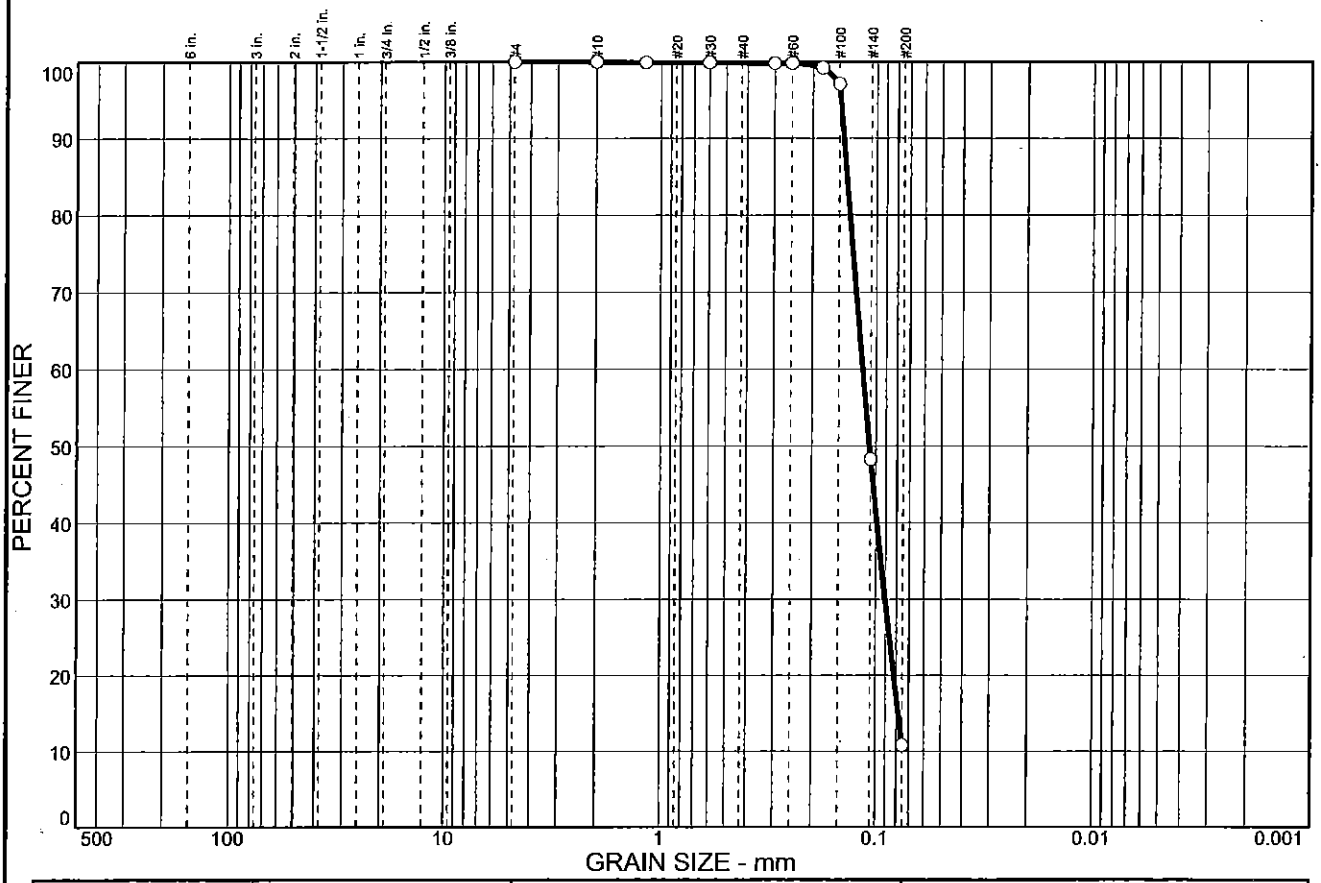
Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.2	89.0	10.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.9		
#50	99.8		
#60	99.8		
#80	99.2		
#100	97.1		
#140	48.3		
#200	10.8		

* (no specification provided)

Soil Description

dark grayish brown silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.138 D_{60}= 0.116 D_{50}= 0.107
D_{30}= 0.0905 D_{15}= 0.0782 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

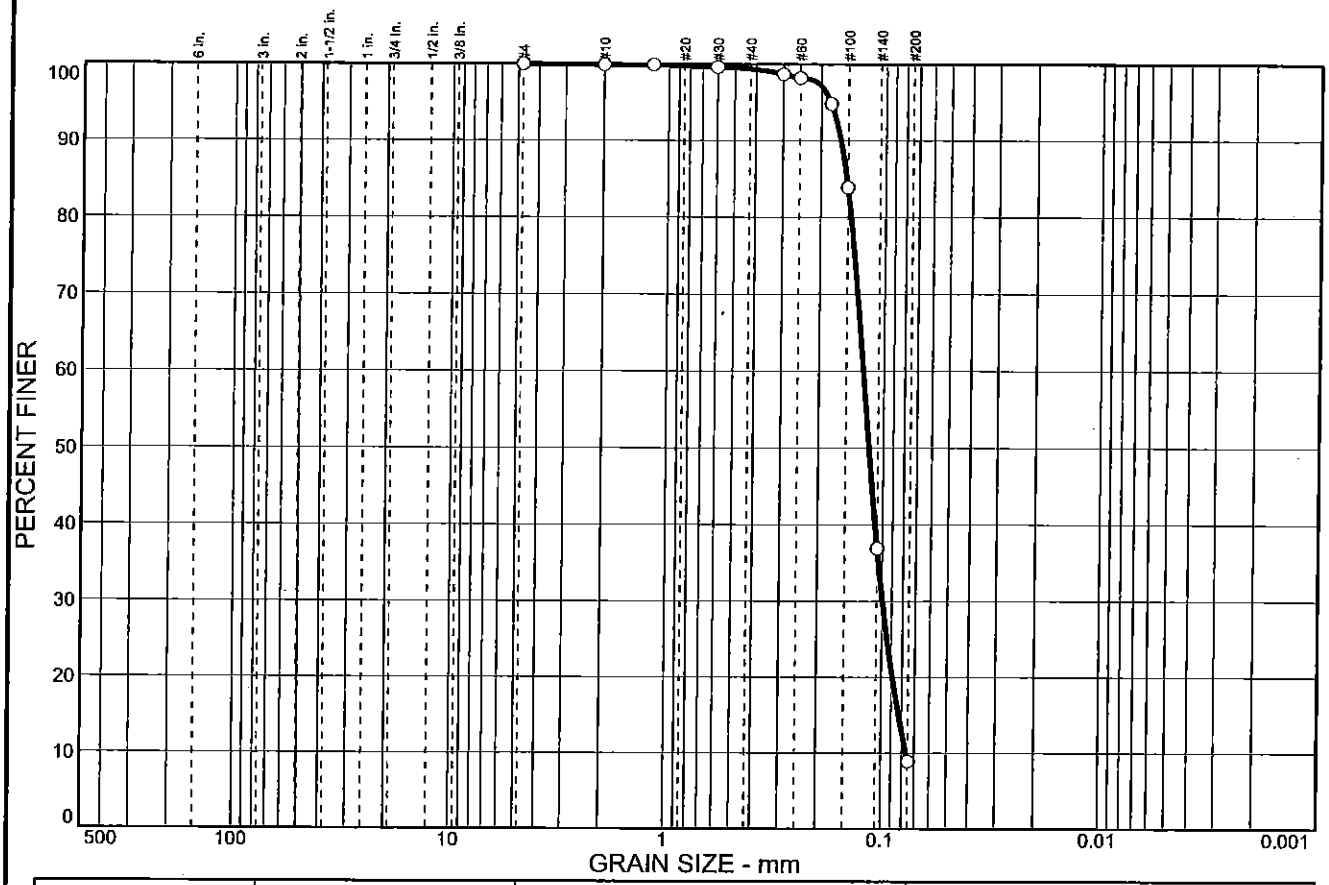
Sample No.: 06OV-01 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 01-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.5	90.5	8.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.6		
#50	98.7		
#60	98.2		
#80	94.8		
#100	83.9		
#140	36.9		
#200	8.9		

* (no specification provided)

Soil Description

dar gray silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.152 D_{60}= 0.125 D_{50}= 0.117
D_{30}= 0.0997 D_{15}= 0.0828 D_{10}= 0.0764
C_u= 1.63 C_c= 1.04

Classification

USCS= AASHTO=

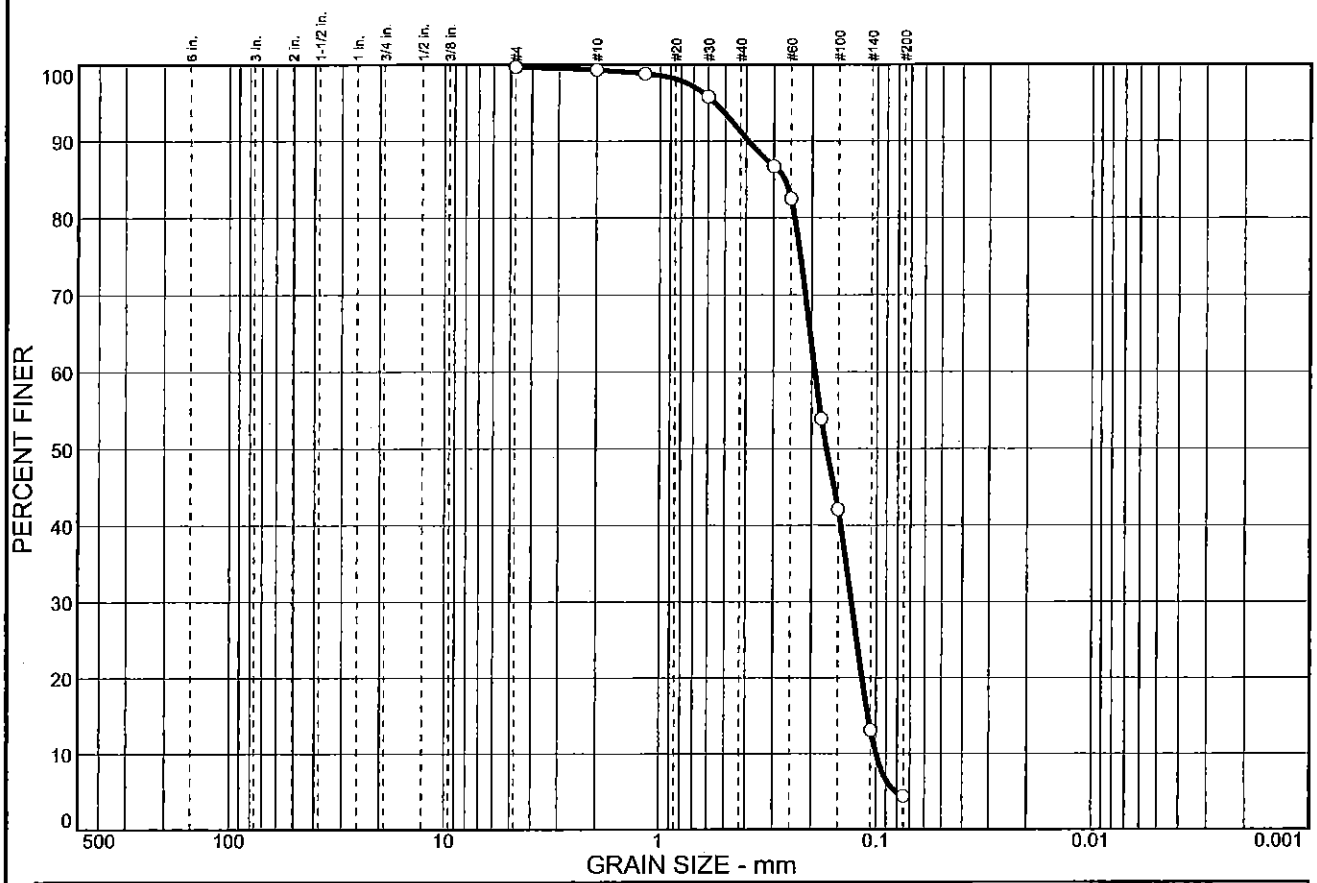
Remarks

Sample No.: 06OV-01 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 01-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.4	8.1	86.8	4.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.7		
#10	99.3		
#16	98.8		
#30	95.8		
#50	86.7		
#60	82.5		
#80	53.9		
#100	42.1		
#140	13.1		
#200	4.4		

* (no specification provided)

Soil Description

dar gray silty sand w/shell

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.267 D_{60}= 0.193 D_{50}= 0.170
D_{30}= 0.130 D_{15}= 0.109 D_{10}= 0.100
C_u= 1.93 C_c= 0.87

Classification

USCS= AASHTO=

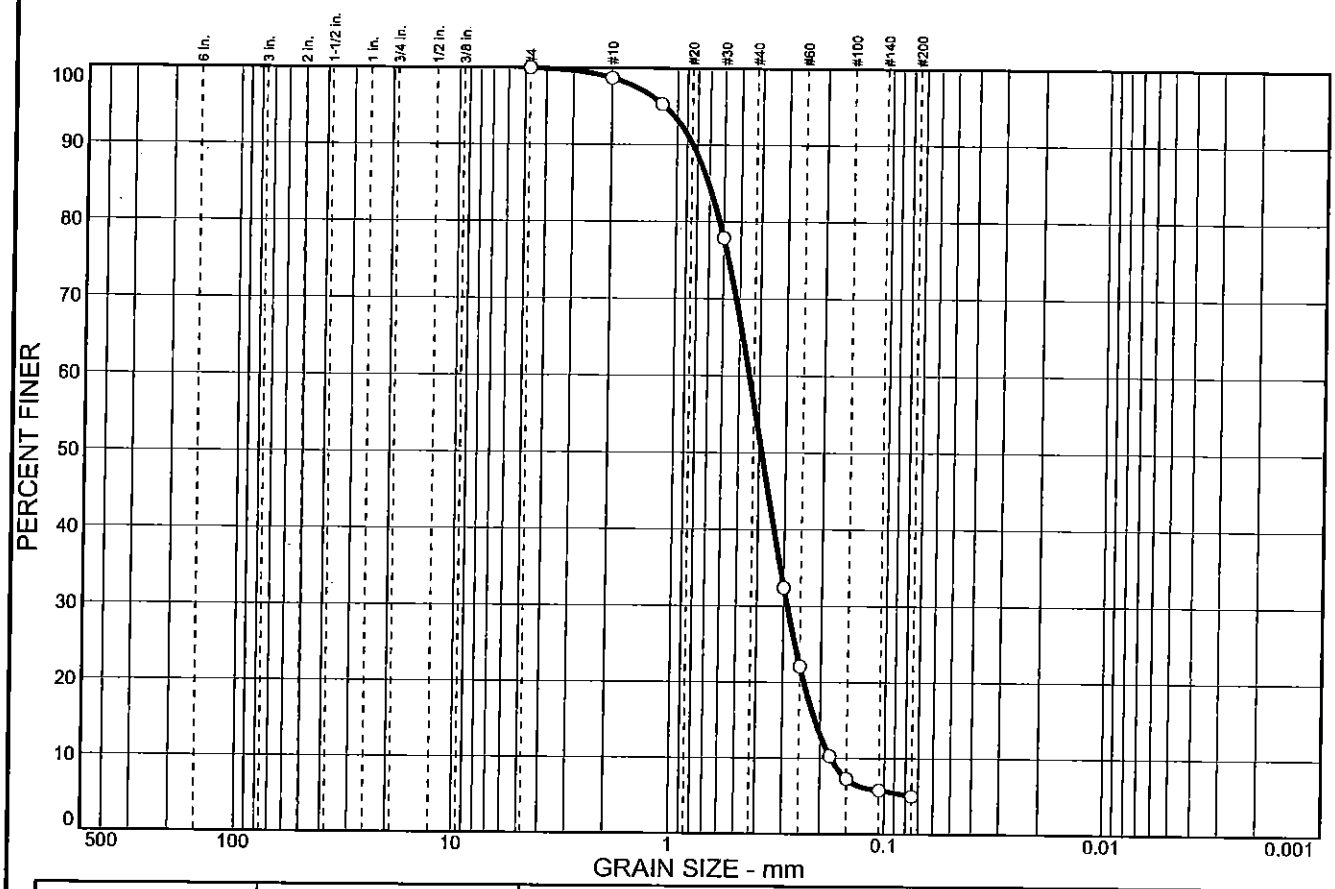
Remarks

Sample No.: 06OV-01 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 01-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.3	42.3	51.4	5.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.7		
#16	95.3		
#30	77.9		
#50	32.4		
#60	22.1		
#80	10.3		
#100	7.3		
#140	5.8		
#200	5.0		

* (no specification provided)

Soil Description

light olive brown sand w/gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.710 D_{60}= 0.448 D_{50}= 0.388
D_{30}= 0.289 D_{15}= 0.211 D_{10}= 0.178
C_u= 2.52 C_c= 1.05

