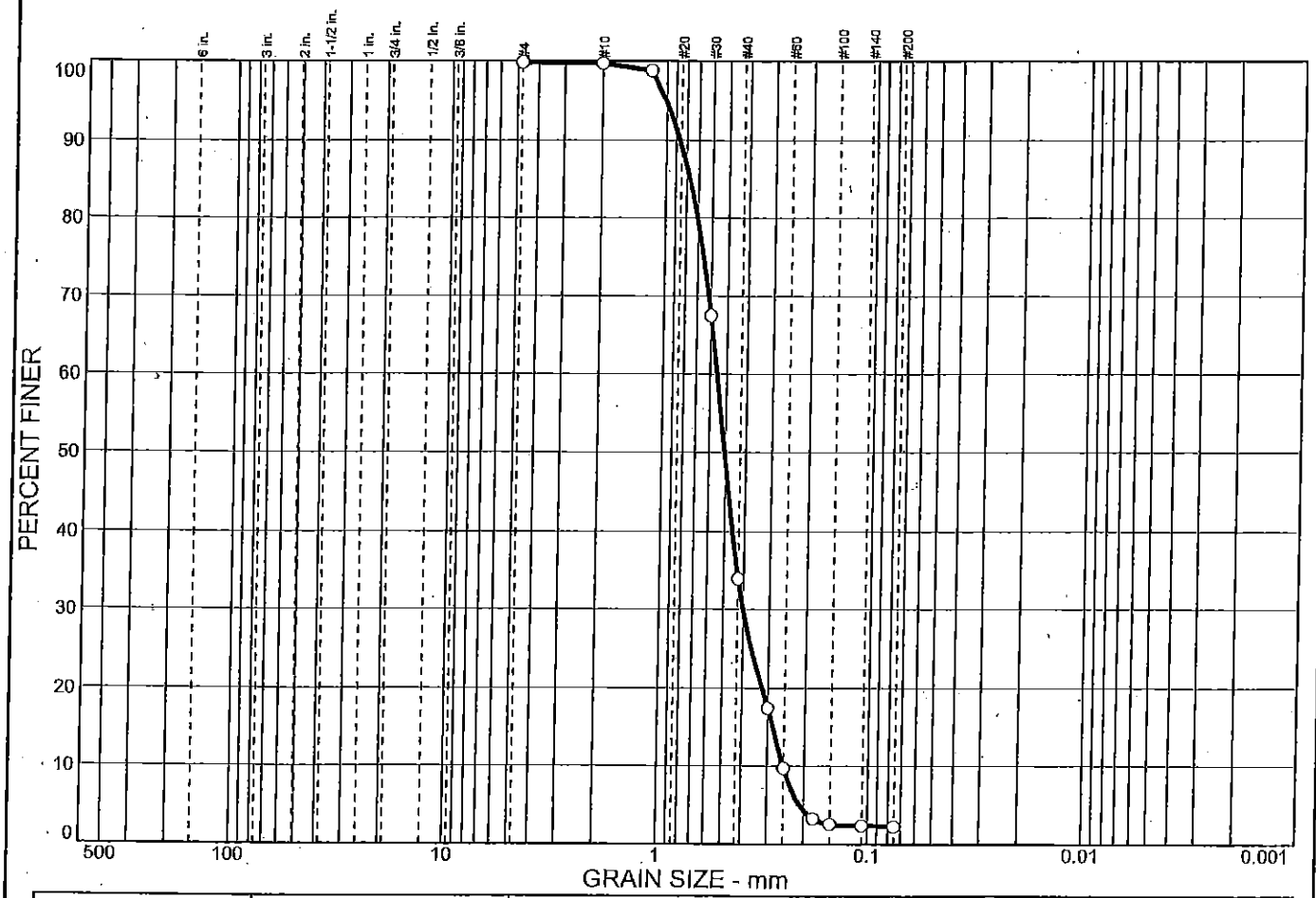
OV-4
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-4 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 4F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		97.5	2.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.7		
#16	98.8		
#30	67.5		
#40	33.9		
#50	17.4		
#60	9.7		
#80	3.3		
#100	2.6		
#140	2.4		
#200	2.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.773 D_{60}= 0.556 D_{50}= 0.505
D_{30}= 0.401 D_{15}= 0.284 D_{10}= 0.252
C_u= 2.20 C_c= 1.15

Classification

USCS= SP AASHTO= A-1-b

Remarks

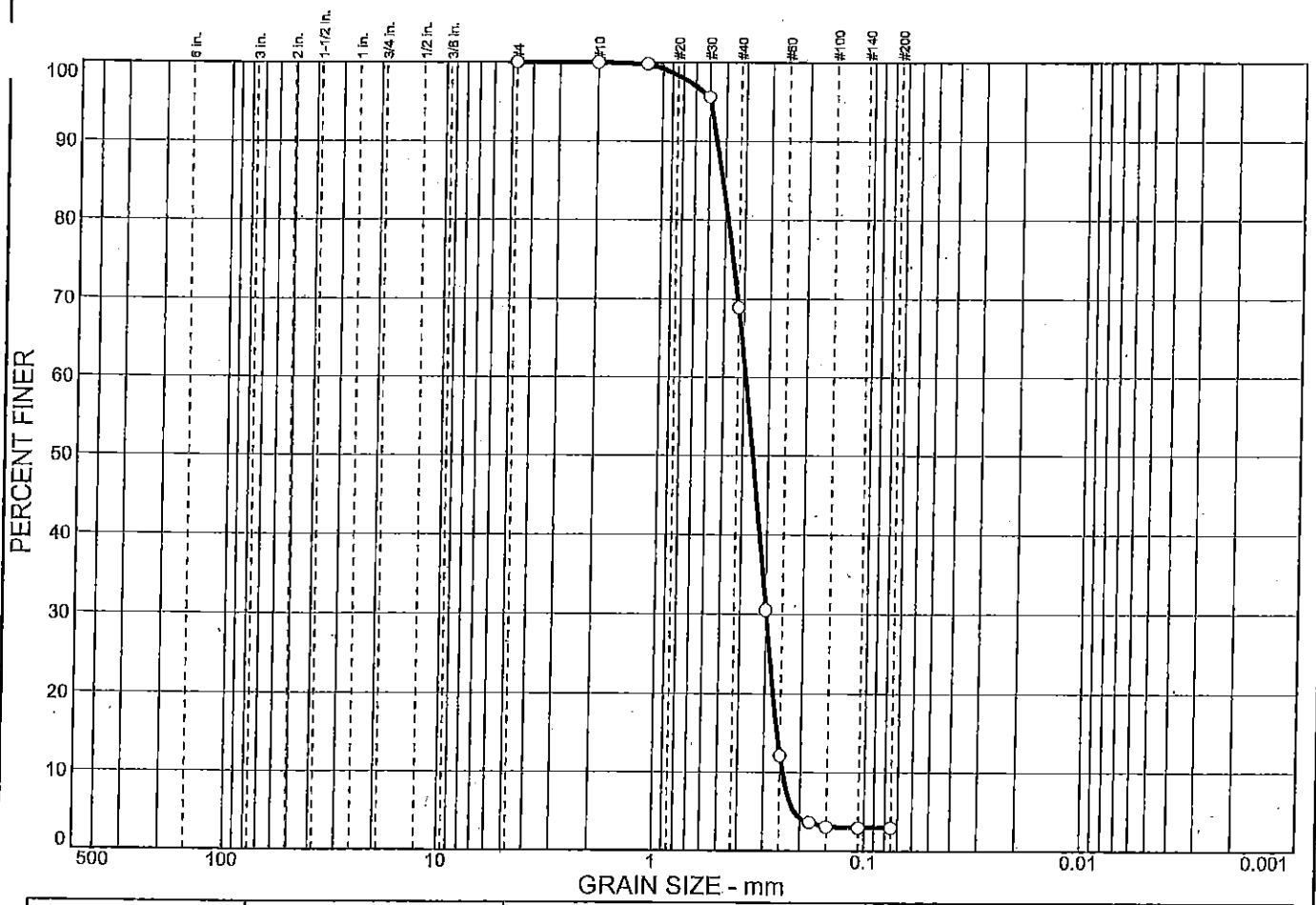
OV-5
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-5 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 5A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.0	3.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	95.6		
#40	68.9		
#50	30.5		
#60	12.1		
#80	3.7		
#100	3.1		
#140	3.0		
#200	3.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.516 D_{60}= 0.389 D_{50}= 0.355
D_{30}= 0.299 D_{15}= 0.259 D_{10}= 0.242
C_u= 1.61 C_c= 0.95

Classification

USCS= SP AASHTO= A-3

Remarks

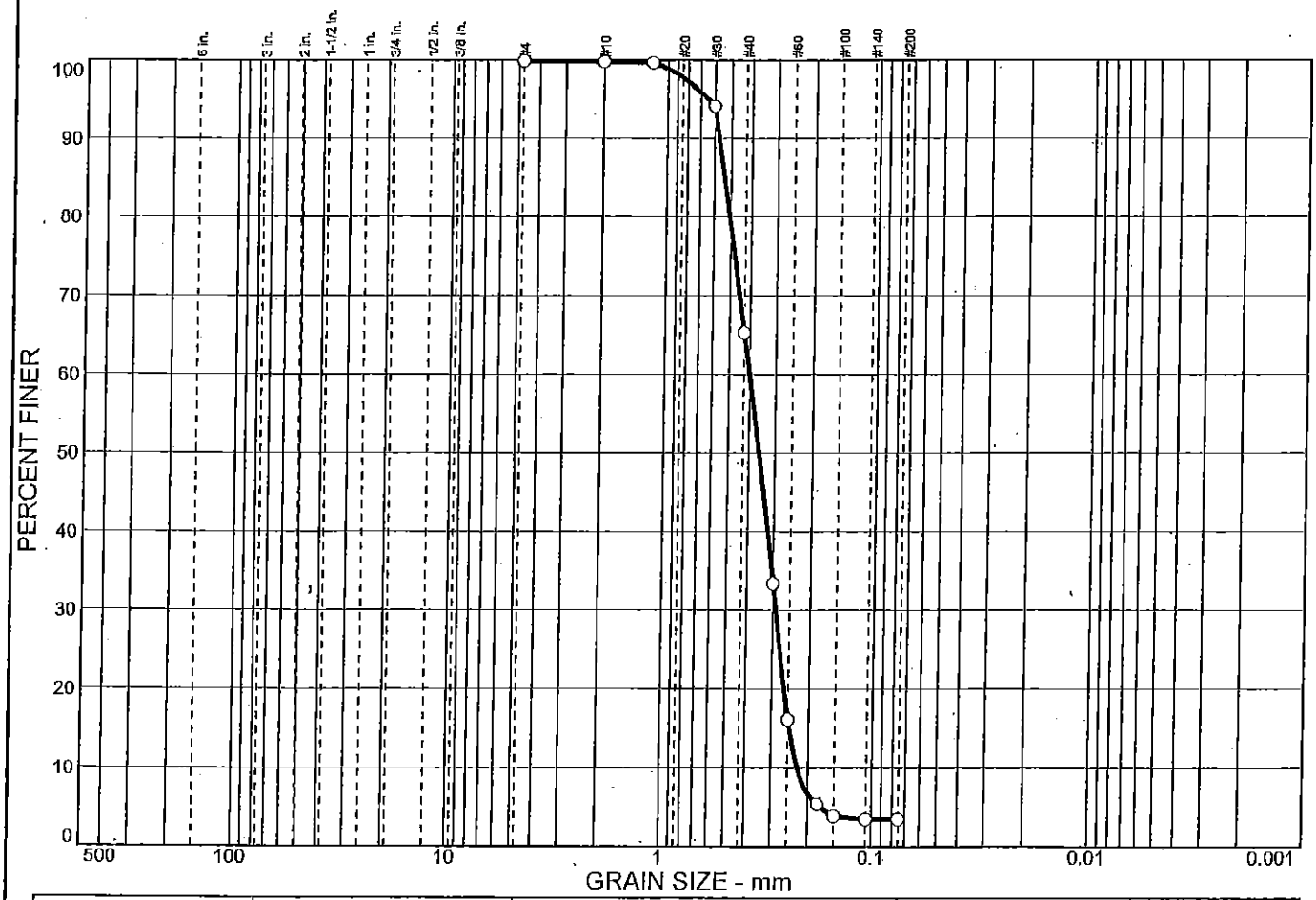
OV-5
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-5 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 5B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		96.4	3.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.8		
#16	99.7		
#30	94.1		
#40	65.3		
#50	33.4		
#60	16.1		
#80	5.4		
#100	3.9		
#140	3.5		
#200	3.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.537 D_{60}= 0.400 D_{50}= 0.357
D_{30}= 0.290 D_{15}= 0.246 D_{10}= 0.224
C_u= 1.78 C_c= 0.94

Classification

USCS= SP AASHTO= A-3

Remarks

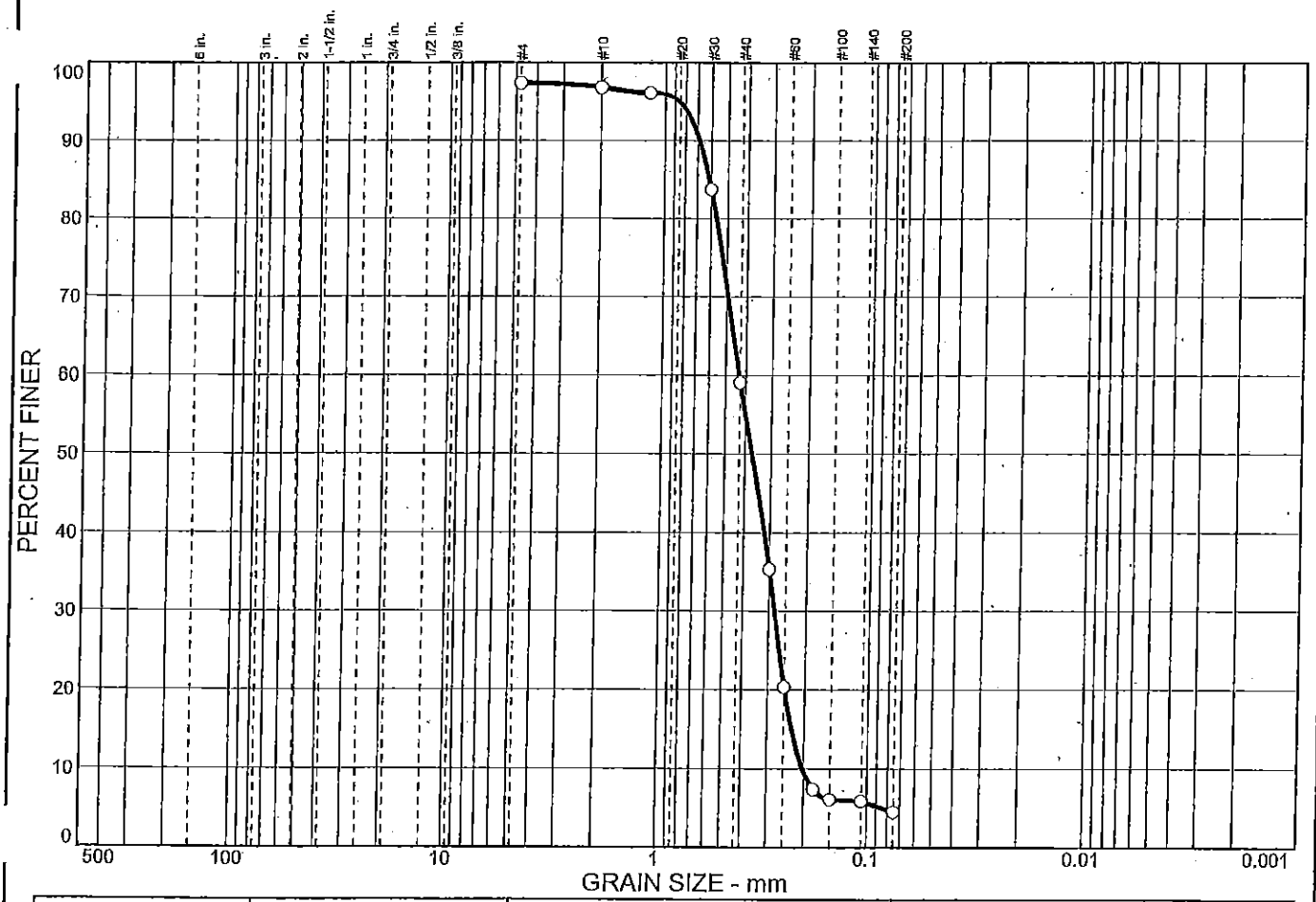
OV-5
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/28/04
Location: OV-5 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 5C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		92.9	4.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	97.4		
#10	96.9		
#16	96.2		
#30	83.8		
#40	59.1		
#50	35.3		
#60	20.3		
#80	7.4		
#100	6.1		
#140	5.9		
#200	4.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.613 D_{60}= 0.430 D_{50}= 0.370
D_{30}= 0.282 D_{15}= 0.230 D_{10}= 0.203
C_u= 2.12 C_c= 0.91

Classification

USCS= SP AASHTO= A-3

Remarks

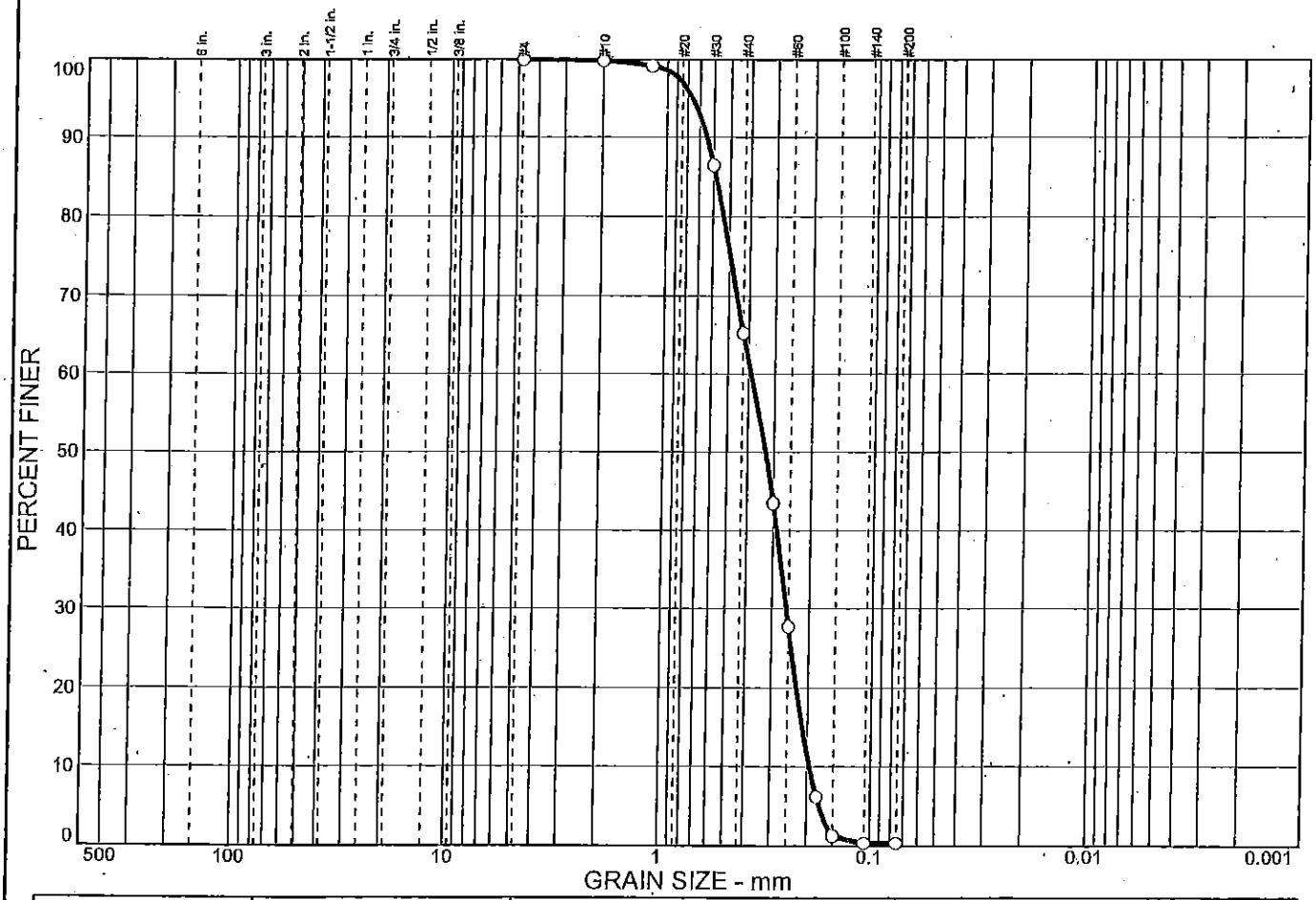
OV-5
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/28/04
Location: OV-5 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 5D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.6	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.2		
#30	86.5		
#40	65.2		
#50	43.5		
#60	27.7		
#80	6.2		
#100	1.3		
#140	0.4		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.583 D_{60}= 0.389 D_{50}= 0.329
D_{30}= 0.257 D_{15}= 0.212 D_{10}= 0.195
C_u= 1.99 C_c= 0.87

Classification

USCS= SP AASHTO= A-3

Remarks

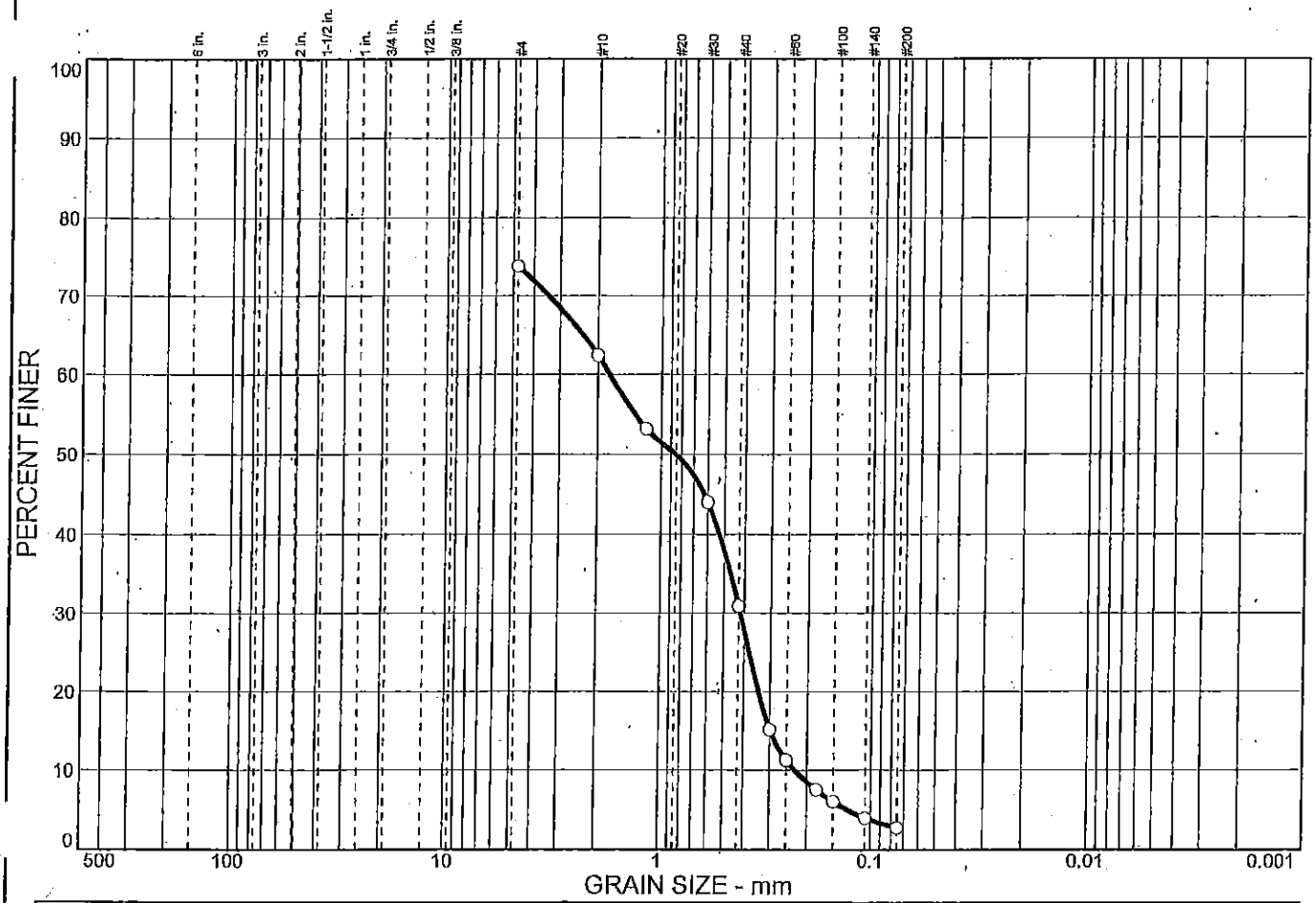
OV-5
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-5 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 5E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		71.0	2.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	73.8		
#10	62.3		
#16	53.2		
#30	44.0		
#40	30.9		
#50	15.1		
#60	11.2		
#80	7.6		
#100	6.1		
#140	4.0		
#200	2.8		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND with Marine Shell

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= 1.76 D_{50}= 0.860
D_{30}= 0.417 D_{15}= 0.299 D_{10}= 0.229
C_u= 7.71 C_c= 0.43

Classification

USCS= SP AASHTO= A-1-b

Remarks

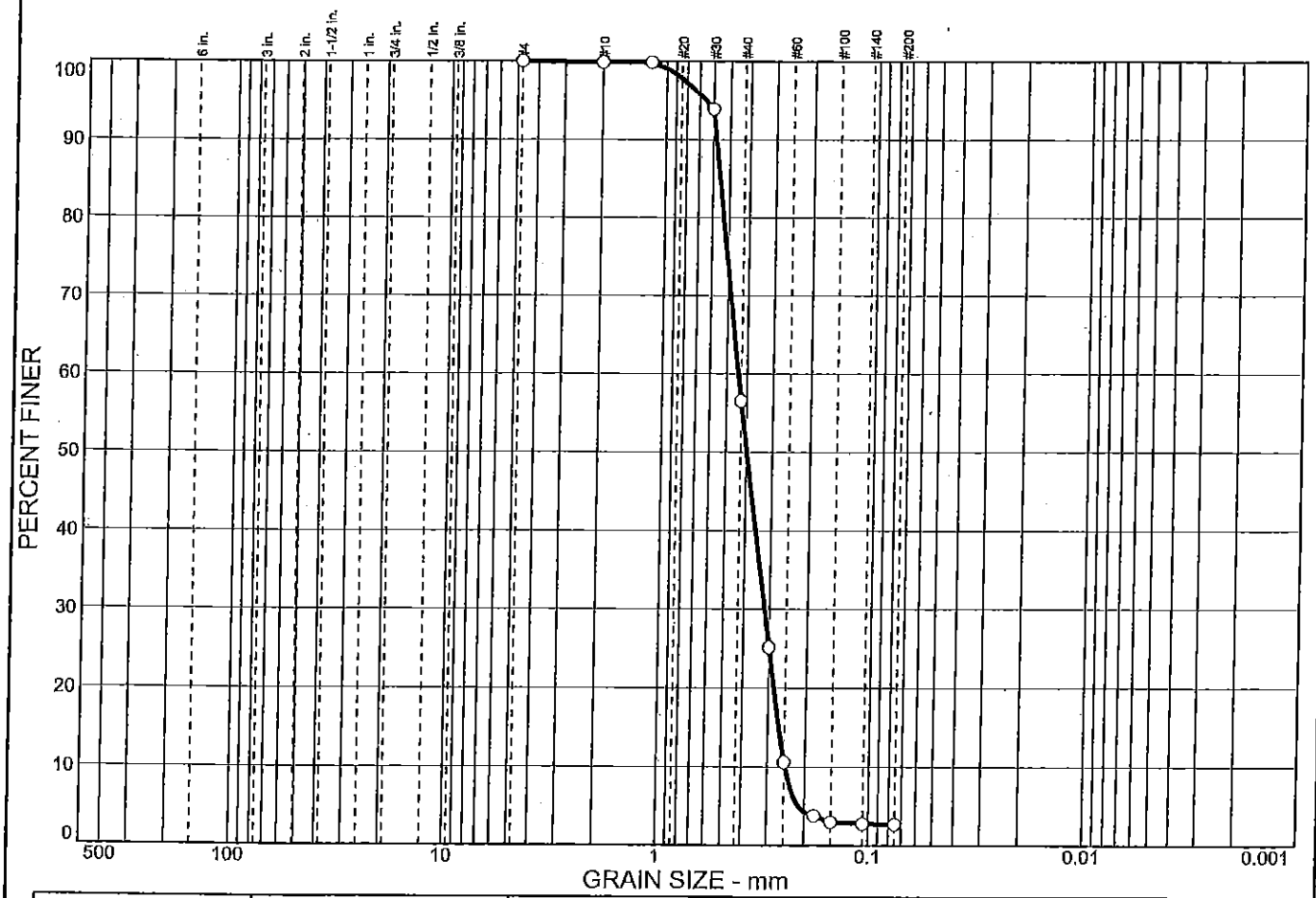
OV-5
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-5 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 5F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.3	2.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	93.9		
#40	56.6		
#50	25.1		
#60	10.6		
#80	3.8		
#100	3.0		
#140	2.8		
#200	2.7		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.554 D_{60}= 0.440 D_{50}= 0.397
D_{30}= 0.317 D_{15}= 0.267 D_{10}= 0.247
C_u= 1.78 C_c= 0.92

Classification

USCS= SP AASHTO= A-3

Remarks

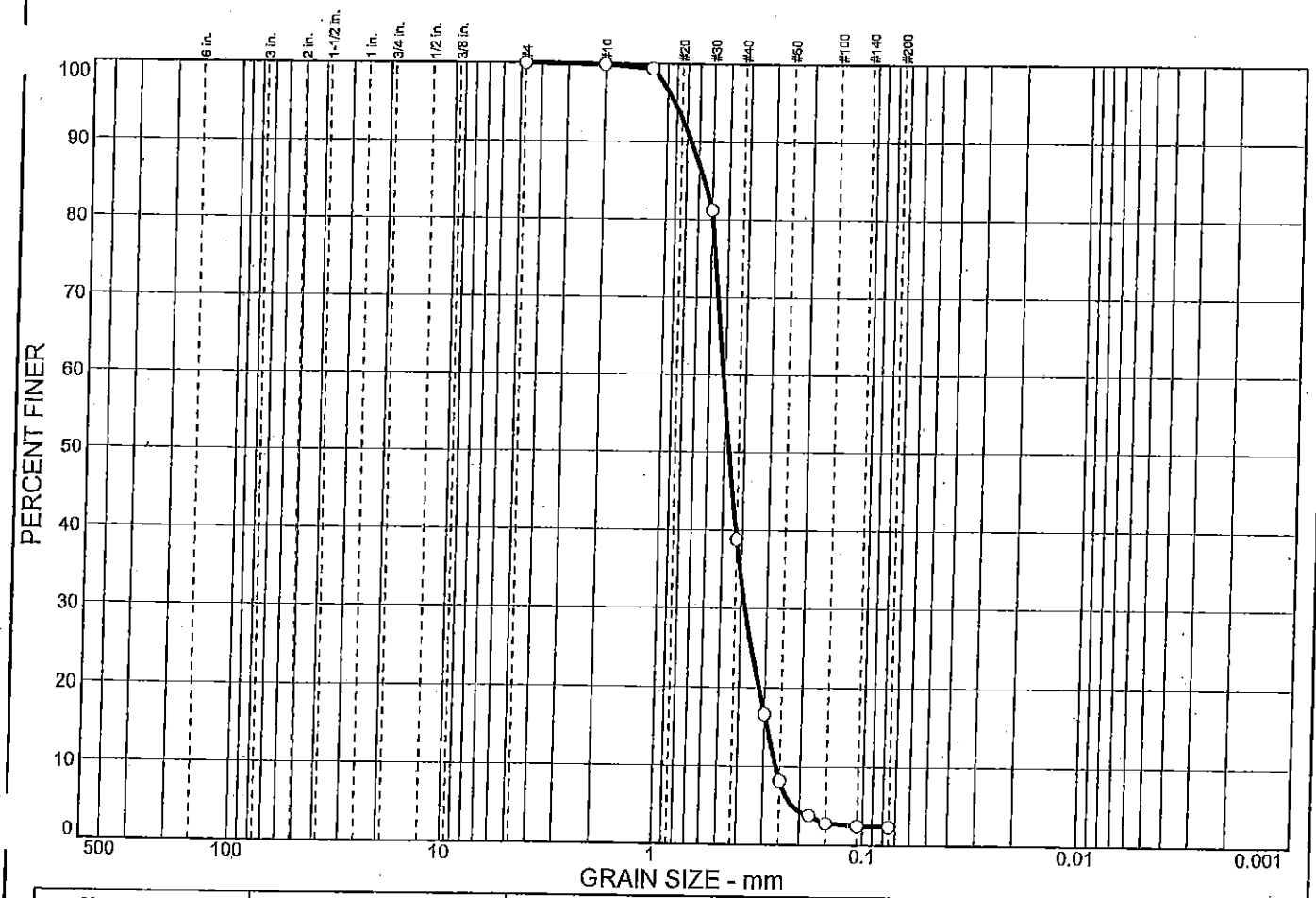
OV-6
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-6 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 6A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.6	2.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.4		
#30	81.2		
#40	38.8		
#50	16.6		
#60	8.2		
#80	3.8		
#100	2.8		
#140	2.5		
#200	2.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.661 D_{60}= 0.512 D_{50}= 0.472
D_{30}= 0.381 D_{15}= 0.291 D_{10}= 0.262
C_u= 1.95 C_c= 1.08

Classification

USCS= SP AASHTO= A-1-b

Remarks

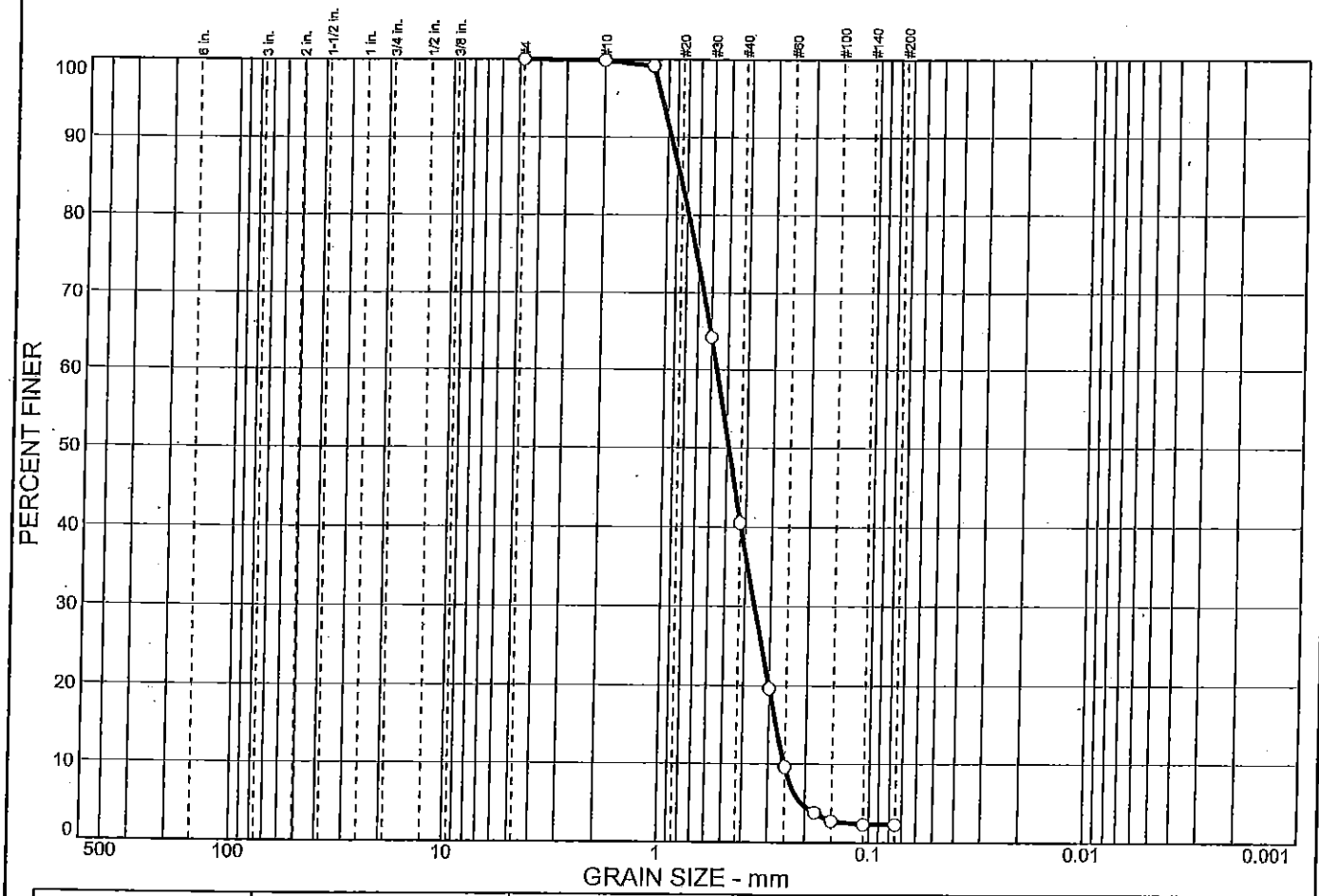
OV-6
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-6 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 6B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.7	2.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.2		
#30	64.2		
#40	40.5		
#50	19.6		
#60	9.6		
#80	3.8		
#100	2.7		
#140	2.3		
#200	2.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.869 D_{60}= 0.564 D_{50}= 0.488
D_{30}= 0.358 D_{15}= 0.278 D_{10}= 0.252
C_u= 2.23 C_c= 0.90

Classification

USCS= SP AASHTO= A-1-b

Remarks

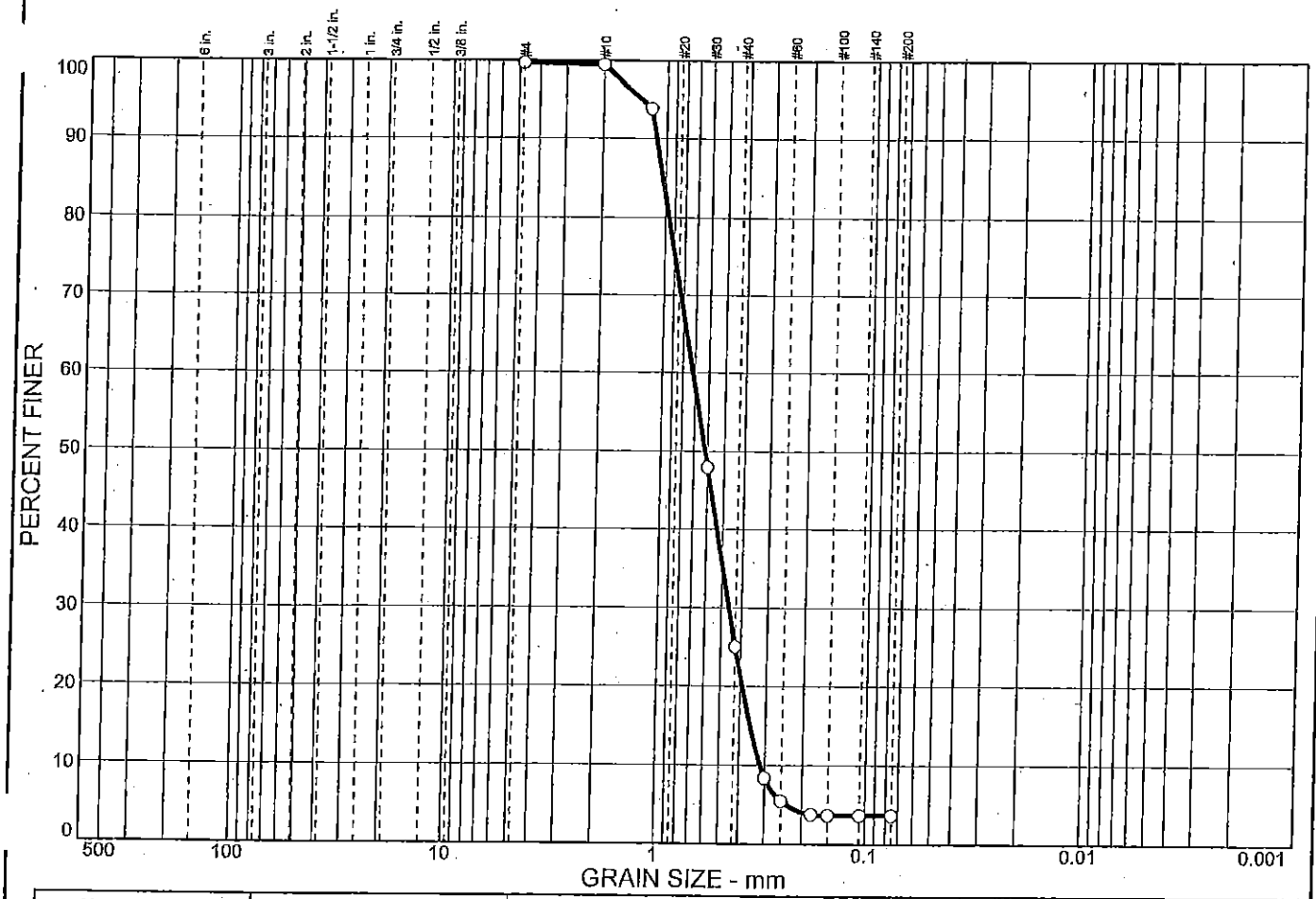
OV-6
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/28/04
Location: OV-6 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 6C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		96.0	3.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.7		
#10	99.5		
#16	93.8		
#30	47.9		
#40	25.0		
#50	8.4		
#60	5.5		
#80	3.8		
#100	3.7		
#140	3.7		
#200	3.7		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.04 D_{60}= 0.716 D_{50}= 0.619
D_{30}= 0.460 D_{15}= 0.356 D_{10}= 0.316
C_u= 2.27 C_c= 0.93

Classification

USCS= SP AASHTO= A-1-b

Remarks

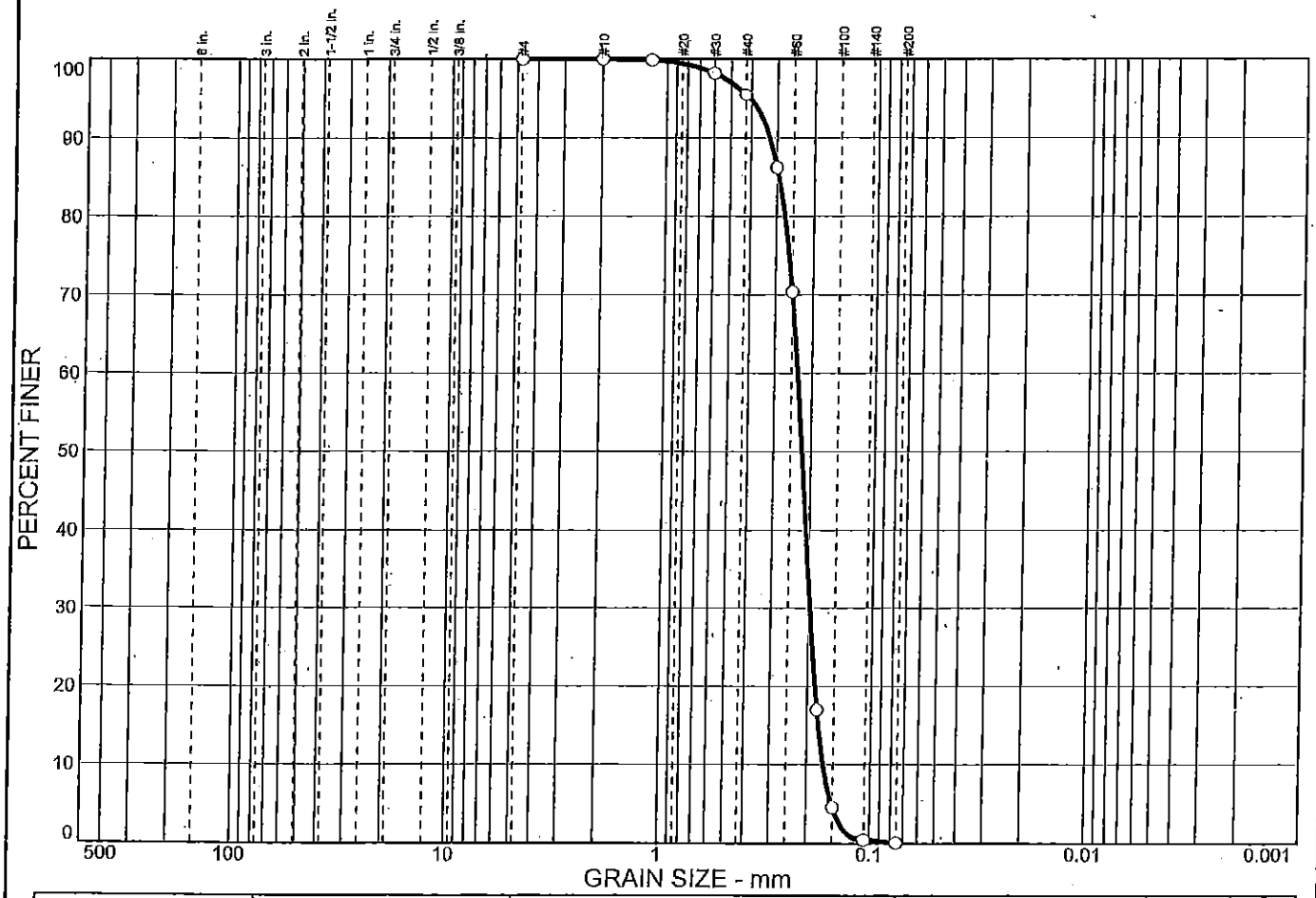
OV-6
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/28/04
Location: OV-6 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 6D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	98.2		
#40	95.5		
#50	86.2		
#60	70.4		
#80	16.9		
#100	4.6		
#140	0.5		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.294 D_{60}= 0.233 D_{50}= 0.220
D_{30}= 0.197 D_{15}= 0.177 D_{10}= 0.167
C_u= 1.40 C_c= 0.99

Classification

USCS= SP AASHTO= A-3

Remarks

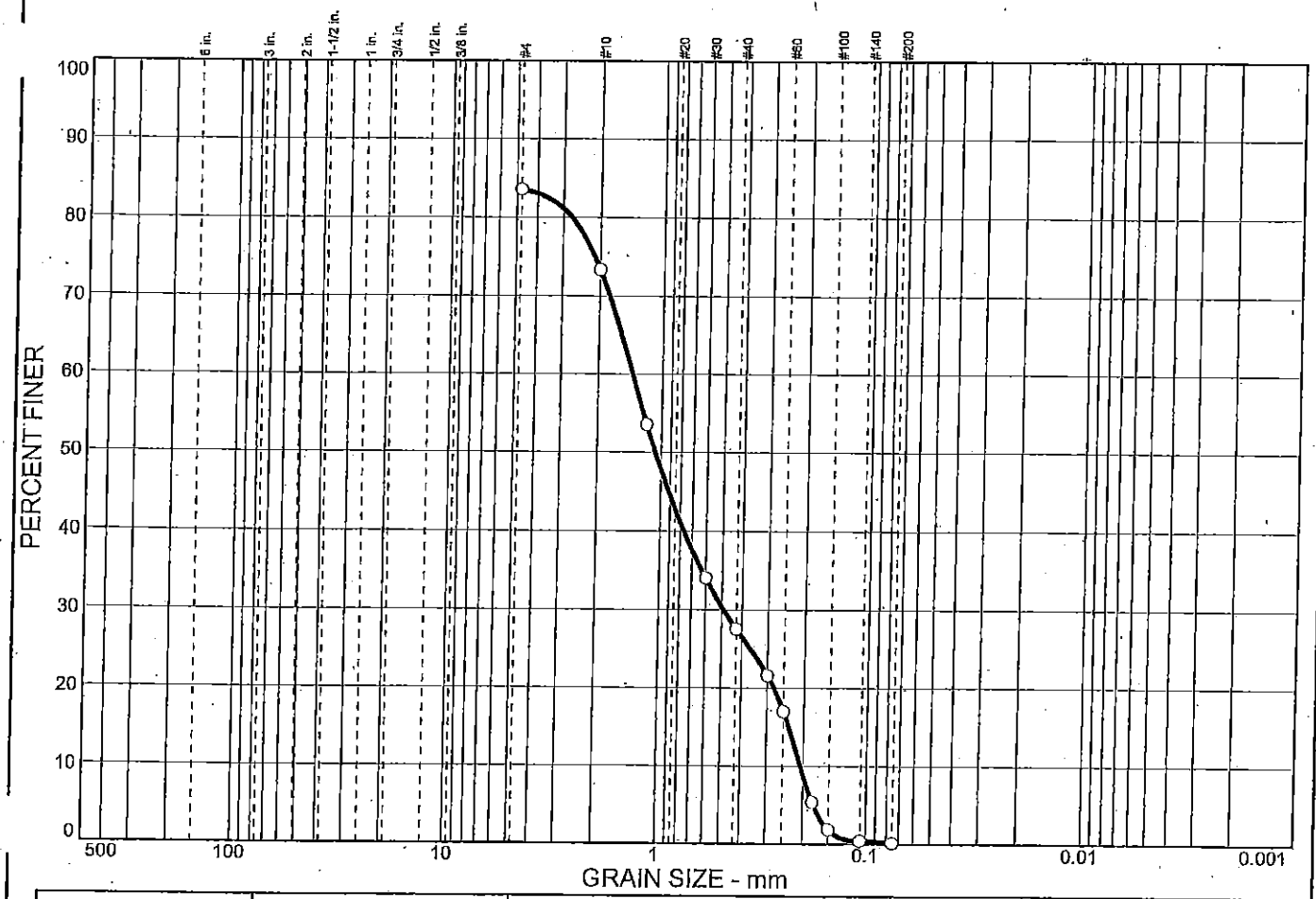
OV-6
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-6 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 6E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		83.4	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	83.6		
#10	73.4		
#16	53.6		
#30	34.0		
#40	27.5		
#50	21.6		
#60	17.0		
#80	5.4		
#100	1.9		
#140	0.5		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= 1.39 D_{50}= 1.07
D_{30}= 0.491 D_{15}= 0.236 D_{10}= 0.206
C_u= 6.73 C_c= 0.84

Classification

USCS= SP AASHTO= A-1-b

Remarks

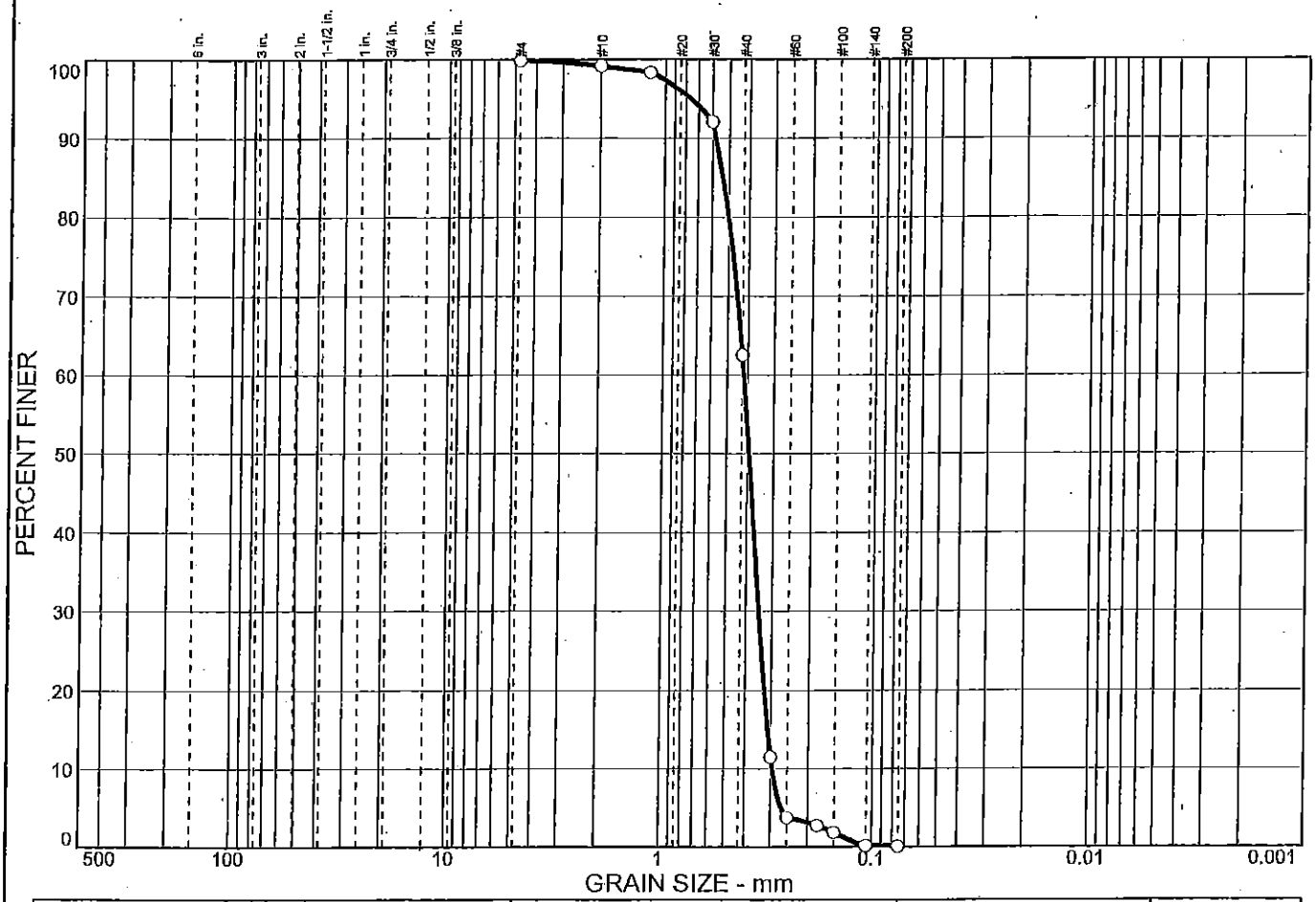
OV-6
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-6 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 6F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.2		
#16	98.4		
#30	92.0		
#40	62.5		
#50	11.5		
#60	3.8		
#80	2.8		
#100	1.9		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.536 D_{60}= 0.418 D_{50}= 0.391
D_{30}= 0.346 D_{15}= 0.311 D_{10}= 0.295
C_u= 1.42 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

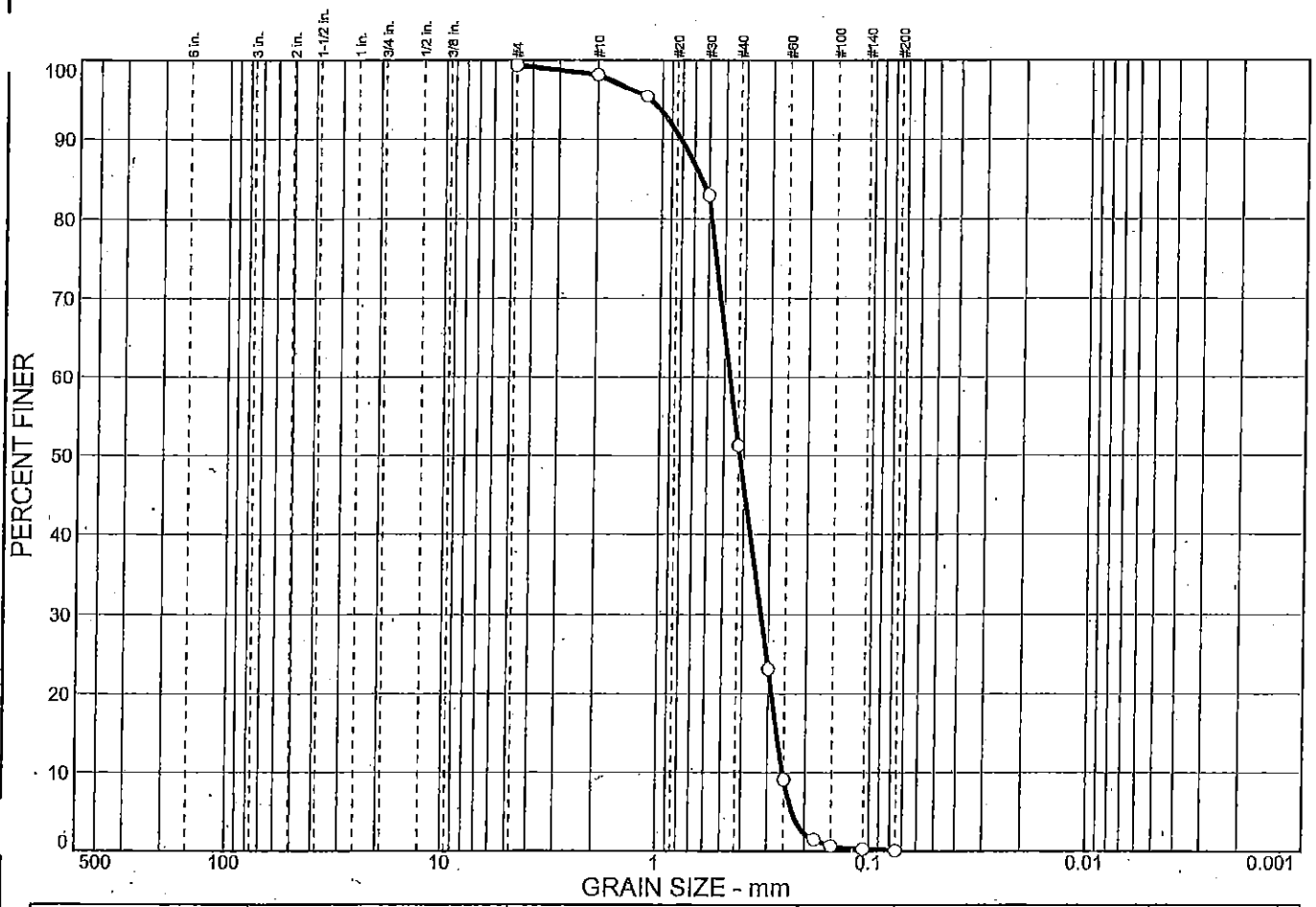
OV-7
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/2/04
Location: OV-7 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 7A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.3	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.4		
#10	98.2		
#16	95.5		
#30	83.0		
#40	51.3		
#50	23.1		
#60	9.1		
#80	1.5		
#100	0.7		
#140	0.3		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.650 D_{60}= 0.469 D_{50}= 0.419
D_{30}= 0.327 D_{15}= 0.272 D_{10}= 0.254
C_u= 1.85 C_c= 0.90

Classification

USCS= SP AASHTO= A-3

Remarks

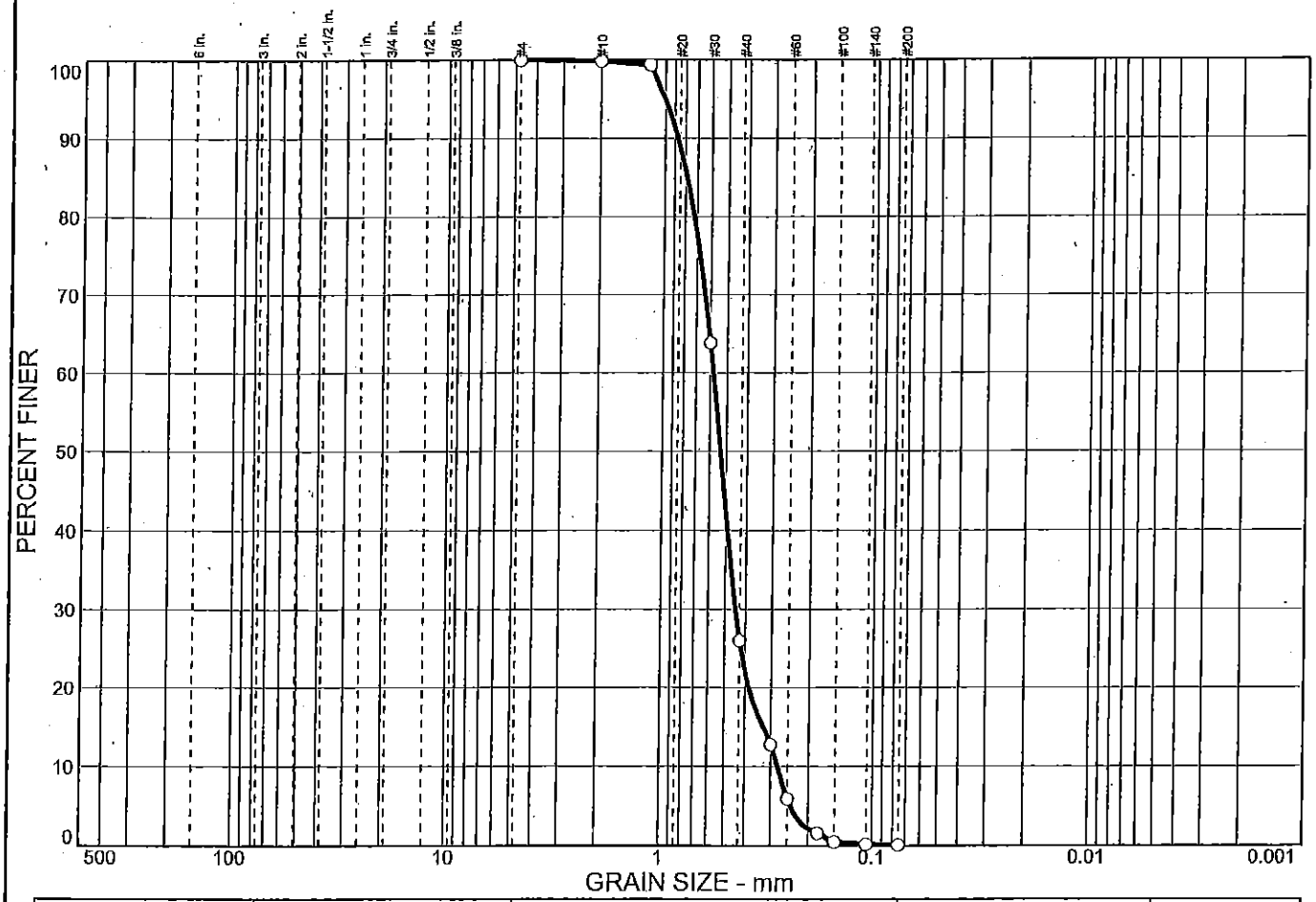
OV-7
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/2/04
Location: OV-7 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 7B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.4		
#30	63.8		
#40	26.0		
#50	12.7		
#60	5.9		
#80	1.6		
#100	0.5		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.787 D_{60}= 0.580 D_{50}= 0.532
D_{30}= 0.445 D_{15}= 0.325 D_{10}= 0.279
C_u= 2.08 C_c= 1.23

Classification

USCS= SP AASHTO= A-1-b

Remarks

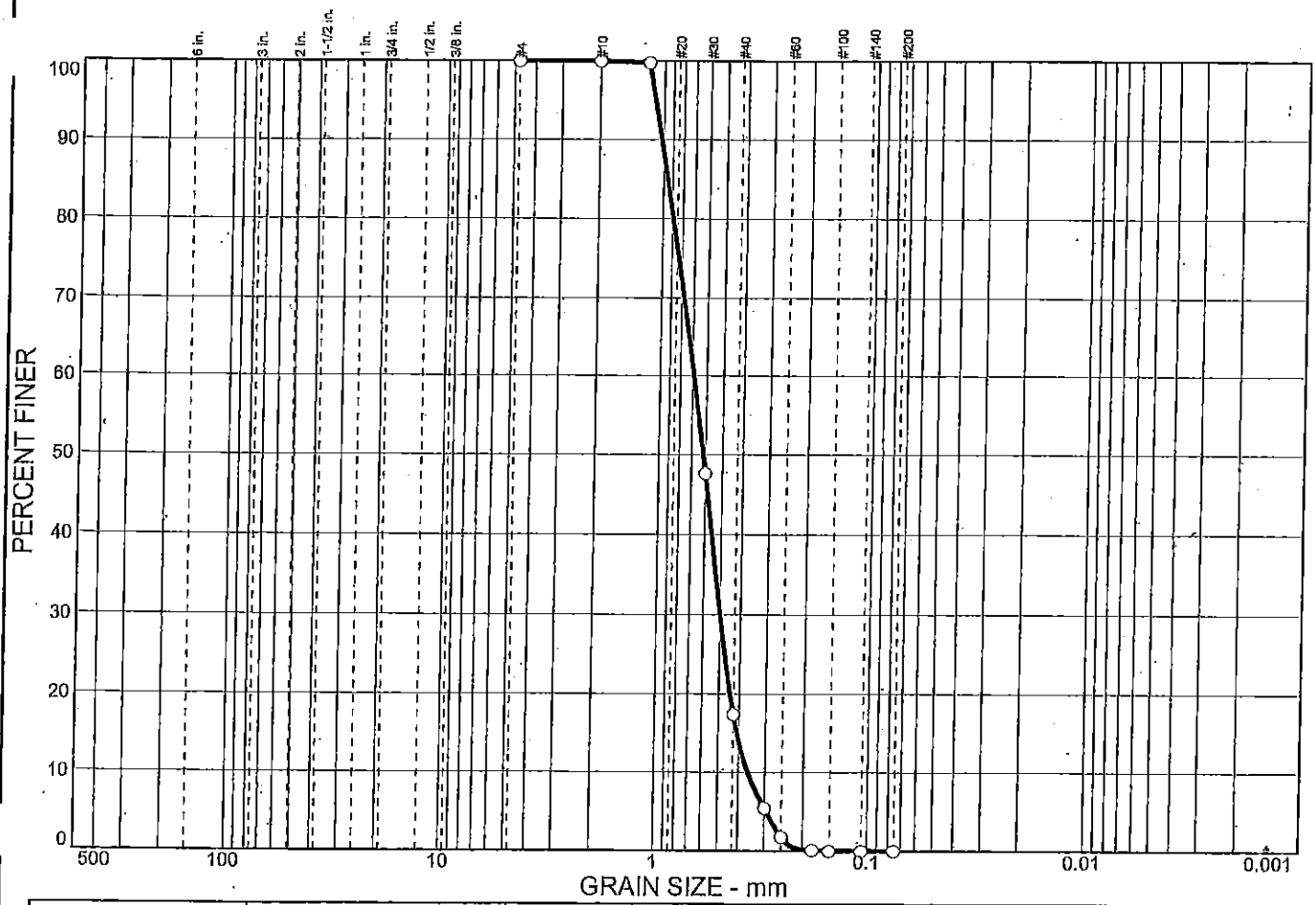
OV-7
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/2/04
Location: OV-7 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 7C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	47.6		
#40	17.3		
#50	5.5		
#60	1.8		
#80	0.1		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.954 D_{60}= 0.689 D_{50}= 0.616
D_{30}= 0.499 D_{15}= 0.408 D_{10}= 0.361
C_u= 1.91 C_c= 1.00

Classification

USCS= SP AASHTO= A-1-b

Remarks

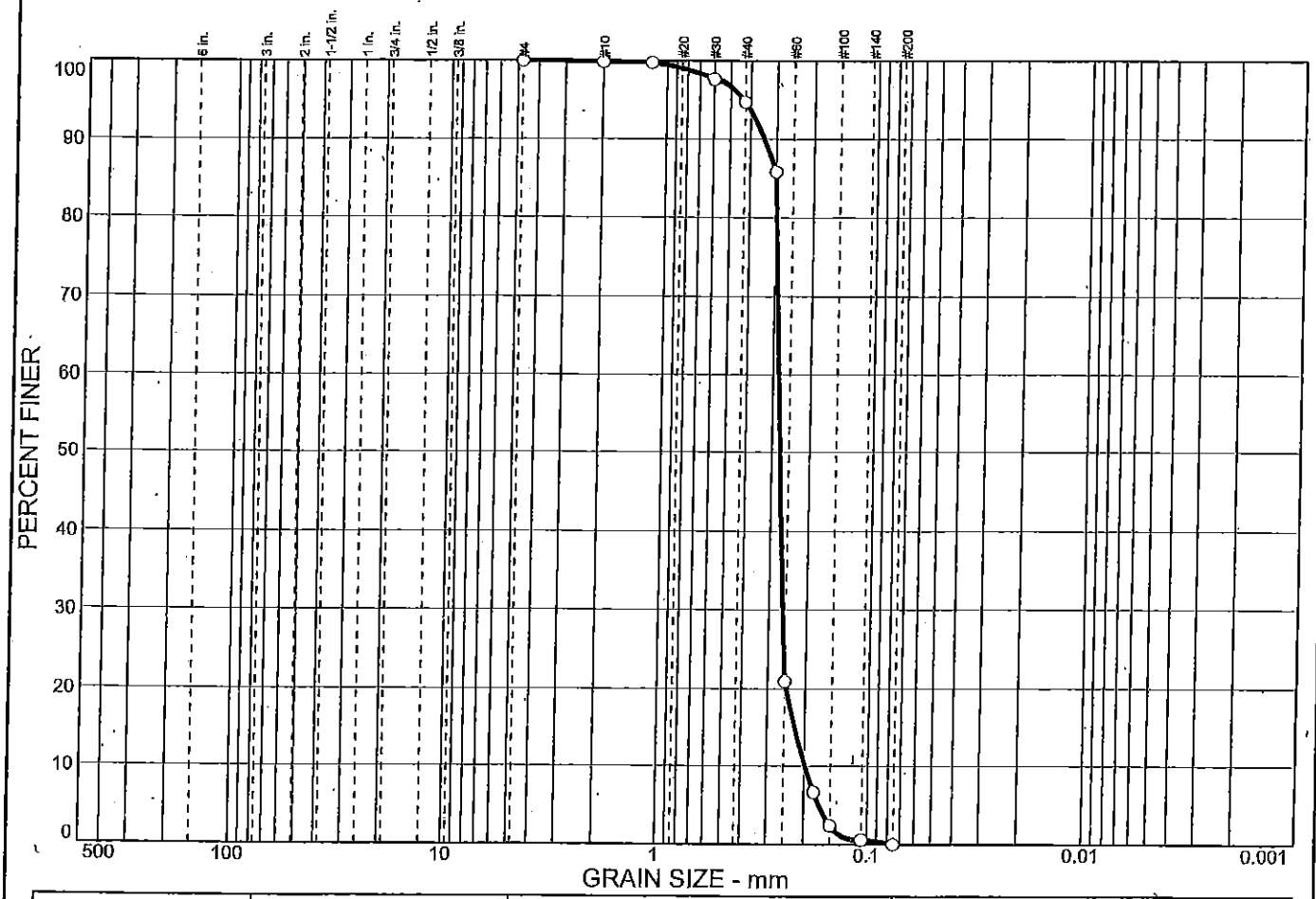
OV-7
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/2/04
Location: OV-7 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 7D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.8		
#30	97.7		
#40	94.7		
#50	85.8		
#60	20.9		
#80	6.7		
#100	2.4		
#140	0.6		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.299 D_{60}= 0.282 D_{50}= 0.274
D_{30}= 0.259 D_{15}= 0.223 D_{10}= 0.198
C_u= 1.42 C_c= 1.20

Classification

USCS= SP AASHTO= A-3

Remarks

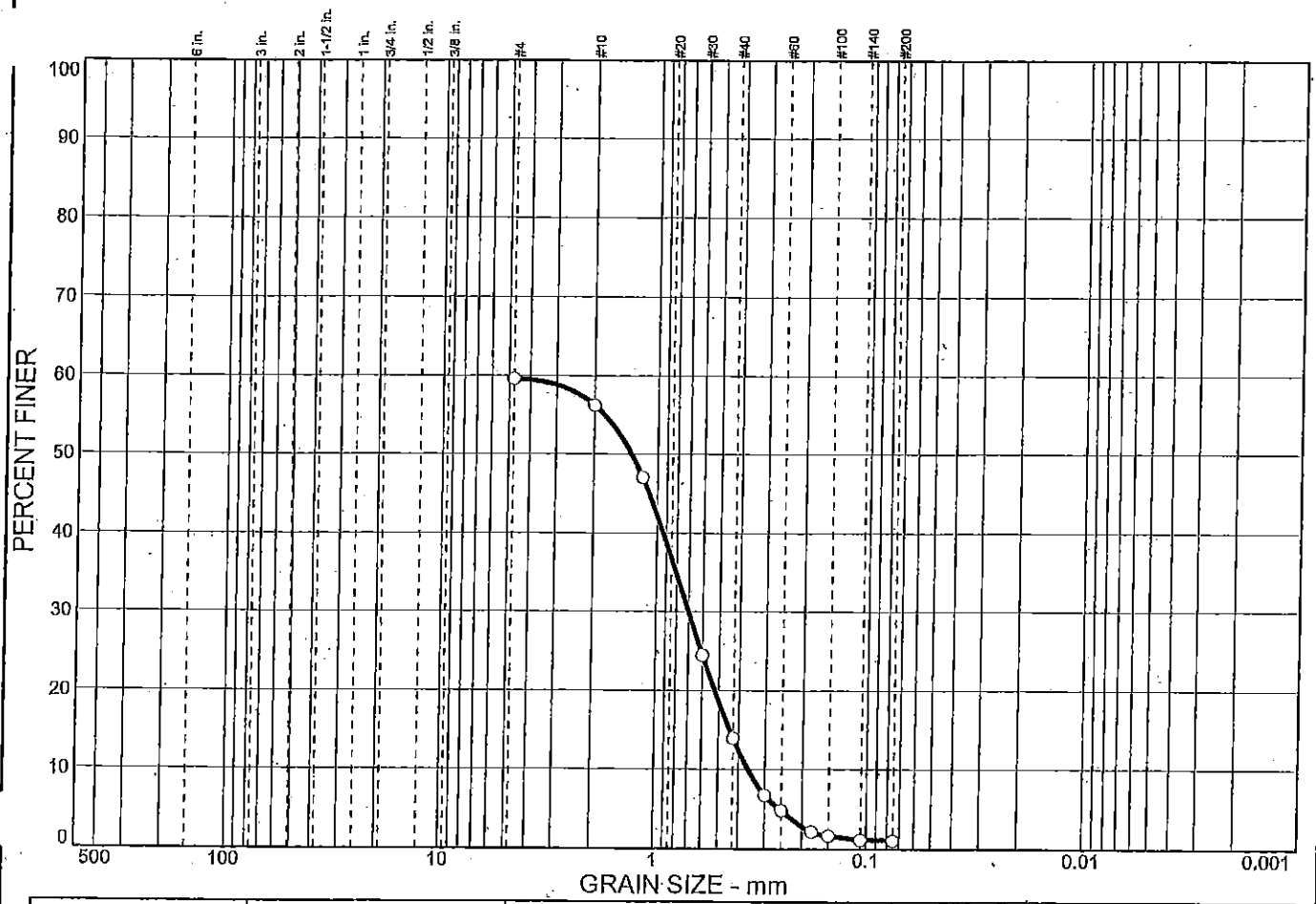
OV-7
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-7 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 7E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		58.5	1.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	59.6		
#10	56.2		
#16	47.0		
#30	24.5		
#40	13.9		
#50	6.8		
#60	4.9		
#80	2.2		
#100	1.7		
#140	1.2		
#200	1.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= D_{50}= 1.34
D_{30}= 0.702 D_{15}= 0.443 D_{10}= 0.361
C_u= C_c=

Classification

USCS= SP AASHTO= A-1-b

Remarks

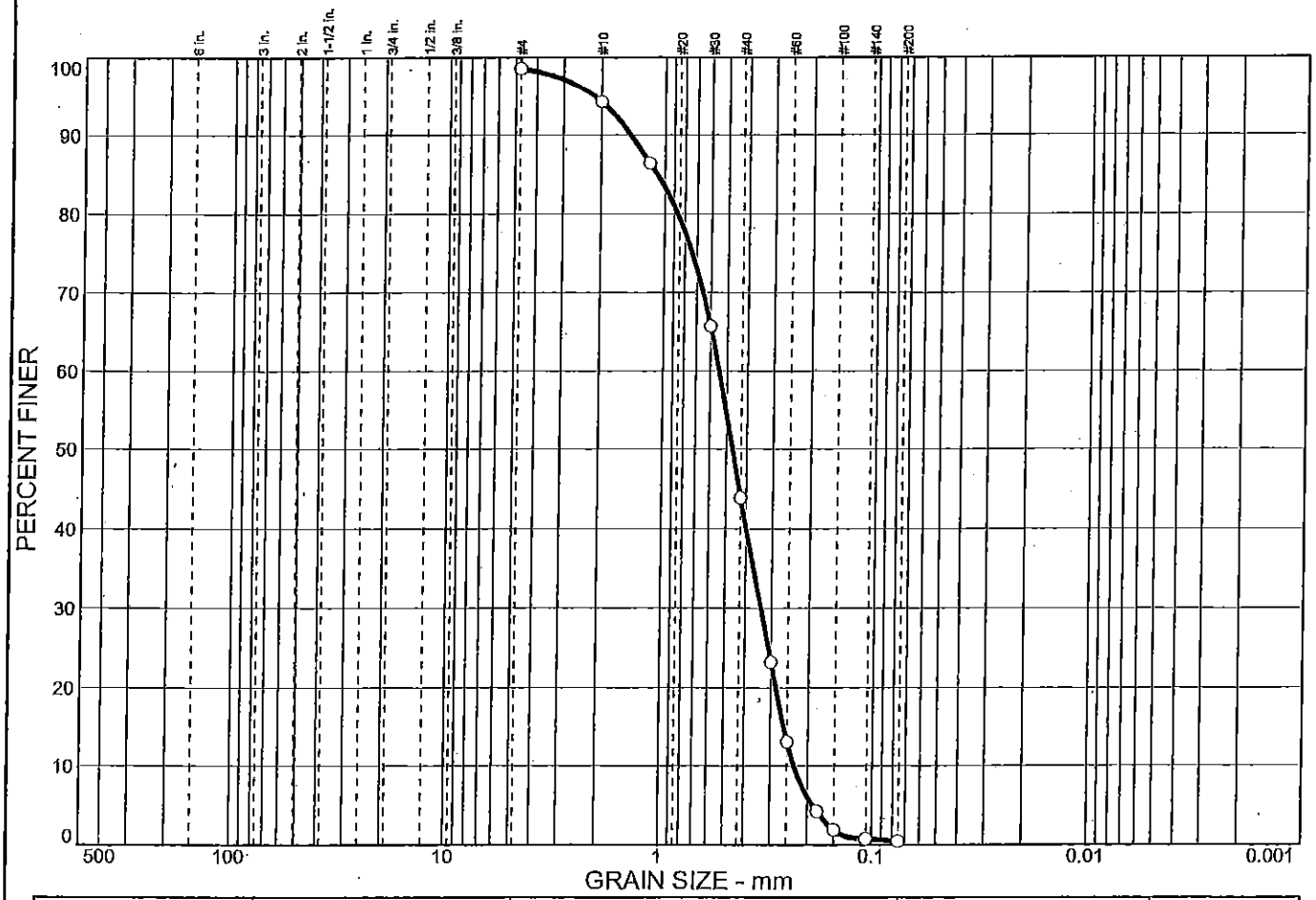
OV-7
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-7 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 7F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		98.1	0.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.6		
#10	94.2		
#16	86.4		
#30	65.7		
#40	43.9		
#50	23.2		
#60	13.0		
#80	4.2		
#100	1.9		
#140	0.8		
#200	0.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.09 D_{60}= 0.544 D_{50}= 0.467
D_{30}= 0.337 D_{15}= 0.260 D_{10}= 0.232
C_u= 2.34 C_c= 0.90

Classification

USCS= SP AASHTO= A-1-b

Remarks

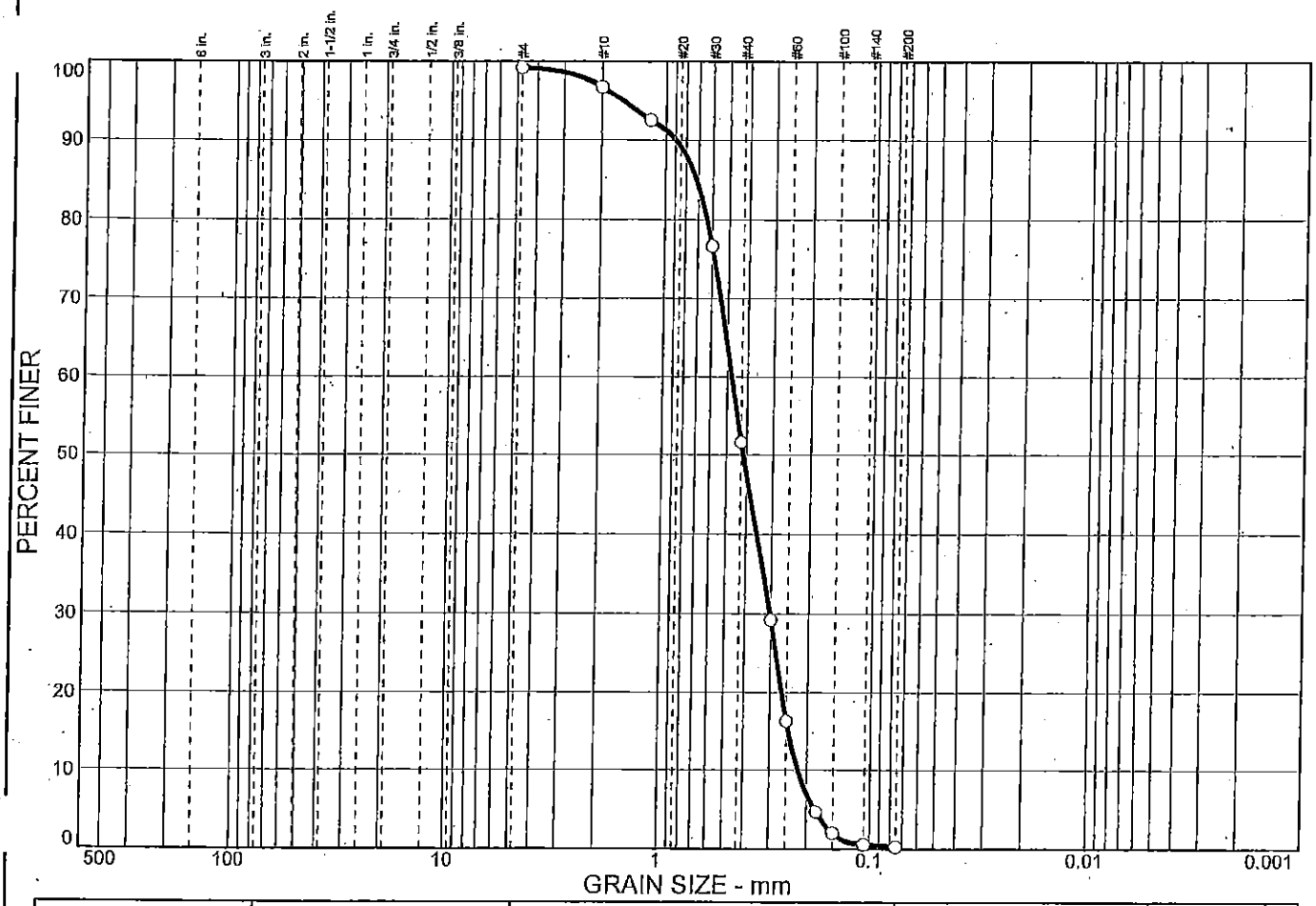
OV-8
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/2/04
Location: OV-8 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 8A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		98.9	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.2		
#10	96.8		
#16	92.4		
#30	76.7		
#40	51.6		
#50	29.2		
#60	16.3		
#80	4.7		
#100	2.0		
#140	0.6		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.719 D_{60}= 0.476 D_{50}= 0.415
D_{30}= 0.303 D_{15}= 0.245 D_{10}= 0.220
C_u= 2.17 C_c= 0.88

Classification

USCS= SP AASHTO= A-3

Remarks

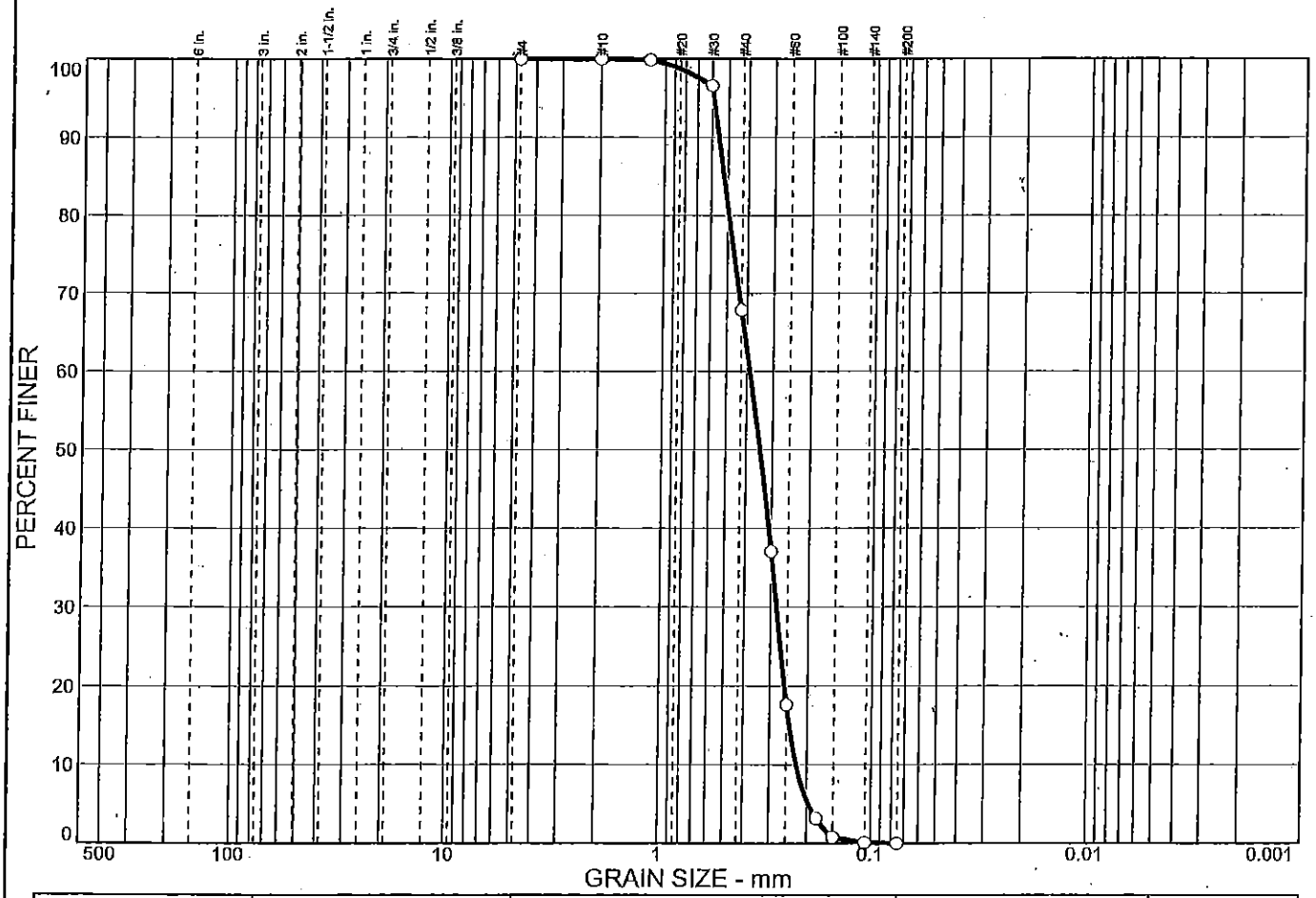
OV-8
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/2/04
Location: OV-8 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 8B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	96.6		
#40	67.8		
#50	37.0		
#60	17.6		
#80	3.2		
#100	0.8		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.523 D_{60}= 0.386 D_{50}= 0.343
D_{30}= 0.282 D_{15}= 0.242 D_{10}= 0.224
C_u= 1.72 C_c= 0.92

Classification

USCS= SP AASHTO= A-3

Remarks

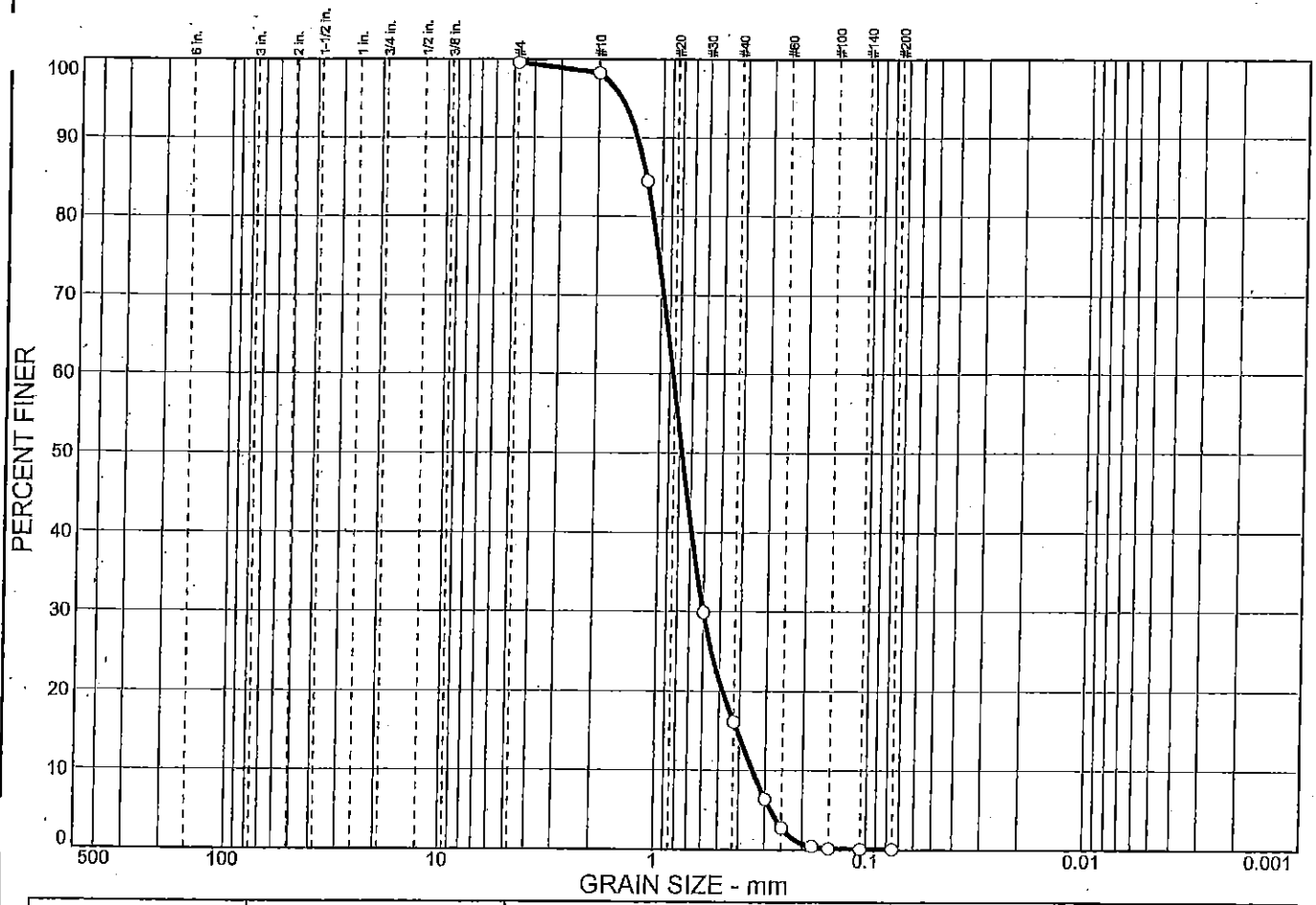
OV-8
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/3/04
Location: OV-8 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 8C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.5	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	98.3		
#16	84.4		
#30	29.9		
#40	16.1		
#50	6.4		
#60	2.8		
#80	0.5		
#100	0.2		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.19 D_{60}= 0.867 D_{50}= 0.776
D_{30}= 0.601 D_{15}= 0.410 D_{10}= 0.345
C_u= 2.52 C_c= 1.21

Classification

USCS= SP AASHTO= A-1-b

Remarks

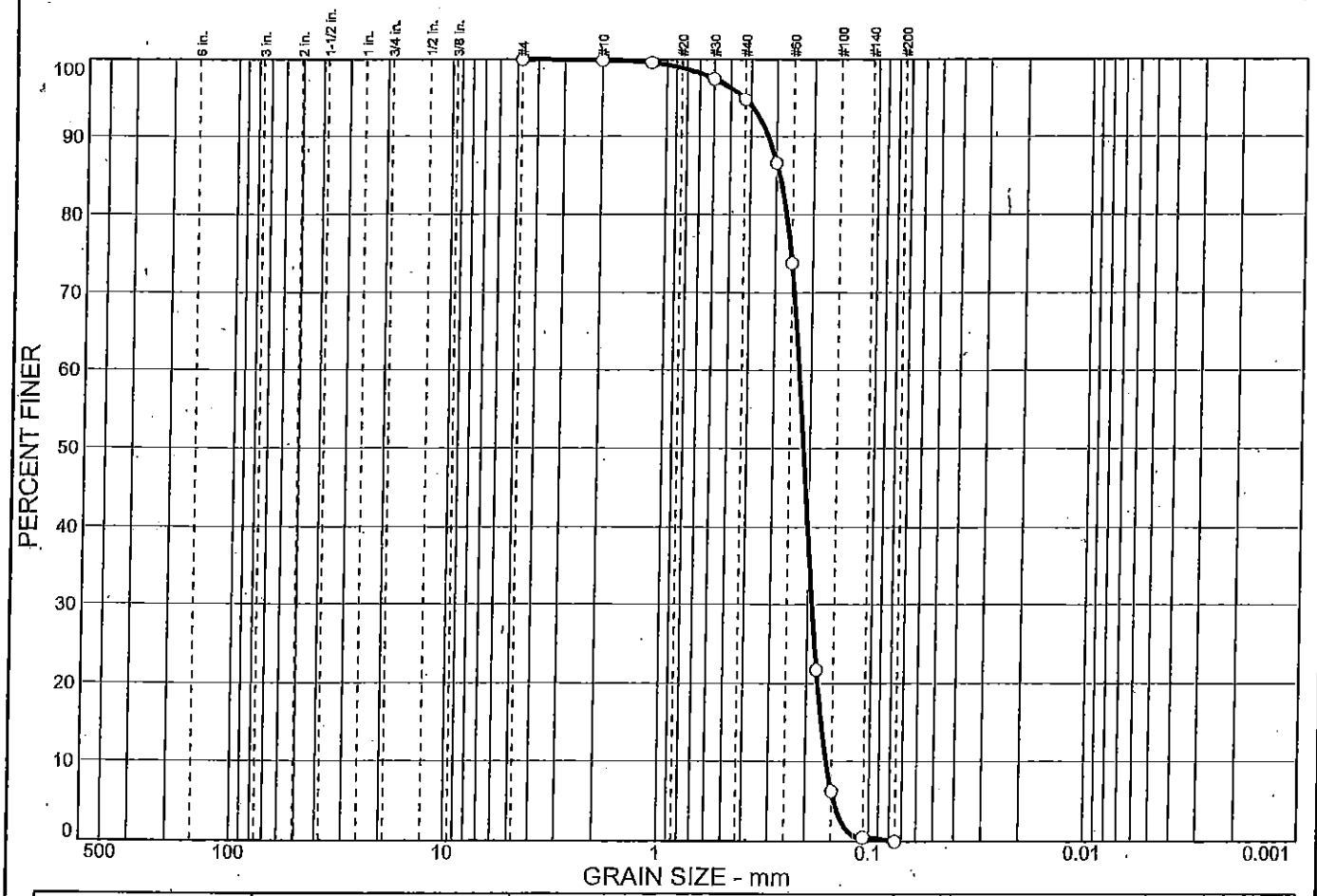
OV-8
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/3/04
Location: OV-8 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 8D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.6		
#30	97.5		
#40	94.8		
#50	86.6		
#60	73.8		
#80	21.7		
#100	6.3		
#140	0.5		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.289 D_{60}= 0.227 D_{50}= 0.214
D_{30}= 0.191 D_{15}= 0.170 D_{10}= 0.160
C_u= 1.42 C_c= 1.00

Classification

USCS= SP AASHTO= A-3

Remarks

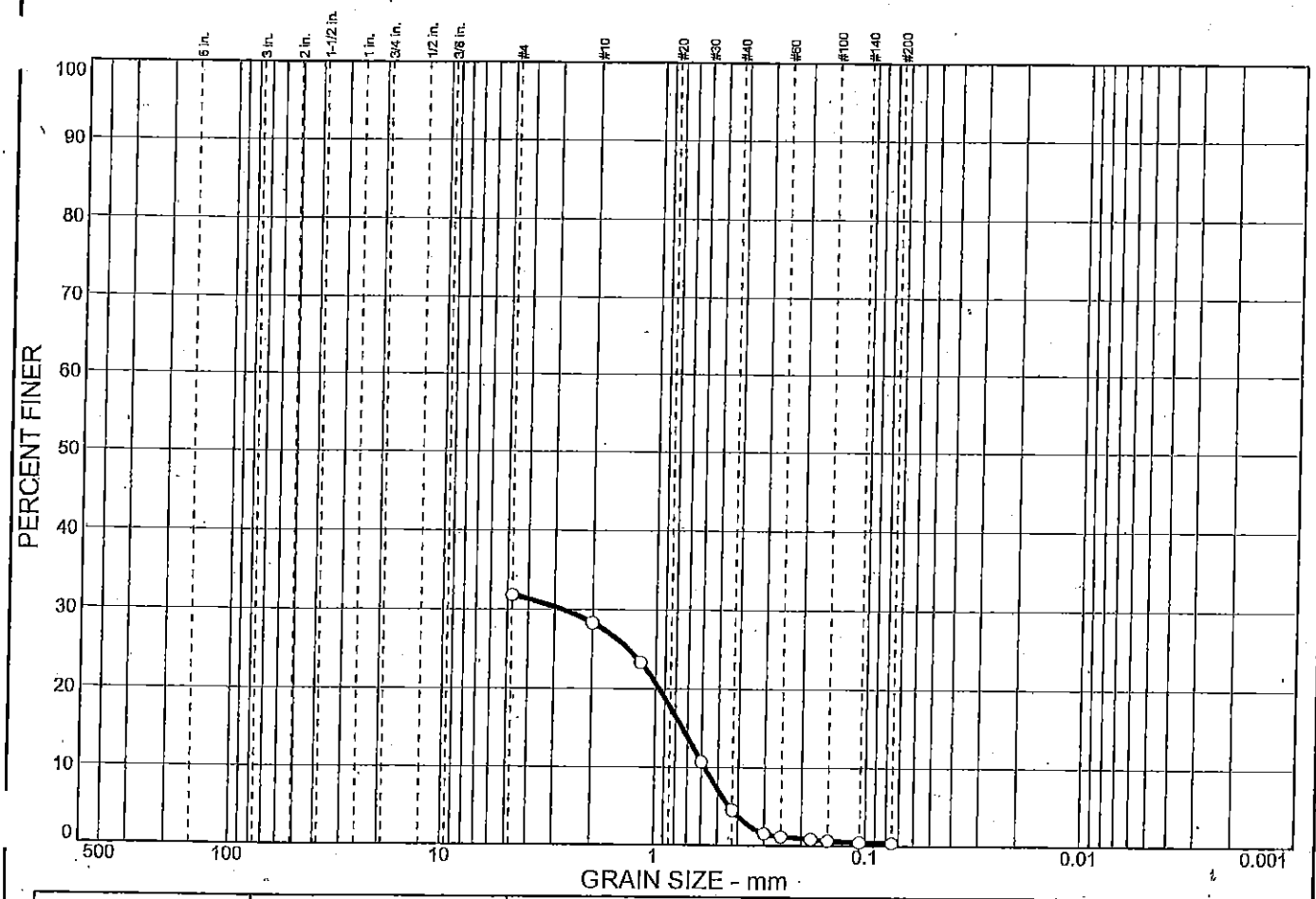
OV-8
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-8 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 8E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		31.4	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	31.8		
#10	28.3		
#16	23.3		
#30	10.7		
#40	4.6		
#50	1.6		
#60	1.2		
#80	0.9		
#100	0.7		
#140	0.5		
#200	0.4		

* (no specification provided)

Soil Description

Large Marine Shell with Tan Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= 2.79 D_{15}= 0.742 D_{10}= 0.579
C_u= C_c=

Classification

USCS= GP AASHTO= A-1-a

Remarks

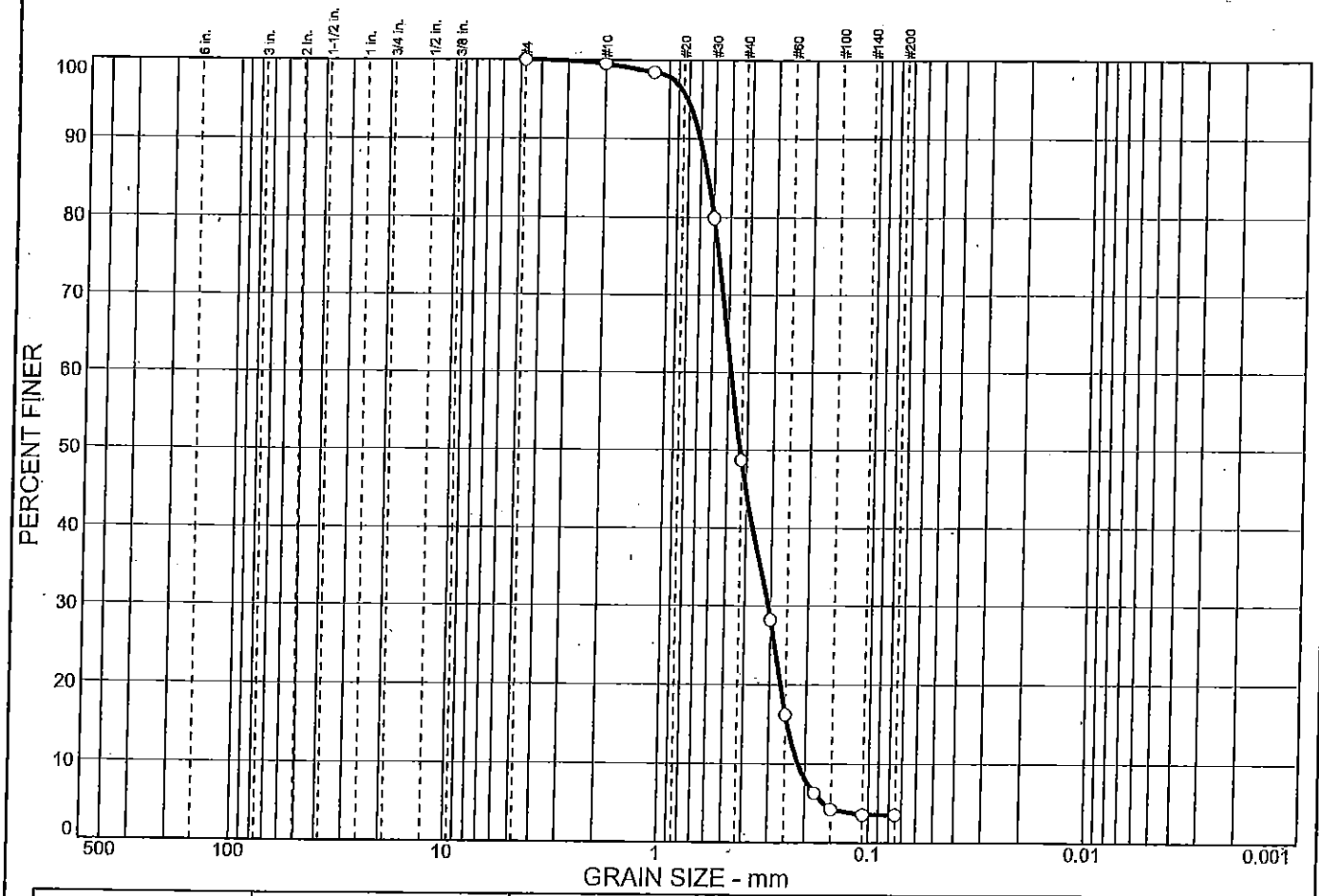
OV-8
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-8 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 8F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.5	3.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.5		
#16	98.4		
#30	79.9		
#40	48.6		
#50	28.2		
#60	16.2		
#80	6.3		
#100	4.2		
#140	3.5		
#200	3.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.645 D_{60}= 0.484 D_{50}= 0.433
D_{30}= 0.309 D_{15}= 0.245 D_{10}= 0.216
C_u= 2.24 C_c= 0.92

Classification

USCS= SP AASHTO= A-1-b

Remarks

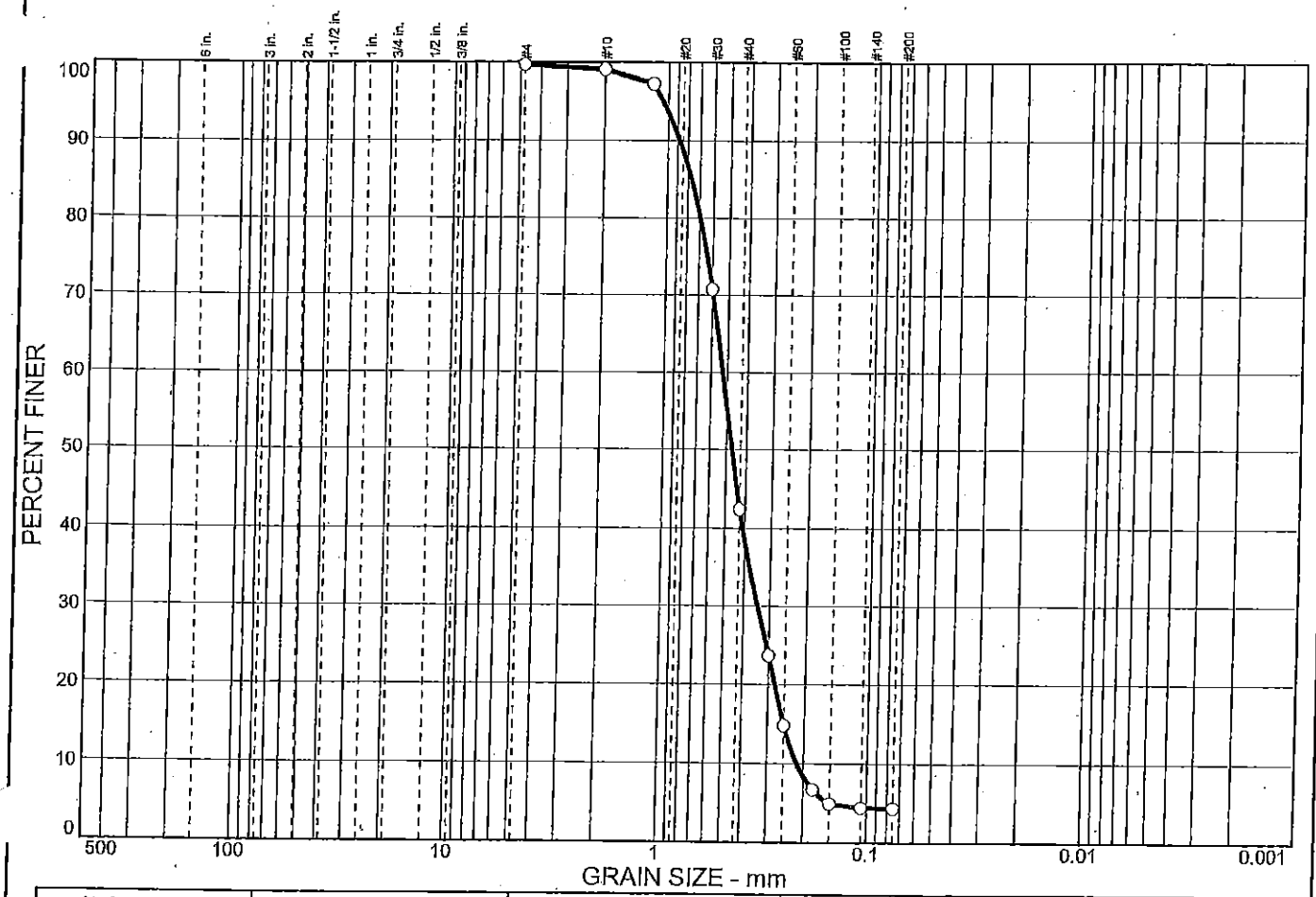
OV-9
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-9 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 9A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		95.4	4.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.7		
#10	99.1		
#16	97.4		
#30	70.7		
#40	42.4		
#50	23.6		
#60	14.8		
#80	6.7		
#100	4.9		
#140	4.4		
#200	4.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.770 D_{60}= 0.526 D_{50}= 0.468
D_{30}= 0.343 D_{15}= 0.251 D_{10}= 0.216
C_u= 2.44 C_c= 1.03

Classification

USCS= SP AASHTO= A-1-b

Remarks

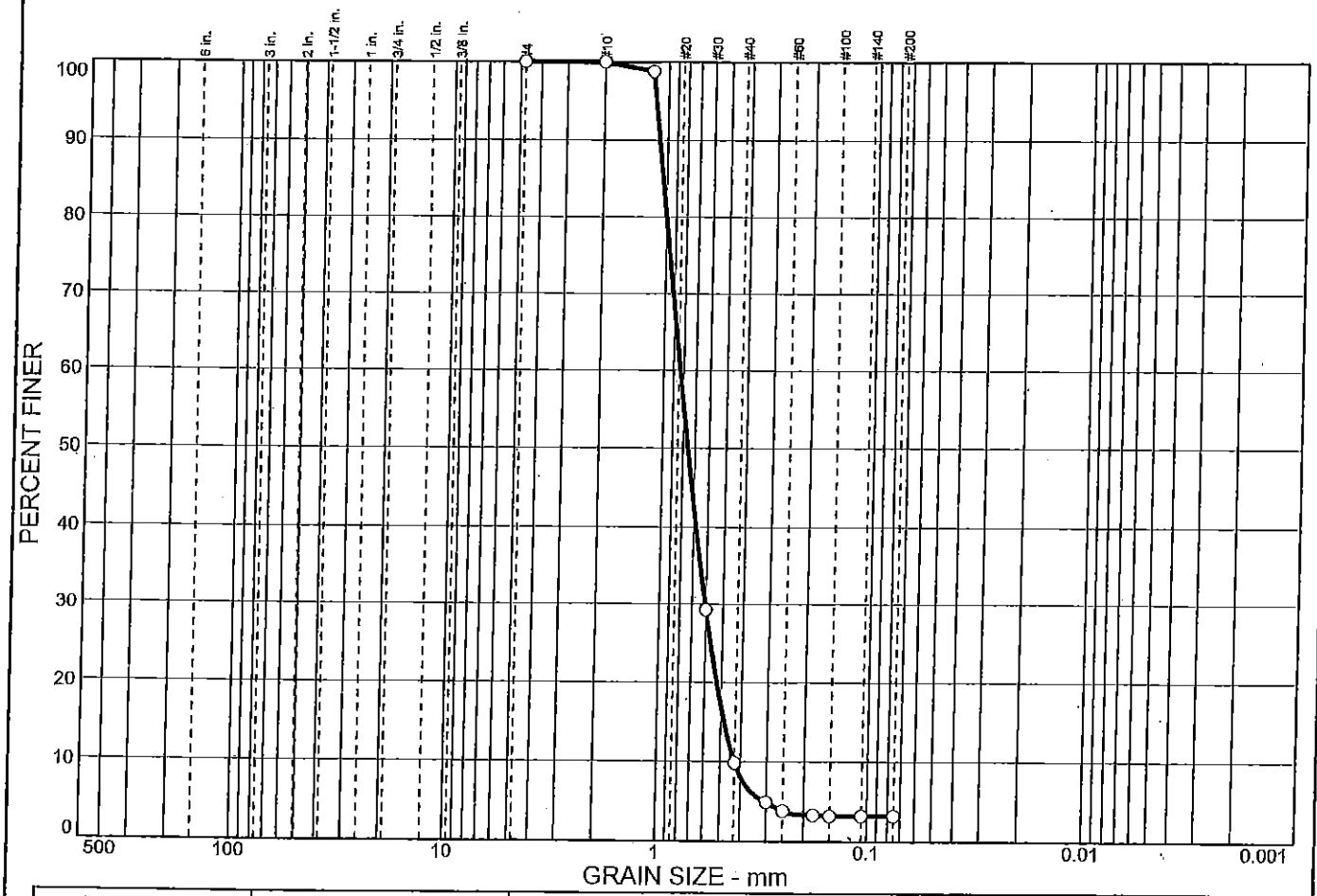
OV-9
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-9 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 9B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.8	3.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	98.8		
#30	29.2		
#40	9.8		
#50	4.9		
#60	3.8		
#80	3.3		
#100	3.2		
#140	3.2		
#200	3.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.05 D_{60}= 0.835 D_{50}= 0.757
D_{30}= 0.606 D_{15}= 0.482 D_{10}= 0.428
C_u= 1.95 C_c= 1.03

Classification

USCS= SP AASHTO= A-1-b

Remarks

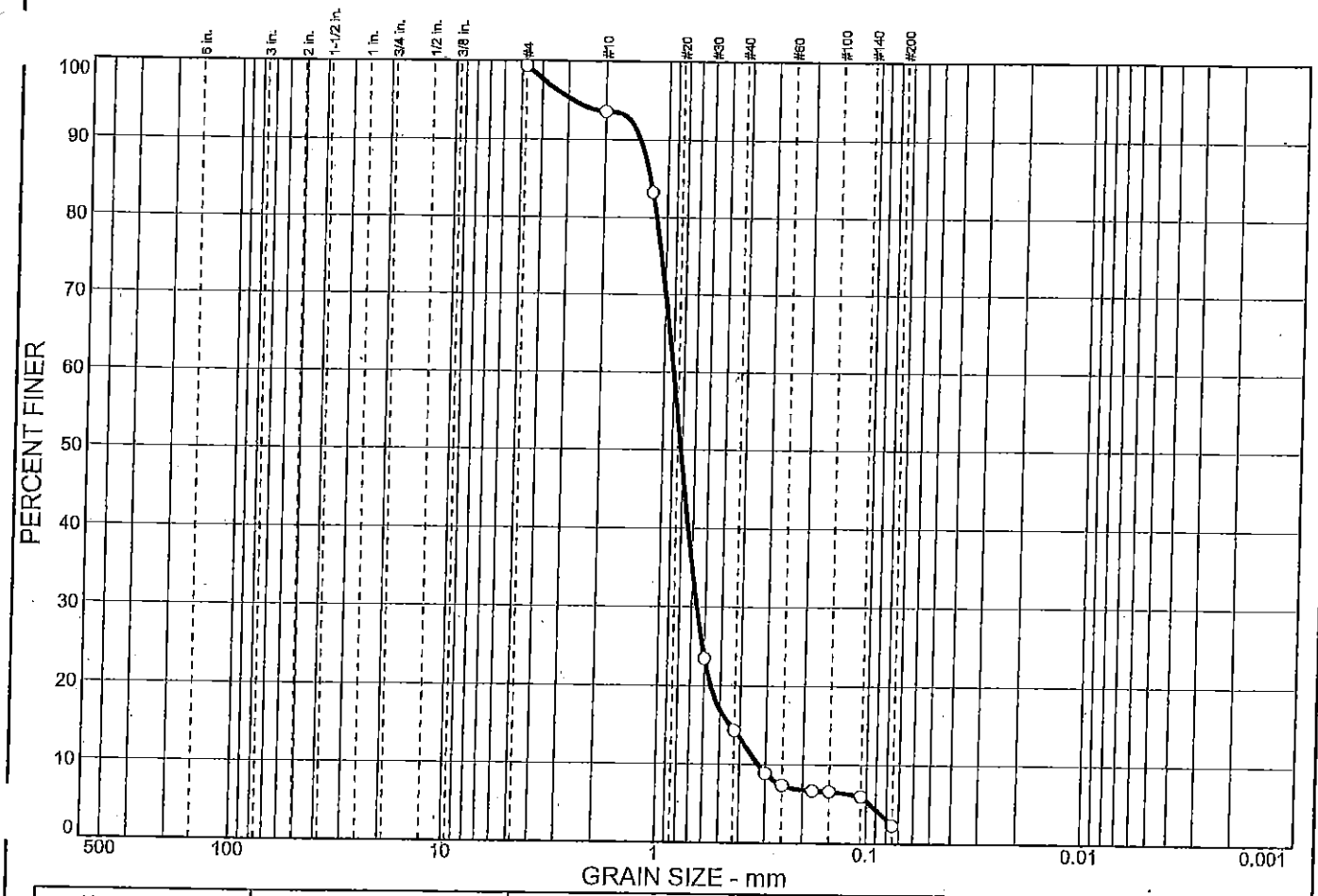
OV-9
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/28/04
Location: OV-9 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 9C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		97.1	2.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.4		
#10	93.6		
#16	83.3		
#30	23.5		
#40	14.3		
#50	8.9		
#60	7.4		
#80	6.7		
#100	6.6		
#140	6.0		
#200	2.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.21 D_{60}= 0.902 D_{50}= 0.818
D_{30}= 0.660 D_{15}= 0.446 D_{10}= 0.325
C_u= 2.77 C_c= 1.49

Classification

USCS= SP AASHTO= A-1-b

Remarks

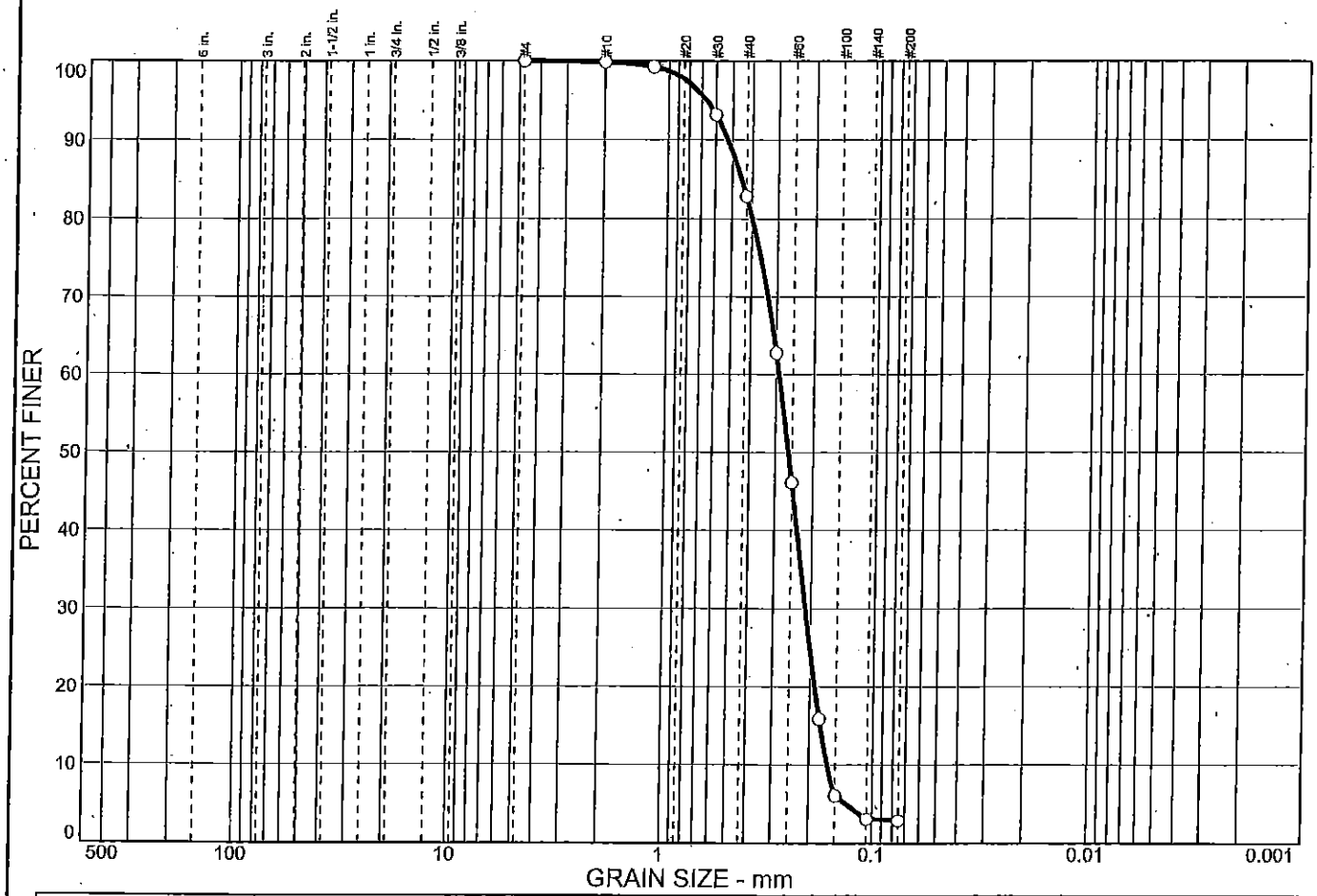
OV-9
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/28/04
Location: OV-9 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 9D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.1	2.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.3		
#30	93.1		
#40	82.8		
#50	62.7		
#60	46.1		
#80	15.8		
#100	6.1		
#140	3.1		
#200	2.9		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.450 D_{60}= 0.290 D_{50}= 0.260
D_{30}= 0.212 D_{15}= 0.178 D_{10}= 0.164
C_u= 1.77 C_c= 0.95

Classification

USCS= SP AASHTO= A-3

Remarks

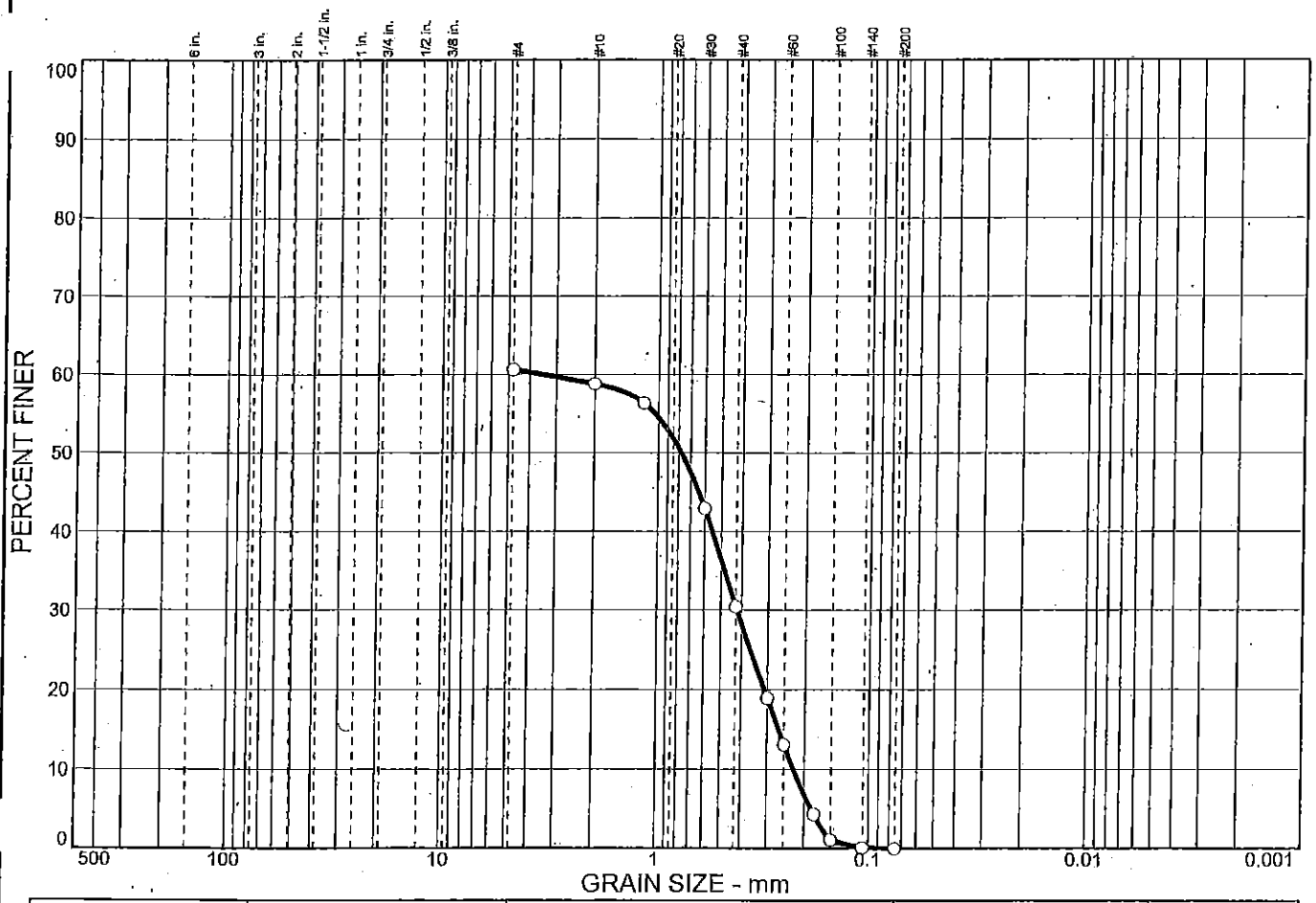
OV-9
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-9 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 9E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		60.6	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	60.6		
#10	58.8		
#16	56.3		
#30	42.9		
#40	30.4		
#50	18.9		
#60	13.1		
#80	4.3		
#100	1.1		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND with Large Marine Shell

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= 3.49 D_{50}= 0.779
D_{30}= 0.420 D_{15}= 0.266 D_{10}= 0.225
C_u= 15.51 C_c= 0.22

Classification

USCS= SP AASHTO= A-1-b

Remarks

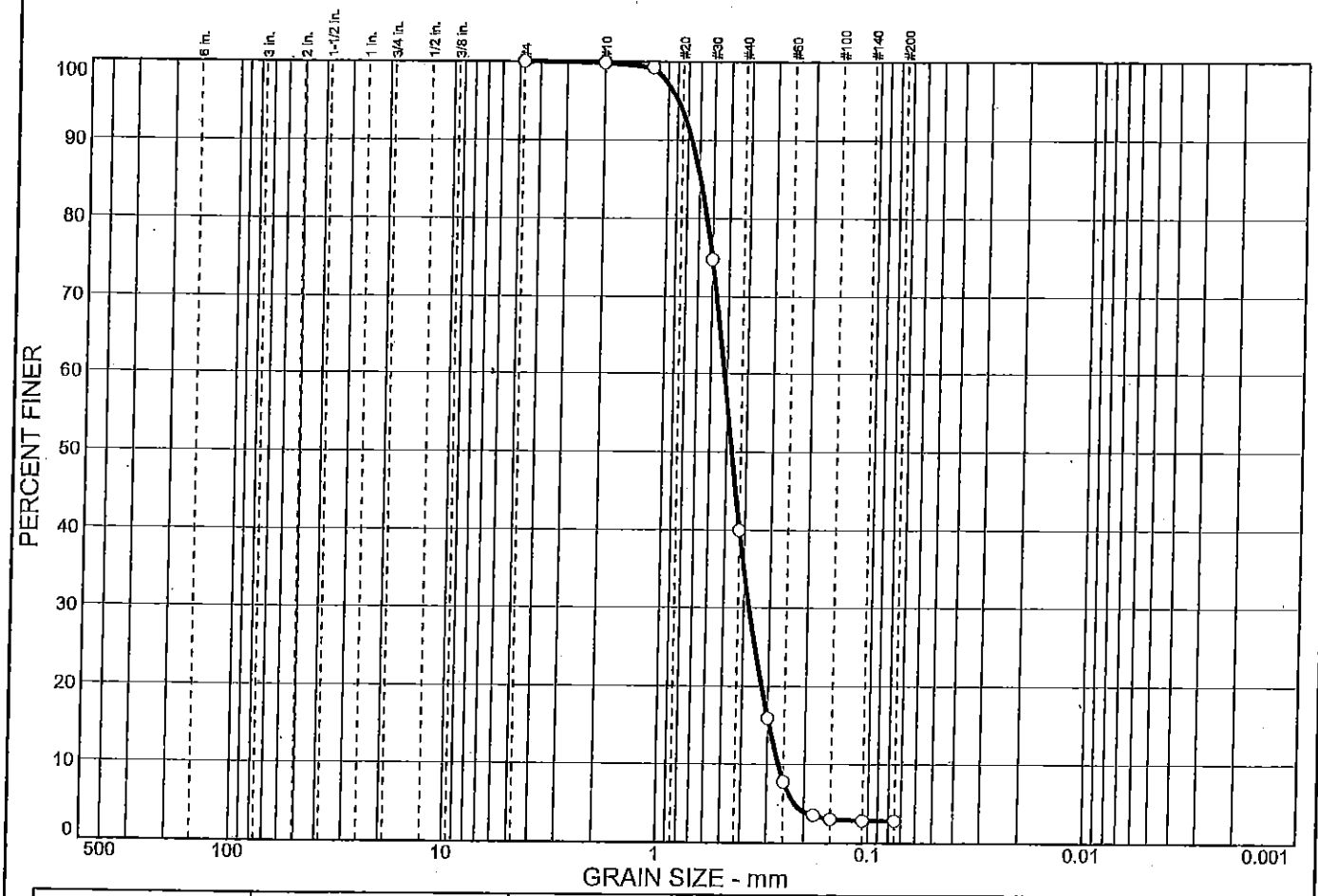
OV-9
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-9 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 9F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.1	2.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.3		
#30	74.7		
#40	40.0		
#50	15.9		
#60	7.8		
#80	3.6		
#100	3.1		
#140	2.9		
#200	2.9		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.694 D_{60}= 0.516 D_{50}= 0.470
D_{30}= 0.377 D_{15}= 0.295 D_{10}= 0.265
C_u= 1.95 C_c= 1.04

Classification

USCS= SP AASHTO= A-1-b

Remarks

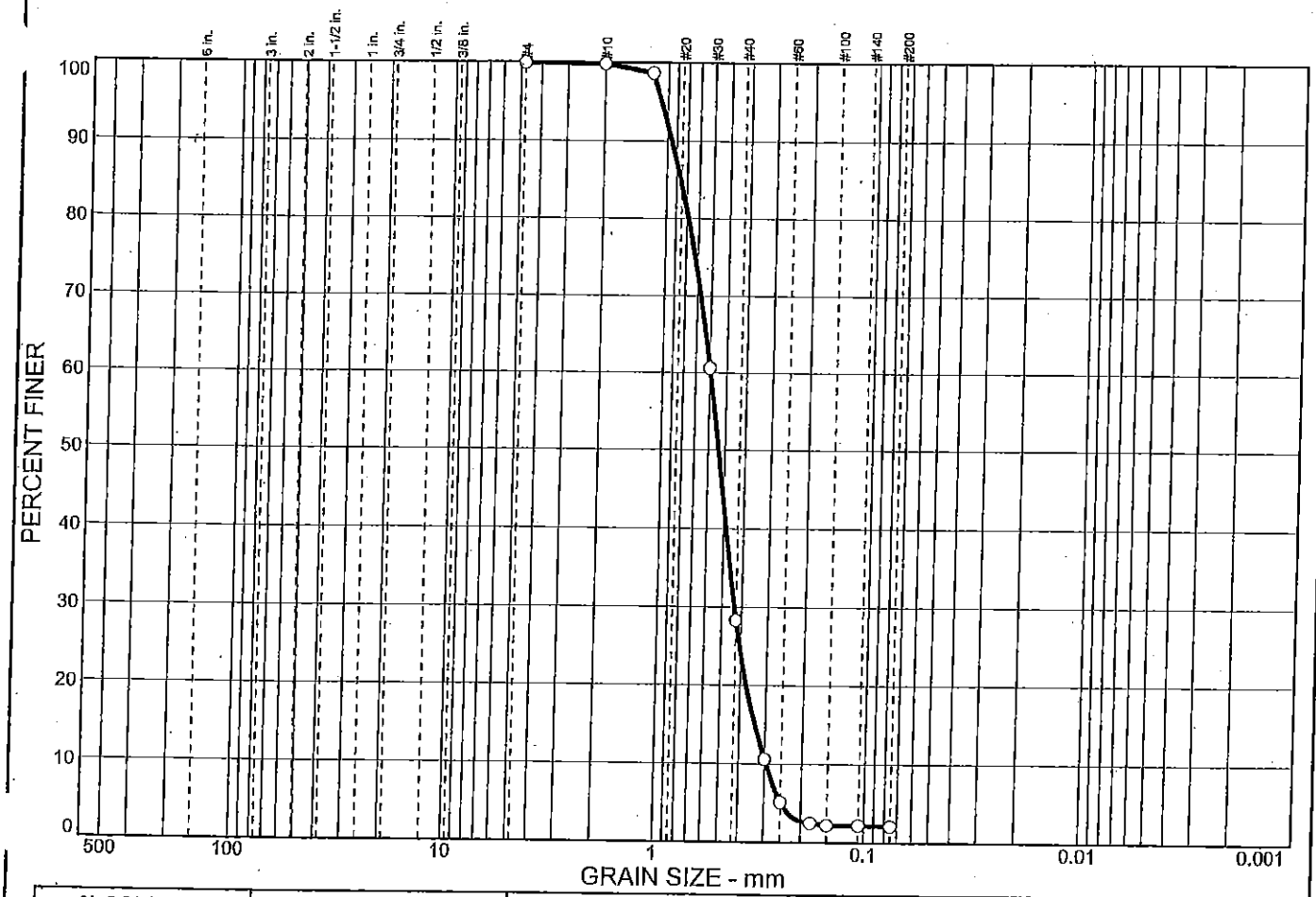
OV-10
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-10 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 10A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		97.8	2.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.8		
#16	98.7		
#30	60.6		
#40	28.3		
#50	10.6		
#60	5.1		
#80	2.5		
#100	2.2		
#140	2.2		
#200	2.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.861 D_{60}= 0.596 D_{50}= 0.537
D_{30}= 0.434 D_{15}= 0.337 D_{10}= 0.295
C_u= 2.02 C_c= 1.07

Classification

USCS= SP AASHTO= A-1-b

Remarks

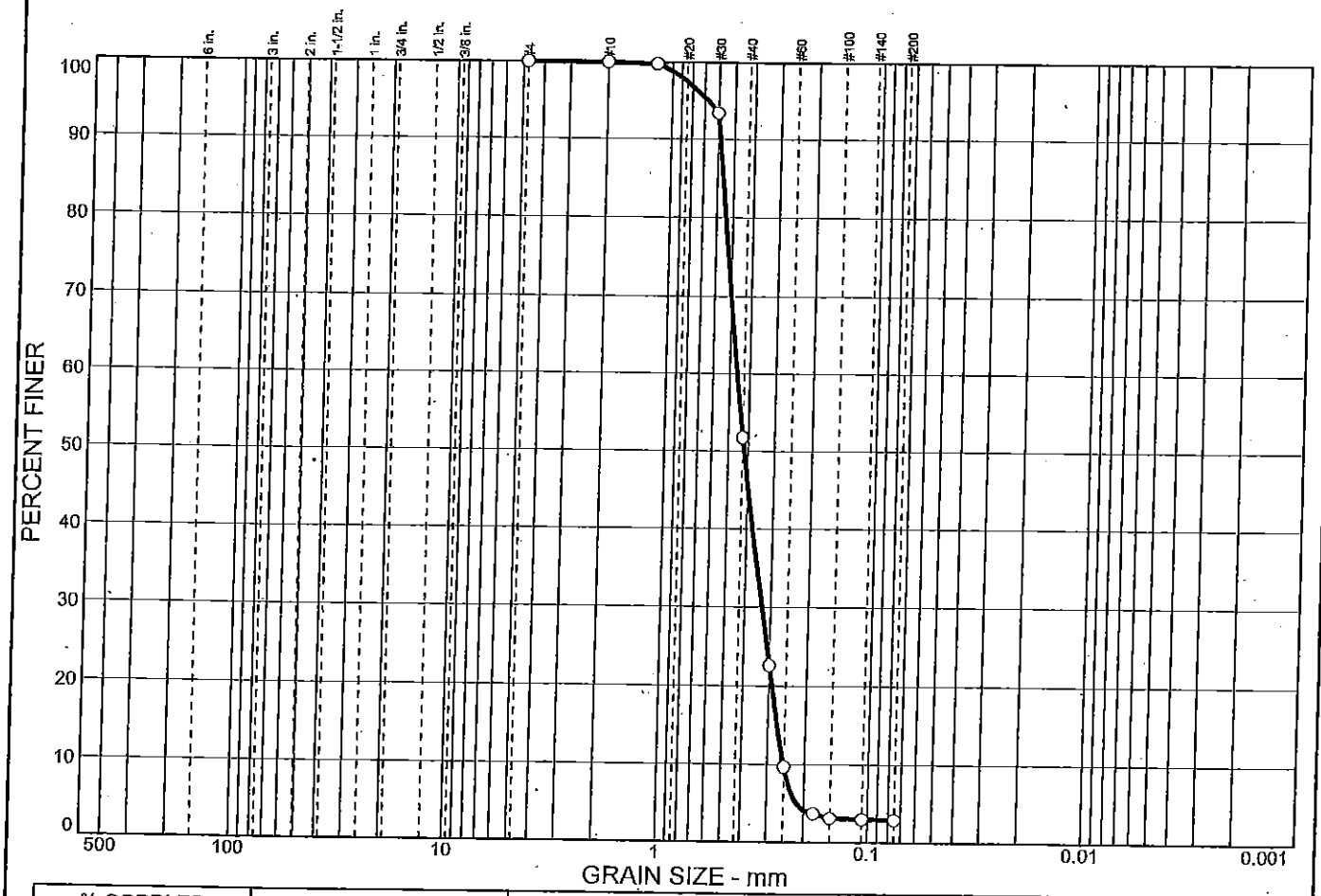
OV-10
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-10 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 10B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.1	2.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	93.4		
#40	51.7		
#50	22.6		
#60	9.7		
#80	3.7		
#100	3.1		
#140	3.0		
#200	2.9		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.562 D_{60}= 0.459 D_{50}= 0.418
D_{30}= 0.330 D_{15}= 0.272 D_{10}= 0.251
C_u= 1.83 C_c= 0.95

Classification

USCS= SP AASHTO= A-3

Remarks

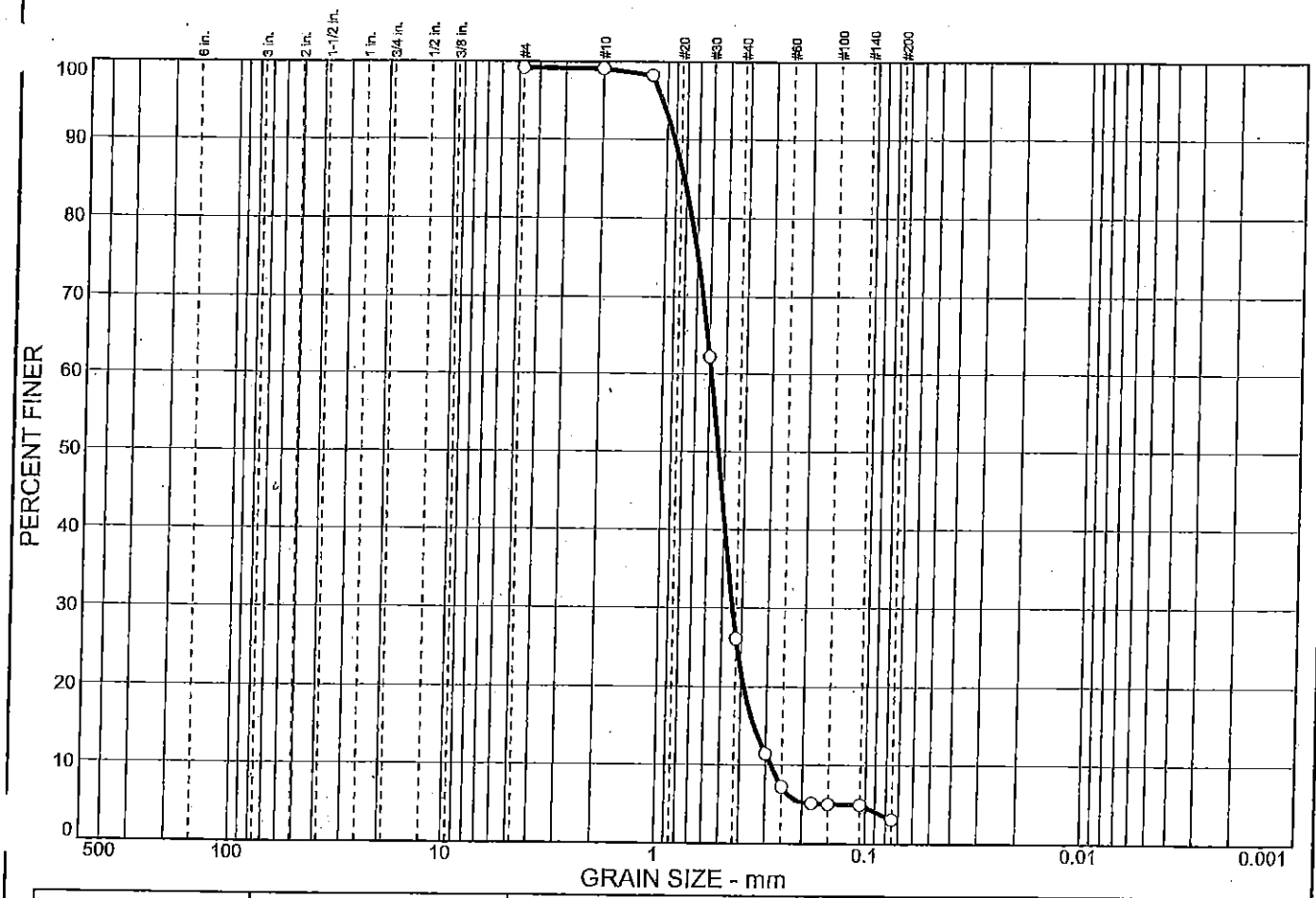
OV-10
Sample C

Sample No.: C
Location: OV-10
Source of Sample:
Date: 4/28/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 10C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		96.1	3.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.2		
#10	99.1		
#16	98.3		
#30	62.2		
#40	26.1		
#50	11.5		
#60	7.3		
#80	5.2		
#100	5.1		
#140	5.0		
#200	3.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.822 D_{60}= 0.587 D_{50}= 0.536
D_{30}= 0.445 D_{15}= 0.342 D_{10}= 0.283
C_u= 2.08 C_c= 1.19

Classification

USCS= SP AASHTO= A-1-b

Remarks

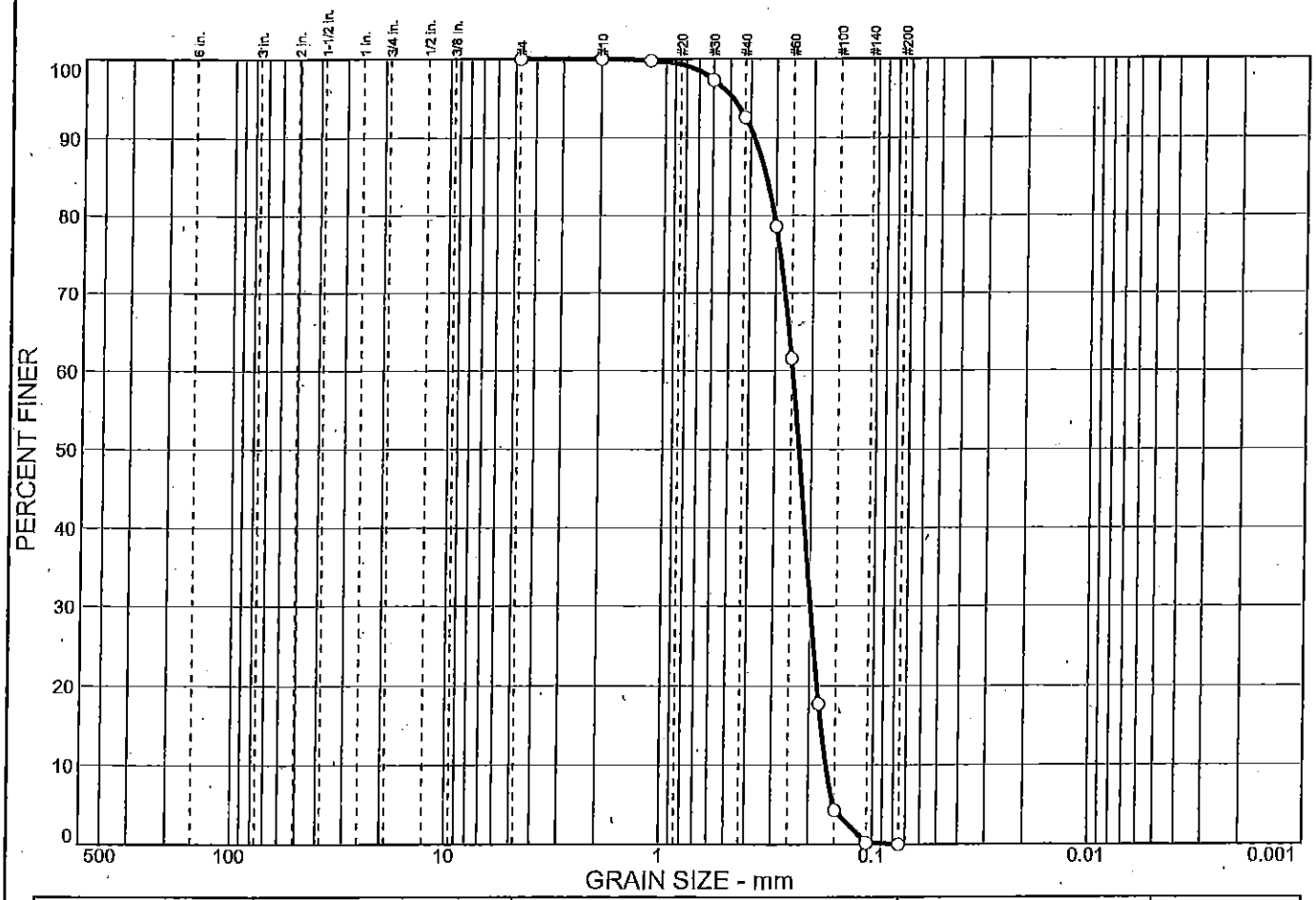
OV-10
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/28/04
Location: OV-10 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 10D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	97.4		
#40	92.5		
#50	78.6		
#60	61.6		
#80	17.7		
#100	4.3		
#140	0.2		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.335 D_{60}= 0.247 D_{50}= 0.229
D_{30}= 0.199 D_{15}= 0.175 D_{10}= 0.165
C_u= 1.49 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

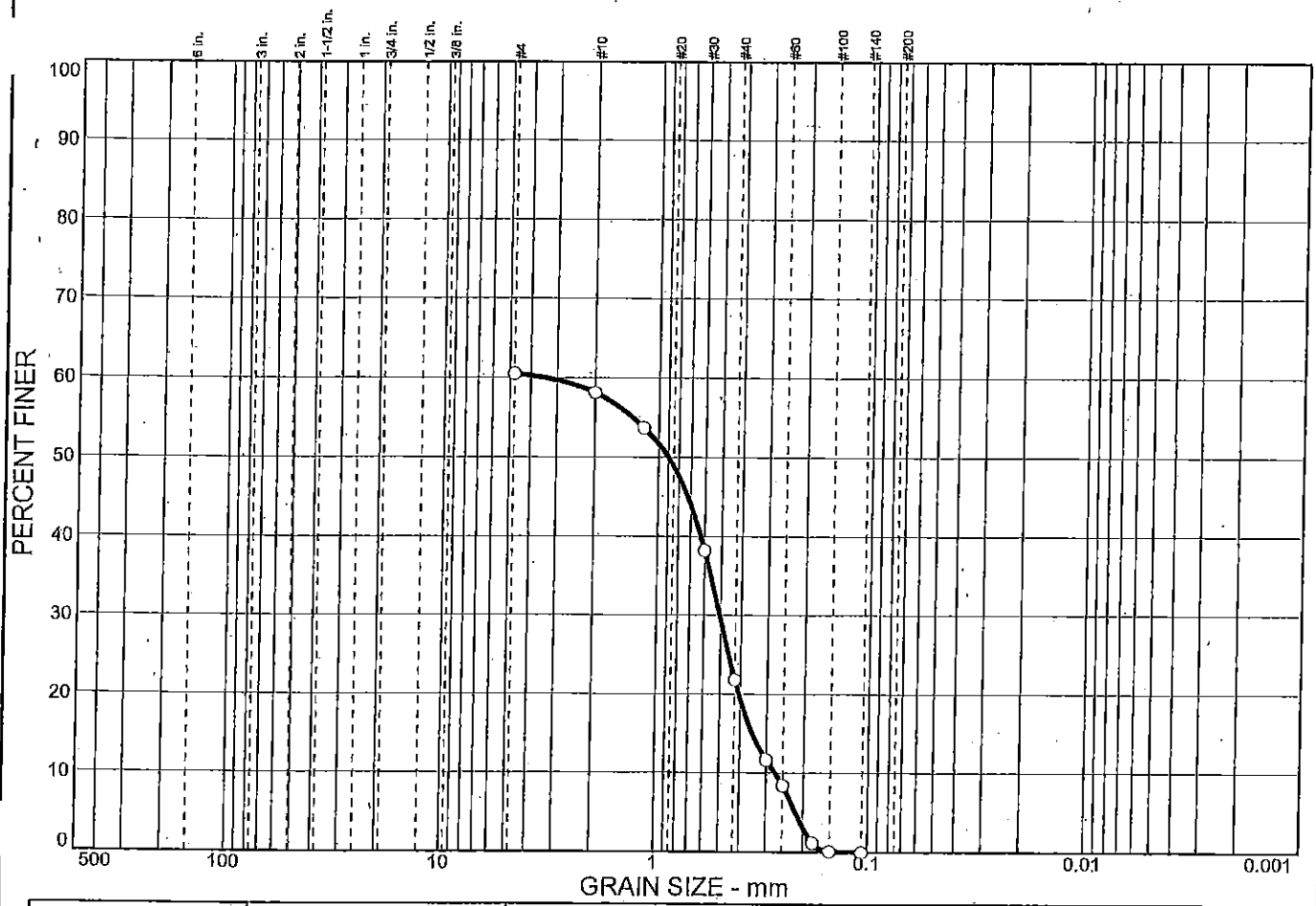
OV-10
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-10 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 10E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		60.5	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	60.5		
#10	58.1		
#16	53.7		
#30	38.2		
#40	21.8		
#50	11.6		
#60	8.4		
#80	1.2		
#100	0.1		
#140	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= 3.43 D_{50}= 0.903
D_{30}= 0.505 D_{15}= 0.349 D_{10}= 0.273
C_u= 12.57 C_c= 0.27

Classification

USCS= SP AASHTO= A-1-b

Remarks

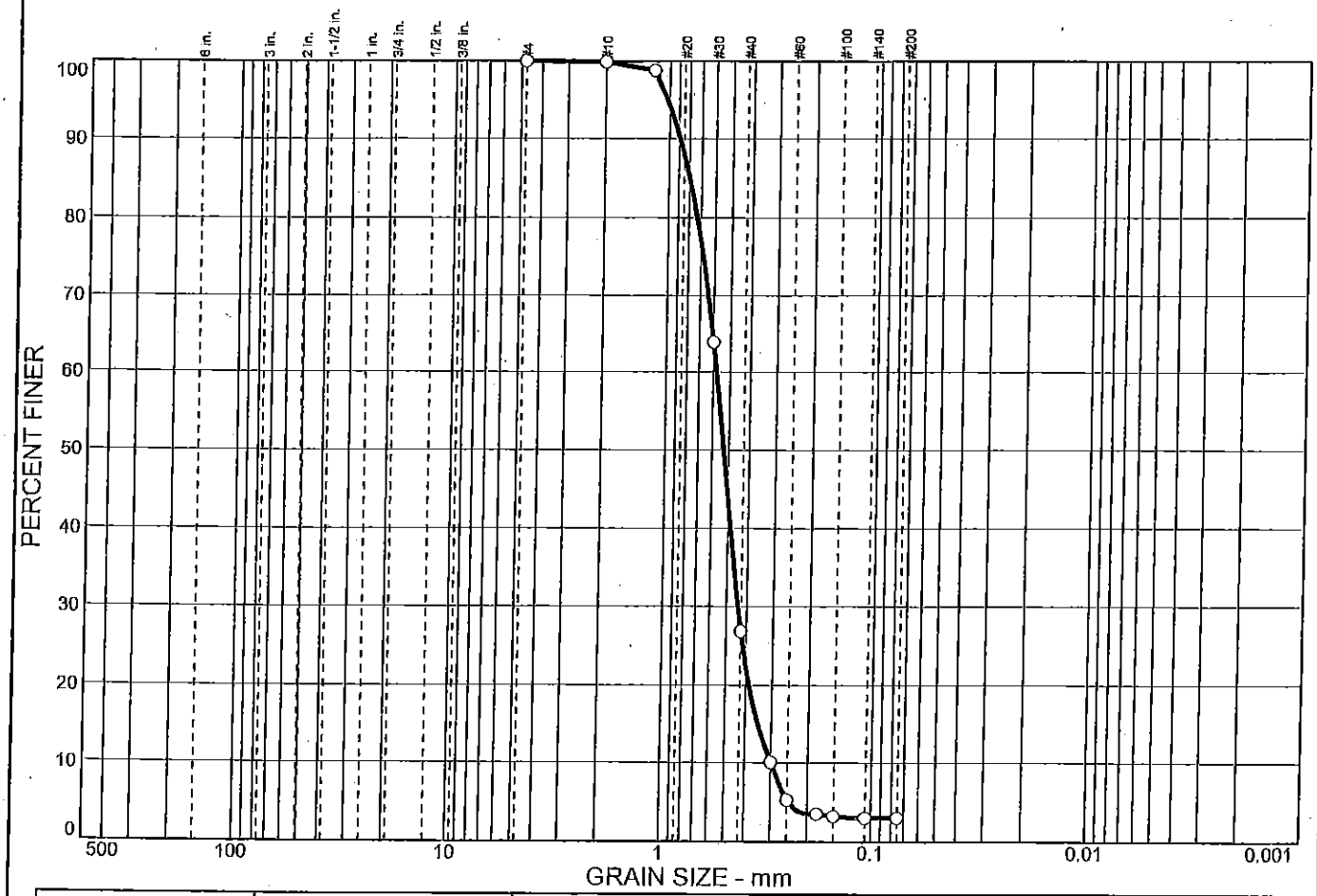
OV-10
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-10 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 10F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.0	3.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	98.8		
#30	63.9		
#40	26.8		
#50	10.1		
#60	5.3		
#80	3.5		
#100	3.2		
#140	3.0		
#200	3.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.798 D_{60}= 0.578 D_{50}= 0.529
D_{30}= 0.440 D_{15}= 0.348 D_{10}= 0.299
C_u= 1.93 C_c= 1.12

Classification

USCS= SP AASHTO= A-1-b

Remarks

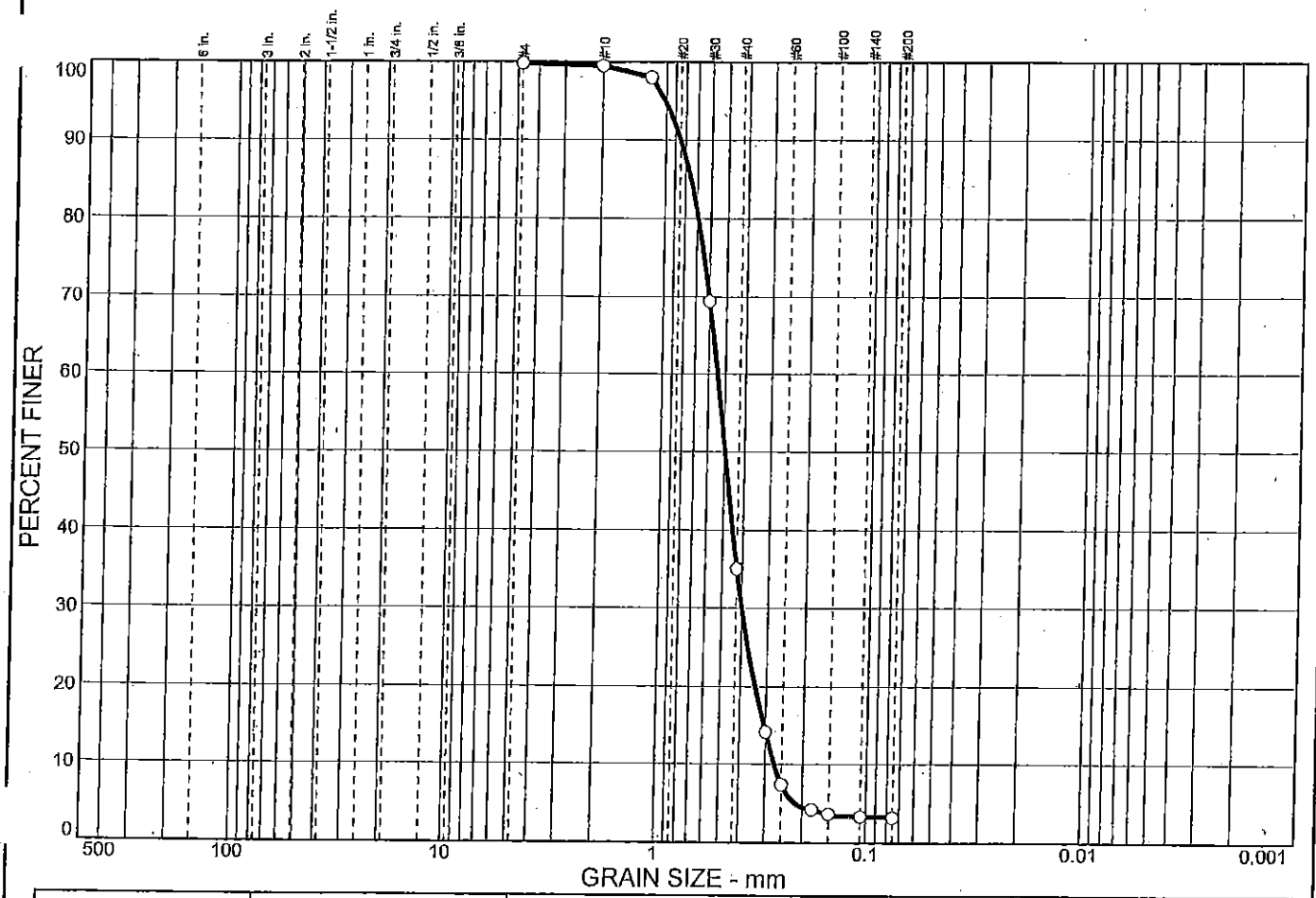
OV-11
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/3/04
Location: OV-11 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 11A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		96.6	3.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.5		
#16	98.1		
#30	69.4		
#40	35.0		
#50	14.1		
#60	7.4		
#80	4.2		
#100	3.6		
#140	3.3		
#200	3.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.756 D_{60}= 0.544 D_{50}= 0.495
D_{30}= 0.399 D_{15}= 0.306 D_{10}= 0.271
C_u= 2.01 C_c= 1.08

Classification

USCS= SP AASHTO= A-1-b

Remarks

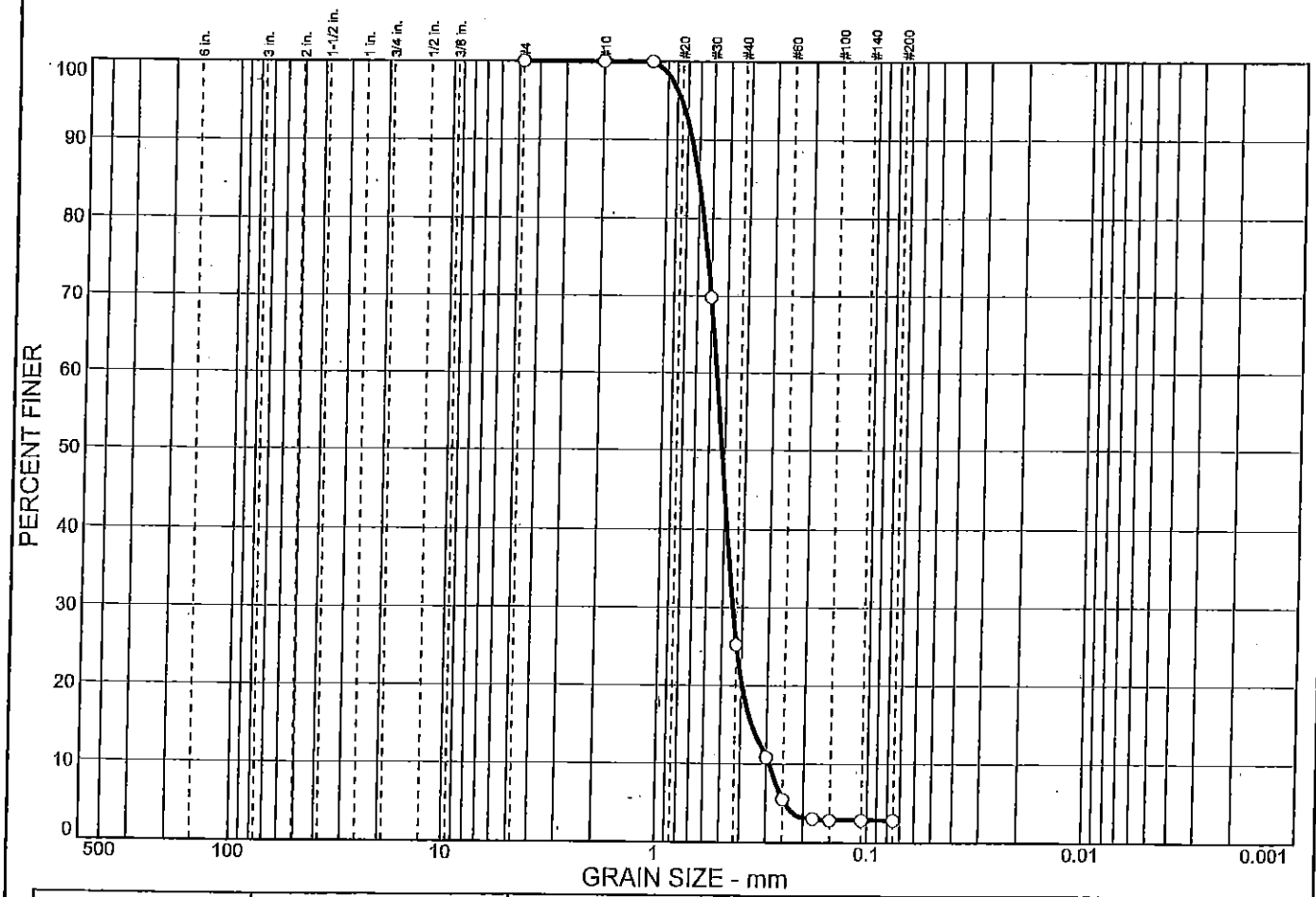
OV-11
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/3/04
Location: OV-11 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 11B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.2	2.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	69.8		
#40	25.3		
#50	10.8		
#60	5.5		
#80	3.0		
#100	2.8		
#140	2.8		
#200	2.8		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.704 D_{60}= 0.556 D_{50}= 0.518
D_{30}= 0.445 D_{15}= 0.355 D_{10}= 0.292
C_u= 1.91 C_c= 1.22

Classification

USCS= SP AASHTO= A-1-b

Remarks

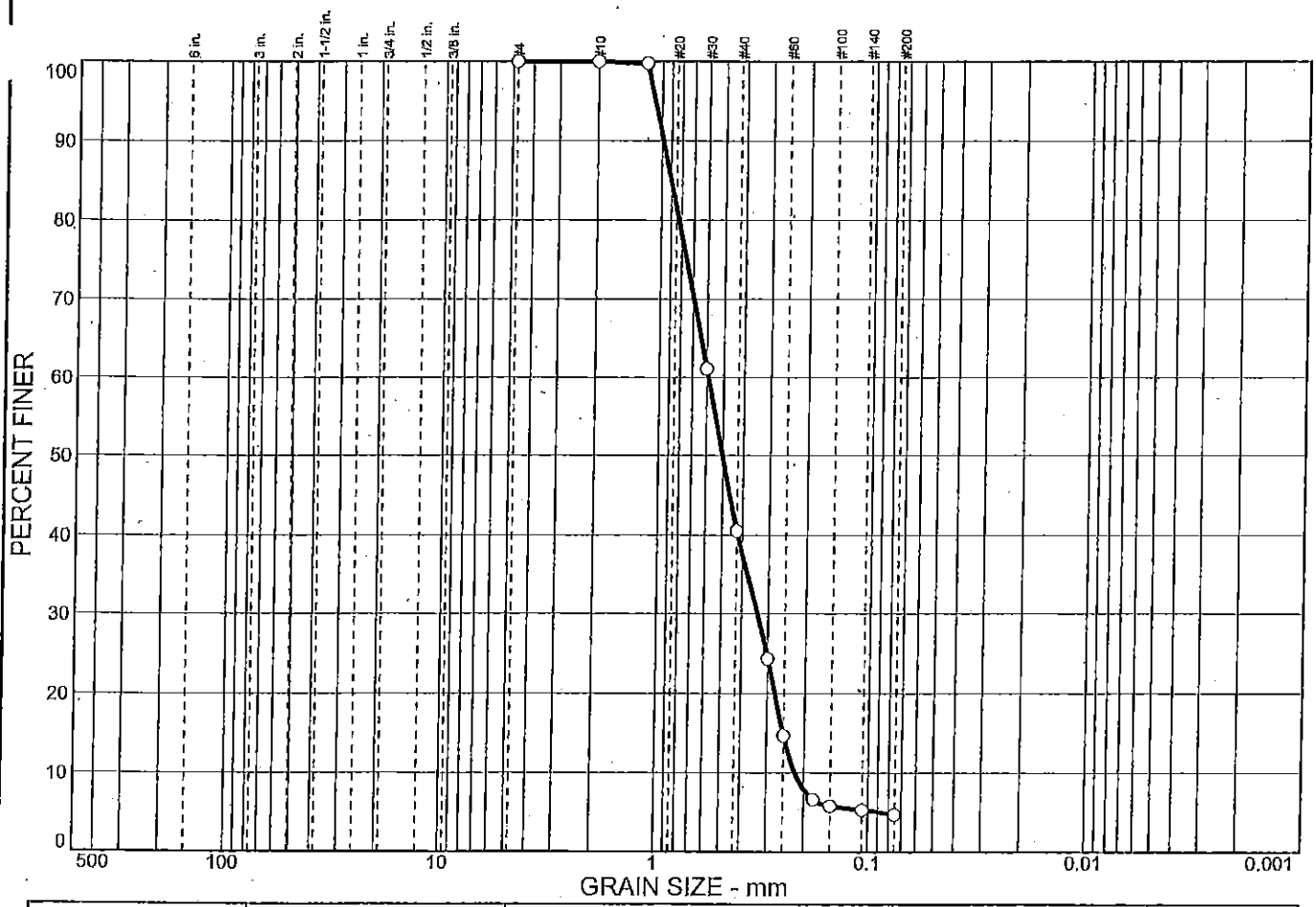
OV-11
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/3/04
Location: OV-11 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 11C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	95.3	4.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	61.1		
#40	40.5		
#50	24.4		
#60	14.7		
#80	6.6		
#100	5.8		
#140	5.3		
#200	4.7		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.902 D_{60}= 0.590 D_{50}= 0.502
D_{30}= 0.337 D_{15}= 0.252 D_{10}= 0.220
C_u= 2.68 C_c= 0.88

Classification

USCS= SP AASHTO= A-1-b

Remarks

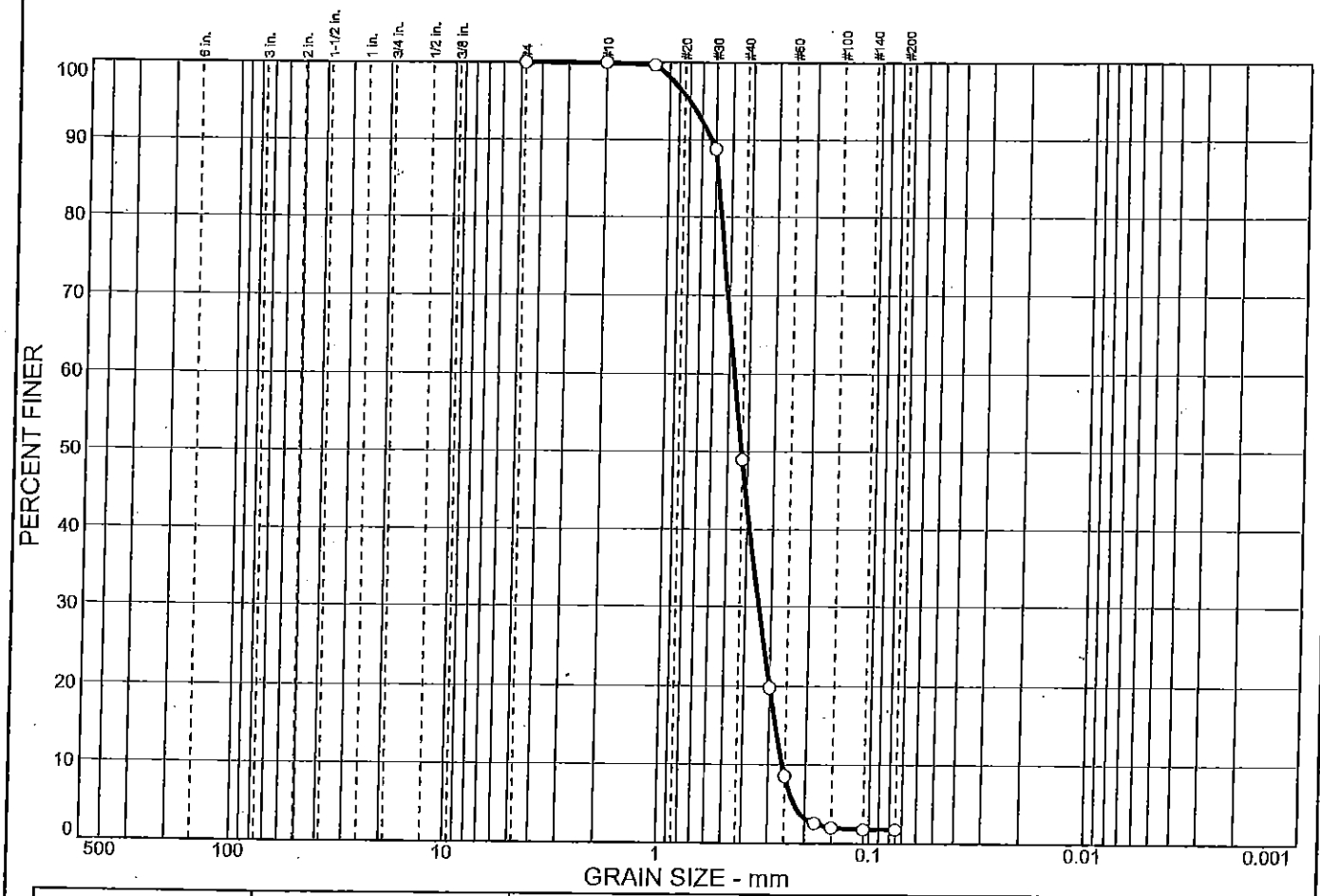
OV-11
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/3/04
Location: OV-11 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 11D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	98.2	1.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.7		
#30	88.8		
#40	48.9		
#50	19.8		
#60	8.6		
#80	2.6		
#100	2.0		
#140	1.8		
#200	1.8		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.581 D_{60}= 0.471 D_{50}= 0.430
D_{30}= 0.344 D_{15}= 0.280 D_{10}= 0.257
C_u= 1.83 C_c= 0.98

Classification

USCS= SP AASHTO= A-1-b

Remarks

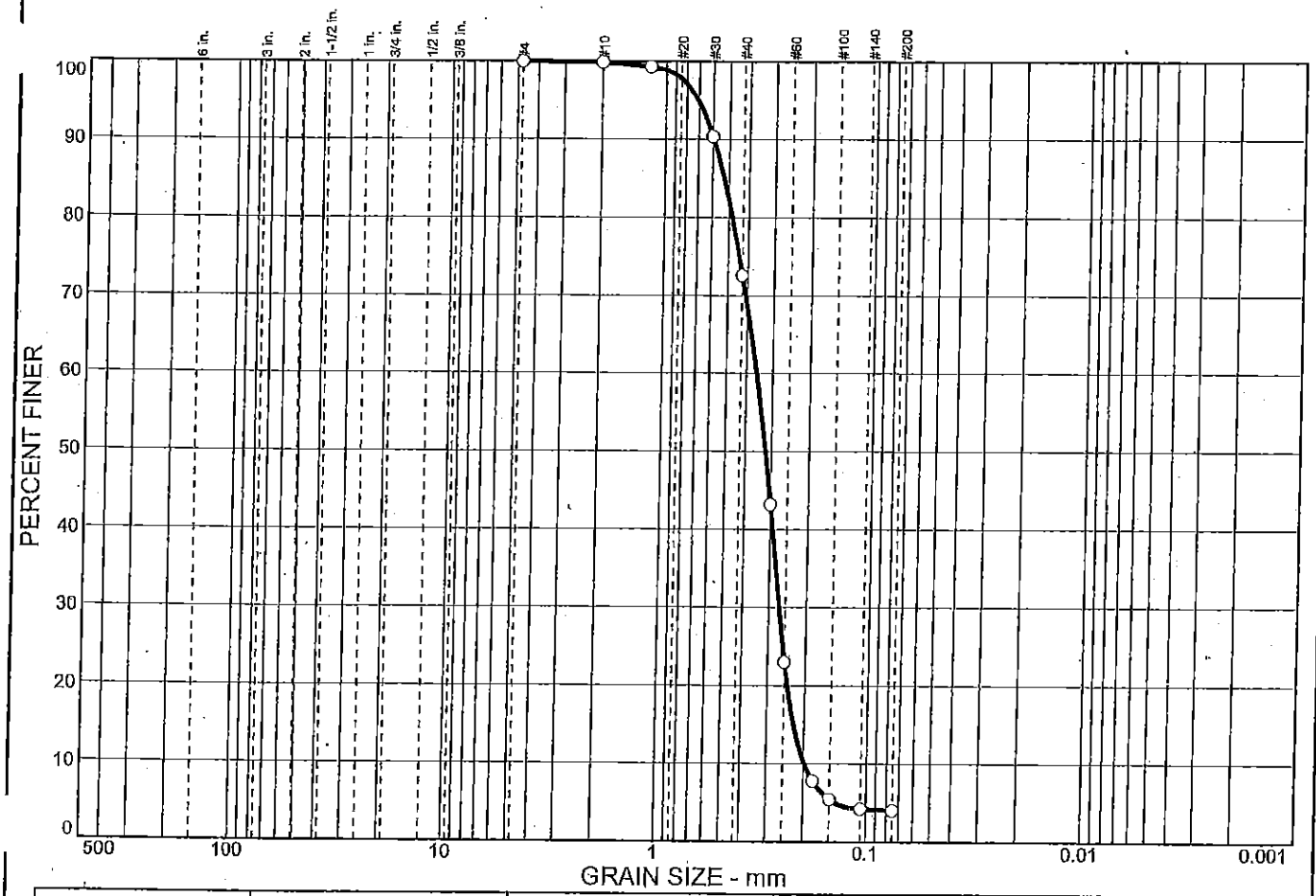
OV-12
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/3/04
Location: OV-12 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 12A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.0	4.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.3		
#30	90.3		
#40	72.6		
#50	43.1		
#60	23.0		
#80	7.8		
#100	5.4		
#140	4.2		
#200	4.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.529 D_{60}= 0.358 D_{50}= 0.320
D_{30}= 0.268 D_{15}= 0.224 D_{10}= 0.198
C_u= 1.80 C_c= 1.01

Classification

USCS= SP AASHTO= A-3

Remarks

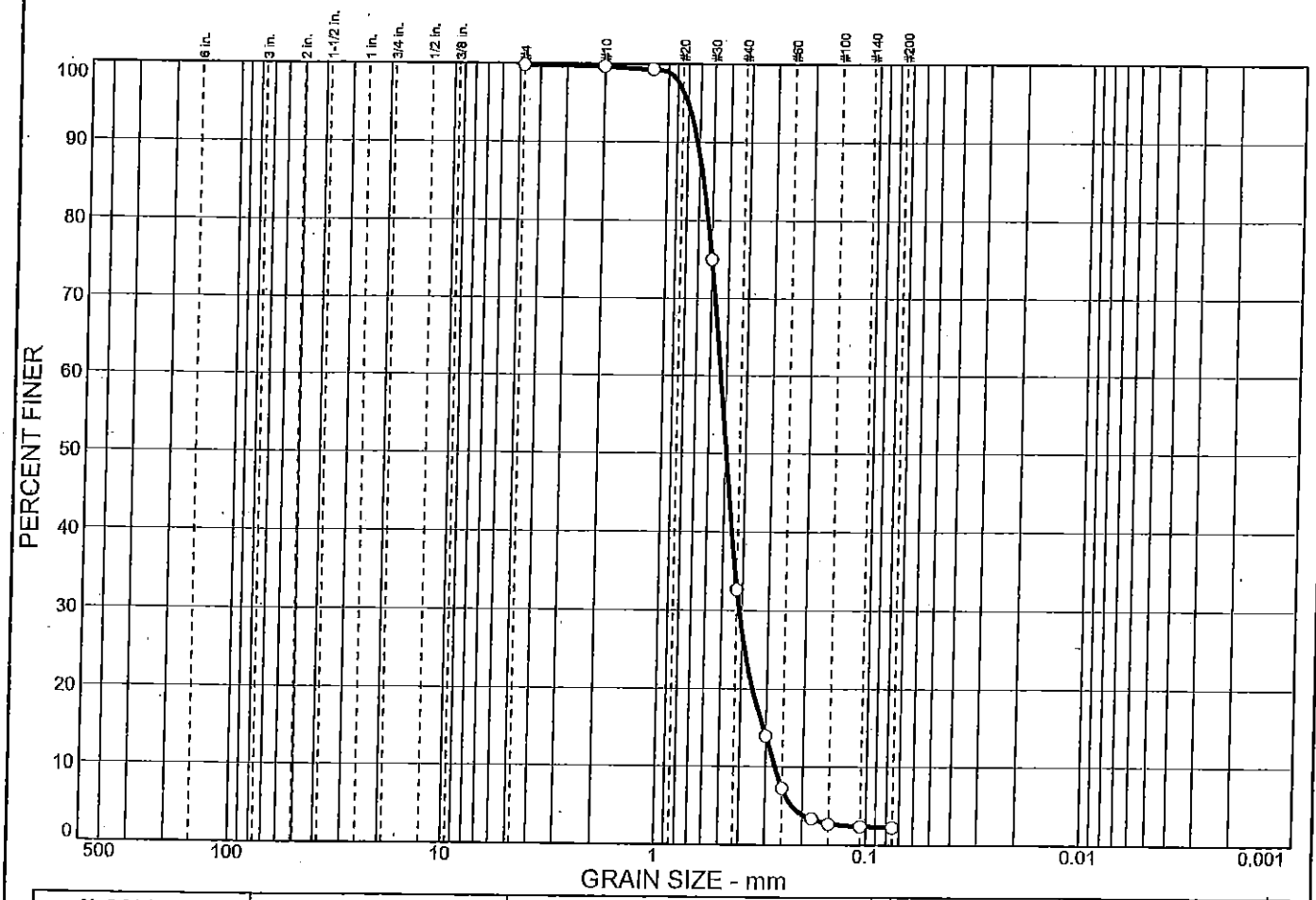
OV-12
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/3/04
Location: OV-12 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 12B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		97.5	2.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.7		
#16	99.3		
#30	75.0		
#40	32.6		
#50	13.9		
#60	7.3		
#80	3.4		
#100	2.7		
#140	2.4		
#200	2.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.669 D_{60}= 0.531 D_{50}= 0.493
D_{30}= 0.413 D_{15}= 0.309 D_{10}= 0.271
C_u= 1.96 C_c= 1.19

Classification

USCS= SP AASHTO= A-1-b

Remarks

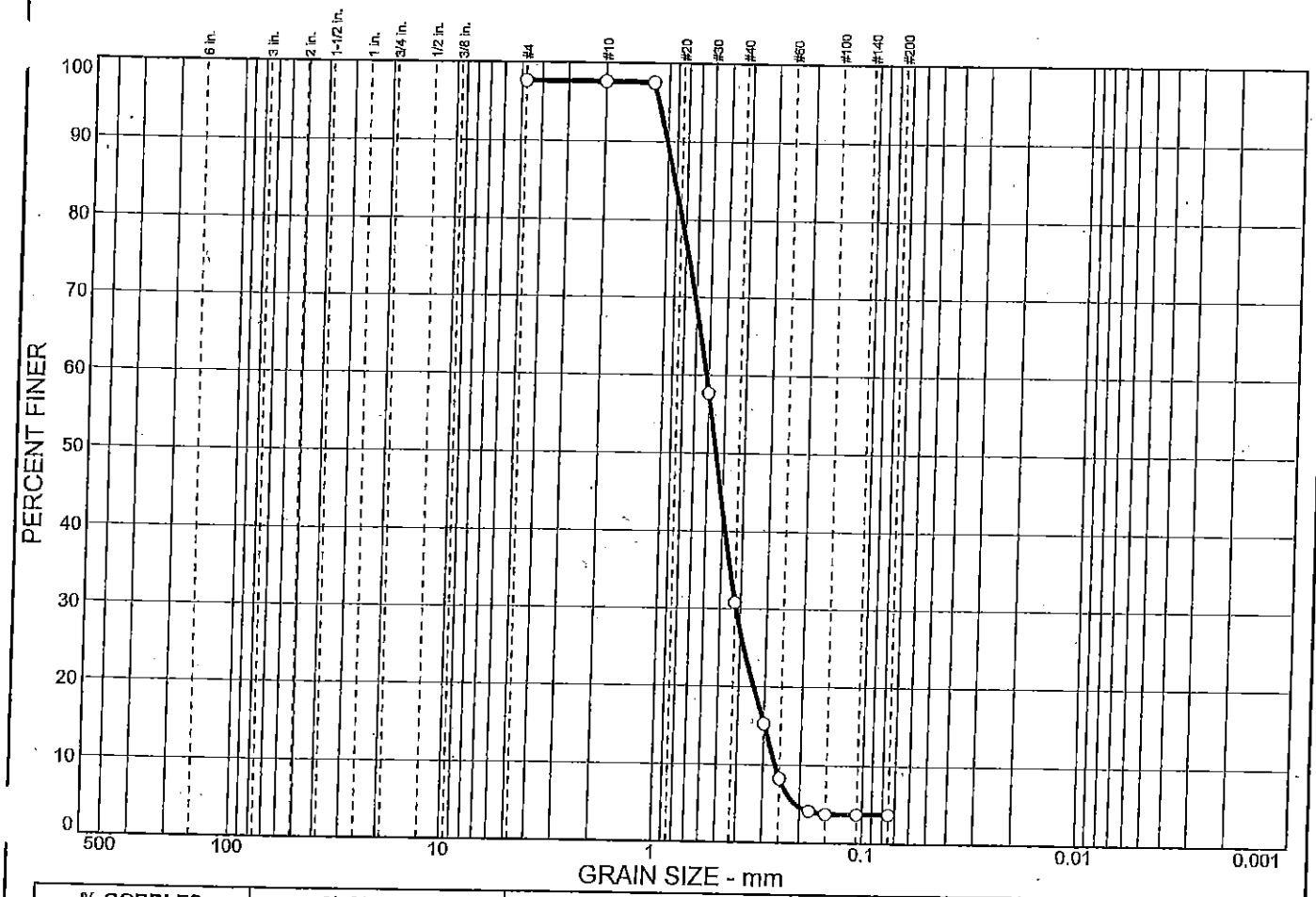
OV-12
Sample D

Sample No.: C **Source of Sample:** **Date:** 4/3/04
Location: OV-12 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 12C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		94.0	3.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	97.7		
#10	97.7		
#16	97.6		
#30	57.7		
#40	30.8		
#50	15.2		
#60	8.3		
#80	4.1		
#100	3.7		
#140	3.7		
#200	3.7		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.920 D_{60}= 0.618 D_{50}= 0.546
D_{30}= 0.420 D_{15}= 0.298 D_{10}= 0.263
C_u= 2.35 C_c= 1.08

Classification

USCS= SP AASHTO= A-1-b

Remarks

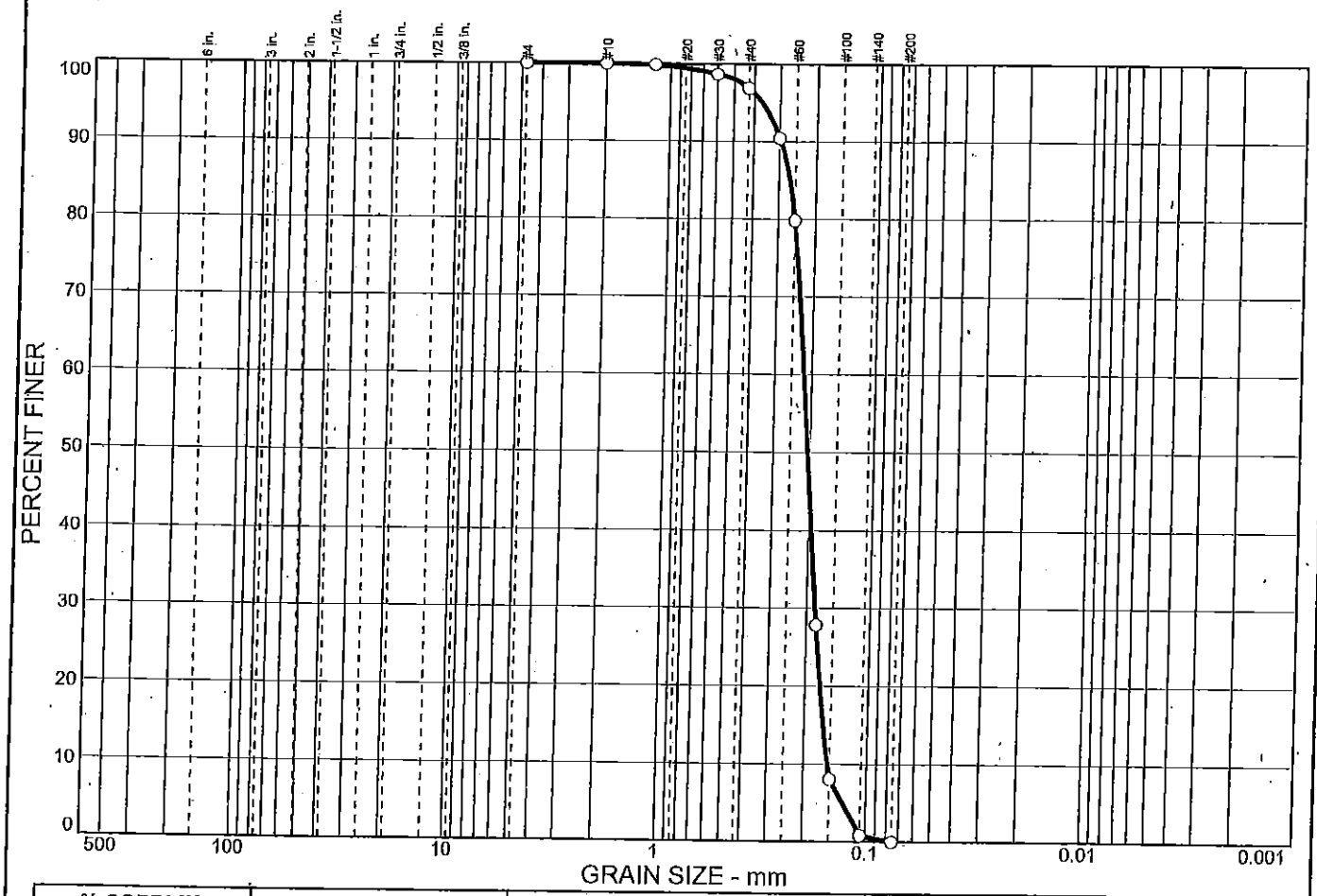
OV-12
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/3/04
Location: OV-12 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 12D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	98.7		
#40	96.9		
#50	90.4		
#60	79.8		
#80	27.8		
#100	8.1		
#140	0.8		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.266 D_{60}= 0.218 D_{50}= 0.205
D_{30}= 0.183 D_{15}= 0.163 D_{10}= 0.154
C_u= 1.41 C_c= 1.00

Classification

USCS= SP AASHTO= A-3

Remarks

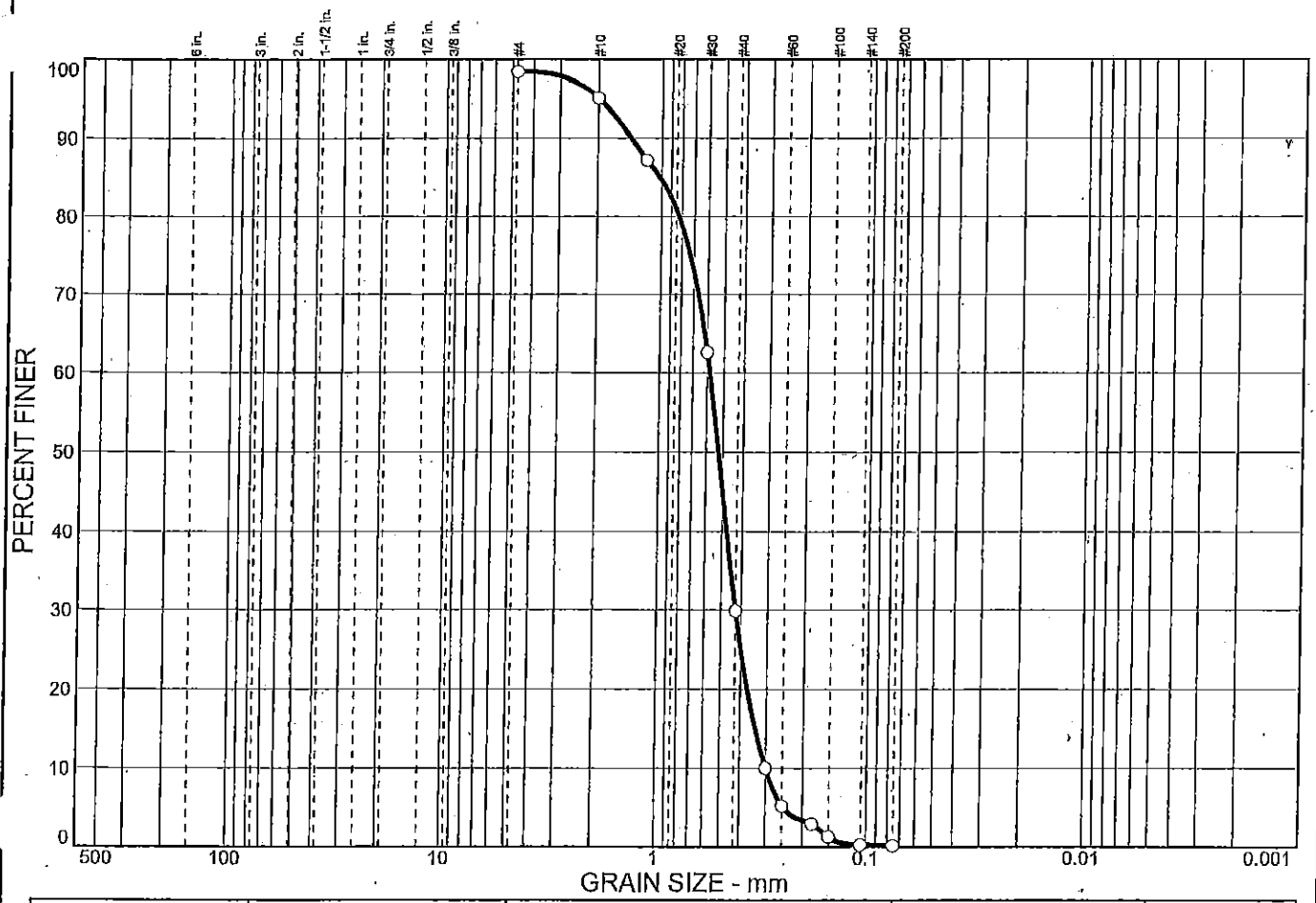
OV-12
Sample E

Sample No.: E
Location: OV-12
Source of Sample:
Date: 6/2/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 12E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		98.3	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.5		
#10	95.1		
#16	87.2		
#30	62.6		
#40	29.9		
#50	10.0		
#60	5.2		
#80	2.9		
#100	1.3		
#140	0.3		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.03 D_{60}= 0.582 D_{50}= 0.524
D_{30}= 0.426 D_{15}= 0.338 D_{10}= 0.300
C_u= 1.94 C_c= 1.04

Classification

USCS= SP AASHTO= A-1-b

Remarks

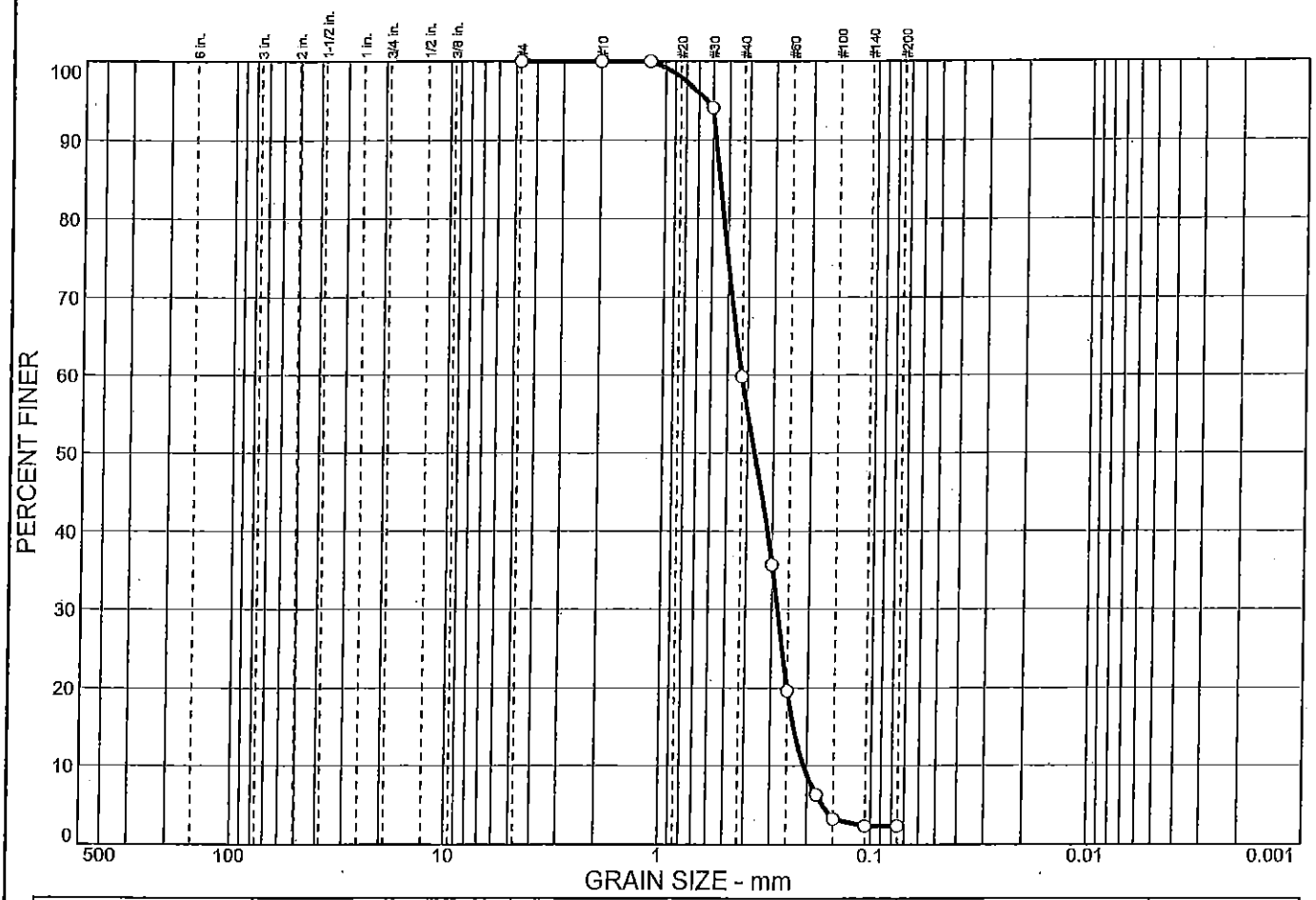
OV-12
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-12 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 12F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.6	2.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	94.1		
#40	59.8		
#50	35.7		
#60	19.6		
#80	6.4		
#100	3.3		
#140	2.4		
#200	2.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.552 D_{60}= 0.426 D_{50}= 0.369
D_{30}= 0.281 D_{15}= 0.233 D_{10}= 0.208
C_u= 2.05 C_c= 0.90