Classification

USCS= AASHTO=

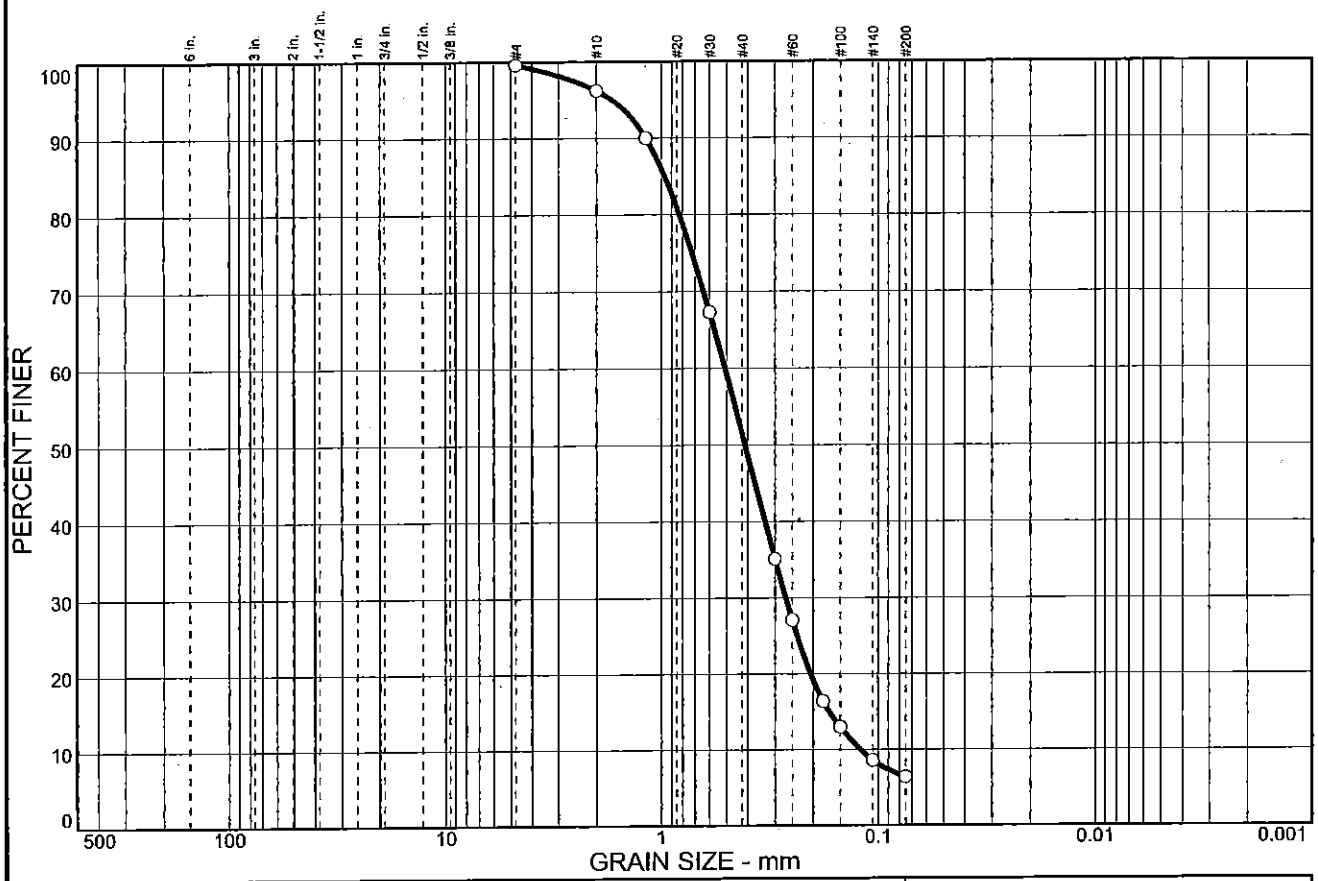
Remarks

Sample No.: 06OV-01 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 01-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			3.4	44.7	45.1	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	96.2		
#16	90.0		
#30	67.3		
#50	35.1		
#60	27.1		
#80	16.4		
#100	13.0		
#140	8.6		
#200	6.4		

* (no specification provided)

Soil Description

light olive brown sand w/gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.967 D_{60}= 0.510 D_{50}= 0.412
D_{30}= 0.268 D_{15}= 0.168 D_{10}= 0.121
C_u= 4.21 C_c= 1.16

Classification

USCS= AASHTO=

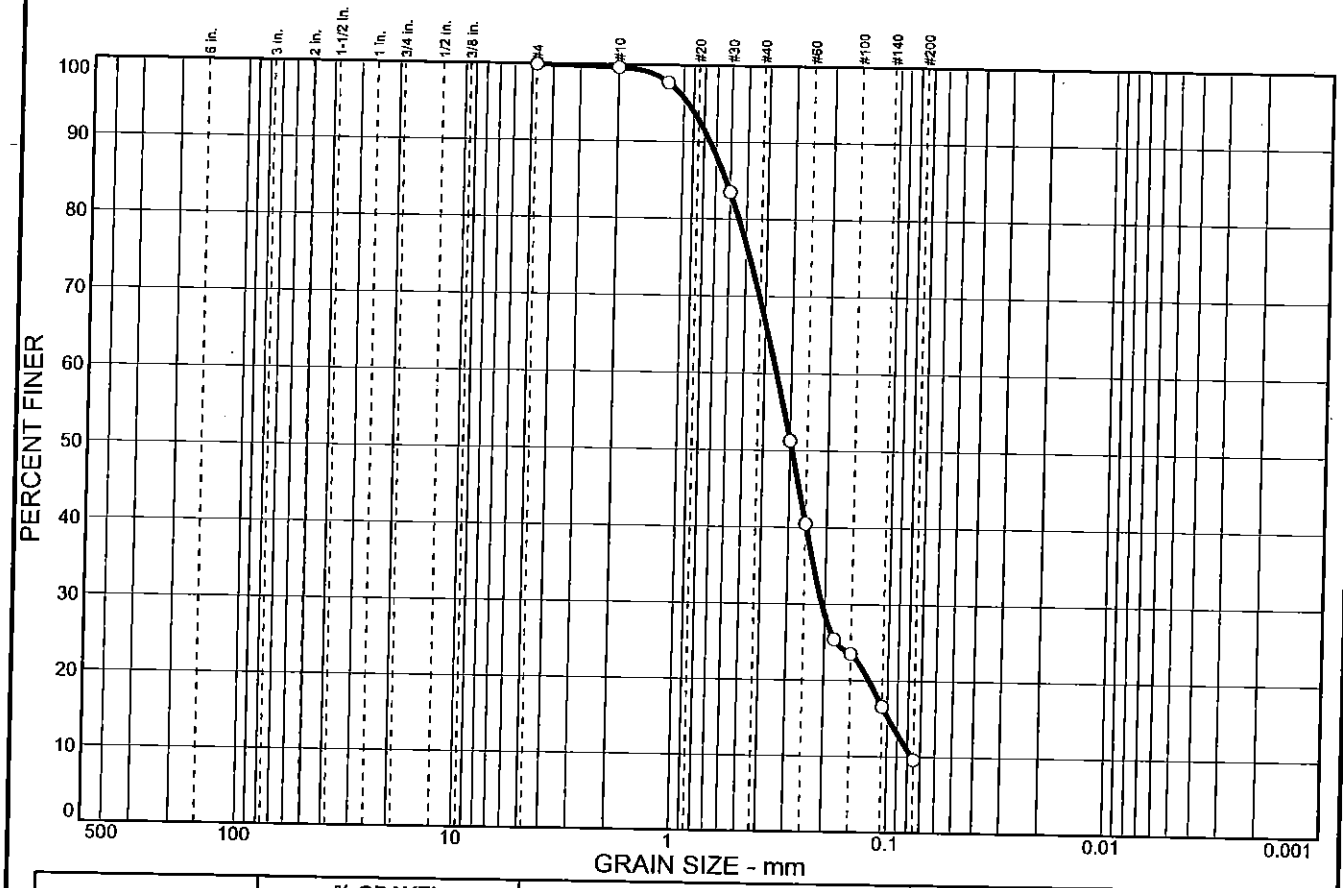
Remarks

Sample No.: 06OV-01 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 16

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 01-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.3	30.0	60.0	9.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.6		
#16	97.7		
#30	83.5		
#50	51.3		
#60	40.5		
#80	25.4		
#100	23.5		
#140	16.6		
#200	9.6		

* (no specification provided)

Soil Description

olive brown silty sand w/shell

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.628 D_{60}= 0.351 D_{50}= 0.293
D_{30}= 0.206 D_{15}= 0.0986 D_{10}= 0.0766
C_u= 4.58 C_c= 1.58

Classification

USCS= AASHTO=

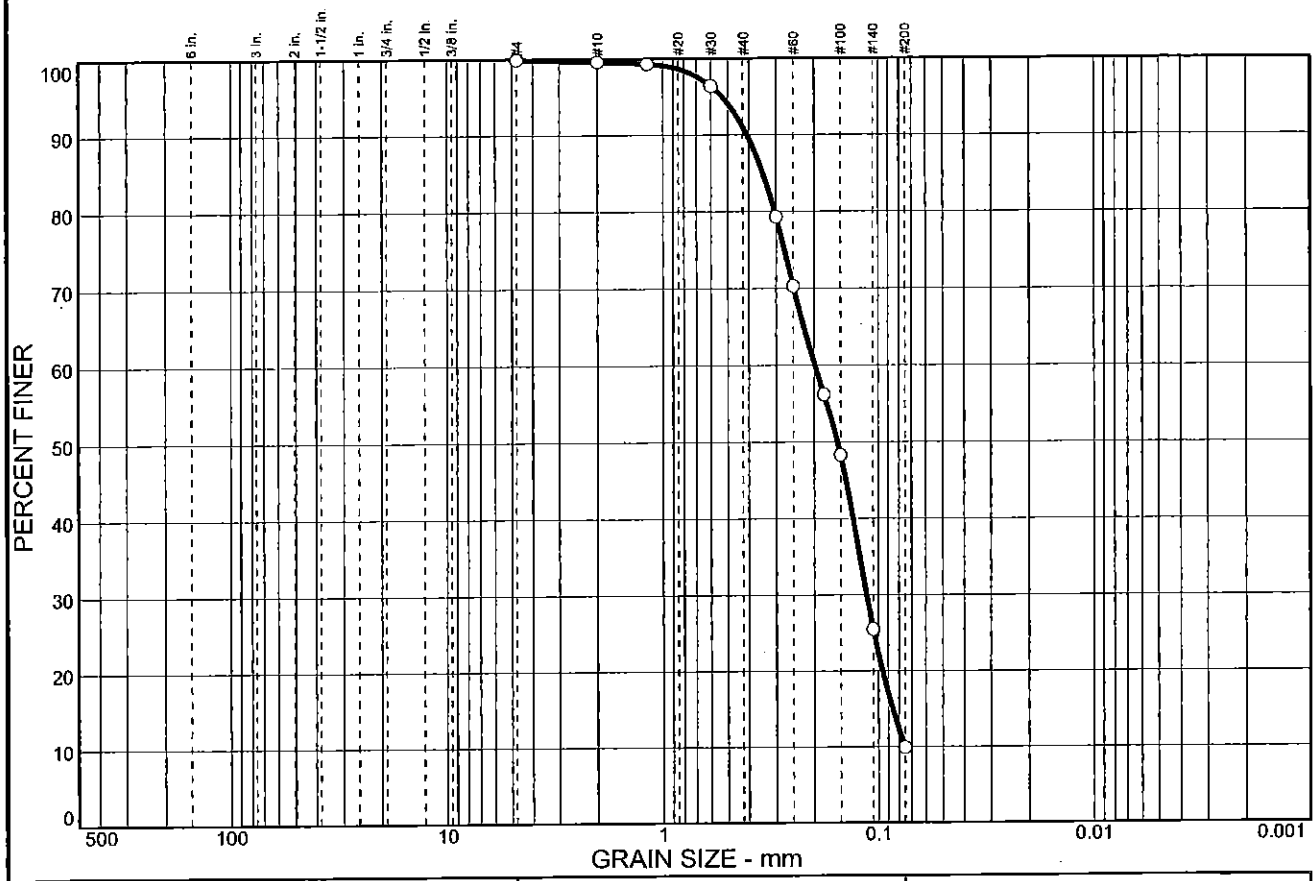
Remarks

Sample No.: 06OV-02 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 02-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.3	8.6	81.1	10.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.6		
#16	99.3		
#30	96.4		
#50	79.3		
#60	70.3		
#80	56.2		
#100	48.3		
#140	25.5		
#200	9.9		

* (no specification provided)

Soil Description

olive brown silty sand w/shell

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.345 D_{60}= 0.198 D_{50}= 0.155
D_{30}= 0.114 D_{15}= 0.0856 D_{10}= 0.0752
C_u= 2.63 C_c= 0.87

Classification

USCS= AASHTO=

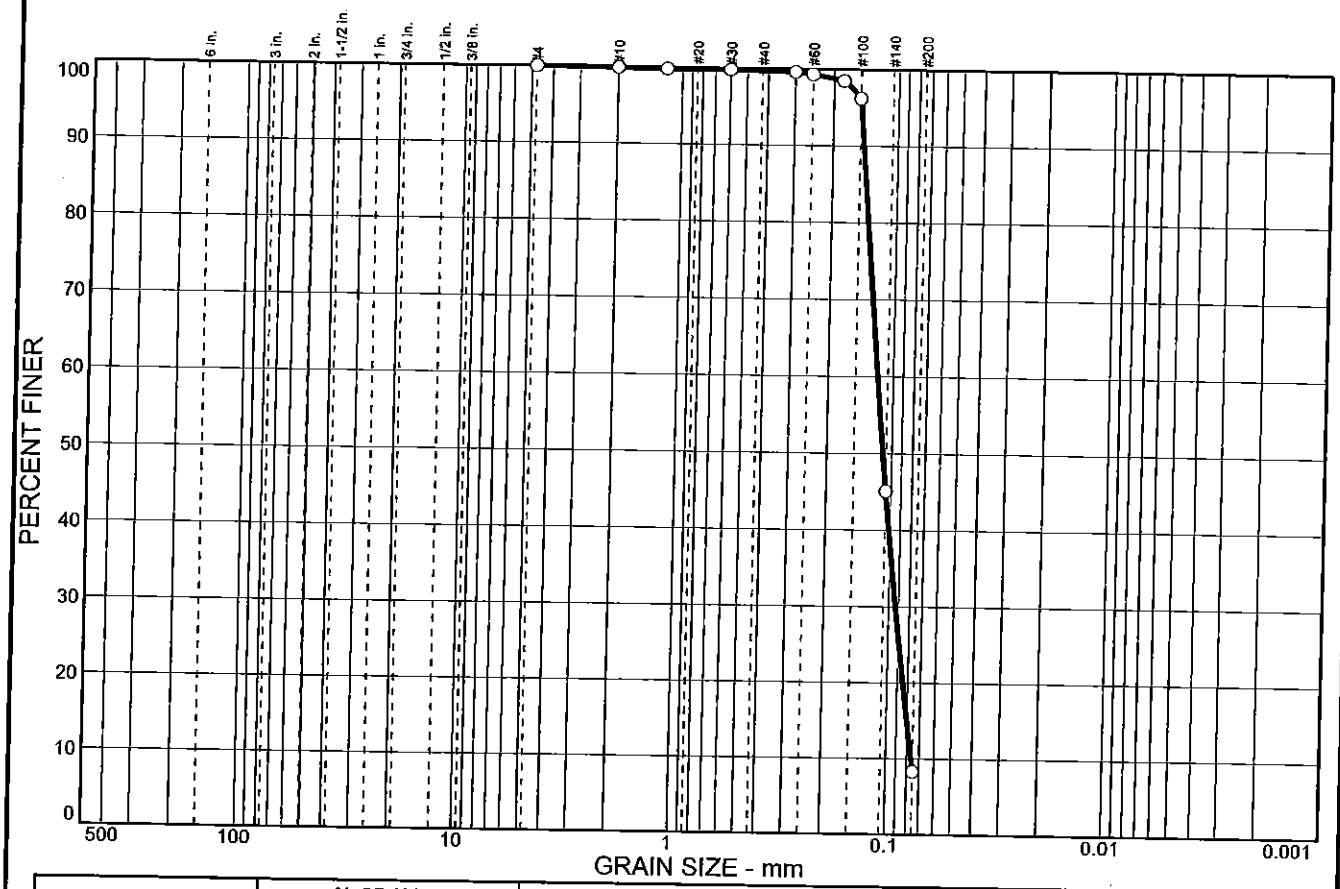
Remarks

Sample No.: 06OV-02 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 02-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.2	91.4	8.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.8		
#30	99.8		
#50	99.6		
#60	99.3		
#80	98.5		
#100	96.2		
#140	45.1		
#200	8.3		

* (no specification provided)

Soil Description

black silty sand w/shell

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.139 D_{60}= 0.118 D_{50}= 0.110
D_{30}= 0.0932 D_{15}= 0.0804 D_{10}= 0.0763
C_u= 1.55 C_c= 0.96

Classification

USCS= AASHTO=

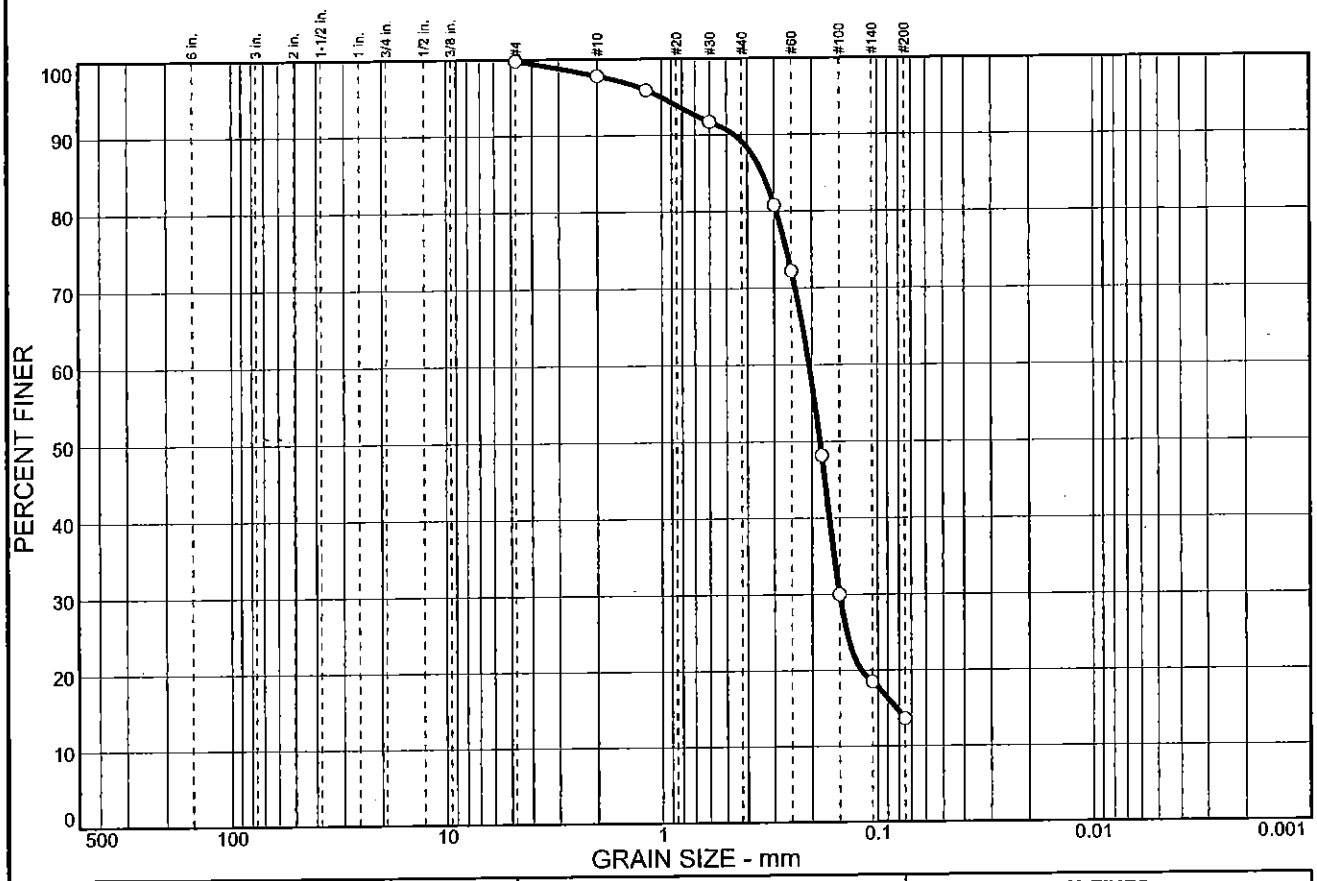
Remarks

Sample No.: O6OV-02 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 02-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.0	8.6	75.6	13.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	97.8		
#16	95.9		
#30	91.7		
#50	80.8		
#60	72.2		
#80	48.2		
#100	30.0		
#140	18.5		
#200	13.6		