Classification

USCS= SP AASHTO= A-3

Remarks

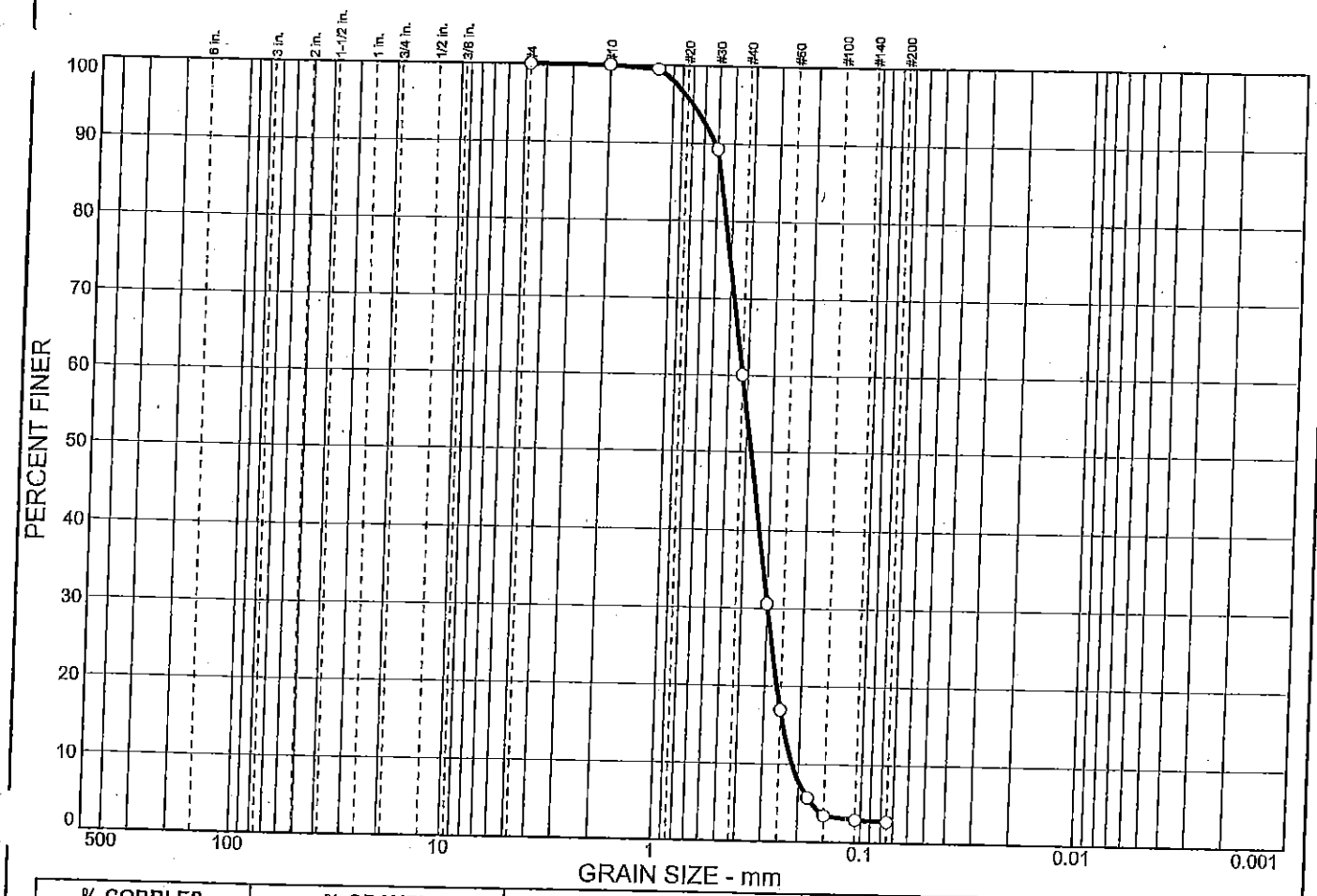
OV-13
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/3/04
Location: OV-13 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 13A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.3	2.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.5		
#30	89.3		
#40	60.1		
#50	30.6		
#60	16.9		
#80	5.7		
#100	3.4		
#140	2.9		
#200	2.7		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.570 D_{60}= 0.425 D_{50}= 0.378
D_{30}= 0.298 D_{15}= 0.242 D_{10}= 0.215
C_u= 1.97 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

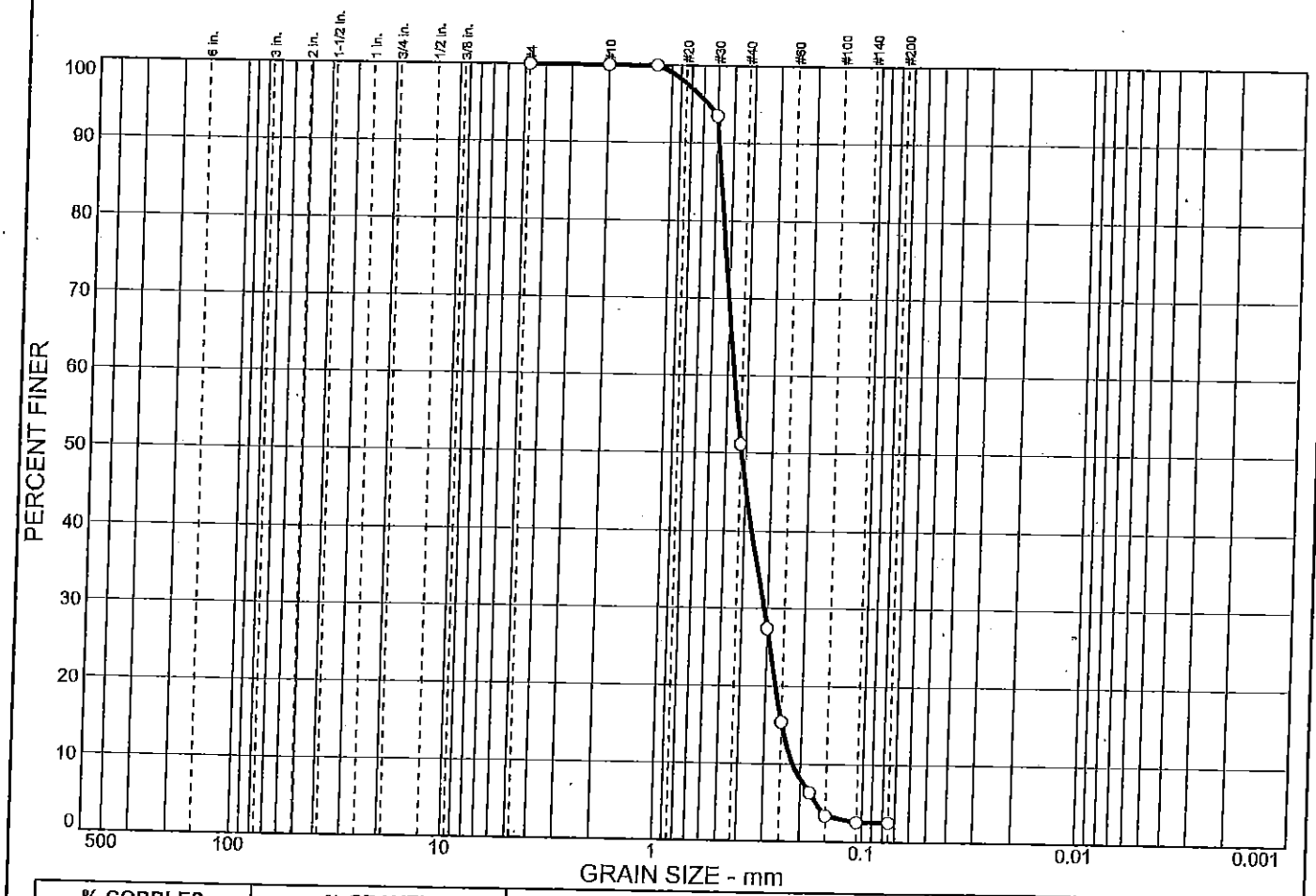
OV-13
Sample B

Sample No.: B
Location: OV-13
Source of Sample:
Date: 4/3/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 13B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.5	2.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	93.4		
#40	51.1		
#50	27.4		
#60	15.3		
#80	6.3		
#100	3.3		
#140	2.5		
#200	2.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.564 D_{60}= 0.463 D_{50}= 0.420
D_{30}= 0.312 D_{15}= 0.249 D_{10}= 0.218
C_u= 2.12 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

OV-13
Sample C

Sample No.: C
Location: OV-13

Source of Sample:

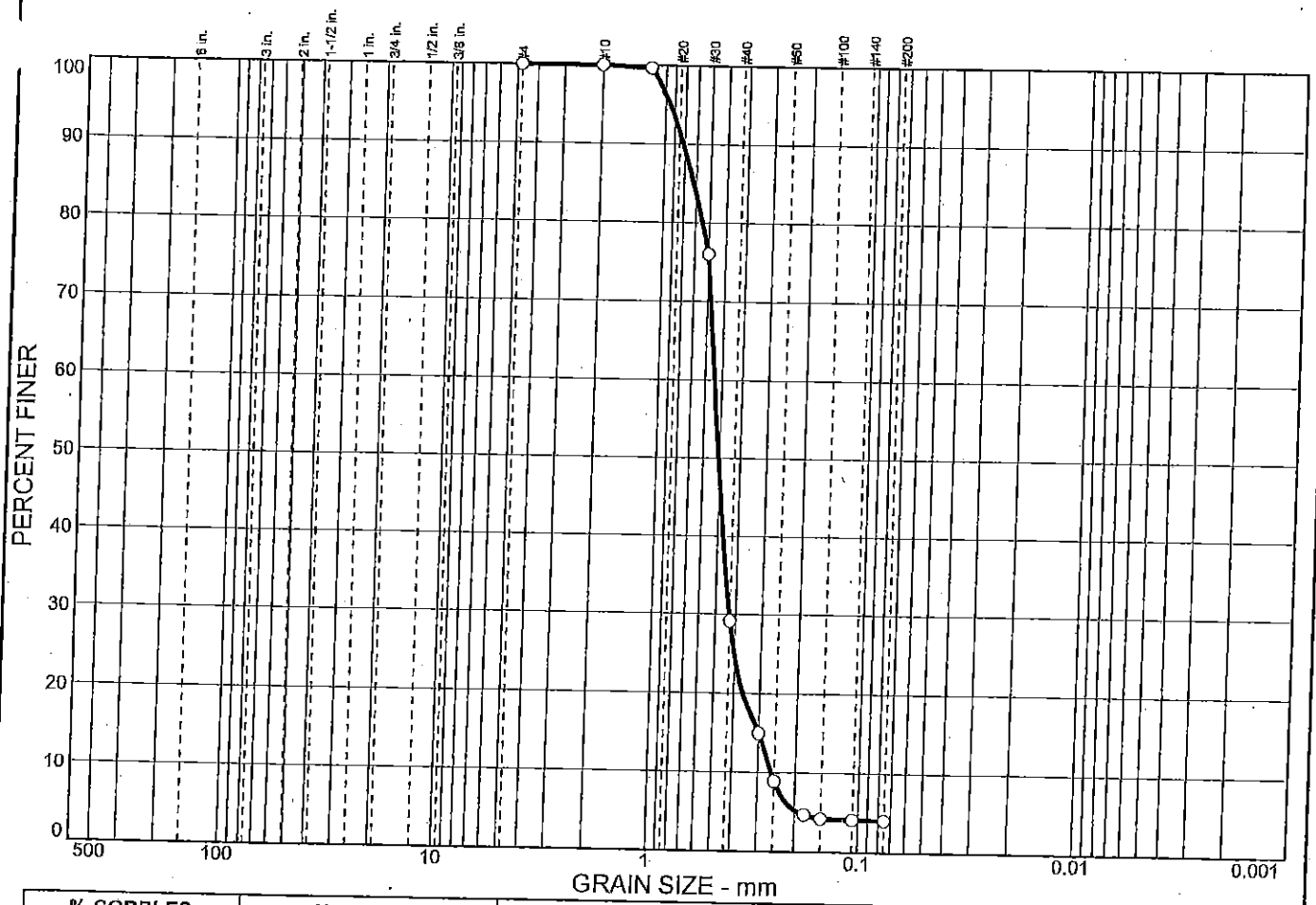
Date: 4/3/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G **Figure** 13C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.0	4.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.7		
#30	75.9		
#40	29.1		
#50	15.0		
#60	8.9		
#80	4.7		
#100	4.2		
#140	4.1		
#200	4.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.722 D_{60}= 0.542 D_{50}= 0.507
D_{30}= 0.429 D_{15}= 0.300 D_{10}= 0.259
C_u= 2.09 C_c= 1.31

Classification

USCS= SP AASHTO= A-1-b

Remarks

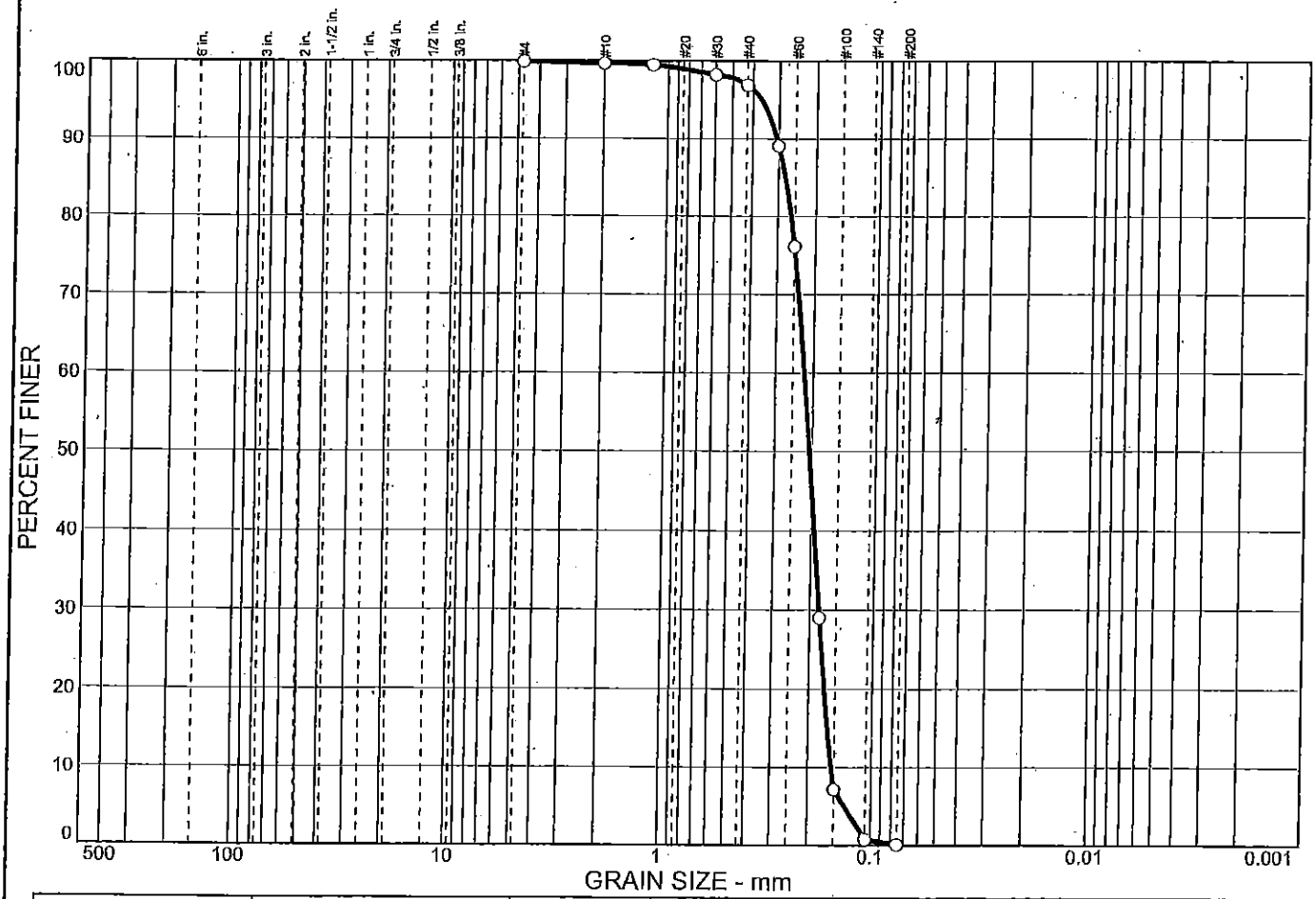
OV-13
Sample D

Sample No.: D
Location: OV-13
Source of Sample:
Date: 4/3/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 13D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.7		
#16	99.5		
#30	98.3		
#40	97.0		
#50	89.0		
#60	76.1		
#80	29.0		
#100	7.2		
#140	0.8		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.279 D_{60}= 0.220 D_{50}= 0.206
D_{30}= 0.181 D_{15}= 0.162 D_{10}= 0.155
C_u= 1.42 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

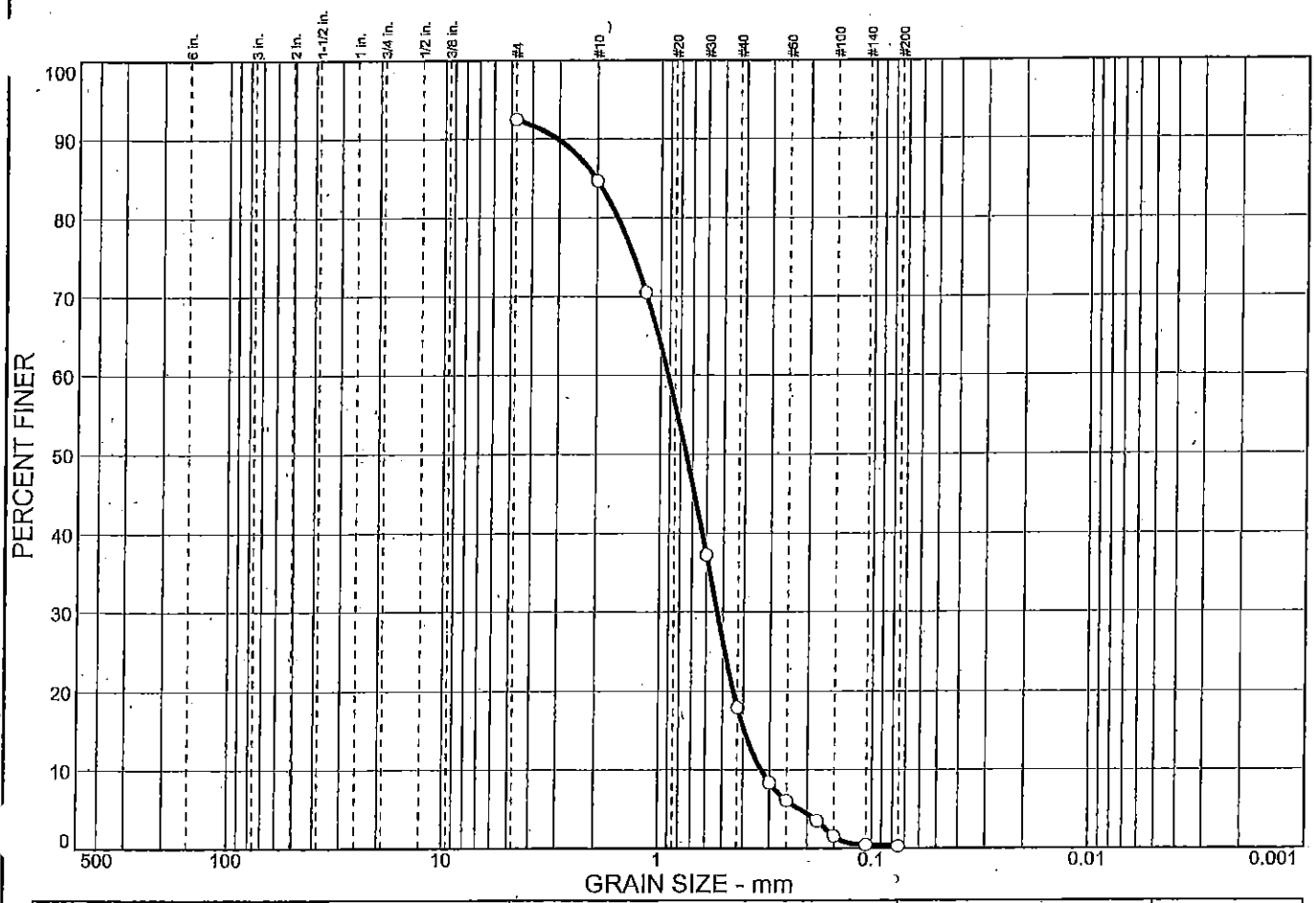
OV-13
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-13 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 13E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		92.1	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	92.4		
#10	84.7		
#16	70.5		
#30	37.3		
#40	17.9		
#50	8.4		
#60	6.1		
#80	3.5		
#100	1.6		
#140	0.5		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 2.03 D_{60}= 0.917 D_{50}= 0.751
D_{30}= 0.532 D_{15}= 0.395 D_{10}= 0.328
C_u= 2.79 C_c= 0.94

Classification

USCS= SP AASHTO= A-1-b

Remarks

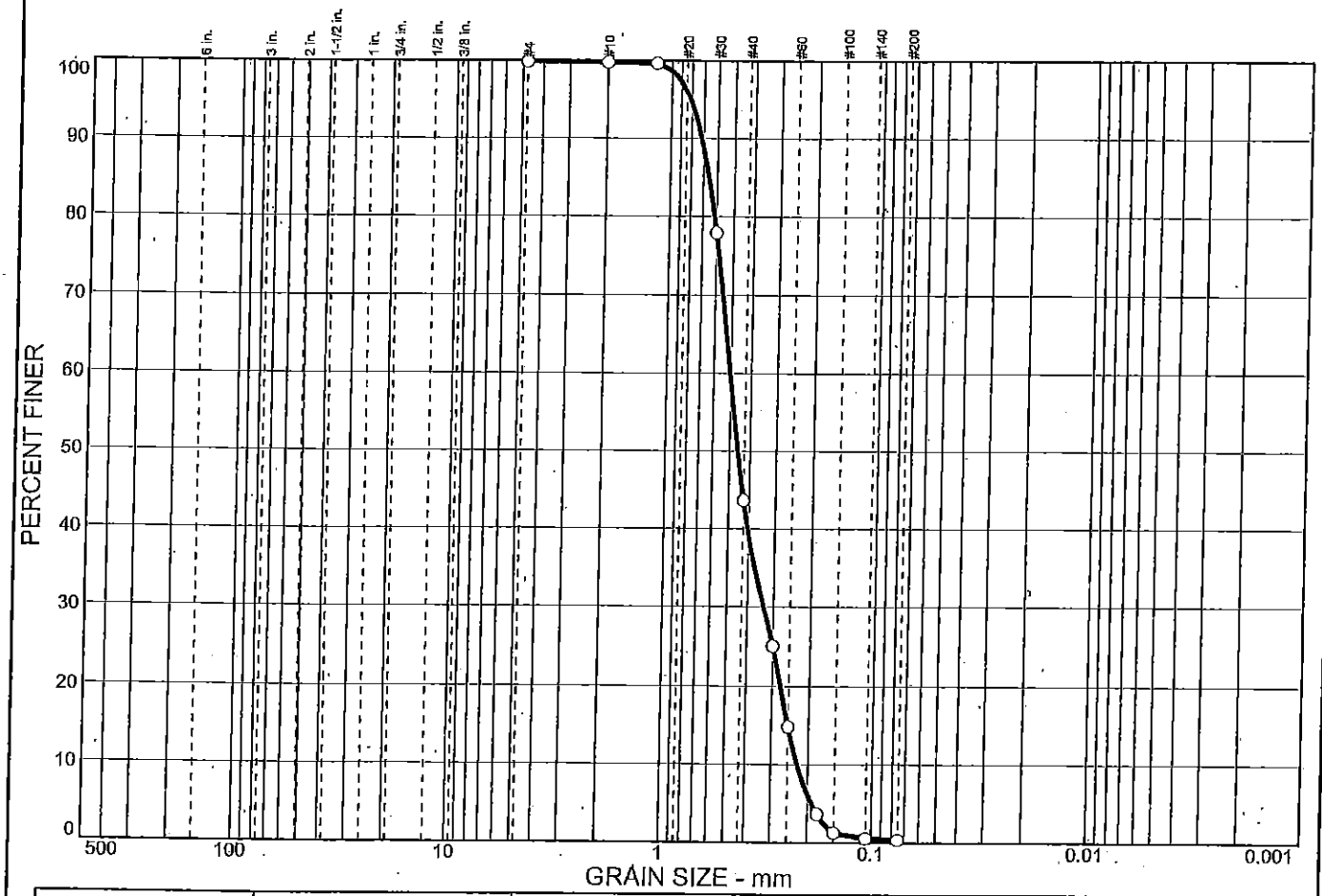
OV-13
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-13 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 13F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.5	0.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.8		
#16	99.7		
#30	77.9		
#40	43.6		
#50	25.0		
#60	14.8		
#80	3.7		
#100	1.3		
#140	0.6		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.658 D_{60}= 0.503 D_{50}= 0.457
D_{30}= 0.334 D_{15}= 0.251 D_{10}= 0.225
C_u= 2.24 C_c= 0.98

Classification

USCS= SP AASHTO= A-1-b

Remarks

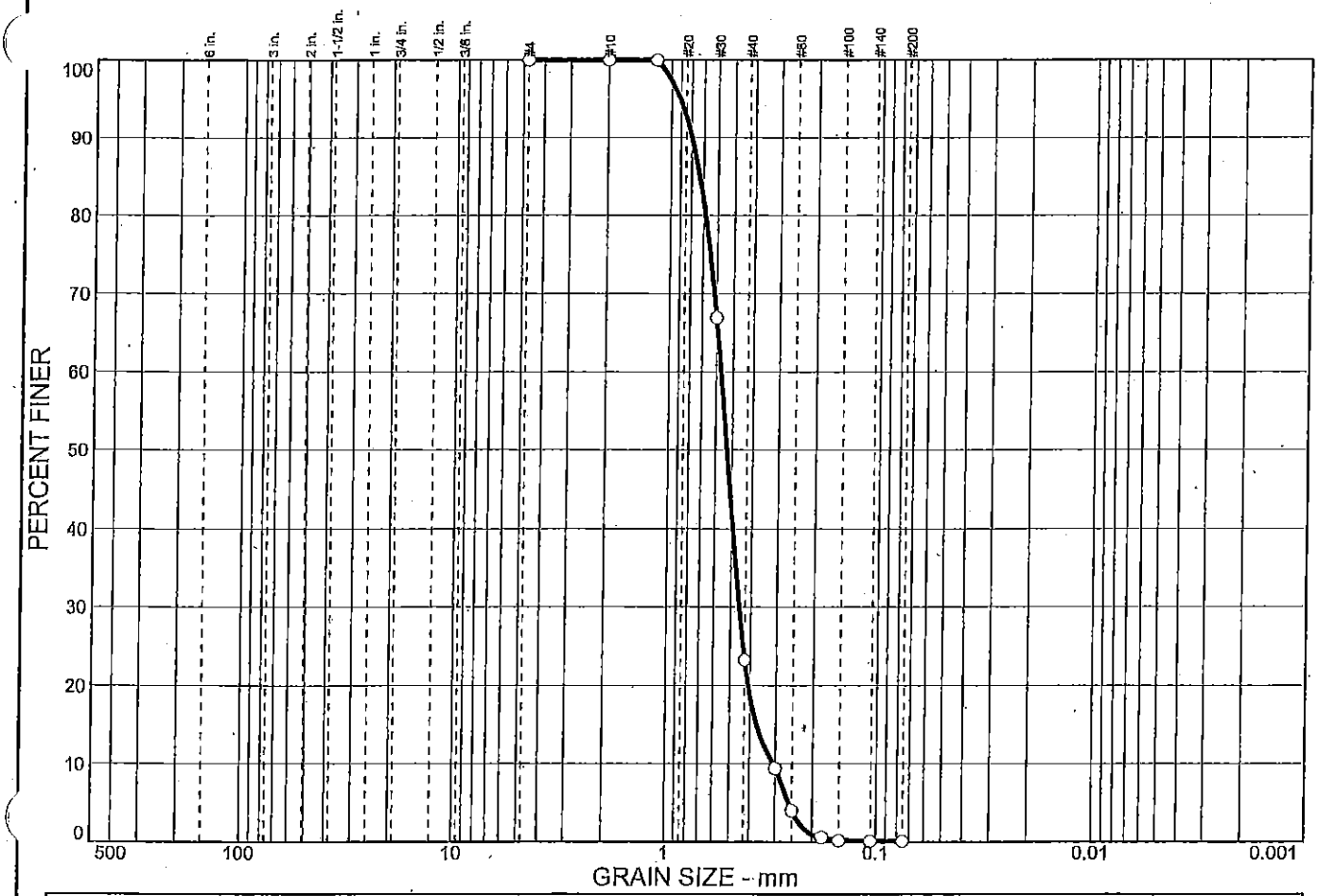
OV-14
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/3/04
Location: OV-14 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 14A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	66.9		
#40	23.2		
#50	9.4		
#60	4.0		
#80	0.6		
#100	0.2		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.732 D_{60}= 0.568 D_{50}= 0.528
D_{30}= 0.454 D_{15}= 0.372 D_{10}= 0.307
C_u= 1.85 C_c= 1.18

Classification

USCS= SP AASHTO= A-1-b

Remarks

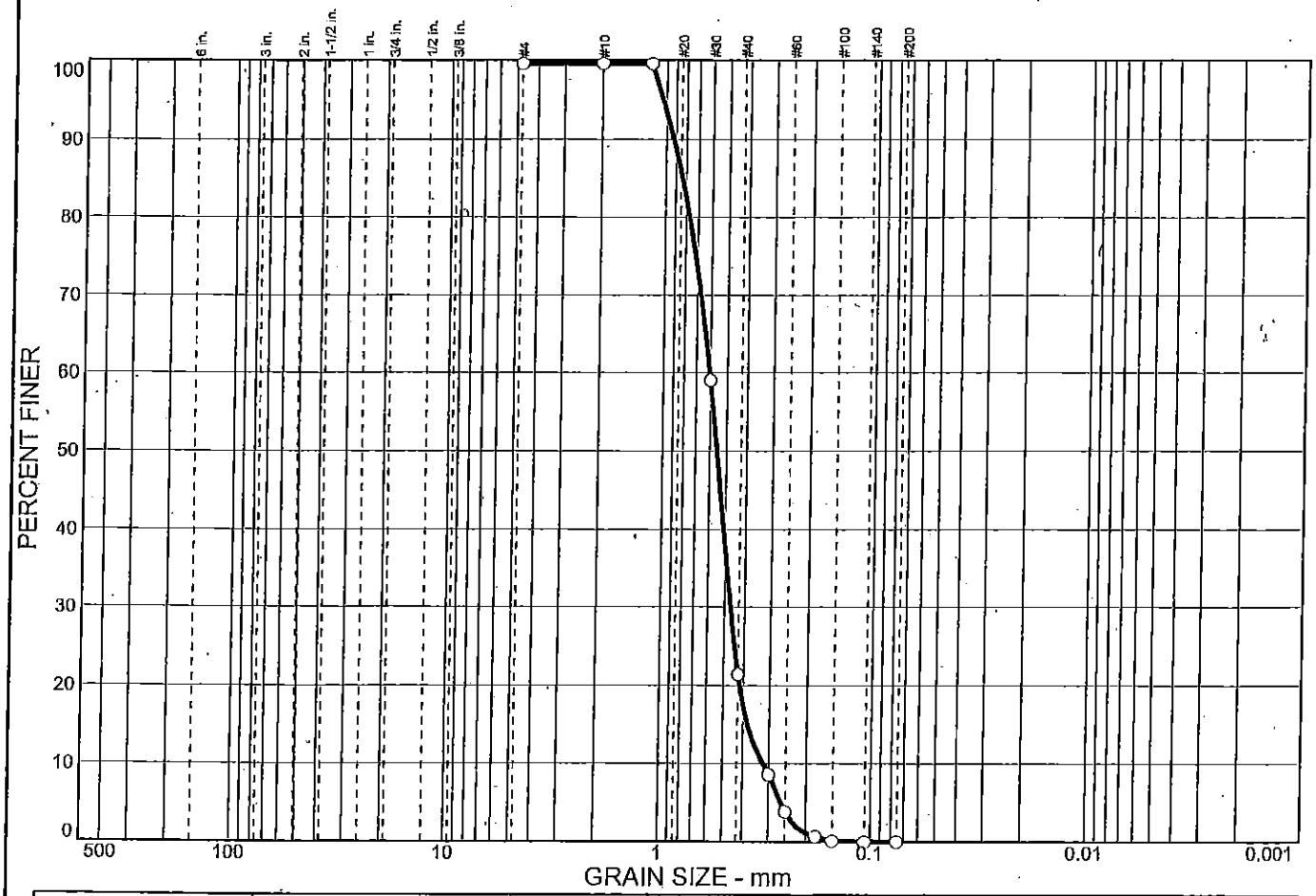
OV-14
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/2/04
Location: OV-14 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 14B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.6	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	99.6		
#16	99.6		
#30	59.0		
#40	21.4		
#50	8.6		
#60	3.9		
#80	0.7		
#100	0.1		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.837 D_{60}= 0.606 D_{50}= 0.554
D_{30}= 0.467 D_{15}= 0.381 D_{10}= 0.319
C_u= 1.90 C_c= 1.13

Classification

USCS= SP AASHTO= A-1-b

Remarks

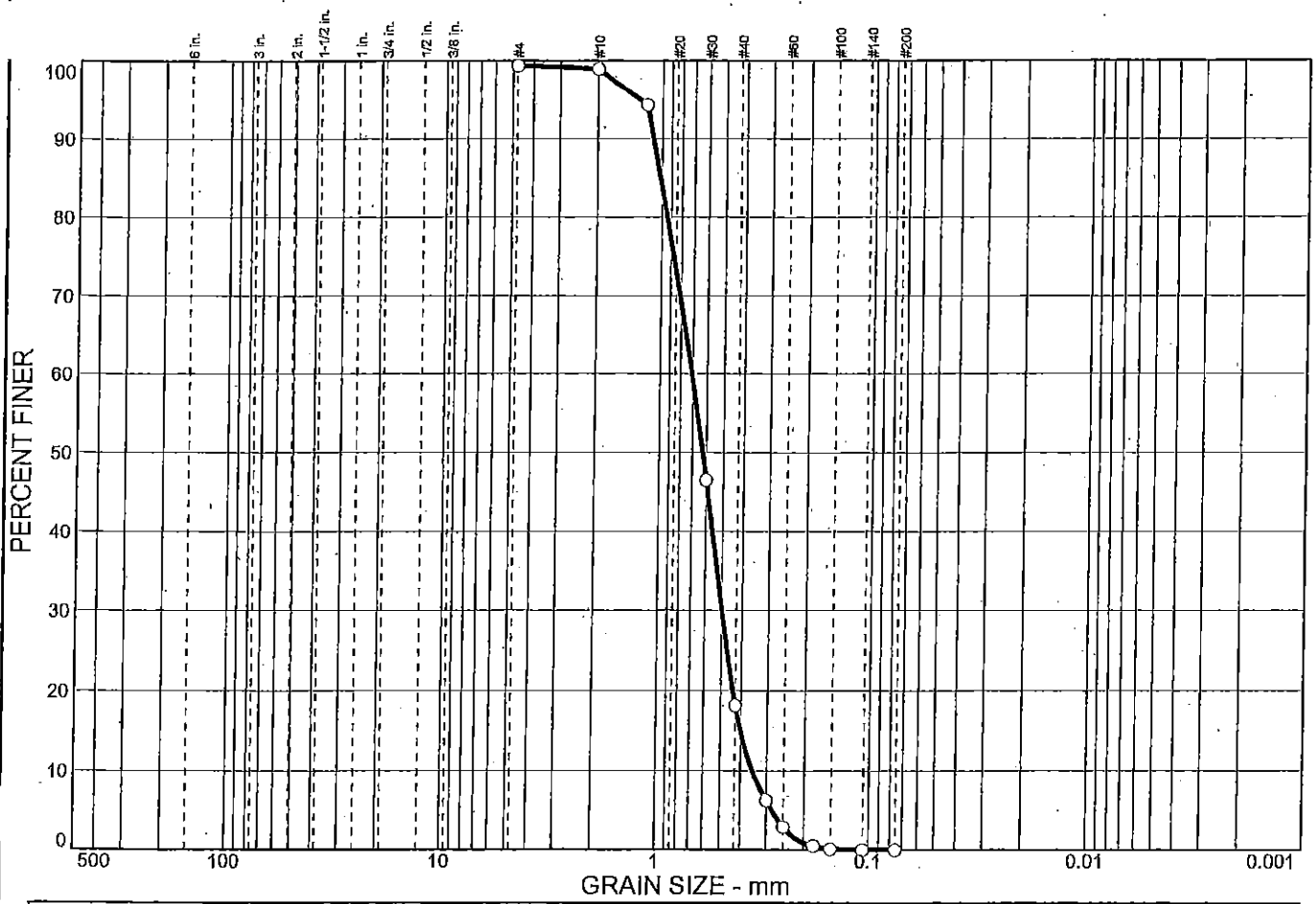
OV-14
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/3/04
Location: OV-14 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 14C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.4	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.4		
#10	99.0		
#16	94.3		
#30	46.5		
#40	18.1		
#50	6.3		
#60	2.9		
#80	0.5		
#100	0.1		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.02 D_{60}= 0.708 D_{50}= 0.625
D_{30}= 0.498 D_{15}= 0.401 D_{10}= 0.351
C_u= 2.01 C_c= 1.00

Classification

USCS= SP AASHTO= A-1-b

Remarks

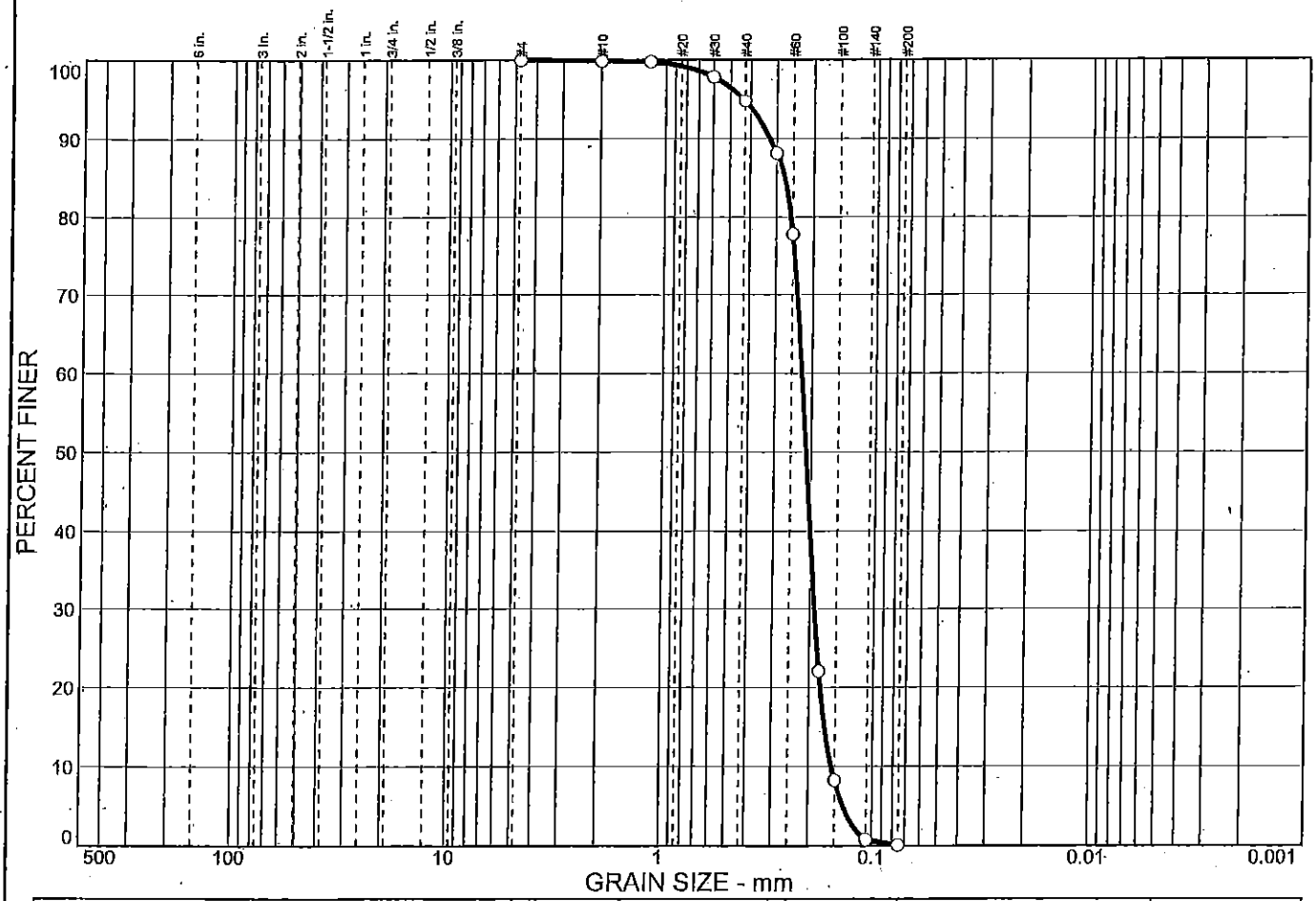
OV-14
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/3/04
Location: OV-14 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 14D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.8		
#30	97.9		
#40	94.8		
#50	88.1		
#60	77.8		
#80	22.0		
#100	8.3		
#140	0.8		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.274 D_{60}= 0.223 D_{50}= 0.212
D_{30}= 0.190 D_{15}= 0.168 D_{10}= 0.156
C_u= 1.43 C_c= 1.04

Classification

USCS= SP AASHTO= A-3

Remarks

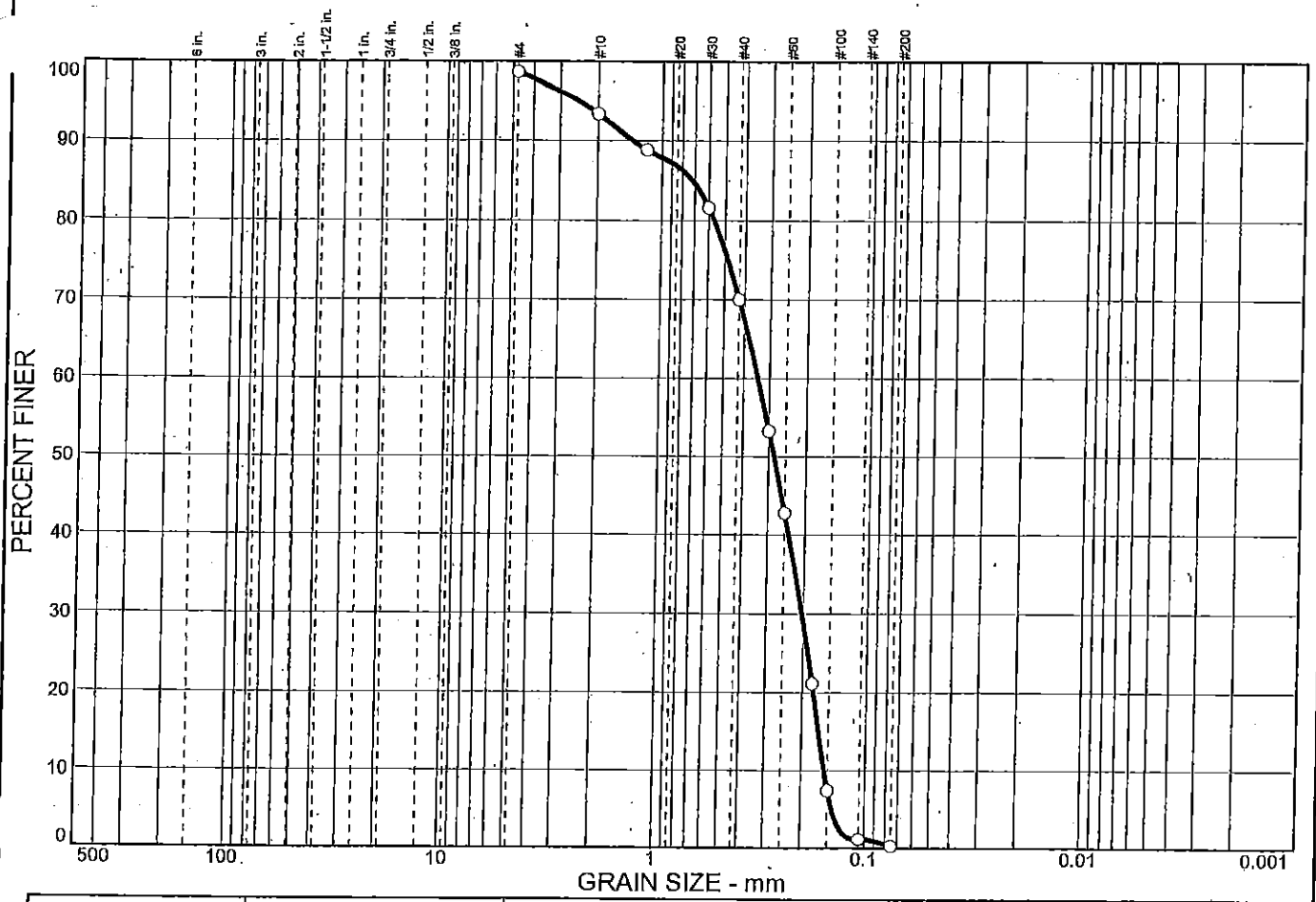
OV-14
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-14 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 14E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		98.4	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.7		
#10	93.3		
#16	88.8		
#30	81.6		
#40	70.0		
#50	53.3		
#60	42.7		
#80	21.1		
#100	7.5		
#140	1.2		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.721 D_{60}= 0.341 D_{50}= 0.283
D_{30}= 0.204 D_{15}= 0.167 D_{10}= 0.156
C_u= 2.18 C_c= 0.78

Classification

USCS= SP AASHTO= A-3

Remarks

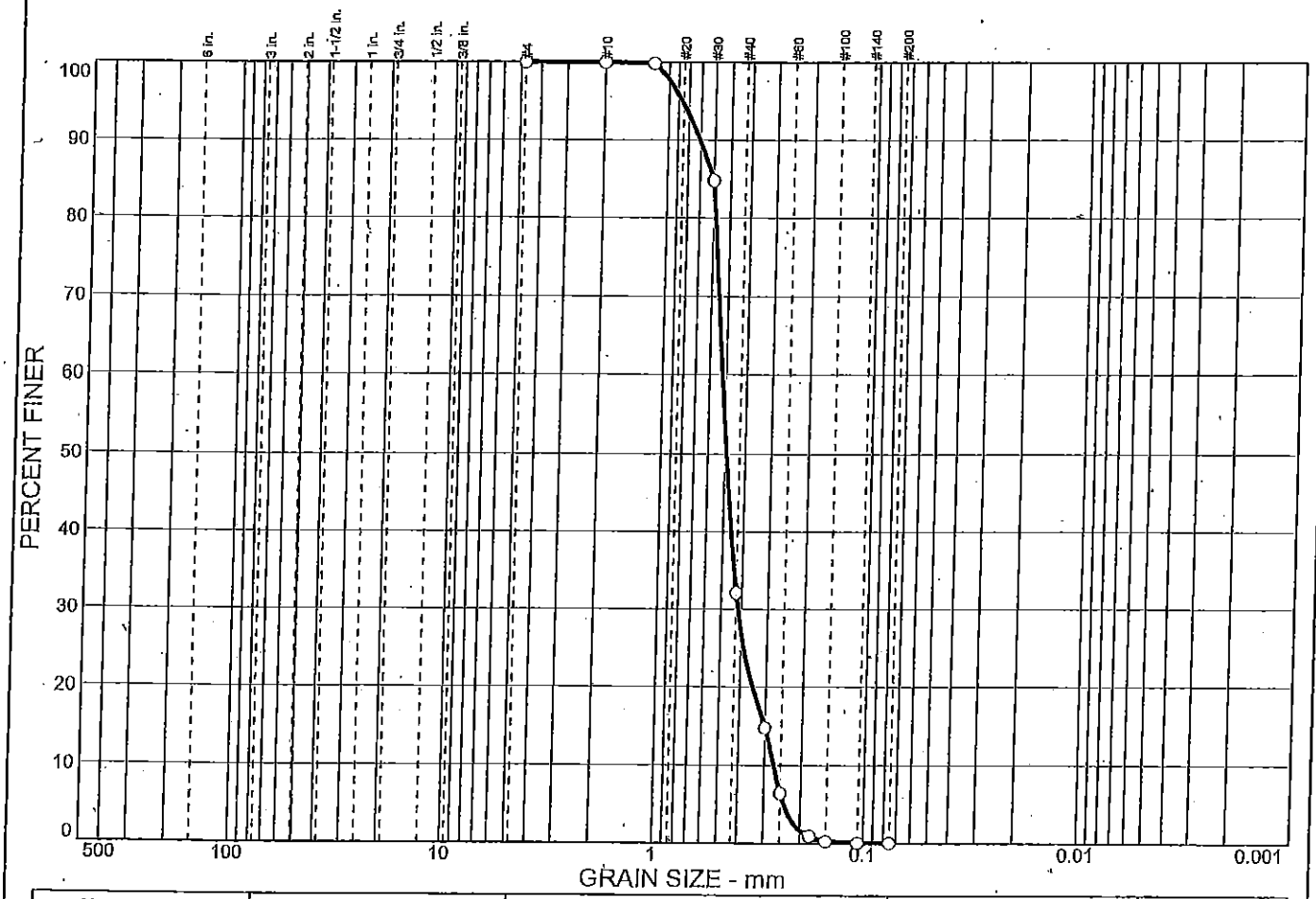
OV-14
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-14 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 14F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	84.8		
#40	32.1		
#50	14.8		
#60	6.5		
#80	1.0		
#100	0.3		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.603 D_{60}= 0.521 D_{50}= 0.489
D_{30}= 0.415 D_{15}= 0.301 D_{10}= 0.270
C_u= 1.92 C_c= 1.23

Classification

USCS= SP AASHTO= A-1-b

Remarks

OV-15
Sample A

Sample No.: A
Location: OV-15

Source of Sample:

Date: 6/9/04
Elev./Depth: NA

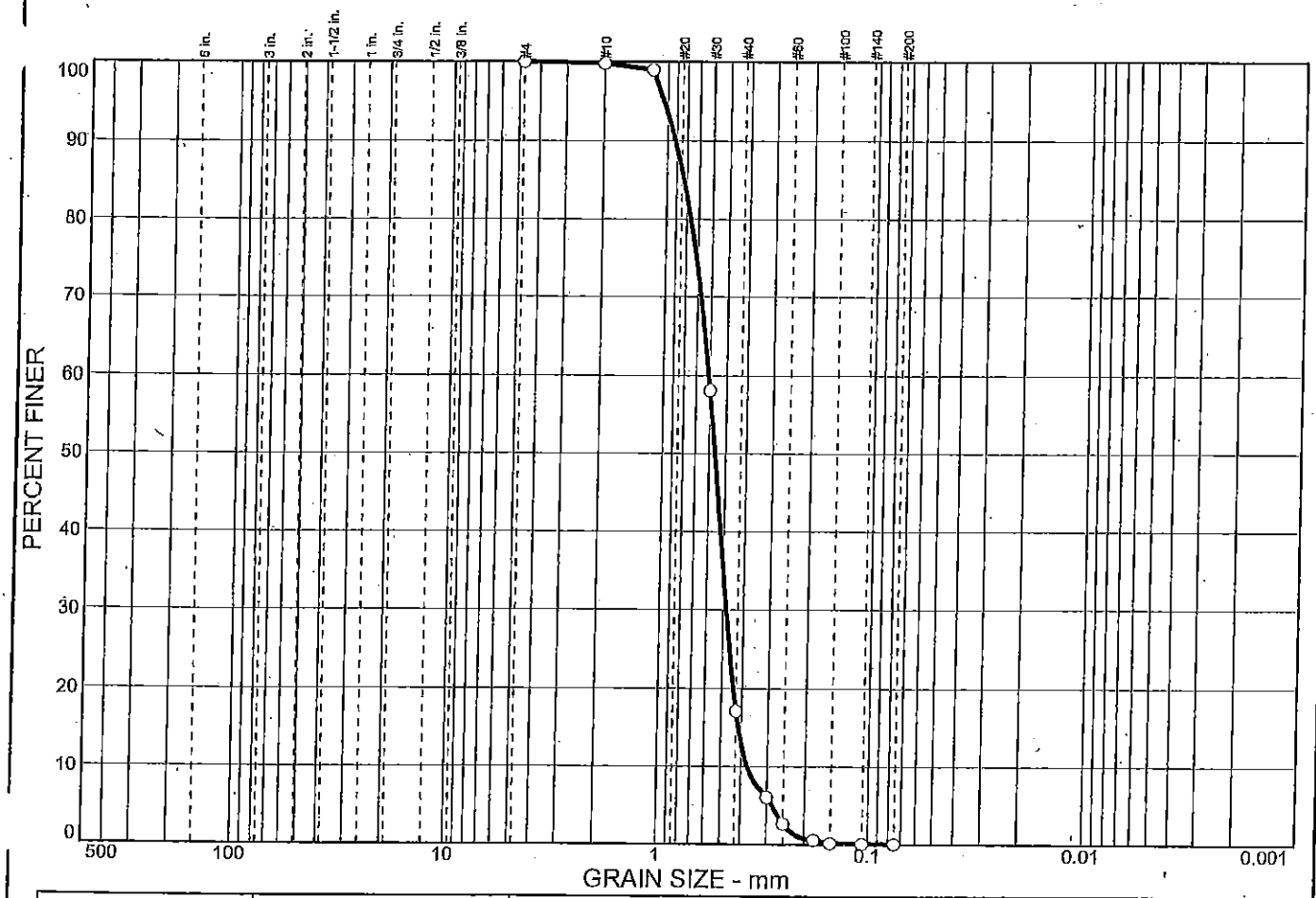
GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G

Figure 15A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#16	99.0		
#30	58.2		
#40	17.1		
#50	6.1		
#60	2.7		
#80	0.6		
#100	0.2		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.829 D_{60}= 0.609 D_{50}= 0.562
D_{30}= 0.481 D_{15}= 0.413 D_{10}= 0.373
C_u= 1.63 C_c= 1.02

Classification

USCS= SP AASHTO= A-1-b

Remarks

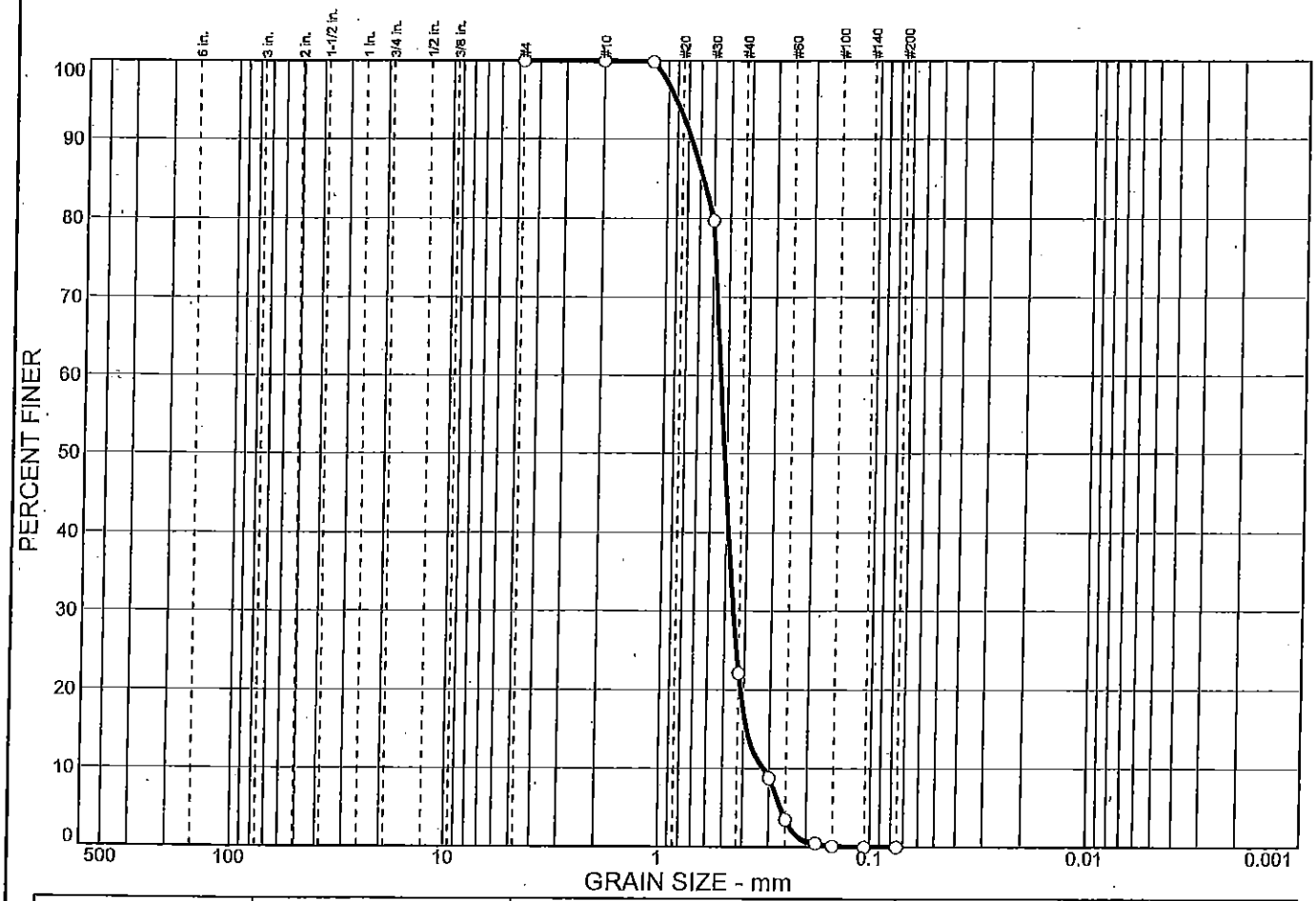
OV-15
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/9/04
Location: OV-15 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 15B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	79.7		
#40	22.1		
#50	8.8		
#60	3.5		
#80	0.5		
#100	0.1		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.678 D_{60}= 0.543 D_{50}= 0.514
D_{30}= 0.454 D_{15}= 0.386 D_{10}= 0.320
C_u= 1.70 C_c= 1.19

Classification

USCS= SP AASHTO= A-1-b

Remarks

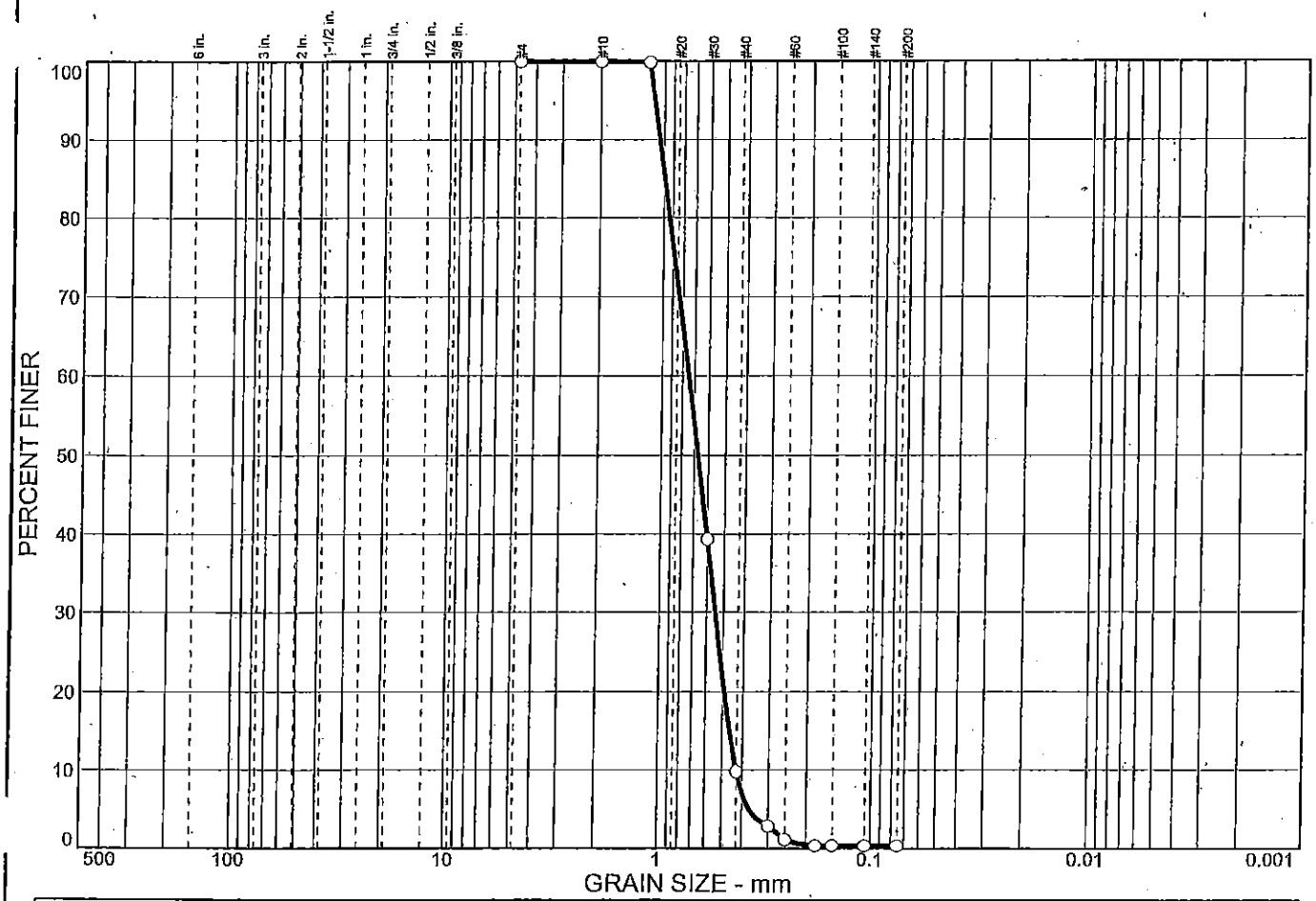
OV-15
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/9/04
Location: OV-15 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 15C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.6	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	39.3		
#40	9.8		
#50	2.9		
#60	1.2		
#80	0.4		
#100	0.4		
#140	0.4		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.991 D_{60}= 0.747 D_{50}= 0.670
D_{30}= 0.546 D_{15}= 0.461 D_{10}= 0.427
C_u= 1.75 C_c= 0.94

Classification

USCS= SP AASHTO= A-1-b

Remarks

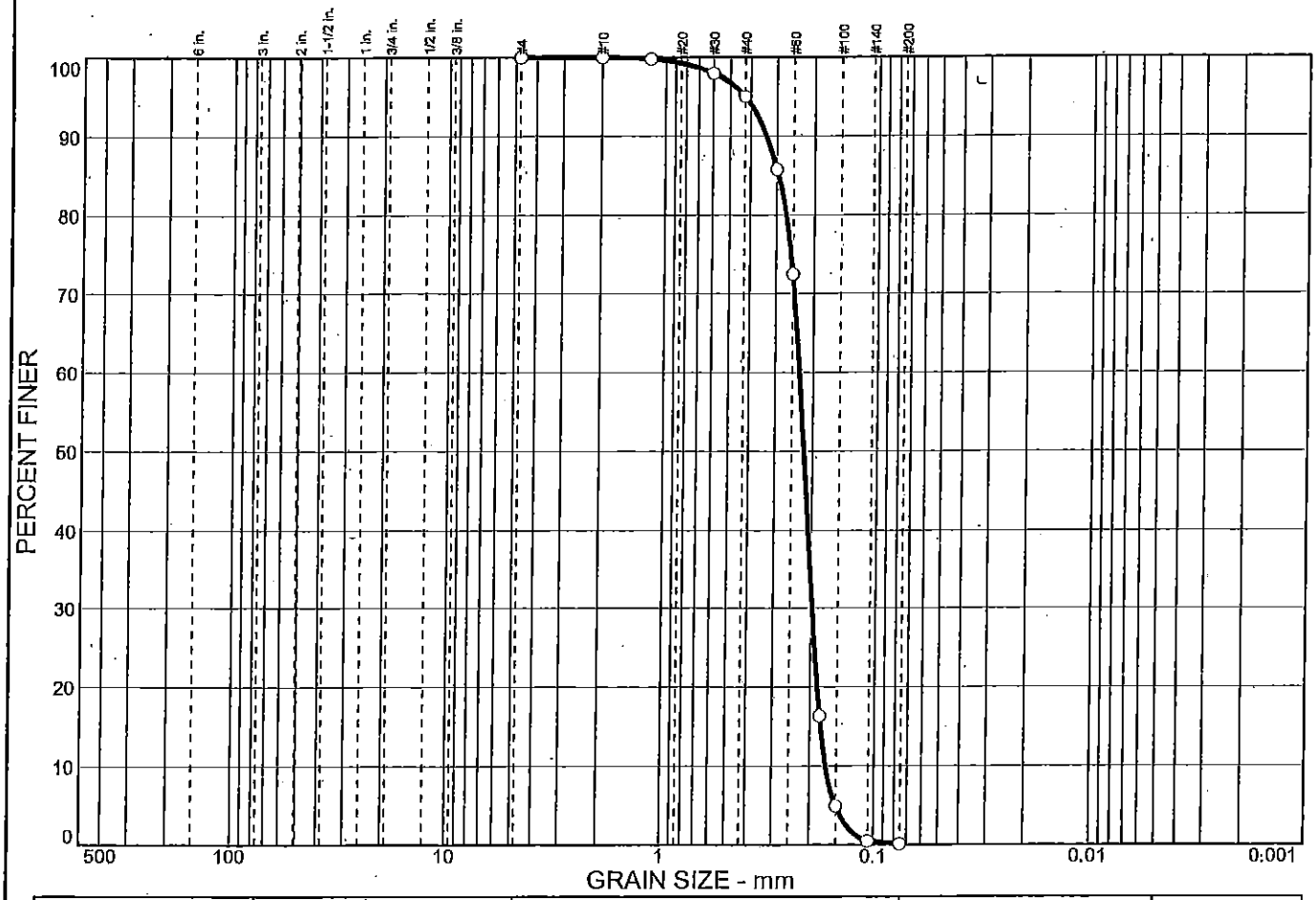
OV-15
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/9/04
Location: OV-15 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 15D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	98.0		
#40	95.0		
#50	85.8		
#60	72.4		
#80	16.3		
#100	5.0		
#140	0.5		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.294 D_{60}= 0.231 D_{50}= 0.219
D_{30}= 0.197 D_{15}= 0.178 D_{10}= 0.168
C_u= 1.37 C_c= 1.00

Classification

USCS= SP AASHTO= A-3

Remarks

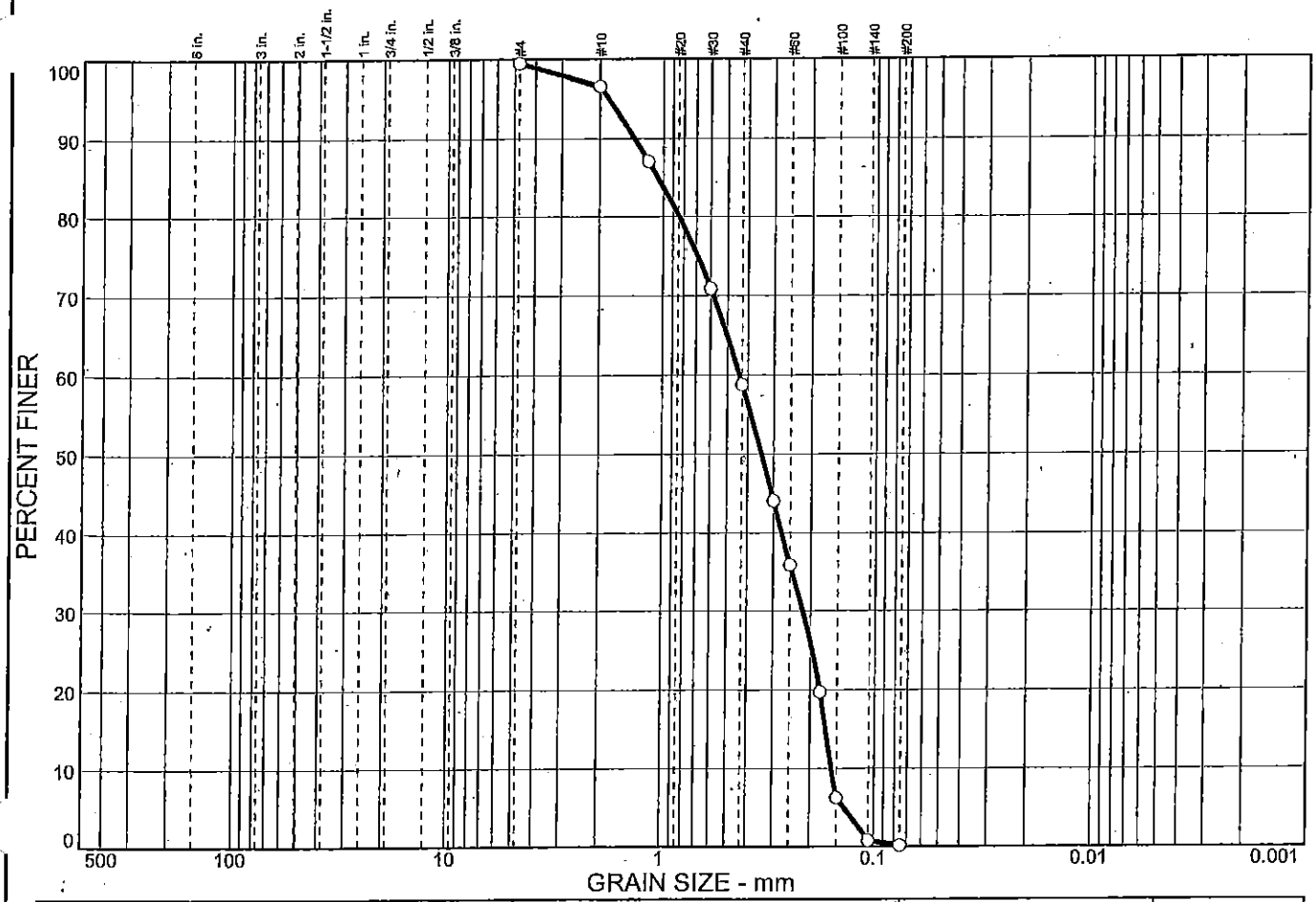
OV-15
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-15 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 15E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.3	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.5		
#10	96.6		
#16	87.1		
#30	70.9		
#40	58.8		
#50	44.1		
#60	35.9		
#80	19.7		
#100	6.3		
#140	0.8		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.06 D_{60}= 0.438 D_{50}= 0.343
D_{30}= 0.217 D_{15}= 0.169 D_{10}= 0.159
C_u= 2.76 C_c= 0.68

Classification

USCS= SP AASHTO= A-3

Remarks

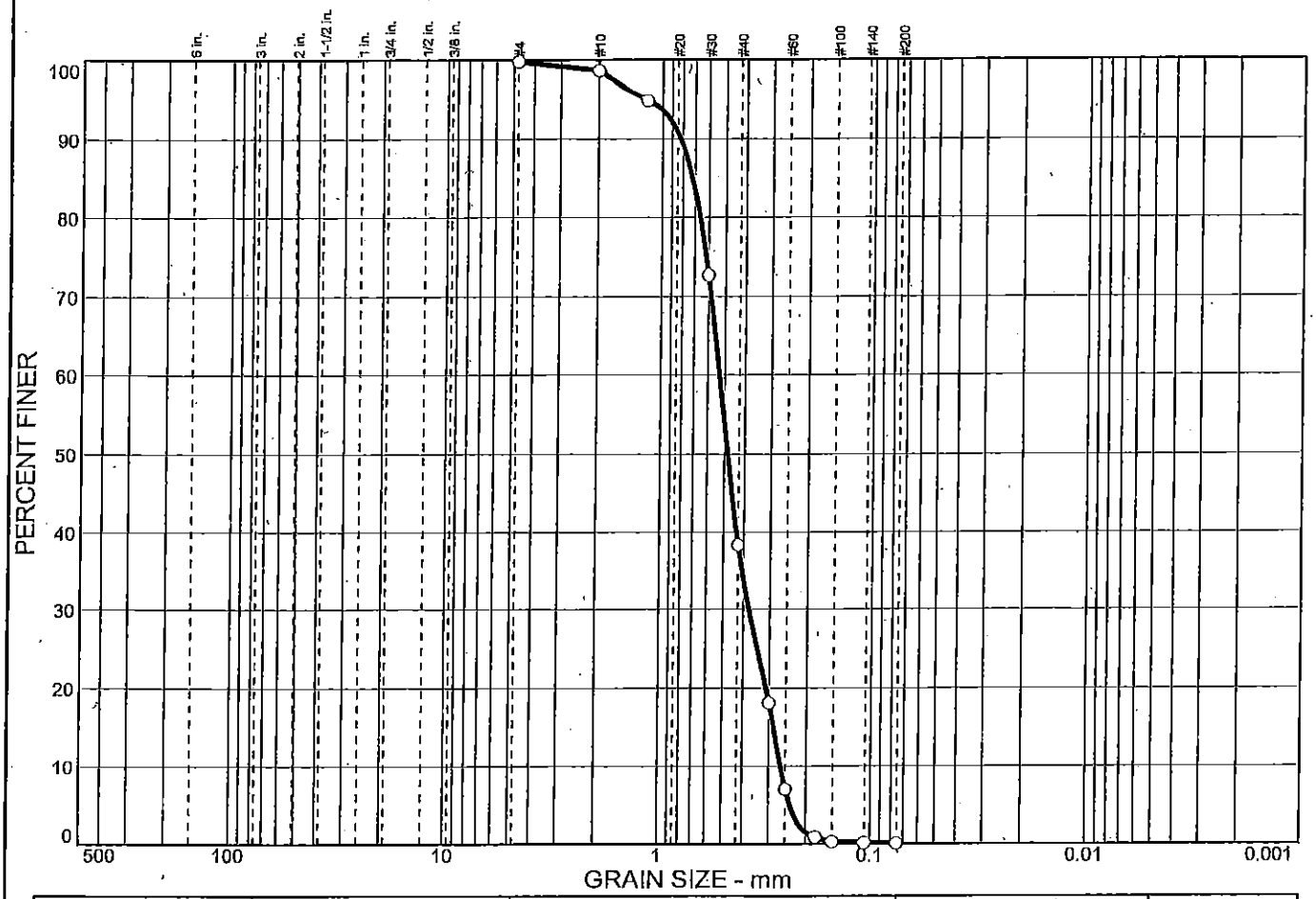
OV-15
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/1/04
Location: OV-15 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 15F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	98.7		
#16	94.8		
#30	72.7		
#40	38.3		
#50	18.0		
#60	7.1		
#80	0.9		
#100	0.3		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.721 D_{60}= 0.528 D_{50}= 0.481
D_{30}= 0.376 D_{15}= 0.286 D_{10}= 0.264
C_u= 2.00 C_c= 1.02

Classification

USCS= SP AASHTO= A-1-b

Remarks

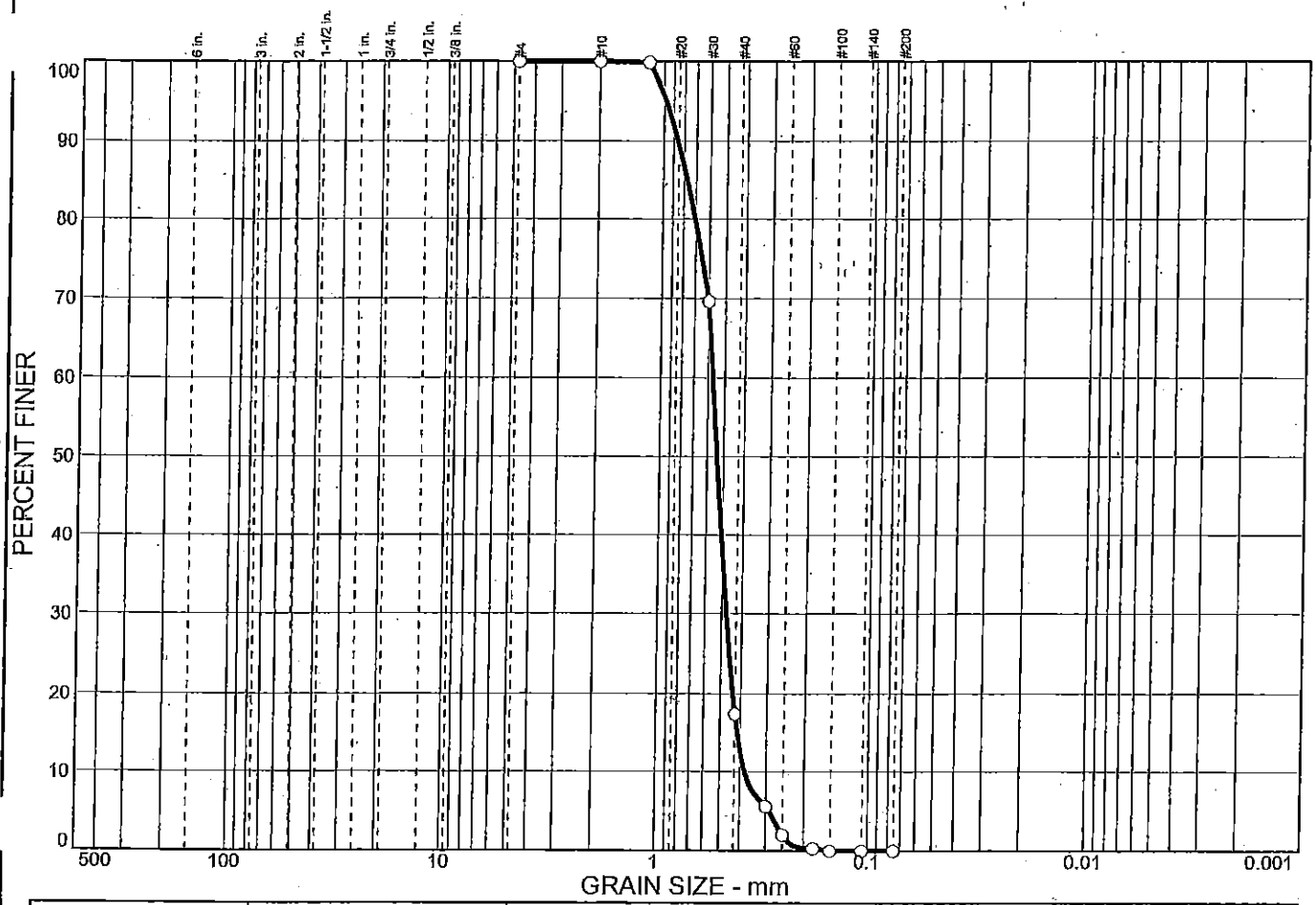
OV-16
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/3/04
Location: OV-16 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 16A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	69.6		
#40	17.3		
#50	5.6		
#60	2.0		
#80	0.3		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.774 D_{60}= 0.568 D_{50}= 0.537
D_{30}= 0.473 D_{15}= 0.414 D_{10}= 0.379
C_u= 1.50 C_c= 1.04

Classification

USCS= SP AASHTO= A-1-b

Remarks

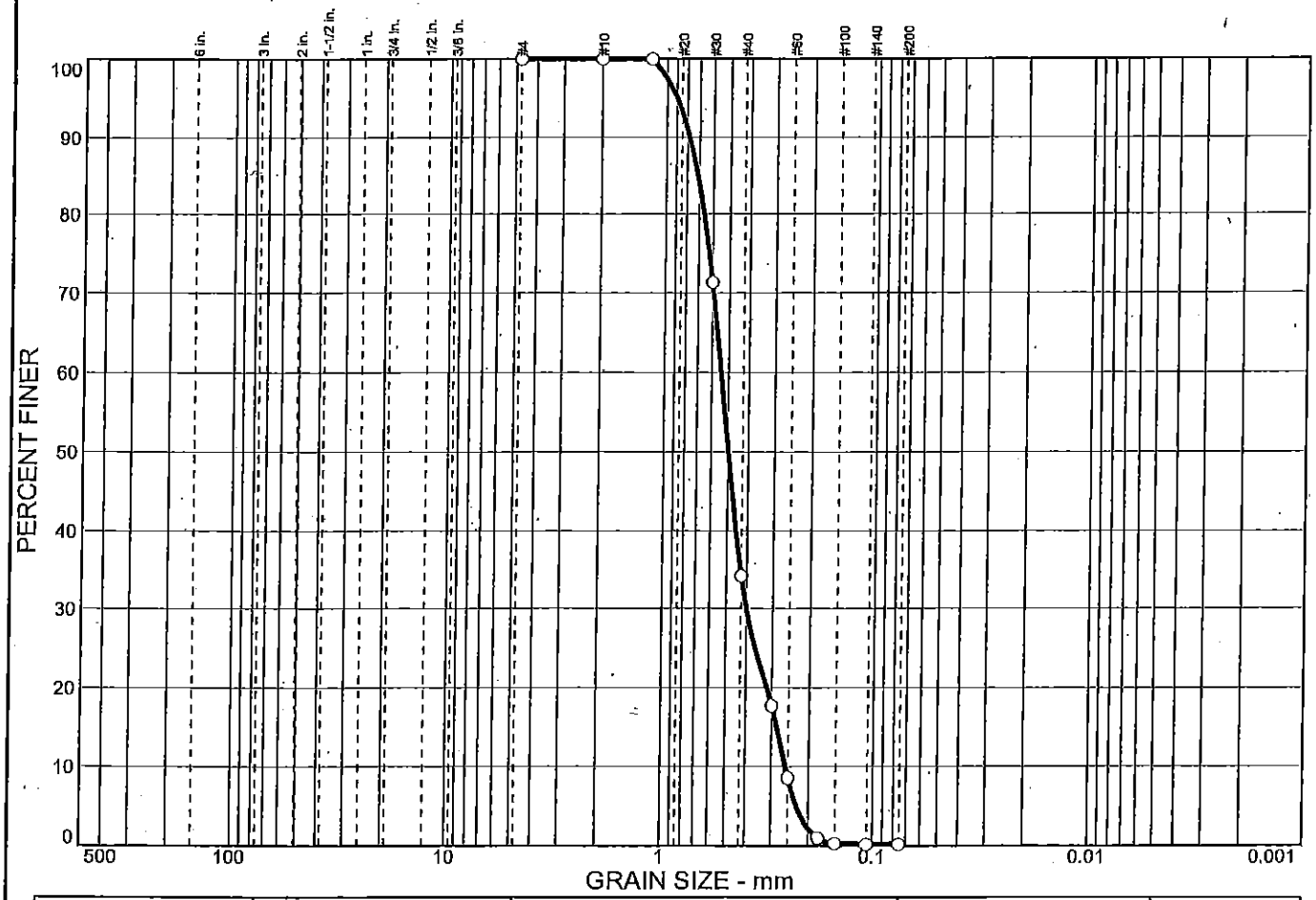
OV-16
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/3/04
Location: OV-16 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 16B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	71.3		
#40	34.2		
#50	17.7		
#60	8.6		
#80	1.0		
#100	0.3		
#140	0.2		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.713 D_{60}= 0.541 D_{50}= 0.497
D_{30}= 0.400 D_{15}= 0.284 D_{10}= 0.258
C_u= 2.10 C_c= 1.15

Classification

USCS= SP AASHTO= A-1-b

Remarks

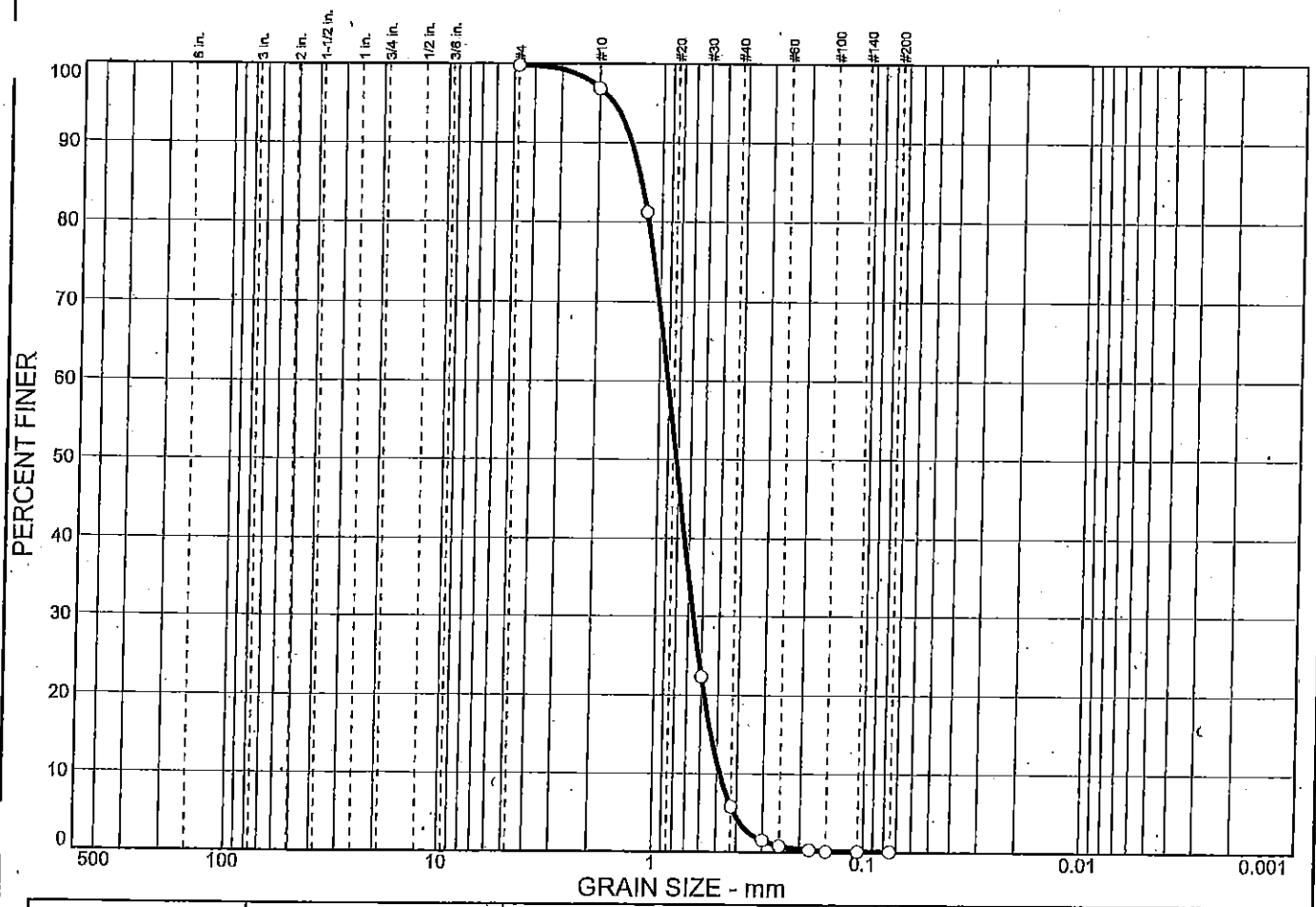
OV-16
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/3/04
Location: OV-16 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 16C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	96.9		
#16	81.2		
#30	22.3		
#40	5.8		
#50	1.5		
#60	0.8		
#80	0.3		
#100	0.1		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.26 D_{60}= 0.910 D_{50}= 0.820
D_{30}= 0.661 D_{15}= 0.535 D_{10}= 0.482
C_u= 1.89 C_c= 1.00

Classification

USCS= SP AASHTO= A-1-b

Remarks

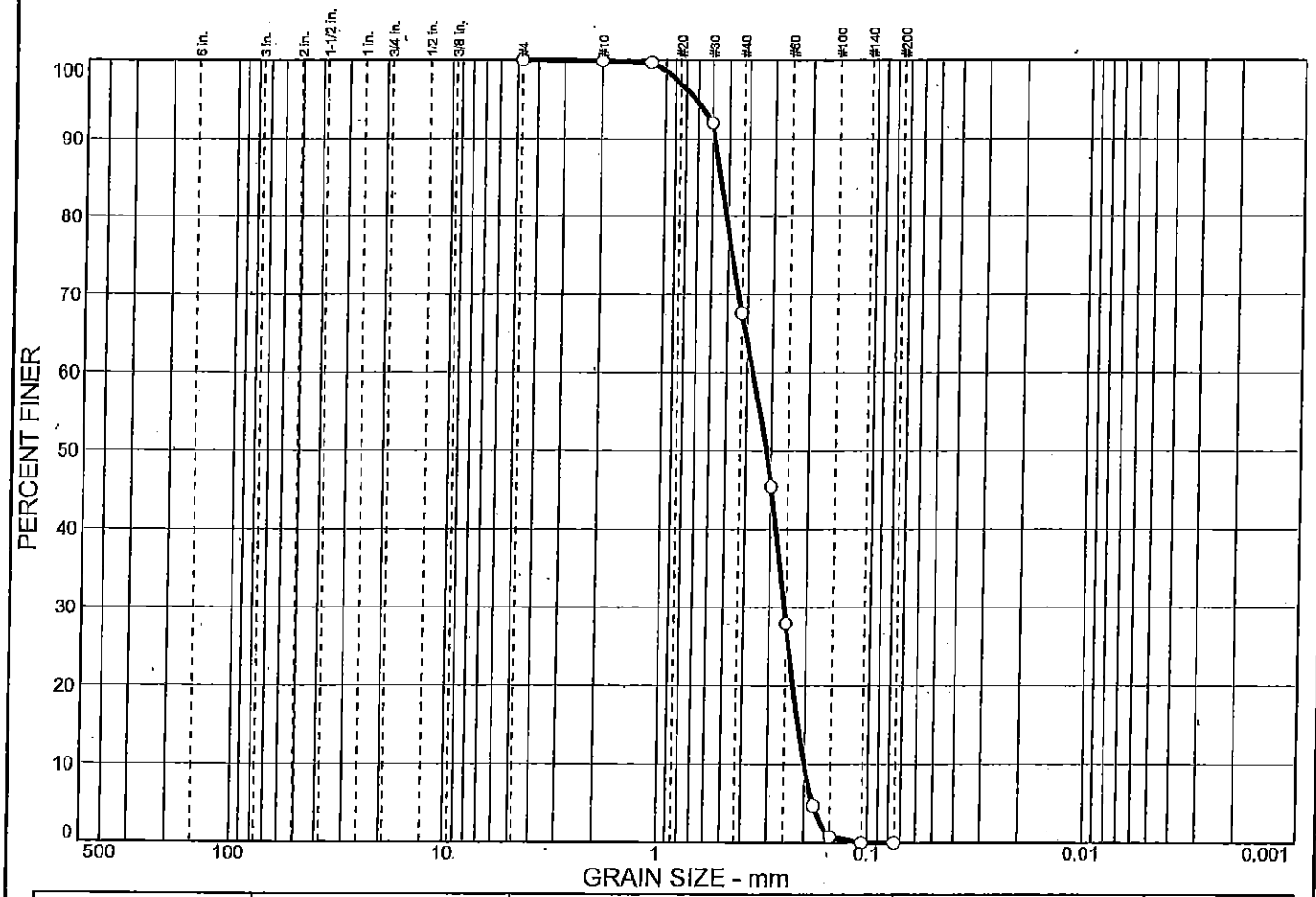
OV-16
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/3/04
Location: OV-16 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 16D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.7		
#30	92.0		
#40	67.6		
#50	45.4		
#60	27.9		
#80	4.8		
#100	0.8		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.546 D_{60}= 0.372 D_{50}= 0.318
D_{30}= 0.255 D_{15}= 0.215 D_{10}= 0.200
C_u= 1.86 C_c= 0.88

Classification

USCS= SP AASHTO= A-3

Remarks

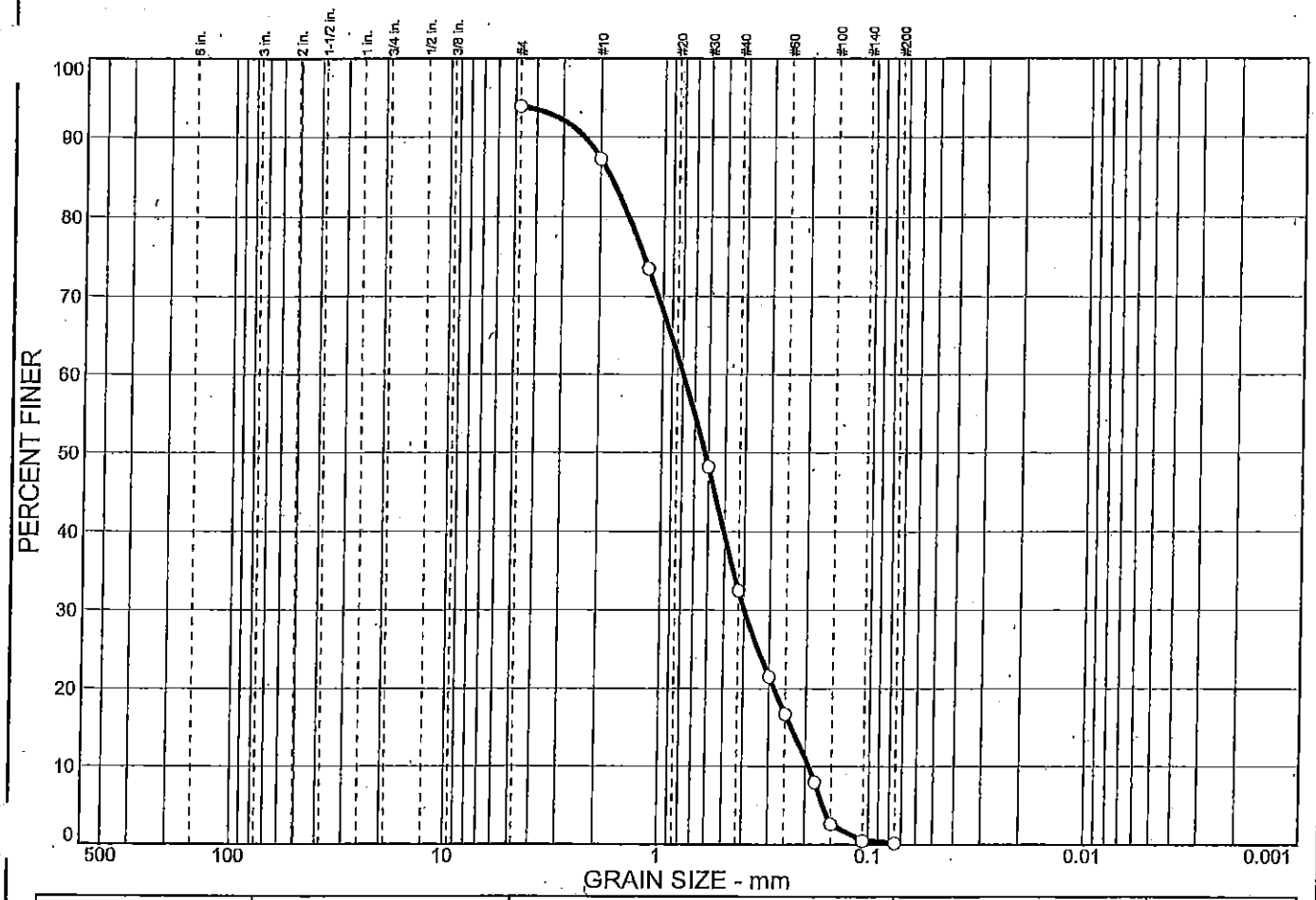
OV-16
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/1/04
Location: OV-16 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 16E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		93.7	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	93.9		
#10	87.2		
#16	73.5		
#30	48.2		
#40	32.5		
#50	21.5		
#60	16.7		
#80	8.0		
#100	2.6		
#140	0.5		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.79 D_{60}= 0.796 D_{50}= 0.624
D_{30}= 0.398 D_{15}= 0.234 D_{10}= 0.193
C_u= 4.13 C_c= 1.03

Classification

USCS= SP AASHTO= A-1-b

Remarks

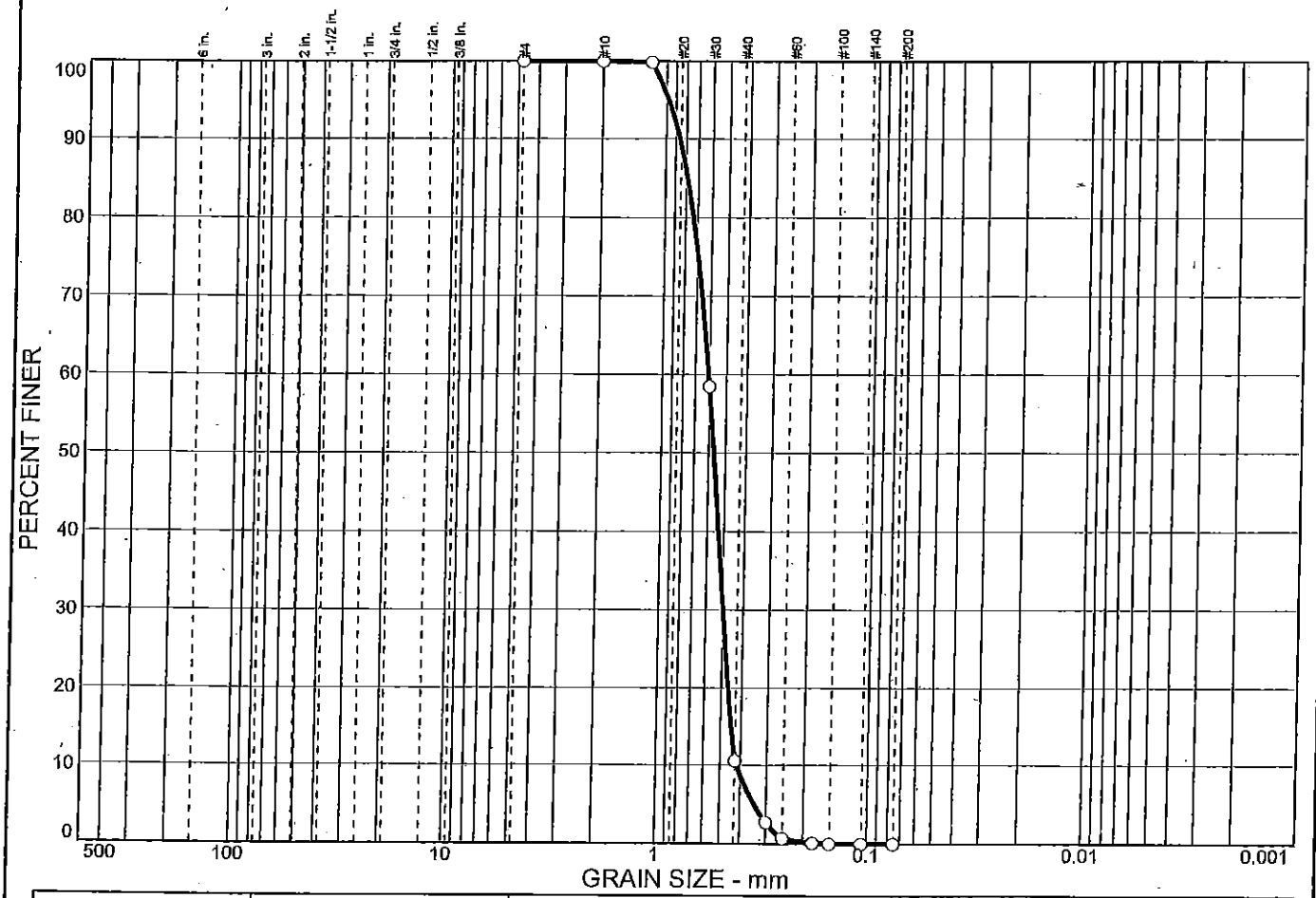
OV-16
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-16 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 16F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	58.5		
#40	10.5		
#50	2.7		
#60	0.7		
#80	0.1		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.788 D_{60}= 0.607 D_{50}= 0.566
D_{30}= 0.497 D_{15}= 0.445 D_{10}= 0.418
C_u= 1.45 C_c= 0.98

Classification

USCS= SP AASHTO= A-1-b

Remarks

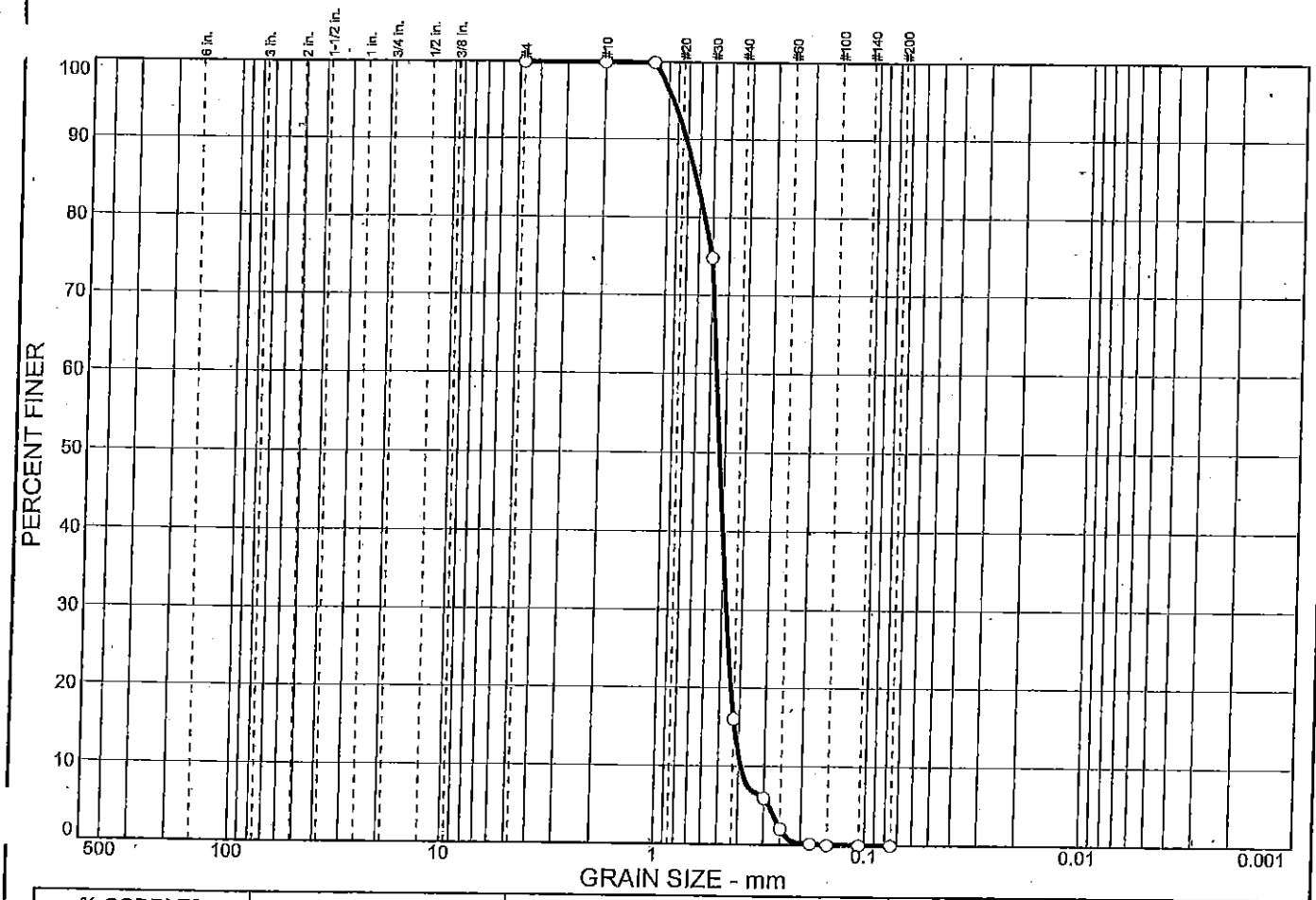
OV-17
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/9/04
Location: OV-17 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 17A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	74.8		
#40	16.0		
#50	6.0		
#60	2.1		
#80	0.2		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.730 D_{60}= 0.558 D_{50}= 0.530
D_{30}= 0.474 D_{15}= 0.420 D_{10}= 0.390
C_u= 1.43 C_c= 1.03

Classification

USCS= SP AASHTO= A-1-b

Remarks

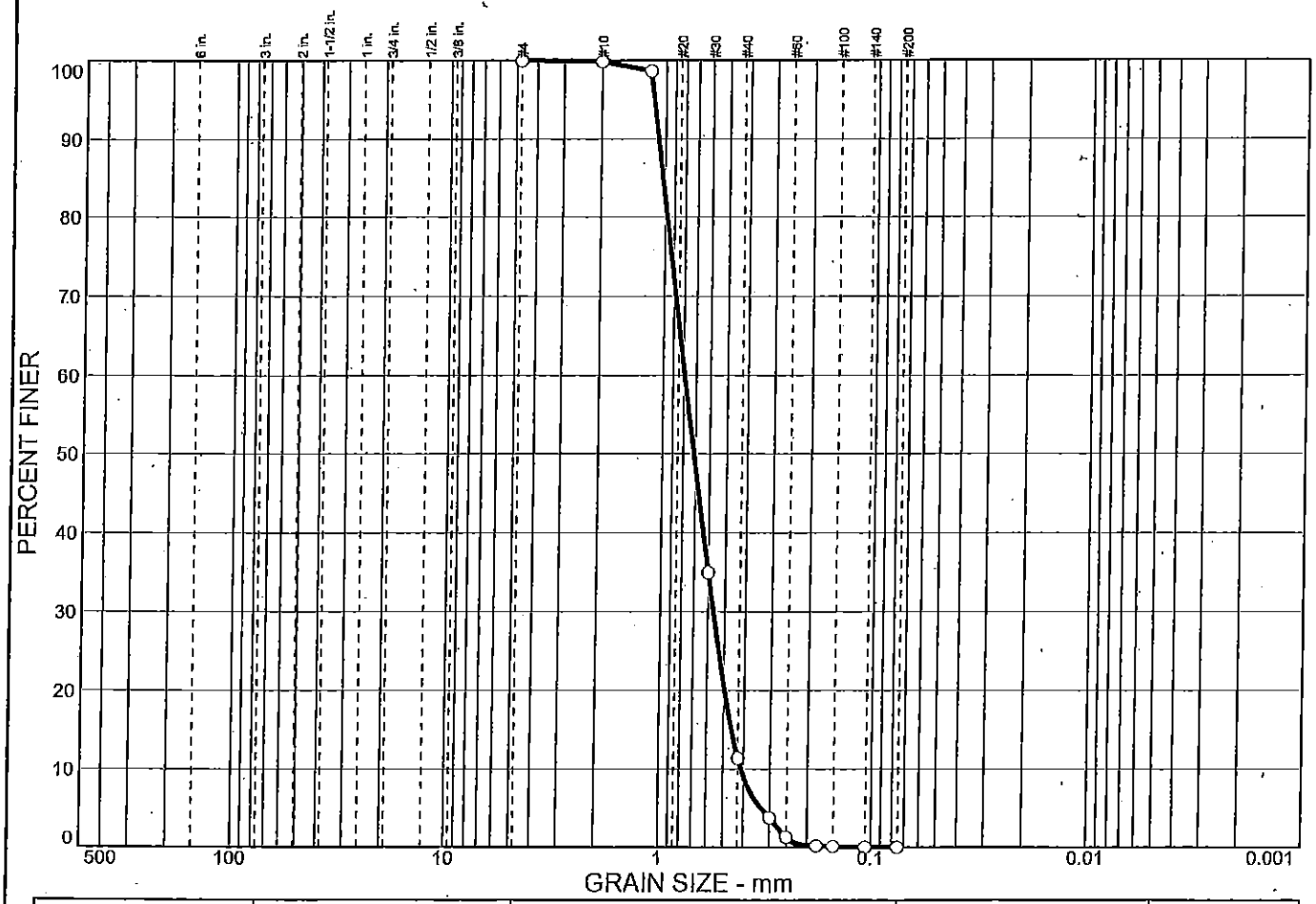
OV-17
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/9/04
Location: OV-17 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 17B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	98.7		
#30	34.9		
#40	11.4		
#50	3.8		
#60	1.3		
#80	0.2		
#100	0.1		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.03 D_{60}= 0.794 D_{50}= 0.712
D_{30}= 0.566 D_{15}= 0.457 D_{10}= 0.410
C_u= 1.93 C_c= 0.98

Classification

USCS= SP AASHTO= A-1-b

Remarks

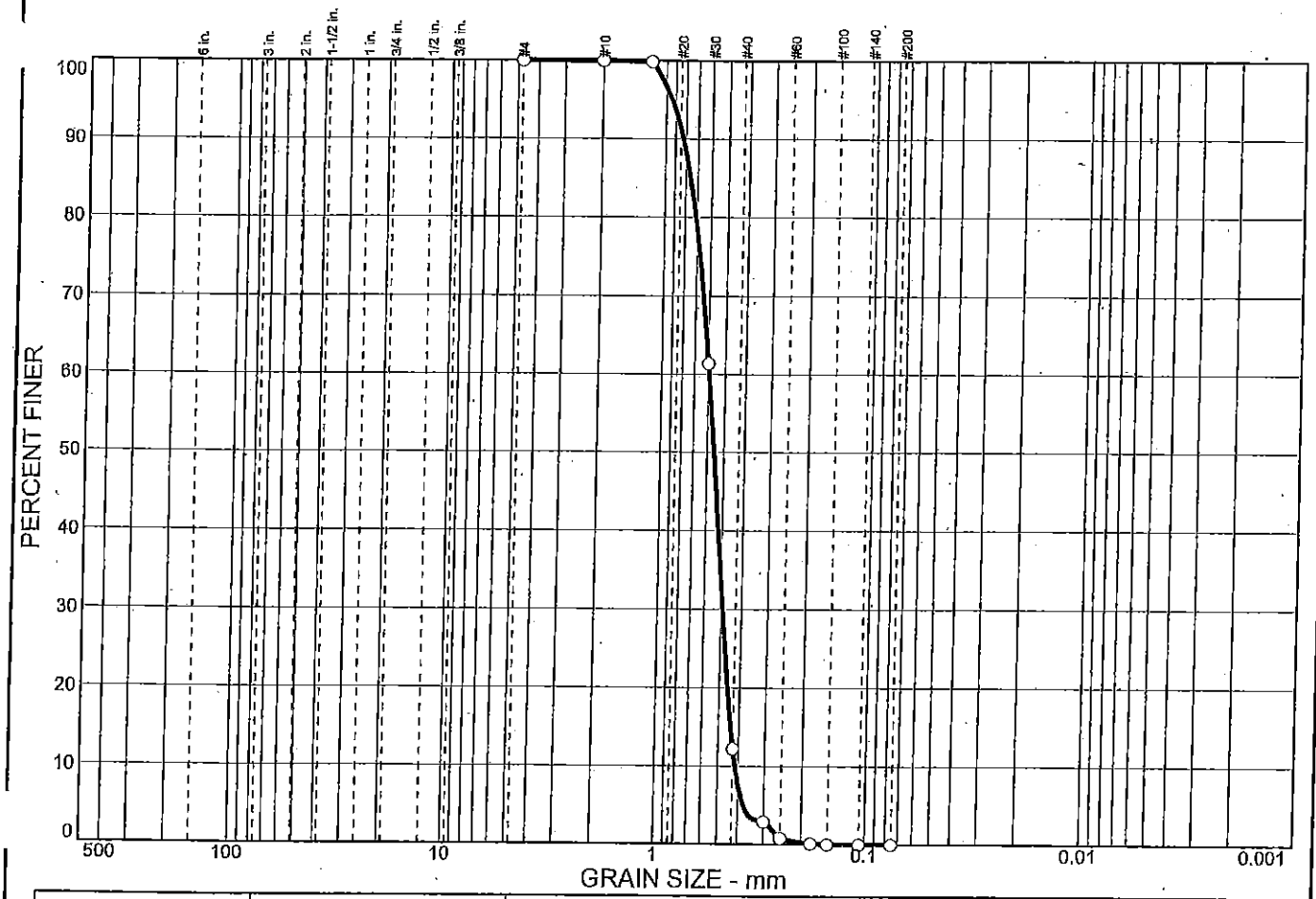
OV-17
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/9/04
Location: OV-17 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 17C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	61.4		
#40	12.2		
#50	2.9		
#60	0.8		
#80	0.1		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.759 D_{60}= 0.594 D_{50}= 0.556
D_{30}= 0.489 D_{15}= 0.437 D_{10}= 0.414
C_u= 1.43 C_c= 0.97

Classification

USCS= SP AASHTO= A-1-b

Remarks

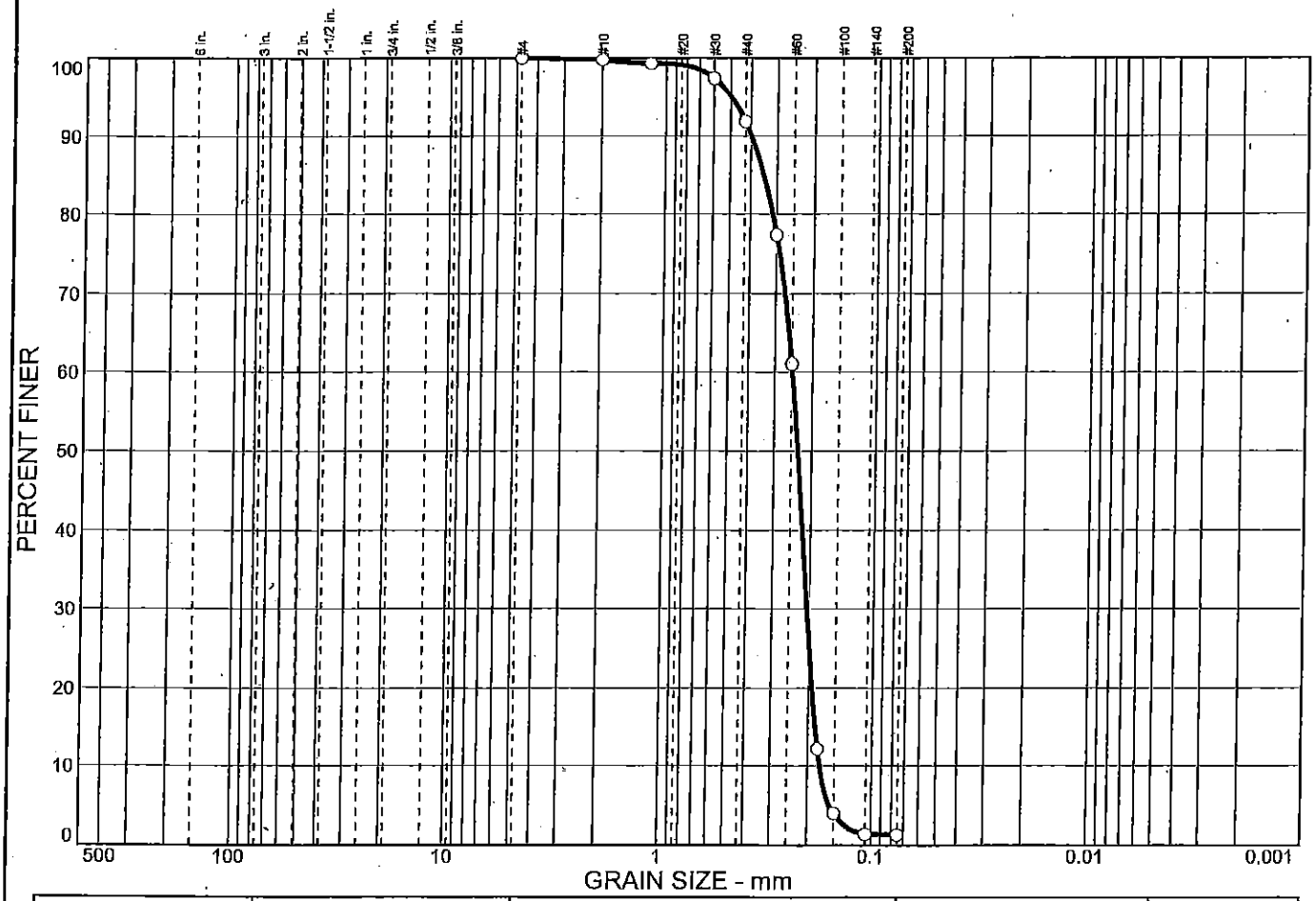
OV-17
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/9/04
Location: OV-17 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 17D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	98.7	1.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#16	99.3		
#30	97.4		
#40	91.8		
#50	77.4		
#60	61.0		
#80	12.1		
#100	4.0		
#140	1.4		
#200	1.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.346 D_{60}= 0.248 D_{50}= 0.232
D_{30}= 0.206 D_{15}= 0.185 D_{10}= 0.176
C_u= 1.41 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

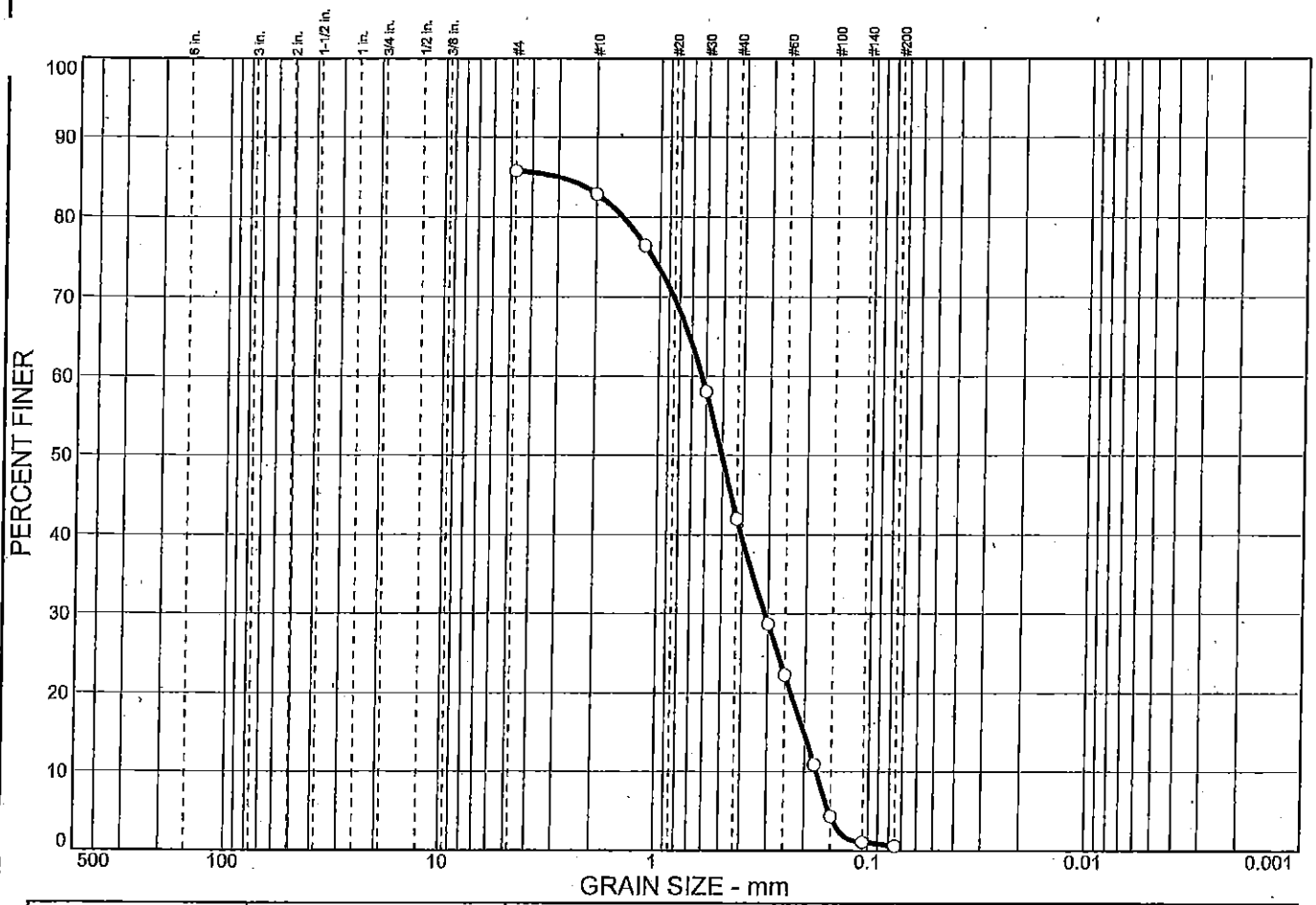
OV-17
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-17 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 17E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		85.2	0.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	85.8		
#10	82.9		
#16	76.5		
#30	58.1		
#40	42.0		
#50	28.7		
#60	22.3		
#80	10.9		
#100	4.4		
#140	1.1		
#200	0.6		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 3.00 D_{60}= 0.628 D_{50}= 0.504
D_{30}= 0.311 D_{15}= 0.202 D_{10}= 0.176
C_u= 3.57 C_c= 0.88

Classification

USCS= SP AASHTO= A-1-b

Remarks

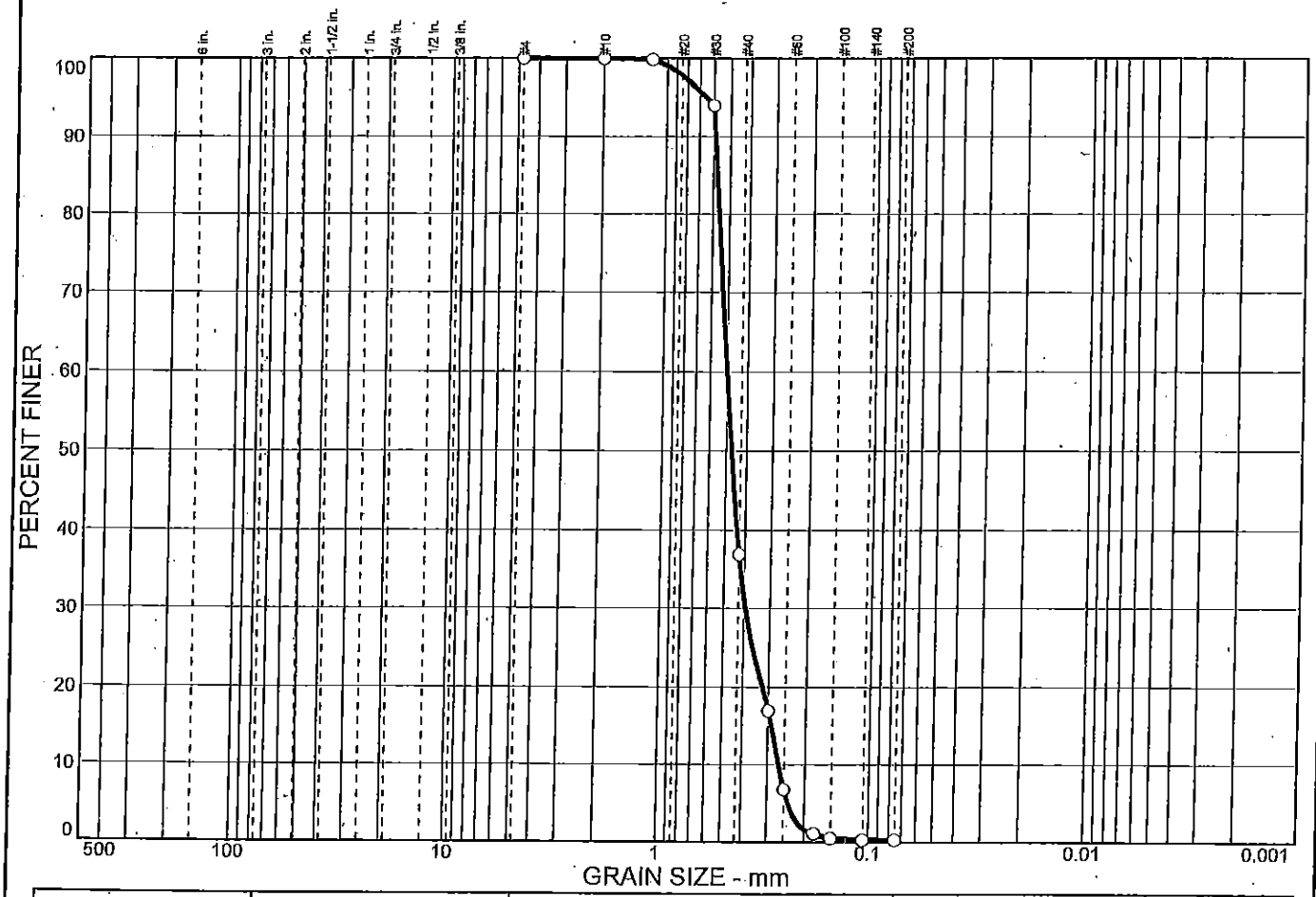
OV-17
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-17 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 17F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	94.0		
#40	36.9		
#50	16.9		
#60	6.8		
#80	1.1		
#100	0.5		
#140	0.3		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.573 D_{60}= 0.500 D_{50}= 0.470
D_{30}= 0.393 D_{15}= 0.290 D_{10}= 0.266
C_u= 1.88 C_c= 1.16

Classification

USCS= SP AASHTO= A-1-b

Remarks

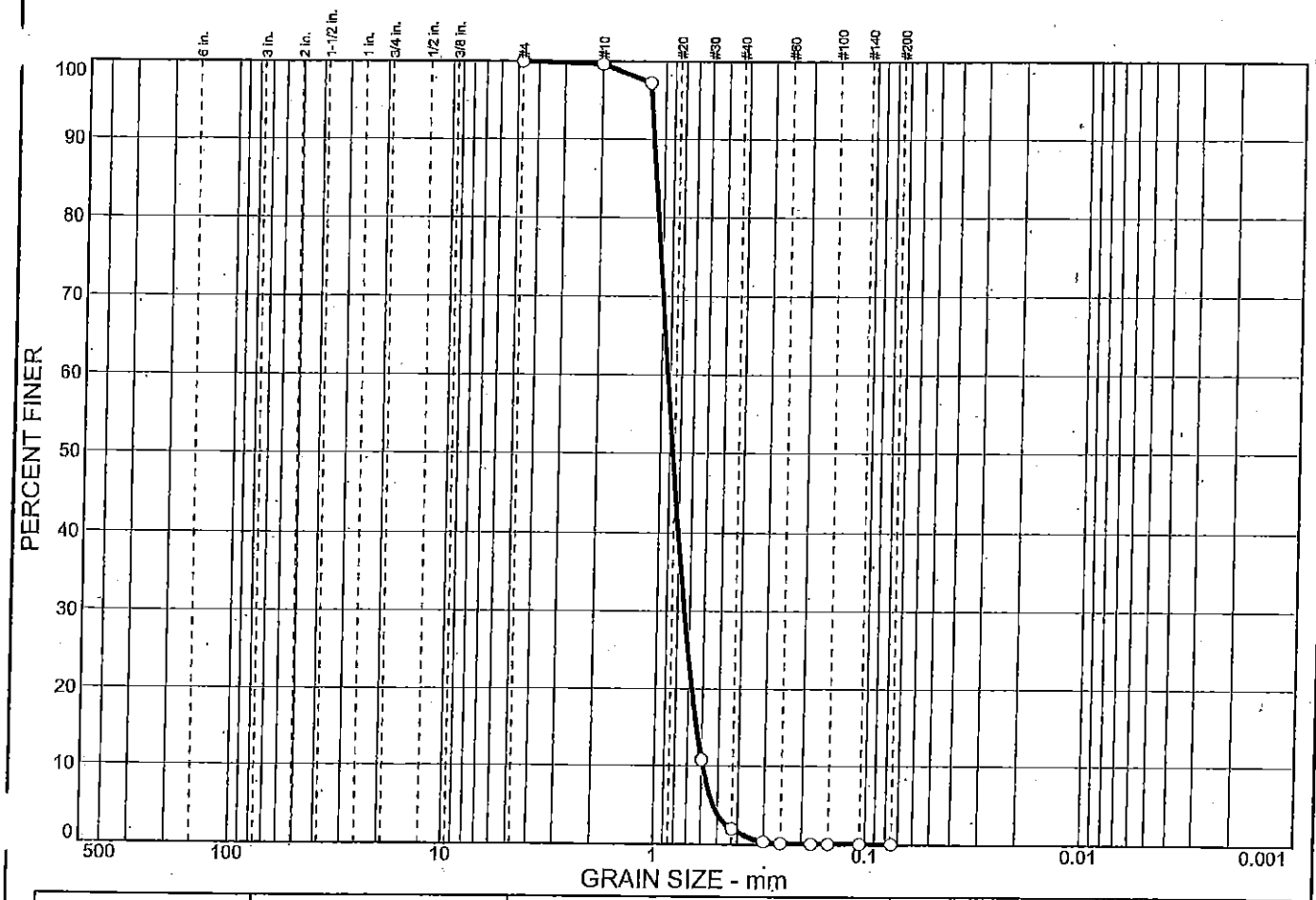
OV-18
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/9/04
Location: OV-18 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 18A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.7		
#16	97.3		
#30	10.8		
#40	2.0		
#50	0.4		
#60	0.2		
#80	0.1		
#100	0.1		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.09 D_{60}= 0.931 D_{50}= 0.869
D_{30}= 0.744 D_{15}= 0.637 D_{10}= 0.592
C_u= 1.57 C_c= 1.00

Classification

USCS= SP AASHTO= A-1-b

Remarks

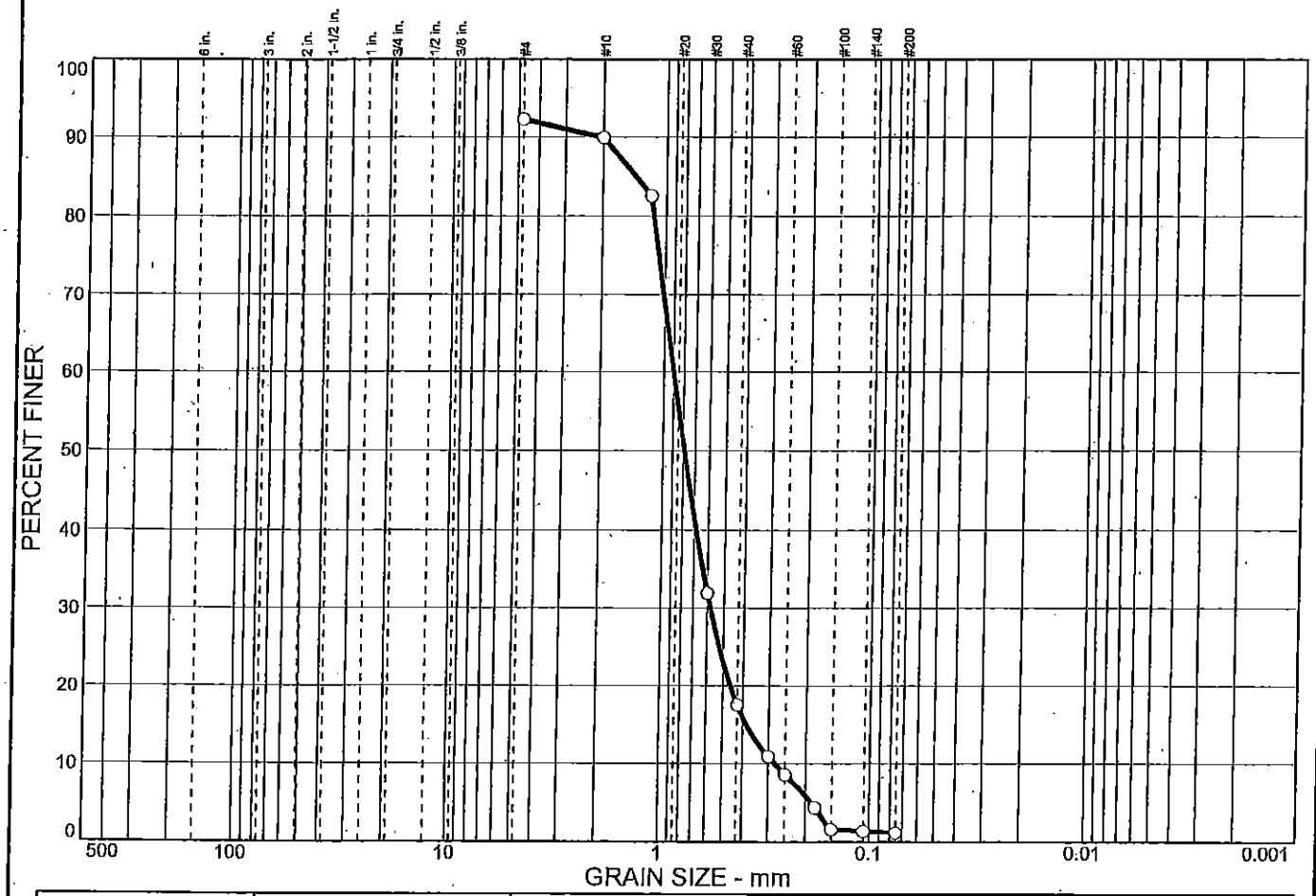
OV-18
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/9/04
Location: OV-18 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 18D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		91.0	1.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	92.2		
#10	89.9		
#16	82.5		
#30	31.9		
#40	17.5		
#50	10.9		
#60	8.6		
#80	4.4		
#100	1.6		
#140	1.4		
#200	1.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.41 D_{60}= 0.899 D_{50}= 0.790
D_{30}= 0.579 D_{15}= 0.384 D_{10}= 0.280
C_u= 3.21 C_c= 1.33

Classification

USCS= SP AASHTO= A-1-b

Remarks

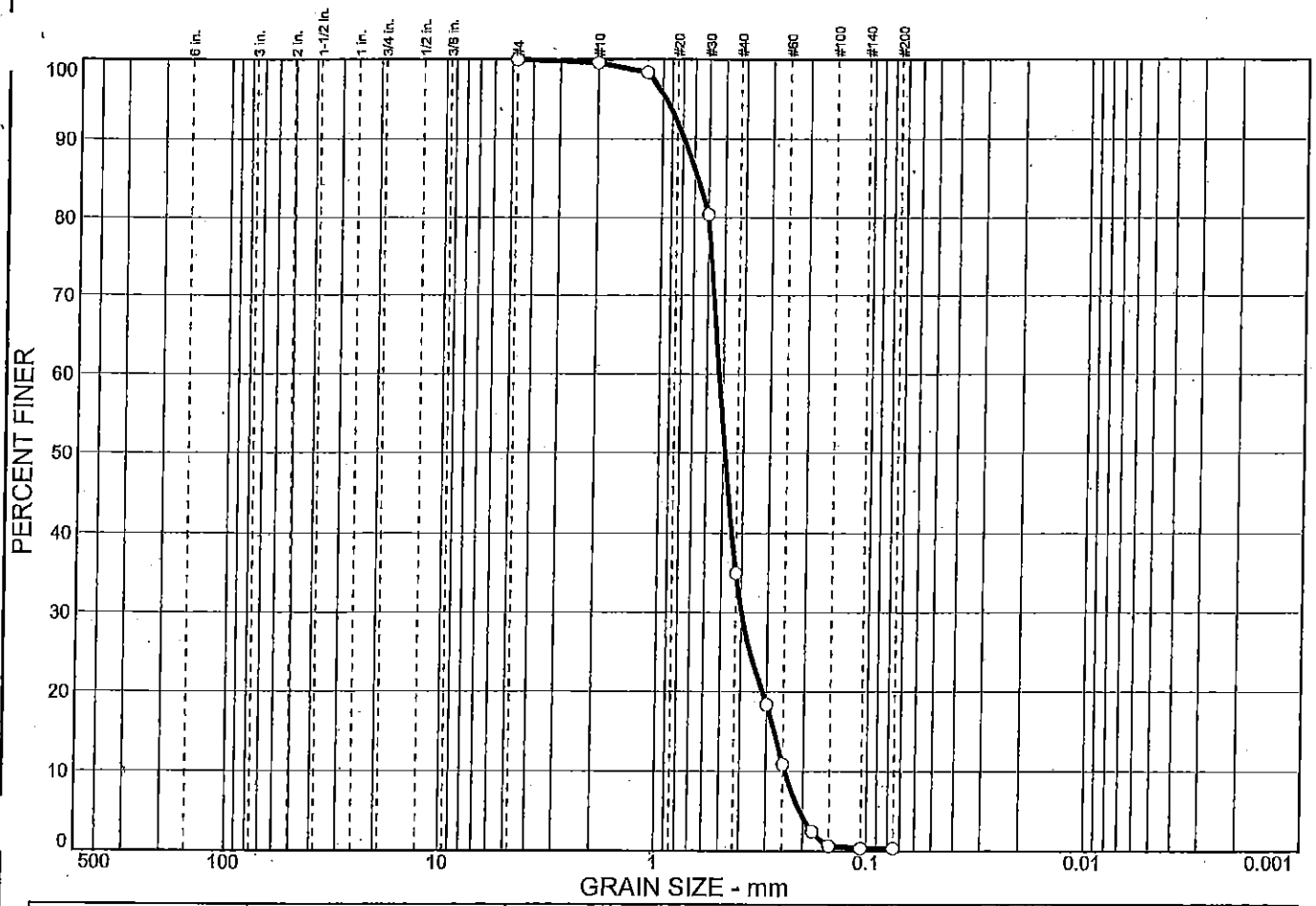
OV-18
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-18 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 18E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.6	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.6		
#16	98.4		
#30	80.4		
#40	34.9		
#50	18.4		
#60	10.9		
#80	2.5		
#100	0.7		
#140	0.4		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.678 D_{60}= 0.523 D_{50}= 0.487
D_{30}= 0.398 D_{15}= 0.276 D_{10}= 0.244
C_u= 2.14 C_c= 1.24

Classification

USCS= SP AASHTO= A-1-b

Remarks

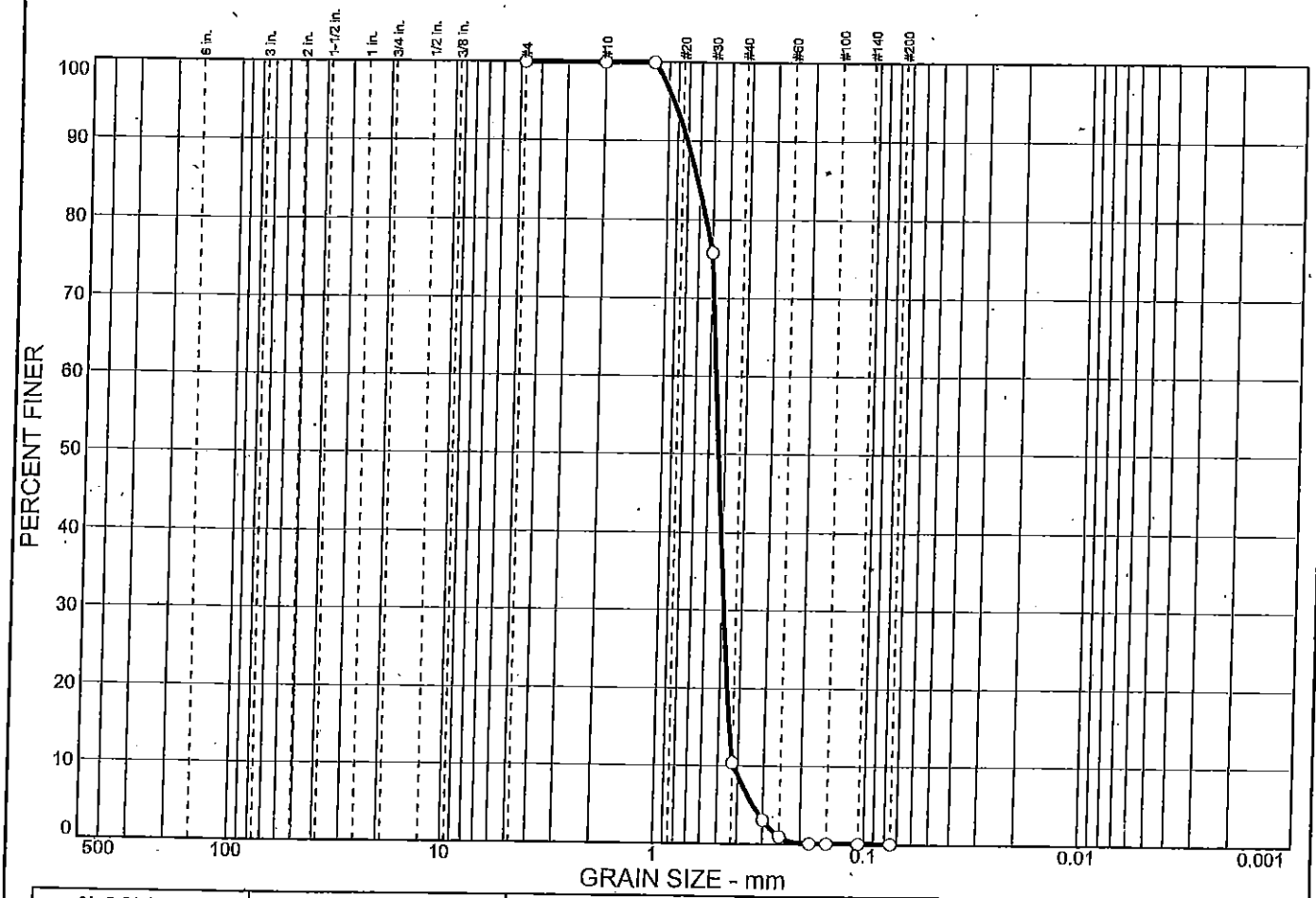
OV-18
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-18 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 18F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	75.8		
#40	10.4		
#50	3.1		
#60	1.0		
#80	0.1		
#100	0.1		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.720 D_{60}= 0.560 D_{50}= 0.536
D_{30}= 0.486 D_{15}= 0.442 D_{10}= 0.419
C_u= 1.34 C_c= 1.01

Classification

USCS= SP AASHTO= A-1-b

Remarks

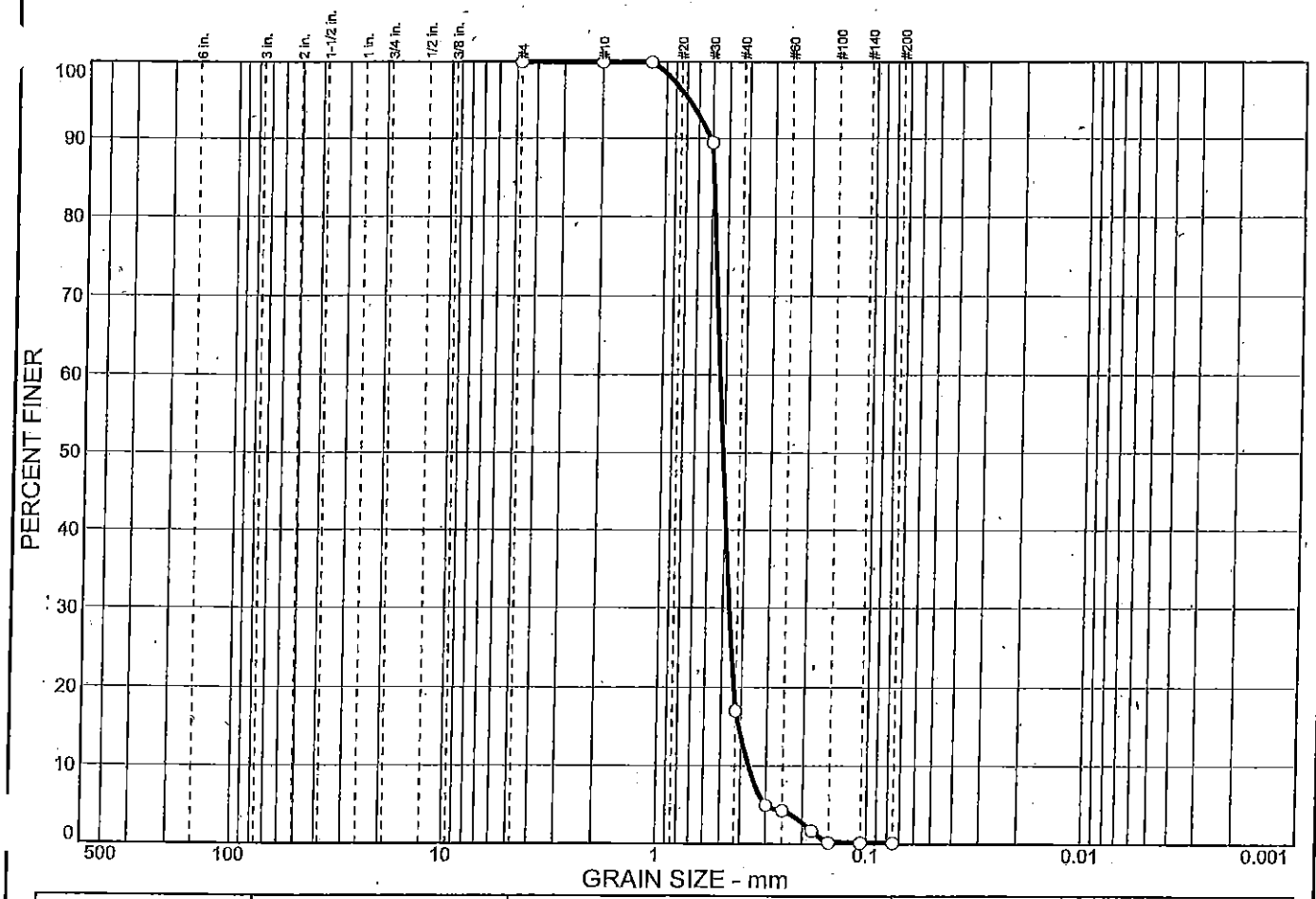
OV-19
Sample A

Sample No.: A
Location: OV-19
Source of Sample:
Date: 6/9/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 19A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	89.4		
#40	17.0		
#50	5.0		
#60	4.3		
#80	1.7		
#100	0.2		
#140	0.2		
#200	0.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.590 D_{60}= 0.533 D_{50}= 0.511
D_{30}= 0.463 D_{15}= 0.409 D_{10}= 0.365
C_u= 1.46 C_c= 1.10

Classification

USCS= SP AASHTO= A-1-b

Remarks

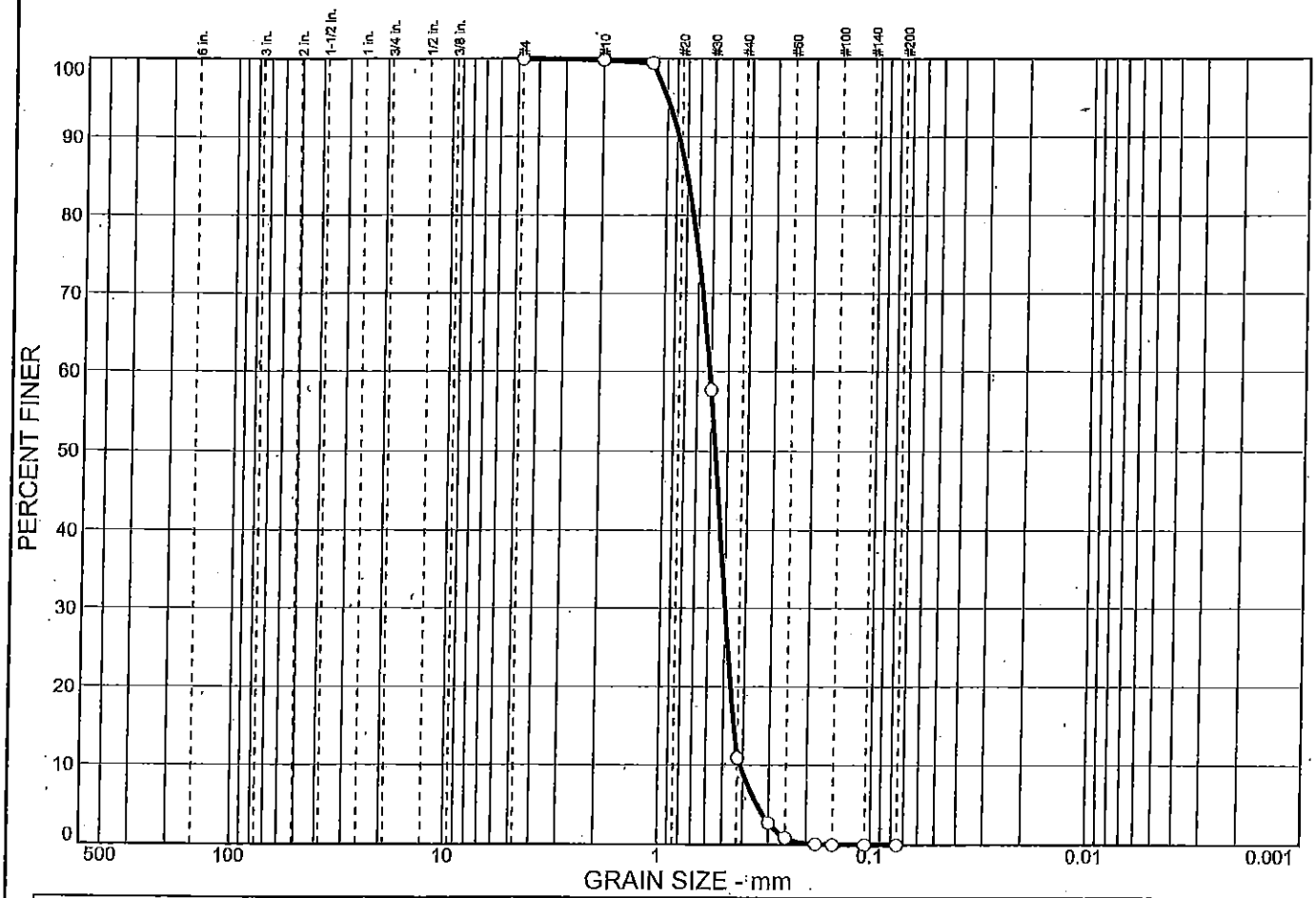
OV-19
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/9/04
Location: OV-19 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 19B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.5		
#30	57.7		
#40	10.9		
#50	2.8		
#60	0.9		
#80	0.1		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.802 D_{60}= 0.611 D_{50}= 0.568
D_{30}= 0.497 D_{15}= 0.443 D_{10}= 0.413
C_u= 1.48 C_c= 0.98

Classification

USCS= SP AASHTO= A-1-b

Remarks

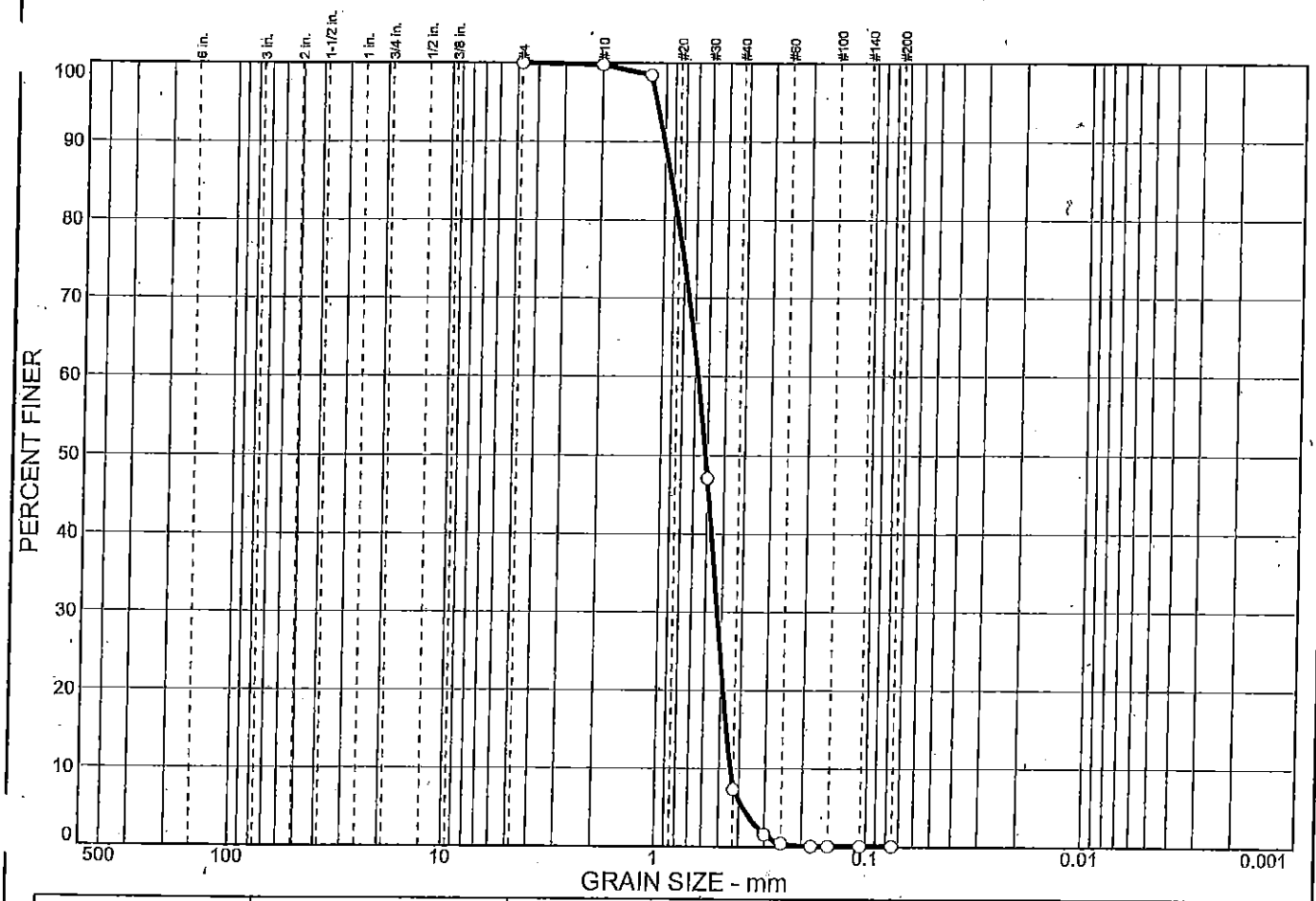
OV-19
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/9/04
Location: OV-19 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 19C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#16	98.5		
#30	47.0		
#40	7.4		
#50	1.6		
#60	0.5		
#80	0.1		
#100	0.1		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.929 D_{60}= 0.675 D_{50}= 0.615
D_{30}= 0.525 D_{15}= 0.463 D_{10}= 0.440
C_u= 1.54 C_c= 0.93

Classification

USCS= SP AASHTO= A-1-b

Remarks

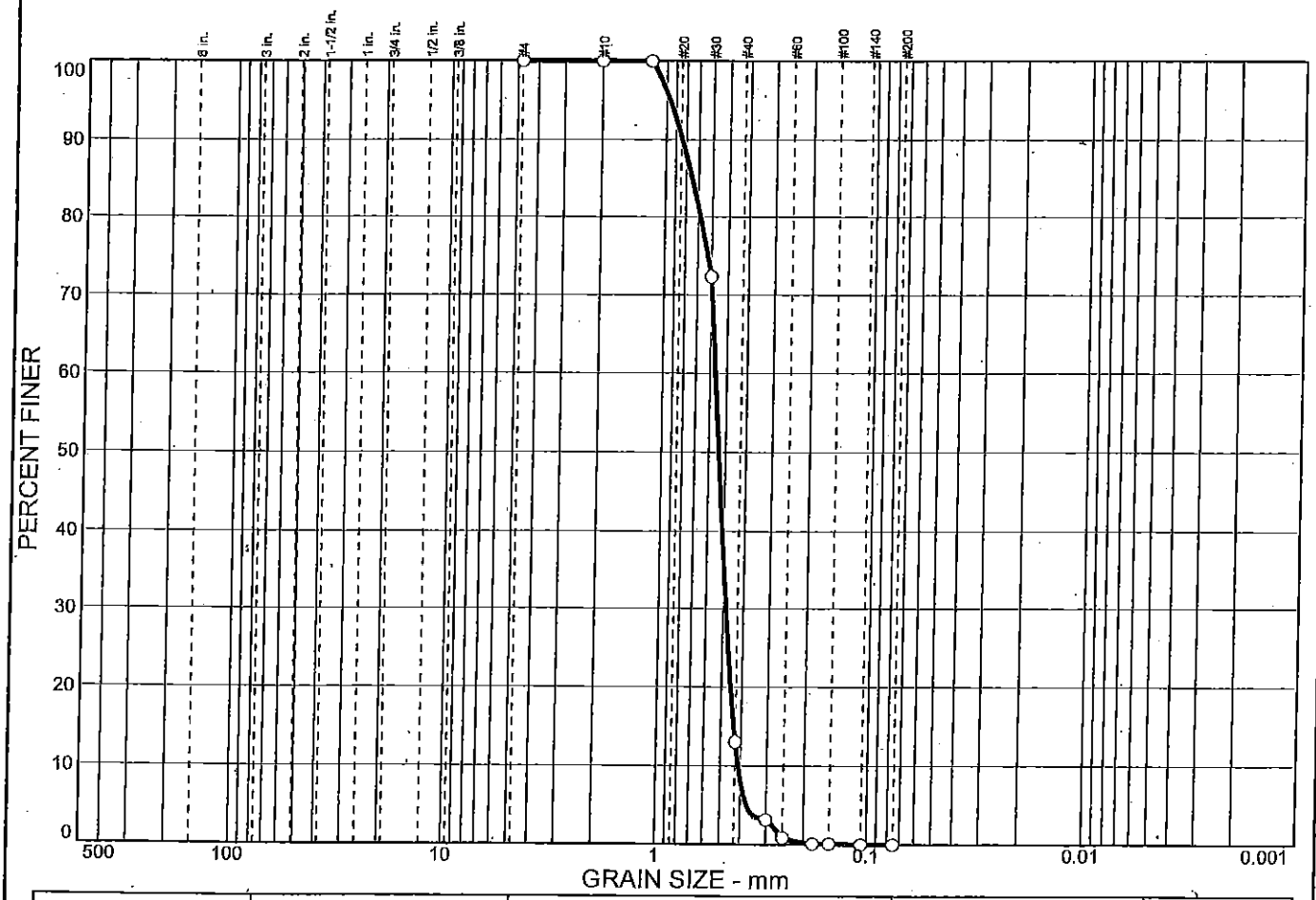
OV-19
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/9/04
Location: OV-19 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 19D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	72.3		
#40	13.0		
#50	3.2		
#60	0.9		
#80	0.1		
#100	0.1		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.752 D_{60}= 0.565 D_{50}= 0.537
D_{30}= 0.482 D_{15}= 0.433 D_{10}= 0.411
C_u= 1.38 C_c= 1.00

Classification

USCS= SP AASHTO= A-1-b

Remarks

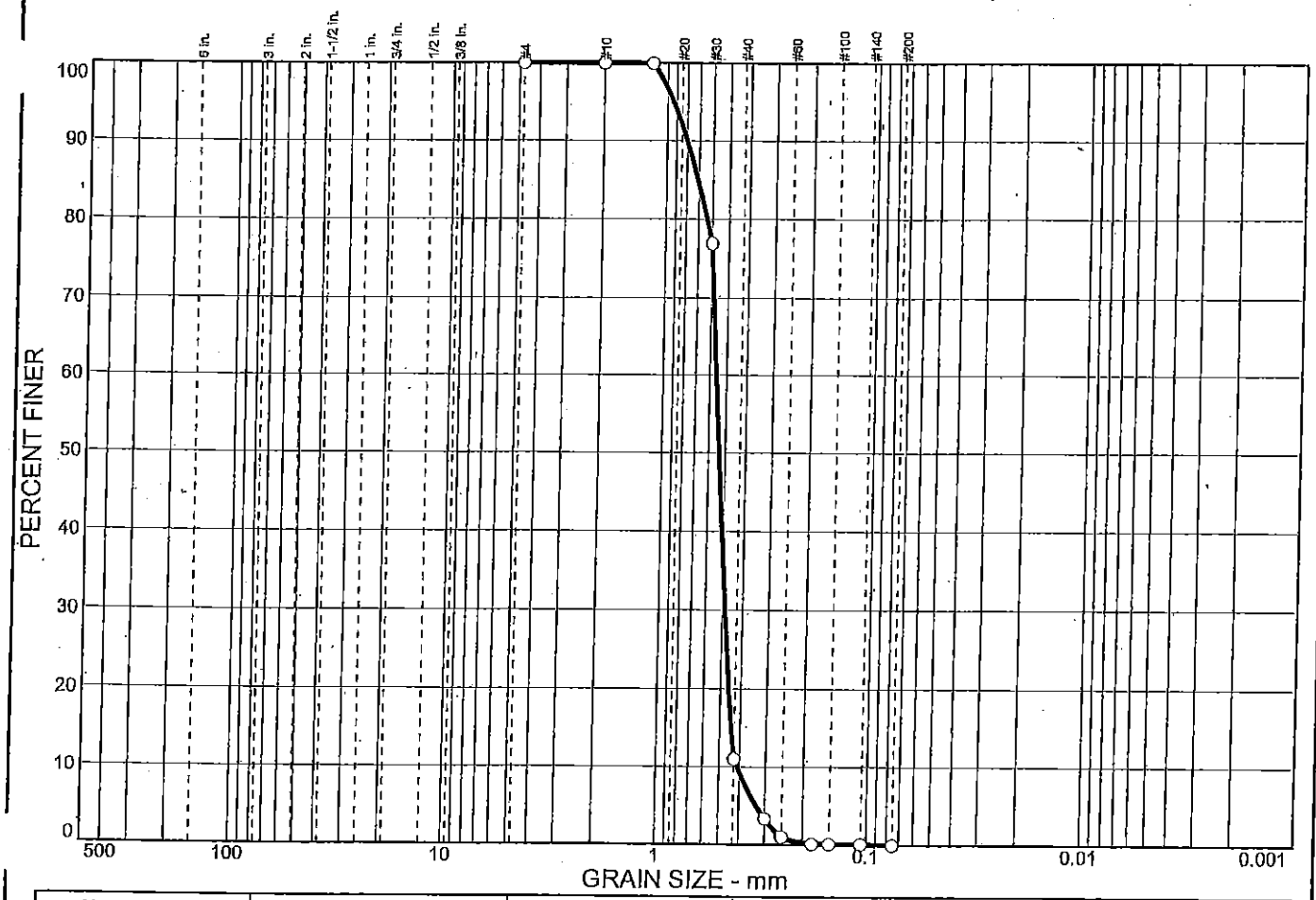
OV-20
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/9/04
Location: OV-20 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 20A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	76.9		
#40	11.0		
#50	3.3		
#60	1.0		
#80	0.1		
#100	0.1		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.709 D_{60}= 0.558 D_{50}= 0.533
D_{30}= 0.484 D_{15}= 0.440 D_{10}= 0.410
C_u= 1.36 C_c= 1.02

Classification

USCS= SP AASHTO= A-1-b

Remarks

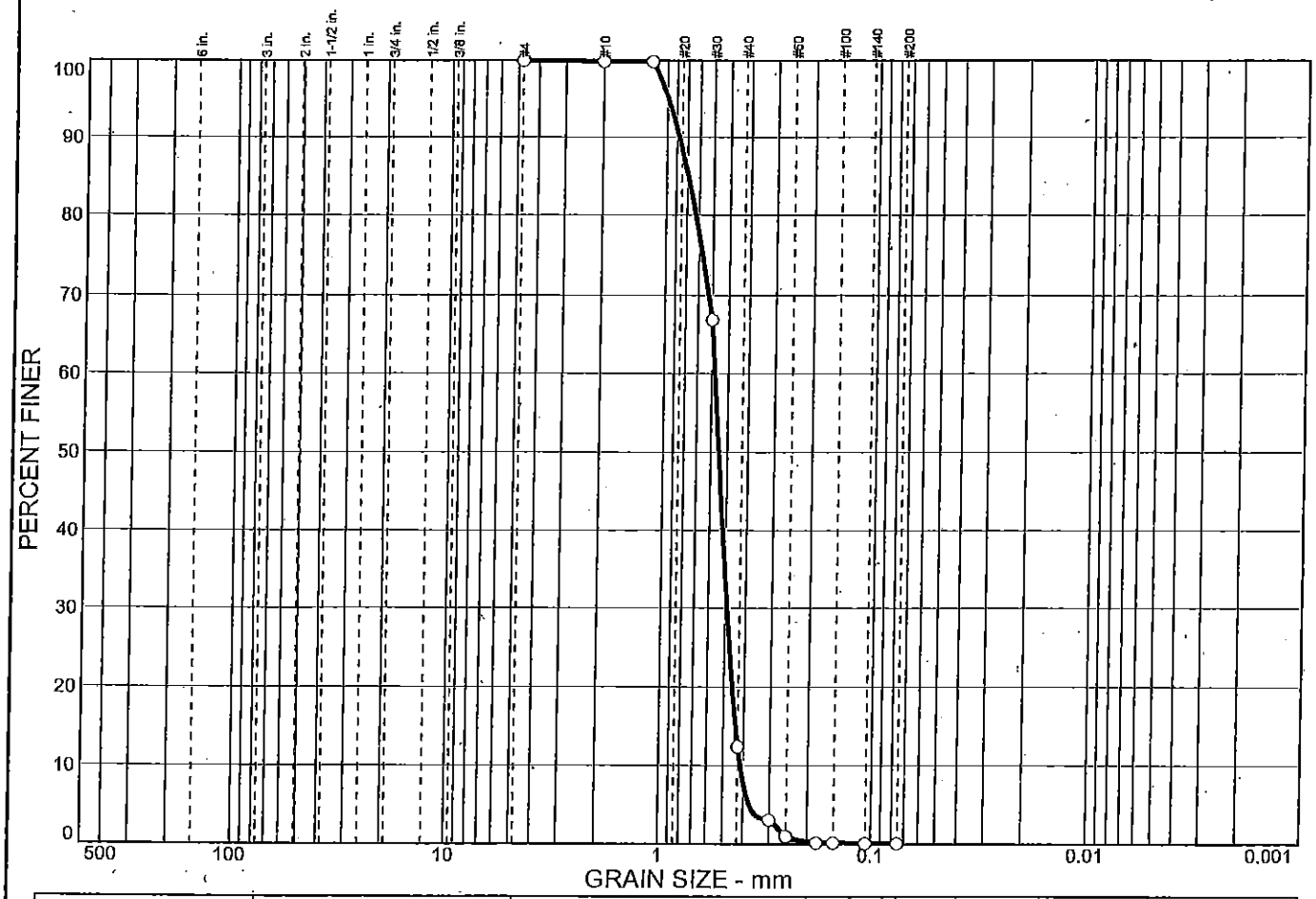
OV-20
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/9/04
Location: OV-20 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 20B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	66.8		
#40	12.4		
#50	3.1		
#60	1.0		
#80	0.2		
#100	0.2		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.794 D_{60}= 0.578 D_{50}= 0.548
D_{30}= 0.488 D_{15}= 0.436 D_{10}= 0.413
C_u= 1.40 C_c= 1.00

Classification

USCS= SP AASHTO= A-1-b

Remarks

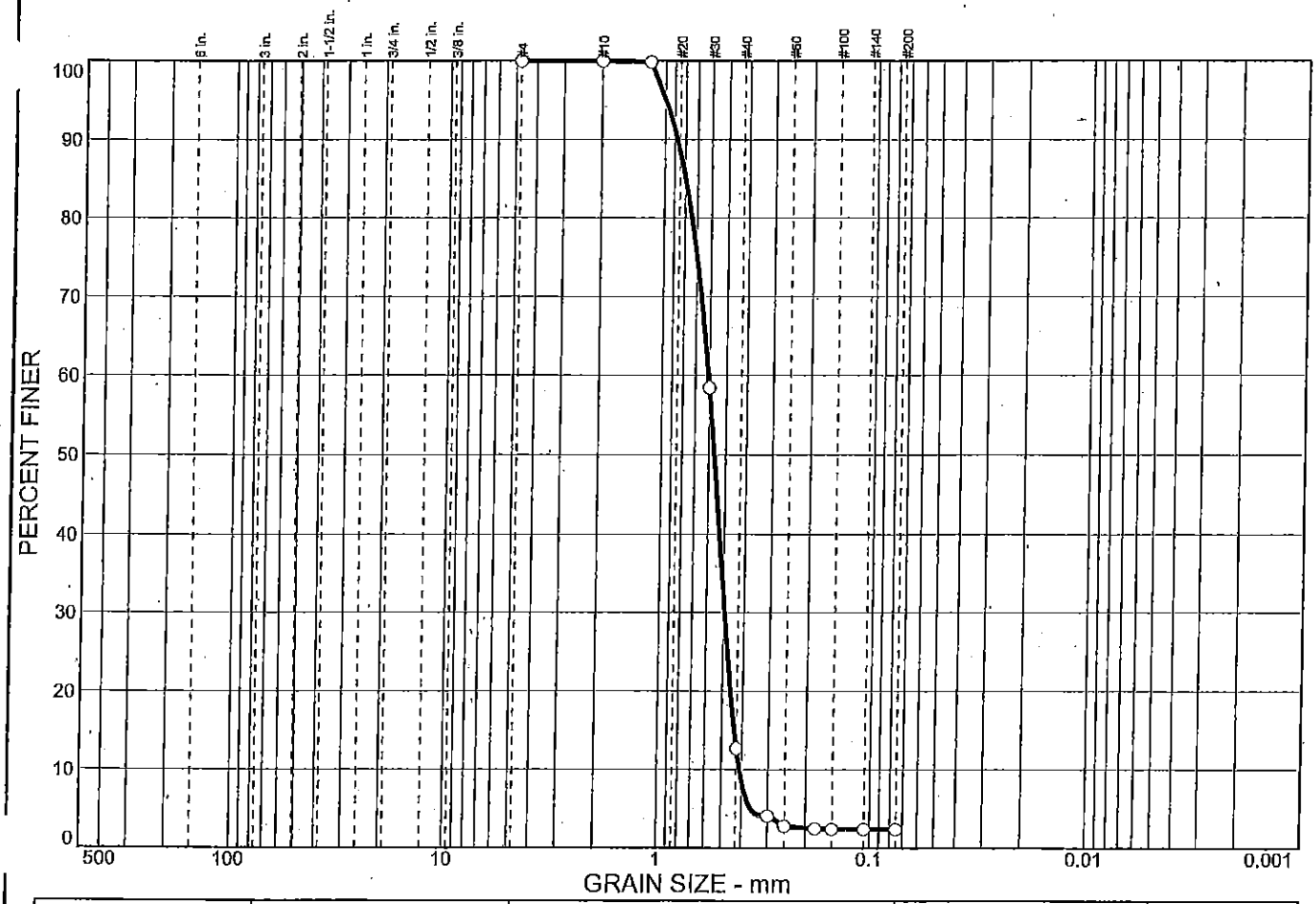
OV-24
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/9/04
Location: OV-20 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 20C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.6	2.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	58.5		
#40	12.6		
#50	4.1		
#60	2.8		
#80	2.5		
#100	2.4		
#140	2.4		
#200	2.4		

* (no specification provided)

Soil Description

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.798 D_{60}= 0.607 D_{50}= 0.564
D_{30}= 0.493 D_{15}= 0.436 D_{10}= 0.411
C_u= 1.48 C_c= 0.97

Classification

USCS= SP AASHTO= A-1-b

Remarks

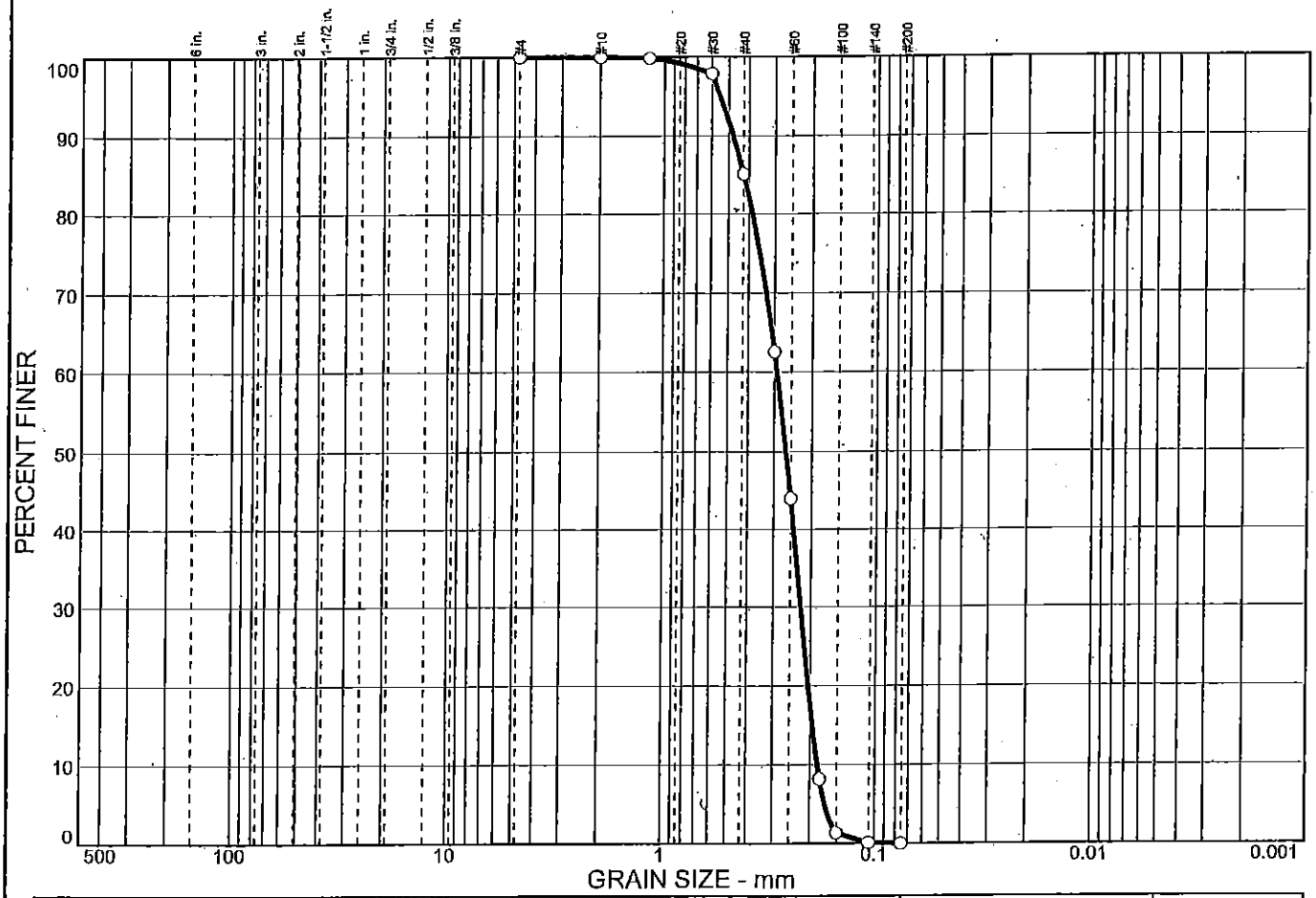
OV-20
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/9/04
Location: OV-20 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 20D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	97.9		
#40	85.1		
#50	62.5		
#60	43.9		
#80	8.2		
#100	1.4		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.424 D_{60}= 0.292 D_{50}= 0.264
D_{30}= 0.223 D_{15}= 0.195 D_{10}= 0.184
C_u= 1.58 C_c= 0.92

Classification

USCS= SP AASHTO= A-3

Remarks

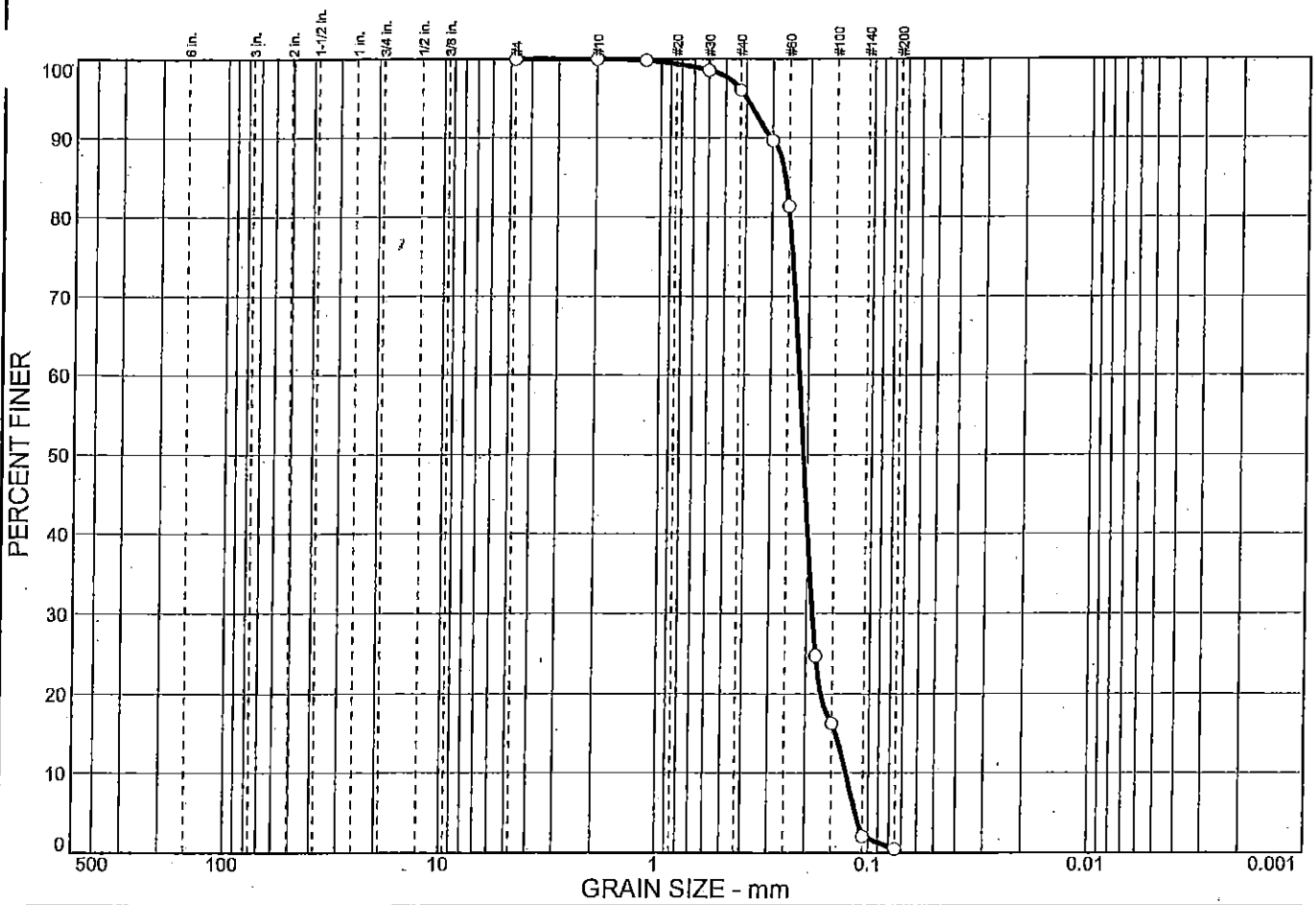
OV-20
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-20 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 20E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.5	0.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	98.6		
#40	96.1		
#50	89.6		
#60	81.3		
#80	24.7		
#100	16.2		
#140	2.1		
#200	0.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.260 D_{60}= 0.220 D_{50}= 0.209
D_{30}= 0.187 D_{15}= 0.144 D_{10}= 0.128
C_u= 1.72 C_c= 1.25

Classification

USCS= SP AASHTO= A-3

Remarks

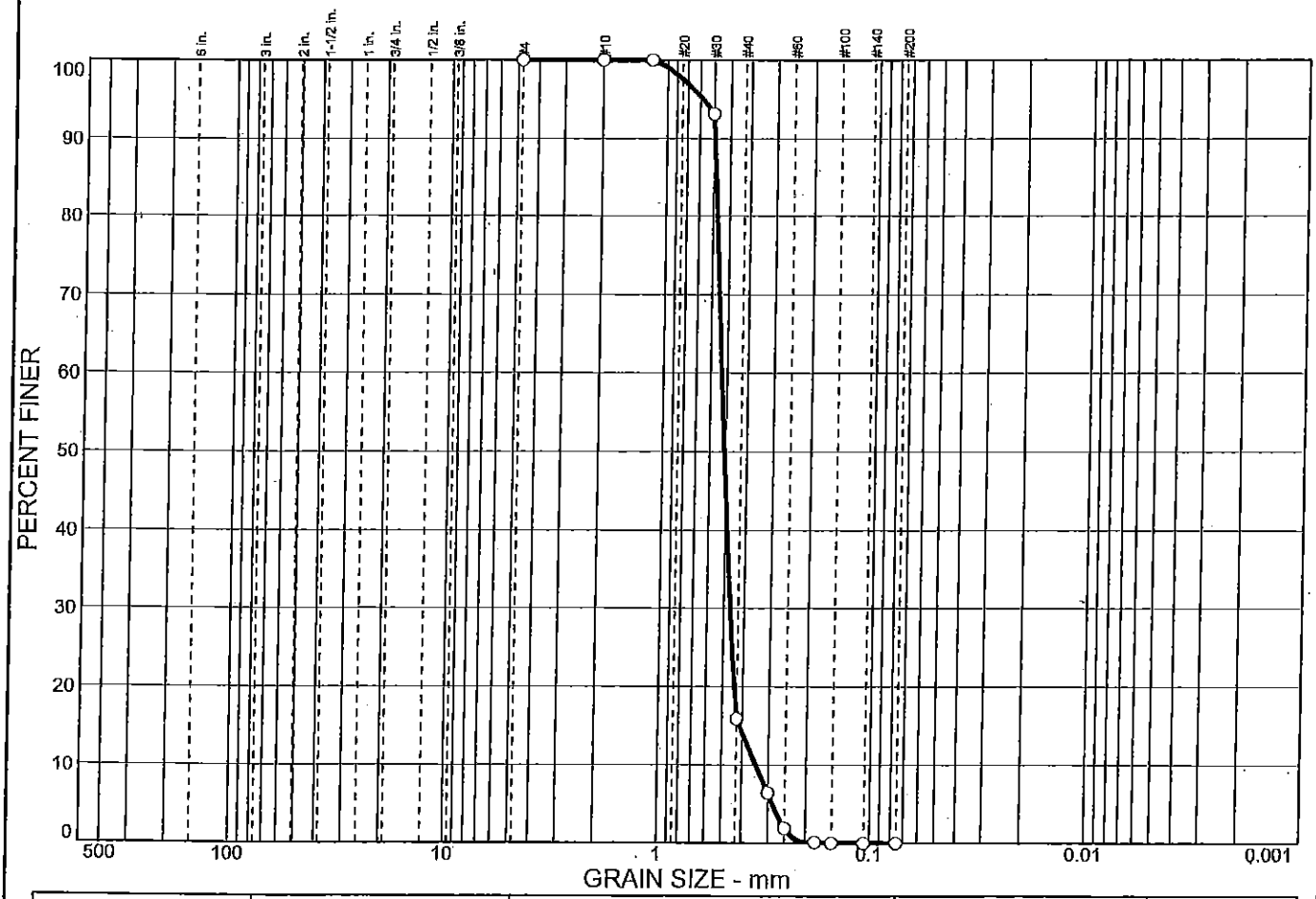
OV-20
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-20 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 20F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	93.1		
#40	15.9		
#50	6.4		
#60	1.9		
#80	0.1		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.583 D_{60}= 0.531 D_{50}= 0.510
D_{30}= 0.465 D_{15}= 0.412 D_{10}= 0.344
C_u= 1.54 C_c= 1.19

Classification

USCS= SP AASHTO= A-1-b

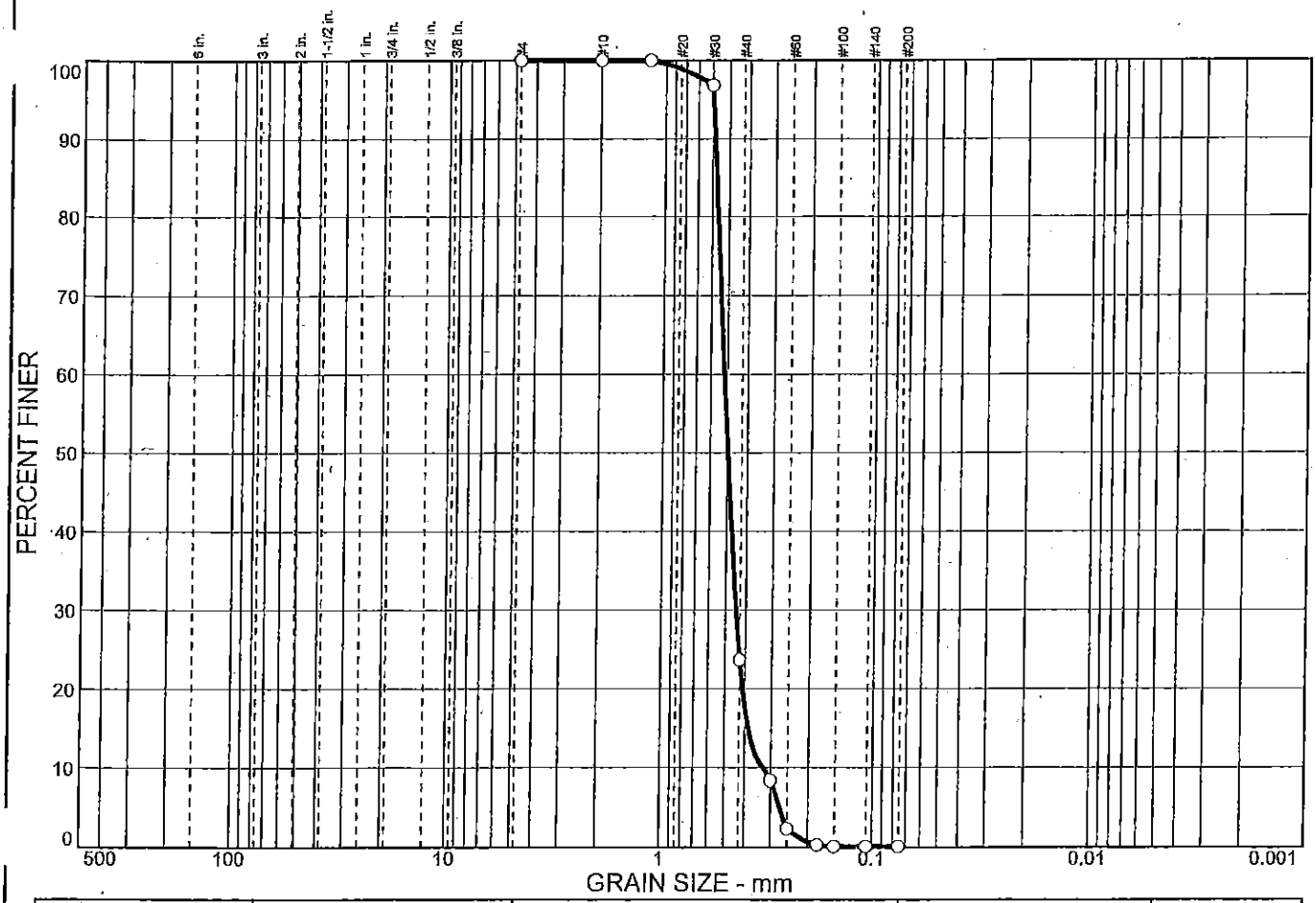
Remarks

Sample No.: A **Source of Sample:** **Date:** 3/25/04
Location: OV-21 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 21A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	96.9		
#40	23.7		
#50	8.4		
#60	2.4		
#80	0.3		
#100	0.1		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.573 D_{60}= 0.517 D_{50}= 0.495
D_{30}= 0.445 D_{15}= 0.385 D_{10}= 0.327
C_u= 1.58 C_c= 1.17

Classification

USCS= SP AASHTO= A-1-b

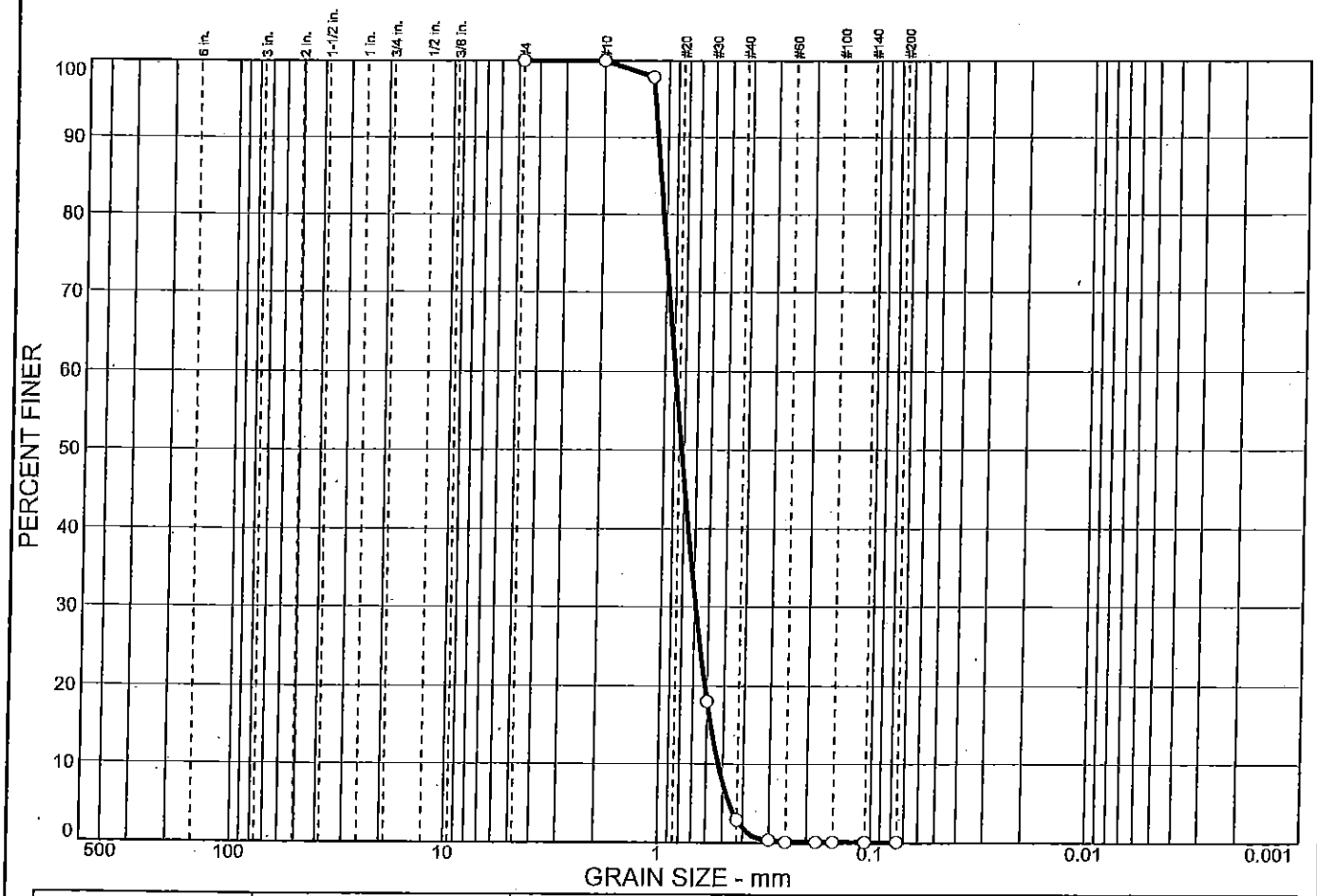
Remarks

Sample No.: B **Source of Sample:** **Date:** 3/25/04
Location: OV-21 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 21B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	97.9		
#30	18.0		
#40	2.9		
#50	0.4		
#60	0.1		
#80	0.1		
#100	0.1		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.08 D_{60}= 0.895 D_{50}= 0.826
D_{30}= 0.690 D_{15}= 0.574 D_{10}= 0.526
C_u= 1.70 C_c= 1.01

Classification

USCS= SP AASHTO= A-1-b

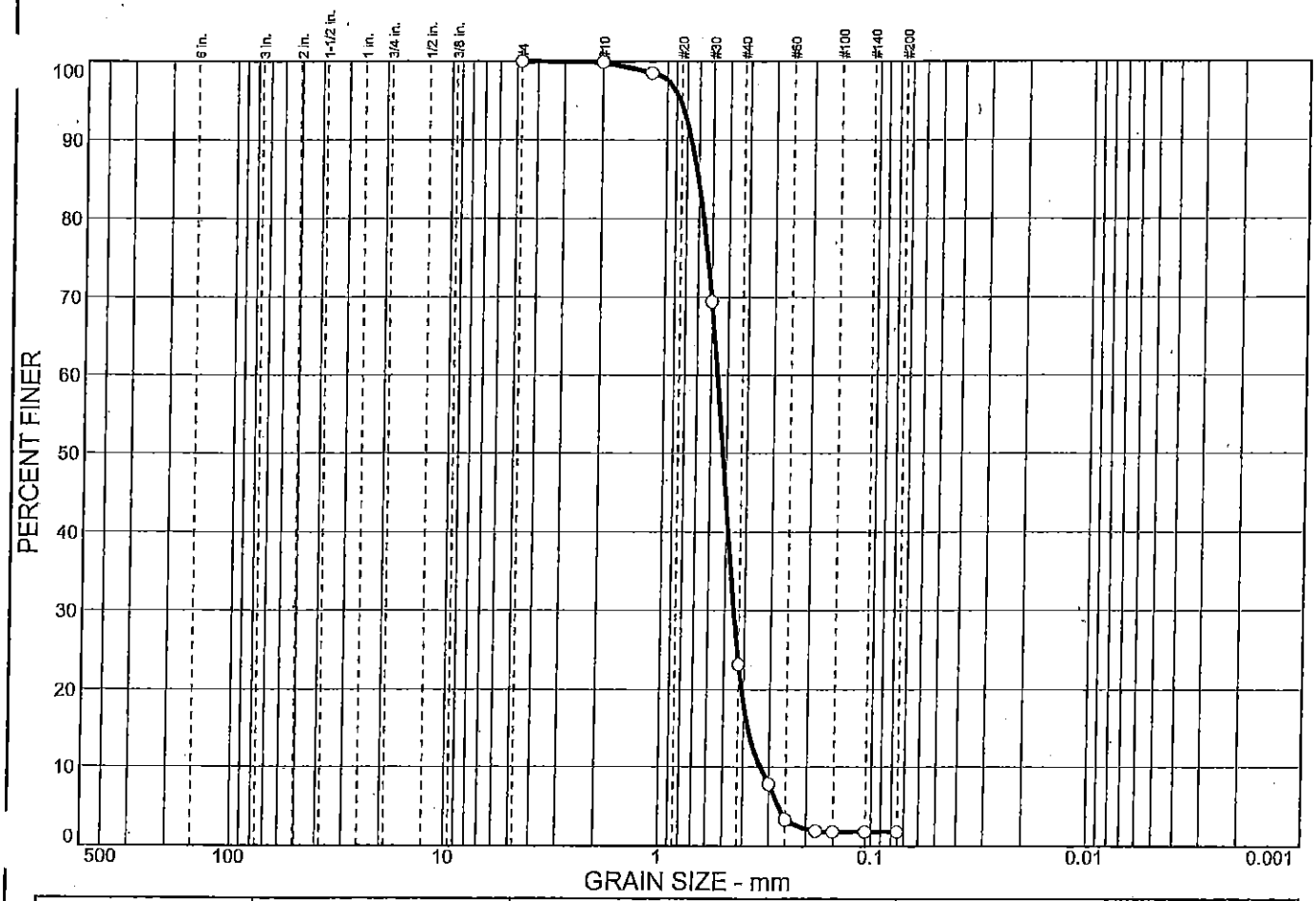
Remarks

Sample No.: C **Source of Sample:** **Date:** 3/25/04
Location: OV-21 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 21C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	98.2	1.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	98.5		
#30	69.4		
#40	23.2		
#50	7.8		
#60	3.3		
#80	1.9		
#100	1.8		
#140	1.8		
#200	1.8		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.706 D_{60}= 0.559 D_{50}= 0.522
D_{30}= 0.452 D_{15}= 0.380 D_{10}= 0.330
C_u= 1.69 C_c= 1.11