* (no specification provided)

Soil Description

light olive brownsilty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.341 D_{60}= 0.206 D_{50}= 0.183
D_{30}= 0.150 D_{15}= 0.0821 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

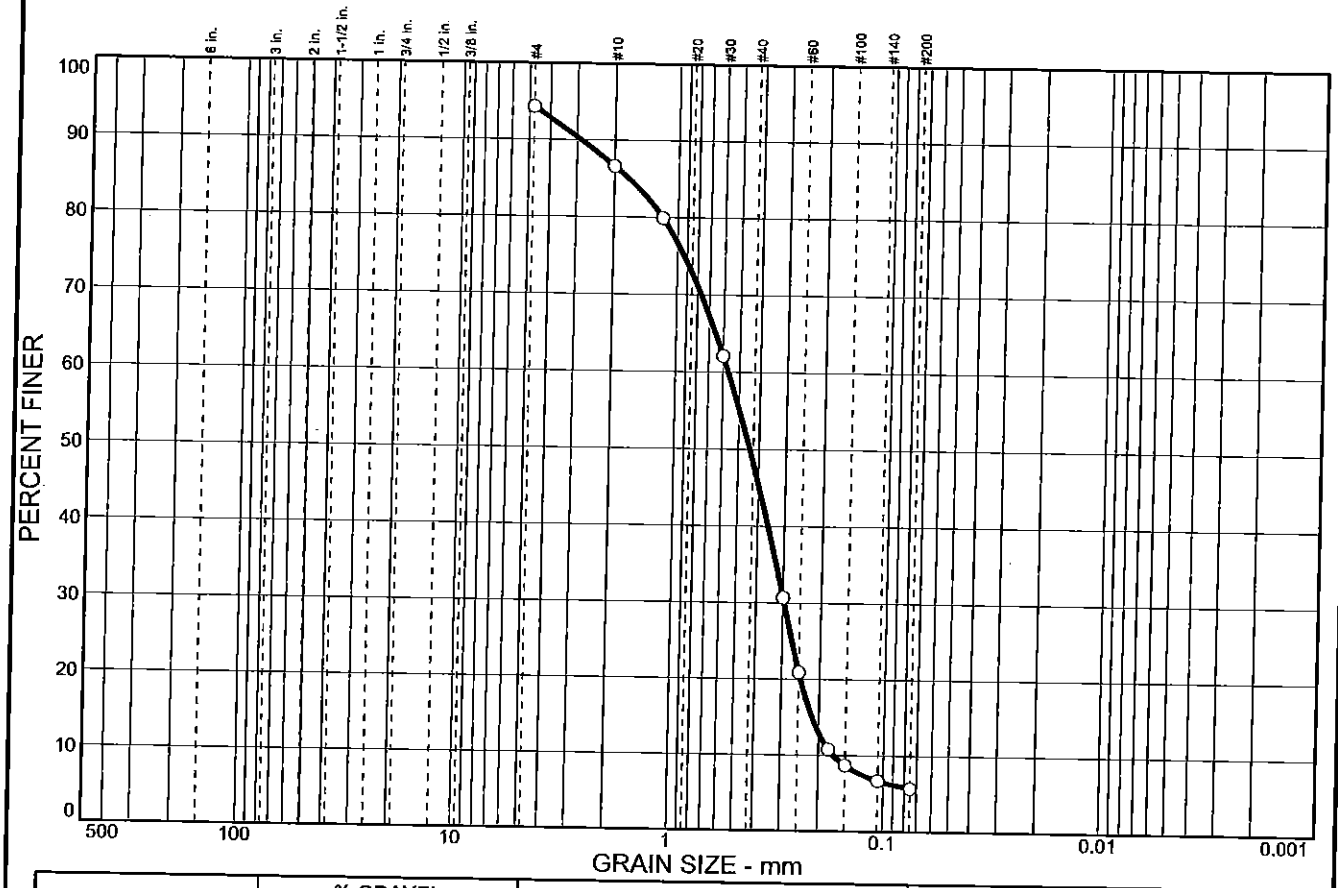
Remarks

Sample No.: 06OV-02 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 02-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			7.7	38.4	42.5	5.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	94.3		
#10	86.6		
#16	79.9		
#30	62.1		
#50	30.7		
#60	20.9		
#80	10.8		
#100	8.7		
#140	6.7		
#200	5.7		

* (no specification provided)

Soil Description

olive yellow silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.71 D_{60}= 0.566 D_{50}= 0.442
D_{30}= 0.296 D_{15}= 0.215 D_{10}= 0.170
C_u= 3.32 C_c= 0.91

Classification

USCS= AASHTO=

Remarks

Sample No.: 06OV-02 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 12

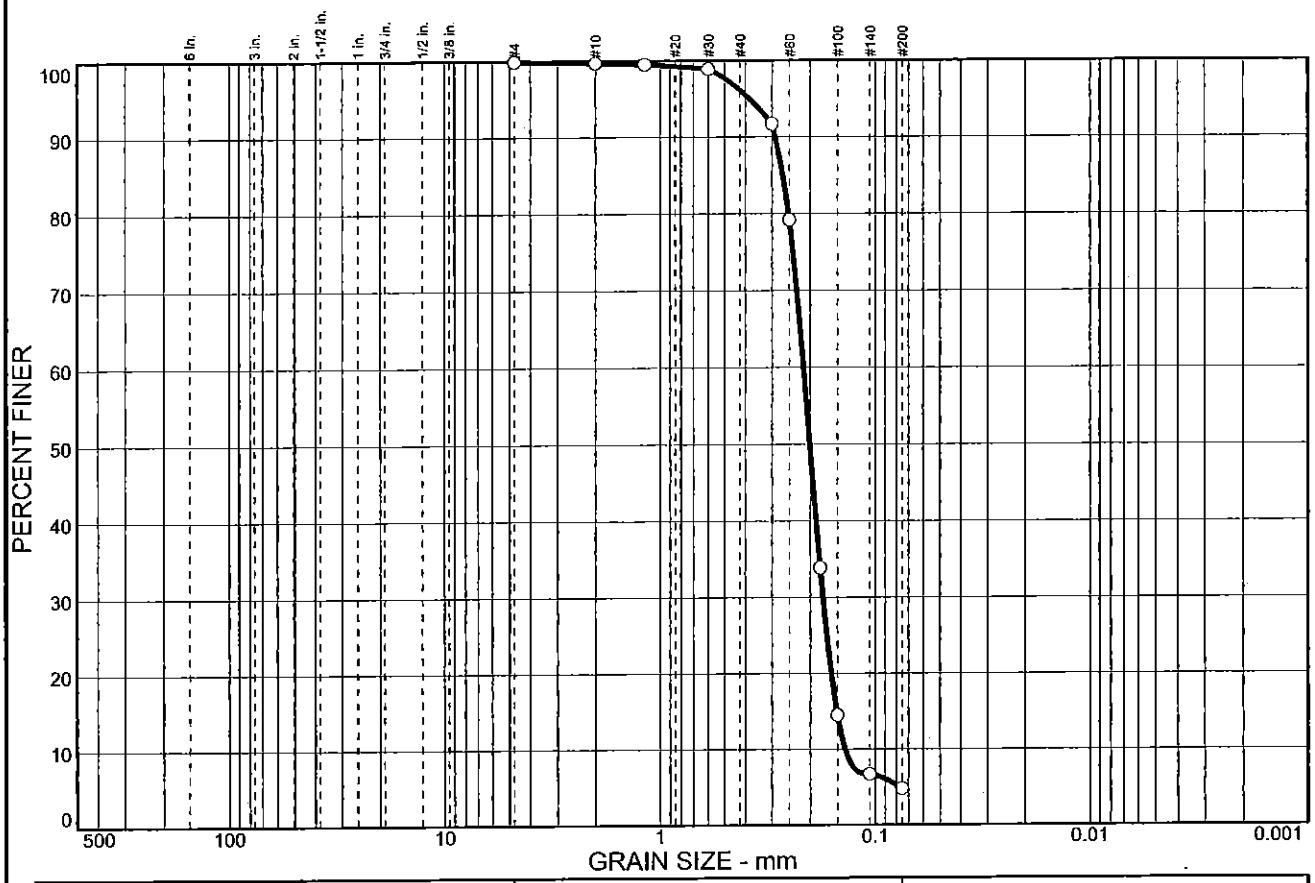
PSI

Client: Moffatt & Nichol

Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 02-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.2	3.6	91.3	4.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.7		
#16	99.5		
#30	98.9		
#50	91.7		
#60	79.2		
#80	33.9		
#100	14.5		
#140	6.7		
#200	4.8		

* (no specification provided)

Soil Description

light olive brown silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.268 D_{60}= 0.215 D_{50}= 0.201
D_{30}= 0.175 D_{15}= 0.151 D_{10}= 0.138
C_u= 1.56 C_c= 1.03

Classification

USCS= AASHTO=

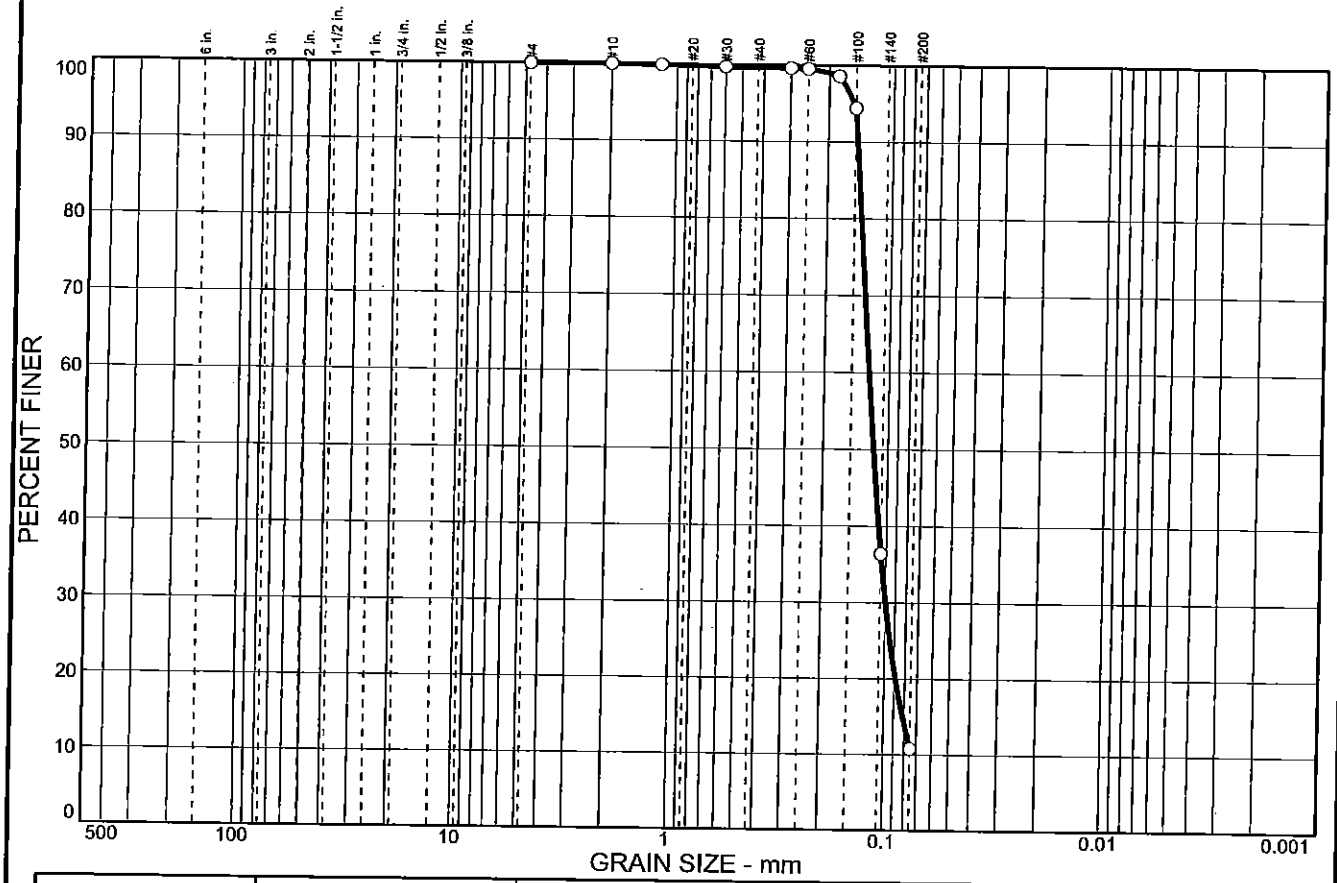
Remarks

Sample No.: 06OV-02 **Source of Sample:** **Date:** 5/15/06
Location: **Elev./Depth:** 16.9

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 02-6

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.4	88.8	10.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.7		
#50	99.6		
#60	99.5		
#80	98.6		
#100	94.4		
#140	36.4		
#200	10.8		

* (no specification provided)

Soil Description

black silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.143 D_{60}= 0.124 D_{50}= 0.117
D_{30}= 0.100 D_{15}= 0.0814 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

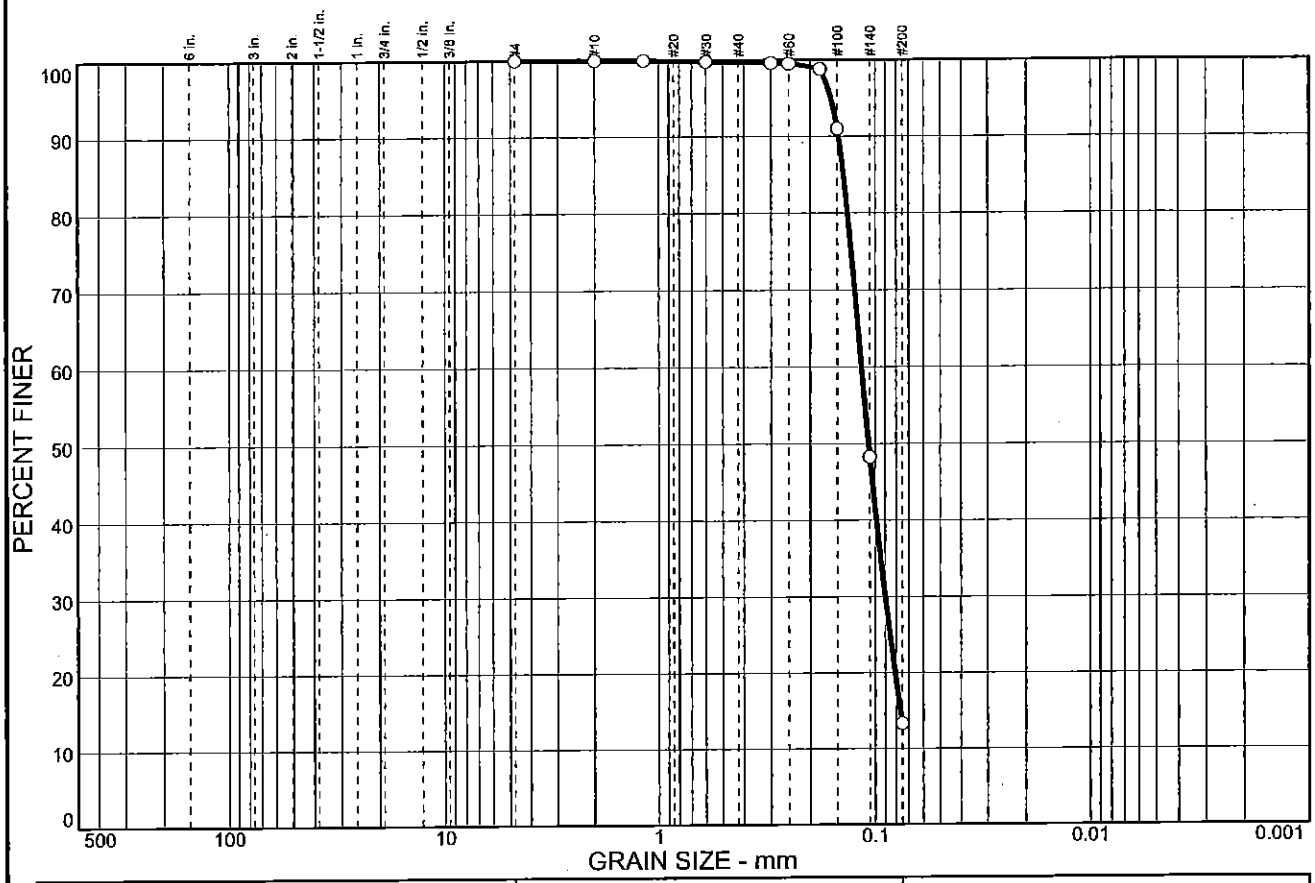
Remarks

Sample No.: 06OV-03 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 03-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.3	86.4	13.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.8		
#50	99.6		
#60	99.5		
#80	98.8		
#100	91.0		
#140	48.3		
#200	13.3		

* (no specification provided)

Soil Description

very dark gray silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.140 D_{60}= 0.116 D_{50}= 0.107
D_{30}= 0.0900 D_{15}= 0.0765 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