Classification

USCS= SP AASHTO= A-1-b

Remarks

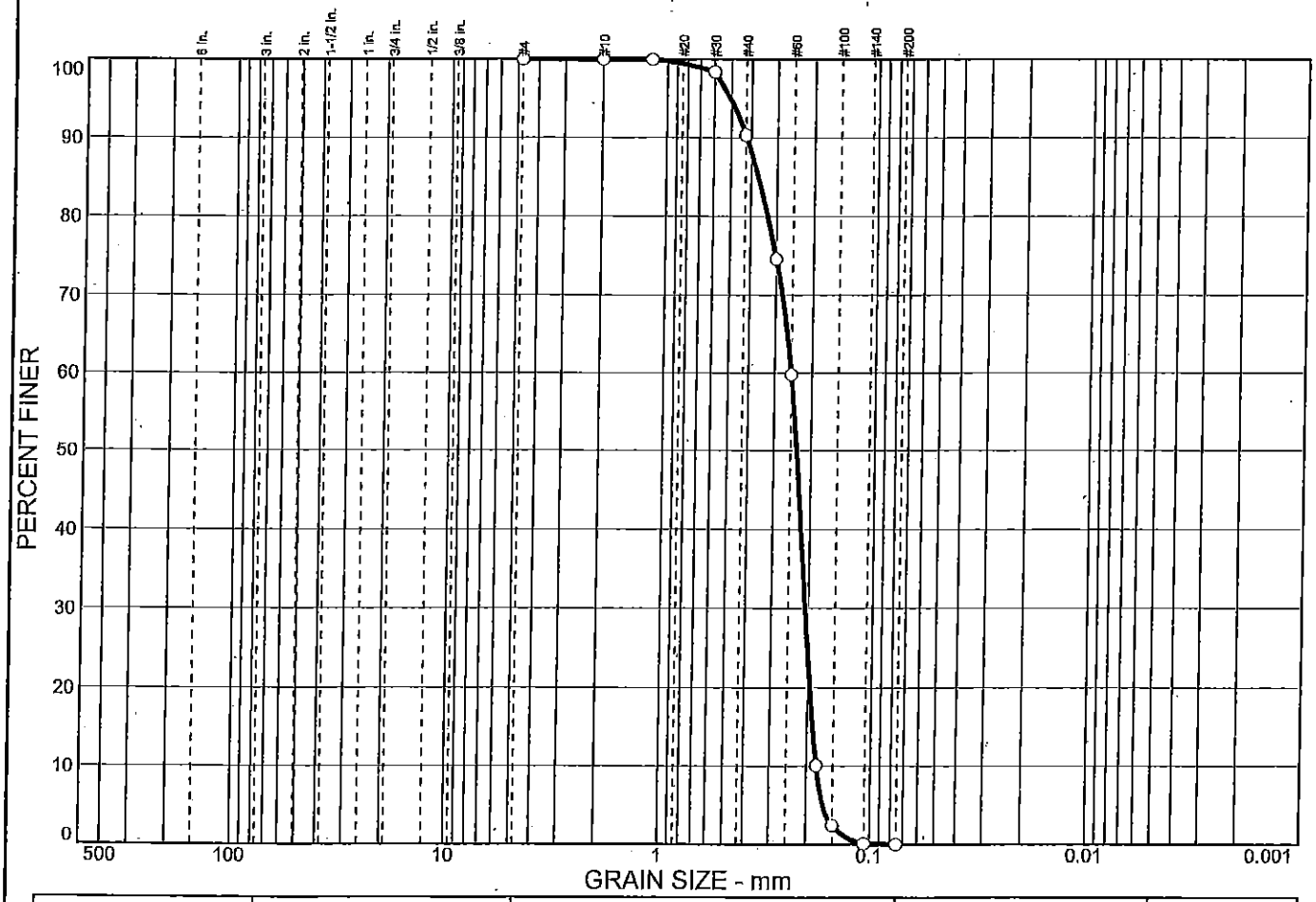
Sample No.: D **Source of Sample:** **Date:** 3/25/04
Location: OV-21 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G **Figure** 21D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	98.4		
#40	90.3		
#50	74.6		
#60	59.8		
#80	10.1		
#100	2.5		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.369 D_{60}= 0.250 D_{50}= 0.233
D_{30}= 0.208 D_{15}= 0.188 D_{10}= 0.180
C_u= 1.39 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

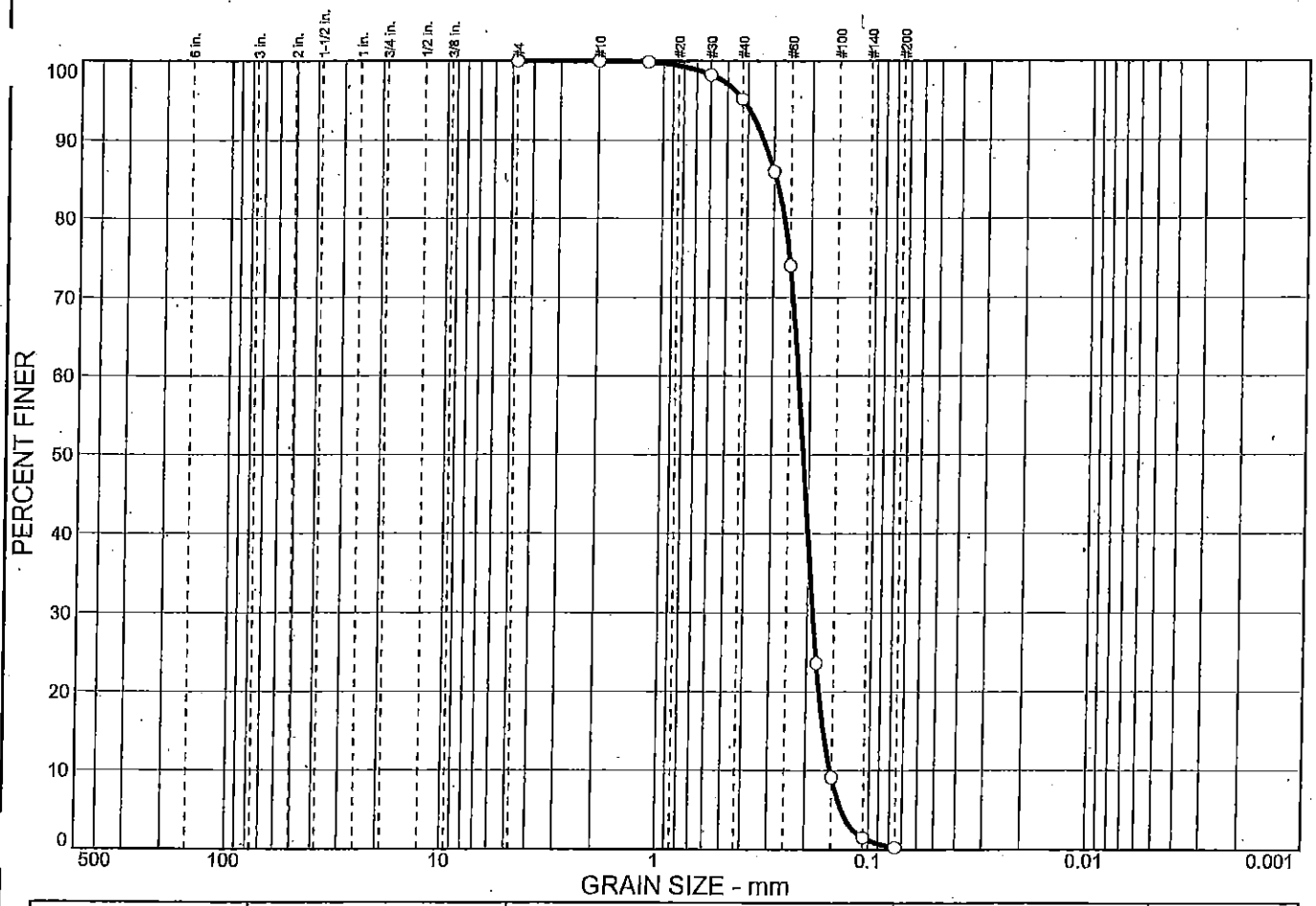
OV-21
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-21 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 21E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	98.3		
#40	95.2		
#50	85.9		
#60	74.1		
#80	23.6		
#100	9.1		
#140	1.6		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.293 D_{60}= 0.226 D_{50}= 0.213
D_{30}= 0.189 D_{15}= 0.165 D_{10}= 0.153
C_u= 1.48 C_c= 1.03

Classification

USCS= SP AASHTO= A-3

Remarks

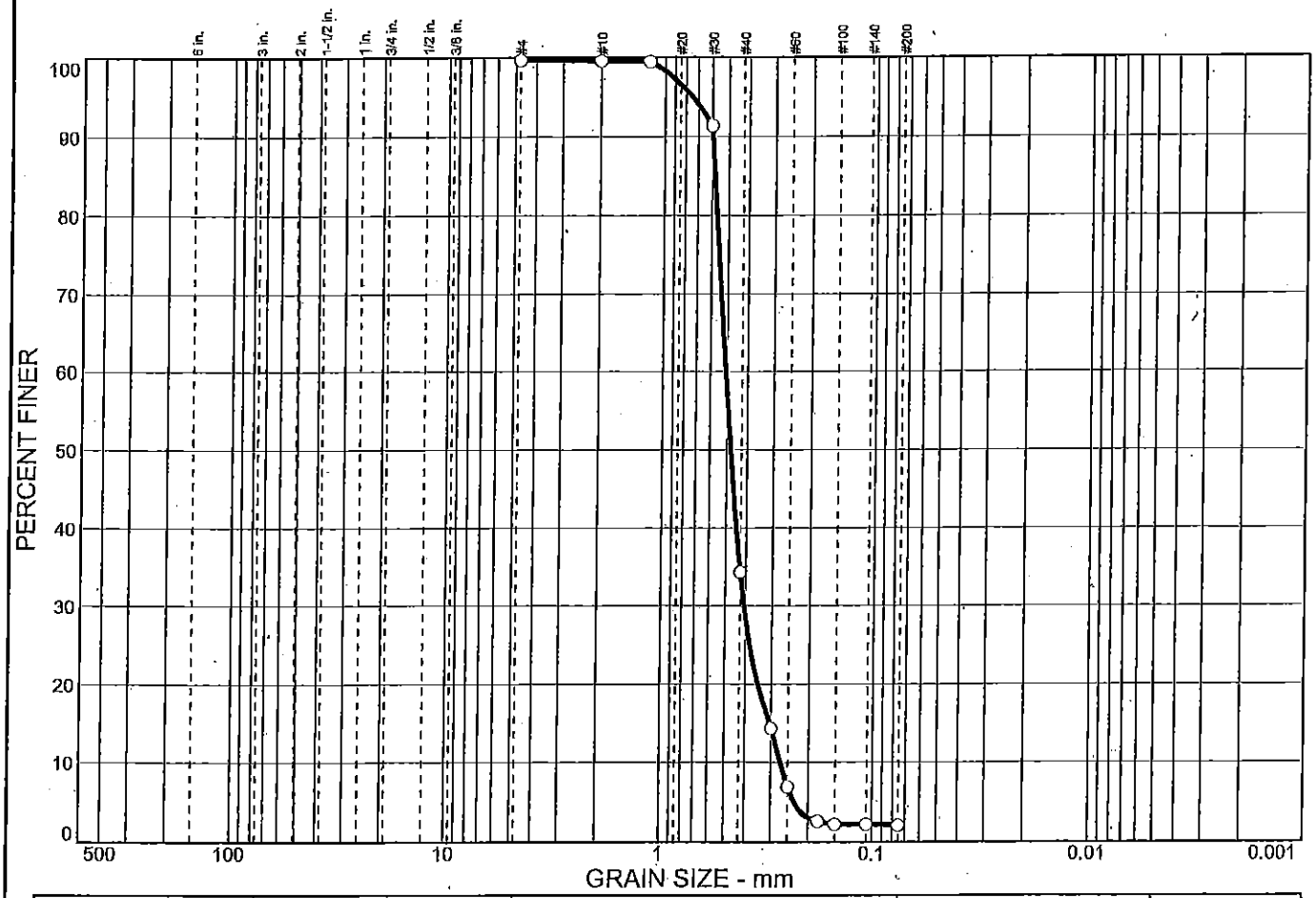
OV-21
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-21 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 21F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		97.6	2.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.7		
#10	99.6		
#16	99.5		
#30	91.3		
#40	34.3		
#50	14.3		
#60	6.9		
#80	2.6		
#100	2.2		
#140	2.2		
#200	2.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NA LL= NA PI= NA

Coefficients

D_{85}= 0.581 D_{60}= 0.507 D_{50}= 0.477
D_{30}= 0.407 D_{15}= 0.305 D_{10}= 0.271
C_u= 1.87 C_c= 1.20

Classification

USCS= SP AASHTO= A-1-b

Remarks

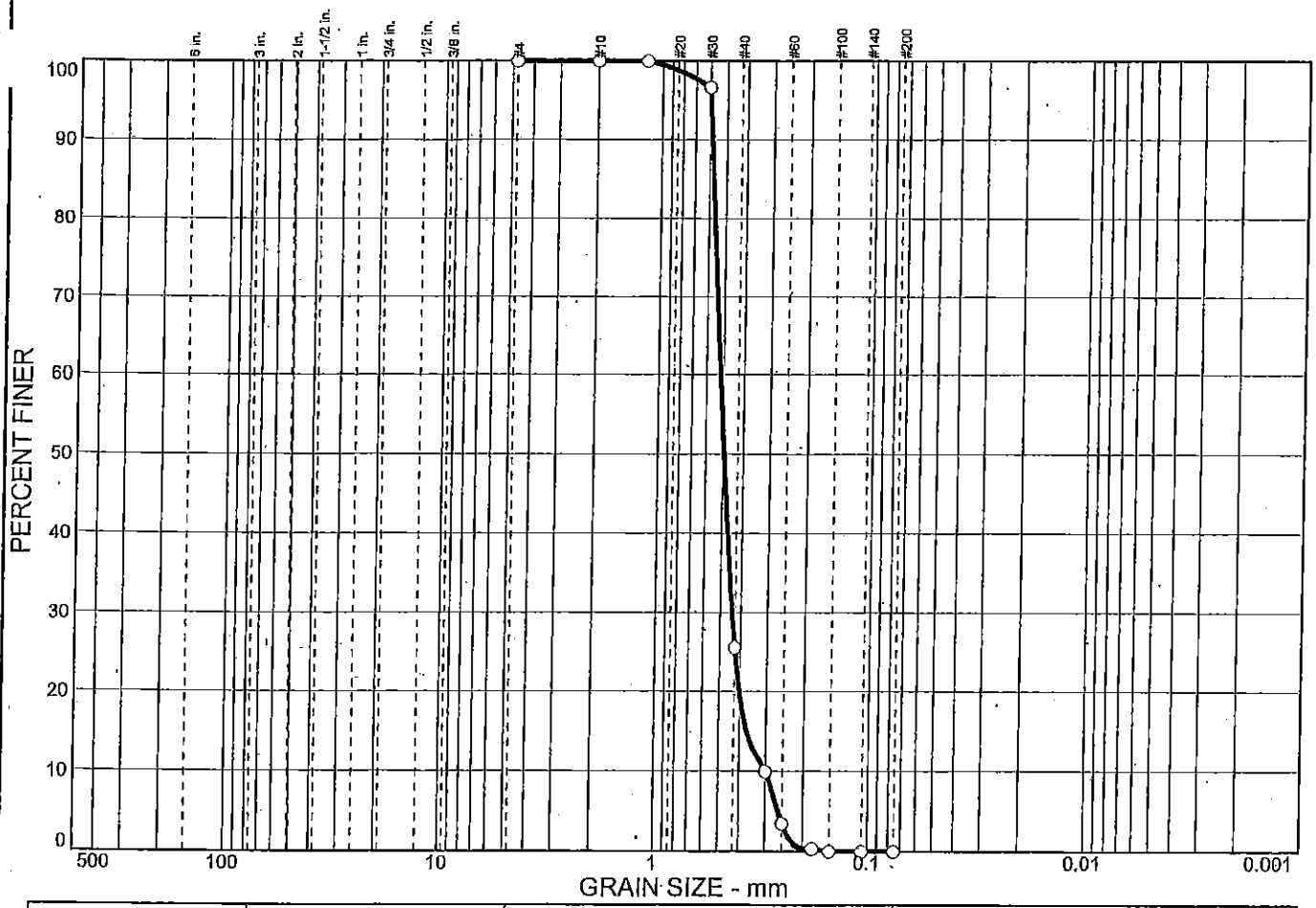
OV-22
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/3/04
Location: OV-22 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 22A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	96.6		
#40	25.5		
#50	9.9		
#60	3.4		
#80	0.3		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.573 D_{60}= 0.515 D_{50}= 0.492
D_{30}= 0.440 D_{15}= 0.370 D_{10}= 0.301
C_u= 1.71 C_c= 1.25

Classification

USCS= SP AASHTO= A-1-b

Remarks

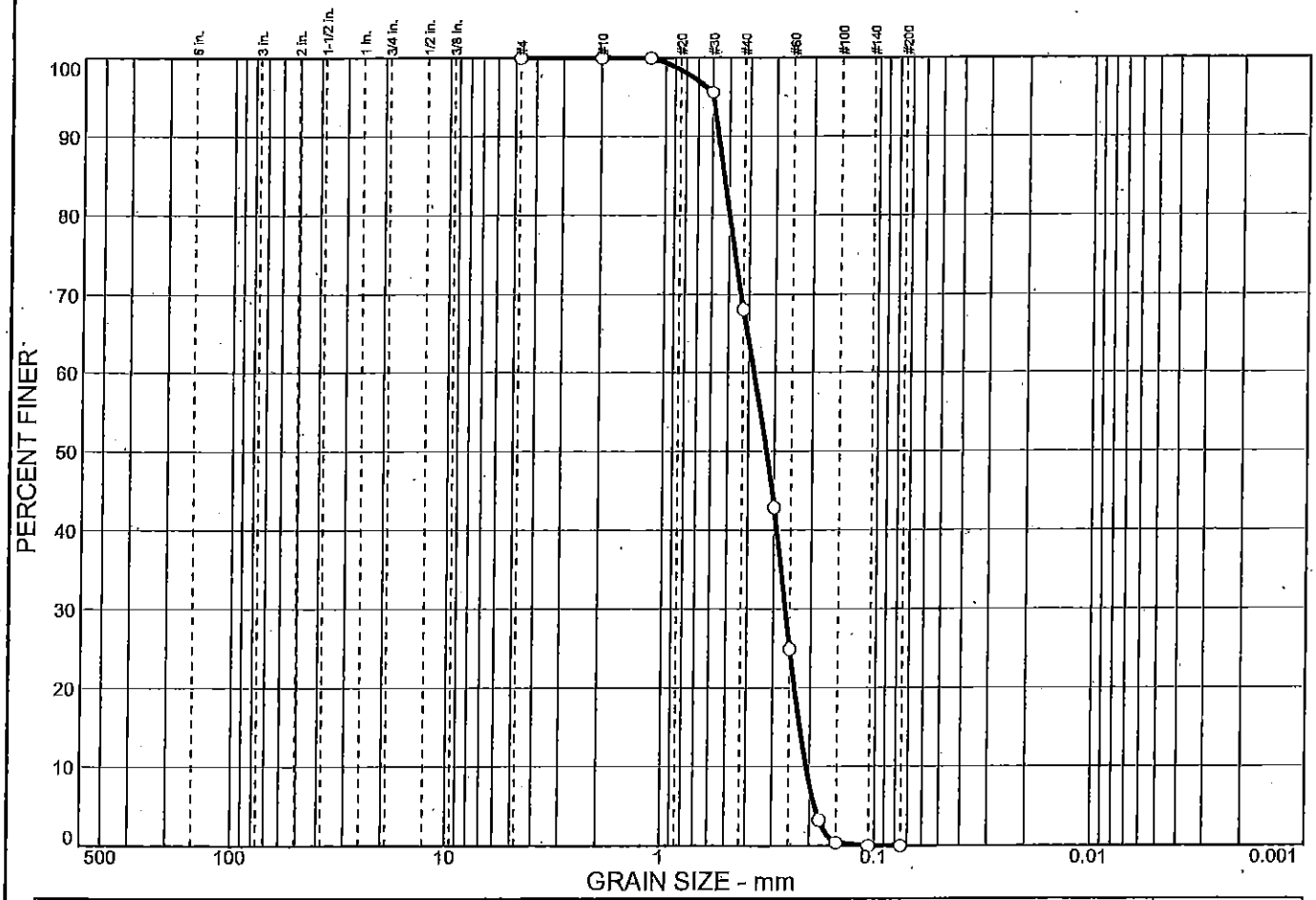
OV-22
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/3/04
Location: OV-22 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 22B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	95.6		
#40	68.1		
#50	42.8		
#60	24.9		
#80	3.3		
#100	0.4		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.528 D_{60}= 0.377 D_{50}= 0.327
D_{30}= 0.263 D_{15}= 0.223 D_{10}= 0.207
C_u= 1.82 C_c= 0.89

Classification

USCS= SP AASHTO= A-3

Remarks

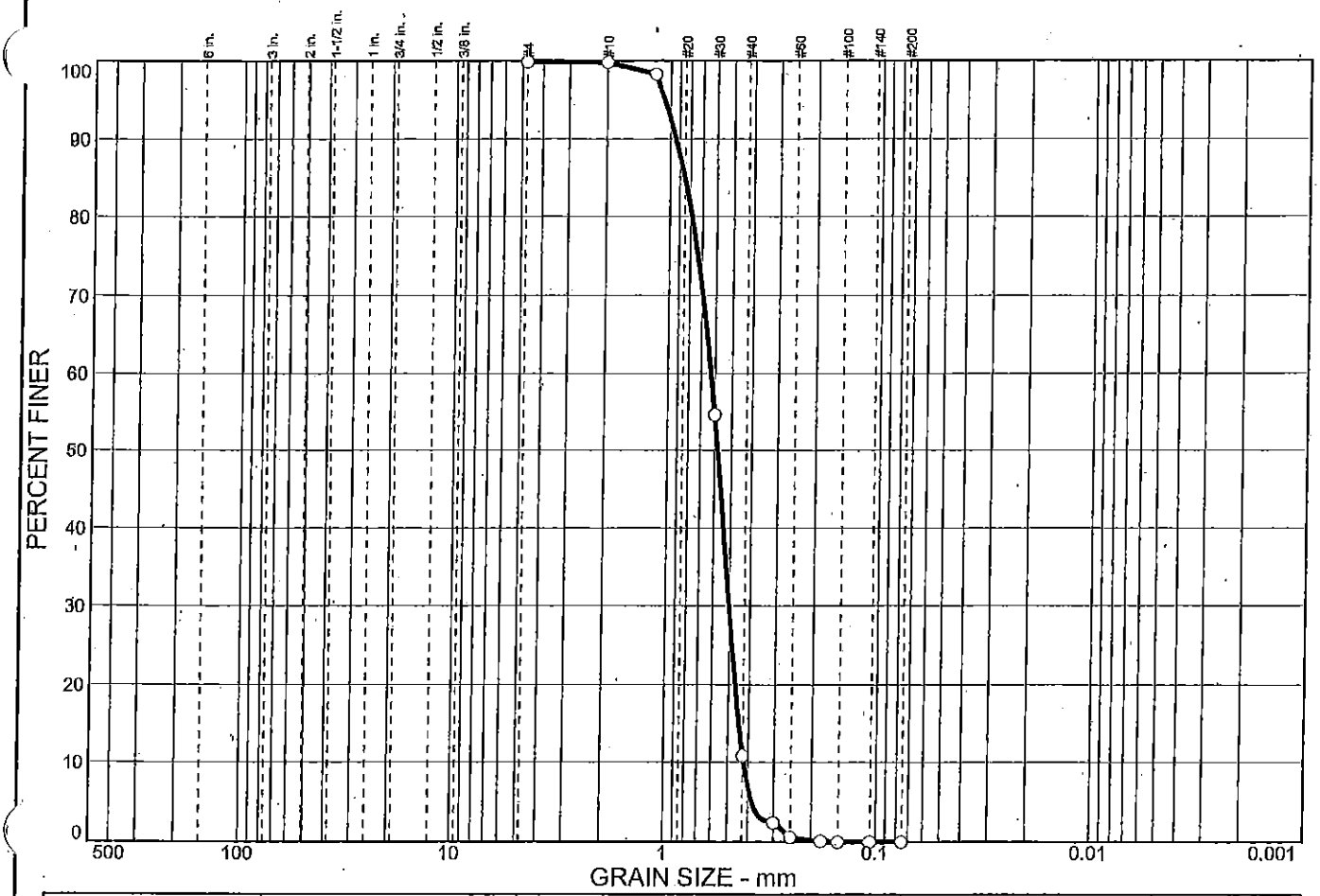
OV-22
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/3/04
Location: OV-22 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 22C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.9	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.8		
#16	98.3		
#30	54.6		
#40	10.8		
#50	2.5		
#60	0.6		
#80	0.1		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.852 D_{60}= 0.627 D_{50}= 0.579
D_{30}= 0.502 D_{15}= 0.445 D_{10}= 0.421
C_u= 1.49 C_c= 0.96

Classification

USCS= SP AASHTO= A-1-b

Remarks

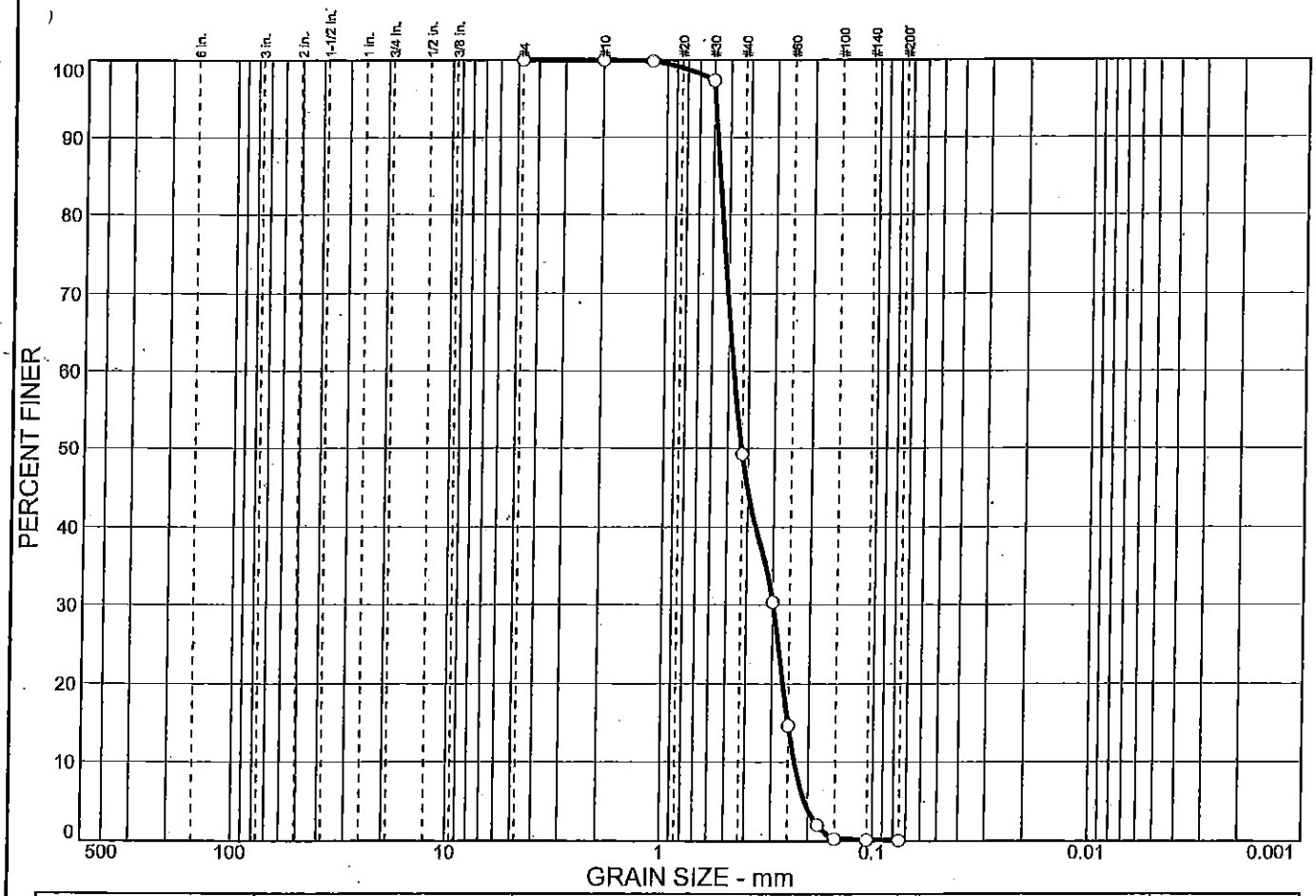
OV-22
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/3/04
Location: OV-22 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 22D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	97.4		
#40	49.2		
#50	30.3		
#60	14.6		
#80	2.1		
#100	0.3		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.557 D_{60}= 0.470 D_{50}= 0.429
D_{30}= 0.299 D_{15}= 0.251 D_{10}= 0.233
C_u= 2.01 C_c= 0.81

Classification

USCS= SP AASHTO= A-1-b

Remarks

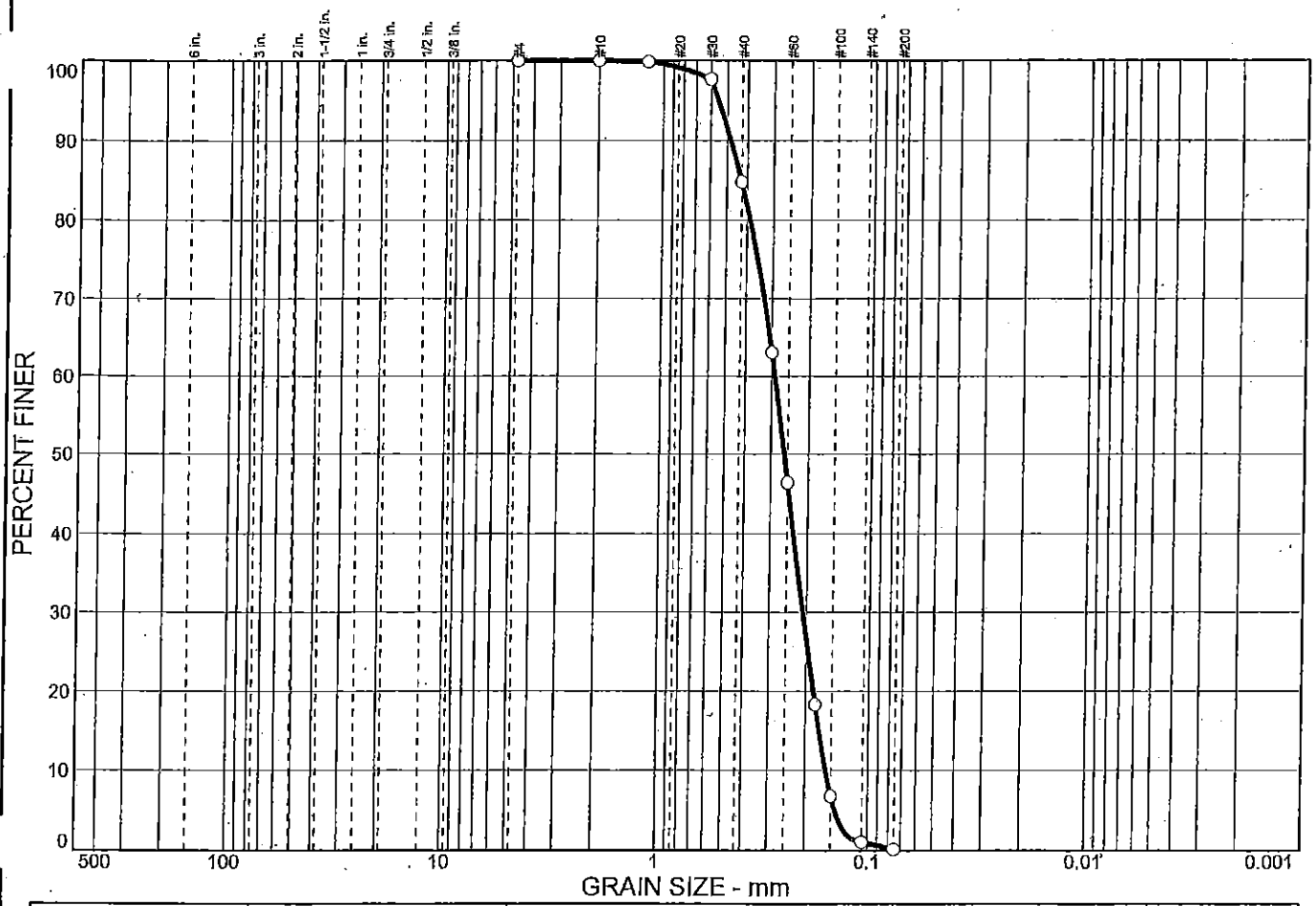
OV-22
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-22 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 22E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	97.7		
#40	84.8		
#50	63.0		
#60	46.4		
#80	18.3		
#100	6.8		
#140	1.1		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.427 D_{60}= 0.290 D_{50}= 0.260
D_{30}= 0.208 D_{15}= 0.172 D_{10}= 0.159
C_u= 1.82 C_c= 0.94

Classification

USCS= SP AASHTO= A-3

Remarks

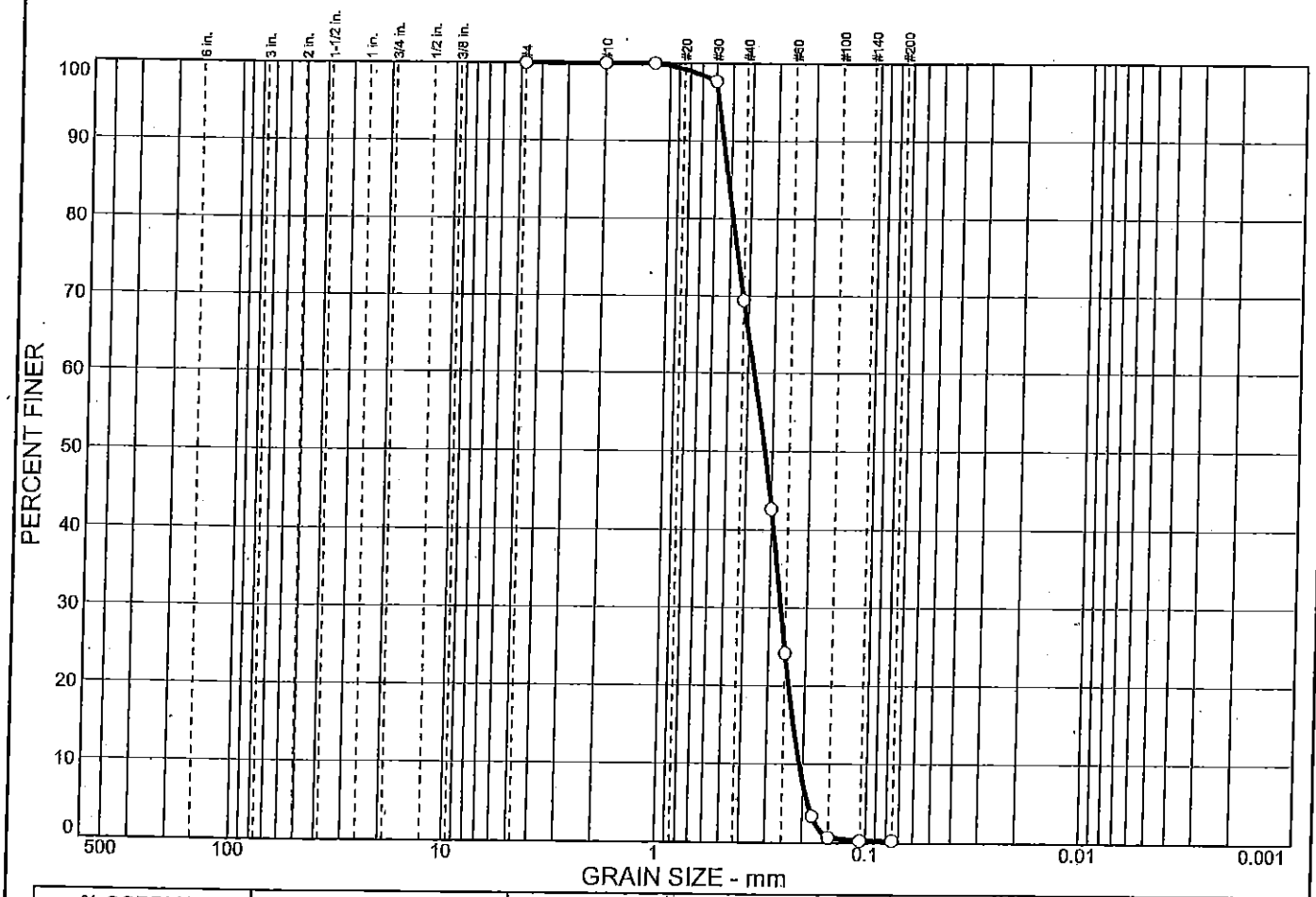
OV-22
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-22 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 22F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	97.7		
#40	69.4		
#50	42.6		
#60	24.2		
#80	3.4		
#100	0.7		
#140	0.3		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.517 D_{60}= 0.373 D_{50}= 0.326
D_{30}= 0.265 D_{15}= 0.224 D_{10}= 0.208
C_u= 1.79 C_c= 0.90

Classification

USCS= SP AASHTO= A-3

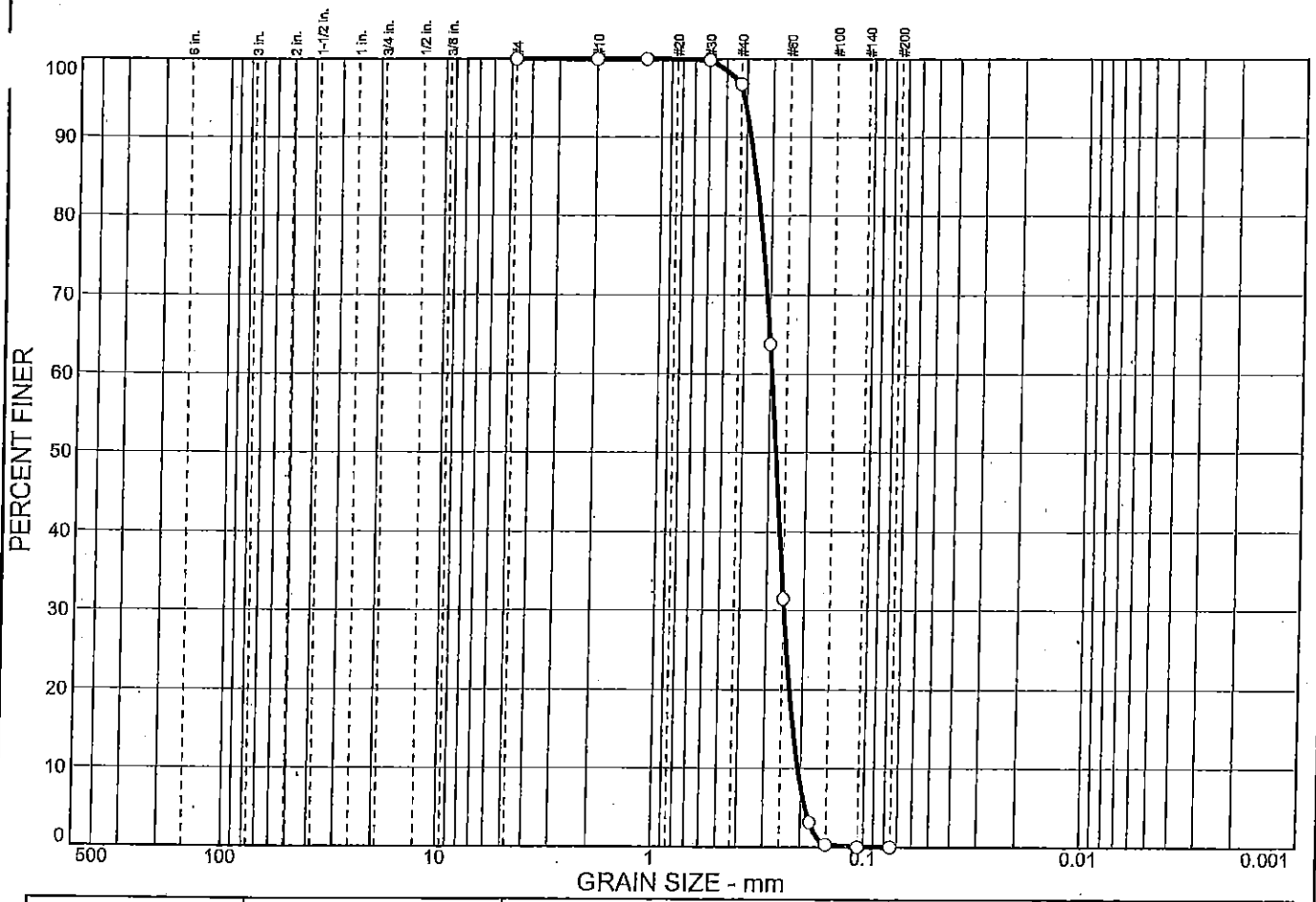
Remarks

Sample No.: A **Source of Sample:** **Date:** 3/25/04
Location: OV-23 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 23A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#40	96.8		
#50	63.8		
#60	31.5		
#80	3.1		
#100	0.3		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.359 D_{60}= 0.293 D_{50}= 0.277
D_{30}= 0.248 D_{15}= 0.219 D_{10}= 0.207
C_u= 1.42 C_c= 1.01

Classification

USCS= SP AASHTO= A-3

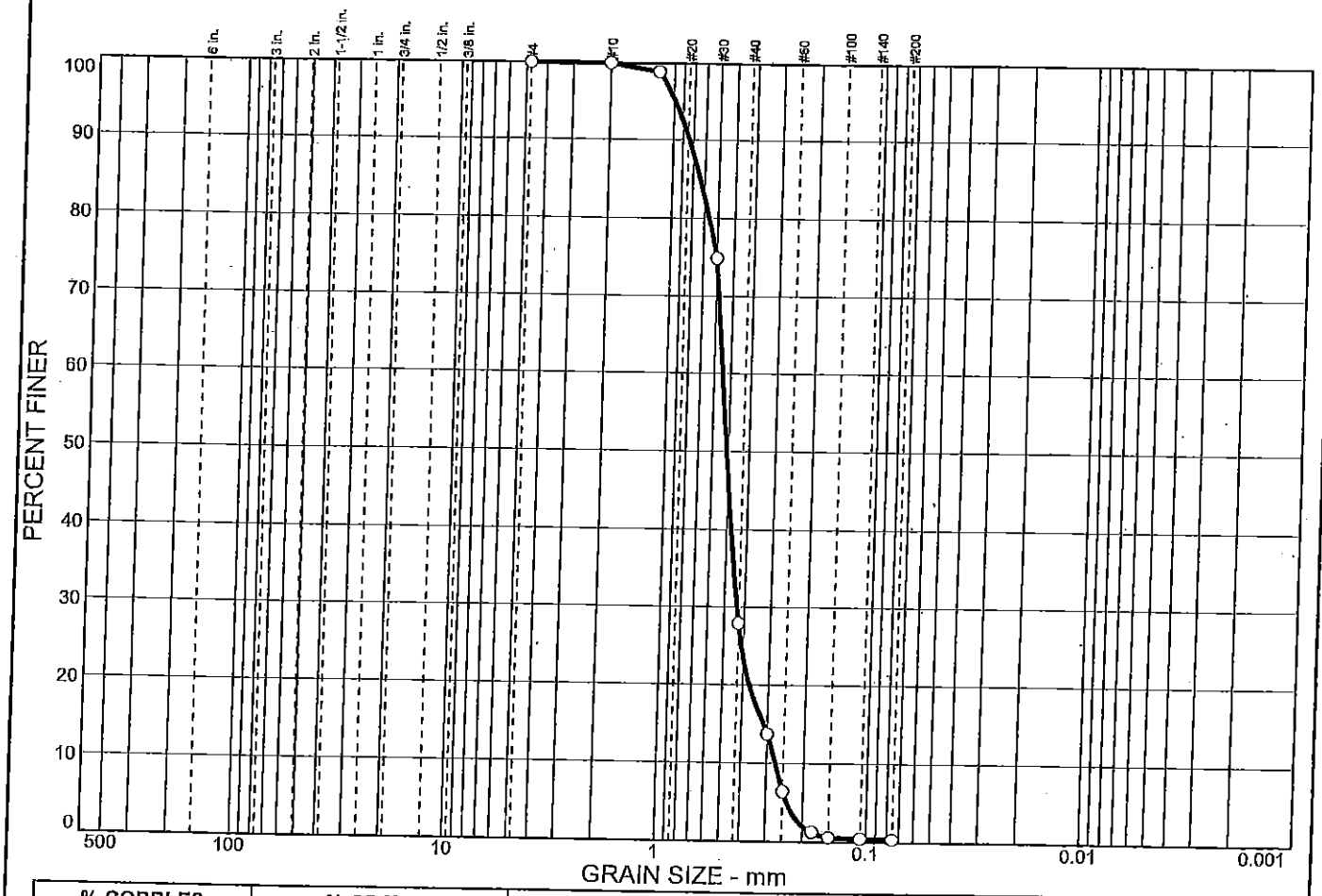
Remarks

Sample No.: B **Source of Sample:** **Date:** 3/25/04
Location: OV-23 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 23B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.6	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	98.9		
#30	74.9		
#40	27.9		
#50	13.7		
#60	6.5		
#80	1.3		
#100	0.6		
#140	0.5		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.739 D_{60}= 0.546 D_{50}= 0.511
D_{30}= 0.435 D_{15}= 0.313 D_{10}= 0.273
C_u= 2.00 C_c= 1.27

Classification

USCS= SP AASHTO= A-1-b

Remarks

Sample No.: C
Location: OV-23

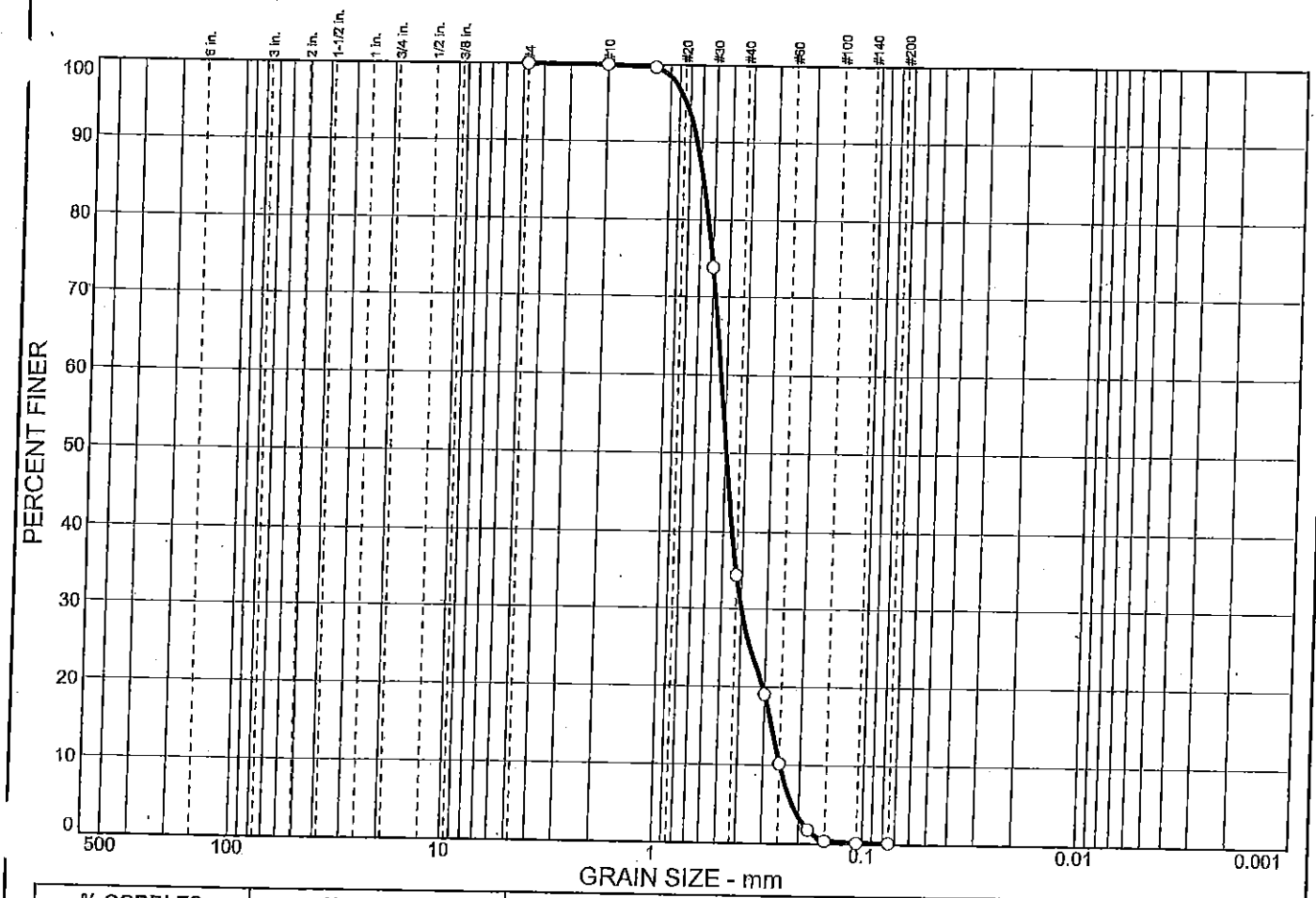
Source of Sample:

Date: 3/25/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 23C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.7		
#30	73.8		
#40	34.4		
#50	19.0		
#60	10.2		
#80	1.8		
#100	0.4		
#140	0.2		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.682 D_{60}= 0.533 D_{50}= 0.492
D_{30}= 0.399 D_{15}= 0.276 D_{10}= 0.249
C_u= 2.14 C_c= 1.20

Classification

USCS= SP AASHTO= A-1-b

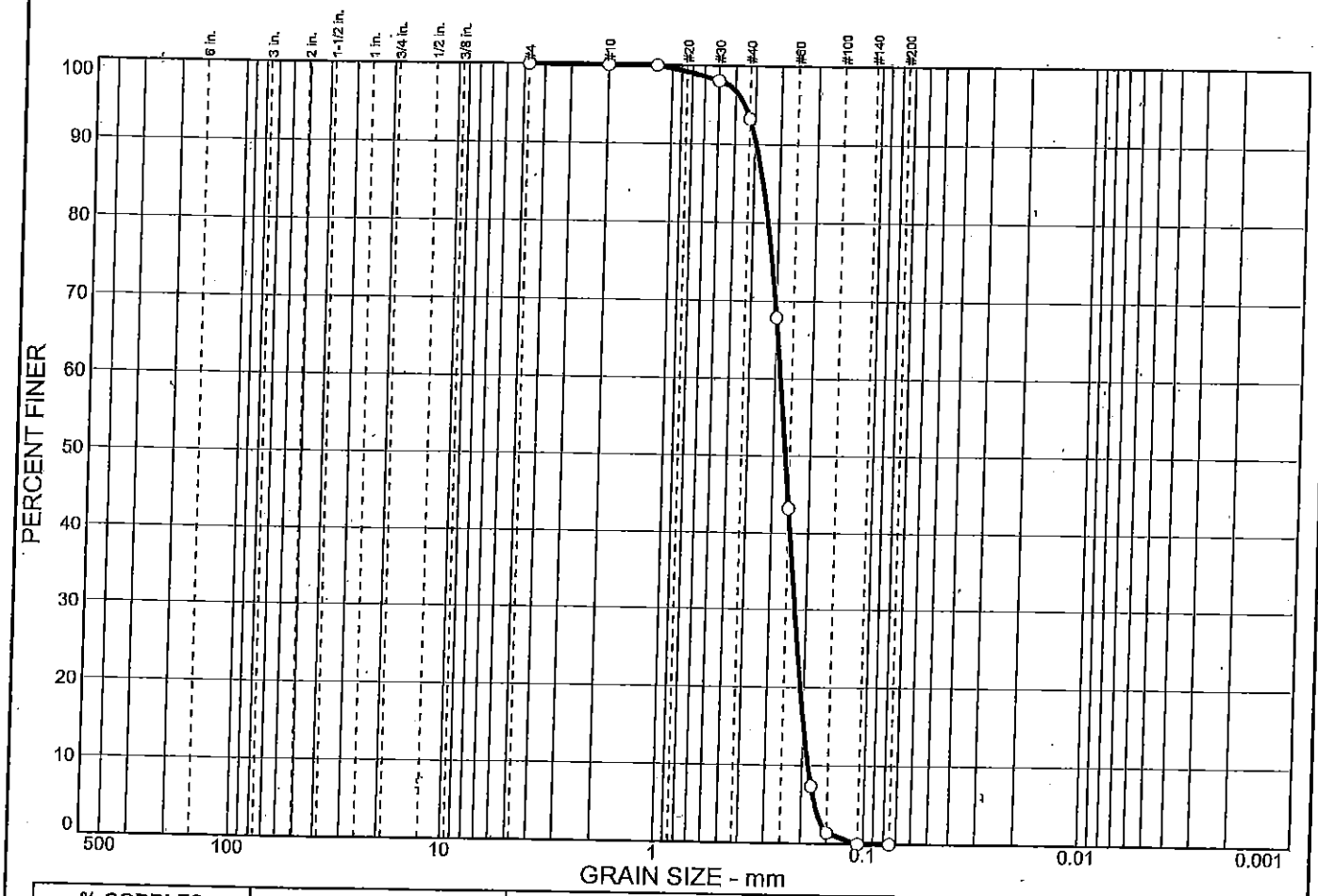
Remarks

Sample No.: D **Source of Sample:** **Date:** 3/25/04
Location: OV-23 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 23D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	98.1		
#40	93.2		
#50	67.9		
#60	43.2		
#80	7.3		
#100	1.4		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.361 D_{60}= 0.282 D_{50}= 0.262
D_{30}= 0.227 D_{15}= 0.199 D_{10}= 0.187
C_u= 1.51 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

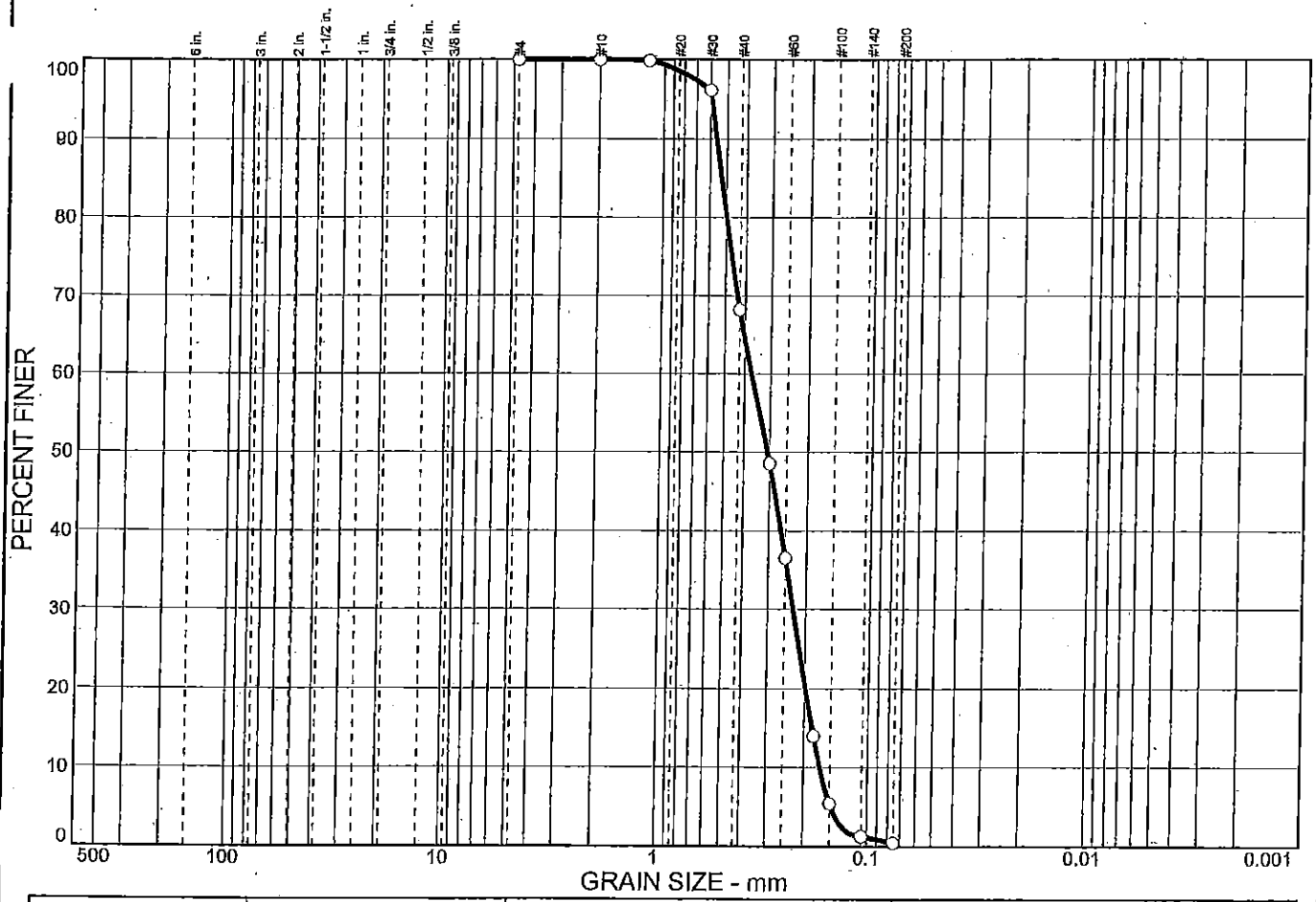
OV-23
Sample E

Sample No.: E
Location: OV-23
Source of Sample:
Date: 6/2/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 23E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.5	0.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	96.2		
#40	68.2		
#50	48.5		
#60	36.5		
#80	13.9		
#100	5.4		
#140	1.3		
#200	0.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.528 D_{60}= 0.370 D_{50}= 0.308
D_{30}= 0.228 D_{15}= 0.183 D_{10}= 0.168
C_u= 2.21 C_c= 0.84

Classification

USCS= SP AASHTO= A-3

Remarks

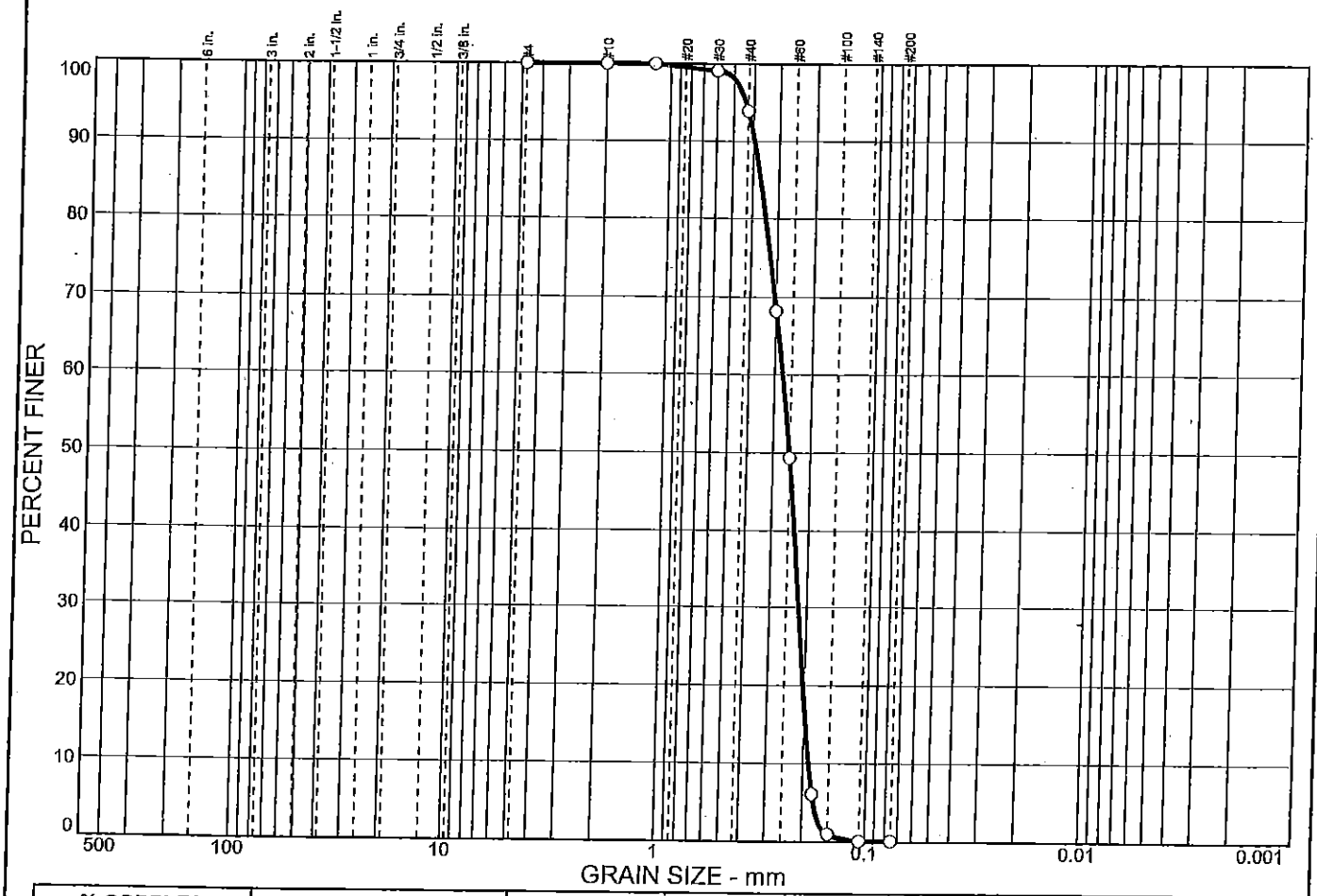
OV-23
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-23 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 23F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.1		
#40	93.8		
#50	68.2		
#60	49.3		
#80	6.1		
#100	1.0		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.367 D_{60}= 0.275 D_{50}= 0.251
D_{30}= 0.219 D_{15}= 0.197 D_{10}= 0.188
C_u= 1.46 C_c= 0.93

Classification

USCS= SP AASHTO= A-3

Remarks

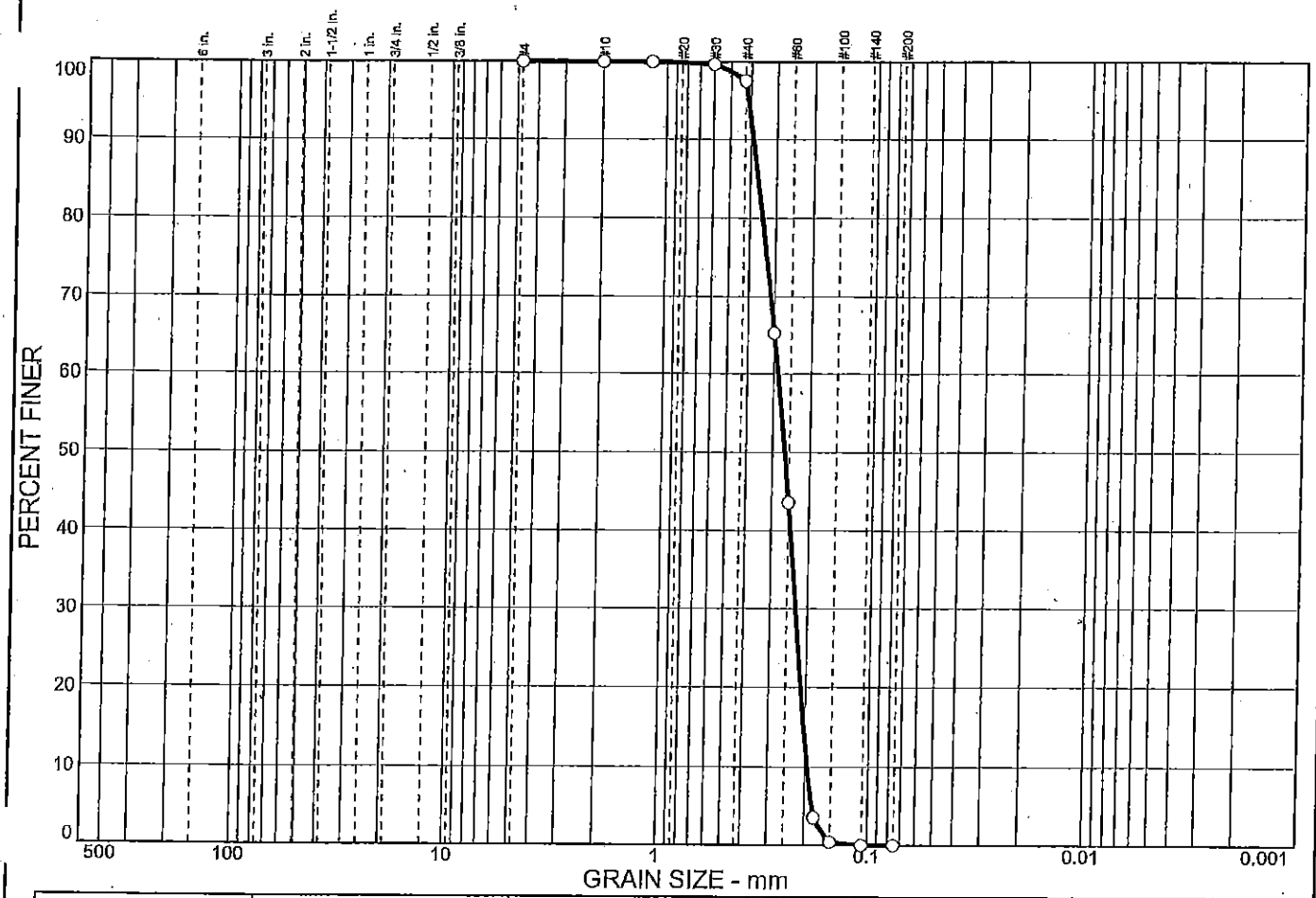
OV-24
Sample Obtained 4/2/04

Sample No.: A **Source of Sample:** **Date:** 4/2/04
Location: OV-24 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 24A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.7		
#40	97.6		
#50	65.3		
#60	43.5		
#80	3.5		
#100	0.4		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.368 D_{60}= 0.286 D_{50}= 0.263
D_{30}= 0.227 D_{15}= 0.204 D_{10}= 0.195
C_u= 1.47 C_c= 0.93

Classification

USCS= SP AASHTO= A-3

Remarks

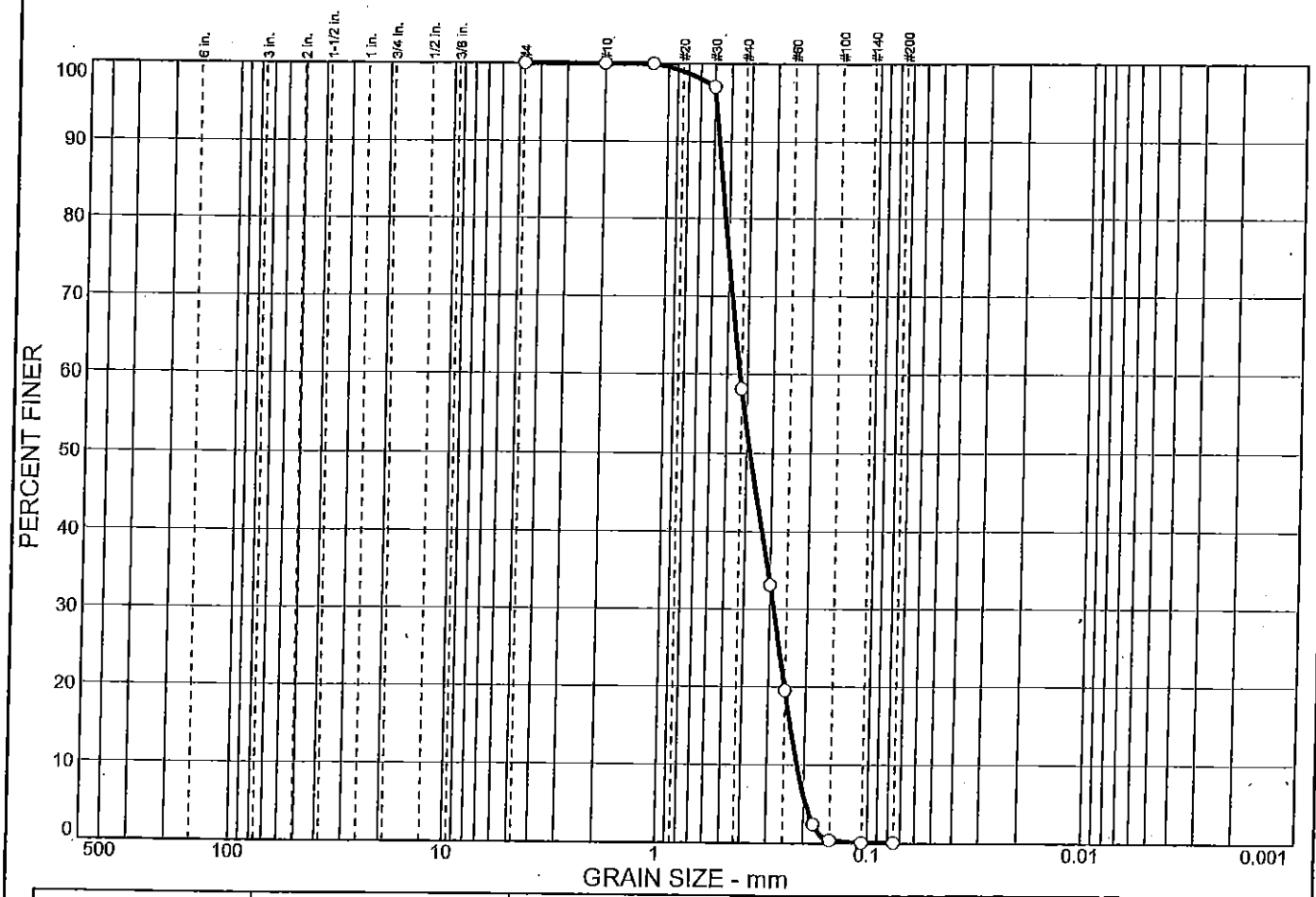
OV-24
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/2/04
Location: OV-24 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 24B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	97.1		
#40	58.2		
#50	33.1		
#60	19.5		
#80	2.4		
#100	0.4		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.544 D_{60}= 0.433 D_{50}= 0.384
D_{30}= 0.288 D_{15}= 0.234 D_{10}= 0.216
C_u= 2.01 C_c= 0.88

Classification

USCS= SP AASHTO= A-3

Remarks

OV-24
Sample C

Sample No.: C
Location: OV-24

Source of Sample:

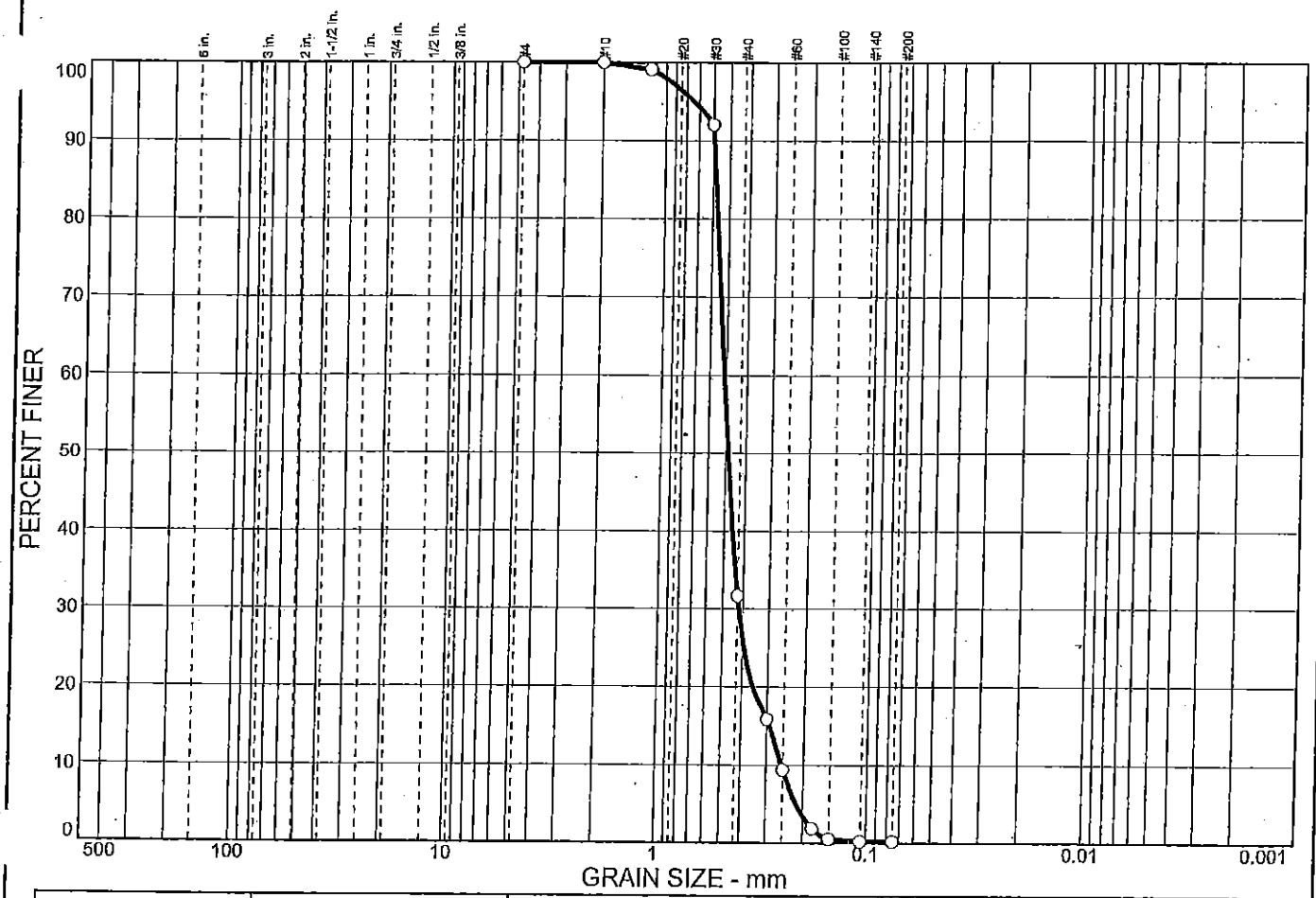
Date: 4/2/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G **Figure** 24C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.1		
#30	92.0		
#40	31.6		
#50	15.8		
#60	9.4		
#80	1.8		
#100	0.5		
#140	0.2		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.580 D_{60}= 0.512 D_{50}= 0.484
D_{30}= 0.418 D_{15}= 0.292 D_{10}= 0.254
C_u= 2.01 C_c= 1.34

Classification

USCS= SP AASHTO= A-1-b

Remarks

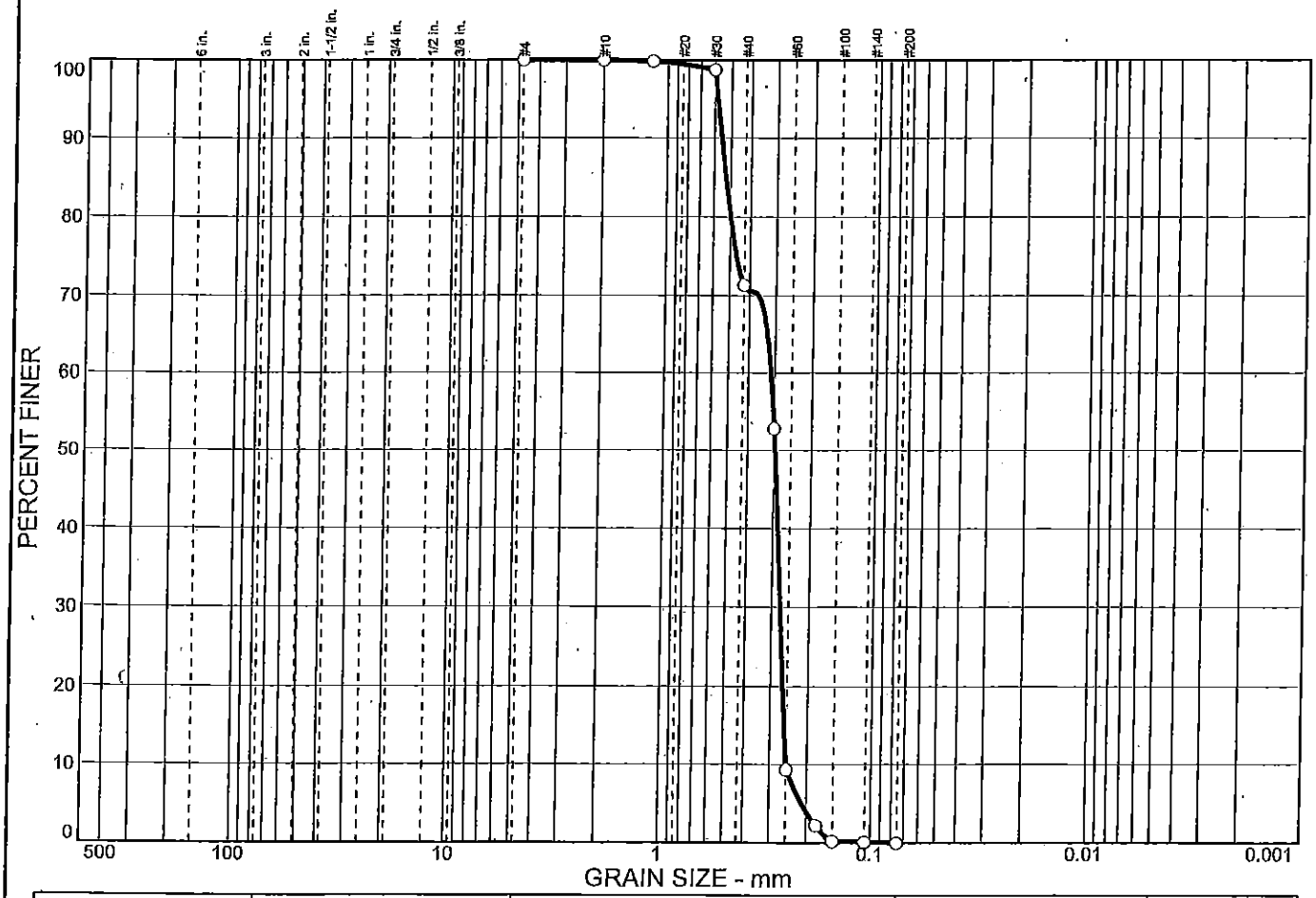
OV-24
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/2/04
Location: OV-24 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 24D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	98.8		
#40	71.3		
#50	52.8		
#60	9.3		
#80	2.2		
#100	0.2		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.525 D_{60}= 0.313 D_{50}= 0.296
D_{30}= 0.273 D_{15}= 0.257 D_{10}= 0.251
C_u= 1.25 C_c= 0.95

Classification

USCS= SP AASHTO= A-3

Remarks

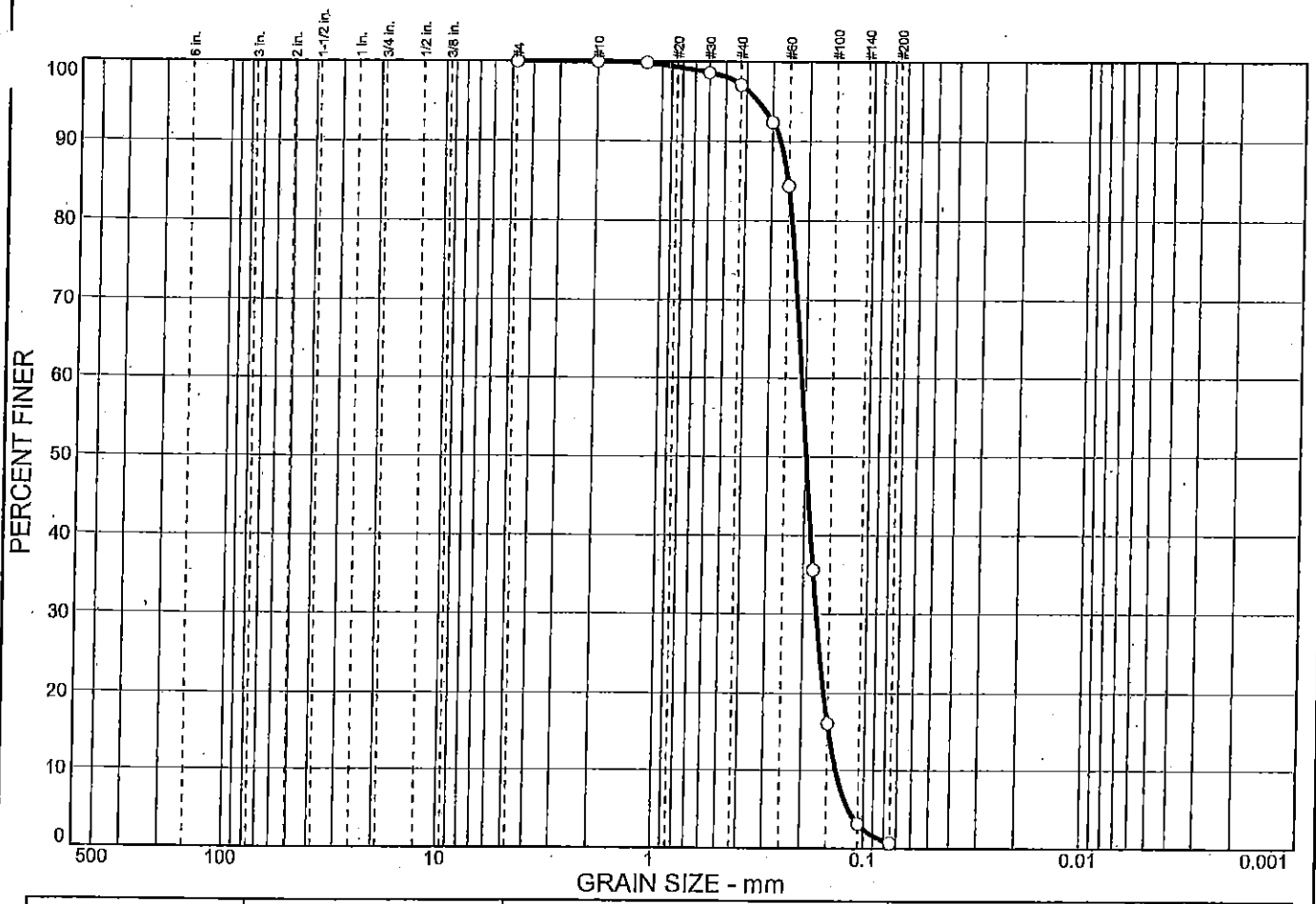
OV-24
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/3/04
Location: OV-24 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 24E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.3	0.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	98.6		
#40	97.1		
#50	92.3		
#60	84.3		
#80	35.6		
#100	16.0		
#140	3.1		
#200	0.7		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.252 D_{60}= 0.209 D_{50}= 0.197
D_{30}= 0.173 D_{15}= 0.148 D_{10}= 0.136
C_u= 1.54 C_c= 1.04

Classification

USCS= SP AASHTO= A-3

Remarks

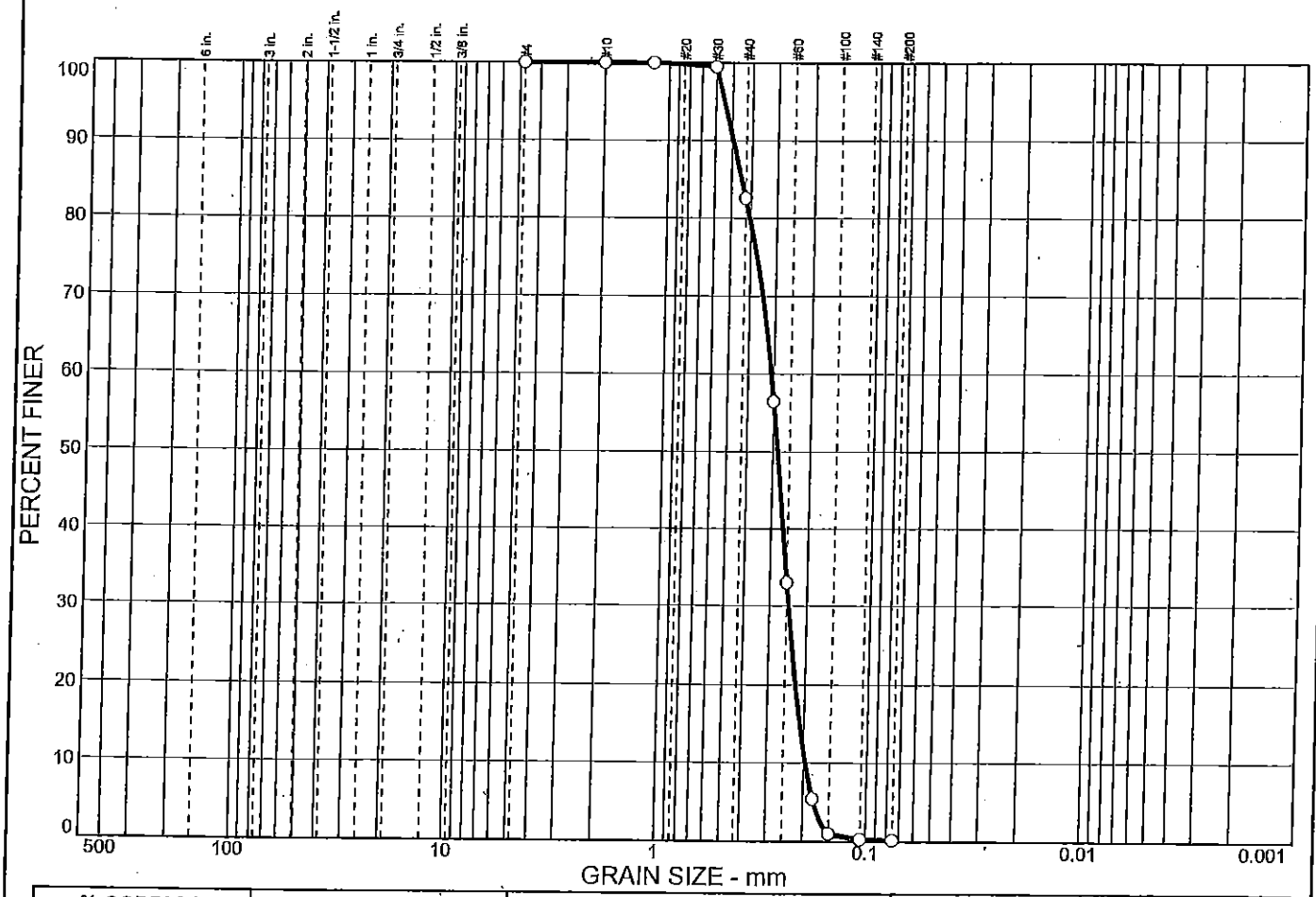
OV-24
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/3/04
Location: OV-24 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 24F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.5		
#40	82.5		
#50	56.6		
#60	33.0		
#80	5.4		
#100	1.0		
#140	0.3		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.446 D_{60}= 0.309 D_{50}= 0.284
D_{30}= 0.244 D_{15}= 0.210 D_{10}= 0.196
C_u= 1.58 C_c= 0.98

Classification

USCS= SP AASHTO= A-3

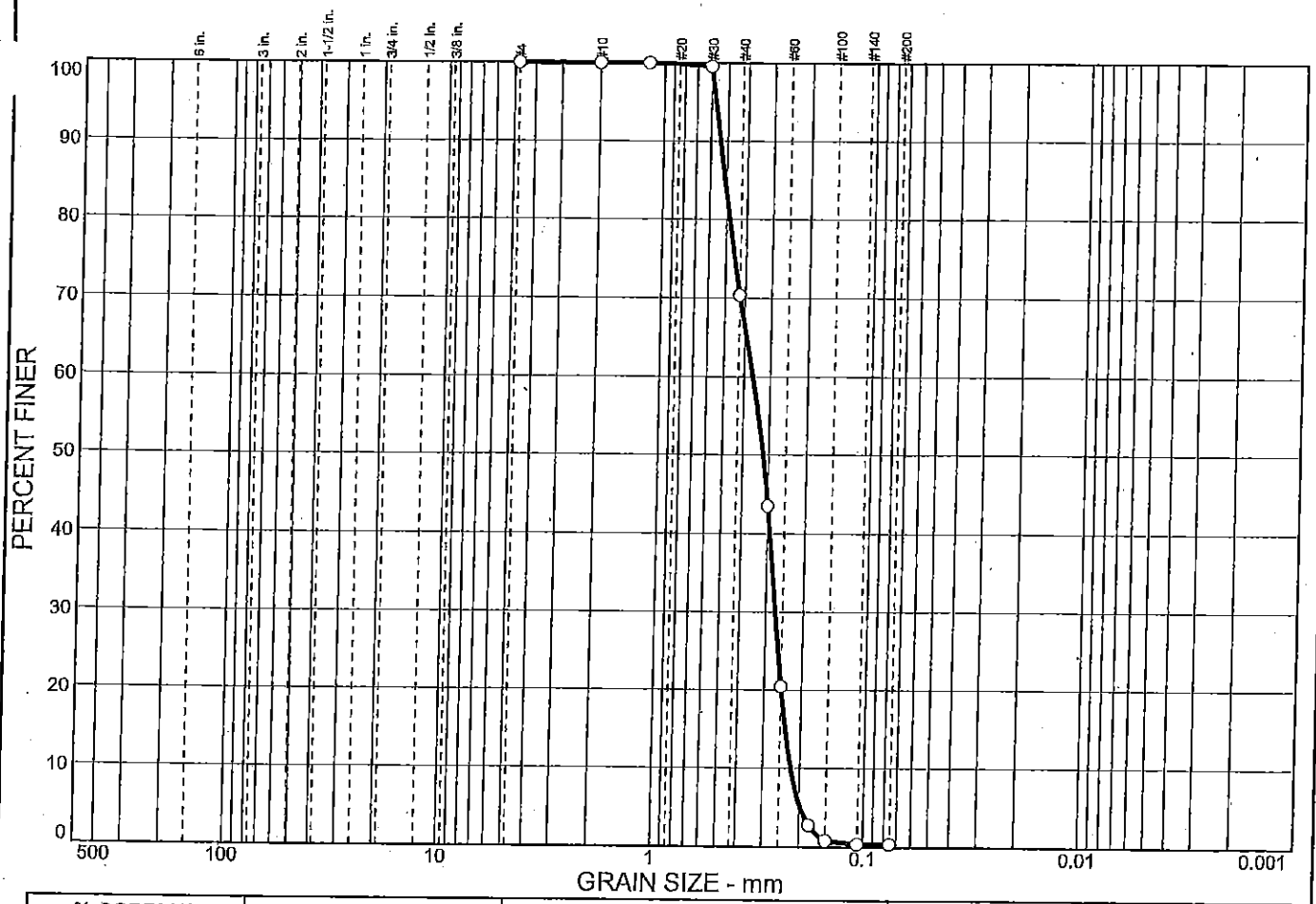
Remarks

Sample No.: A **Source of Sample:** **Date:** 3/25/04
Location: OV-25 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 25A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.6	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.6		
#40	70.4		
#50	43.4		
#60	20.4		
#80	2.8		
#100	0.8		
#140	0.4		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.511 D_{60}= 0.363 D_{50}= 0.320
D_{30}= 0.270 D_{15}= 0.237 D_{10}= 0.221
C_u= 1.64 C_c= 0.91

Classification

USCS= SP AASHTO= A-3

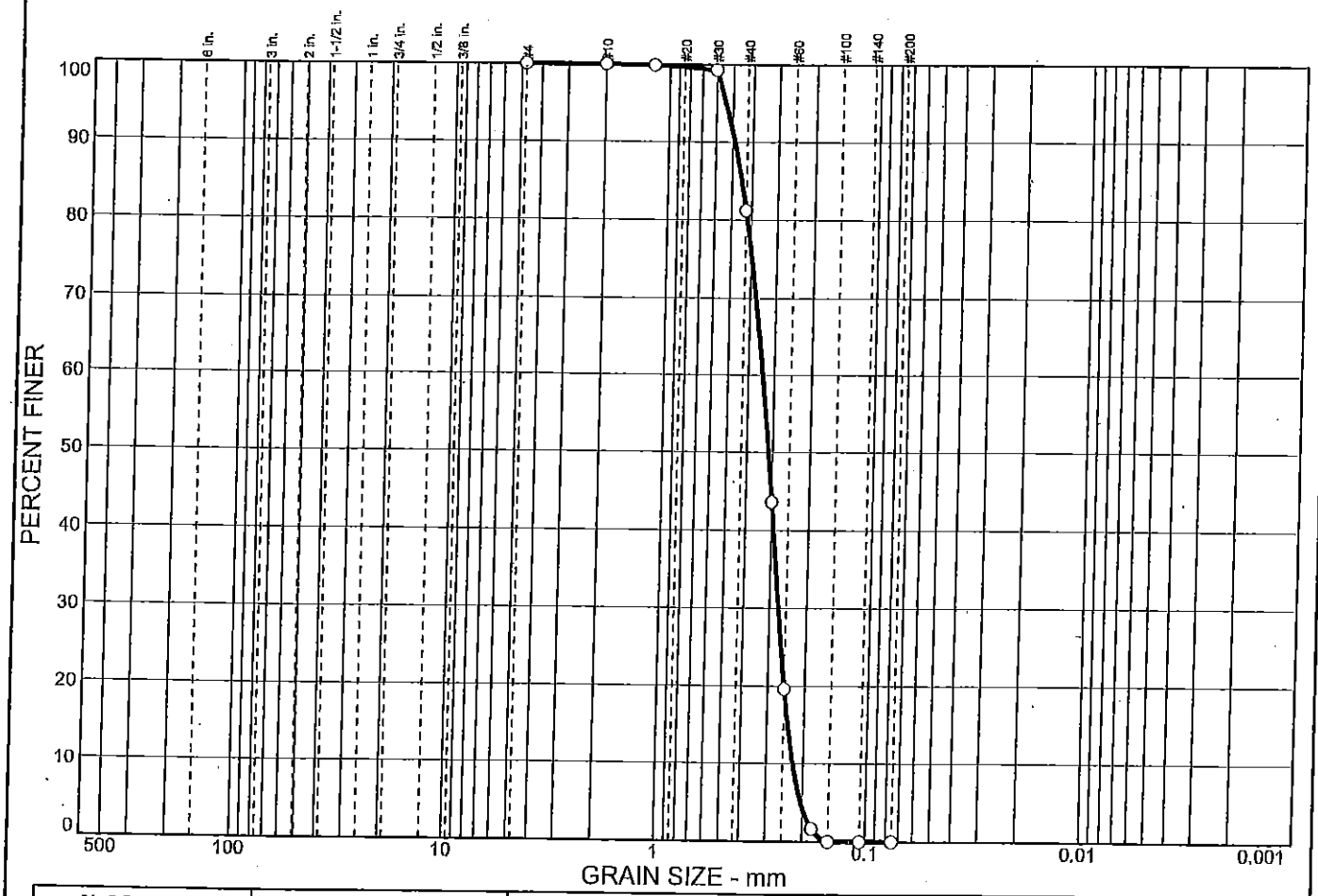
Remarks

Sample No.: B **Source of Sample:** **Date:** 3/25/04
Location: OV-25 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 25B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.3		
#40	81.2		
#50	43.5		
#60	19.6		
#80	1.6		
#100	0.0		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.448 D_{60}= 0.342 D_{50}= 0.315
D_{30}= 0.272 D_{15}= 0.239 D_{10}= 0.224
C_u= 1.53 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

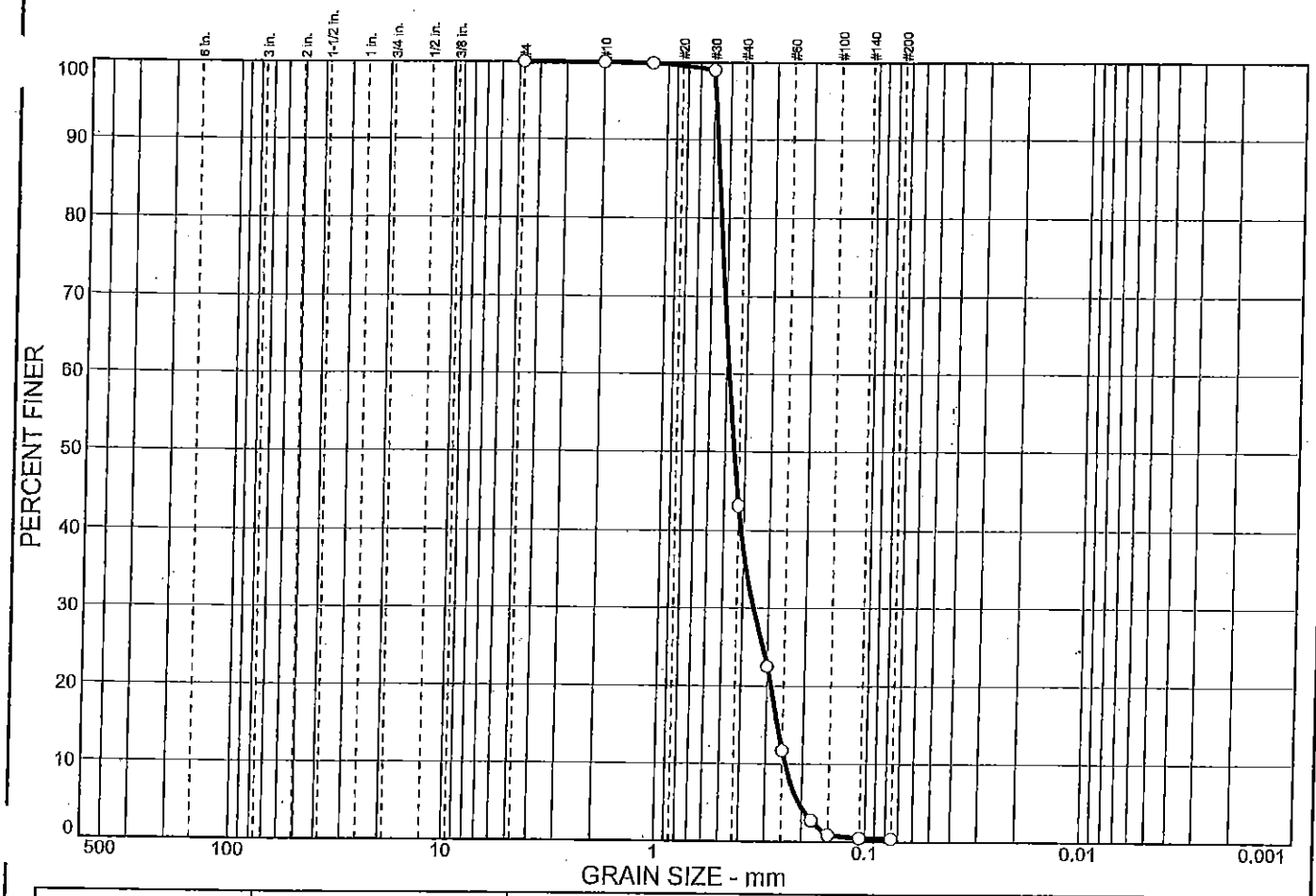
Remarks

Sample No.: C **Source of Sample:** **Date:** 3/25/04
Location: OV-25 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 25C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.6	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.0		
#40	43.1		
#50	22.5		
#60	11.7		
#80	2.7		
#100	0.9		
#140	0.5		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.557 D_{60}= 0.483 D_{50}= 0.450
D_{30}= 0.353 D_{15}= 0.265 D_{10}= 0.241
C_u= 2.00 C_c= 1.07

Classification

USCS= SP AASHTO= A-1-b

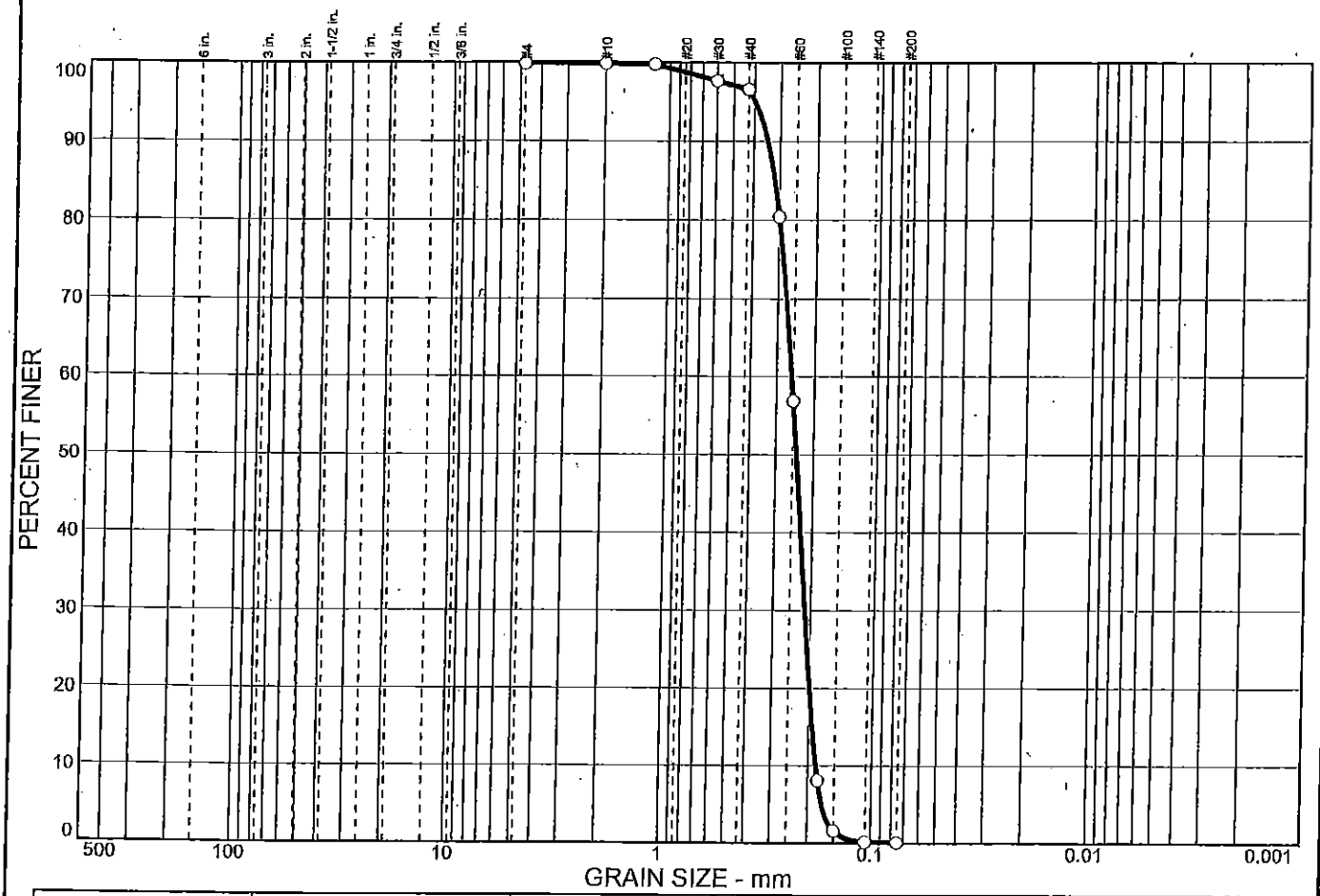
Remarks

Sample No.: D **Source of Sample:** **Date:** 3/25/04
Location: OV-25 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 25D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.9		
#16	99.8		
#30	97.7		
#40	96.6		
#50	80.4		
#60	56.9		
#80	8.1		
#100	1.6		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.317 D_{60}= 0.255 D_{50}= 0.240
D_{30}= 0.213 D_{15}= 0.192 D_{10}= 0.184
C_u= 1.39 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

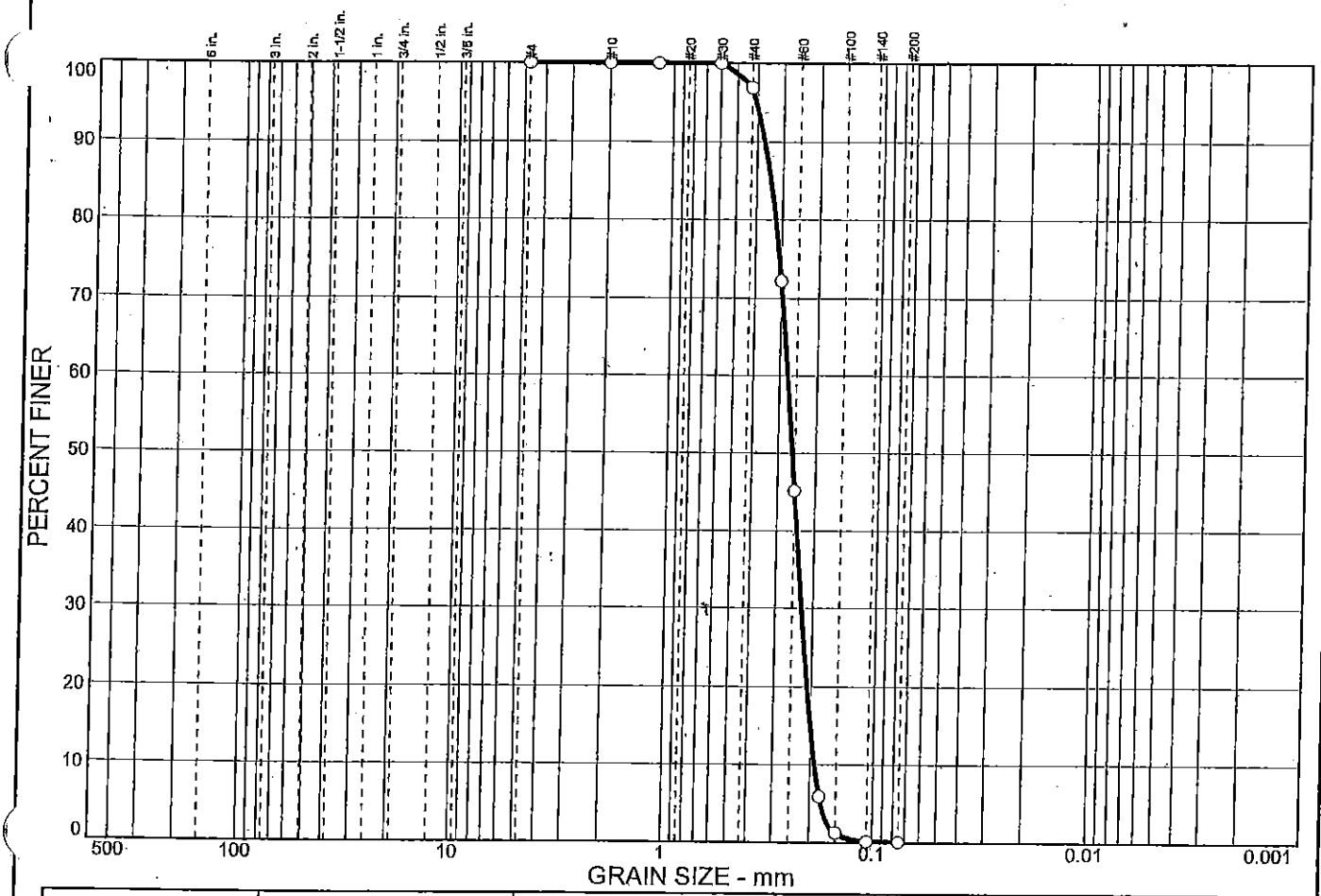
OV-26
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/2/04
Location: OV-26 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 26A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#40	96.9		
#50	72.2		
#60	45.1		
#80	5.9		
#100	1.3		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.342 D_{60}= 0.275 D_{50}= 0.258
D_{30}= 0.226 D_{15}= 0.201 D_{10}= 0.191
C_u= 1.44 C_c= 0.98

Classification

USCS= SP AASHTO= A-3

Remarks

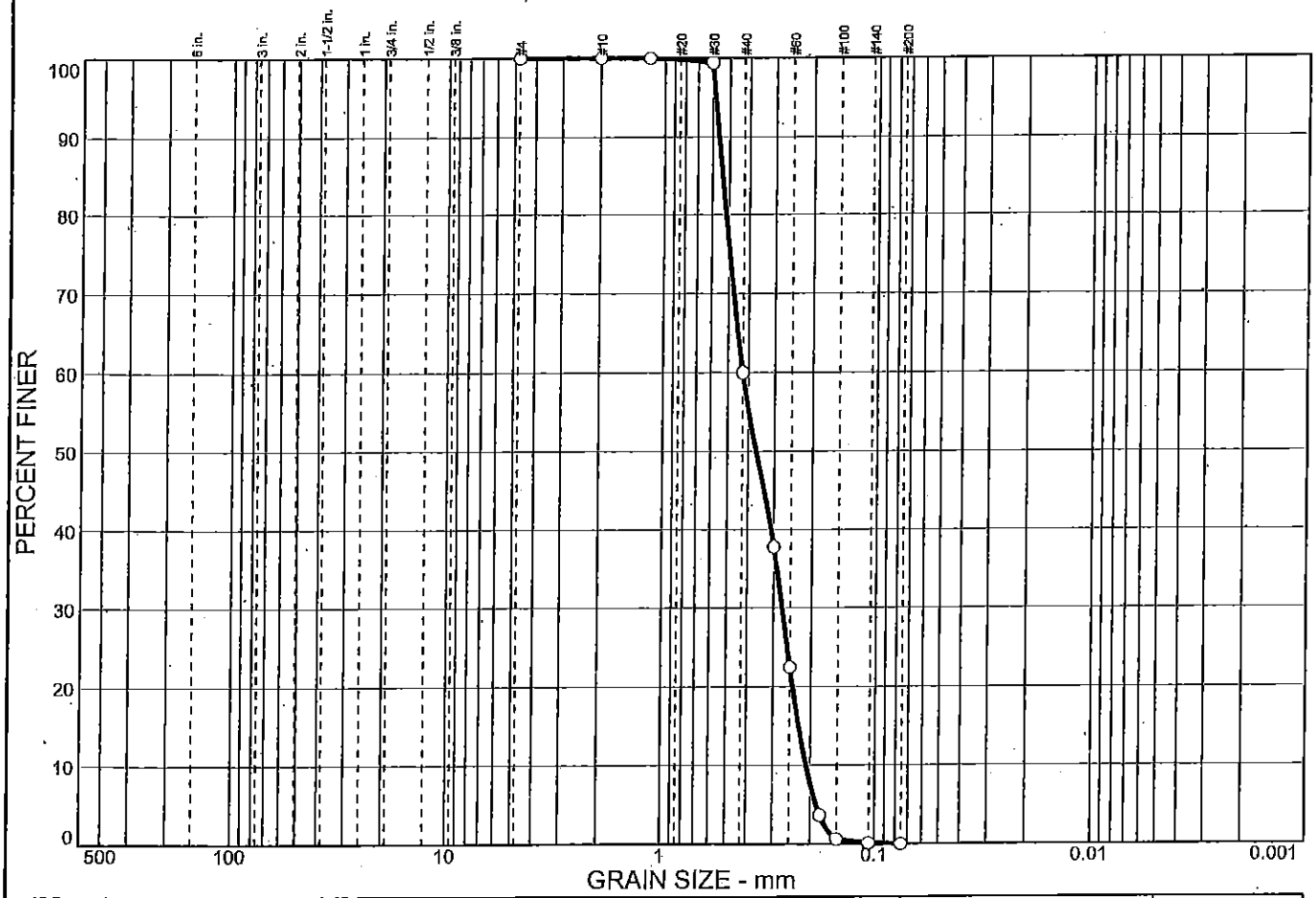
OV-26
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/2/04
Location: OV-26 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 26B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.4		
#40	60.0		
#50	37.8		
#60	22.5		
#80	3.7		
#100	0.6		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.536 D_{60}= 0.425 D_{50}= 0.366
D_{30}= 0.273 D_{15}= 0.226 D_{10}= 0.209
C_u= 2.04 C_c= 0.84

Classification

USCS= SP AASHTO= A-3

Remarks

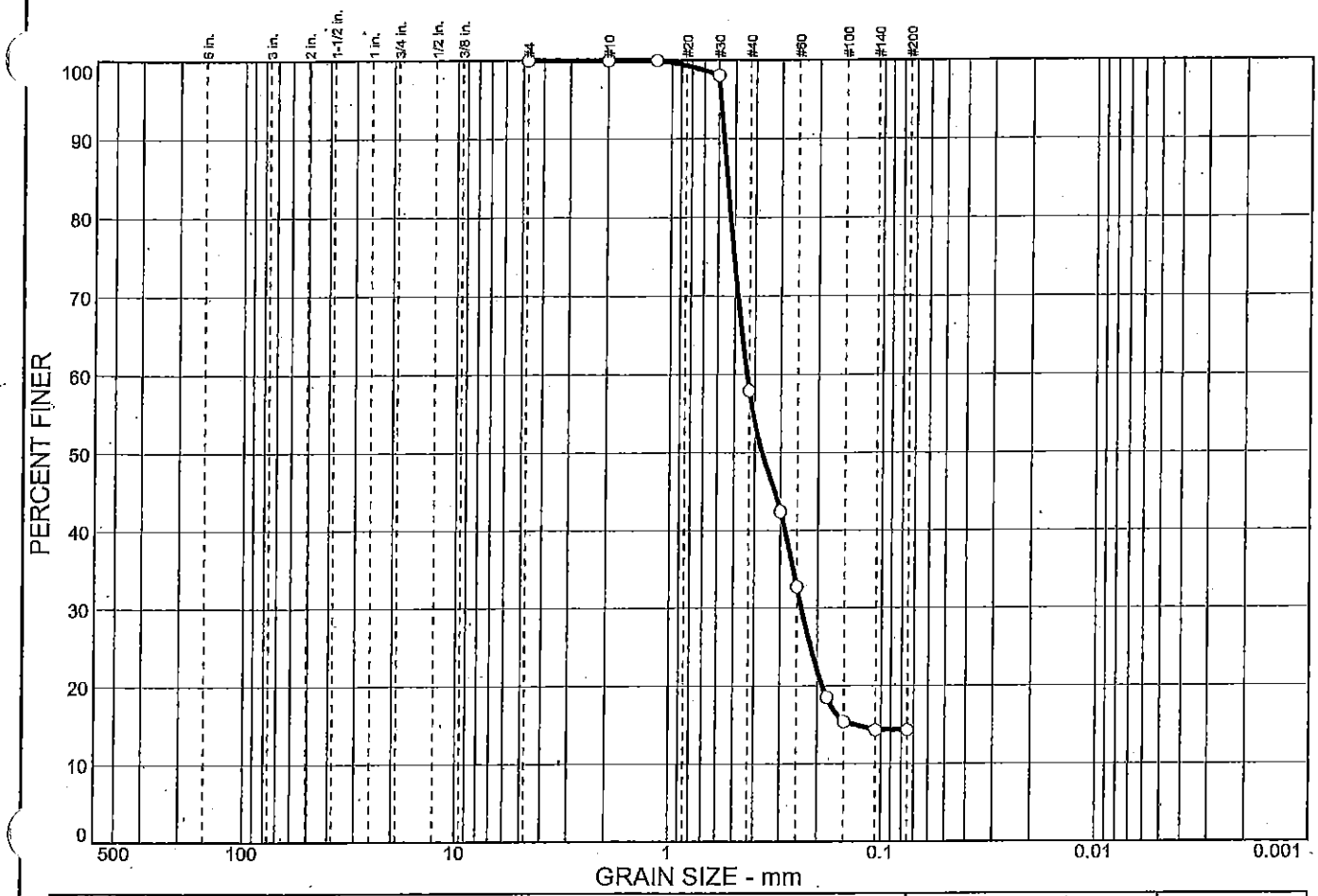
OV-26
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/2/04
Location: OV-26 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 26C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	85.7	14.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	98.1		
#40	58.0		
#50	42.4		
#60	32.7		
#80	18.5		
#100	15.4		
#140	14.3		
#200	14.3		

* (no specification provided)

Soil Description

Tan, Silty SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.544 D_{60}= 0.436 D_{50}= 0.368
D_{30}= 0.238 D_{15}= 0.132 D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

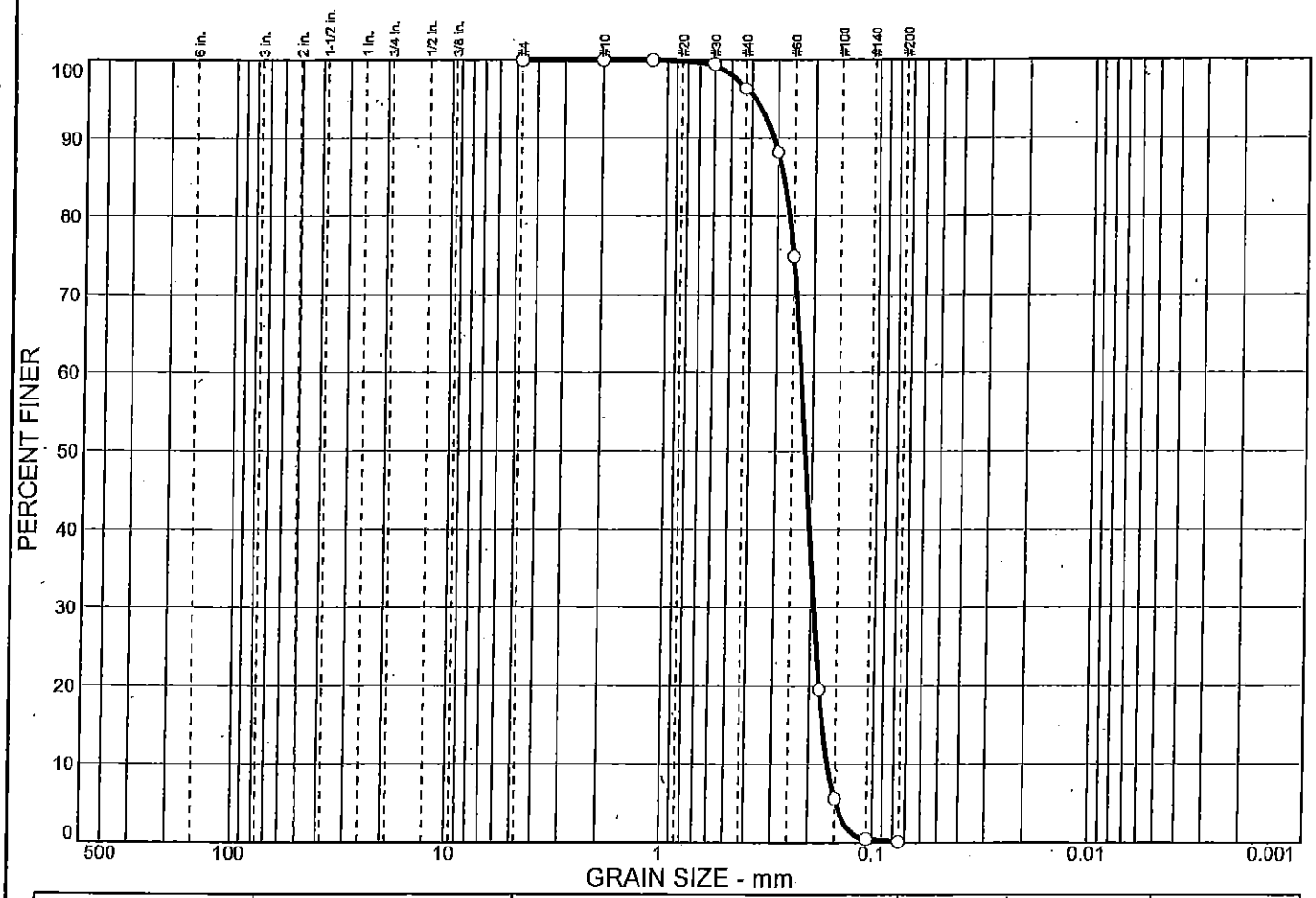
OV-26
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/2/04
Location: OV-26 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 26D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.5		
#40	96.4		
#50	88.2		
#60	74.9		
#80	19.5		
#100	5.6		
#140	0.5		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.281 D_{60}= 0.227 D_{50}= 0.215
D_{30}= 0.193 D_{15}= 0.173 D_{10}= 0.163
C_u= 1.39 C_c= 1.01

Classification

USCS= SP AASHTO= A-3

Remarks

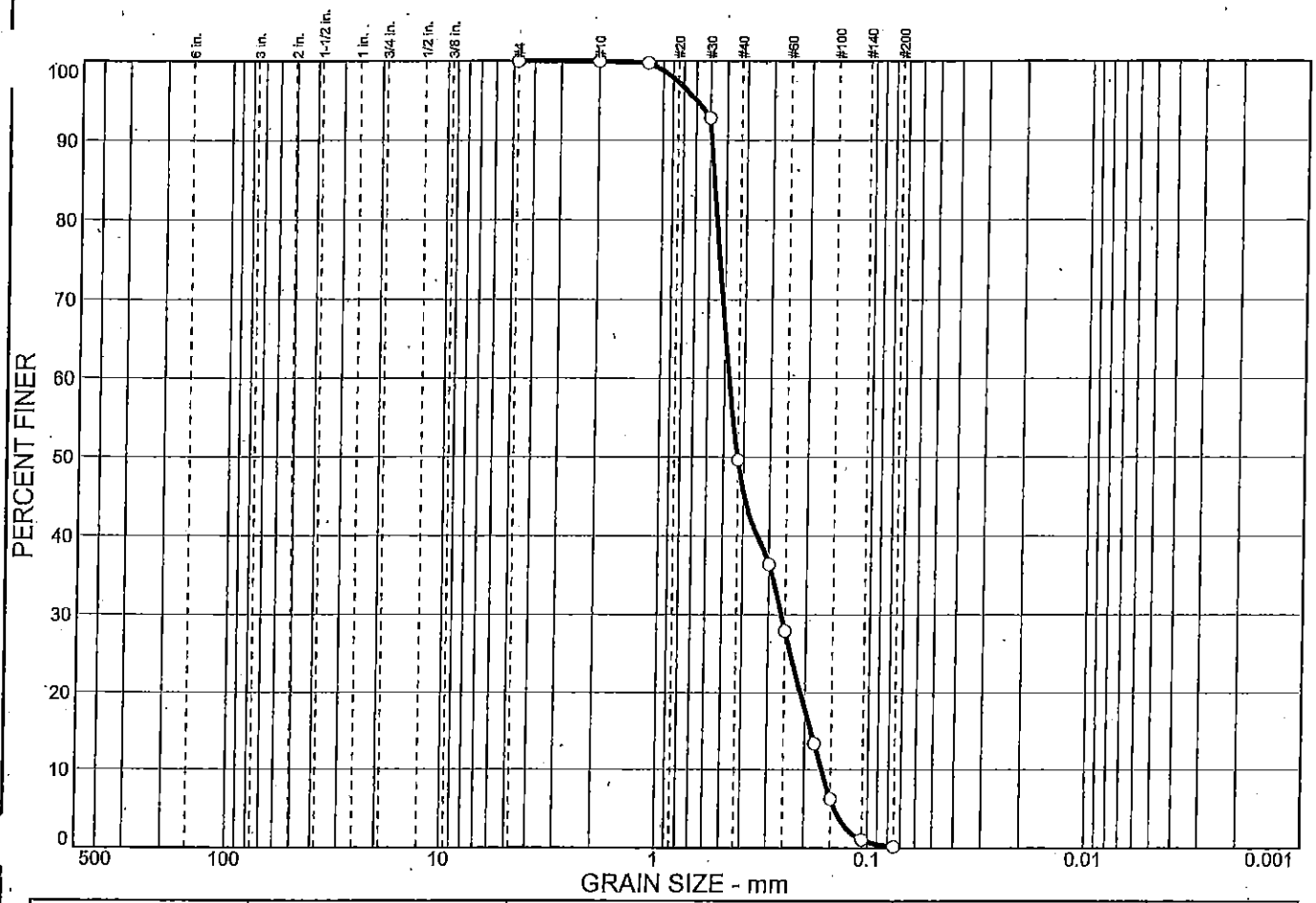
OV-26
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/3/04
Location: OV-26 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 26B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	92.8		
#40	49.6		
#50	36.4		
#60	27.9		
#80	13.4		
#100	6.3		
#140	1.1		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.569 D_{60}= 0.473 D_{50}= 0.427
D_{30}= 0.261 D_{15}= 0.187 D_{10}= 0.166
C_u= 2.85 C_c= 0.87

Classification

USCS= SP AASHTO= A-1-b

Remarks

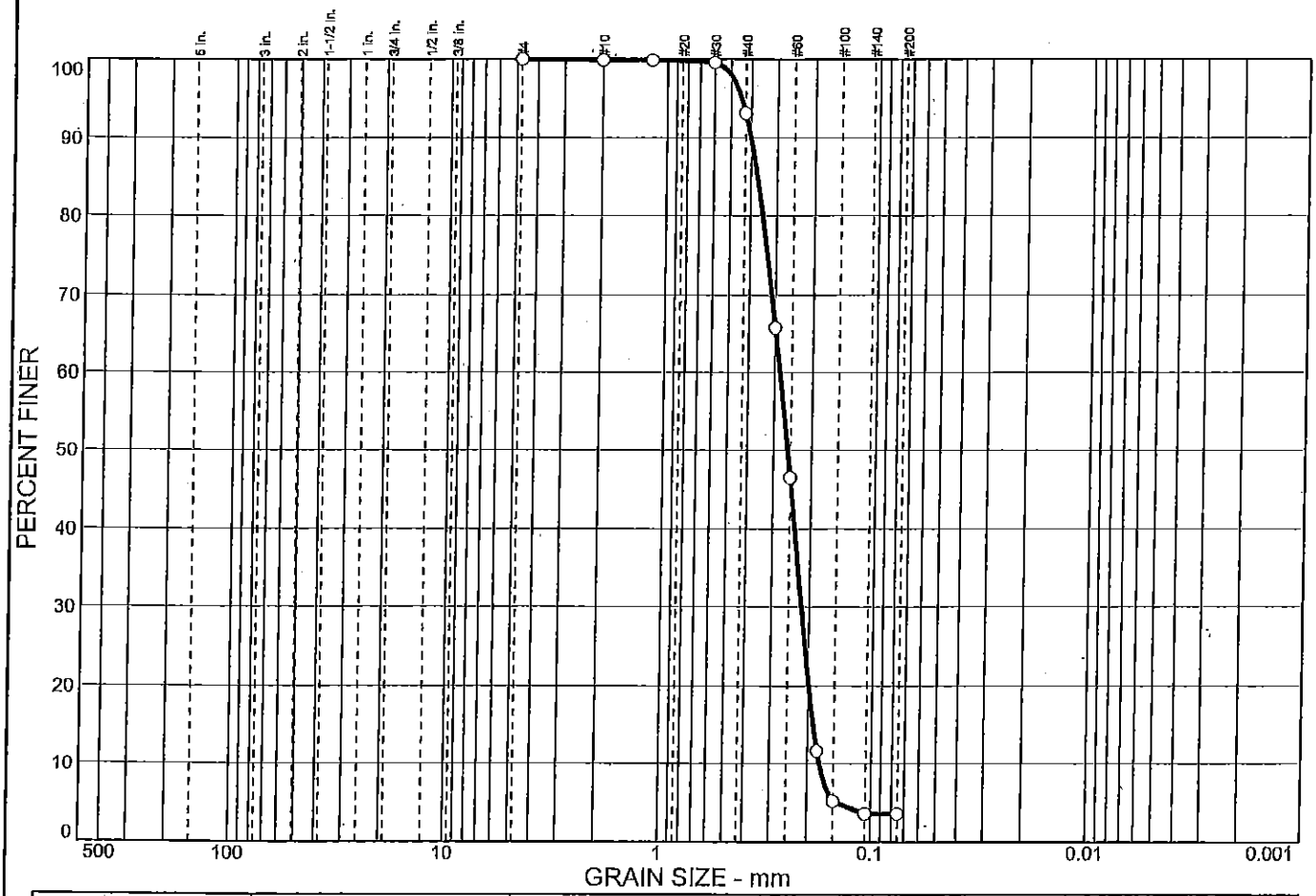
OV-26
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/3/04
Location: OV-26 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 26F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	96.4	3.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.6		
#40	93.1		
#50	65.8		
#60	46.4		
#80	11.6		
#100	5.2		
#140	3.6		
#200	3.6		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.372 D_{60}= 0.283 D_{50}= 0.258
D_{30}= 0.218 D_{15}= 0.188 D_{10}= 0.175
C_u= 1.62 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

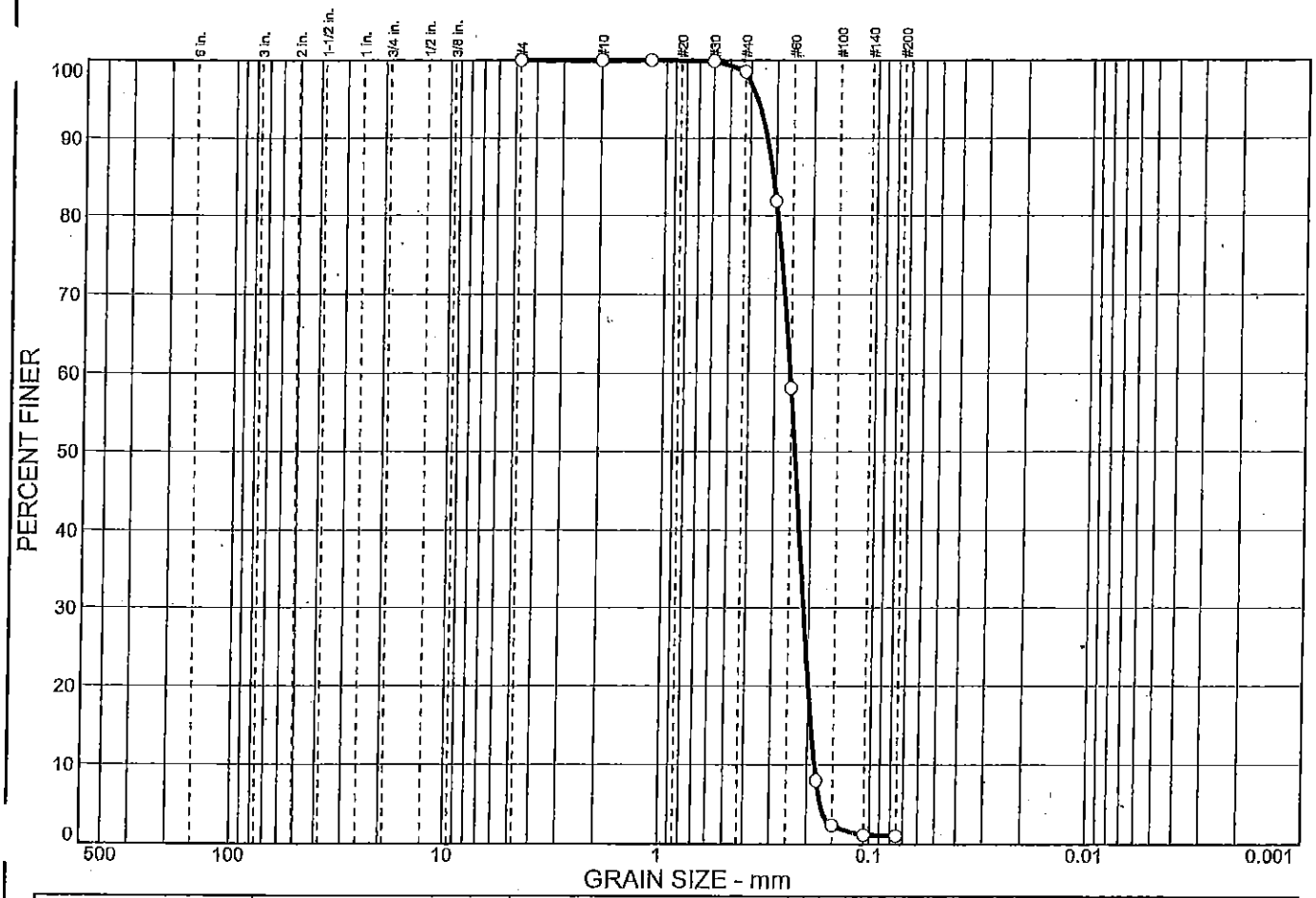
OV-27
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/28/04
Location: OV-27 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 27A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	98.9	1.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#40	98.6		
#50	81.9		
#60	58.2		
#80	8.0		
#100	2.4		
#140	1.2		
#200	1.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.311 D_{60}= 0.253 D_{50}= 0.238
D_{30}= 0.212 D_{15}= 0.192 D_{10}= 0.184
C_u= 1.37 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

OV-27
Sample B

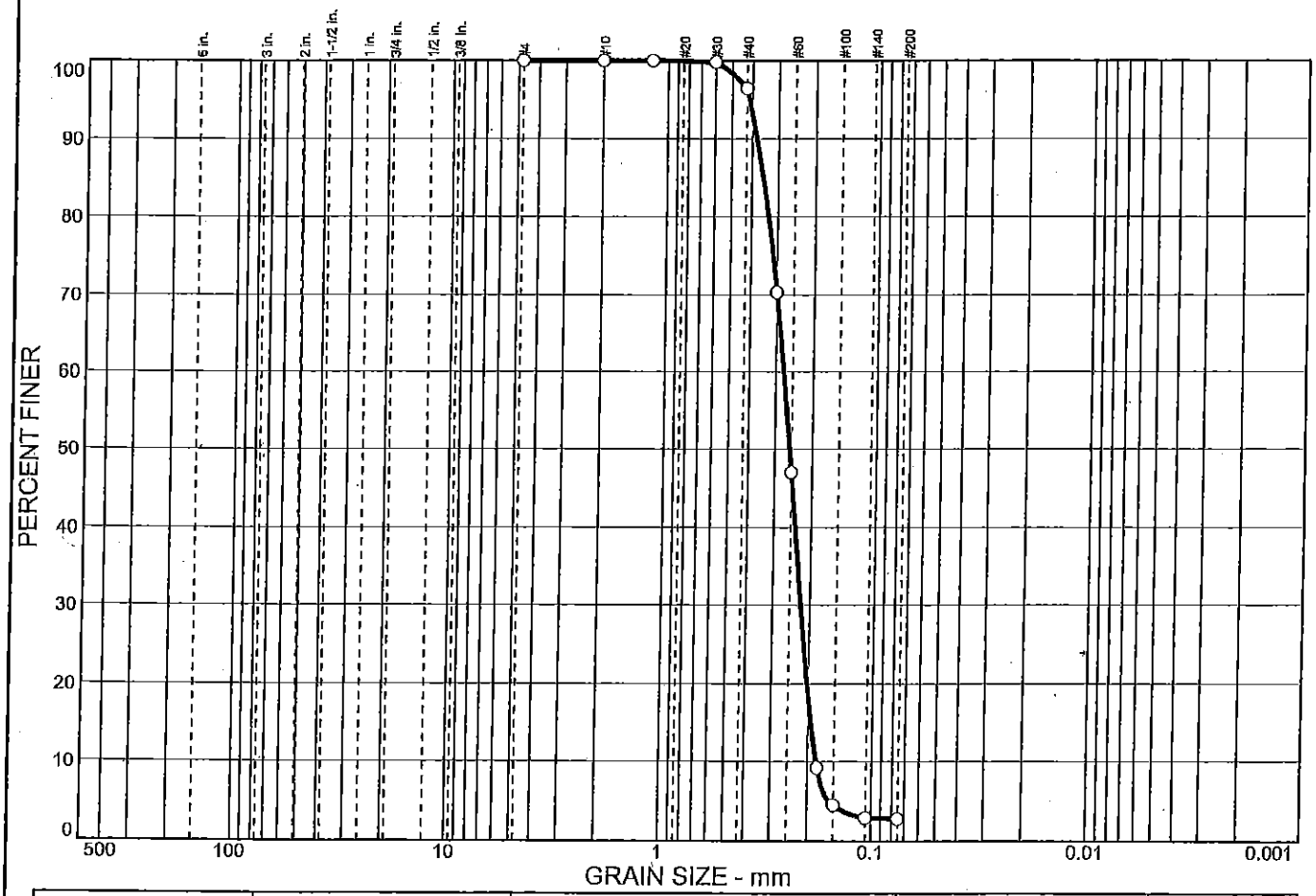
Sample No.: B **Source of Sample:** **Date:** 4/28/04
Location: OV-27 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G **Figure** 27B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	97.2	2.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.8		
#40	96.5		
#50	70.3		
#60	46.9		
#80	9.2		
#100	4.5		
#140	2.9		
#200	2.8		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.354 D_{60}= 0.275 D_{50}= 0.256
D_{30}= 0.221 D_{15}= 0.194 D_{10}= 0.182
C_u= 1.51 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

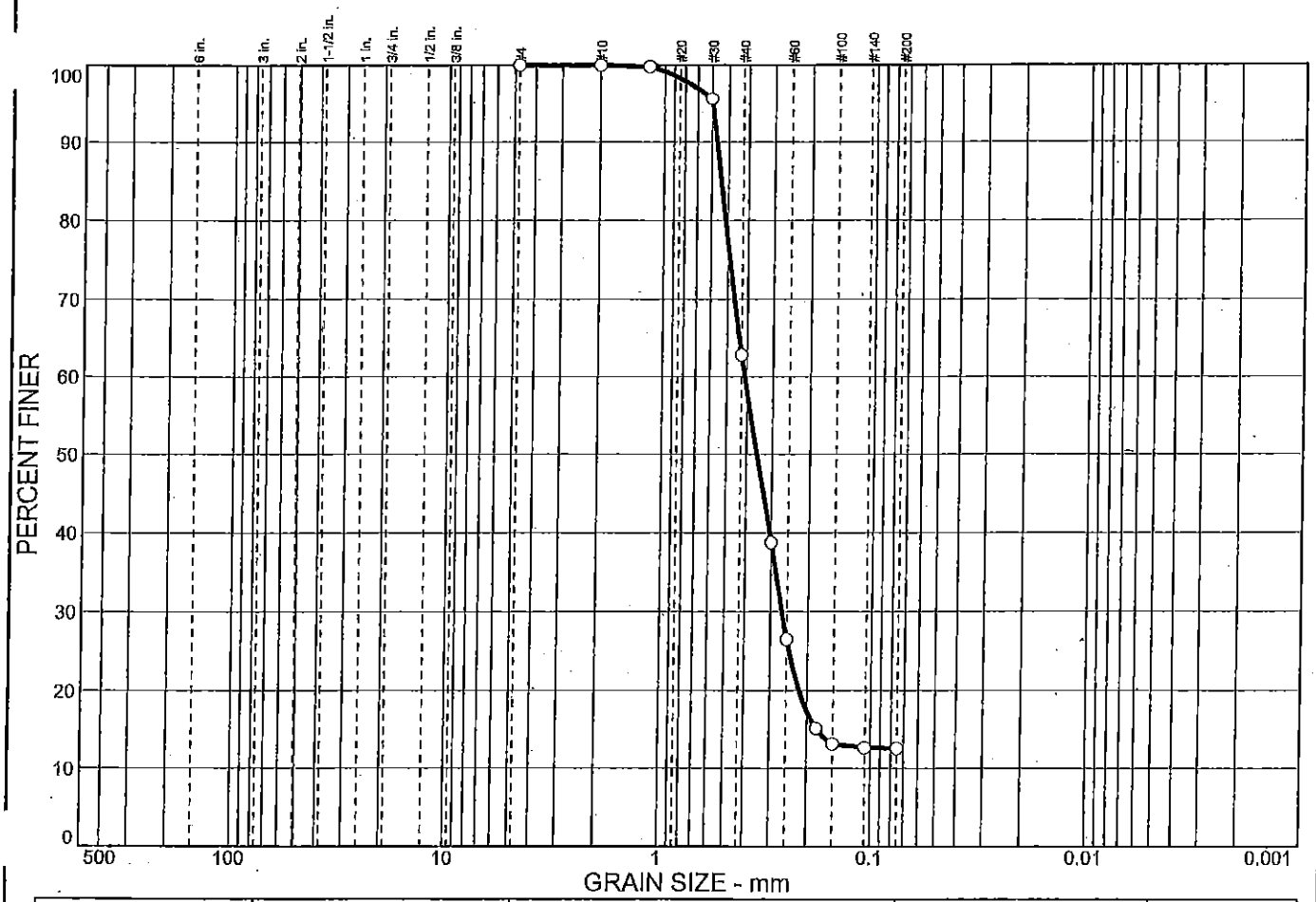
OV-27
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/28/04
Location: OV-27 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 27C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	87.5	12.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	95.6		
#40	62.8		
#50	38.7		
#60	26.5		
#80	15.1		
#100	13.1		
#140	12.6		
#200	12.5		

* (no specification provided)

Soil Description

Tan, Silty SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.540 D_{60}= 0.410 D_{50}= 0.356
D_{30}= 0.264 D_{15}= 0.179 D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

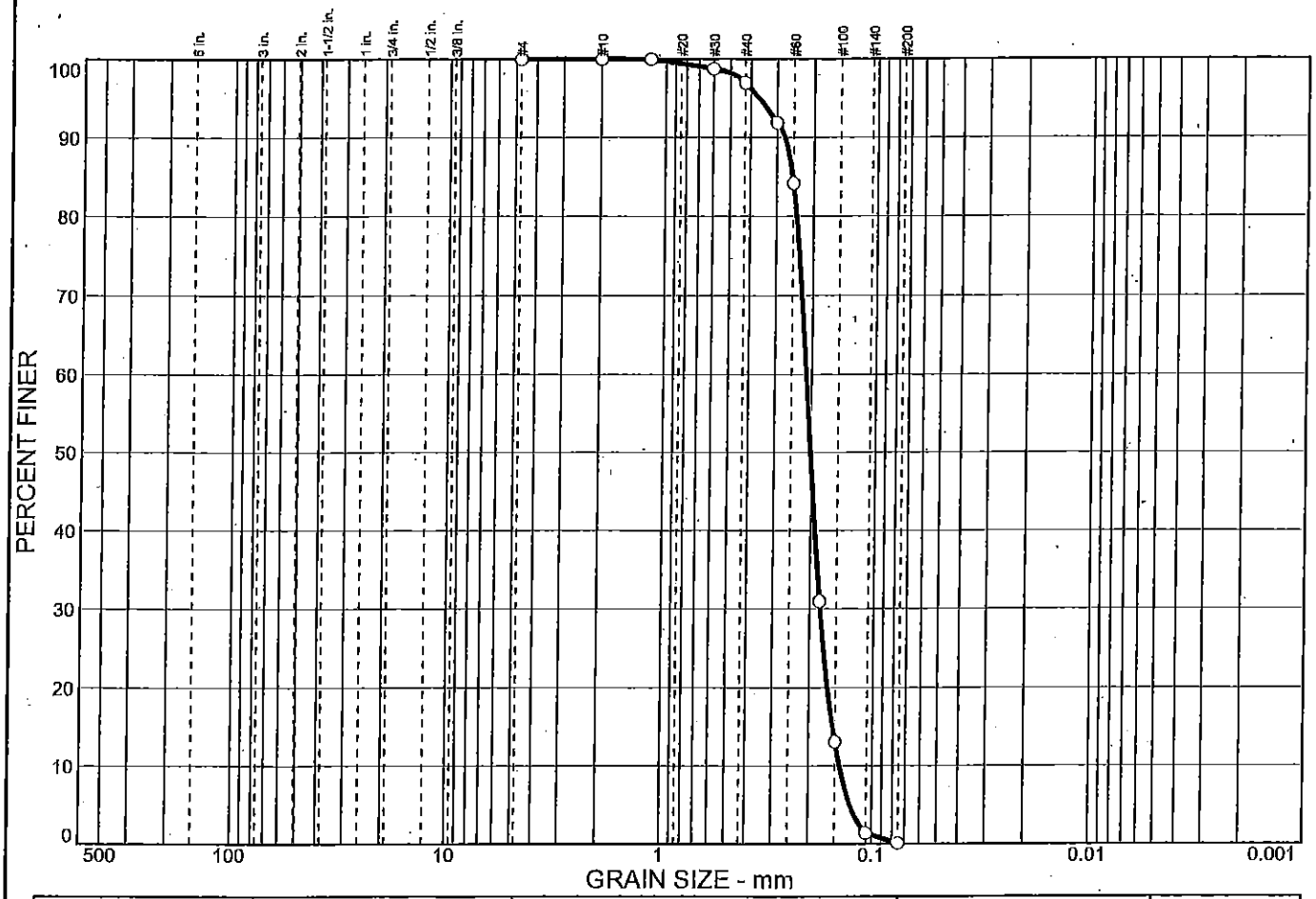
OV-27
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/28/04
Location: OV-27 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 27D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	98.8		
#40	97.1		
#50	91.8		
#60	84.2		
#80	30.9		
#100	13.0		
#140	1.4		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.252 D_{60}= 0.213 D_{50}= 0.202
D_{30}= 0.179 D_{15}= 0.154 D_{10}= 0.143
C_u= 1.49 C_c= 1.05

Classification

USCS= SP AASHTO= A-3

Remarks

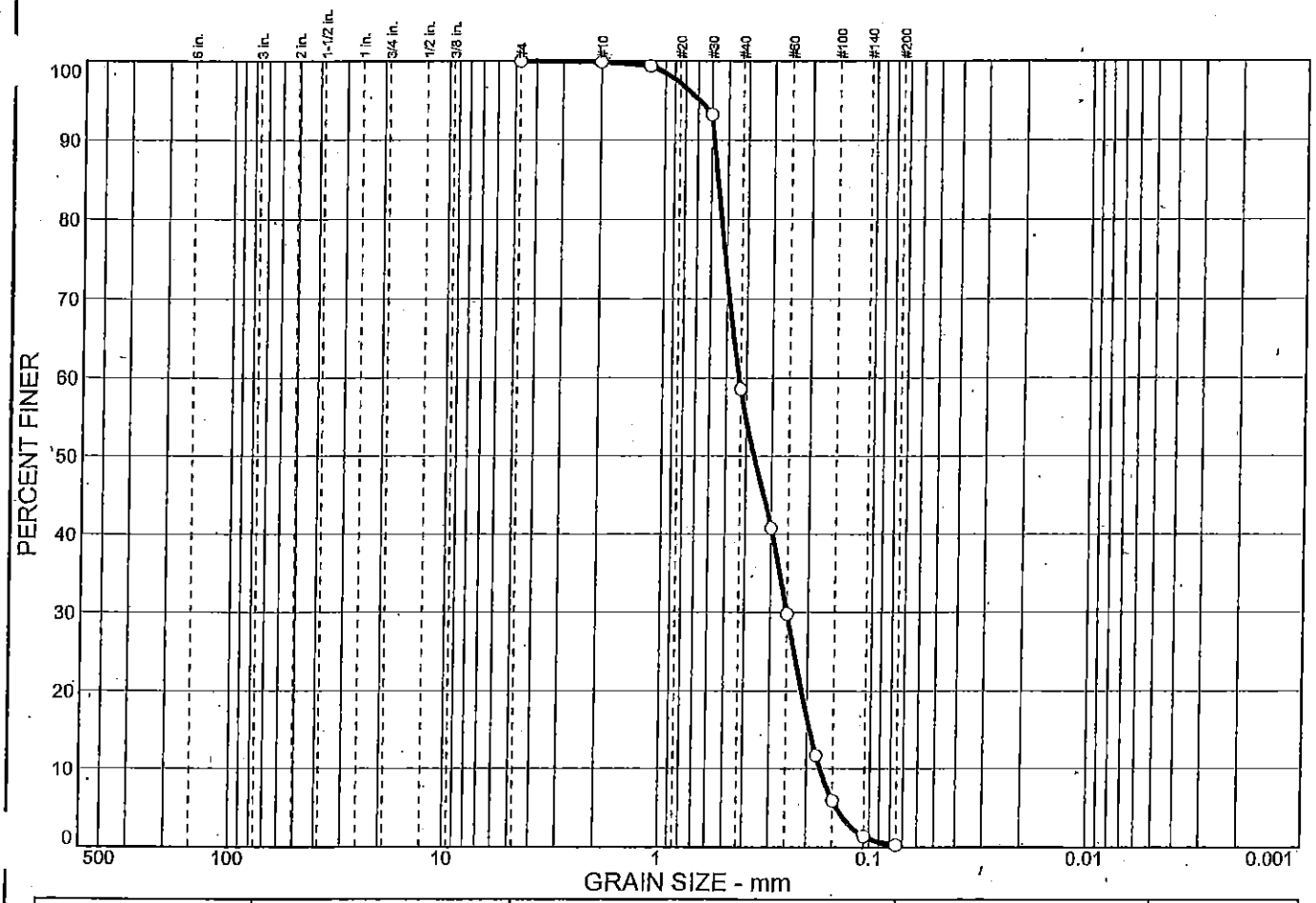
OV-27
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/3/04
Location: OV-27 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 27E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.4		
#30	93.2		
#40	58.6		
#50	40.8		
#60	29.8		
#80	11.7		
#100	6.0		
#140	1.4		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.558 D_{60}= 0.433 D_{50}= 0.366
D_{30}= 0.251 D_{15}= 0.194 D_{10}= 0.172
C_u= 2.52 C_c= 0.84

Classification

USCS= SP AASHTO= A-3

Remarks

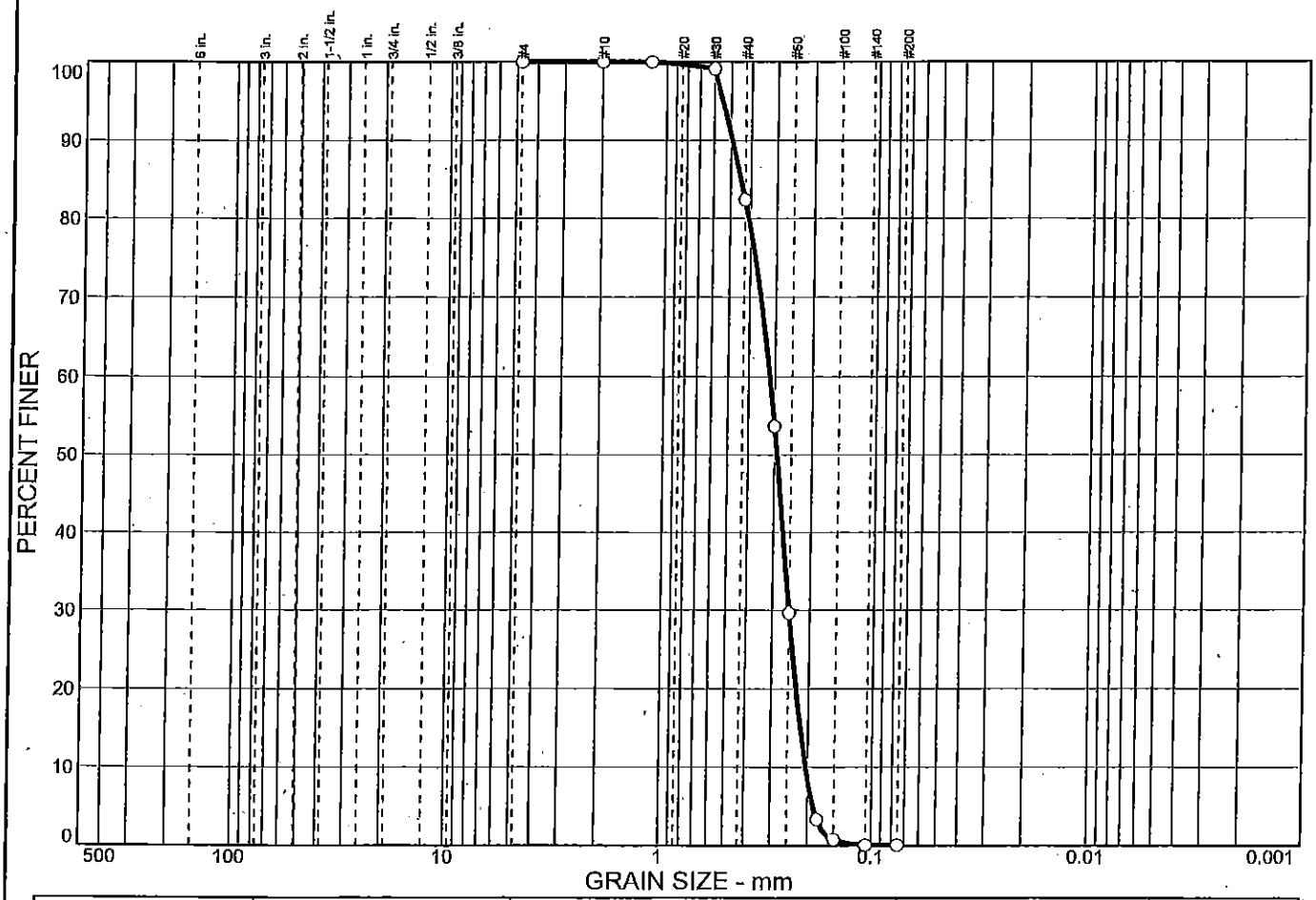
OV-27
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/9/04
Location: OV-27 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 27F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.1		
#40	82.4		
#50	53.7		
#60	29.6		
#80	3.4		
#100	0.8		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.446 D_{60}= 0.317 D_{50}= 0.291
D_{30}= 0.251 D_{15}= 0.218 D_{10}= 0.205
C_u= 1.55 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

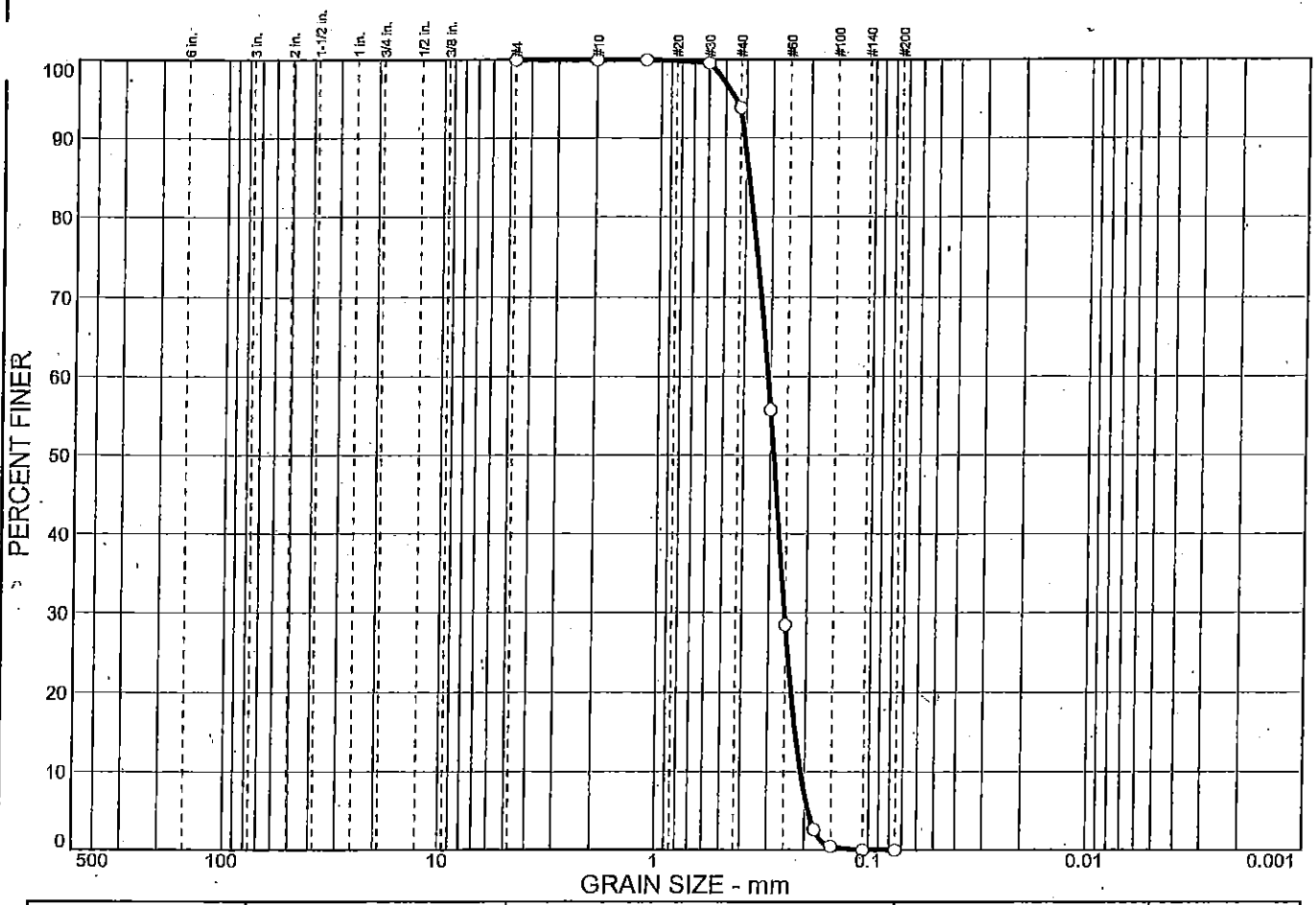
OV-28
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/2/04
Location: OV-28 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 28A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.6		
#40	93.8		
#50	55.8		
#60	28.5		
#80	2.7		
#100	0.5		
#140	0.0		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.386 D_{60}= 0.309 D_{50}= 0.289
D_{30}= 0.253 D_{15}= 0.222 D_{10}= 0.209
C_u= 1.48 C_c= 0.99

Classification

USCS= SP AASHTO= A-3

Remarks

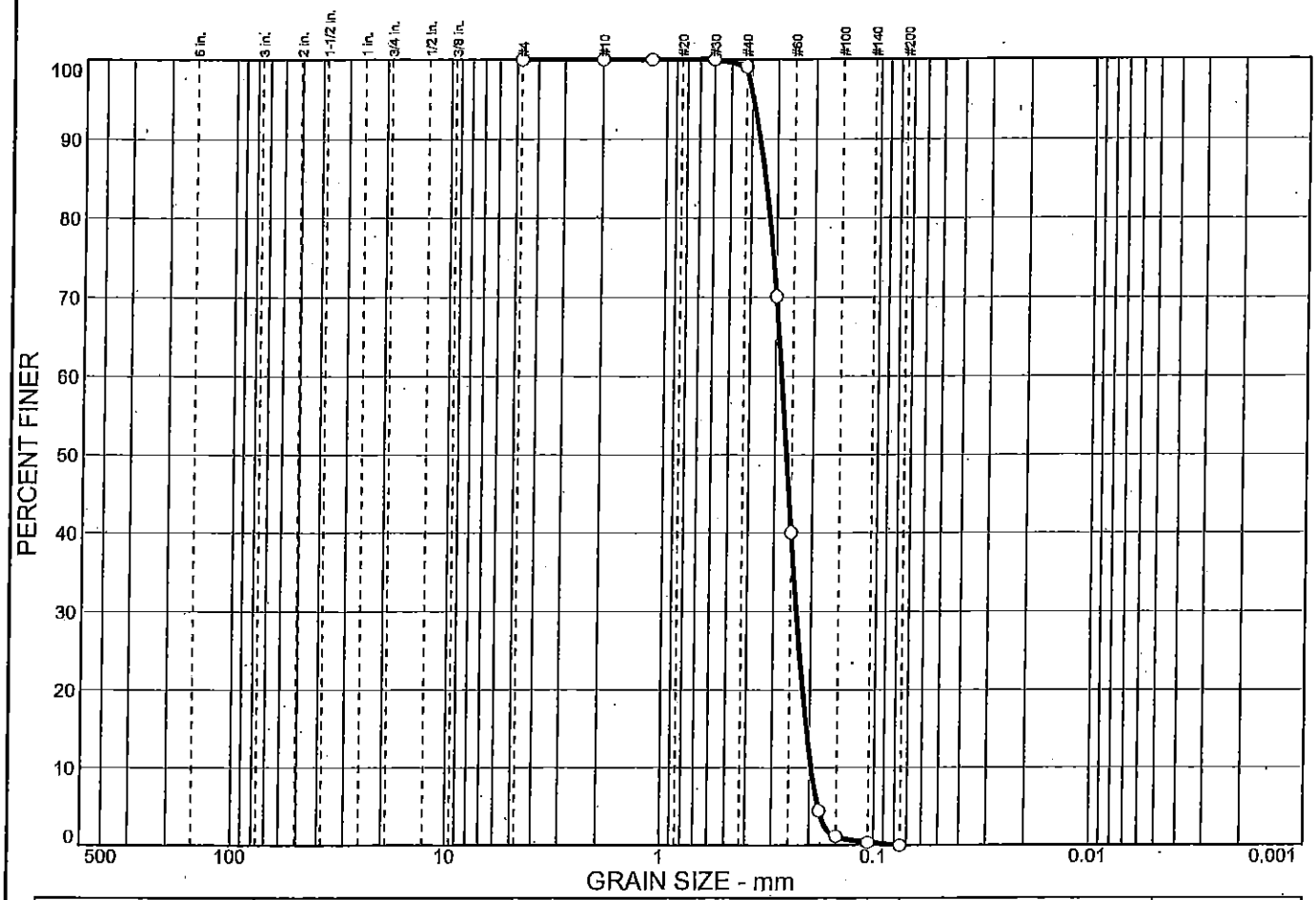
OV-28
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/2/04
Location: OV-28 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 28B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#40	99.1		
#50	70.1		
#60	40.0		
#80	4.5		
#100	1.2		
#140	0.4		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.342 D_{60}= 0.281 D_{50}= 0.265
D_{30}= 0.234 D_{15}= 0.207 D_{10}= 0.196
C_u= 1.43 C_c= 0.99

Classification

USCS= SP AASHTO= A-3

Remarks

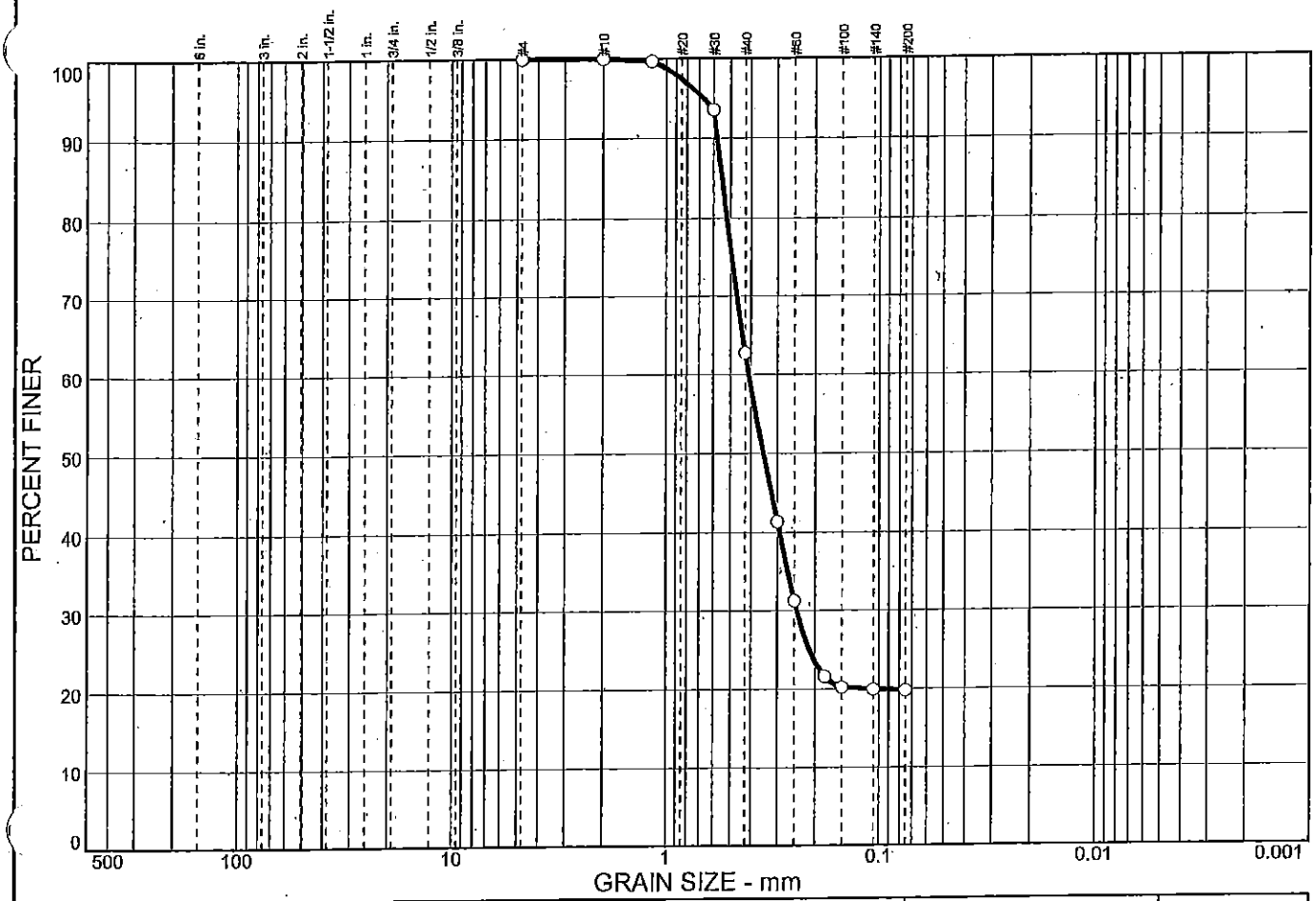
OV-28
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/2/04
Location: OV-28 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 28C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	80.2	19.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.7		
#30	93.5		
#40	62.7		
#50	41.4		
#60	31.3		
#80	21.6		
#100	20.2		
#140	19.9		
#200	19.8		

* (no specification provided)

Soil Description

Tan, Silty SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.549 D_{60}= 0.409 D_{50}= 0.349
D_{30}= 0.243 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

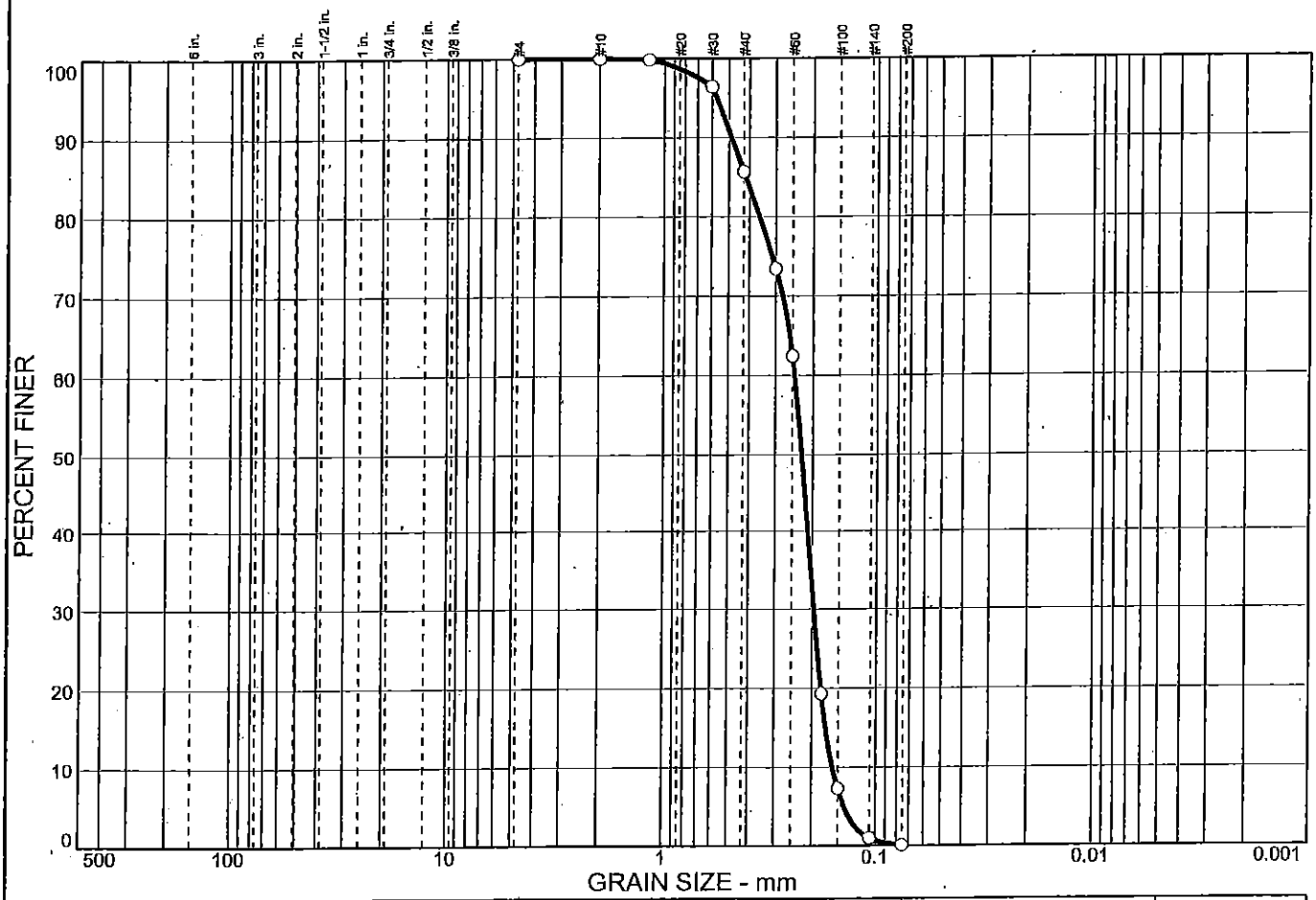
OV-28
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/2/04
Location: OV-28 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 28D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	96.5		
#40	85.7		
#50	73.4		
#60	62.4		
#80	19.3		
#100	7.3		
#140	1.0		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.416 D_{60}= 0.244 D_{50}= 0.226
D_{30}= 0.196 D_{15}= 0.172 D_{10}= 0.159
C_u= 1.53 C_c= 0.99

Classification

USCS= SP AASHTO= A-3

Remarks

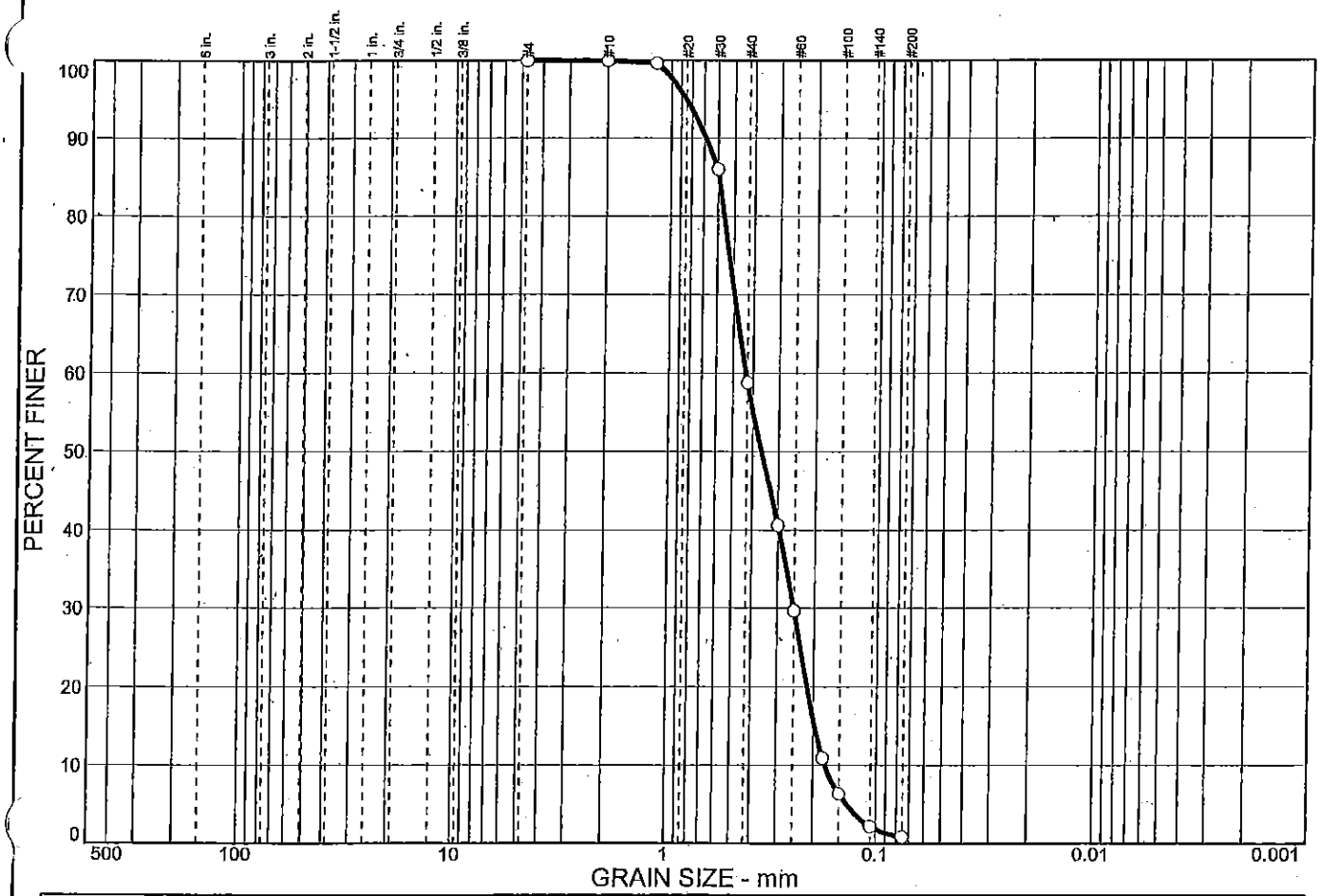
OV-28
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/2/04
Location: OV-28 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 28E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.1	0.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.7		
#30	86.0		
#40	58.8		
#50	40.6		
#60	29.6		
#80	10.9		
#100	6.4		
#140	2.2		
#200	0.9		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.593 D_{60}= 0.433 D_{50}= 0.362
D_{30}= 0.252 D_{15}= 0.197 D_{10}= 0.175
C_u= 2.47 C_c= 0.83

Classification

USCS= SP AASHTO= A-3

Remarks

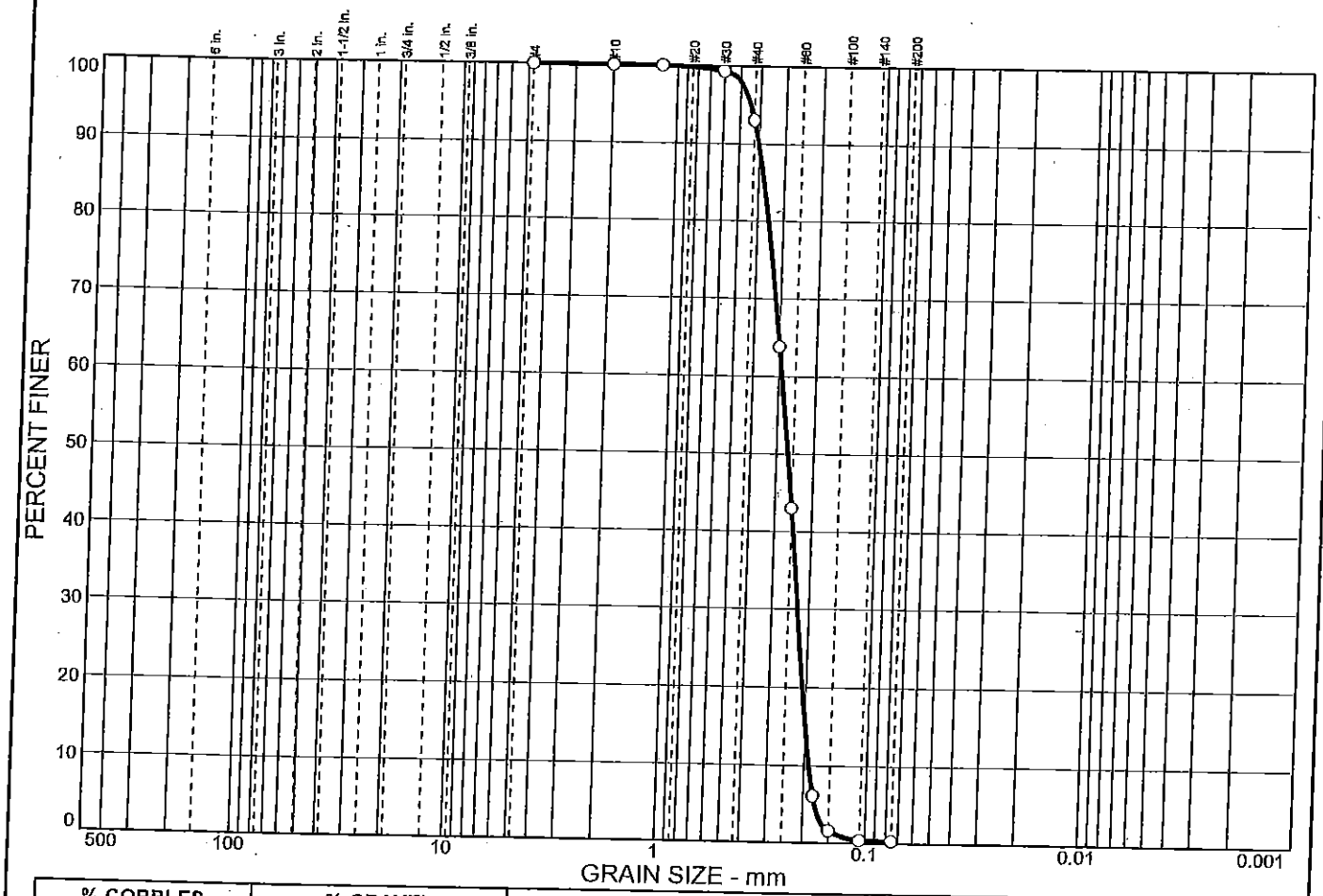
OV-28
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/2/04
Location: OV-28 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 28F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.3		
#40	93.0		
#50	63.8		
#60	43.0		
#80	6.1		
#100	1.6		
#140	0.4		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.375 D_{60}= 0.290 D_{50}= 0.265
D_{30}= 0.226 D_{15}= 0.200 D_{10}= 0.190
C_u= 1.53 C_c= 0.93

Classification

USCS= SP AASHTO= A-3

Remarks

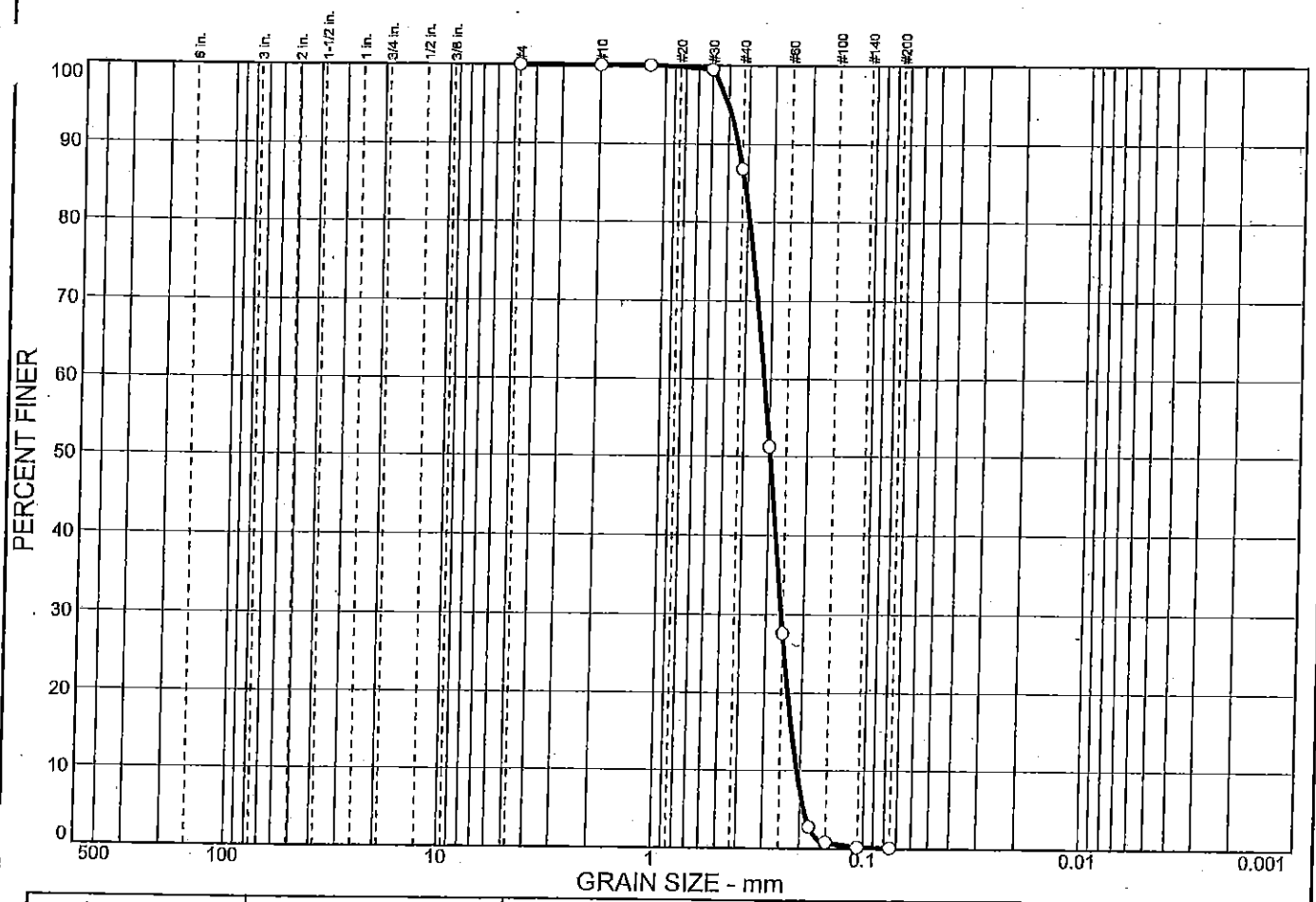
OV-29
Sample A

Sample No.: A
Location: OV-29
Source of Sample:
Date: 4/21/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 29A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.5		
#40	86.8		
#50	51.2		
#60	27.6		
#80	2.8		
#100	0.8		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.414 D_{60}= 0.322 D_{50}= 0.297
D_{30}= 0.255 D_{15}= 0.221 D_{10}= 0.208
C_u= 1.55 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

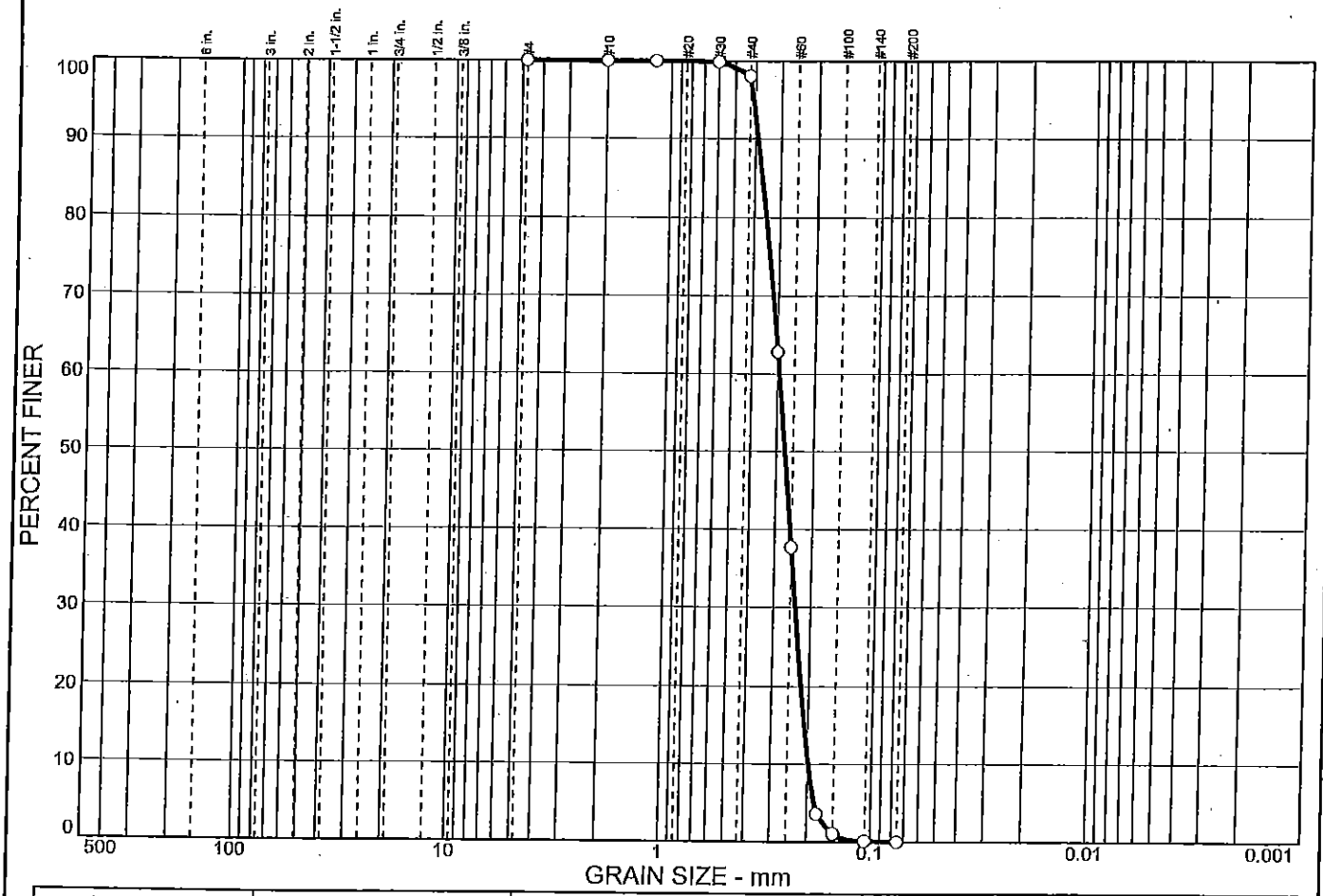
OV-29
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/21/04
Location: OV-29 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 29B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#40	98.1		
#50	62.8		
#60	37.7		
#80	3.5		
#100	1.0		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.368 D_{60}= 0.294 D_{50}= 0.273
D_{30}= 0.236 D_{15}= 0.209 D_{10}= 0.198
C_u= 1.48 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

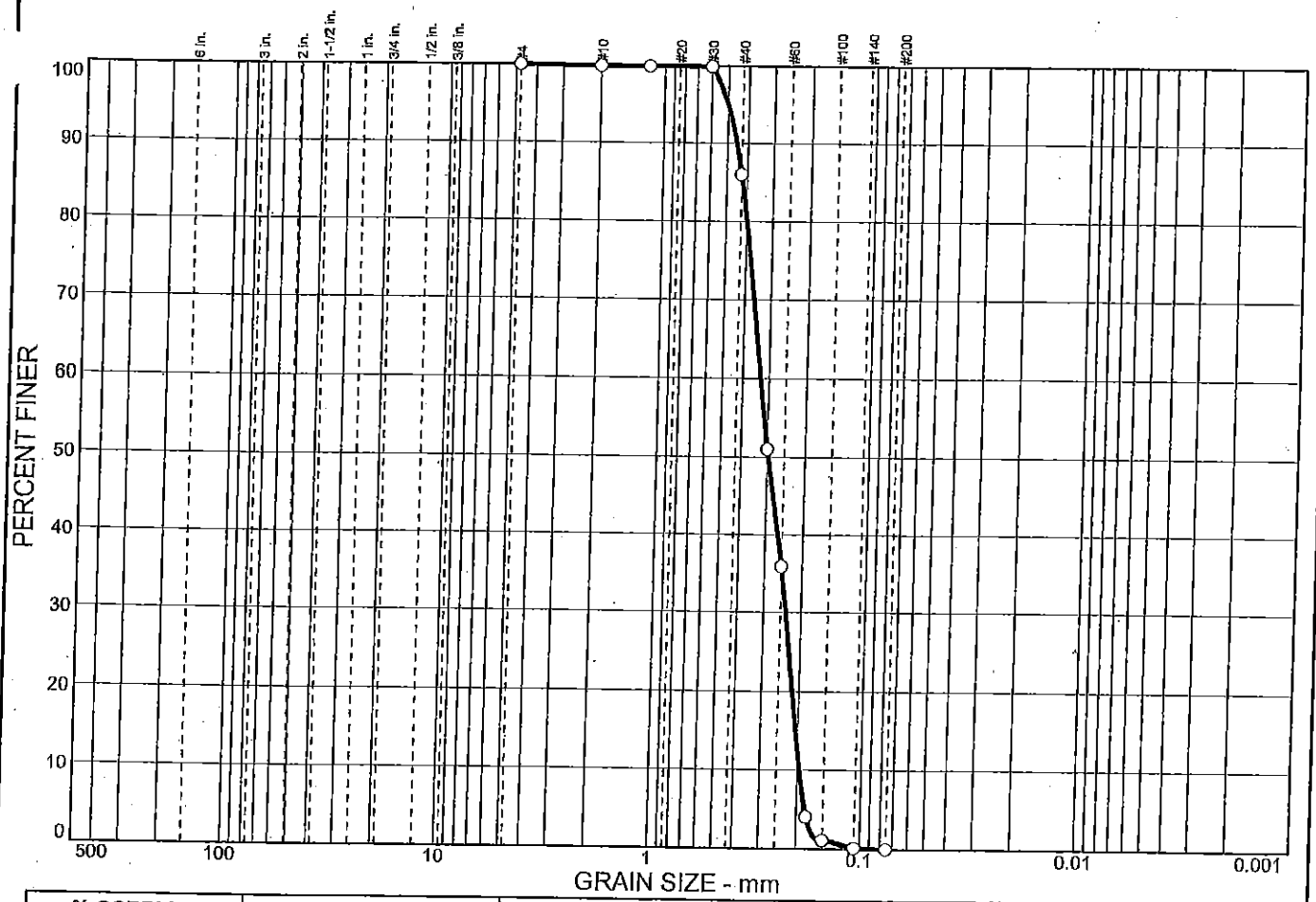
OV-29
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/21/04
Location: OV-29 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 29C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.9		
#40	86.0		
#50	51.0		
#60	35.9		
#80	4.1		
#100	1.1		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.420 D_{60}= 0.329 D_{50}= 0.297
D_{30}= 0.236 D_{15}= 0.206 D_{10}= 0.195
C_u= 1.68 C_c= 0.87

Classification

USCS= SP AASHTO= A-3

Remarks

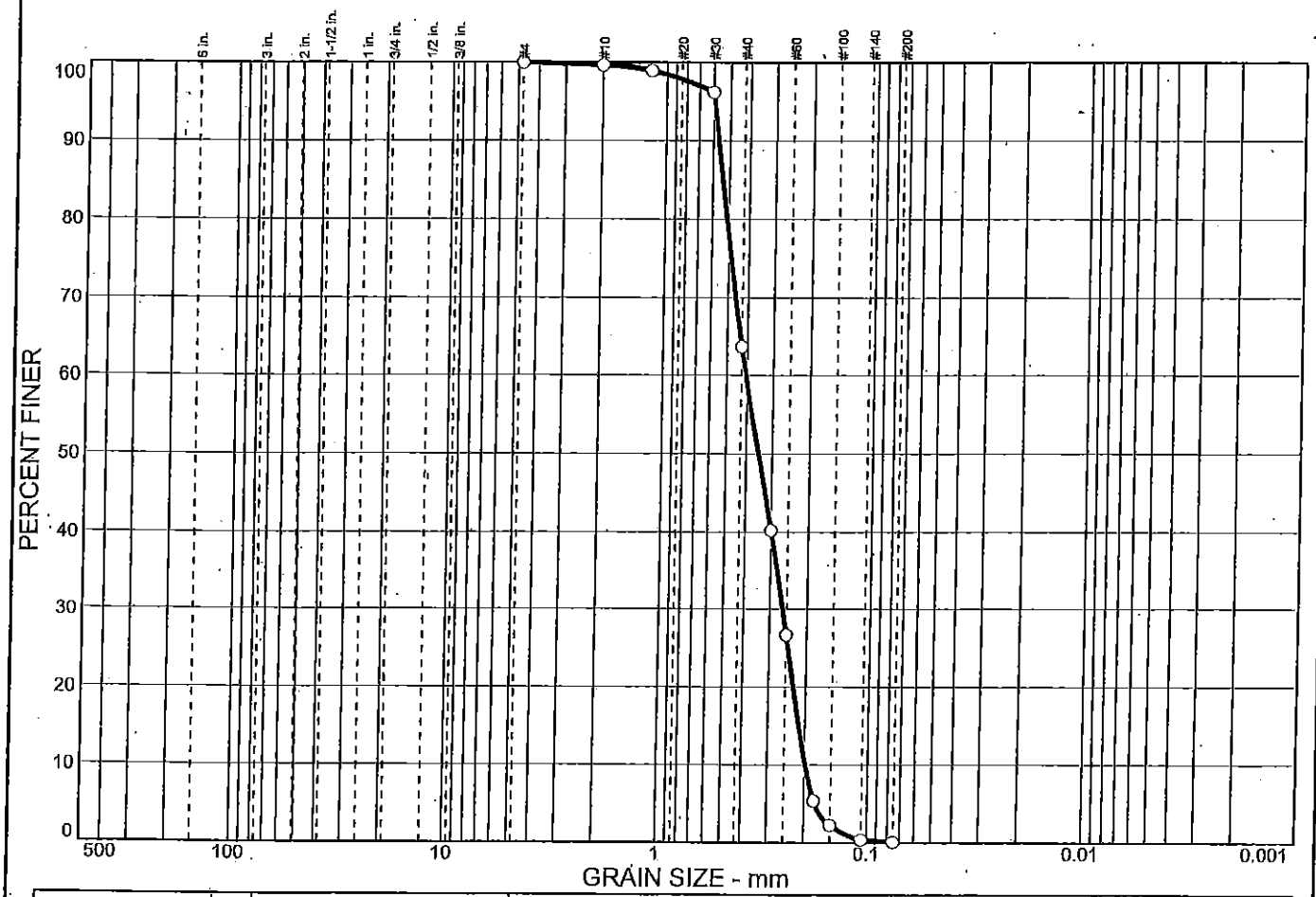
OV-29
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/21/04
Location: OV-29 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 29D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.7		
#16	99.0		
#30	96.3		
#40	63.7		
#50	40.2		
#60	26.7		
#80	5.5		
#100	2.3		
#140	0.4		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.537 D_{60}= 0.405 D_{50}= 0.349
D_{30}= 0.261 D_{15}= 0.214 D_{10}= 0.198
C_u= 2.04 C_c= 0.85