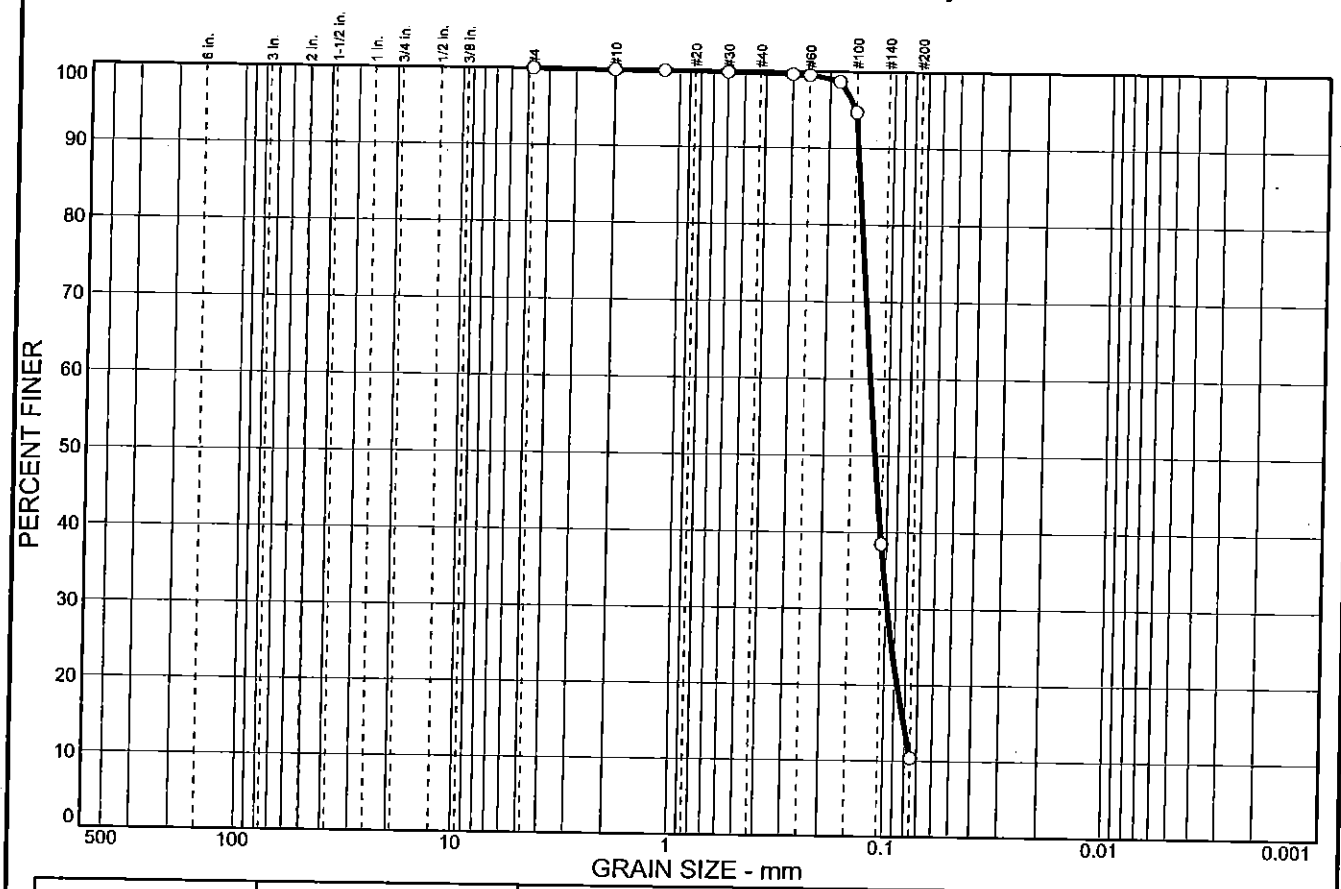
Remarks

Sample No.: 06OV-03 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 03-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.2	89.3	10.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.8		
#50	99.6		
#60	99.5		
#80	98.7		
#100	94.7		
#140	38.5		
#200	10.4		

* (no specification provided)

Soil Description

dark gray silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.142 D_{60}= 0.123 D_{50}= 0.115
D_{30}= 0.0982 D_{15}= 0.0809 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 06OV-03 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 5-5.5

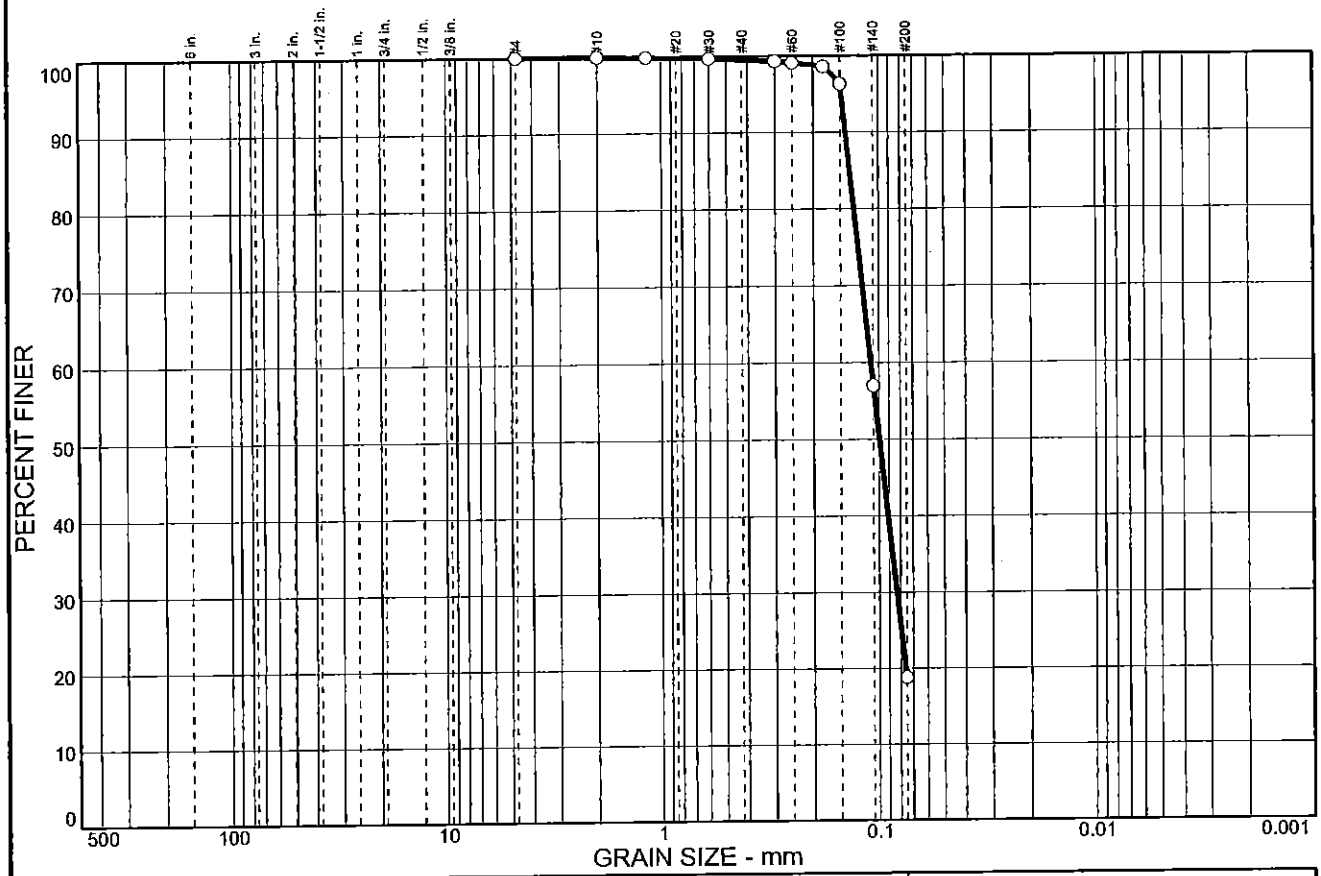
PSI

Client: Moffatt & Nichol

Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 03-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.5	80.7	18.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.7		
#50	99.3		
#60	99.1		
#80	98.6		
#100	96.3		
#140	57.0		
#200	18.8		

* (no specification provided)

Soil Description

dark gray silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.136 D_{60}= 0.109 D_{50}= 0.0996
D_{30}= 0.0831 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

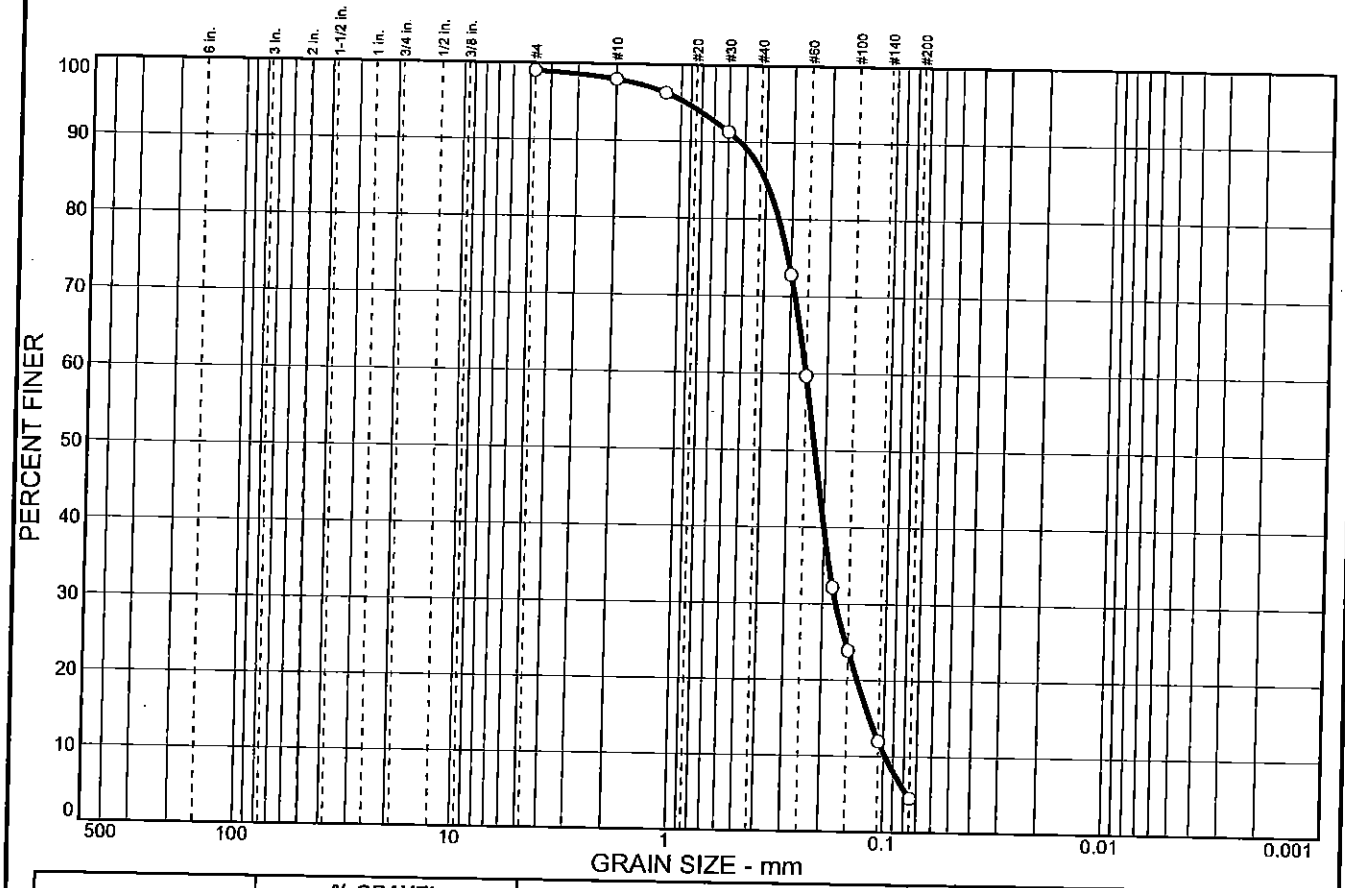
Remarks

Sample No.: 06OV-03 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 03-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.0	11.6	81.9	4.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.0		
#10	98.0		
#16	96.3		
#30	91.3		
#50	72.8		
#60	59.7		
#80	32.2		
#100	23.9		
#140	12.0		
#200	4.5		

* (no specification provided)

Soil Description

dark olive brown silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.401 D_{60}= 0.251 D_{50}= 0.224
D_{30}= 0.173 D_{15}= 0.117 D_{10}= 0.0982
C_u= 2.56 C_c= 1.22

Classification

USCS= AASHTO=

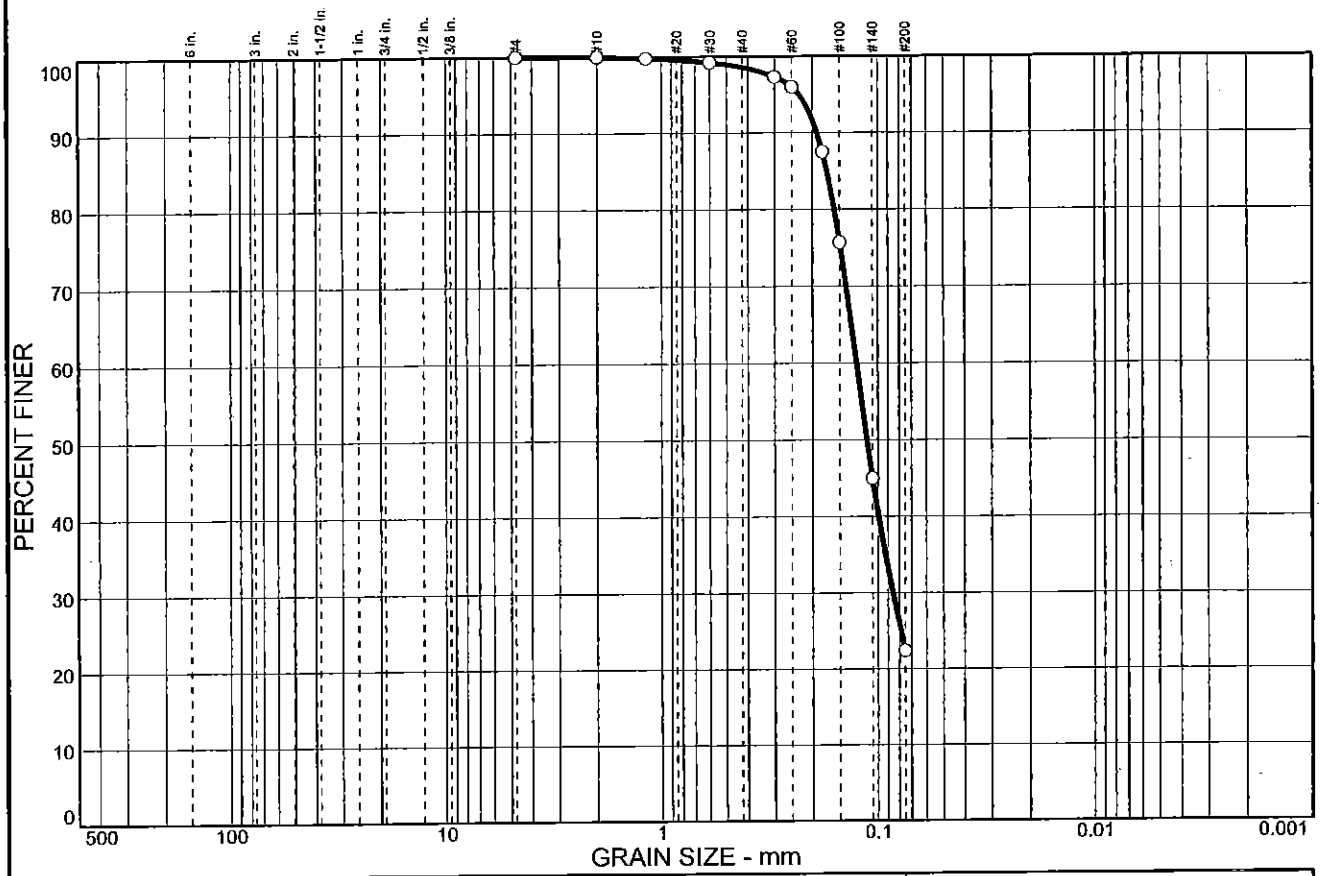
Remarks

Sample No.: 06OV-03 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 15

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 03-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	1.4	76.2	22.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.8		
#30	99.2		
#50	97.3		
#60	96.0		
#80	87.5		
#100	75.7		
#140	45.0		
#200	22.4		

* (no specification provided)

Soil Description

very dark gray sand w/gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.172 D_{60}= 0.126 D_{50}= 0.112
D_{30}= 0.0854 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

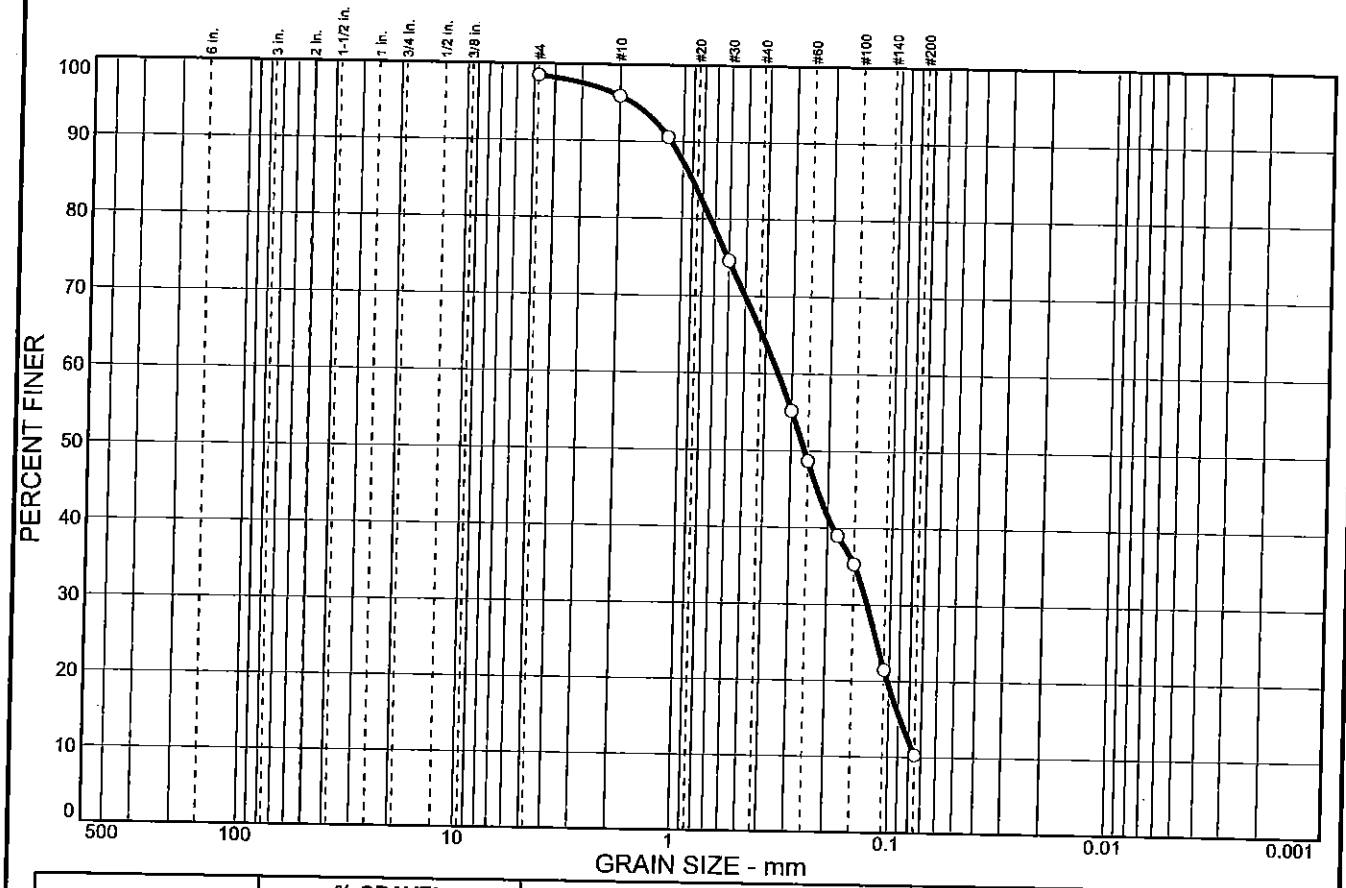
Remarks

Sample No.: 06OV-03 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 18

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 03-6

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.6	30.2	55.4	10.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.5		
#10	95.9		
#16	90.6		
#30	74.6		
#50	55.2		
#60	48.7		
#80	39.0		
#100	35.3		
#140	21.5		
#200	10.3		

* (no specification provided)

Soil Description

black sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.899 D_{60}= 0.348 D_{50}= 0.259
D_{30}= 0.129 D_{15}= 0.0881 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

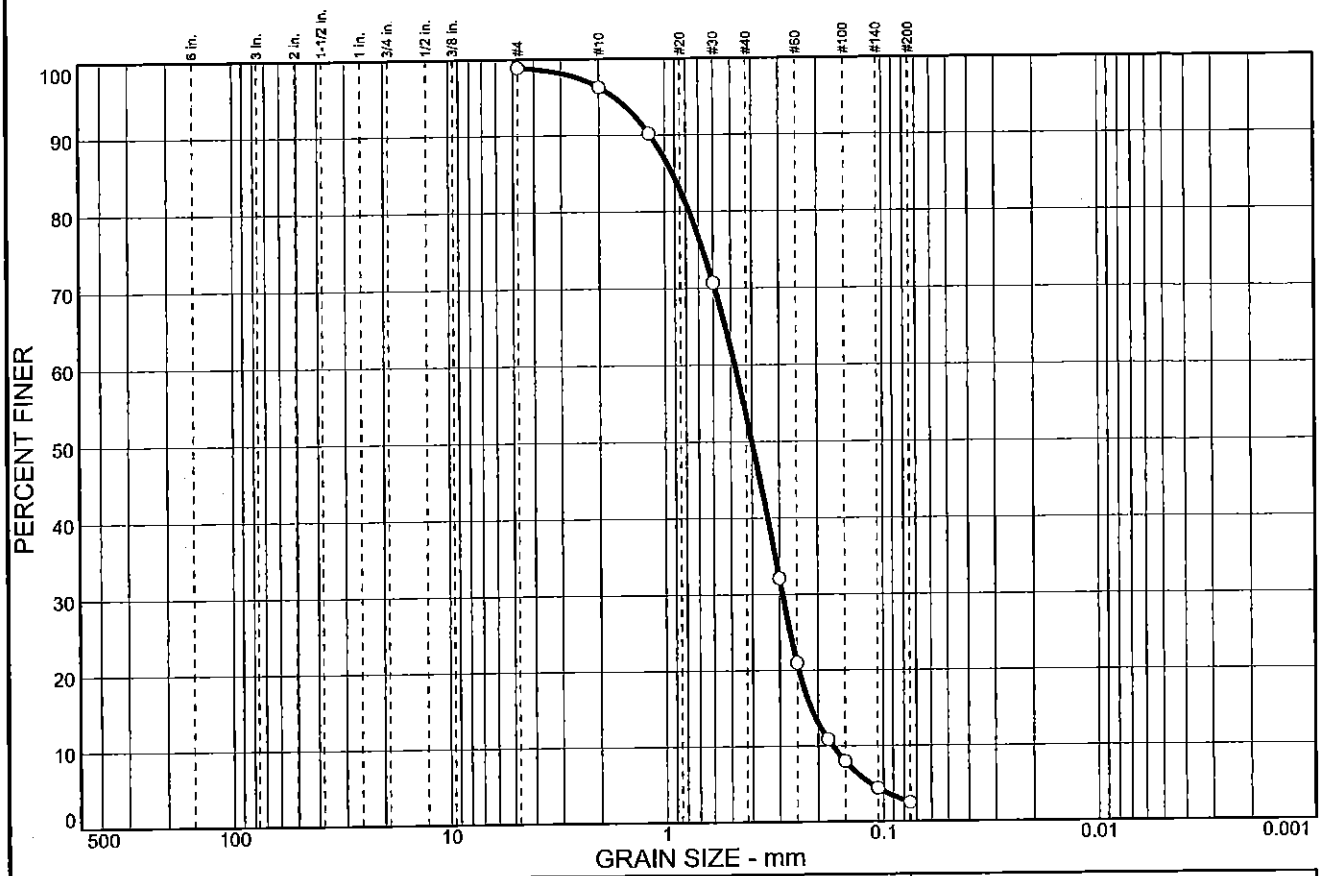
Remarks

Sample No.: 06OV-04 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 04-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.6	42.9	50.9	2.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.9		
#10	96.3		
#16	90.2		
#30	70.7		
#50	32.1		
#60	21.0		
#80	10.9		
#100	8.0		
#140	4.4		
#200	2.5		

* (no specification provided)

Soil Description

light olive brown sand w/gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.921 D_{60}= 0.479 D_{50}= 0.400
D_{30}= 0.290 D_{15}= 0.215 D_{10}= 0.171
C_u= 2.80 C_c= 1.03

Classification

USCS= AASHTO=

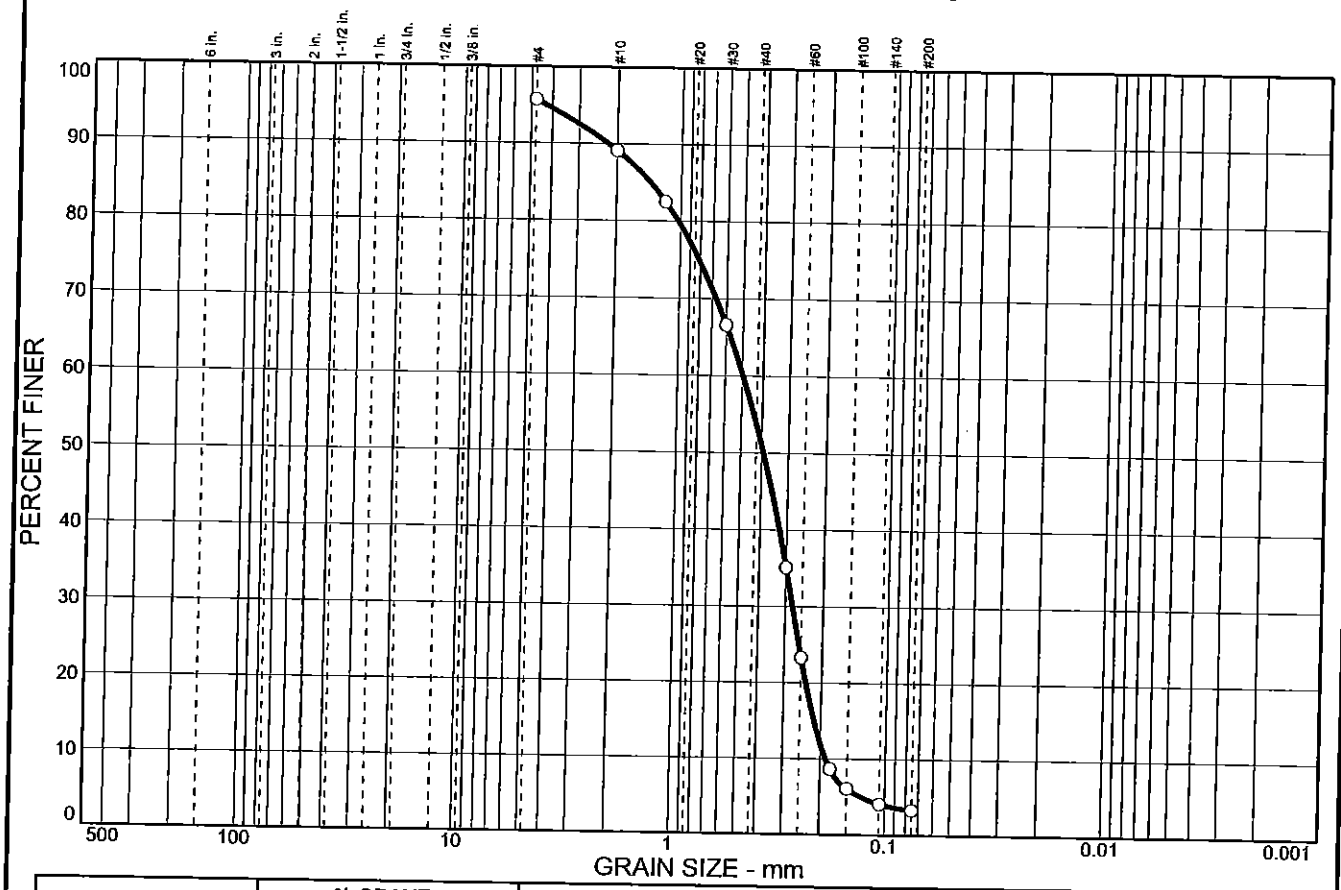
Remarks

Sample No.: 06OV-04 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 04-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			6.6	35.4	50.4	3.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	95.7		
#10	89.1		
#16	82.5		
#30	66.6		
#50	35.1		
#60	23.3		
#80	8.7		
#100	6.1		
#140	4.1		
#200	3.3		

* (no specification provided)

Soil Description

olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.40 D_{60}= 0.496 D_{50}= 0.393
D_{30}= 0.277 D_{15}= 0.215 D_{10}= 0.189
C_u= 2.63 C_c= 0.82

Classification

USCS= AASHTO=

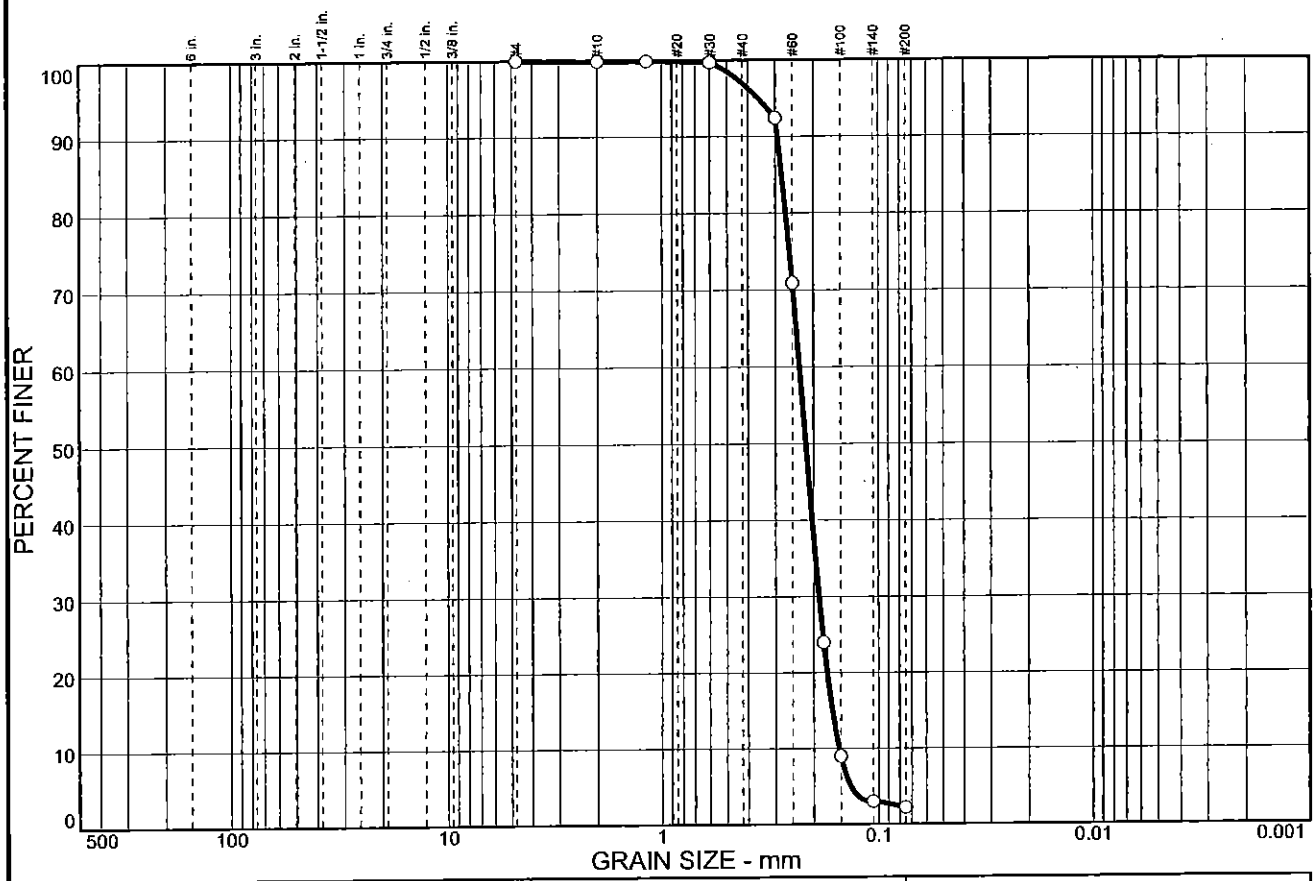
Remarks

Sample No.: 06OV-04 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 04-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	2.9	94.8	2.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.7		
#50	92.4		
#60	70.9		
#80	24.0		
#100	9.0		
#140	3.0		
#200	2.2		

* (no specification provided)

Soil Description

light olive brown sand w/gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.281 D_{60}= 0.232 D_{50}= 0.217
D_{30}= 0.189 D_{15}= 0.164 D_{10}= 0.153
C_u= 1.52 C_c= 1.01

Classification

USCS= AASHTO=

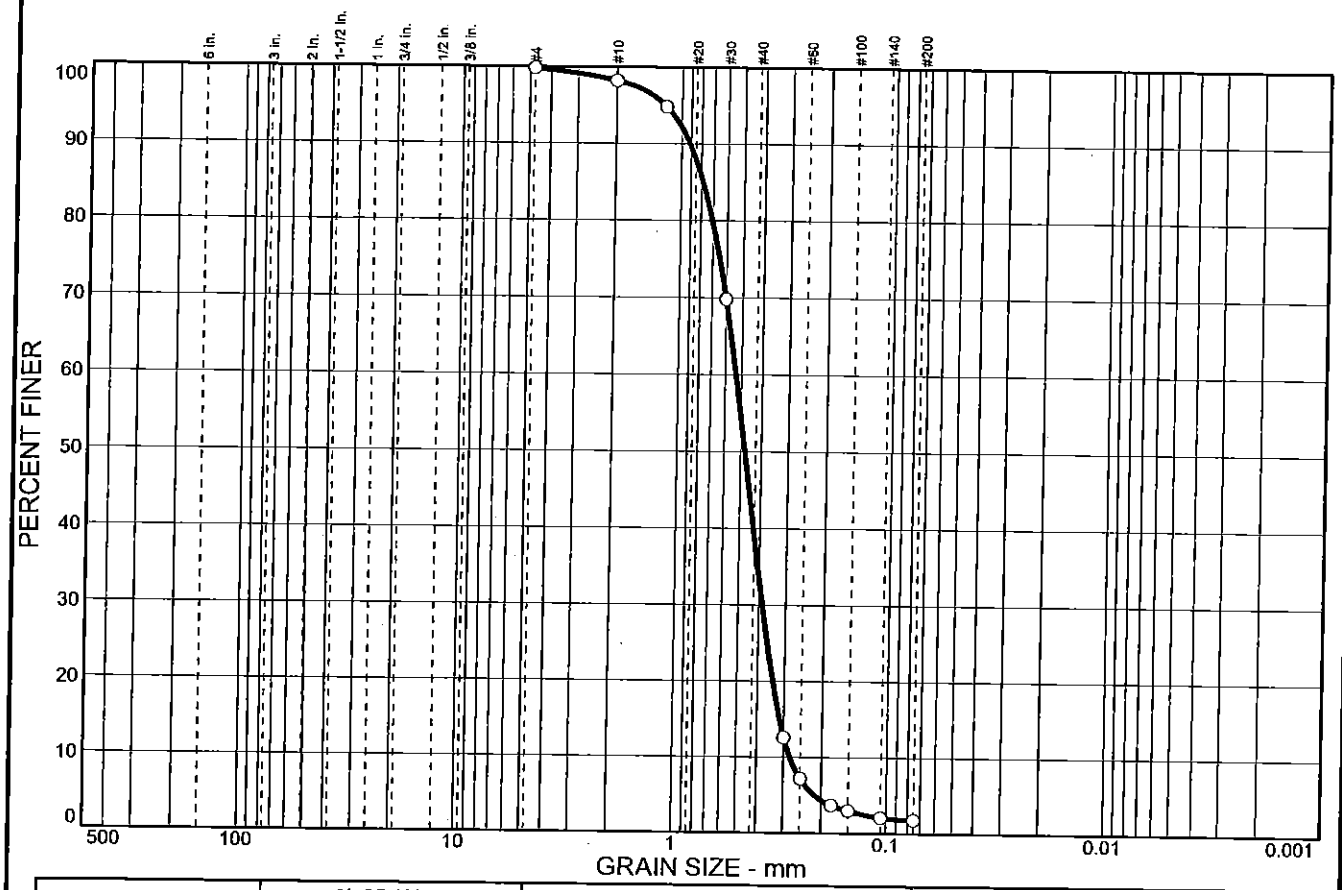
Remarks

Sample No.: 06OV-04 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 04-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.6	59.3	37.1	2.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	98.2		
#16	94.8		
#30	69.8		
#50	12.6		
#60	7.2		
#80	3.7		
#100	3.0		
#140	2.1		
#200	1.8		