Classification

USCS= SP AASHTO= A-3

Remarks

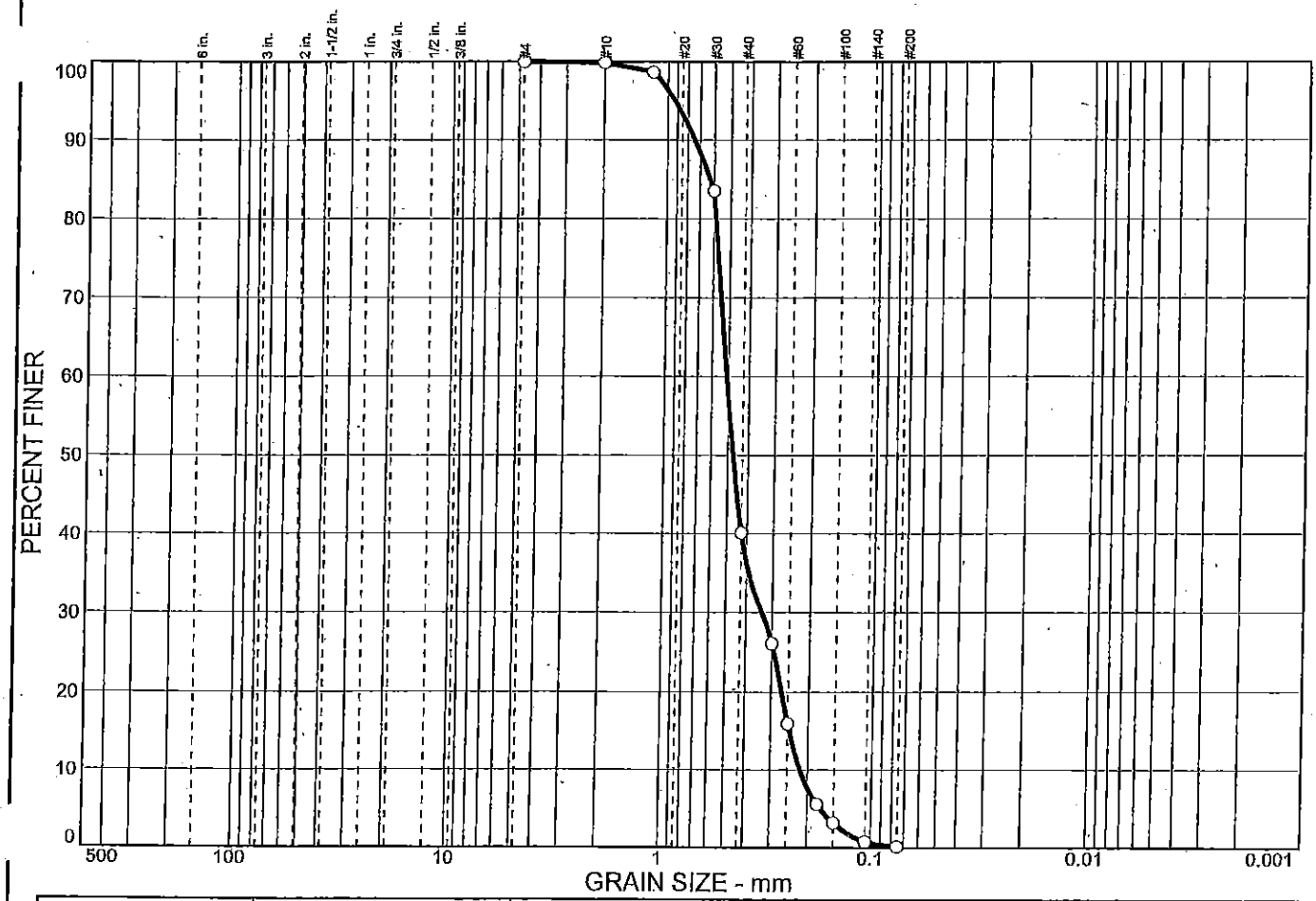
OV-29
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/9/04
Location: OV-29 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 29E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	98.7		
#30	83.5		
#40	40.1		
#50	26.1		
#60	15.9		
#80	5.6		
#100	3.2		
#140	0.8		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.628 D_{60}= 0.510 D_{50}= 0.471
D_{30}= 0.336 D_{15}= 0.246 D_{10}= 0.217
C_u= 2.35 C_c= 1.02

Classification

USCS= SP AASHTO= A-1-b

Remarks

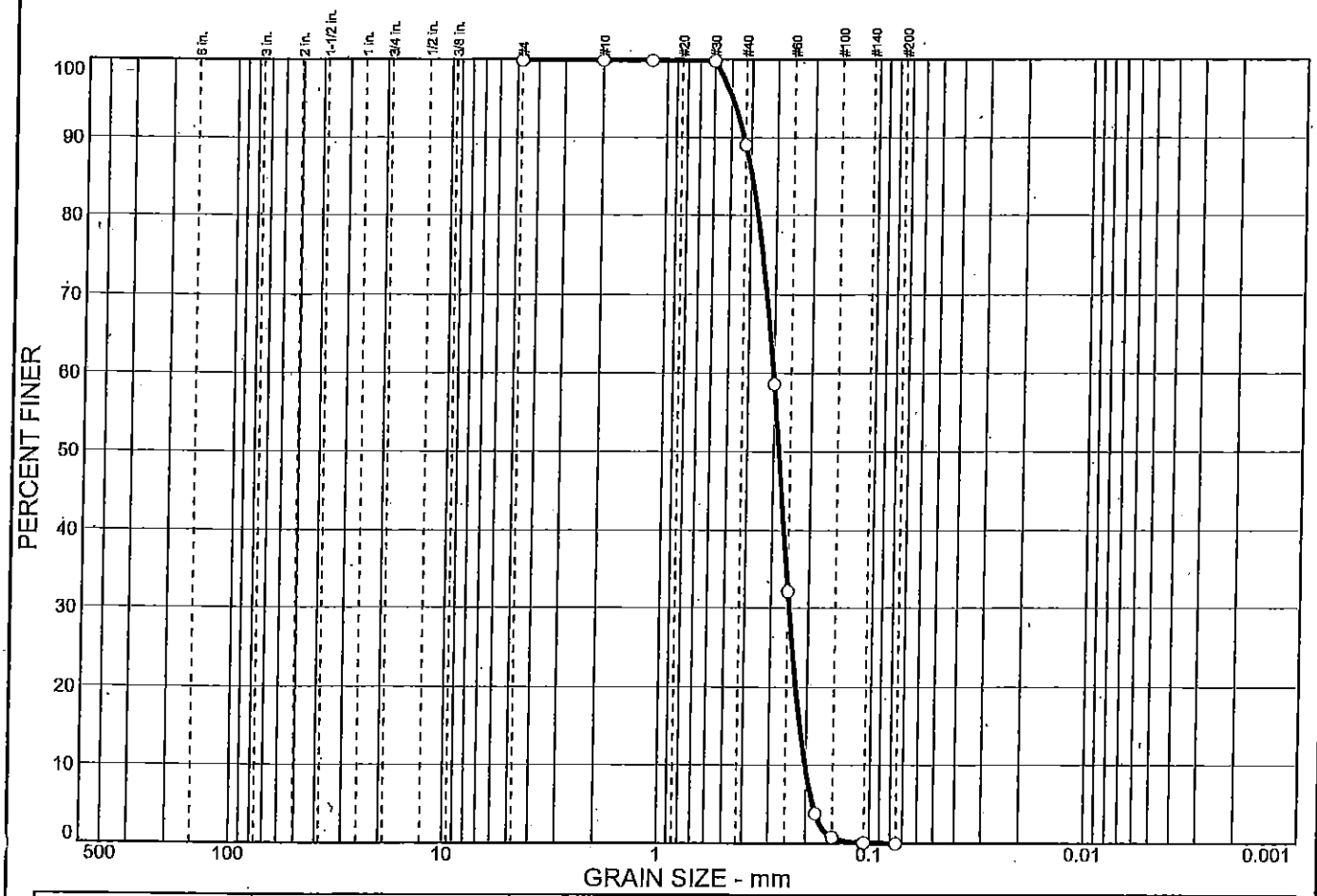
OV-29
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/9/04
Location: OV-29 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 29F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.9	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.9		
#16	99.9		
#30	99.8		
#40	89.0		
#50	58.6		
#60	32.1		
#80	3.8		
#100	0.8		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.396 D_{60}= 0.303 D_{50}= 0.282
D_{30}= 0.246 D_{15}= 0.215 D_{10}= 0.202
C_u= 1.50 C_c= 0.99

Classification

USCS= SP AASHTO= A-3

Remarks

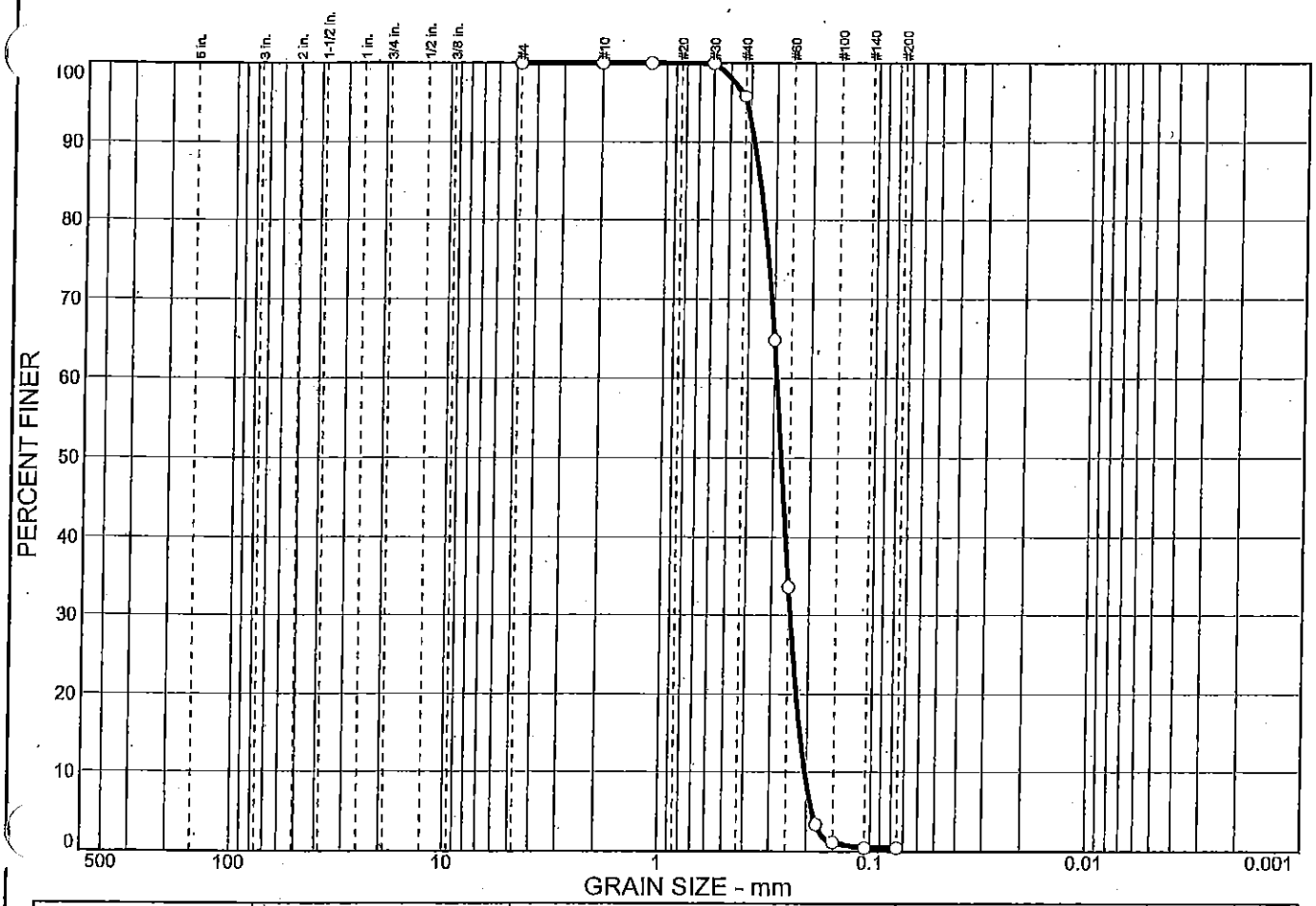
OV-30
Sample A

Sample No.: A **Source of Sample:** **Date:** 6/2/04
Location: OV-30 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 30A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.5	0.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#40	95.8		
#50	64.8		
#60	33.6		
#80	3.5		
#100	1.2		
#140	0.5		
#200	0.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.359 D_{60}= 0.291 D_{50}= 0.275
D_{30}= 0.244 D_{15}= 0.216 D_{10}= 0.204
C_u= 1.43 C_c= 1.01

Classification

USCS= SP AASHTO= A-3

Remarks

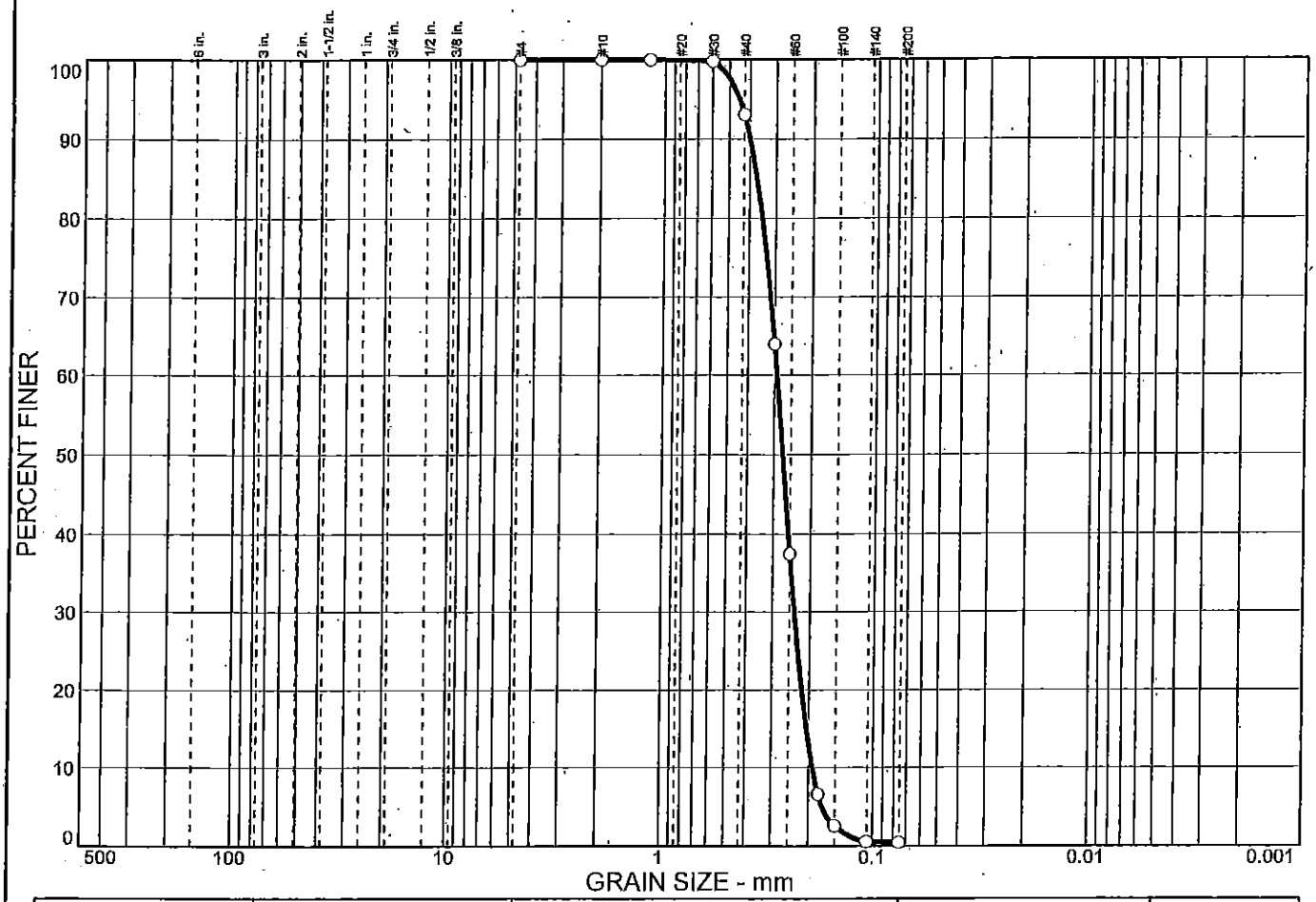
OV-30
Sample B

Sample No.: B **Source of Sample:** **Date:** 6/2/04
Location: OV-30 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 30B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.5	0.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.8		
#40	93.0		
#50	63.9		
#60	37.4		
#80	6.6		
#100	2.6		
#140	0.6		
#200	0.5		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.369 D_{60}= 0.292 D_{50}= 0.272
D_{30}= 0.236 D_{15}= 0.205 D_{10}= 0.192
C_u= 1.52 C_c= 1.00

Classification

USCS= SP AASHTO= A-3

Remarks

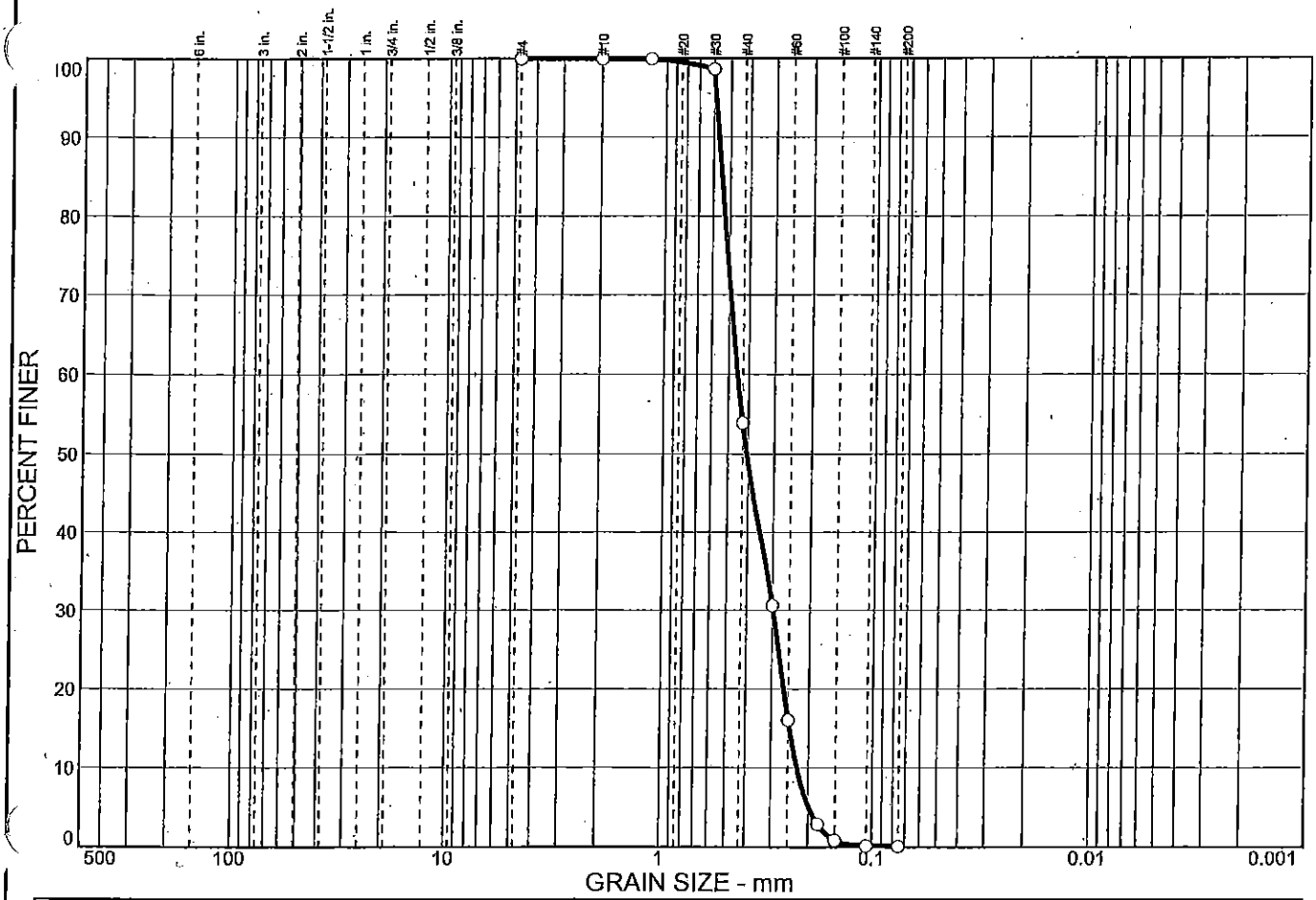
OV-30
Sample C

Sample No.: C **Source of Sample:** **Date:** 6/2/04
Location: OV-30 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 30C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	98.7		
#40	53.9		
#50	30.6		
#60	16.0		
#80	2.9		
#100	0.9		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.547 D_{60}= 0.451 D_{50}= 0.406
D_{30}= 0.298 D_{15}= 0.246 D_{10}= 0.226
C_u= 1.99 C_c= 0.87

Classification

USCS= SP AASHTO= A-3

Remarks

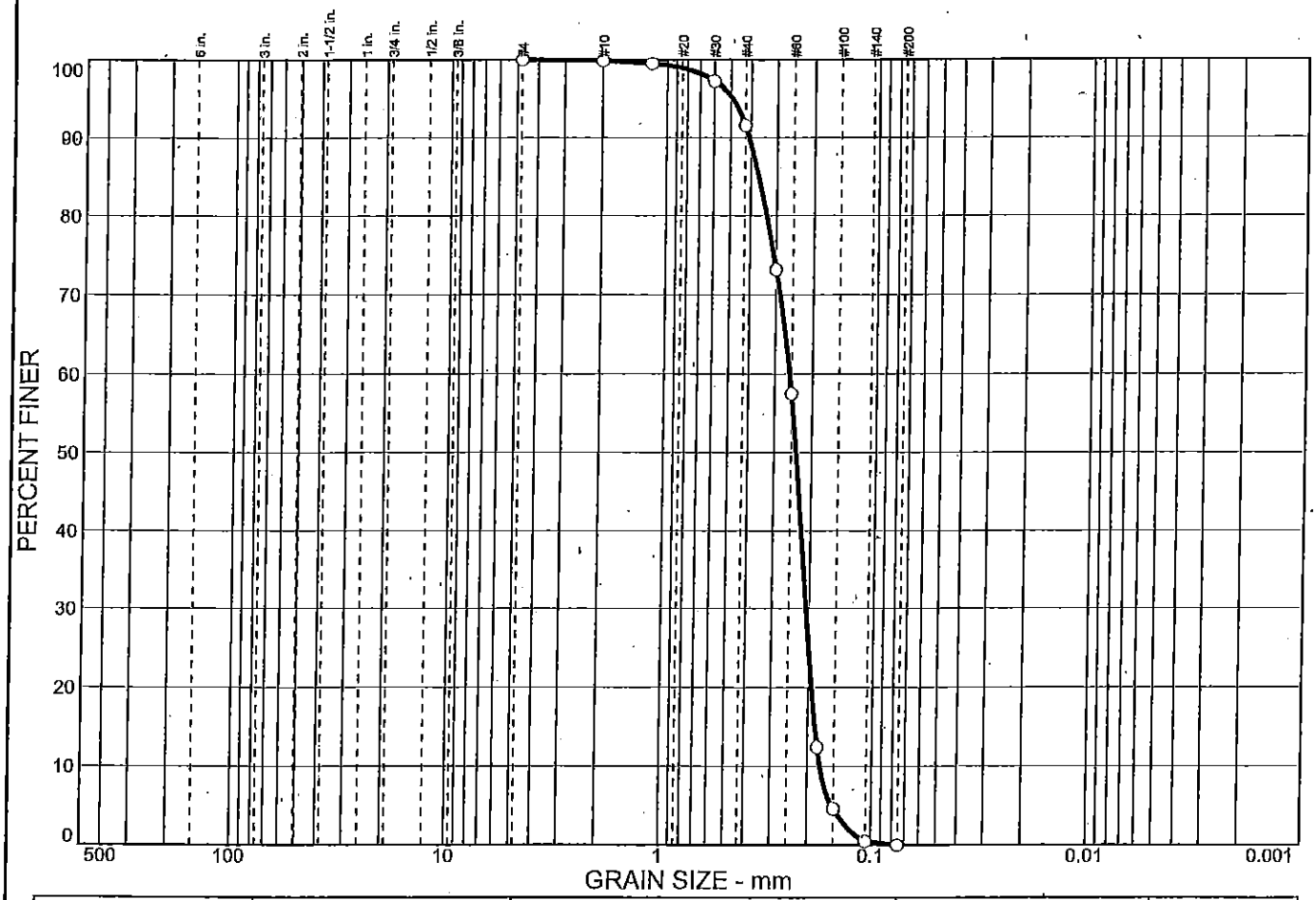
OV-30
Sample D

Sample No.: D **Source of Sample:** **Date:** 6/2/04
Location: OV-30 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 30D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.5		
#30	97.3		
#40	91.5		
#50	73.1		
#60	57.5		
#80	12.4		
#100	4.6		
#140	0.5		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.366 D_{60}= 0.256 D_{50}= 0.236
D_{30}= 0.207 D_{15}= 0.185 D_{10}= 0.174
C_u= 1.46 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

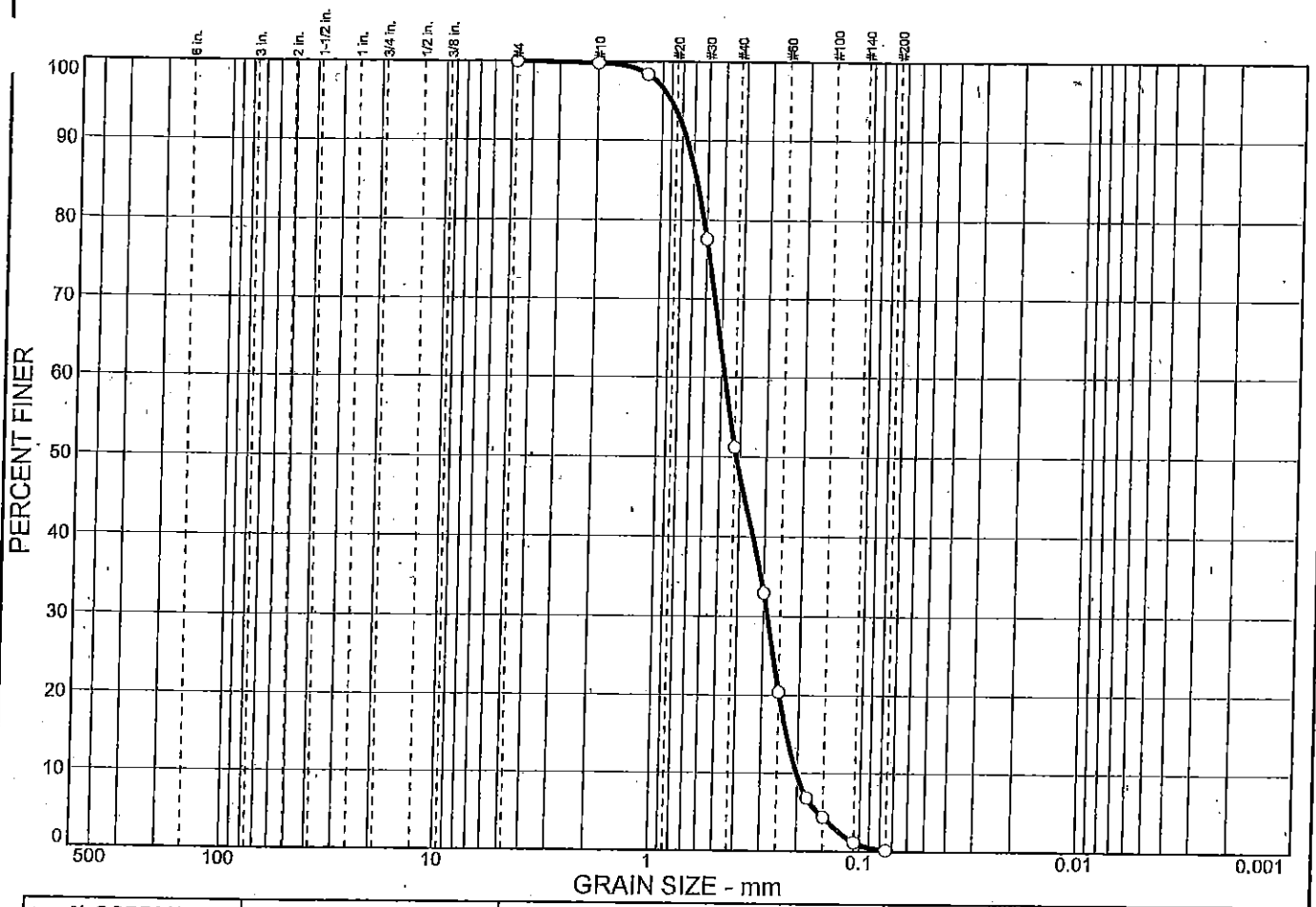
OV-30
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/9/04
Location: OV-30 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 30E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#16	98.4		
#30	77.6		
#40	51.2		
#50	33.0		
#60	20.4		
#80	6.9		
#100	4.4		
#140	1.2		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.679 D_{60}= 0.480 D_{50}= 0.417
D_{30}= 0.287 D_{15}= 0.228 D_{10}= 0.202
C_u= 2.37 C_c= 0.85

Classification

USCS= SP AASHTO= A-3

Remarks

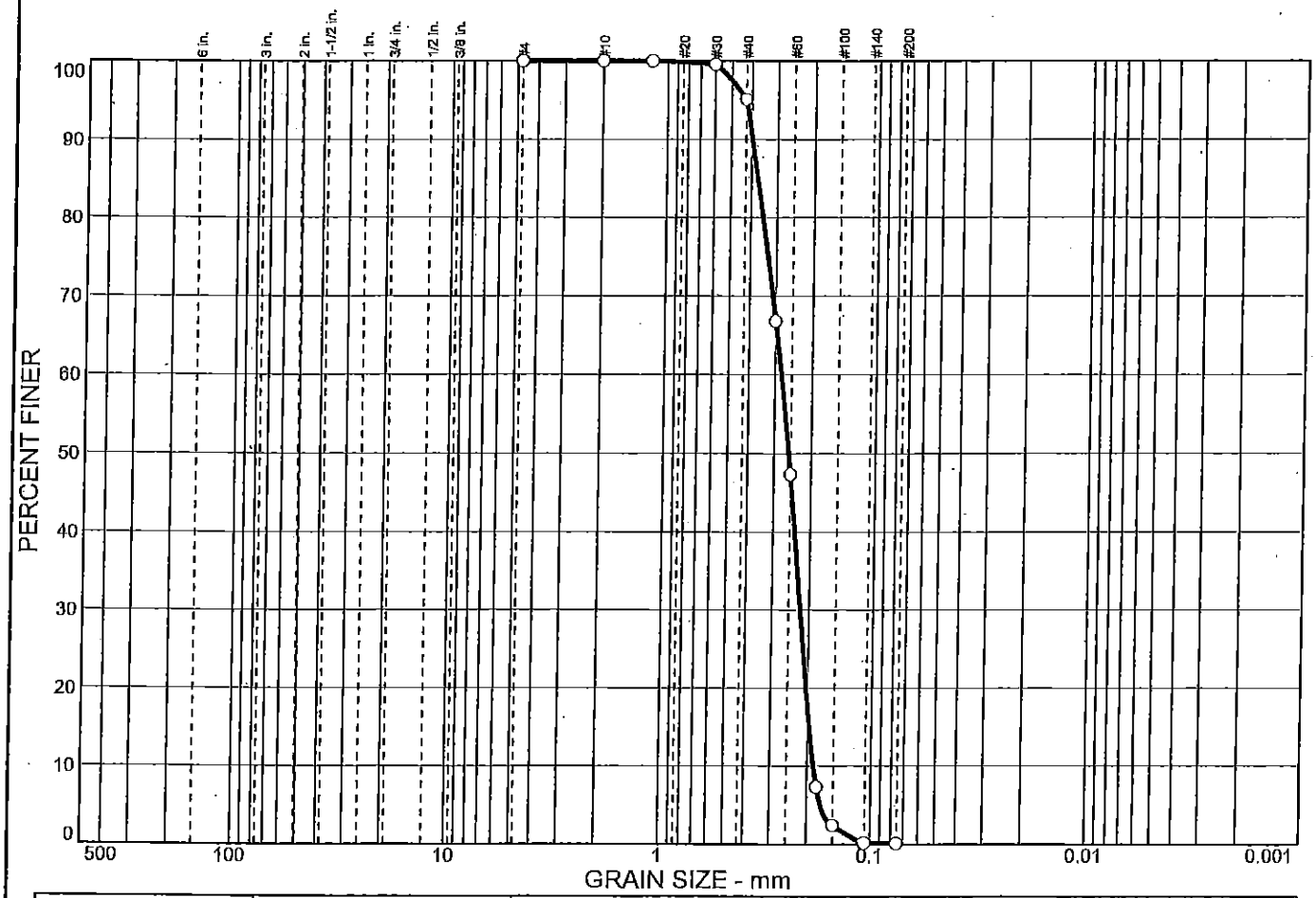
OV-30
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/9/04
Location: OV-30 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 30F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.6		
#40	95.1		
#50	66.8		
#60	47.3		
#80	7.3		
#100	2.4		
#140	0.2		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.372 D_{60}= 0.280 D_{50}= 0.256
D_{30}= 0.220 D_{15}= 0.196 D_{10}= 0.186
C_u= 1.50 C_c= 0.93

Classification

USCS= SP AASHTO= A-3

Remarks

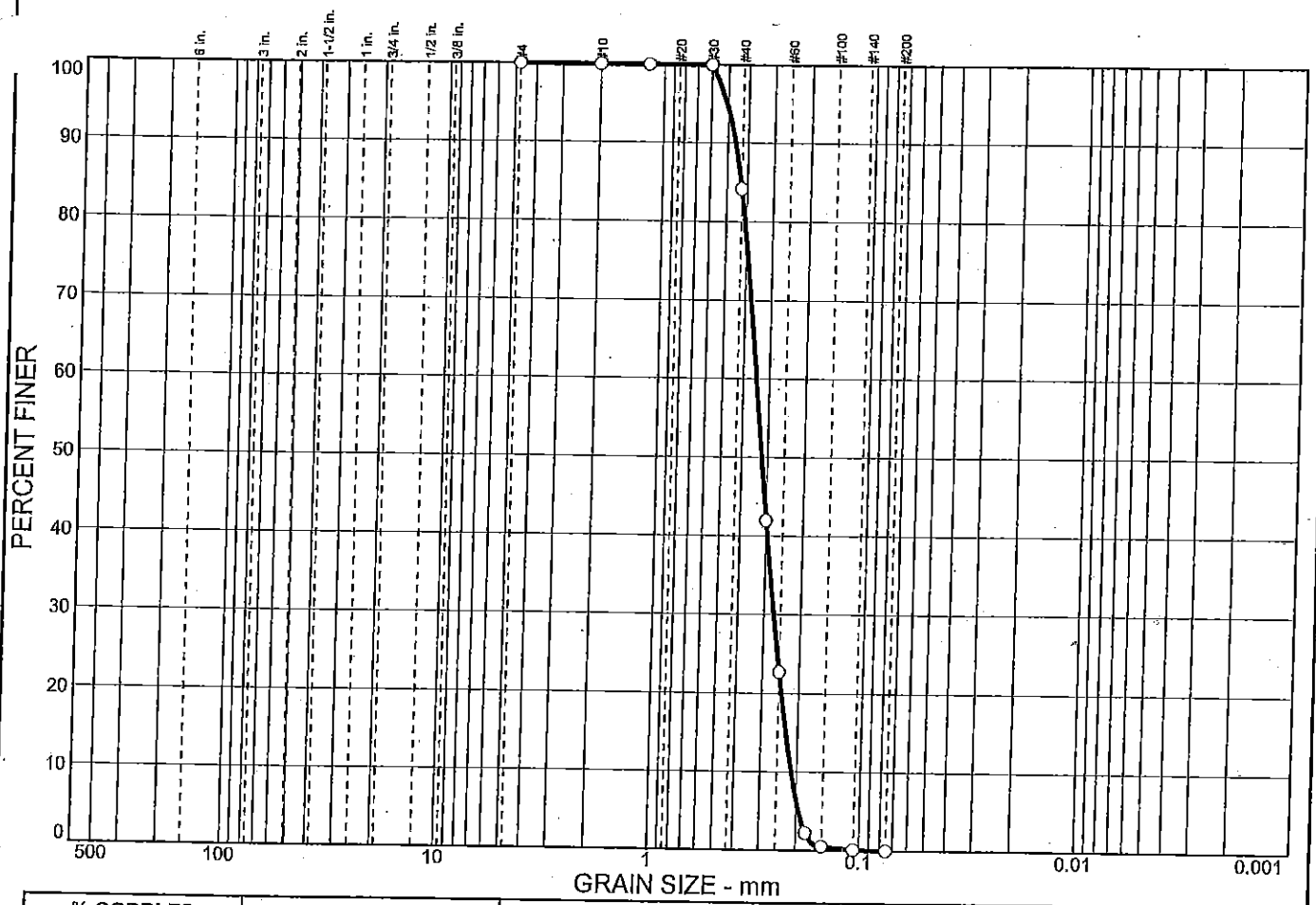
OV-31
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/2/04
Location: OV-31 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 31A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#40	84.1		
#50	41.9		
#60	22.7		
#80	2.2		
#100	0.5		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NA LL= NA PI= NA

Coefficients

D_{85}= 0.429 D_{60}= 0.345 D_{50}= 0.320
D_{30}= 0.270 D_{15}= 0.228 D_{10}= 0.213
C_u= 1.62 C_c= 0.99

Classification

USCS= SP AASHTO= A-3

Remarks

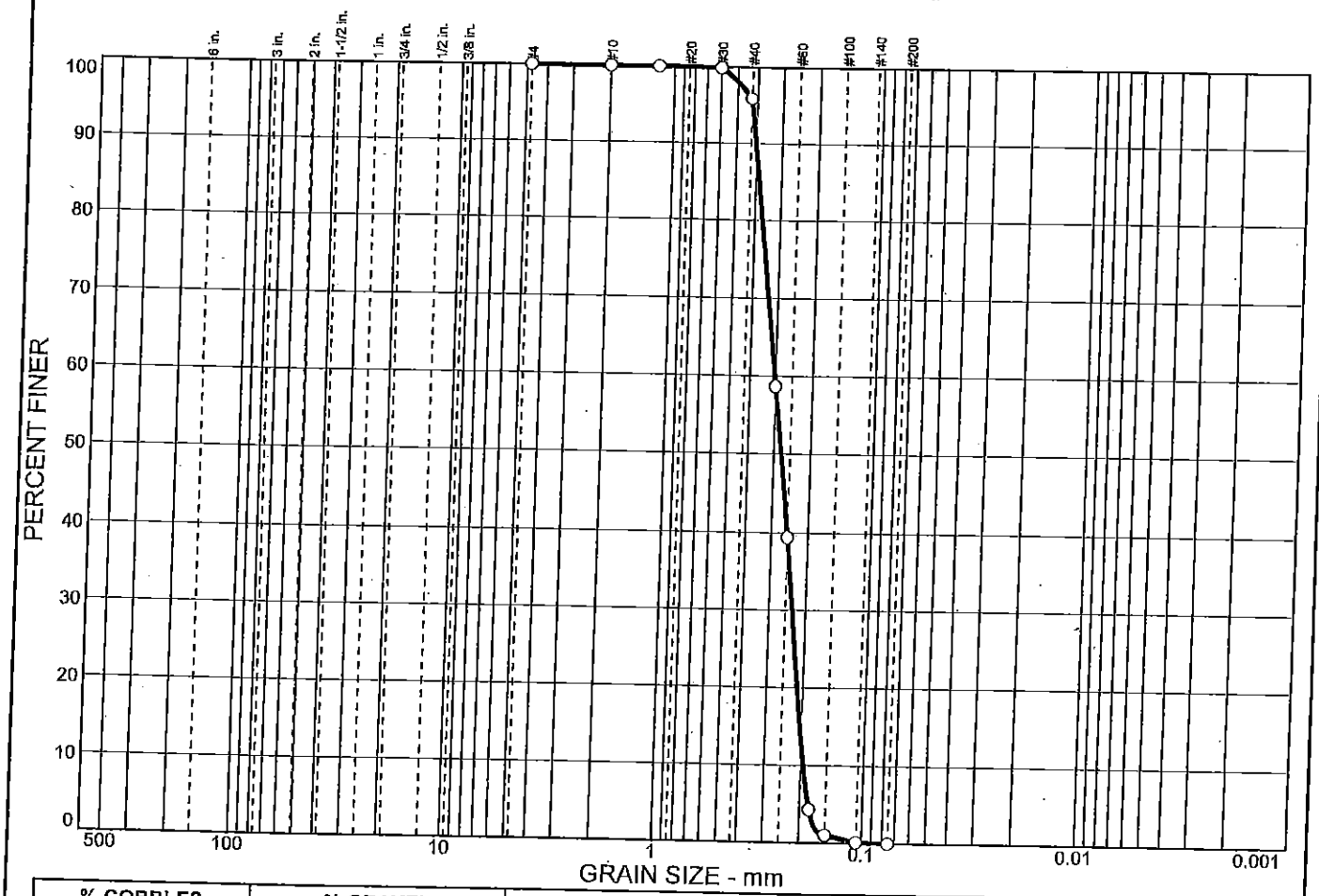
OV-31
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/2/04
Location: OV-31 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 31B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#40	95.9		
#50	58.7		
#60	39.4		
#80	4.3		
#100	1.0		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.384 D_{60}= 0.304 D_{50}= 0.276
D_{30}= 0.232 D_{15}= 0.204 D_{10}= 0.194
C_u= 1.56 C_c= 0.91

Classification

USCS= SP AASHTO= A-3

Remarks

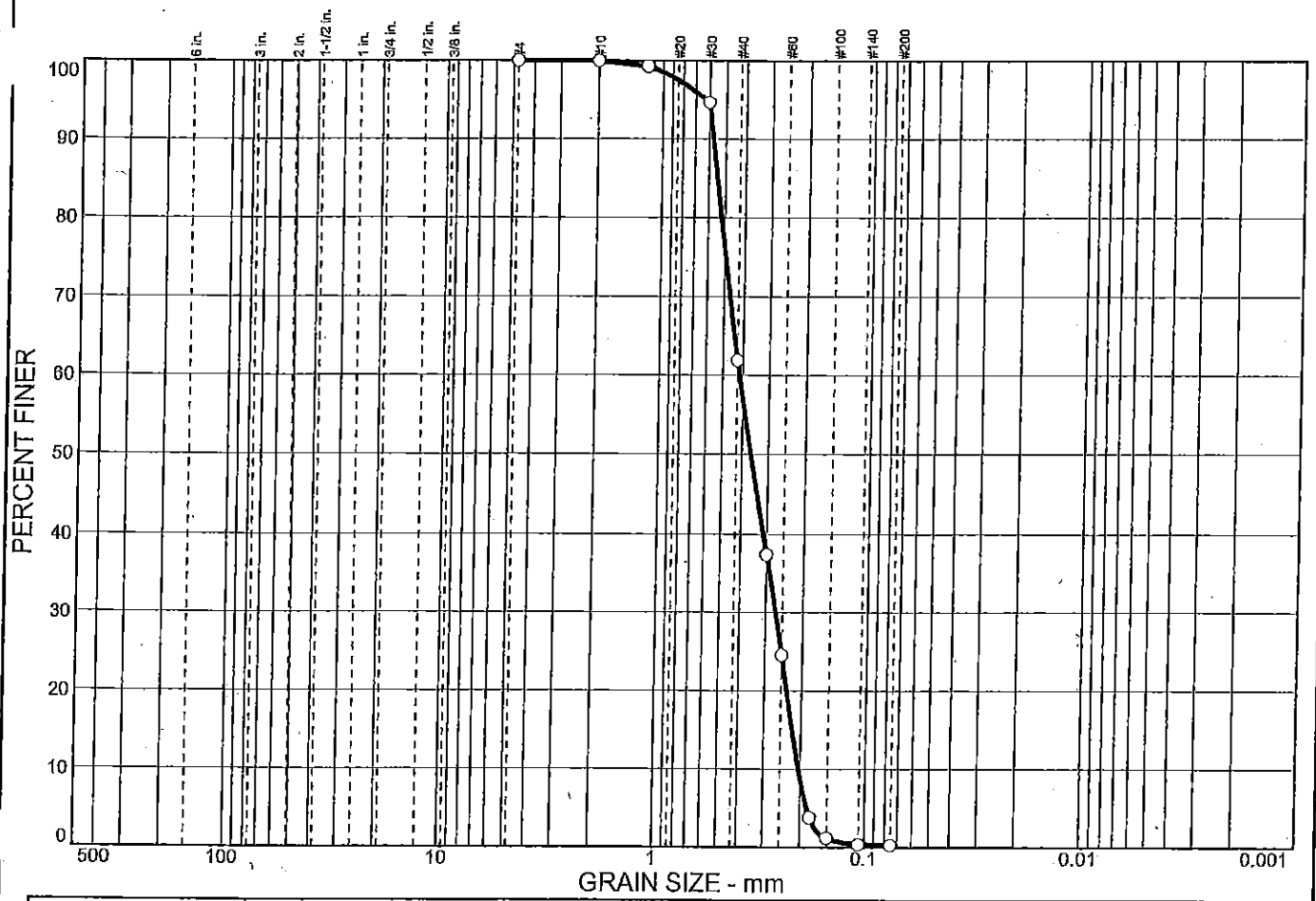
OV-31
Sample C

Sample No.: C
Location: OV-31
Source of Sample:
Date: 4/2/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 31C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.3		
#30	94.7		
#40	61.9		
#50	37.4		
#60	24.5		
#80	3.8		
#100	1.2		
#140	0.4		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.545 D_{60}= 0.415 D_{50}= 0.362
D_{30}= 0.270 D_{15}= 0.220 D_{10}= 0.204
C_u= 2.03 C_c= 0.86

Classification

USCS= SP AASHTO= A-3

Remarks

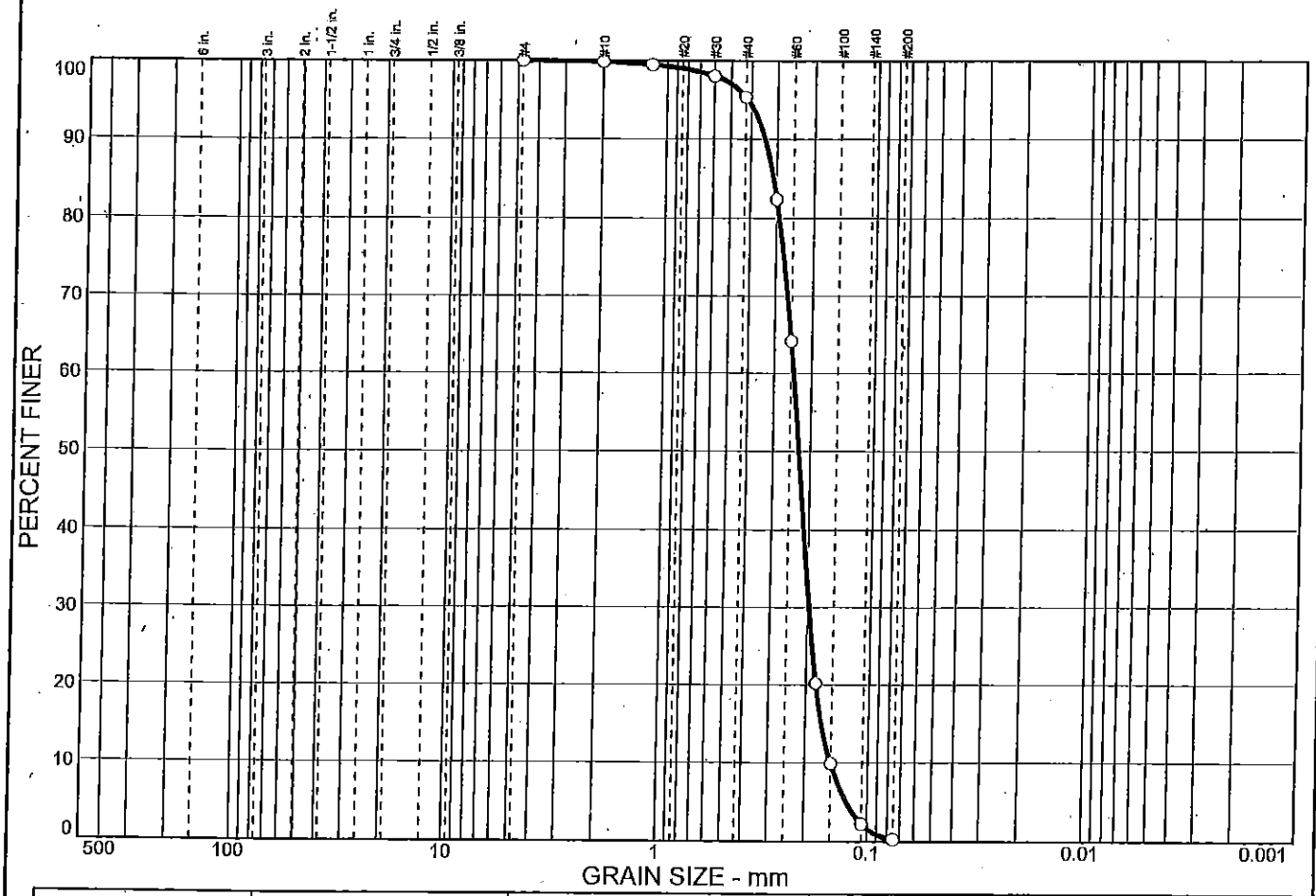
OV-31
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/2/04
Location: OV-31 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 31D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.5		
#30	98.1		
#40	95.4		
#50	82.4		
#60	64.2		
#80	20.2		
#100	9.9		
#140	2.2		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.312 D_{60}= 0.242 D_{50}= 0.226
D_{30}= 0.196 D_{15}= 0.168 D_{10}= 0.150
C_u= 1.61 C_c= 1.06

Classification

USCS= SP AASHTO= A-3

Remarks

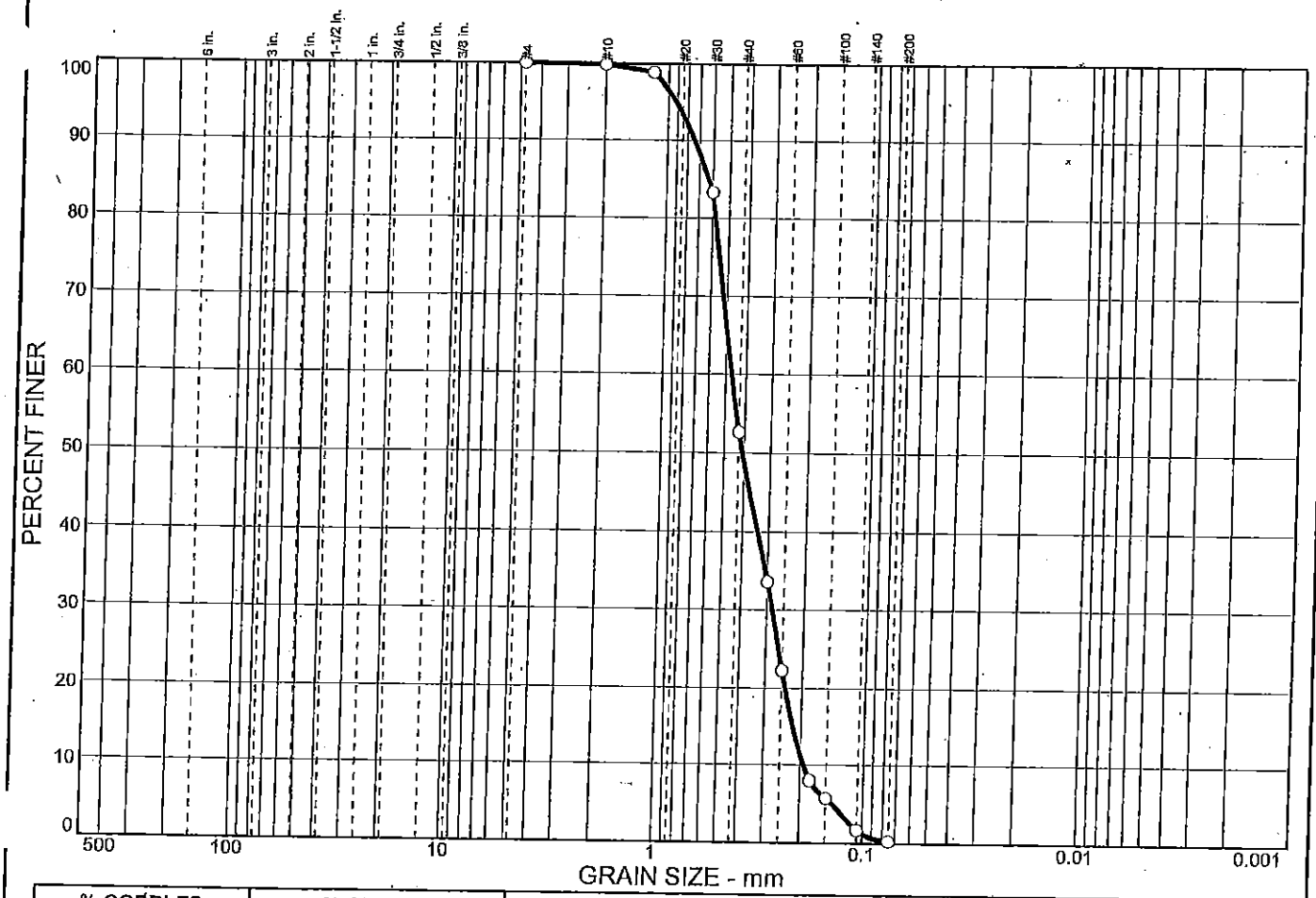
OV-31
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/9/04
Location: OV-31 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 31E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	98.9		
#30	83.3		
#40	52.7		
#50	33.6		
#60	22.3		
#80	8.1		
#100	5.8		
#140	1.7		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.631 D_{60}= 0.467 D_{50}= 0.408
D_{30}= 0.283 D_{15}= 0.219 D_{10}= 0.193
C_u= 2.42 C_c= 0.88

Classification

USCS= SP AASHTO= A-3

Remarks

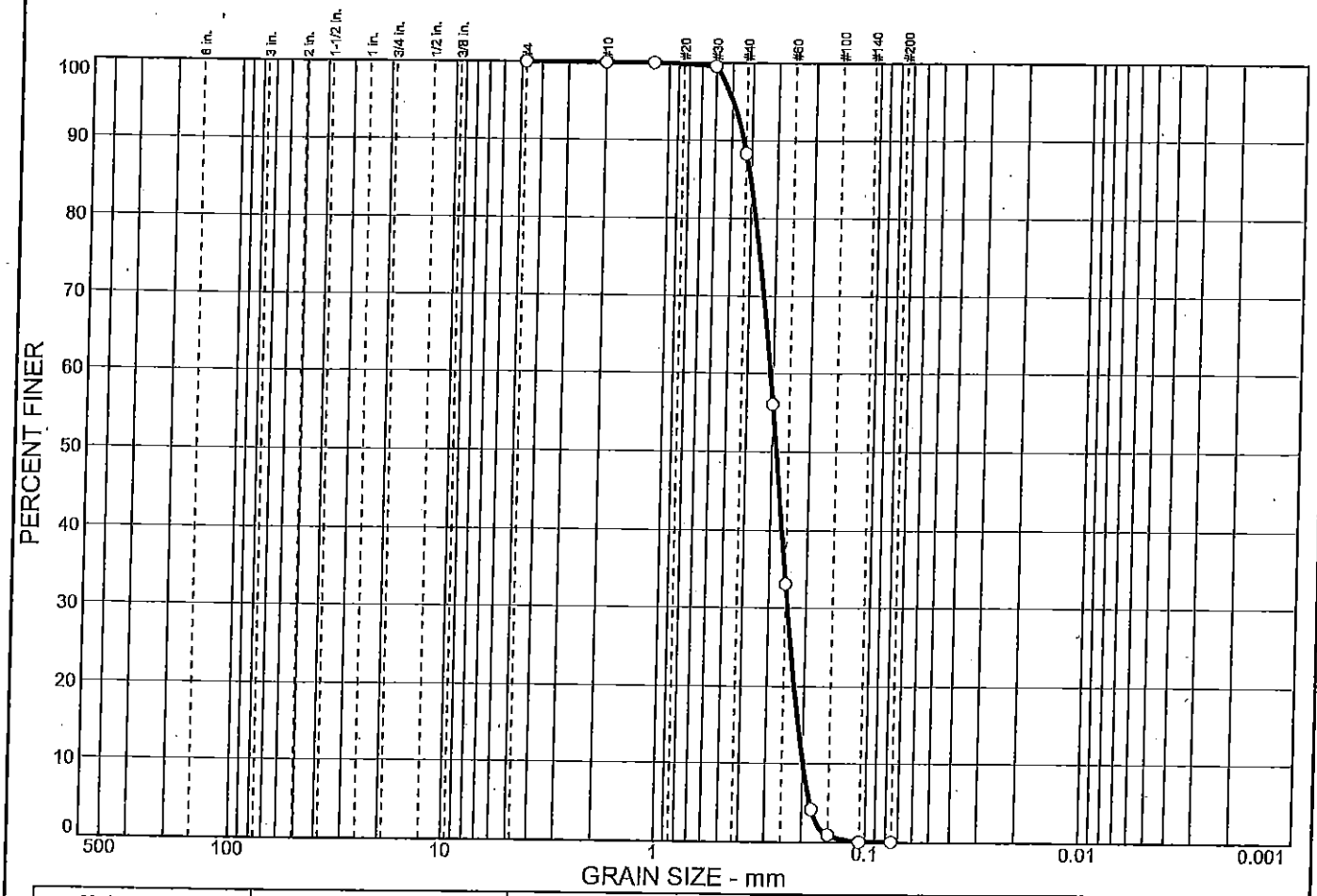
OV-31
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/9/04
Location: OV-31 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 31F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.6		
#40	88.3		
#50	56.1		
#60	33.1		
#80	4.2		
#100	1.0		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.404 D_{60}= 0.310 D_{50}= 0.286
D_{30}= 0.244 D_{15}= 0.211 D_{10}= 0.199
C_u= 1.56 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

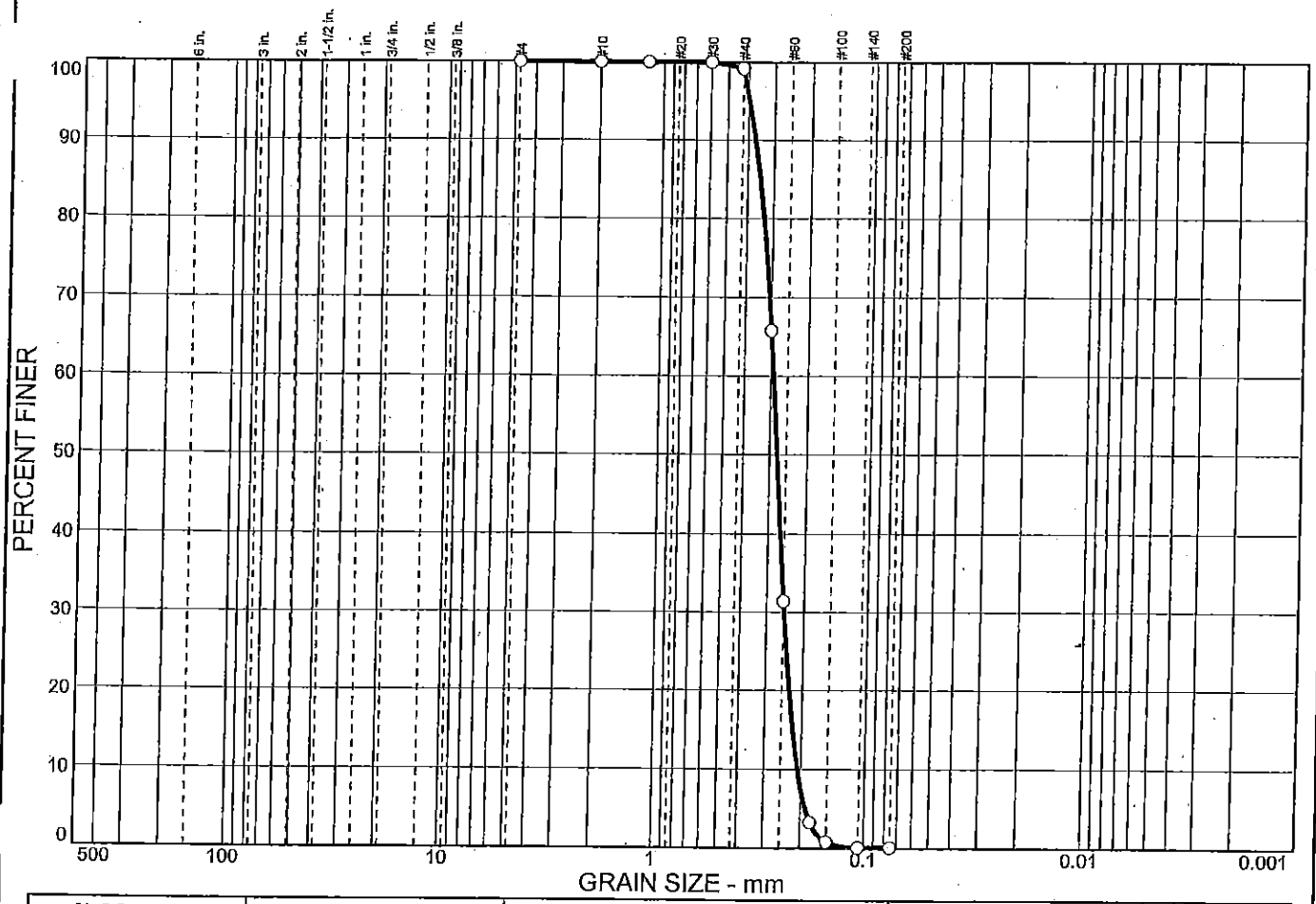
OV-32
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/2/04
Location: OV-32 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 32A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#40	99.2		
#50	65.8		
#60	31.4		
#80	3.3		
#100	0.8		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.348 D_{60}= 0.290 D_{50}= 0.276
D_{30}= 0.248 D_{15}= 0.221 D_{10}= 0.208
C_u= 1.40 C_c= 1.02

Classification

USCS= SP AASHTO= A-3

Remarks

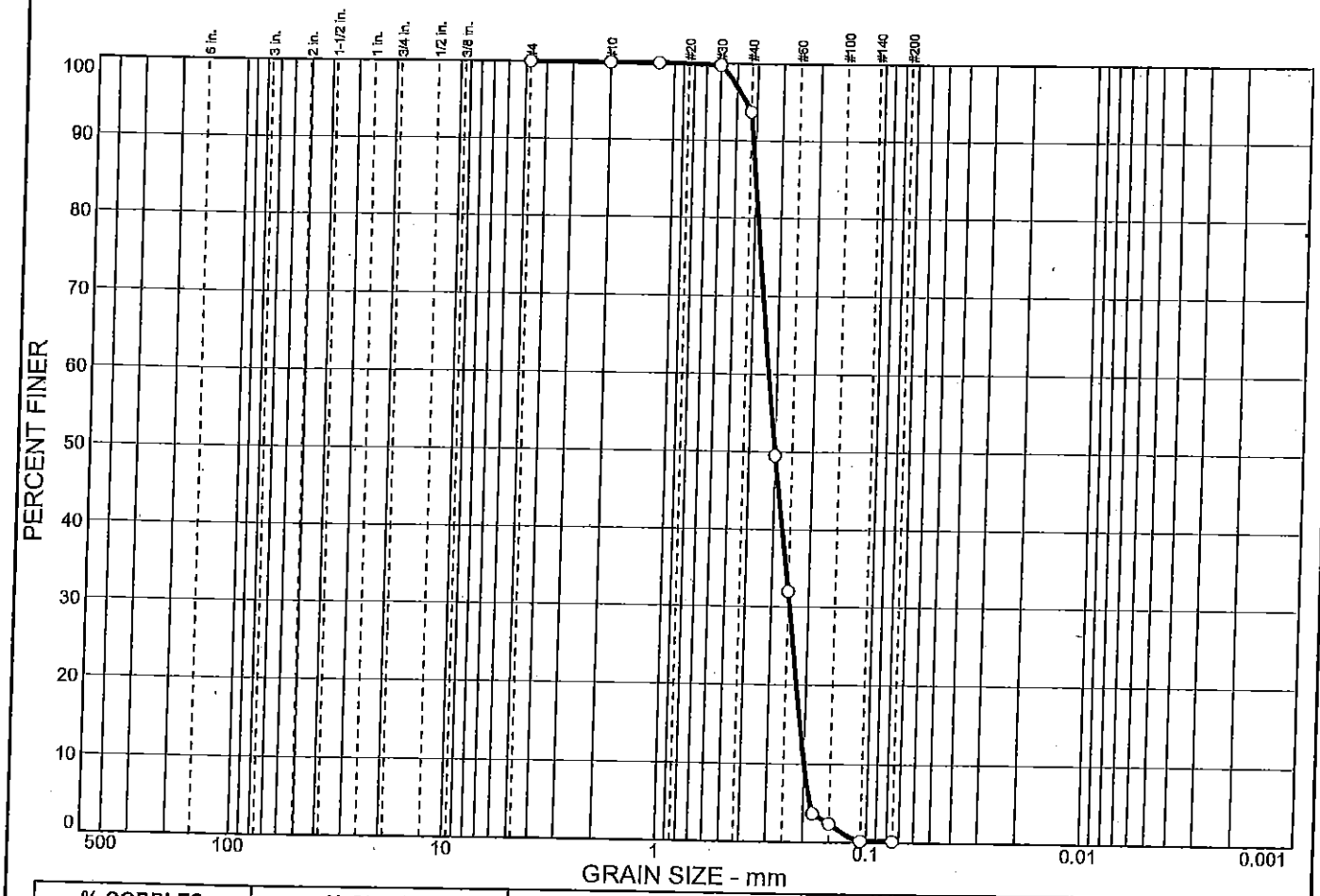
OV-32
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/2/04
Location: OV-32 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 32B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.8		
#40	93.7		
#50	49.5		
#60	32.0		
#80	3.7		
#100	2.4		
#140	0.2		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.399 D_{60}= 0.329 D_{50}= 0.301
D_{30}= 0.245 D_{15}= 0.211 D_{10}= 0.200
C_u= 1.65 C_c= 0.91

Classification

USCS= SP AASHTO= A-3

Remarks

OV-32
Sample C

Sample No.: C
Location: OV-32

Source of Sample:

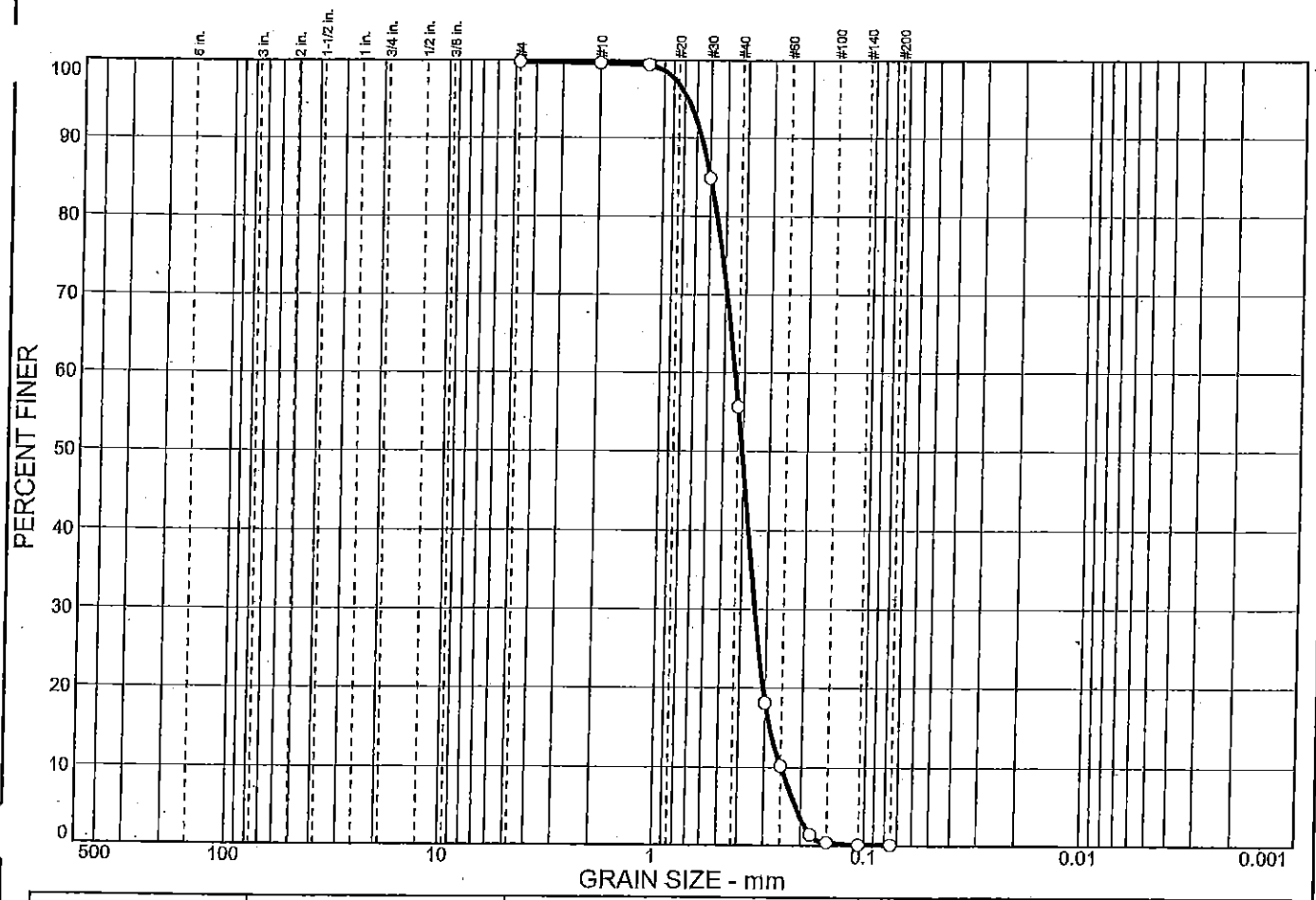
Date: 4/2/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis

Project No: VB04-131G **Figure** 32C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.7		
#16	99.5		
#30	84.9		
#40	55.6		
#50	18.1		
#60	10.2		
#80	1.4		
#100	0.4		
#140	0.1		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.601 D_{60}= 0.442 D_{50}= 0.405
D_{30}= 0.342 D_{15}= 0.284 D_{10}= 0.248
C_u= 1.78 C_c= 1.06

Classification

USCS= SP AASHTO= A-3

Remarks

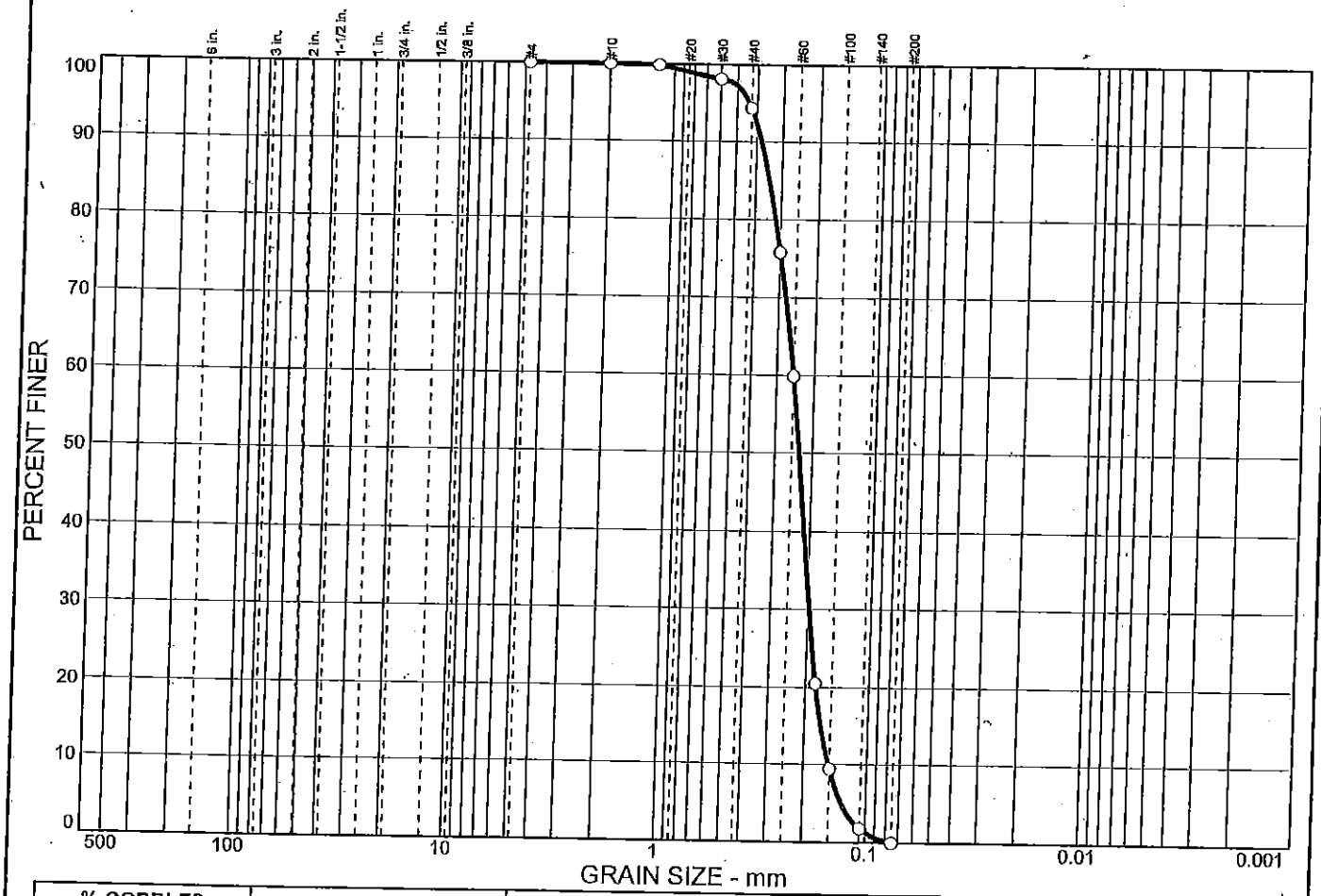
OV-32
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/2/04
Location: OV-32 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 32D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	98.1		
#40	94.3		
#50	75.9		
#60	59.9		
#80	20.5		
#100	9.4		
#140	1.8		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.345 D_{60}= 0.250 D_{50}= 0.230
D_{30}= 0.197 D_{15}= 0.168 D_{10}= 0.152
C_u= 1.64 C_c= 1.02

Classification

USCS= SP AASHTO= A-3

Remarks

OV-32
Sample E

Sample No.: E
Location: OV-32

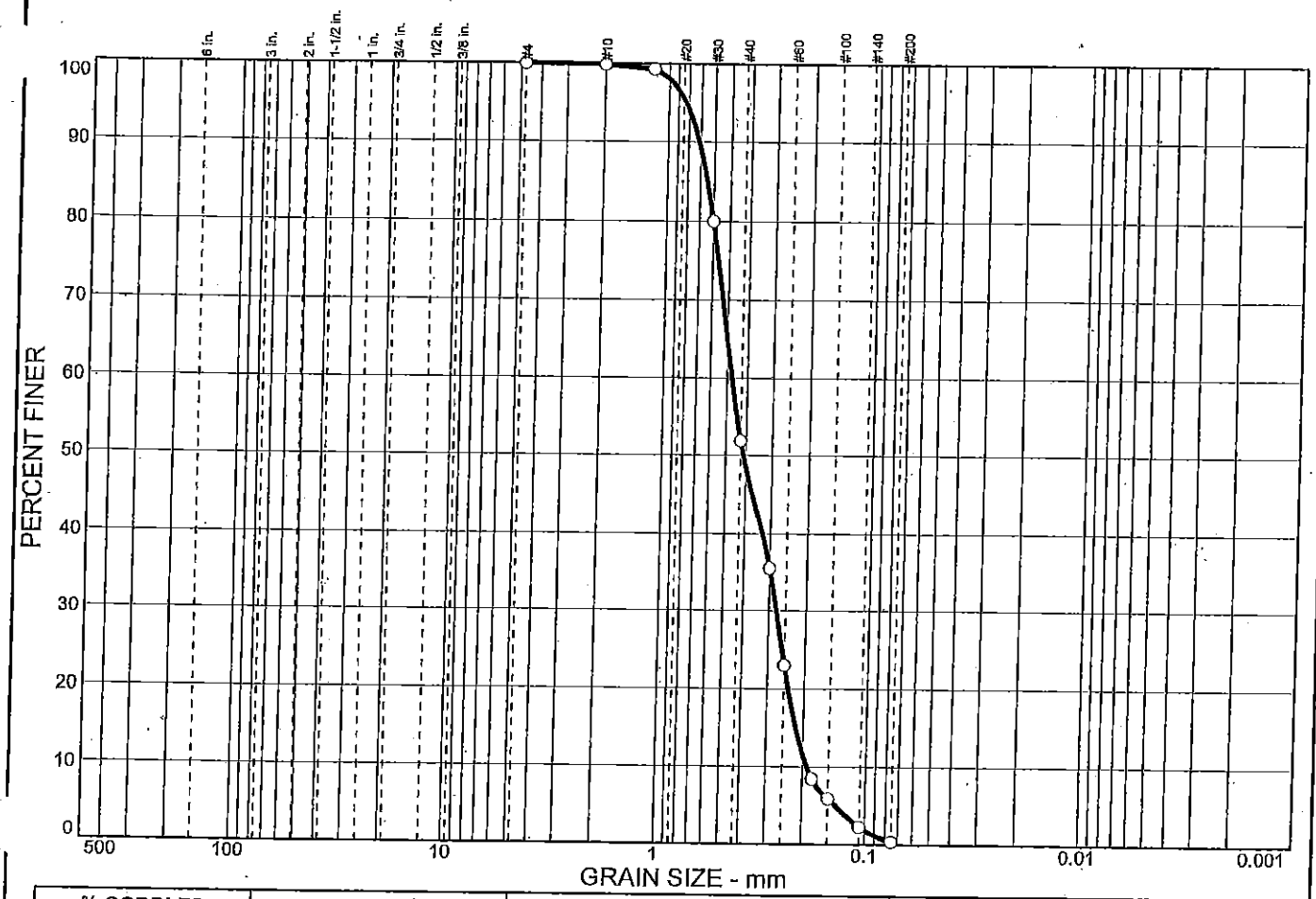
Source of Sample:

Date: 6/9/04
Elev./Depth: NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G
Figure 32E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.6	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.3		
#30	80.0		
#40	51.9		
#50	35.5		
#60	23.0		
#80	8.5		
#100	6.0		
#140	2.3		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.647 D_{60}= 0.474 D_{50}= 0.412
D_{30}= 0.276 D_{15}= 0.217 D_{10}= 0.191
C_u= 2.48 C_c= 0.84

Classification

USCS= SP AASHTO= A-3

Remarks

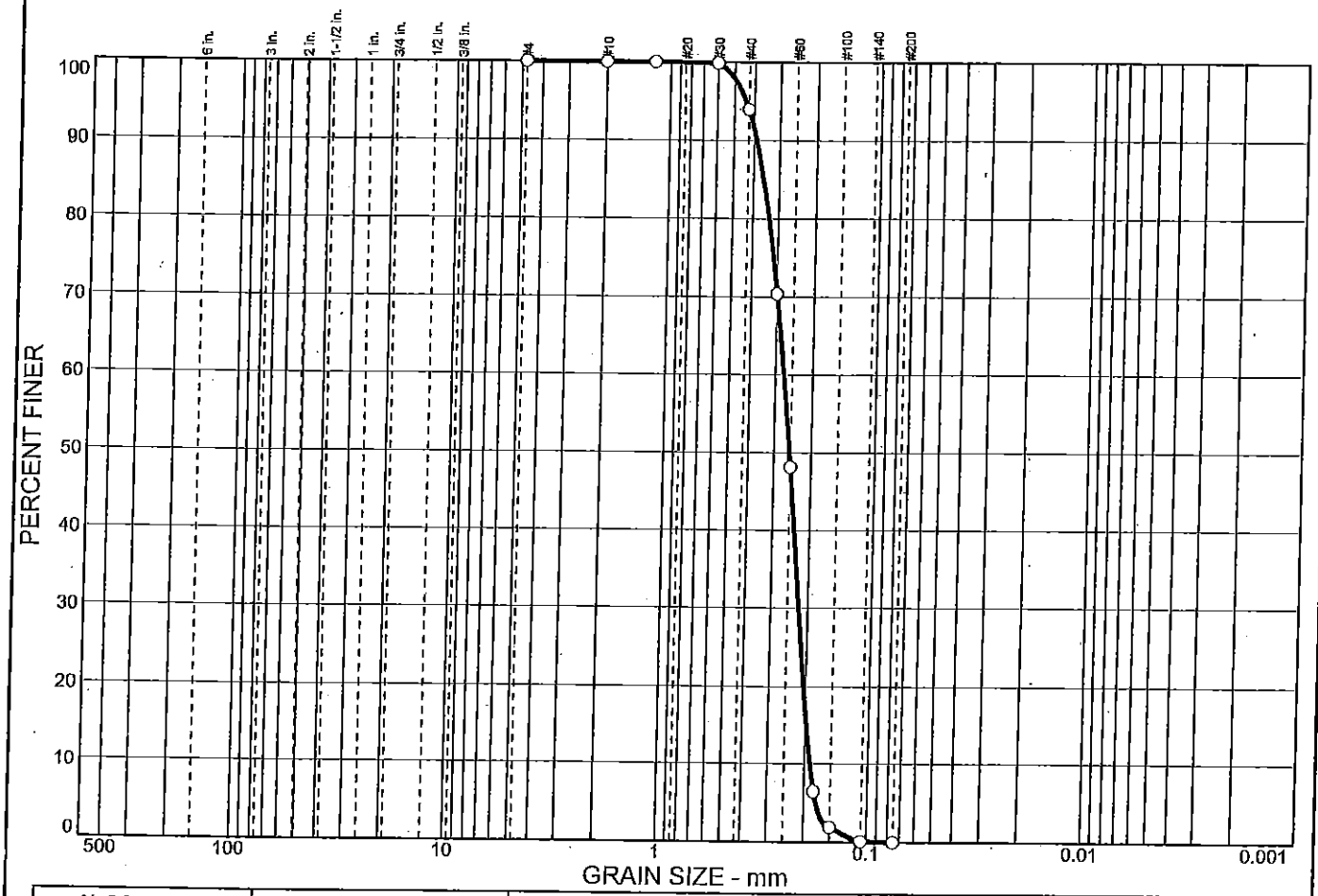
OV-32
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/9/04
Location: OV-32 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 32F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#40	93.9		
#50	70.4		
#60	48.1		
#80	6.5		
#100	1.9		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.357 D_{60}= 0.274 D_{50}= 0.253
D_{30}= 0.221 D_{15}= 0.197 D_{10}= 0.188
C_u= 1.45 C_c= 0.95

Classification

USCS= SP AASHTO= A-3

Remarks

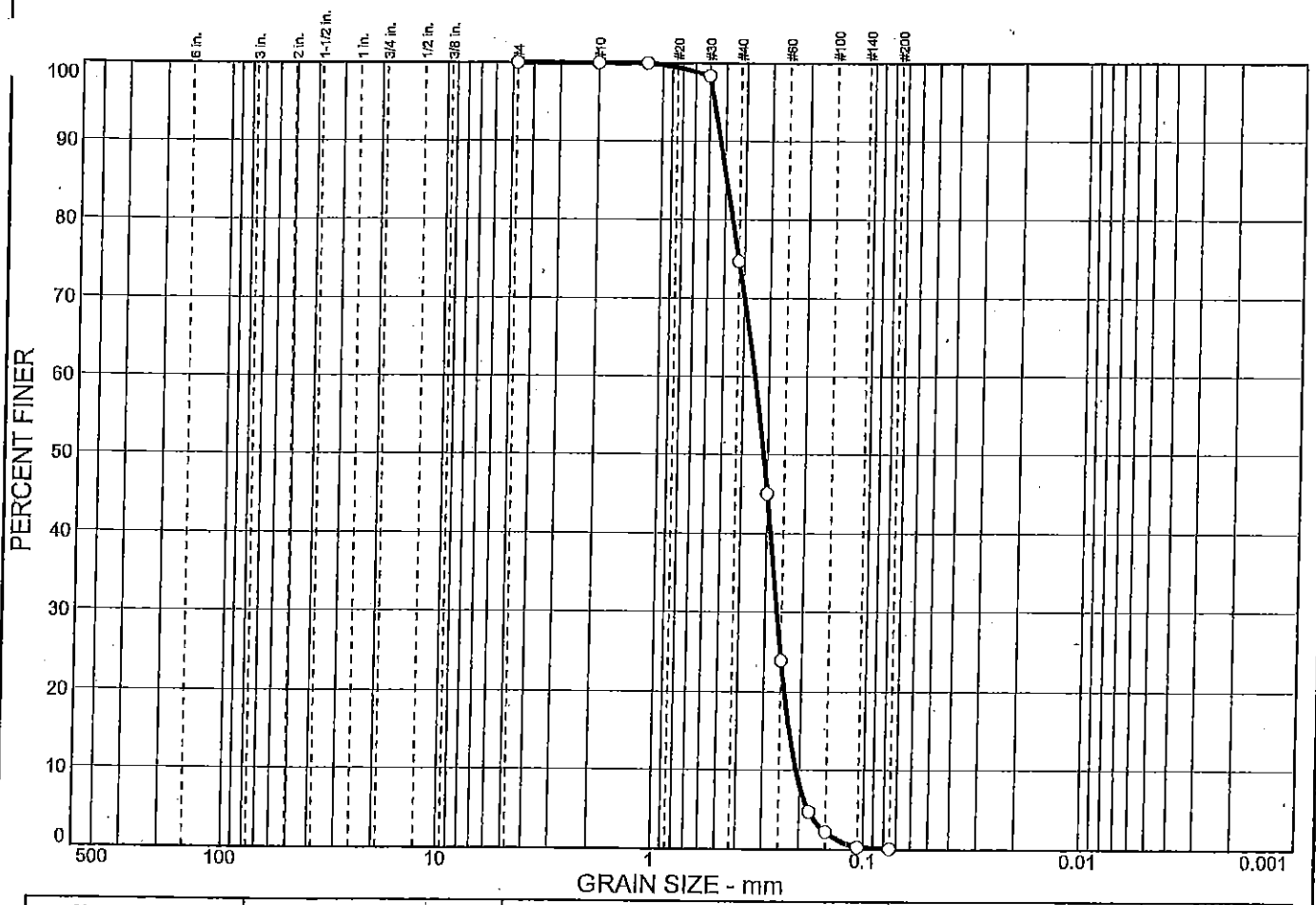
OV-33
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/21/04
Location: OV-33 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 33A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	98.4		
#40	74.7		
#50	45.0		
#60	23.9		
#80	4.8		
#100	2.2		
#140	0.3		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.493 D_{60}= 0.350 D_{50}= 0.314
D_{30}= 0.264 D_{15}= 0.226 D_{10}= 0.208
C_u= 1.69 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

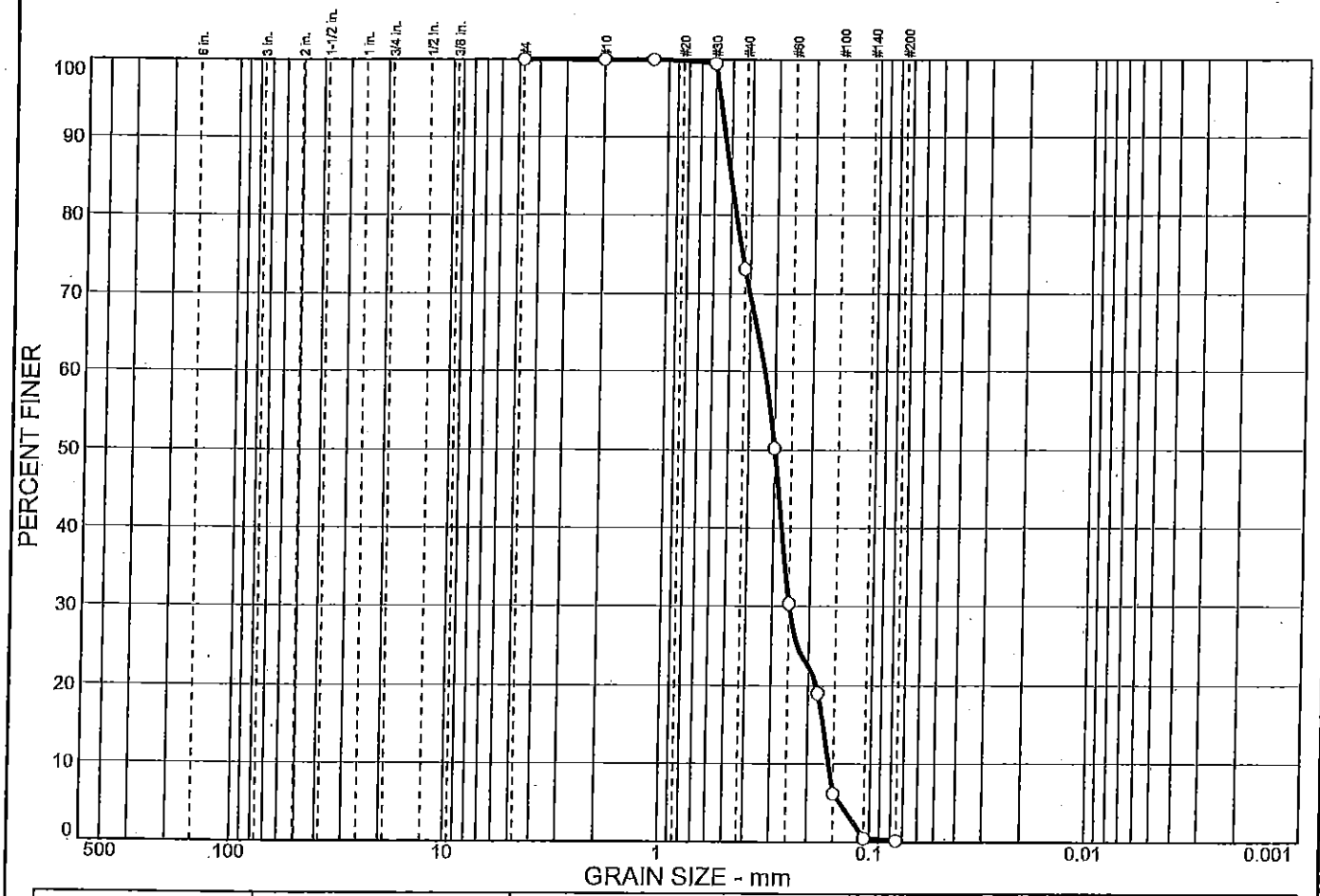
OV-33
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/21/04
Location: OV-33 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 33B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.5		
#40	73.1		
#50	50.2		
#60	30.3		
#80	19.0		
#100	6.2		
#140	0.5		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.504 D_{60}= 0.337 D_{50}= 0.299
D_{30}= 0.249 D_{15}= 0.169 D_{10}= 0.158
C_u= 2.13 C_c= 1.16

Classification

USCS= SP AASHTO= A-3

Remarks

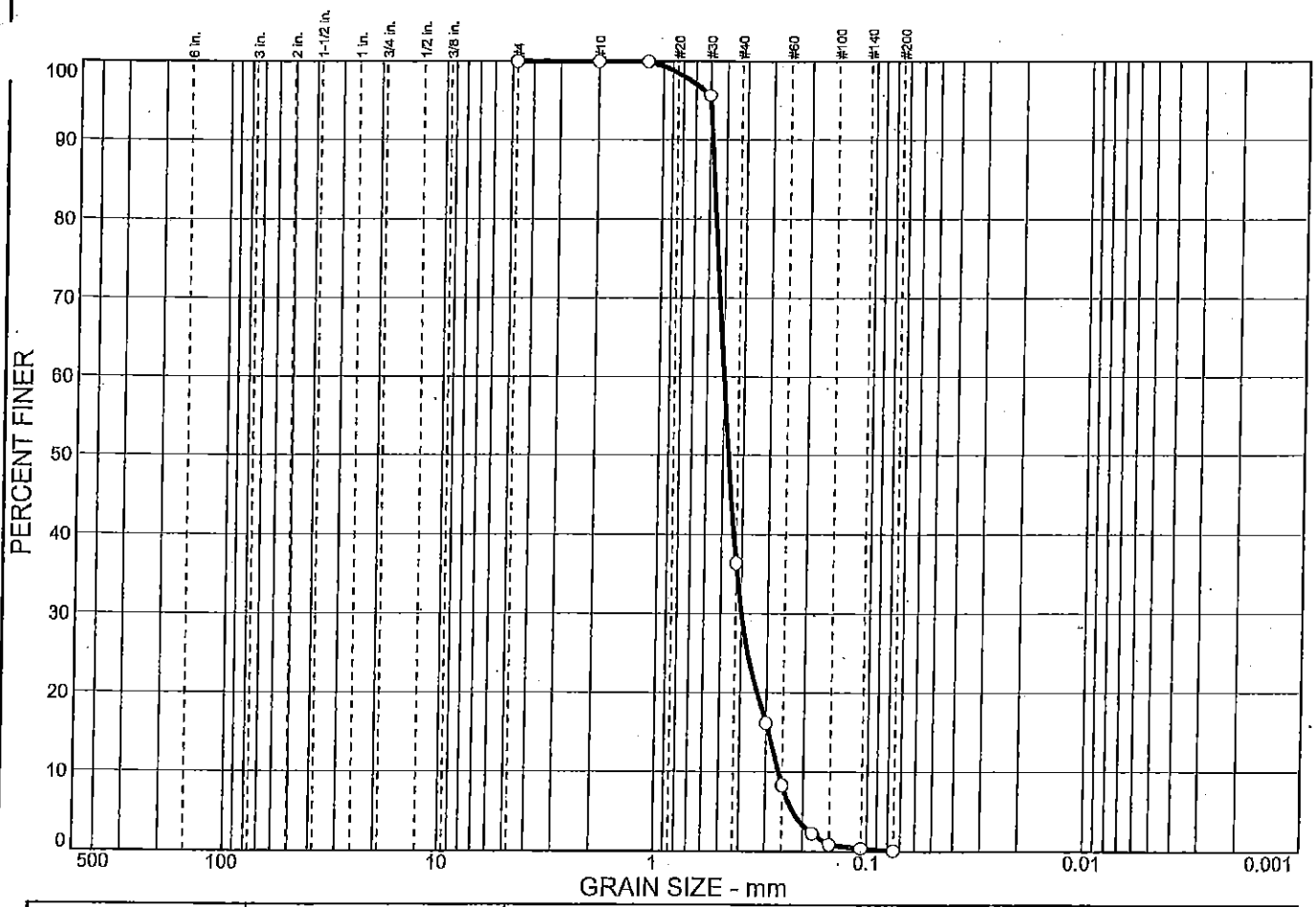
OV-33
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/21/04
Location: OV-33 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 33C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	95.7		
#40	36.3		
#50	16.1		
#60	8.3		
#80	2.3		
#100	0.9		
#140	0.4		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.569 D_{60}= 0.499 D_{50}= 0.470
D_{30}= 0.398 D_{15}= 0.292 D_{10}= 0.261
C_u= 1.91 C_c= 1.22

Classification

USCS= SP AASHTO= A-1-b

Remarks

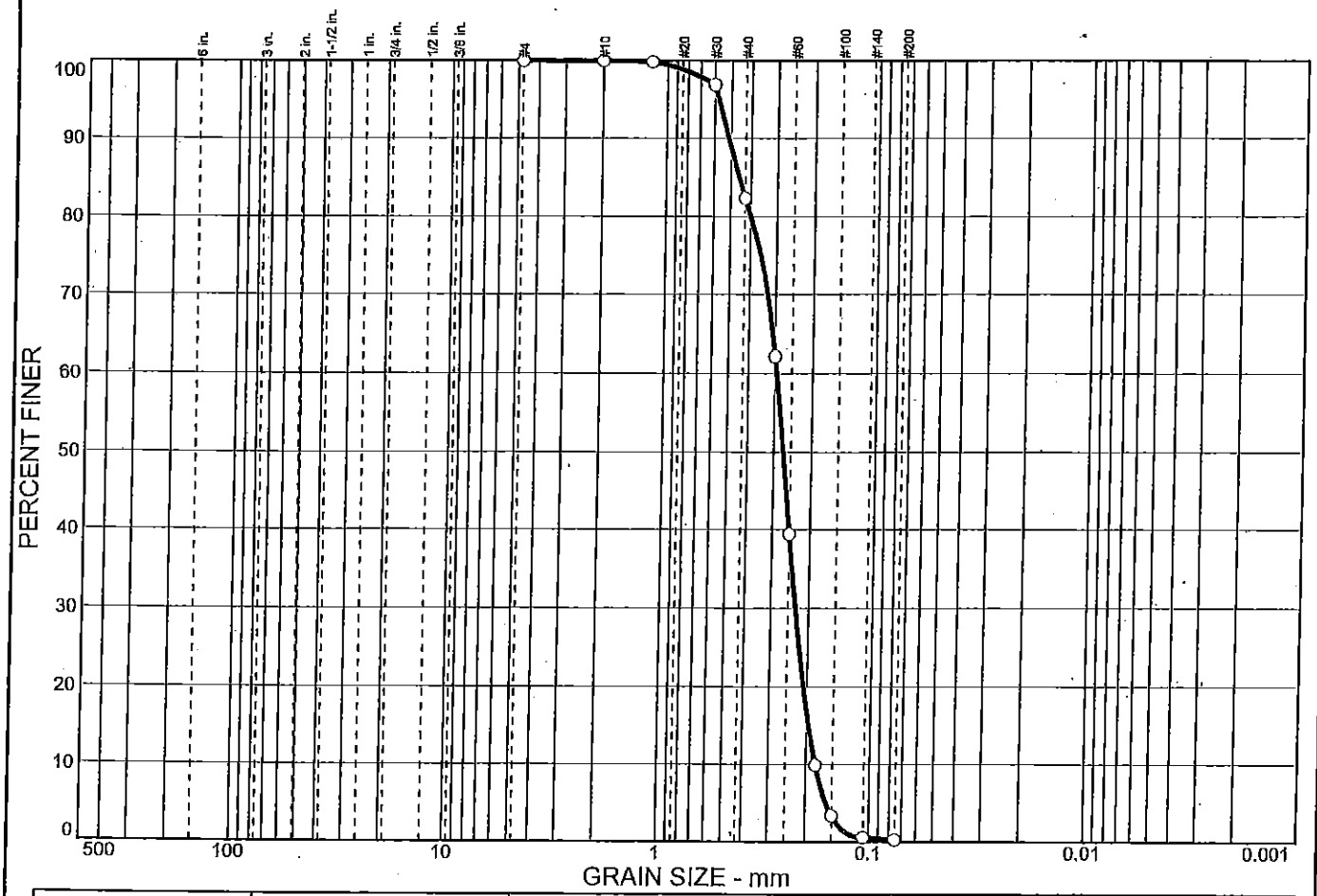
OV-33
Sample A

Sample No.: D **Source of Sample:** **Date:** 4/21/04
Location: OV-33 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 33D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	97.0		
#40	82.3		
#50	62.2		
#60	39.4		
#80	9.9		
#100	3.4		
#140	0.6		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.455 D_{60}= 0.294 D_{50}= 0.271
D_{30}= 0.231 D_{15}= 0.195 D_{10}= 0.180
C_u= 1.63 C_c= 1.00

Classification

USCS= SP AASHTO= A-3

Remarks

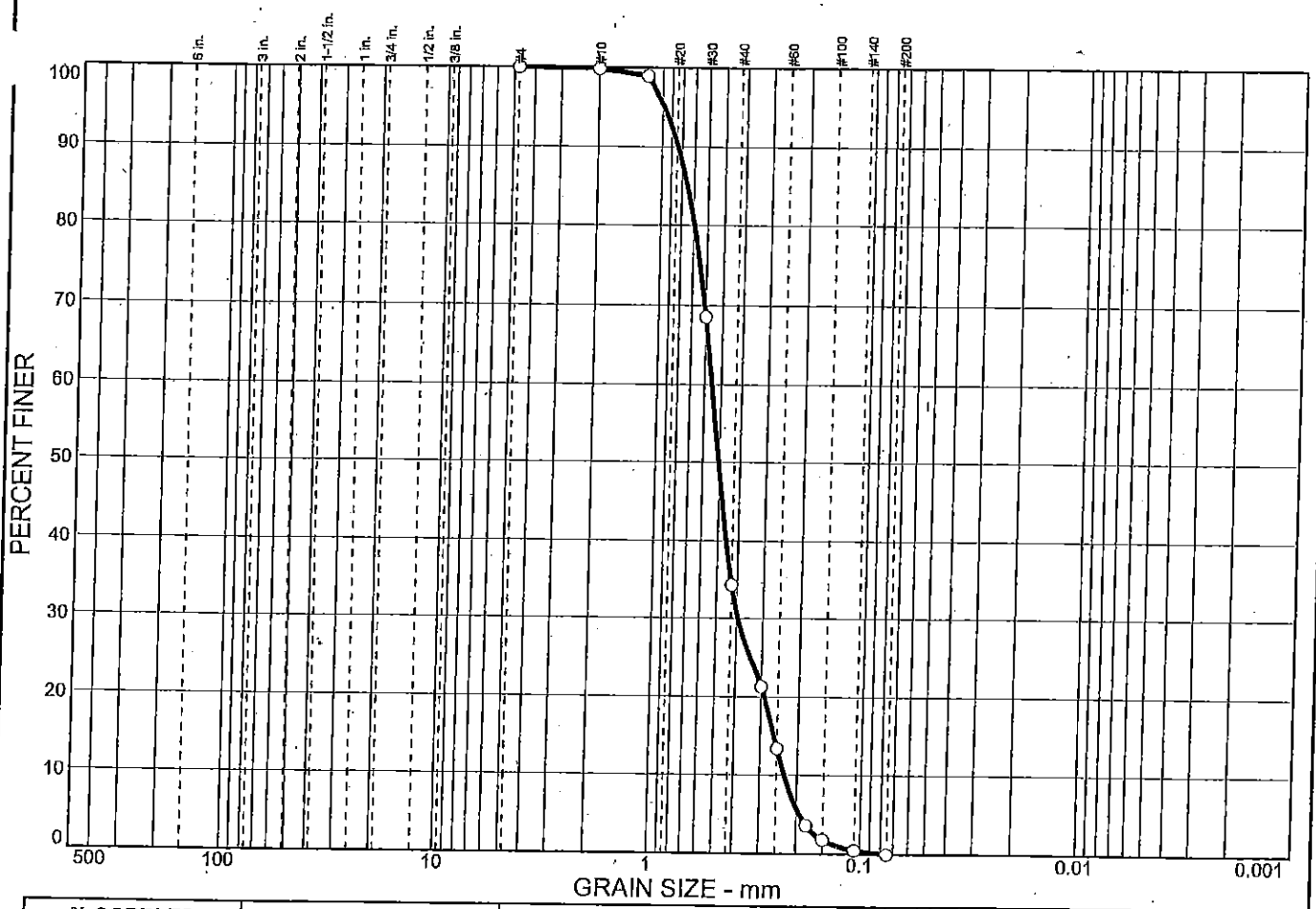
OV-33
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/9/04
Location: OV-33 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 33E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.0		
#30	68.5		
#40	34.3		
#50	21.3		
#60	13.4		
#80	3.6		
#100	1.8		
#140	0.5		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.753 D_{60}= 0.552 D_{50}= 0.503
D_{30}= 0.395 D_{15}= 0.259 D_{10}= 0.230
C_u= 2.40 C_c= 1.23

Classification

USCS= SP AASHTO= A-1-b

Remarks

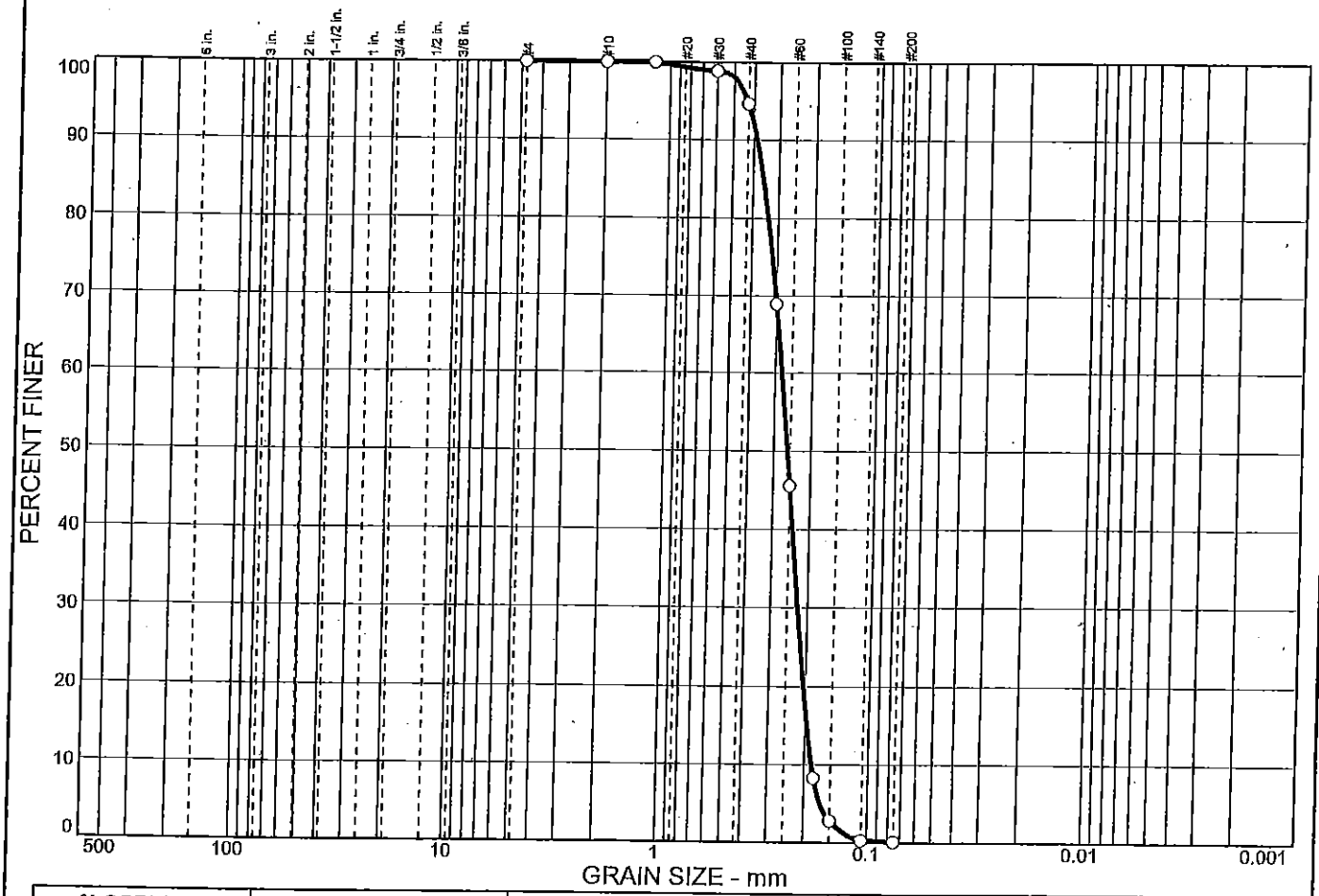
OV-33
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/9/04
Location: OV-33 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 33F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	98.9		
#40	94.6		
#50	68.9		
#60	45.5		
#80	8.3		
#100	2.8		
#140	0.3		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.357 D_{60}= 0.279 D_{50}= 0.258
D_{30}= 0.223 D_{15}= 0.196 D_{10}= 0.185
C_u= 1.51 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

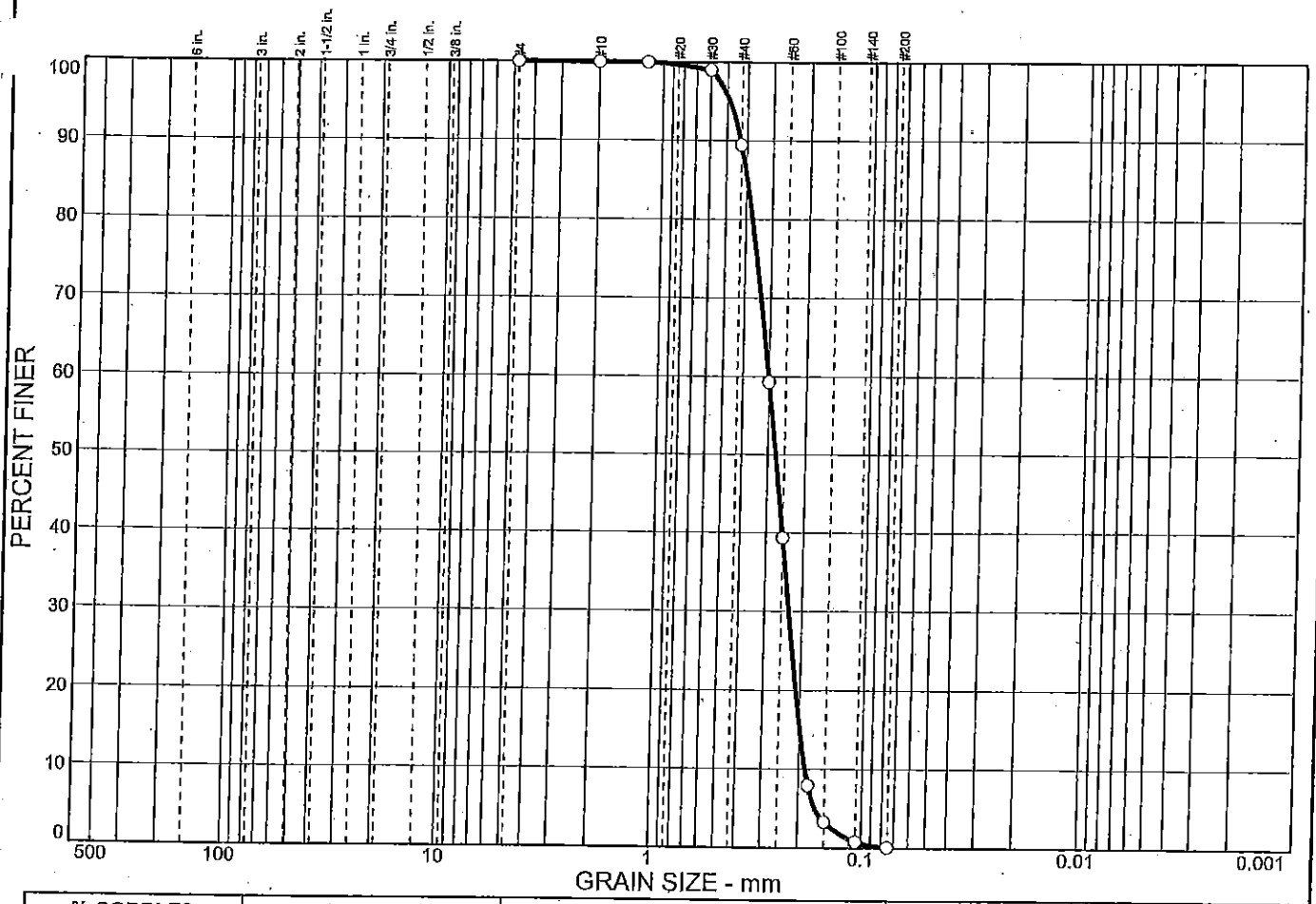
OV-34
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/2/04
Location: OV-34 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 34A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.0		
#40	89.4		
#50	59.3		
#60	39.3		
#80	7.9		
#100	3.3		
#140	0.8		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.397 D_{60}= 0.302 D_{50}= 0.275
D_{30}= 0.230 D_{15}= 0.199 D_{10}= 0.187
C_u= 1.62 C_c= 0.94

Classification

USCS= SP AASHTO= A-3

Remarks

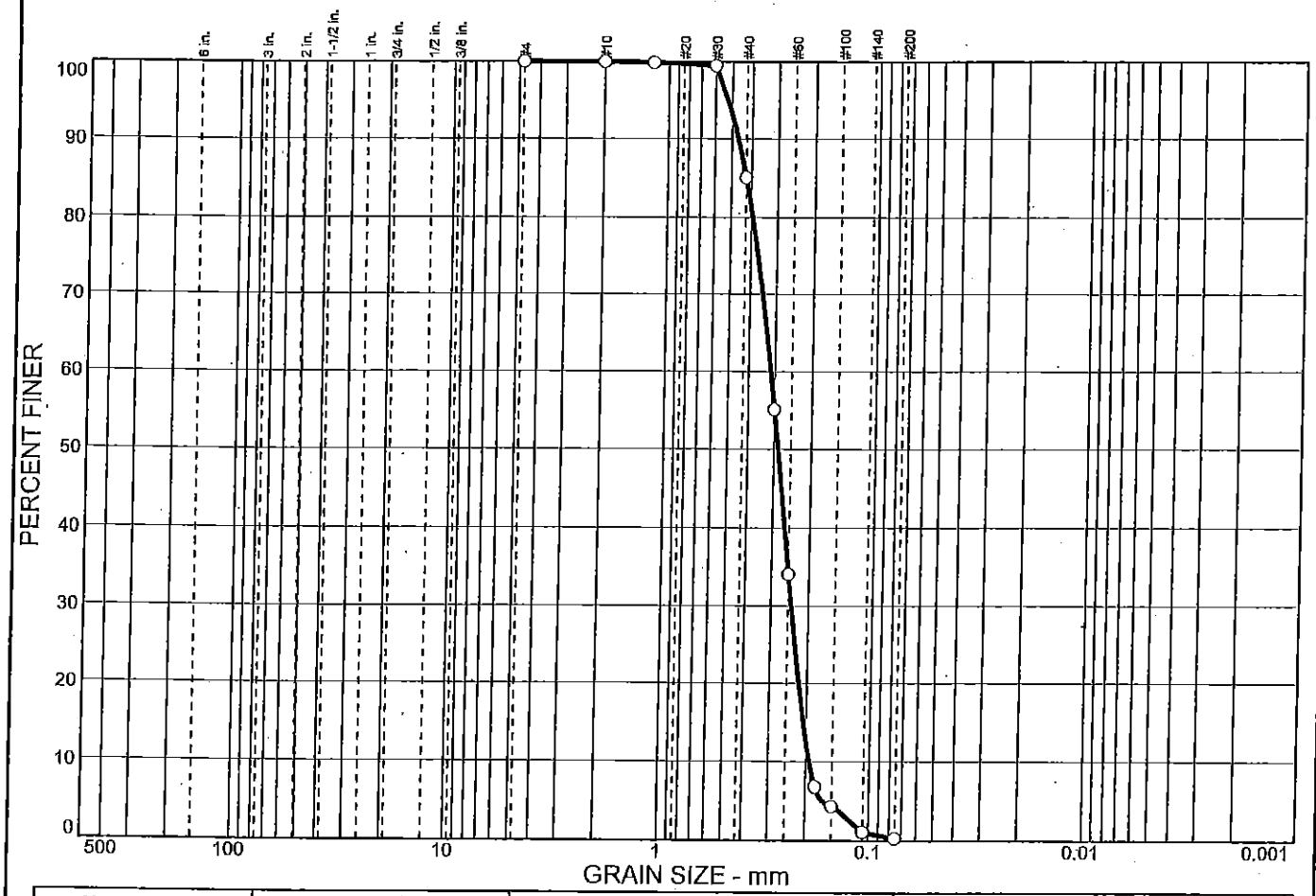
OV-34
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/2/04
Location: OV-34 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 34B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.5		
#40	85.1		
#50	55.1		
#60	34.1		
#80	6.8		
#100	4.3		
#140	1.1		
#200	0.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.424 D_{60}= 0.314 D_{50}= 0.287
D_{30}= 0.241 D_{15}= 0.207 D_{10}= 0.192
C_u= 1.63 C_c= 0.96

Classification

USCS= SP AASHTO= A-3

Remarks

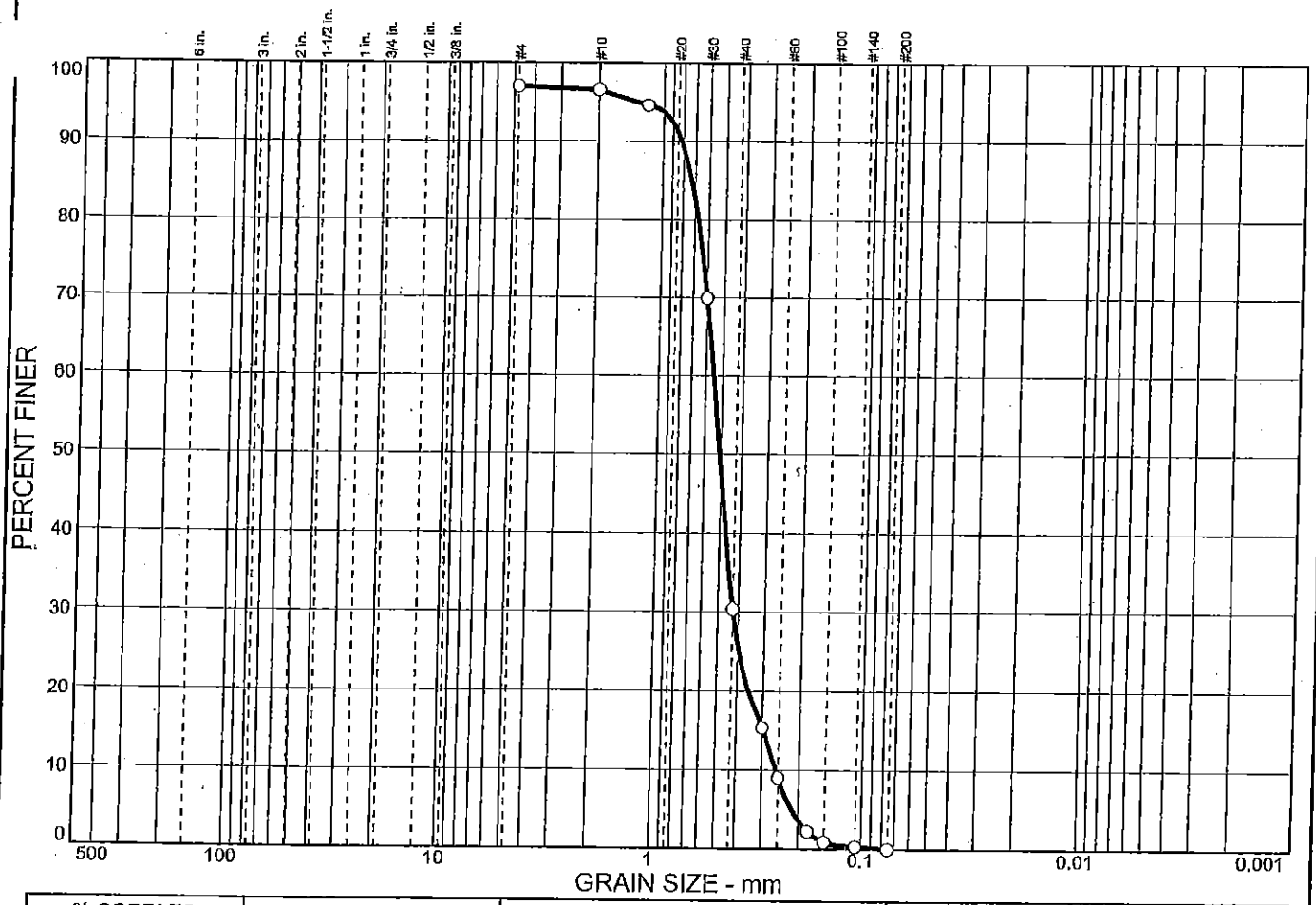
OV-34
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/2/04
Location: OV-34 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 34C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		97.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	97.0		
#10	96.6		
#16	94.6		
#30	69.9		
#40	30.3		
#50	15.3		
#60	9.0		
#80	2.2		
#100	0.9		
#140	0.3		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.729 D_{60}= 0.550 D_{50}= 0.508
D_{30}= 0.423 D_{15}= 0.297 D_{10}= 0.258
C_u= 2.14 C_c= 1.27

Classification

USCS= SP AASHTO= A-1-b

Remarks

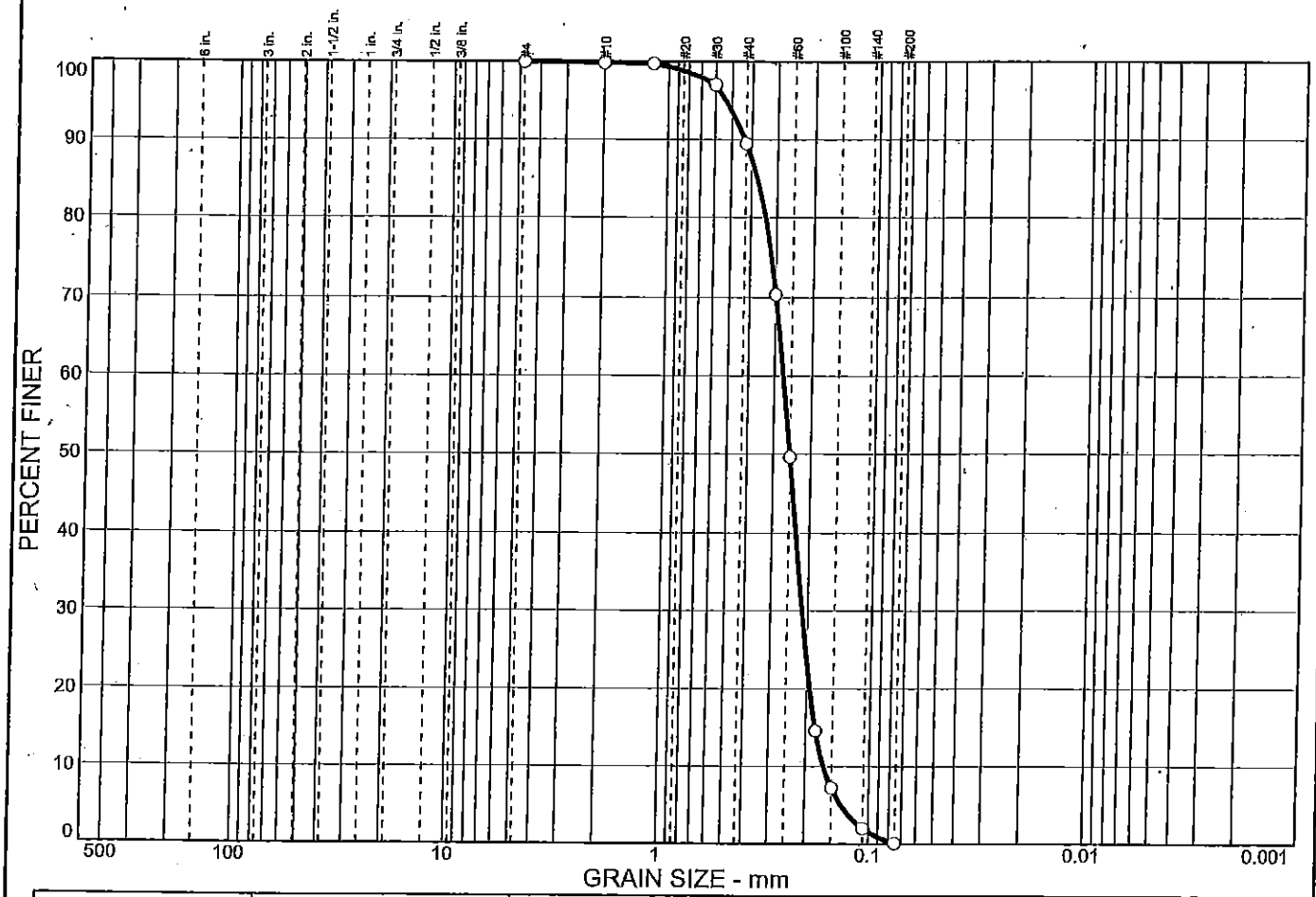
OV-34
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/2/04
Location: OV-34 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 34D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.8		
#30	97.2		
#40	89.5		
#50	70.4		
#60	49.6		
#80	14.6		
#100	7.3		
#140	2.0		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.374 D_{60}= 0.272 D_{50}= 0.251
D_{30}= 0.213 D_{15}= 0.181 D_{10}= 0.164
C_u= 1.66 C_c= 1.01

Classification

USCS= SP AASHTO= A-3

Remarks

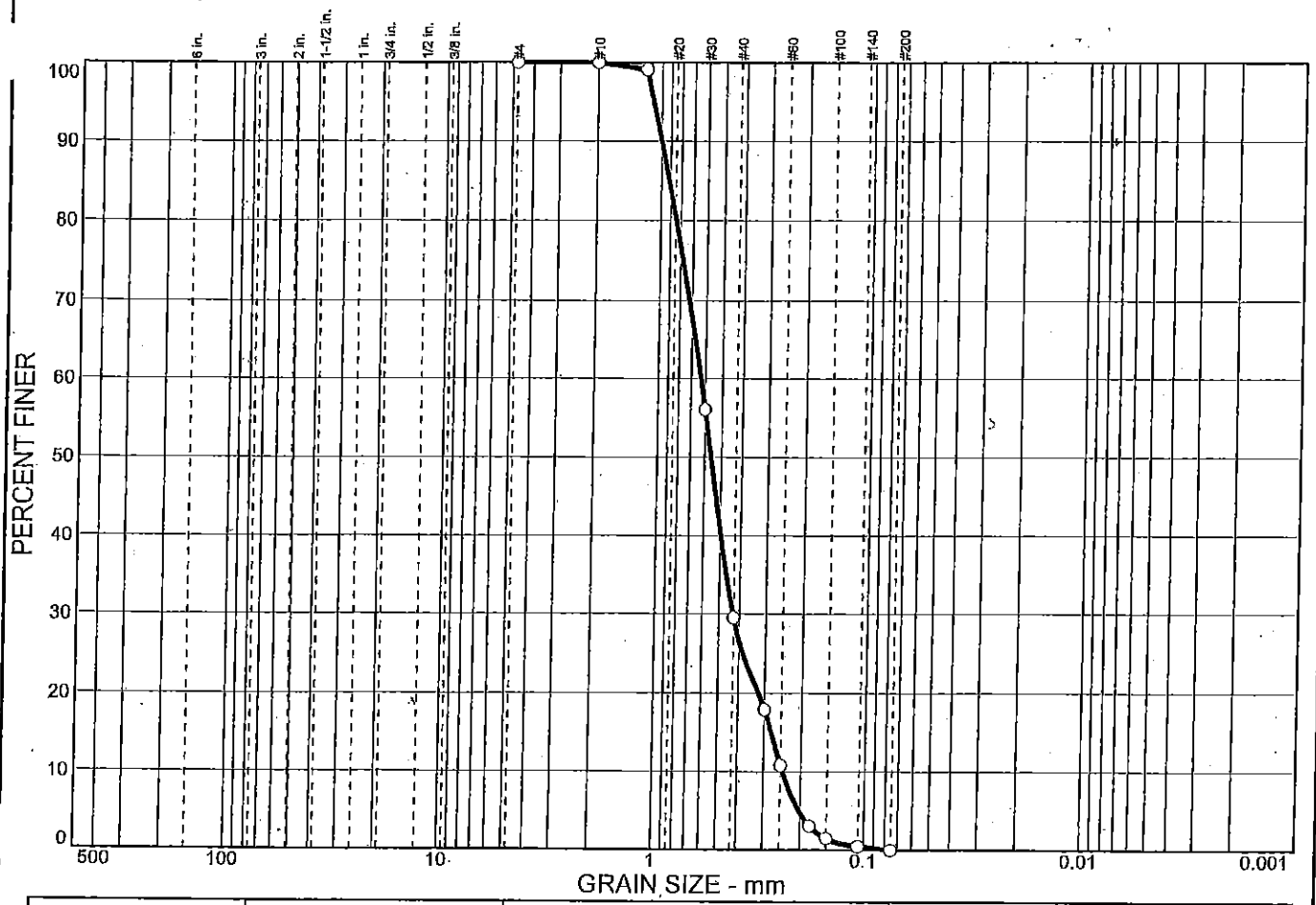
OV-34
Sample E

Sample No.: E **Source of Sample:** **Date:** 6/9/04
Location: OV-34 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 34E

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.1		
#30	56.1		
#40	29.5		
#50	17.9		
#60	10.8		
#80	3.1		
#100	1.5		
#140	0.5		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.916 D_{60}= 0.630 D_{50}= 0.558
D_{30}= 0.429 D_{15}= 0.278 D_{10}= 0.244
C_u= 2.58 C_c= 1.19

Classification

USCS= SP AASHTO= A-1-b

Remarks

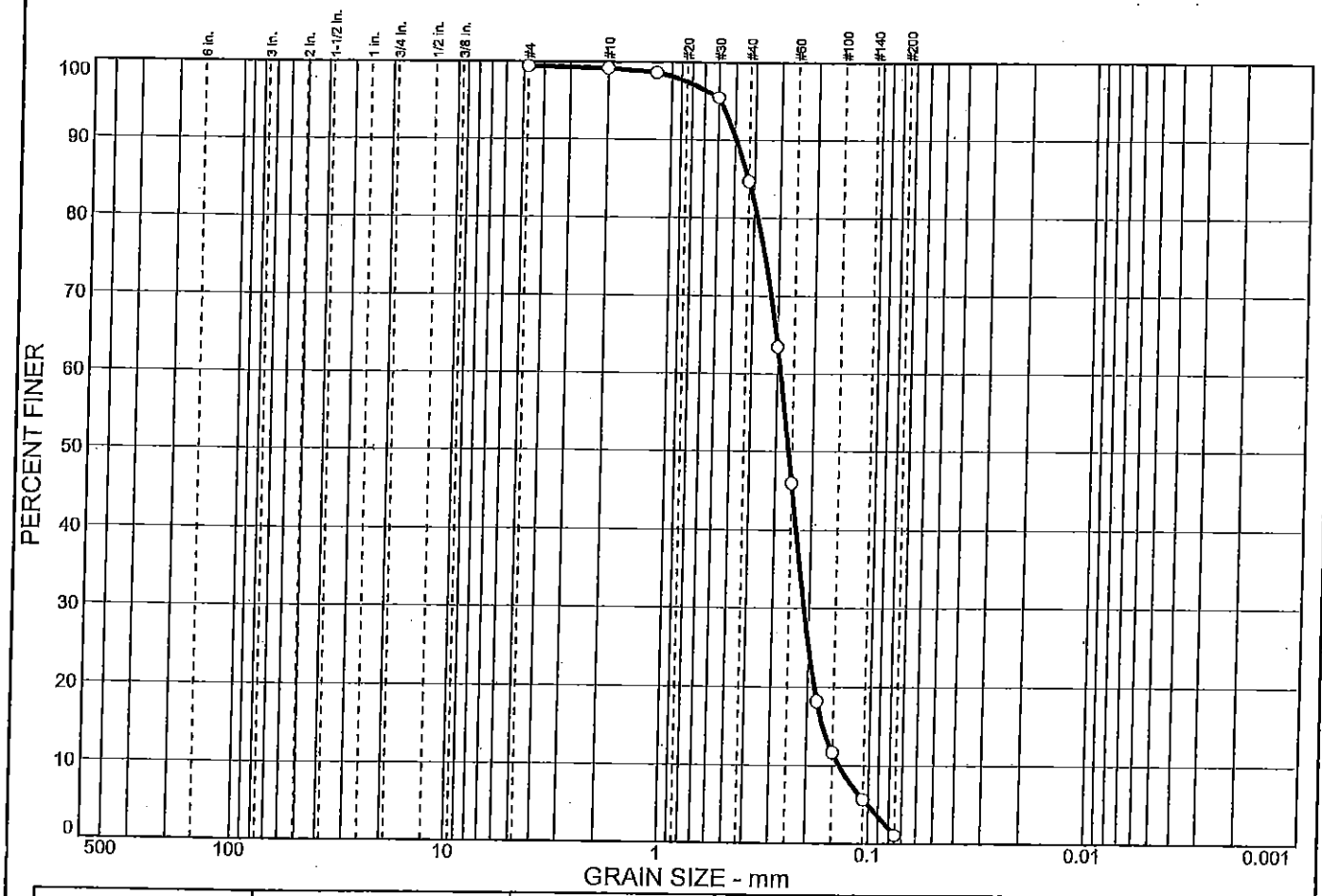
OV-34
Sample F

Sample No.: F **Source of Sample:** **Date:** 6/9/04
Location: OV-34 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 34F

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		98.3	1.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.4		
#10	99.2		
#16	98.7		
#30	95.5		
#40	84.7		
#50	63.5		
#60	45.9		
#80	18.2		
#100	11.7		
#140	5.7		
#200	1.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.428 D_{60}= 0.288 D_{50}= 0.260
D_{30}= 0.212 D_{15}= 0.168 D_{10}= 0.139
C_u= 2.08 C_c= 1.12

Classification

USCS= SP AASHTO= A-3

Remarks

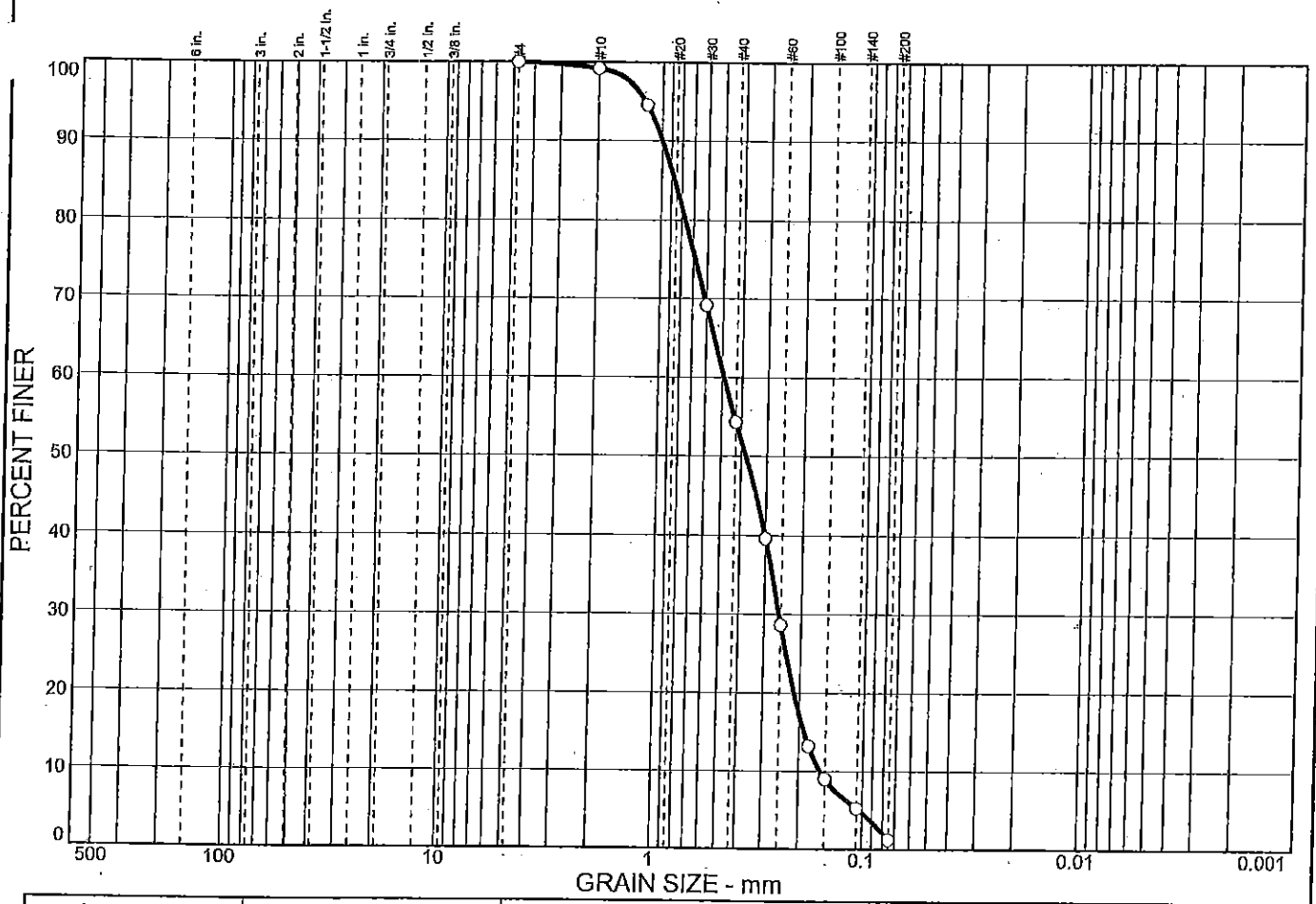
OV-35
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/21/04
Location: OV-35 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 35A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	98.8	1.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.2		
#16	94.5		
#30	69.1		
#40	54.3		
#50	39.6		
#60	28.6		
#80	13.2		
#100	9.0		
#140	5.2		
#200	1.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.868 D_{60}= 0.488 D_{50}= 0.379
D_{30}= 0.256 D_{15}= 0.190 D_{10}= 0.159
C_u= 3.08 C_c= 0.85

Classification

USCS= SP AASHTO= A-3

Remarks

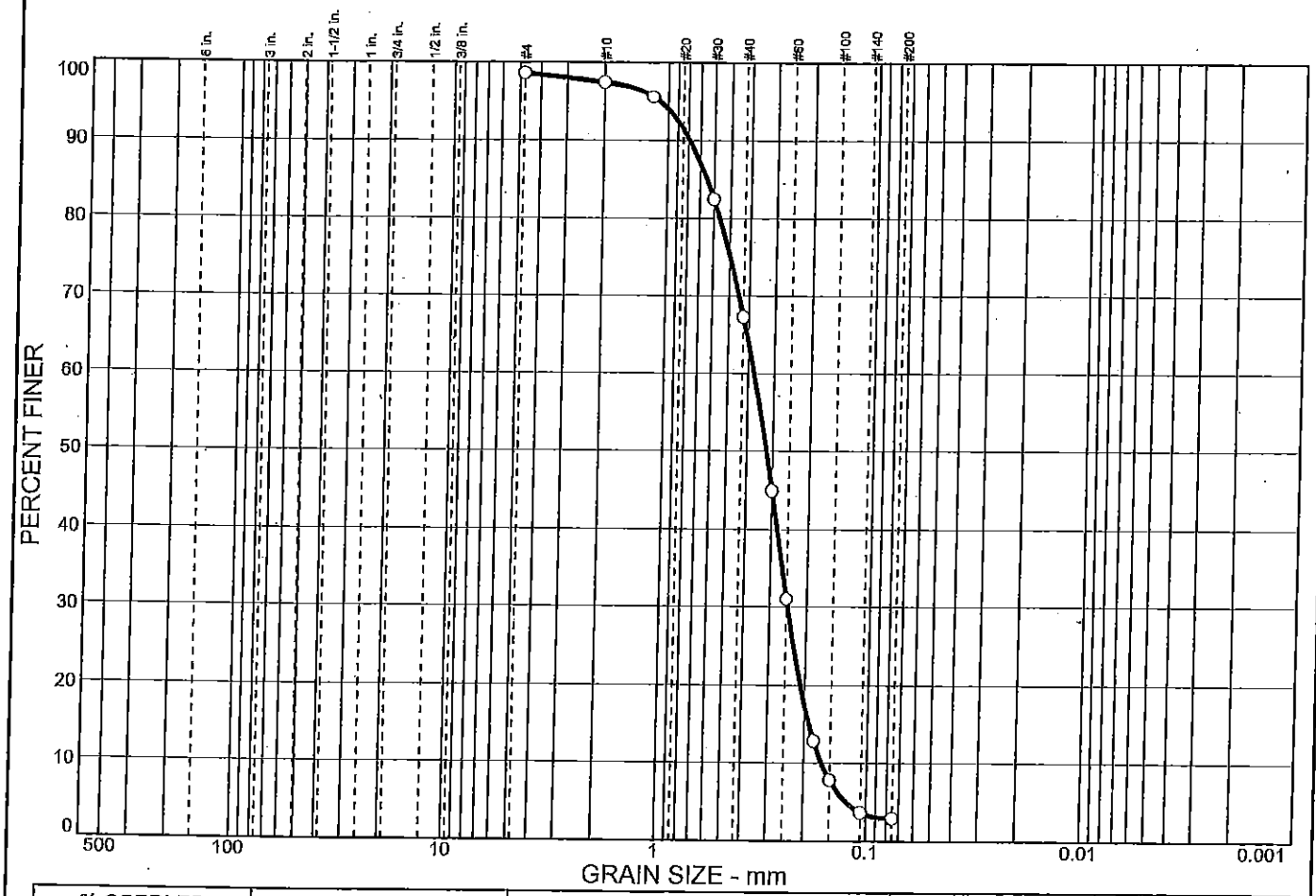
OV-35
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/21/04
Location: OV-35 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 35B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		95.7	2.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.6		
#10	97.5		
#16	95.6		
#30	82.4		
#40	67.3		
#50	44.9		
#60	31.0		
#80	12.8		
#100	7.8		
#140	3.6		
#200	2.9		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.651 D_{60}= 0.374 D_{50}= 0.322
D_{30}= 0.247 D_{15}= 0.190 D_{10}= 0.165
C_u= 2.27 C_c= 0.99

Classification

USCS= SP AASHTO= A-3

Remarks

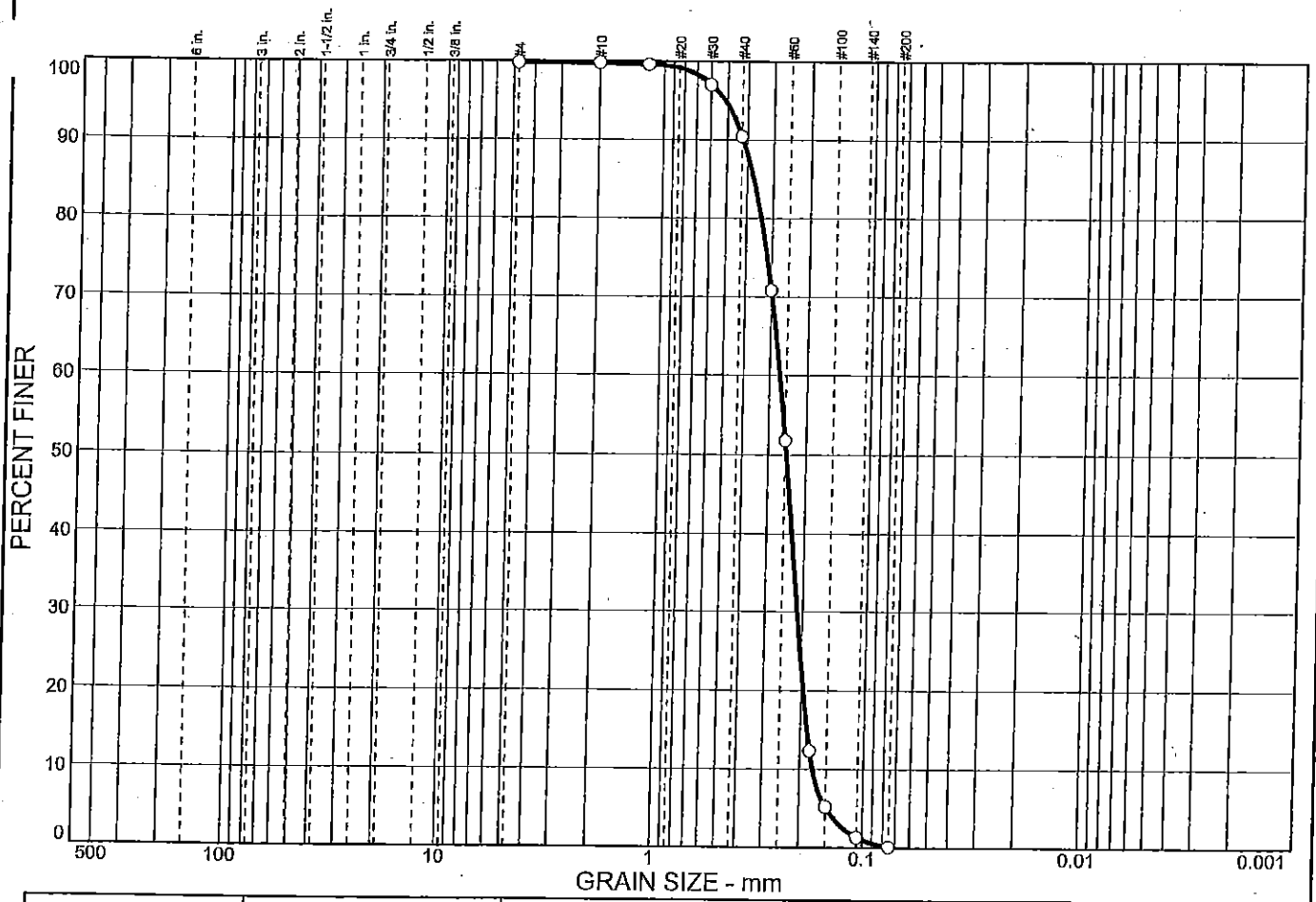
OV-35
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/22/04
Location: OV-35 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 35C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.8		
#16	99.6		
#30	97.1		
#40	90.4		
#50	70.8		
#60	51.8		
#80	12.3		
#100	5.2		
#140	1.3		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.372 D_{60}= 0.268 D_{50}= 0.246
D_{30}= 0.212 D_{15}= 0.186 D_{10}= 0.174
C_u= 1.54 C_c= 0.97

Classification

USCS= SP AASHTO= A-3

Remarks

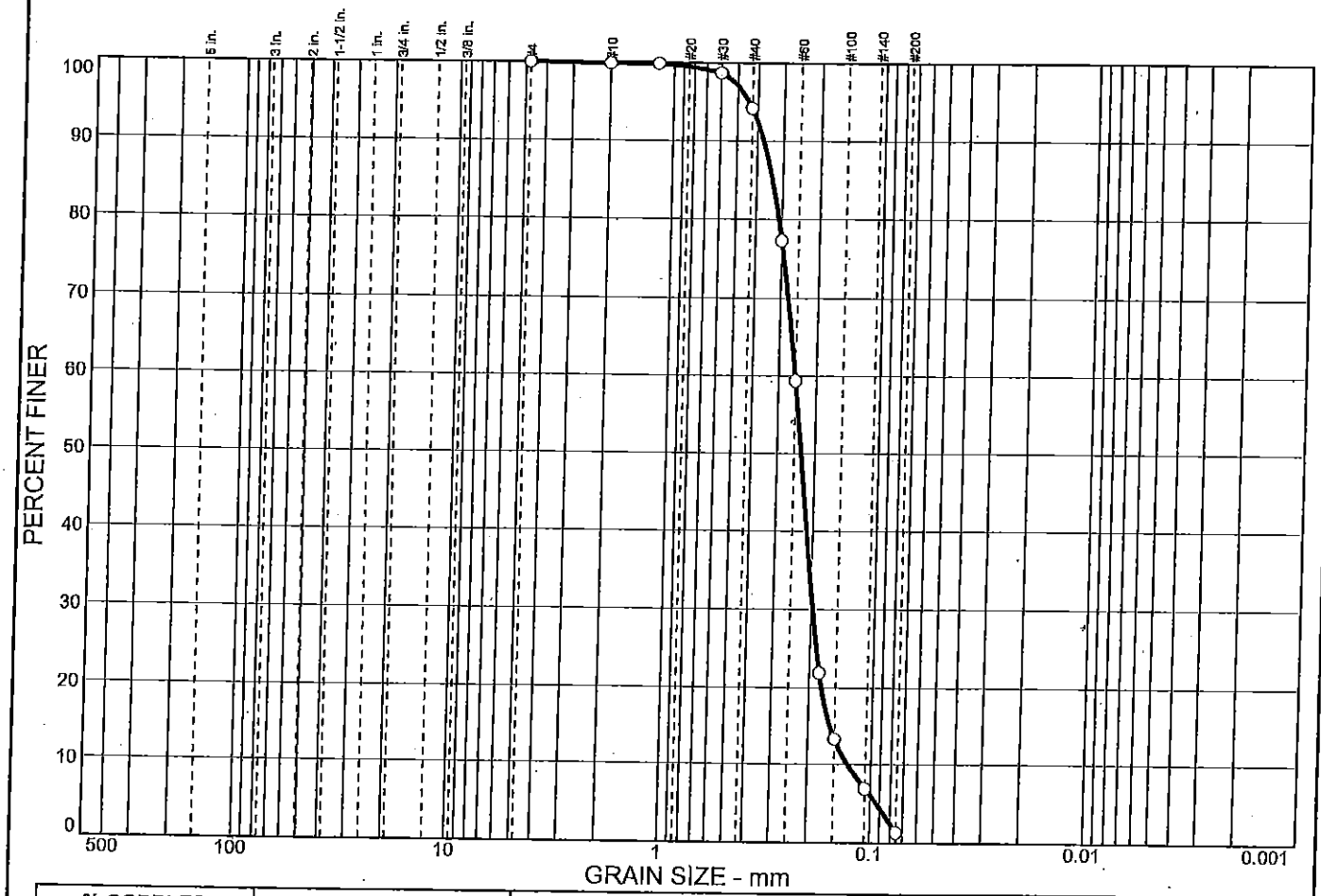
OV-35
Sample D

Sample No.: D **Source of Sample:** **Date:** 4/22/04
Location: OV-35 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 35D

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	98.7	1.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	98.7		
#40	94.1		
#50	77.3		
#60	59.4		
#80	21.9		
#100	13.3		
#140	6.9		
#200	1.3		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.336 D_{60}= 0.251 D_{50}= 0.232
D_{30}= 0.196 D_{15}= 0.158 D_{10}= 0.130
C_u= 1.94 C_c= 1.18

Classification

USCS= SP AASHTO= A-3

Remarks

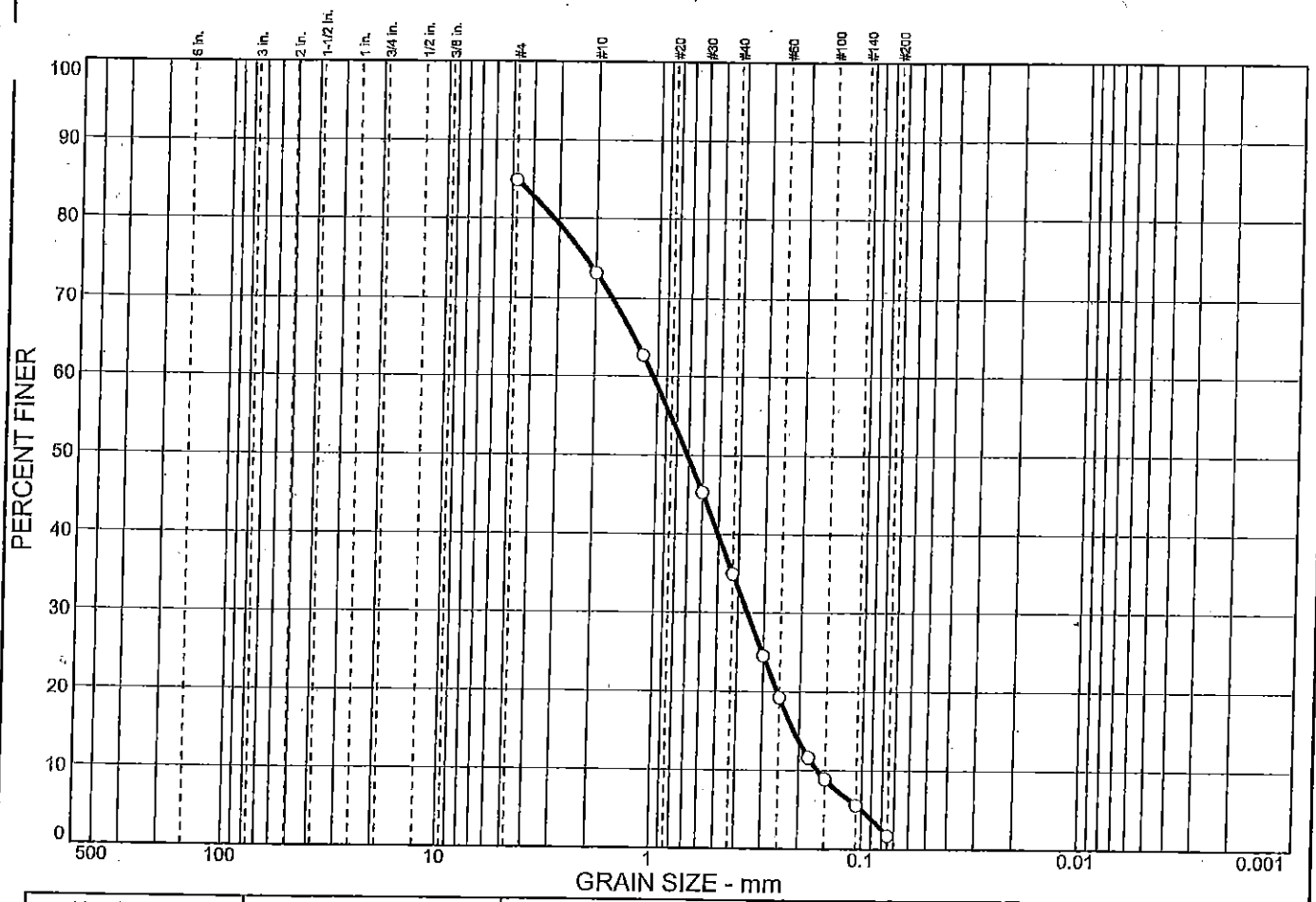
OV-36
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/22/04
Location: OV-36 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 36A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		83.2	1.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	84.9		
#10	73.2		
#16	62.7		
#30	45.2		
#40	34.9		
#50	24.6		
#60	19.2		
#80	11.6		
#100	8.9		
#140	5.6		
#200	1.7		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= D_{60}= 1.05 D_{50}= 0.711
D_{30}= 0.360 D_{15}= 0.212 D_{10}= 0.163
C_u= 6.44 C_c= 0.76

Classification

USCS= SP AASHTO= A-1-b

Remarks

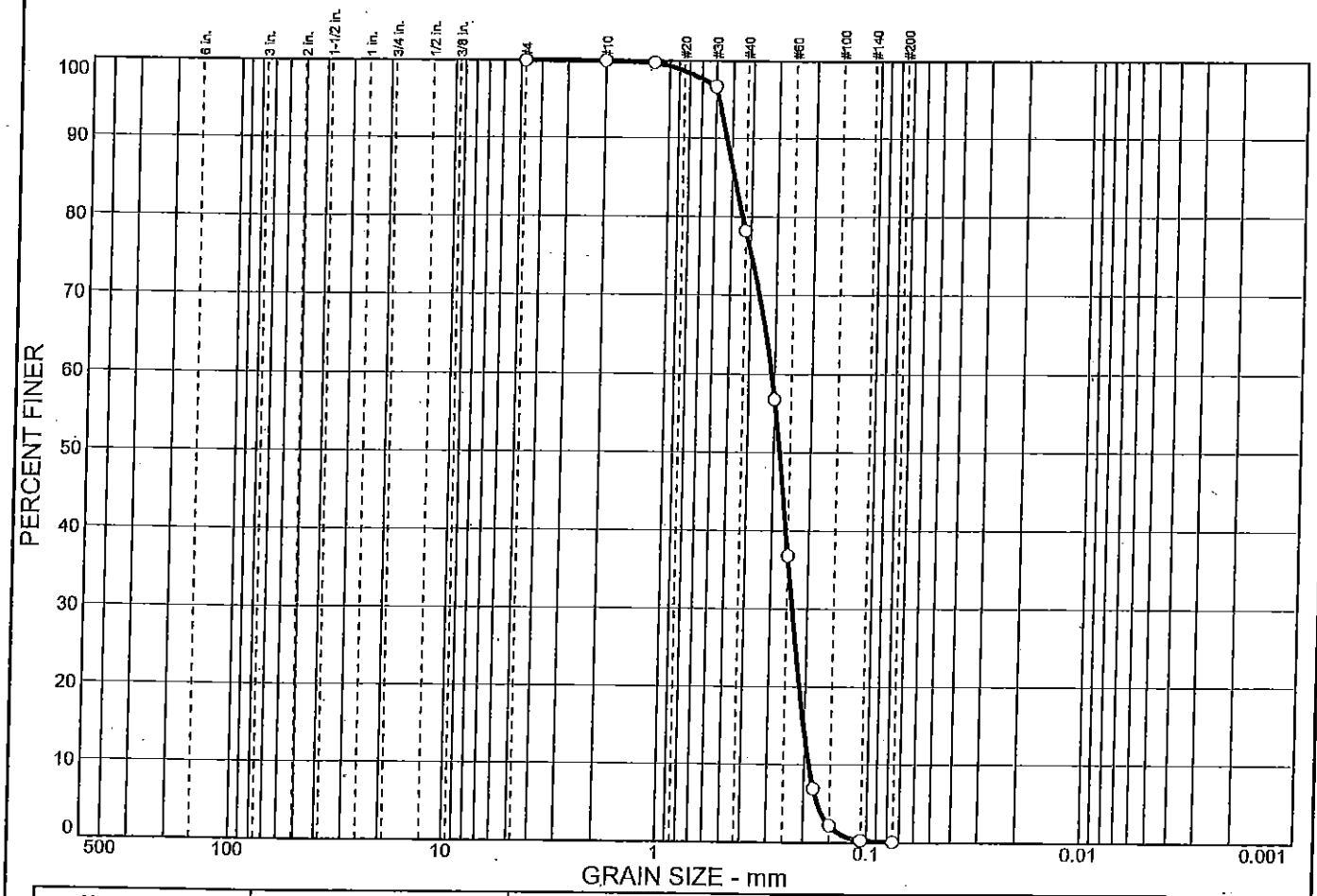
OV-36
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/22/04
Location: OV-36 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 36B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	96.8		
#40	78.2		
#50	56.8		
#60	36.8		
#80	6.9		
#100	2.2		
#140	0.3		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.485 D_{60}= 0.311 D_{50}= 0.281
D_{30}= 0.236 D_{15}= 0.203 D_{10}= 0.190
C_u= 1.64 C_c= 0.94

Classification

USCS= SP AASHTO= A-3

Remarks

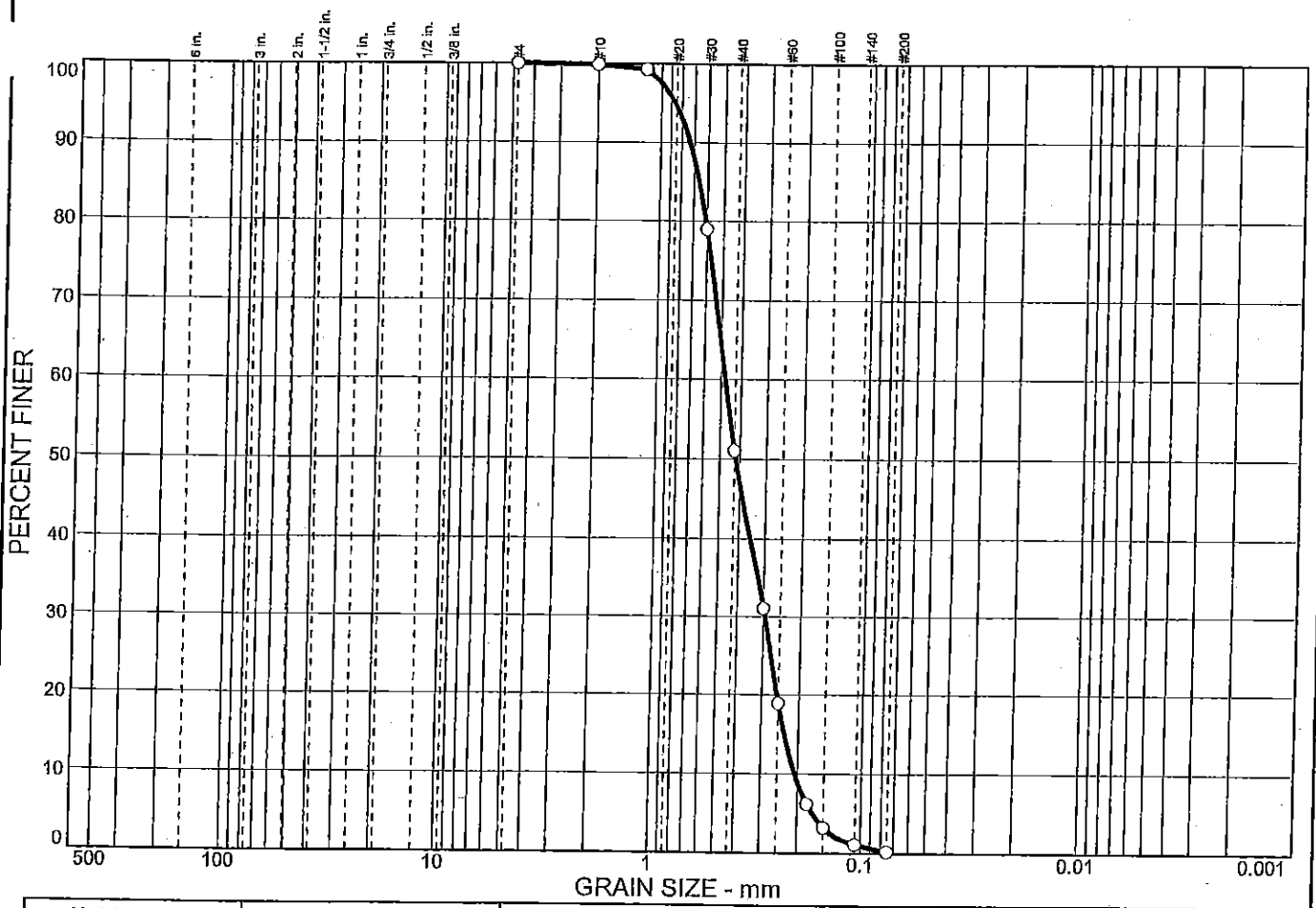
OV-36
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/22/04
Location: OV-36 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 36C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.8	0.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.3		
#30	79.0		
#40	51.0		
#50	31.1		
#60	18.9		
#80	6.2		
#100	3.2		
#140	1.1		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.660 D_{60}= 0.477 D_{50}= 0.419
D_{30}= 0.295 D_{15}= 0.233 D_{10}= 0.207
C_u= 2.31 C_c= 0.88

Classification

USCS= SP AASHTO= A-3

Remarks

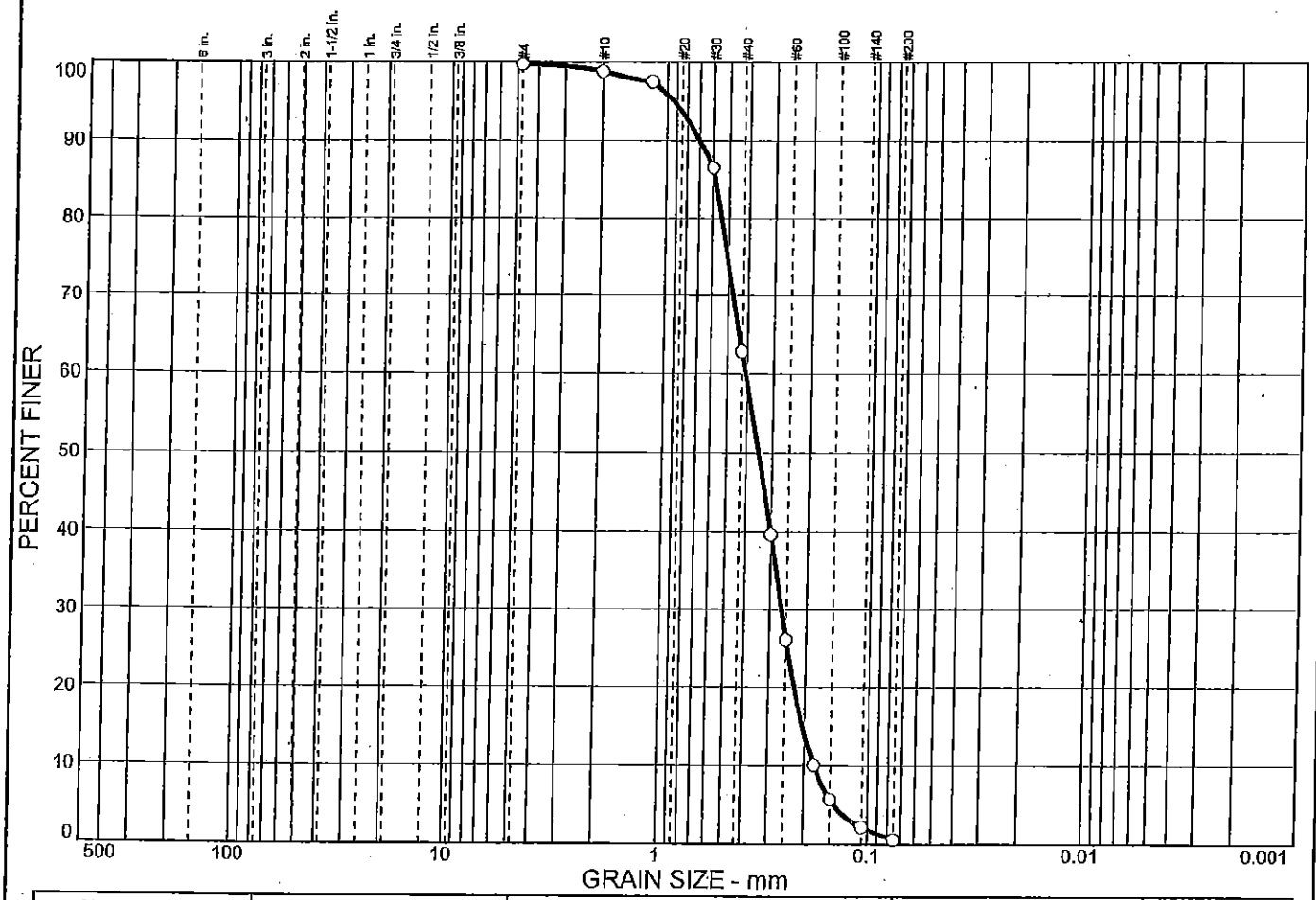
OV-37
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/22/04
Location: OV-37 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 37A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.1	0.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.7		
#10	98.8		
#16	97.6		
#30	86.5		
#40	62.8		
#50	39.6		
#60	26.1		
#80	10.0		
#100	5.7		
#140	2.2		
#200	0.6		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.587 D_{60}= 0.407 D_{50}= 0.349
D_{30}= 0.264 D_{15}= 0.205 D_{10}= 0.180
C_u= 2.26 C_c= 0.95

Classification

USCS= SP AASHTO= A-3

Remarks

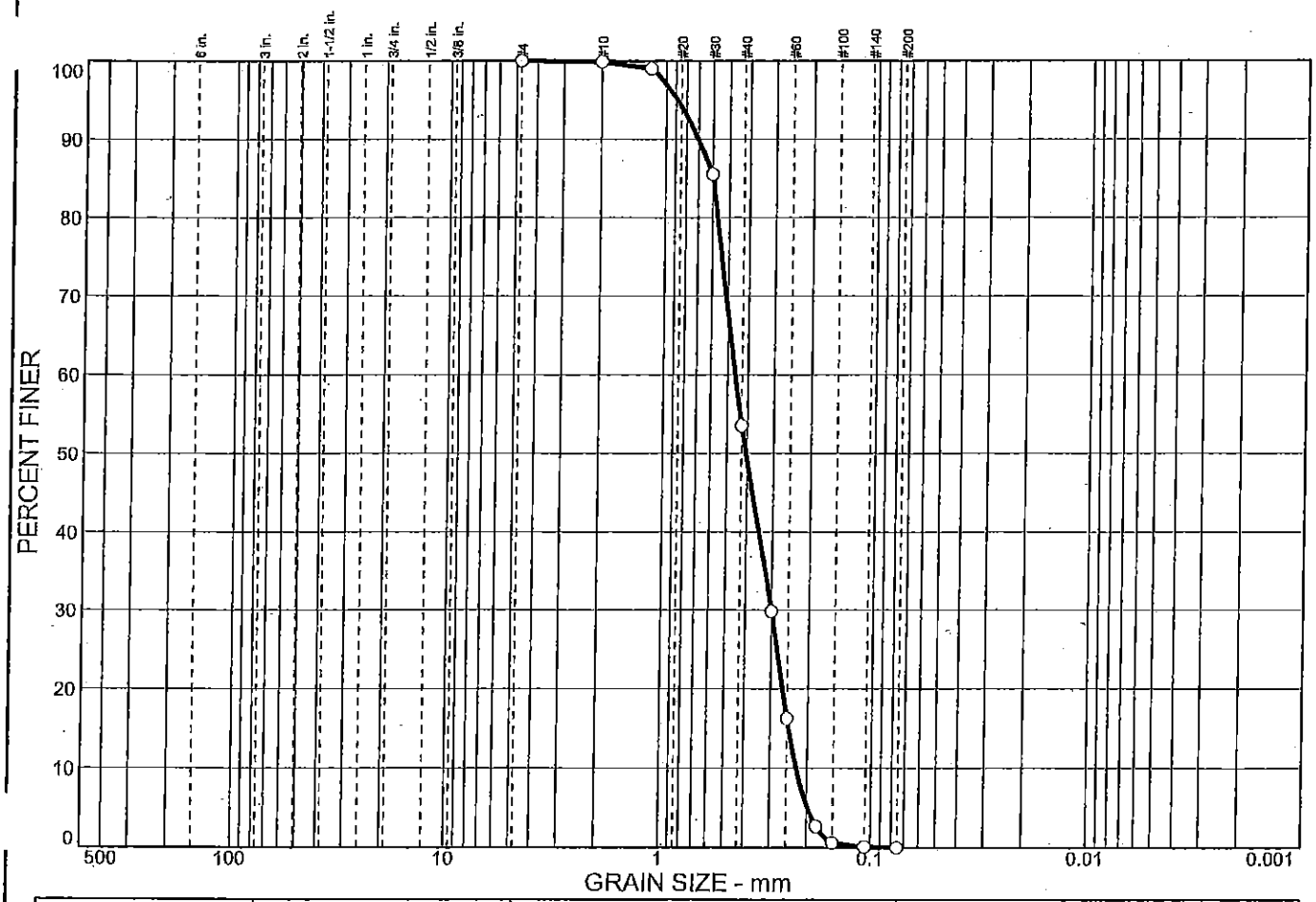
OV-37
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/22/04
Location: OV-37 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 37B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.0		
#30	85.5		
#40	53.6		
#50	29.8		
#60	16.2		
#80	2.7		
#100	0.6		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.597 D_{60}= 0.459 D_{50}= 0.405
D_{30}= 0.301 D_{15}= 0.245 D_{10}= 0.224
C_u= 2.04 C_c= 0.88

Classification

USCS= SP AASHTO= A-3

Remarks

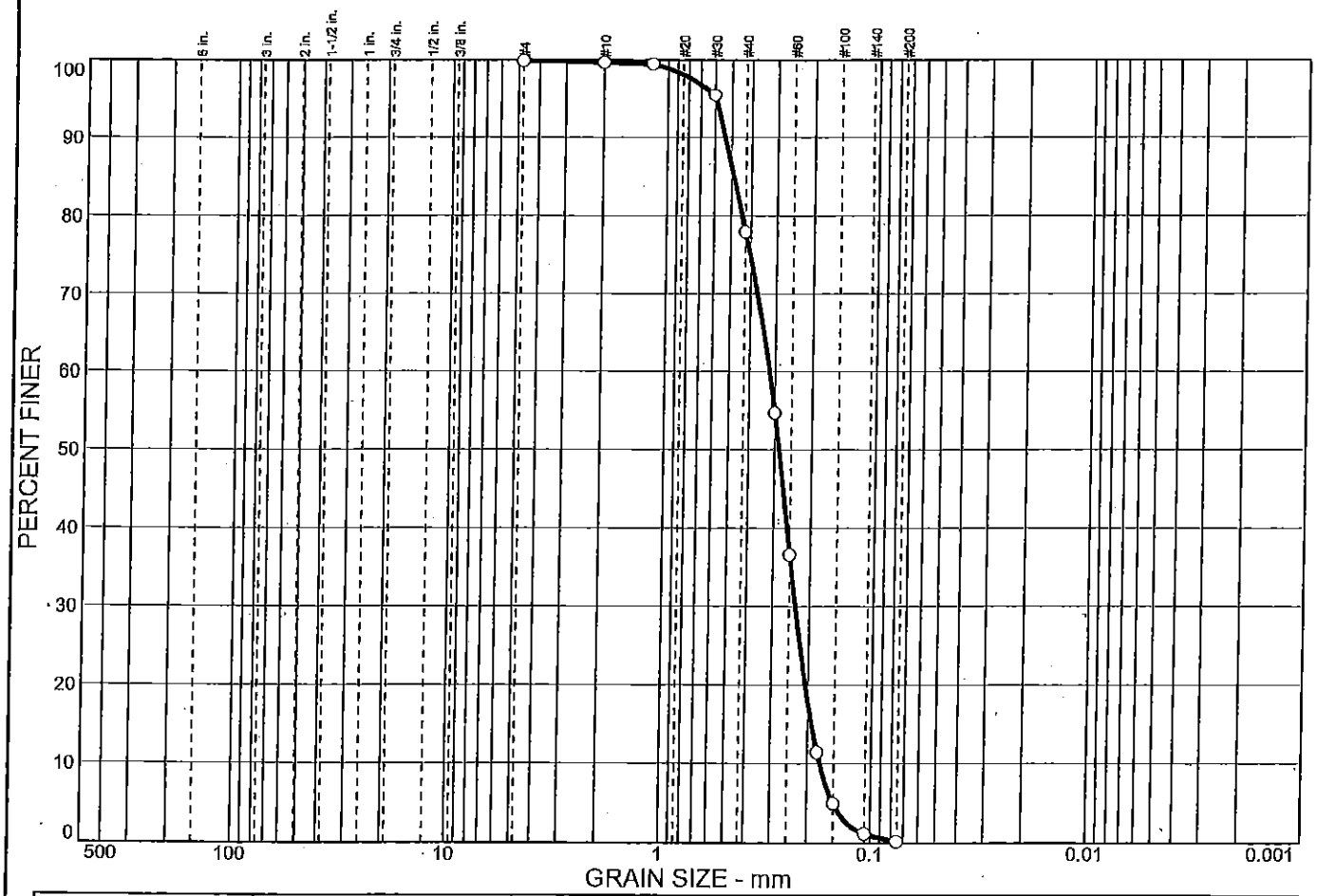
OV-37
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/22/04
Location: OV-37 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 37C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		99.7	0.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.7		
#16	99.5		
#30	95.5		
#40	78.0		
#50	54.7		
#60	36.6		
#80	11.4		
#100	5.0		
#140	1.2		
#200	0.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.486 D_{60}= 0.319 D_{50}= 0.285
D_{30}= 0.233 D_{15}= 0.192 D_{10}= 0.175
C_u= 1.83 C_c= 0.97

Classification

USCS= AASHTO= A-3

Remarks

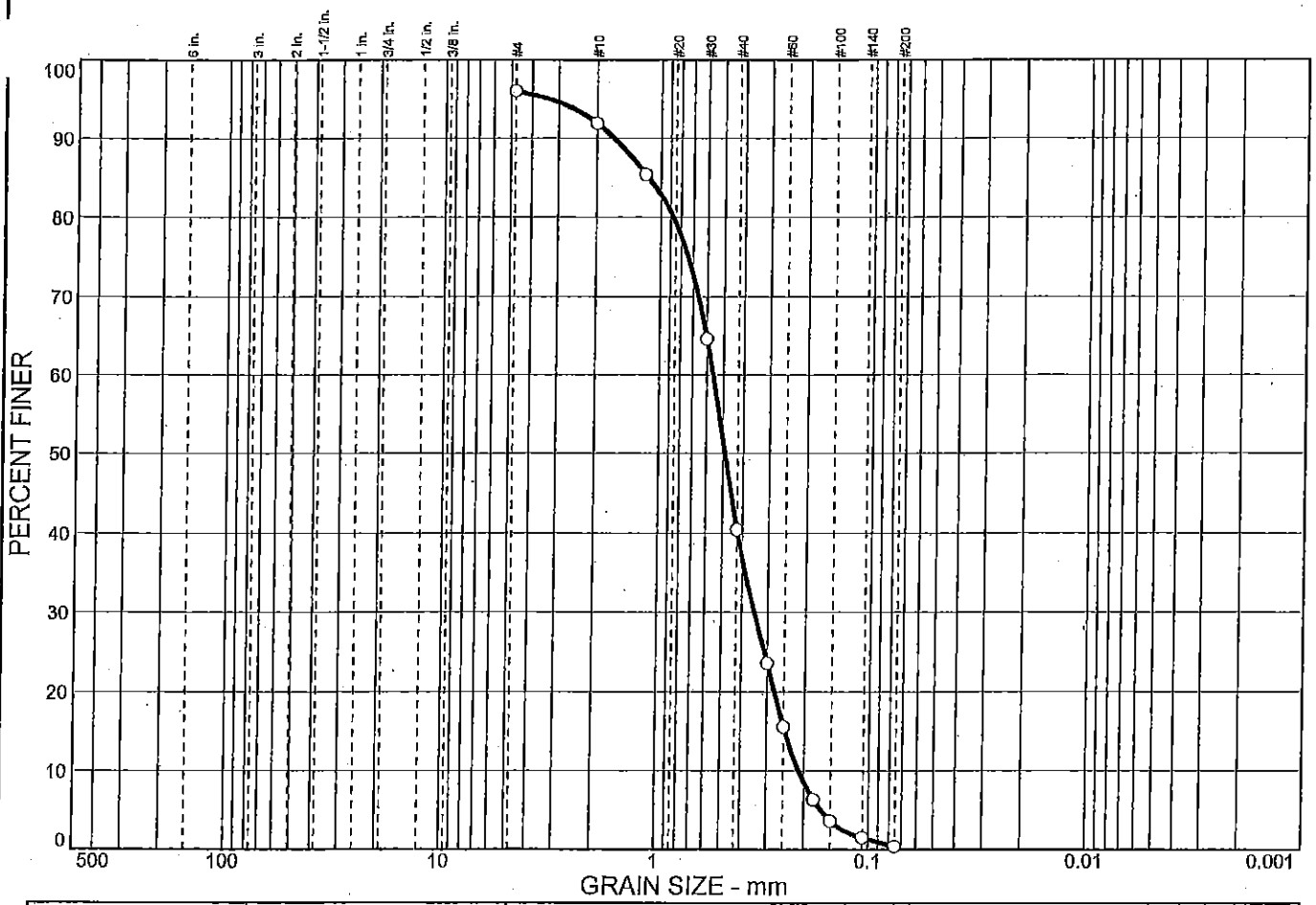
OV-38
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/22/04
Location: OV-38 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 38A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		95.7	0.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	96.1		
#10	91.9		
#16	85.4		
#30	64.6		
#40	40.4		
#50	23.5		
#60	15.5		
#80	6.4		
#100	3.7		
#140	1.5		
#200	0.4		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.15 D_{60}= 0.560 D_{50}= 0.488
D_{30}= 0.348 D_{15}= 0.247 D_{10}= 0.211
C_u= 2.65 C_c= 1.02

Classification

USCS= SP AASHTO= A-1-b

Remarks

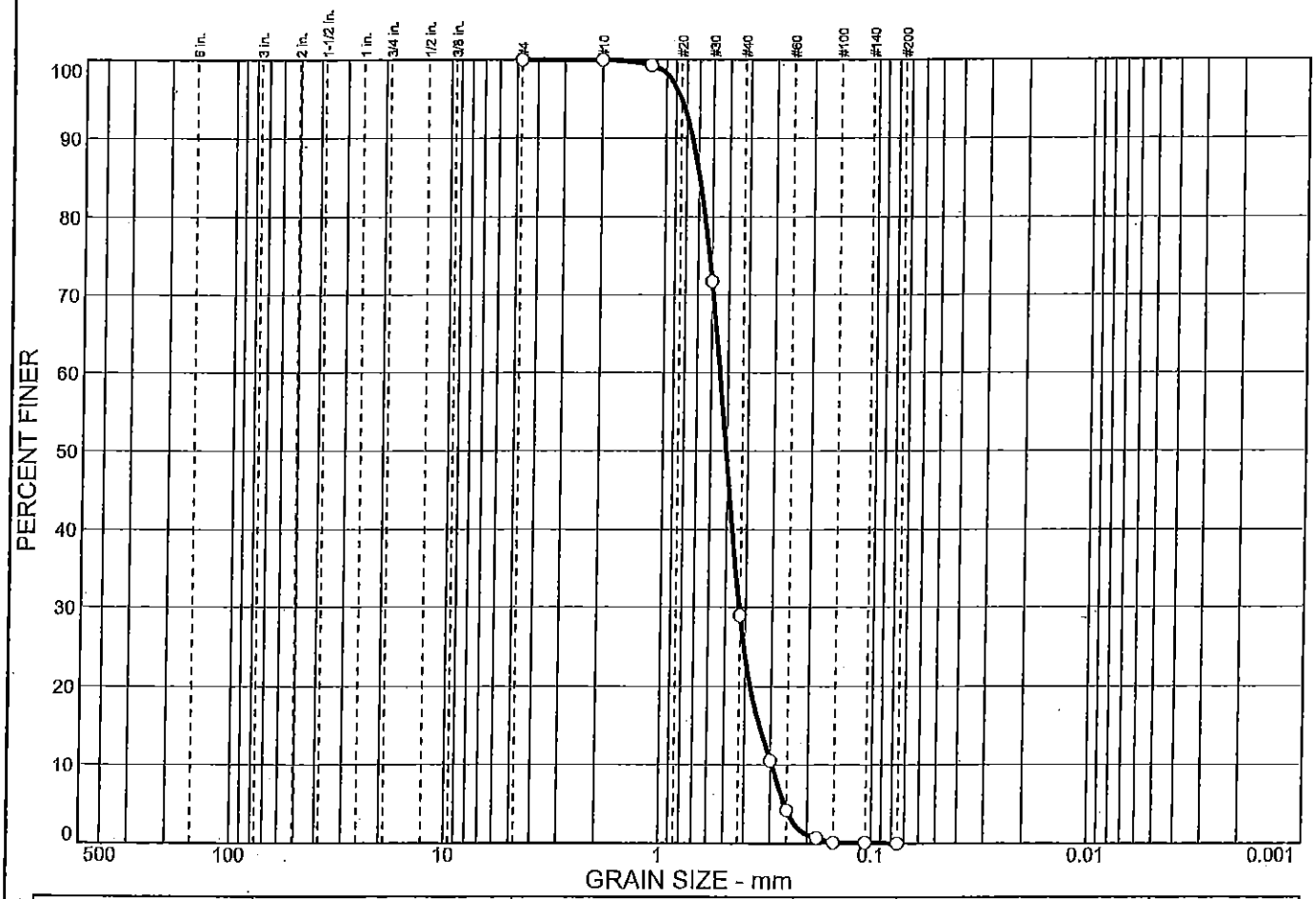
OV-38
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/23/04
Location: OV-38 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 38B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	100.0	0.0	0.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.3		
#30	71.7		
#40	28.9		
#50	10.5		
#60	4.2		
#80	0.7		
#100	0.1		
#140	0.1		
#200	0.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.695 D_{60}= 0.546 D_{50}= 0.506
D_{30}= 0.430 D_{15}= 0.340 D_{10}= 0.296
C_u= 1.84 C_c= 1.14

Classification

USCS= SP AASHTO= A-1-b

Remarks

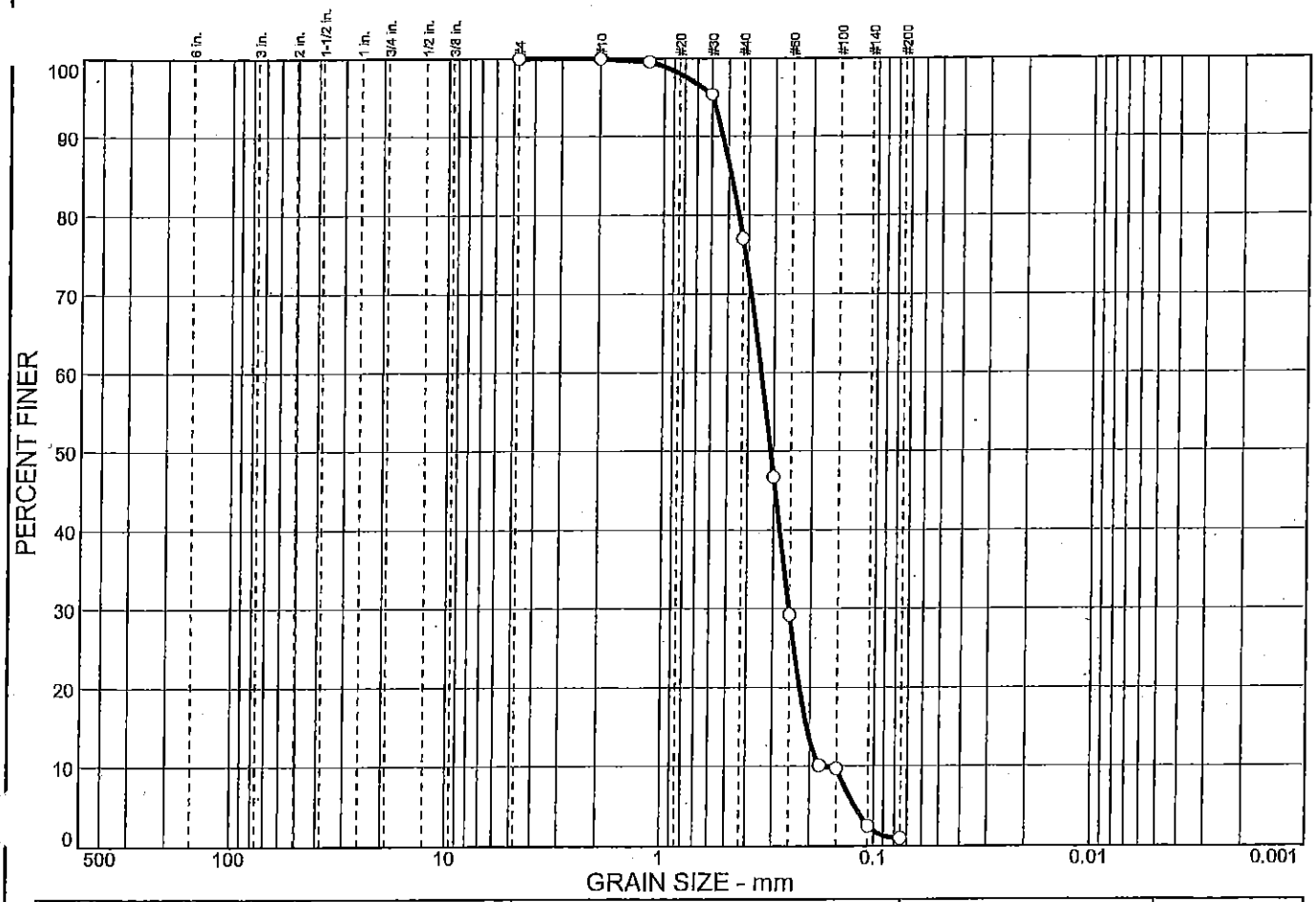
OV-38
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/23/04
Location: OV-38 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 38C

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	99.0	1.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.6		
#30	95.4		
#40	77.0		
#50	46.6		
#60	29.2		
#80	10.1		
#100	9.7		
#140	2.5		
#200	1.0		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 0.484 D_{60}= 0.345 D_{50}= 0.311
D_{30}= 0.252 D_{15}= 0.206 D_{10}= 0.172
C_u= 2.01 C_c= 1.07

Classification

USCS= SP AASHTO= A-3

Remarks

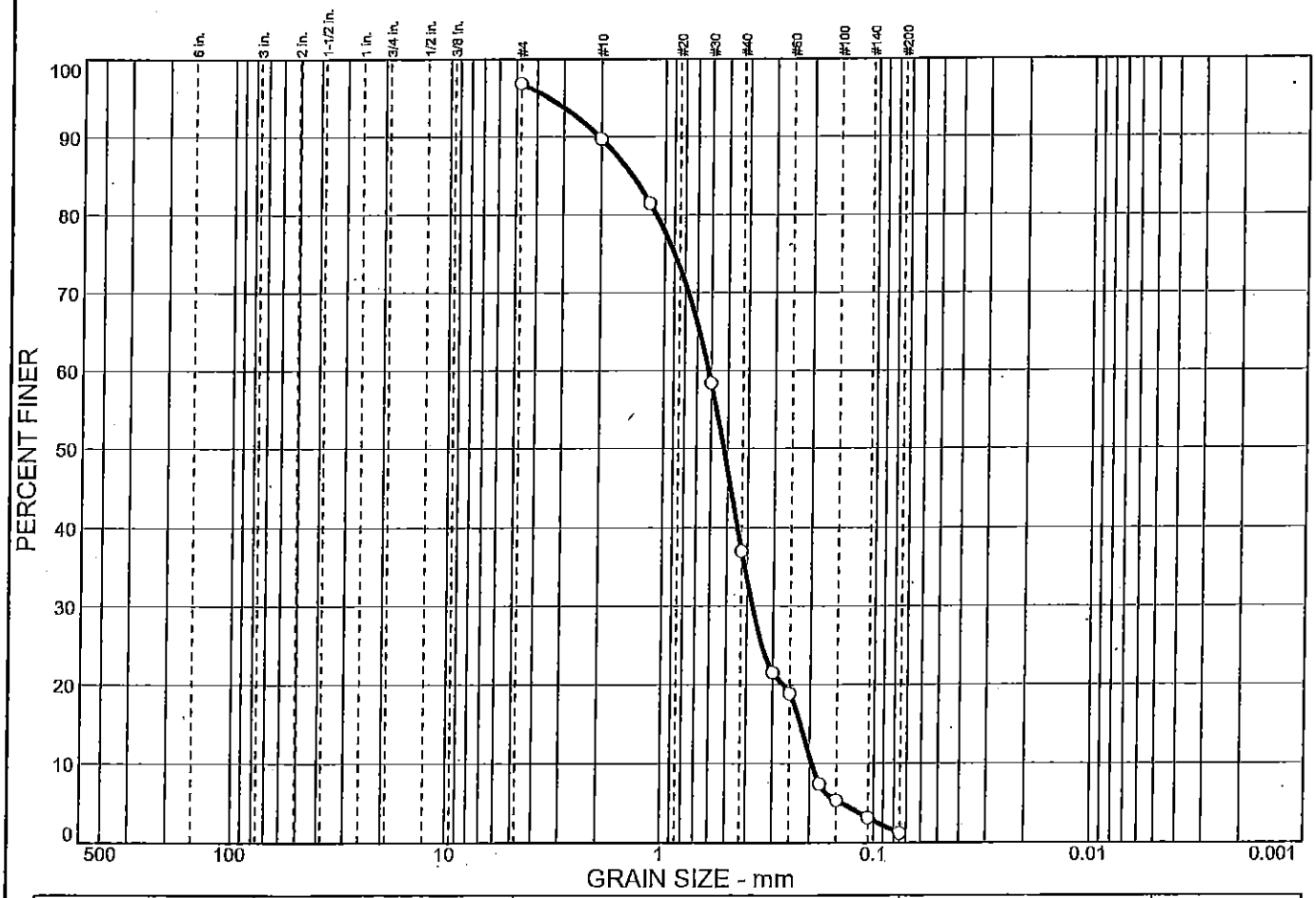
OV-39
Sample A

Sample No.: A **Source of Sample:** **Date:** 4/23/04
Location: OV-39 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 39A

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		95.7	1.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	96.9		
#10	89.7		
#16	81.5		
#30	58.4		
#40	37.0		
#50	21.5		
#60	18.8		
#80	7.4		
#100	5.3		
#140	3.1		
#200	1.2		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.43 D_{60}= 0.618 D_{50}= 0.521
D_{30}= 0.376 D_{15}= 0.222 D_{10}= 0.196
C_u= 3.16 C_c= 1.17

Classification

USCS= SP AASHTO= A-1-b

Remarks

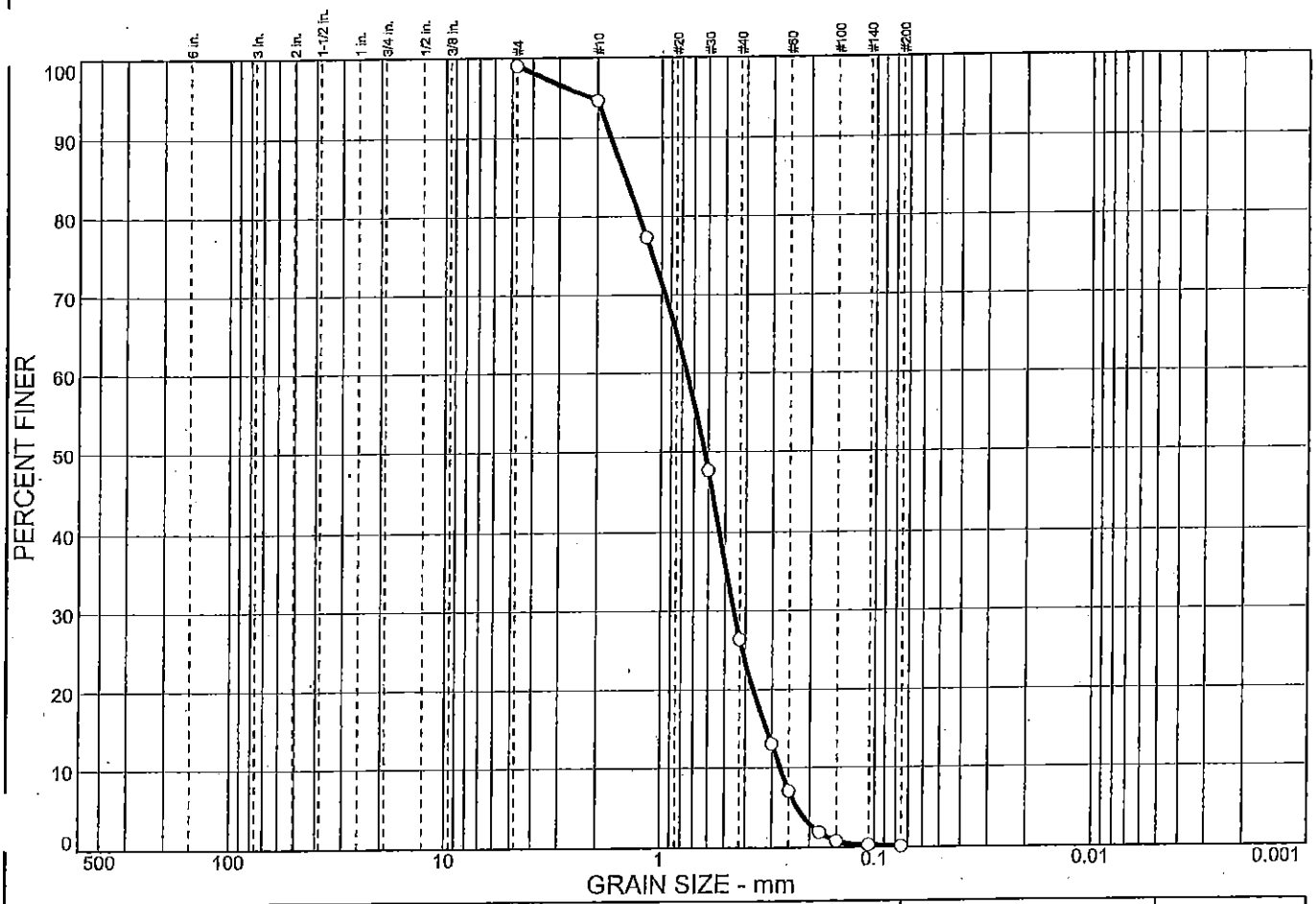
OV-39
Sample B

Sample No.: B **Source of Sample:** **Date:** 4/23/04
Location: OV-39 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 39B

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
		98.9	0.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.0		
#10	94.5		
#16	77.3		
#30	47.6		
#40	26.4		
#50	13.0		
#60	7.1		
#80	1.9		
#100	0.8		
#140	0.3		
#200	0.1		

* (no specification provided)

Soil Description

Tan, Poorly Graded SAND

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{85}= 1.49 D_{60}= 0.757 D_{50}= 0.625
D_{30}= 0.454 D_{15}= 0.318 D_{10}= 0.275
C_u= 2.76 C_c= 0.99

Classification

USCS= SP AASHTO= A-1-b

Remarks

OV-39
Sample C

Sample No.: C **Source of Sample:** **Date:** 4/23/04
Location: OV-39 **Elev./Depth:** NA

GET SOLUTIONS, INC.

Client: Waterway Surveys and Engineering, LTD
Project: Ocean View Sediment Analysis
Project No: VB04-131G **Figure** 39C