* (no specification provided)

Soil Description

olive brown sand with gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.785 D_{60}= 0.533 D_{50}= 0.478
D_{30}= 0.386 D_{15}= 0.314 D_{10}= 0.280
C_u= 1.90 C_c= 0.99

Classification

USCS= AASHTO=

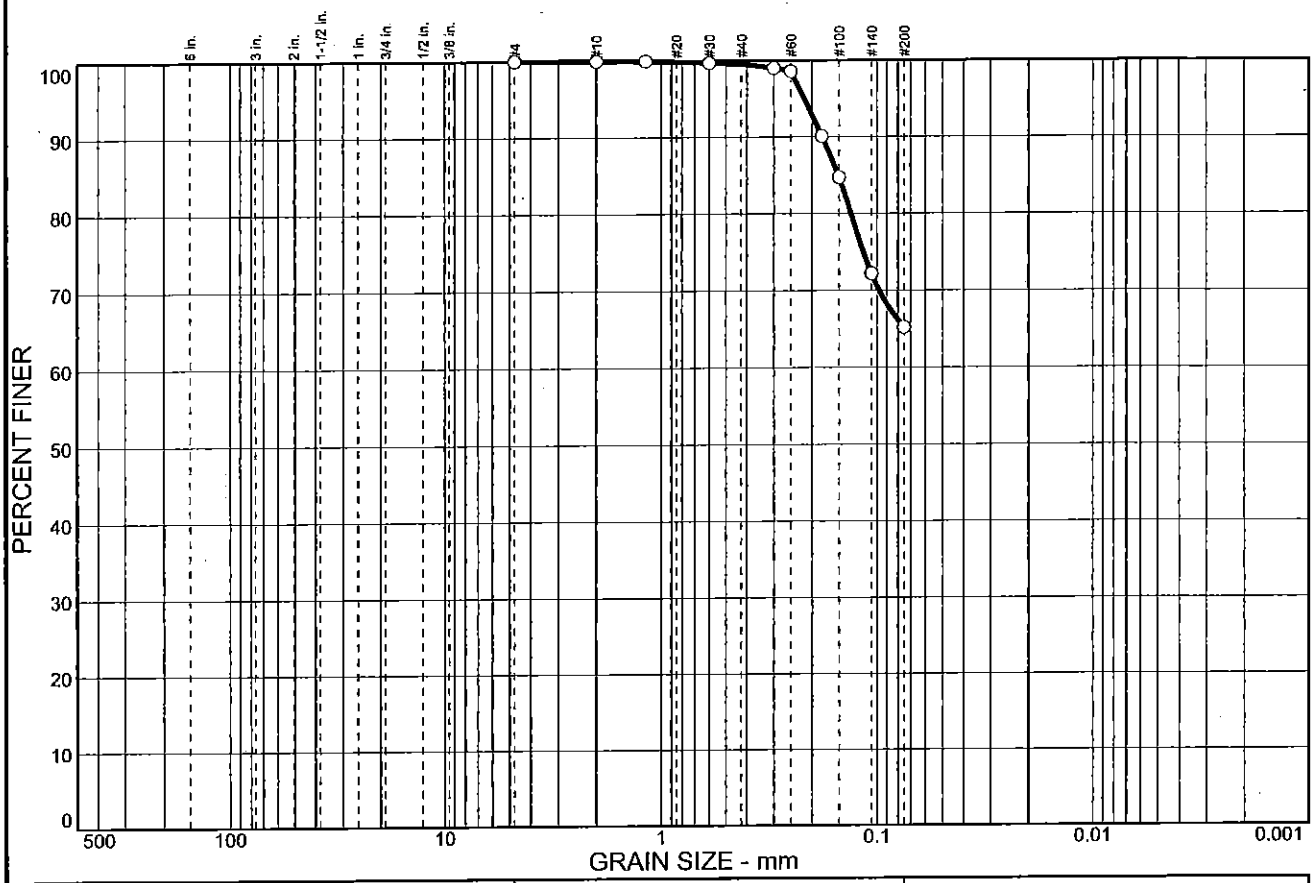
Remarks

Sample No.: 06OV-04 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 15

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 04-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.5	34.3	65.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.7		
#50	99.0		
#60	98.6		
#80	90.1		
#100	84.7		
#140	72.2		
#200	65.2		

* (no specification provided)

Soil Description

black clay

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.151 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

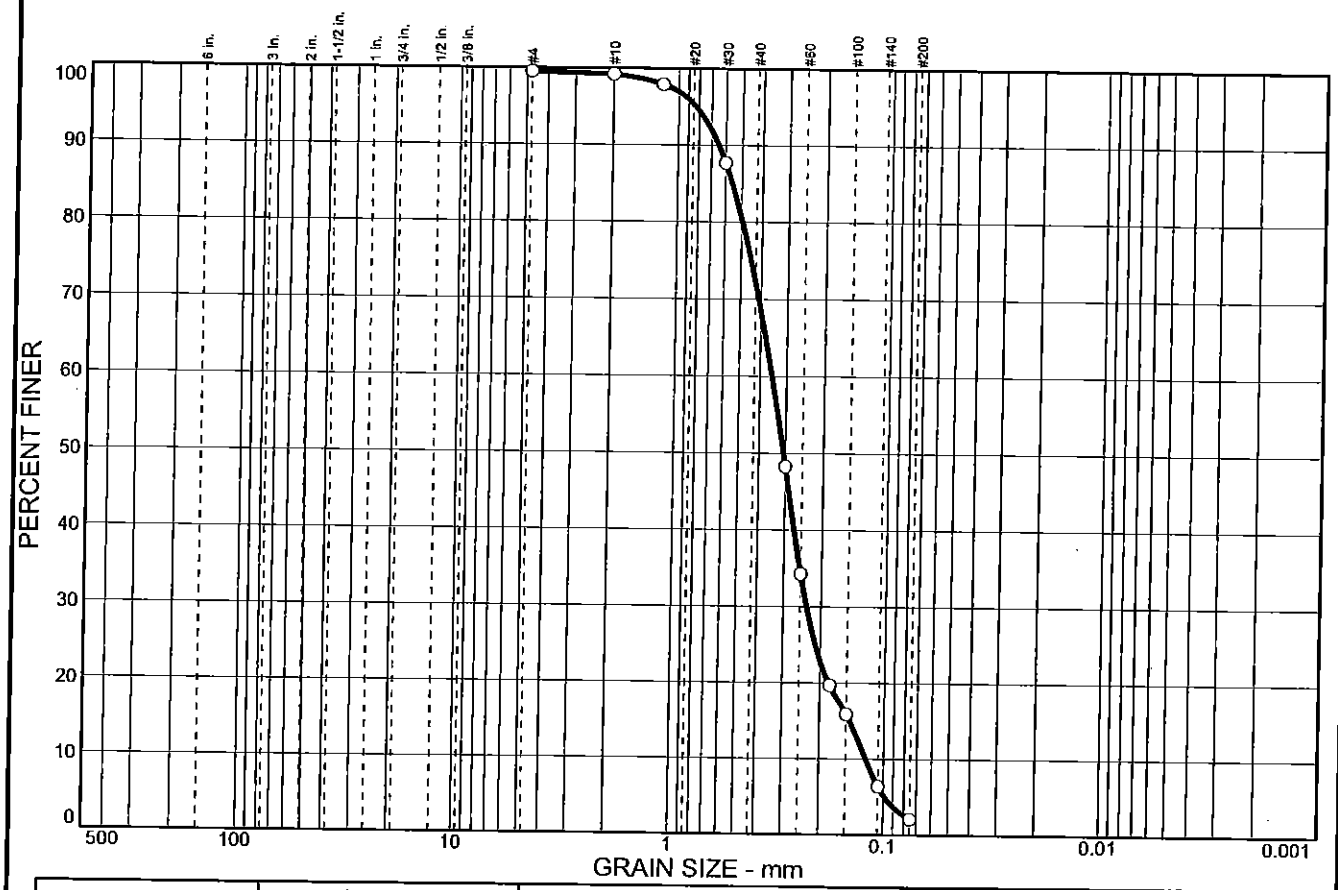
Remarks

Sample No.: 06OV-04 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 19.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 04-6

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.3	27.2	69.9	2.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.5		
#10	99.2		
#16	97.9		
#30	87.7		
#50	48.3		
#60	34.3		
#80	19.7		
#100	15.9		
#140	6.4		
#200	2.1		

* (no specification provided)

Soil Description

very dark grayish brown sand w/shell

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.557 D_{60}= 0.351 D_{50}= 0.307
D_{30}= 0.233 D_{15}= 0.145 D_{10}= 0.121
C_u= 2.90 C_c= 1.28

Classification

USCS= AASHTO=

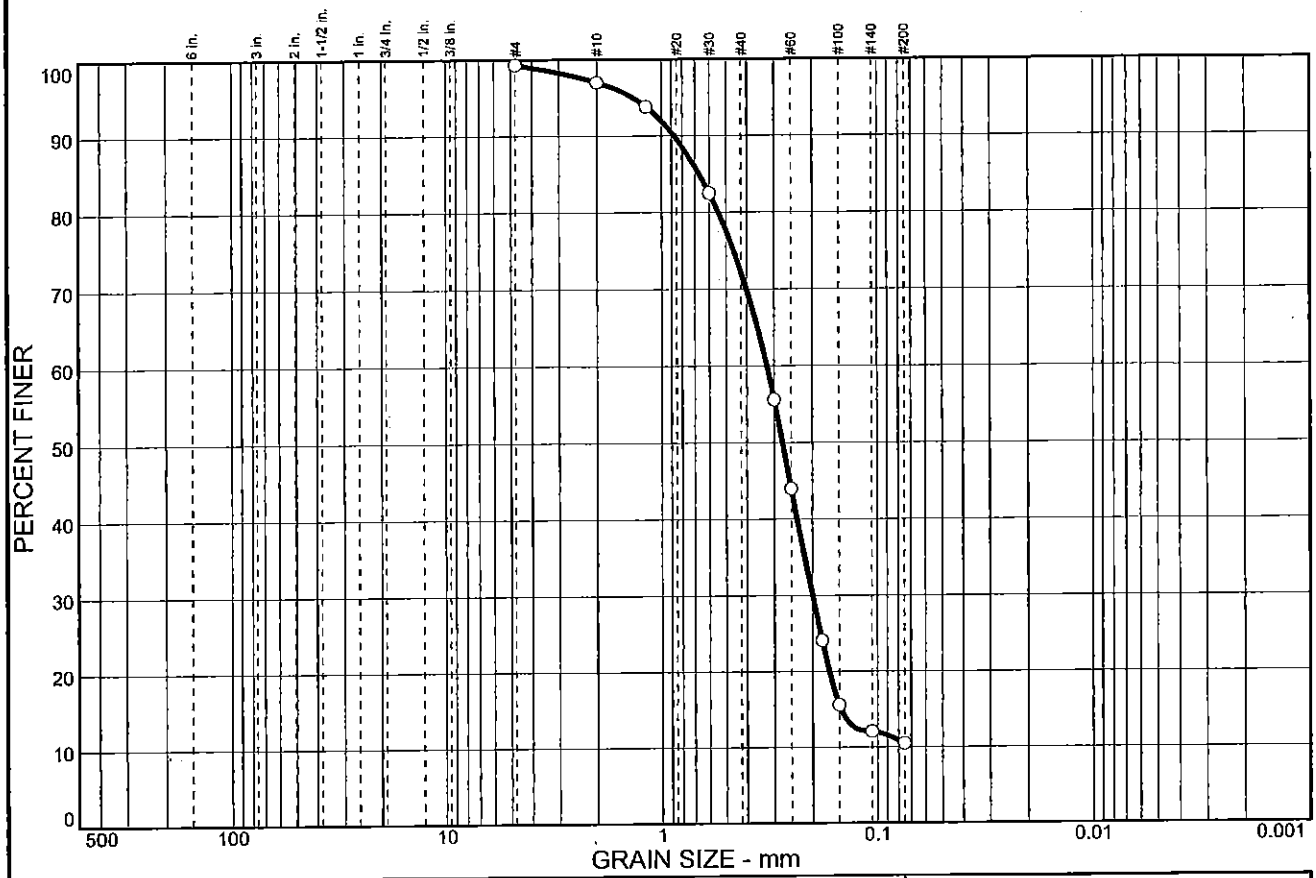
Remarks

Sample No.: 06OV-05 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 05-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.3	24.8	61.7	10.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.3		
#10	97.0		
#16	93.8		
#30	82.5		
#50	55.6		
#60	44.0		
#80	24.1		
#100	15.6		
#140	12.1		
#200	10.5		

* (no specification provided)

Soil Description

black sand w/shell

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.669 D_{60}= 0.324 D_{50}= 0.274
D_{30}= 0.200 D_{15}= 0.147 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

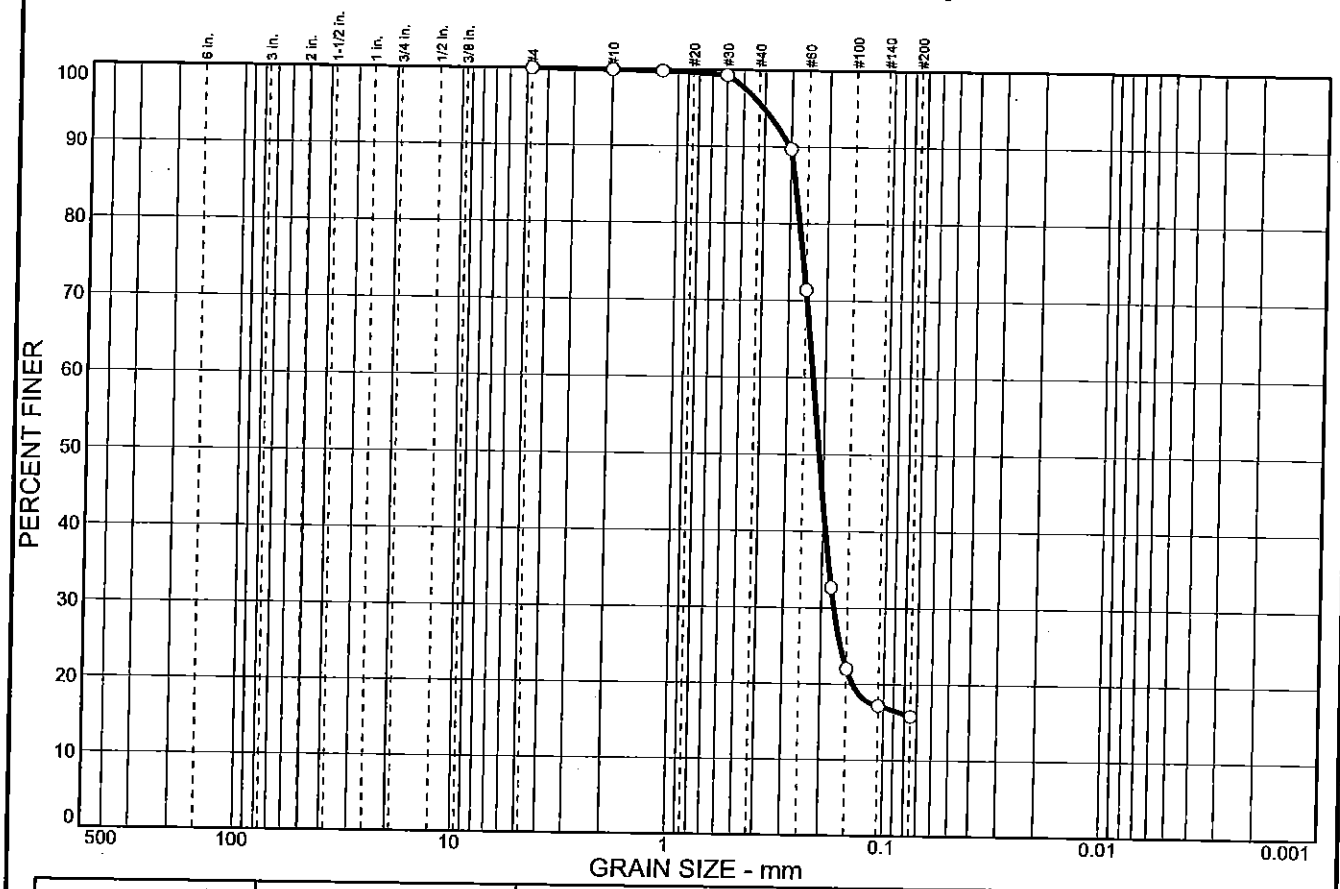
Remarks

Sample No.: 06OV-05 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 05-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	4.2	79.9	15.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.8		
#30	99.3		
#50	89.7		
#60	71.4		
#80	32.7		
#100	22.0		
#140	17.2		
#200	15.8		

* (no specification provided)

Soil Description

dark grey silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.285 D_{60}= 0.228 D_{50}= 0.211
D_{30}= 0.174 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

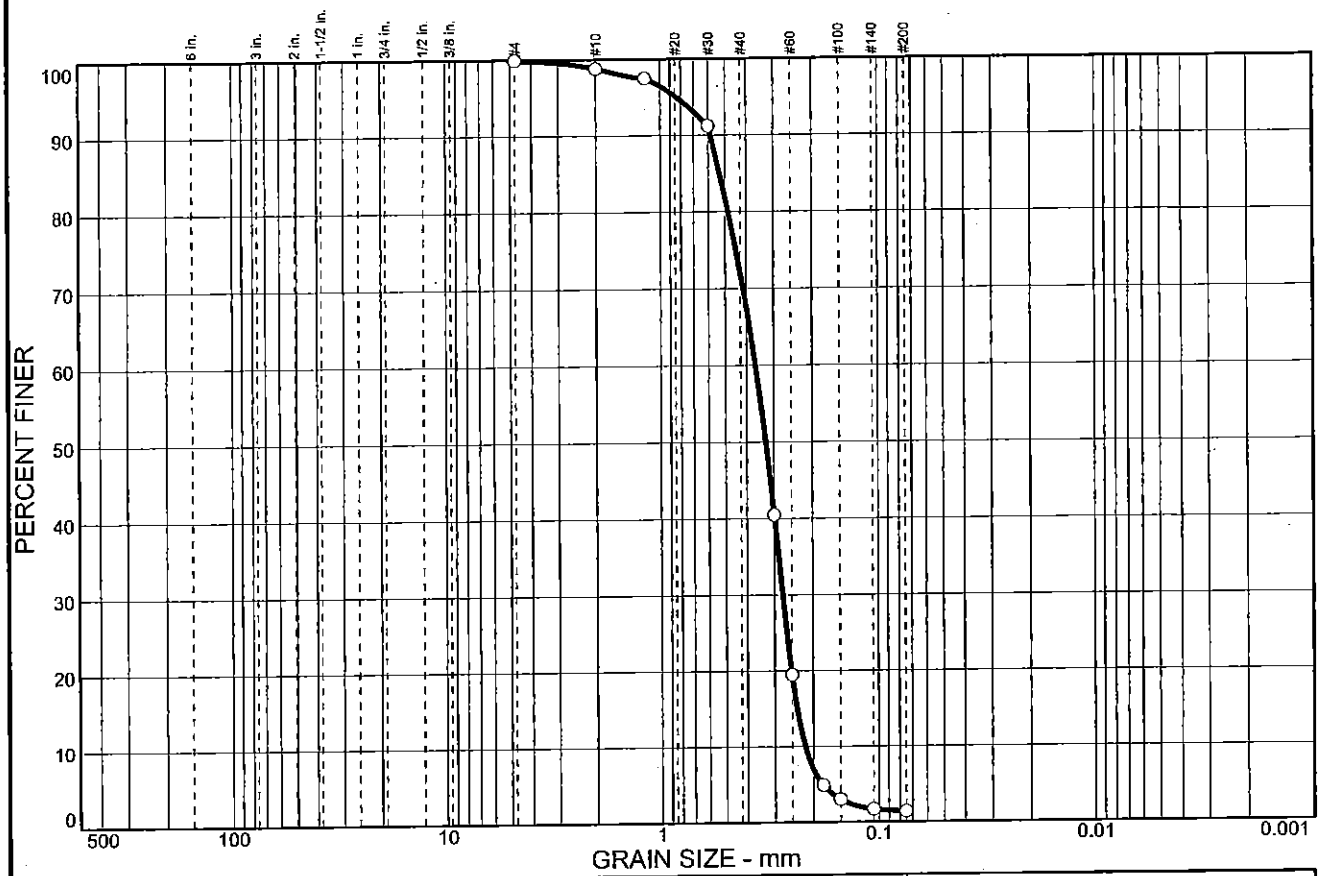
Remarks

Sample No.: 06OV-05 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 05-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.1	27.0	70.4	1.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	98.8		
#16	97.5		
#30	91.2		
#50	40.5		
#60	19.5		
#80	4.9		
#100	3.0		
#140	1.7		
#200	1.4		

* (no specification provided)

Soil Description

light olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.531 D_{60}= 0.364 D_{50}= 0.327
D_{30}= 0.275 D_{15}= 0.237 D_{10}= 0.218
C_u= 1.67 C_c= 0.95

Classification

USCS= AASHTO=

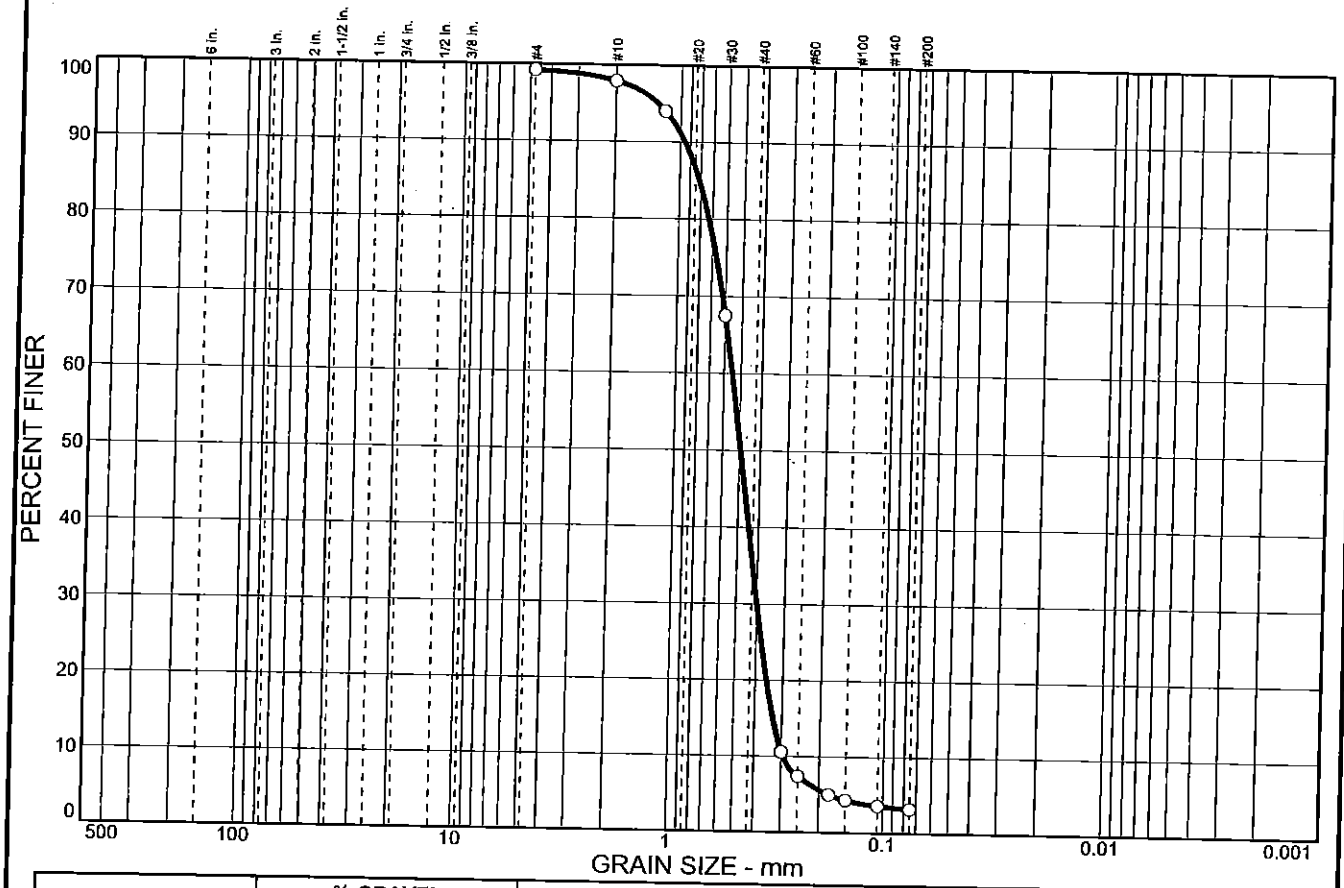
Remarks

Sample No.: 06OV-05 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 05-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.3	62.5	32.2	3.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.2		
#10	97.9		
#16	94.0		
#30	67.5		
#50	10.6		
#60	7.4		
#80	5.0		
#100	4.3		
#140	3.6		
#200	3.2		

* (no specification provided)

Soil Description

olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.815 D_{60}= 0.549 D_{50}= 0.494
D_{30}= 0.401 D_{15}= 0.329 D_{10}= 0.294
C_u= 1.86 C_c= 0.99

Classification

USCS= AASHTO=

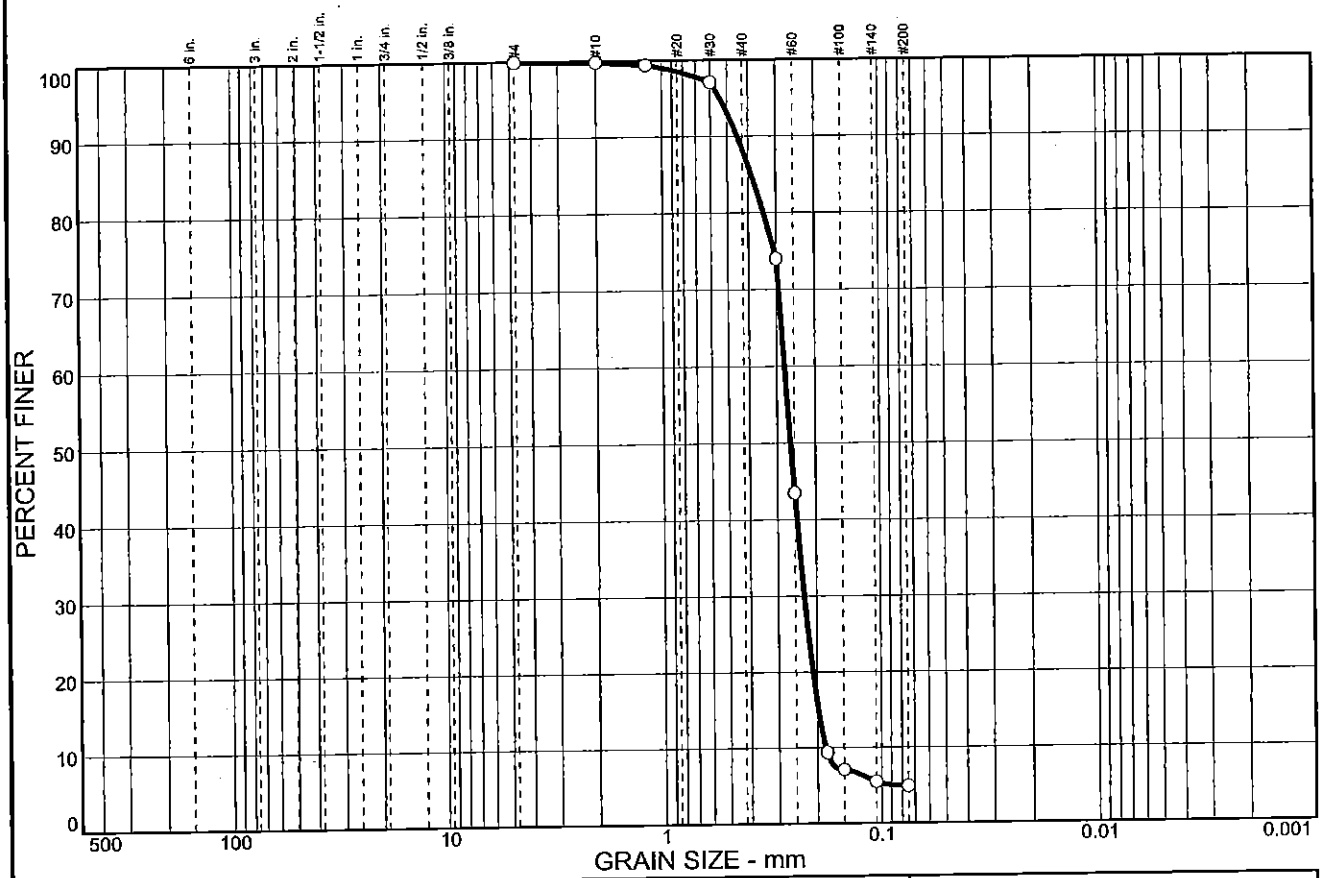
Remarks

Sample No.: 06OV-05 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 15

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 05-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.1	11.6	83.3	5.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.8		
#16	99.4		
#30	97.1		
#50	74.0		
#60	43.5		
#80	9.4		
#100	7.1		
#140	5.5		
#200	4.9		

* (no specification provided)

Soil Description

light olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.388 D_{60}= 0.277 D_{50}= 0.260
D_{30}= 0.227 D_{15}= 0.197 D_{10}= 0.183
C_u= 1.51 C_c= 1.02

Classification

USCS= AASHTO=

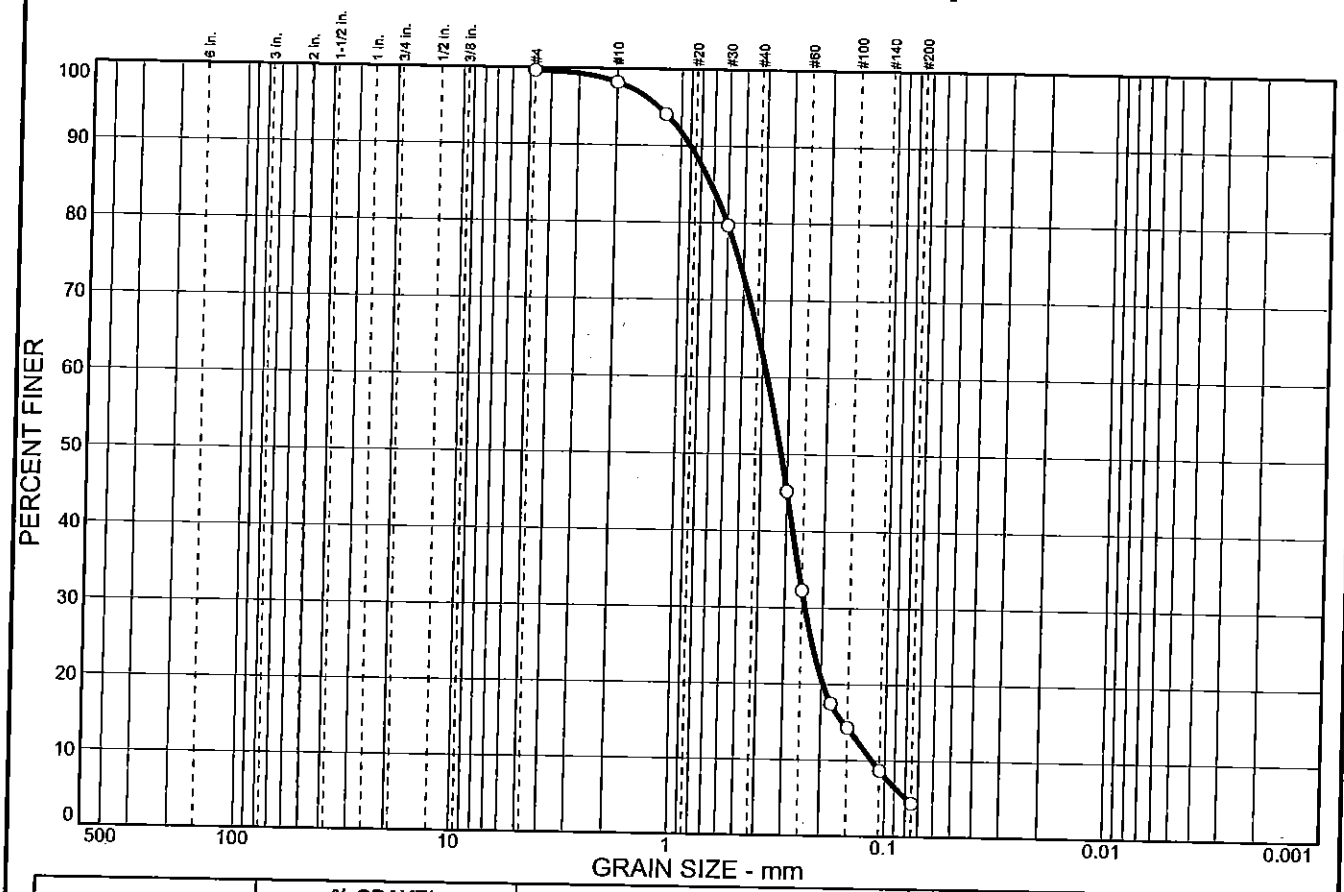
Remarks

Sample No.: 06OV-05 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 17.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 05-6

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.4	32.4	61.4	4.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	98.2		
#16	94.1		
#30	79.7		
#50	45.2		
#60	32.3		
#80	17.5		
#100	14.3		
#140	8.7		
#200	4.4		

* (no specification provided)

Soil Description

very dark grey sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.720 D_{60}= 0.380 D_{50}= 0.322
D_{30}= 0.241 D_{15}= 0.157 D_{10}= 0.115
C_u= 3.30 C_c= 1.33

Classification

USCS= AASHTO=

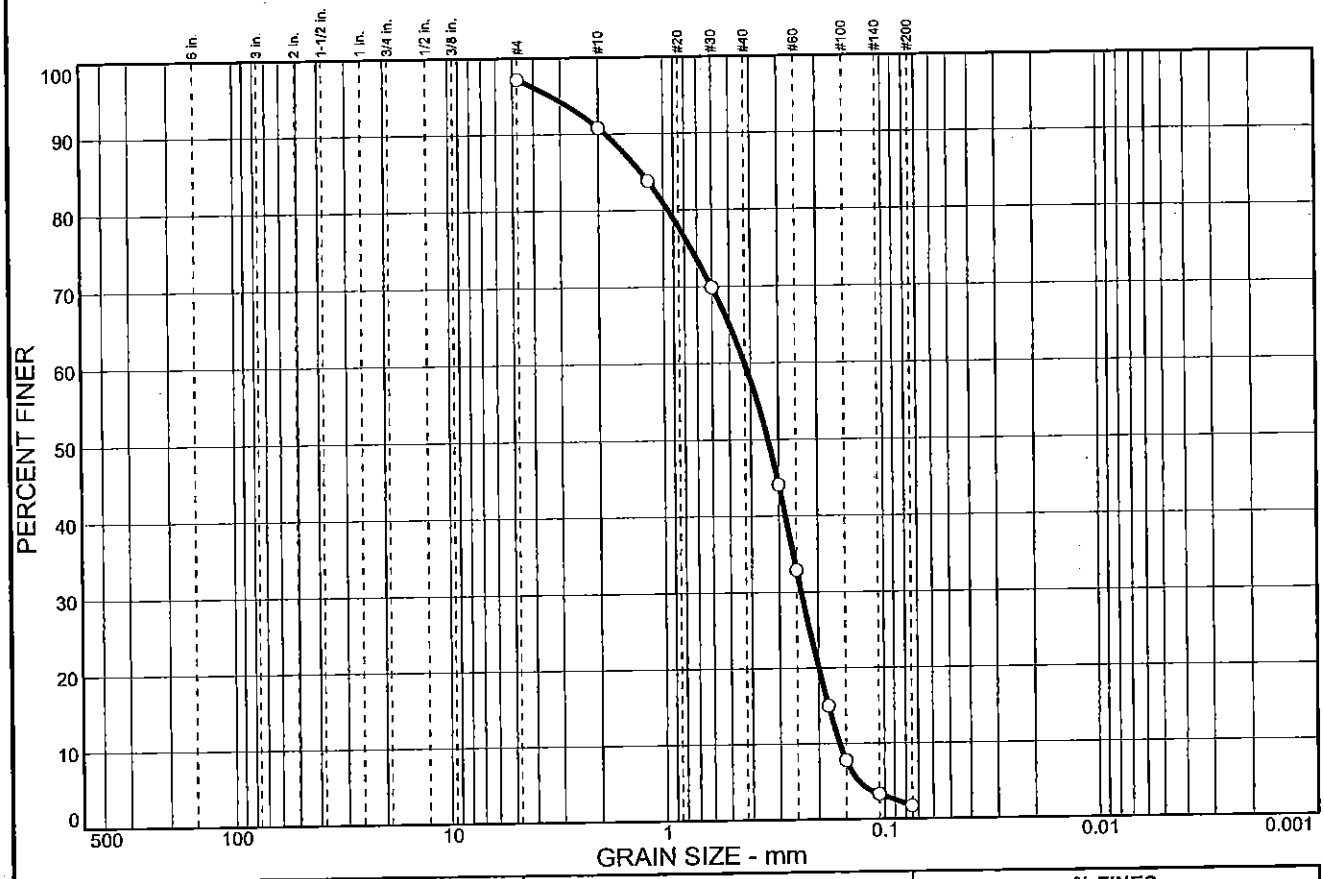
Remarks

Sample No.: 06OV-06 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 06-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			6.4	30.9	58.2	1.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	97.2		
#10	90.8		
#16	83.8		
#30	69.9		
#50	44.1		
#60	32.9		
#80	15.0		
#100	7.8		
#140	3.3		
#200	1.7		

* (no specification provided)

Soil Description

olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.27 D_{60}= 0.426 D_{50}= 0.335
D_{30}= 0.238 D_{15}= 0.180 D_{10}= 0.160
C_u= 2.66 C_c= 0.83

Classification

USCS= AASHTO=

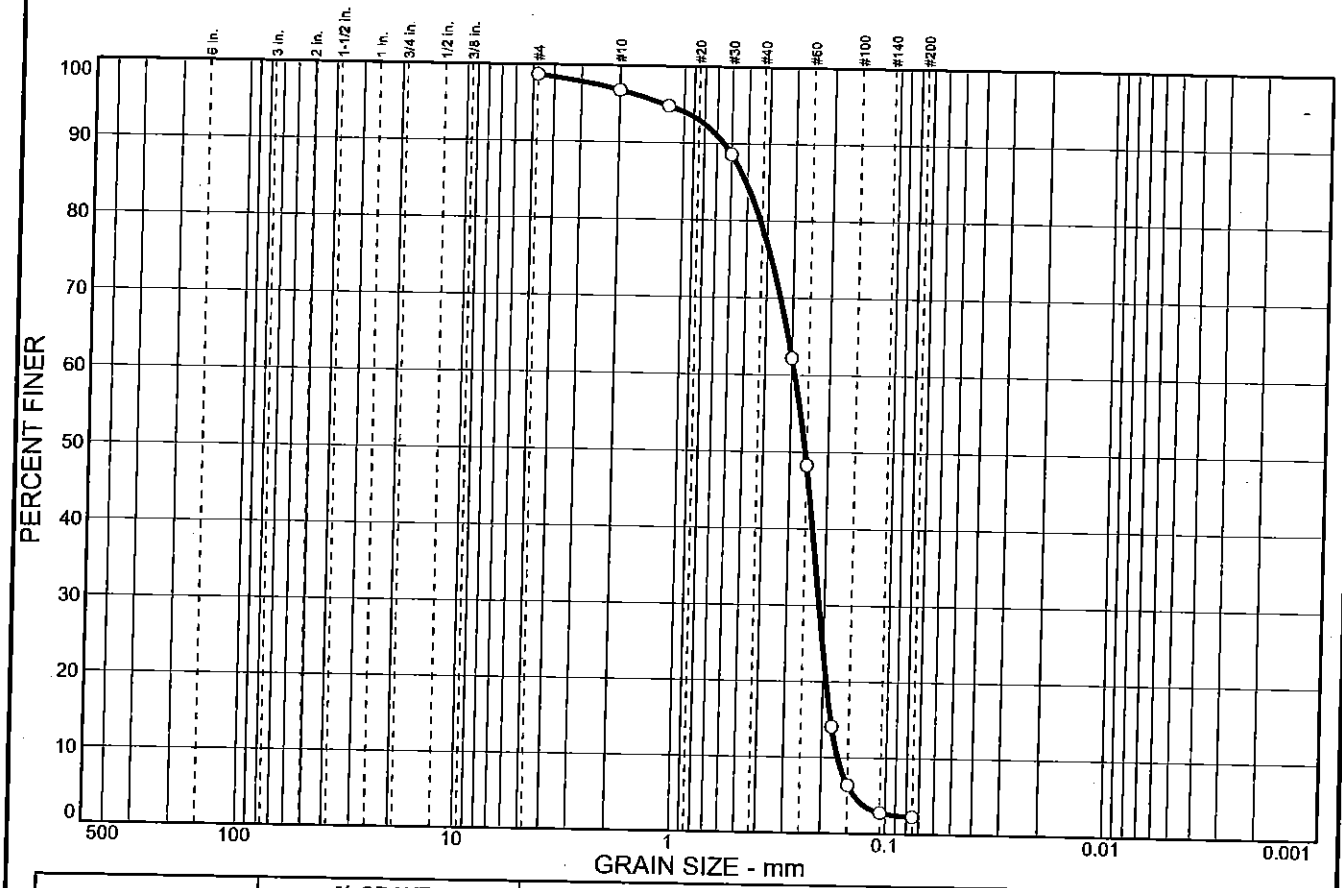
Remarks

Sample No.: 06OV-06 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 06-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.9	17.6	76.9	2.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.7		
#10	96.8		
#16	94.8		
#30	88.6		
#50	62.2		
#60	48.3		
#80	14.1		
#100	6.4		
#140	2.8		
#200	2.3		

* (no specification provided)

Soil Description

olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.511 D_{60}= 0.290 D_{50}= 0.255
D_{30}= 0.212 D_{15}= 0.182 D_{10}= 0.168
C_u= 1.73 C_c= 0.92

Classification

USCS= AASHTO=

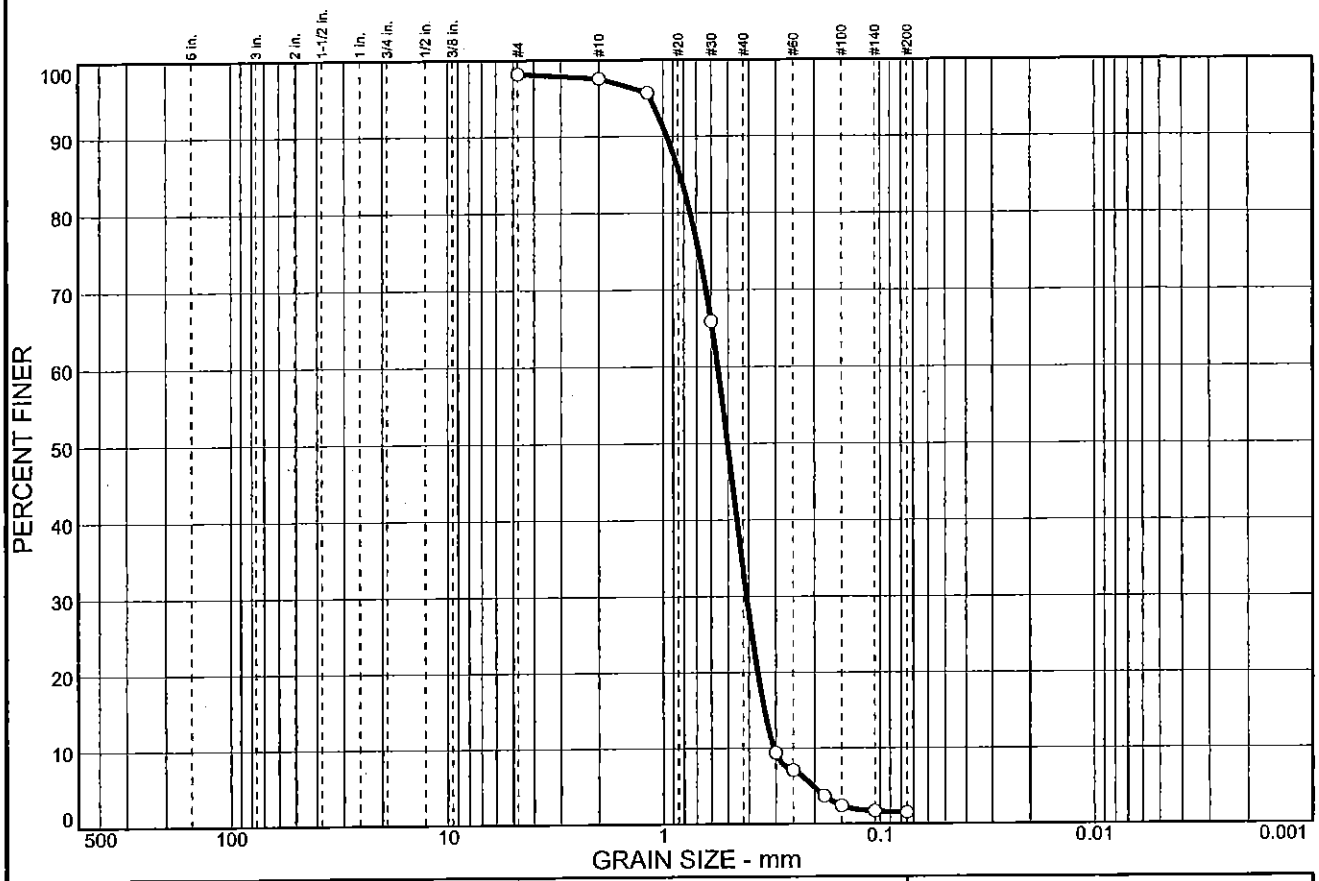
Remarks

Sample No.: 06OV-06 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 06-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.6	64.2	31.9	1.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.2		
#10	97.6		
#16	95.7		
#30	65.9		
#50	9.4		
#60	7.1		
#80	3.7		
#100	2.4		
#140	1.7		
#200	1.5		

* (no specification provided)

Soil Description

olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.834 D_{60}= 0.560 D_{50}= 0.503
D_{30}= 0.410 D_{15}= 0.339 D_{10}= 0.306
C_u= 1.83 C_c= 0.98

Classification

USCS= AASHTO=

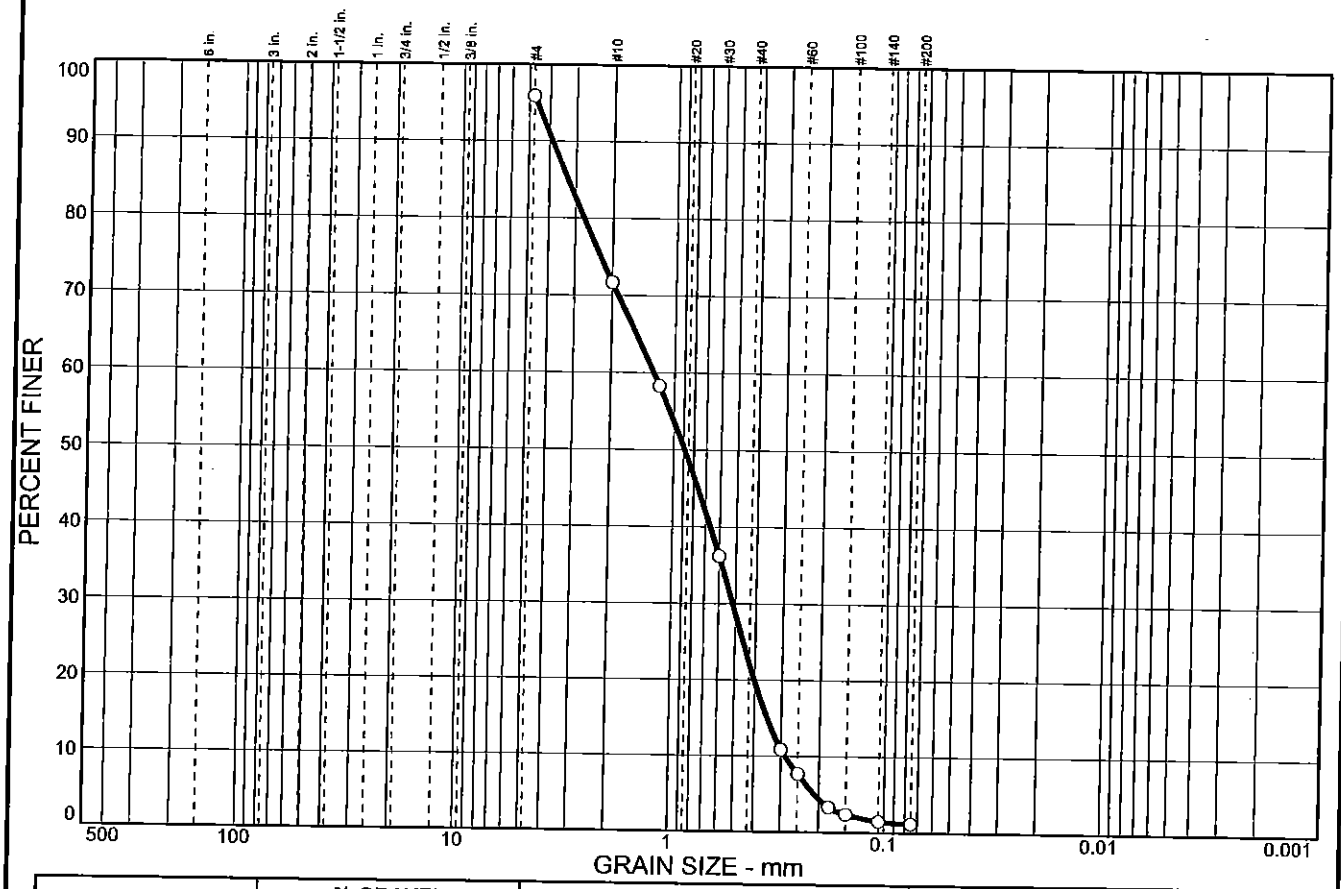
Remarks

Sample No.: 06OV-06 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 06-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			24.2	49.6	20.9	1.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	95.9		
#10	71.7		
#16	58.3		
#30	36.2		
#50	10.9		
#60	7.7		
#80	3.3		
#100	2.4		
#140	1.5		
#200	1.2		

* (no specification provided)

Soil Description

dark olive brown

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 3.26 D_{60}= 1.26 D_{50}= 0.887
D_{30}= 0.516 D_{15}= 0.349 D_{10}= 0.287
C_u= 4.38 C_c= 0.74

Classification

USCS= AASHTO=

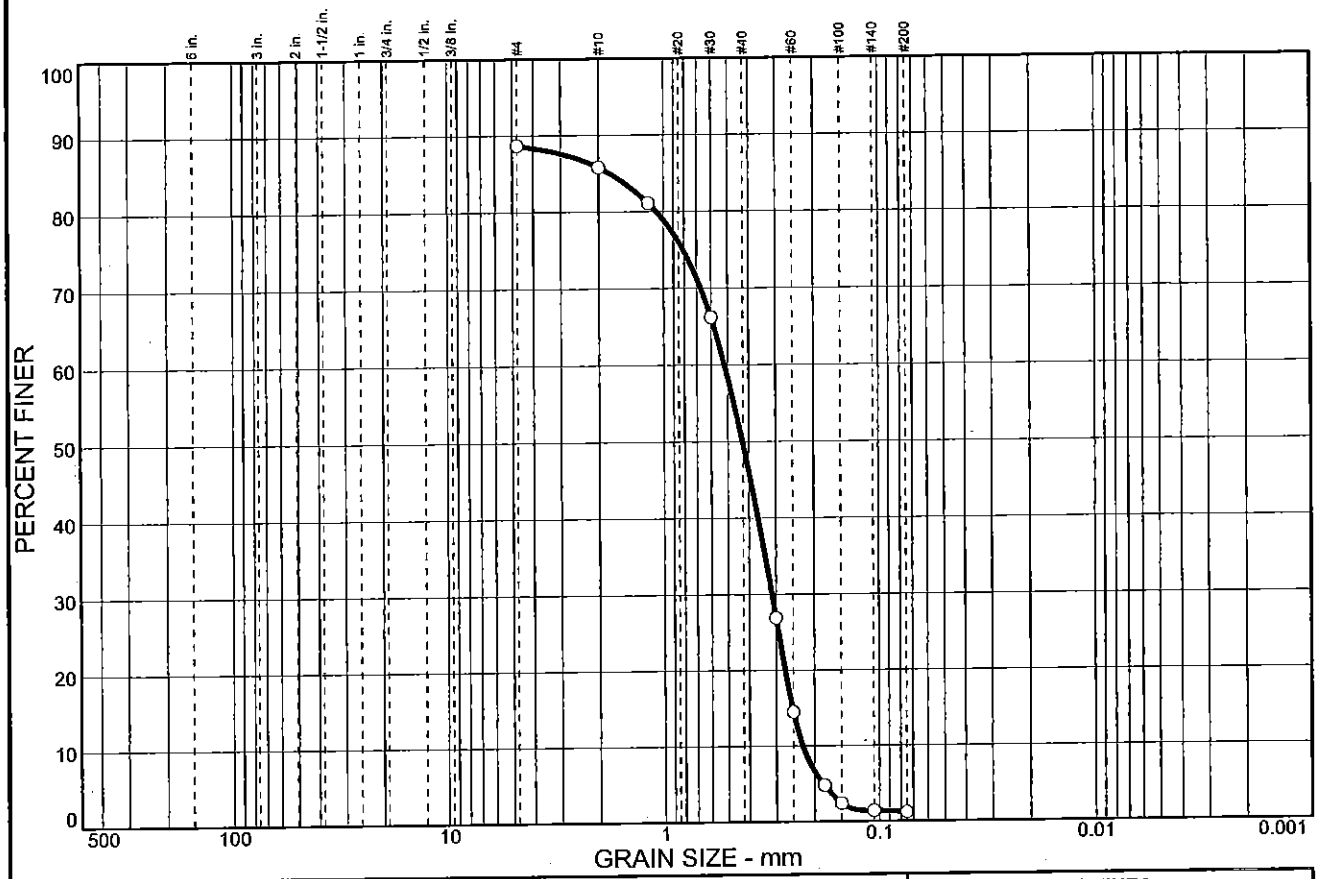
Remarks

Sample No.: 06OV-06 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 15

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 06-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.9	36.1	48.5	1.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	88.7		
#10	85.8		
#16	81.1		
#30	66.2		
#50	26.9		
#60	14.5		
#80	4.8		
#100	2.4		
#140	1.4		
#200	1.2		

* (no specification provided)

Soil Description

olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.77 D_{60}= 0.518 D_{50}= 0.427
D_{30}= 0.313 D_{15}= 0.252 D_{10}= 0.226
C_u= 2.29 C_c= 0.84

Classification

USCS= AASHTO=

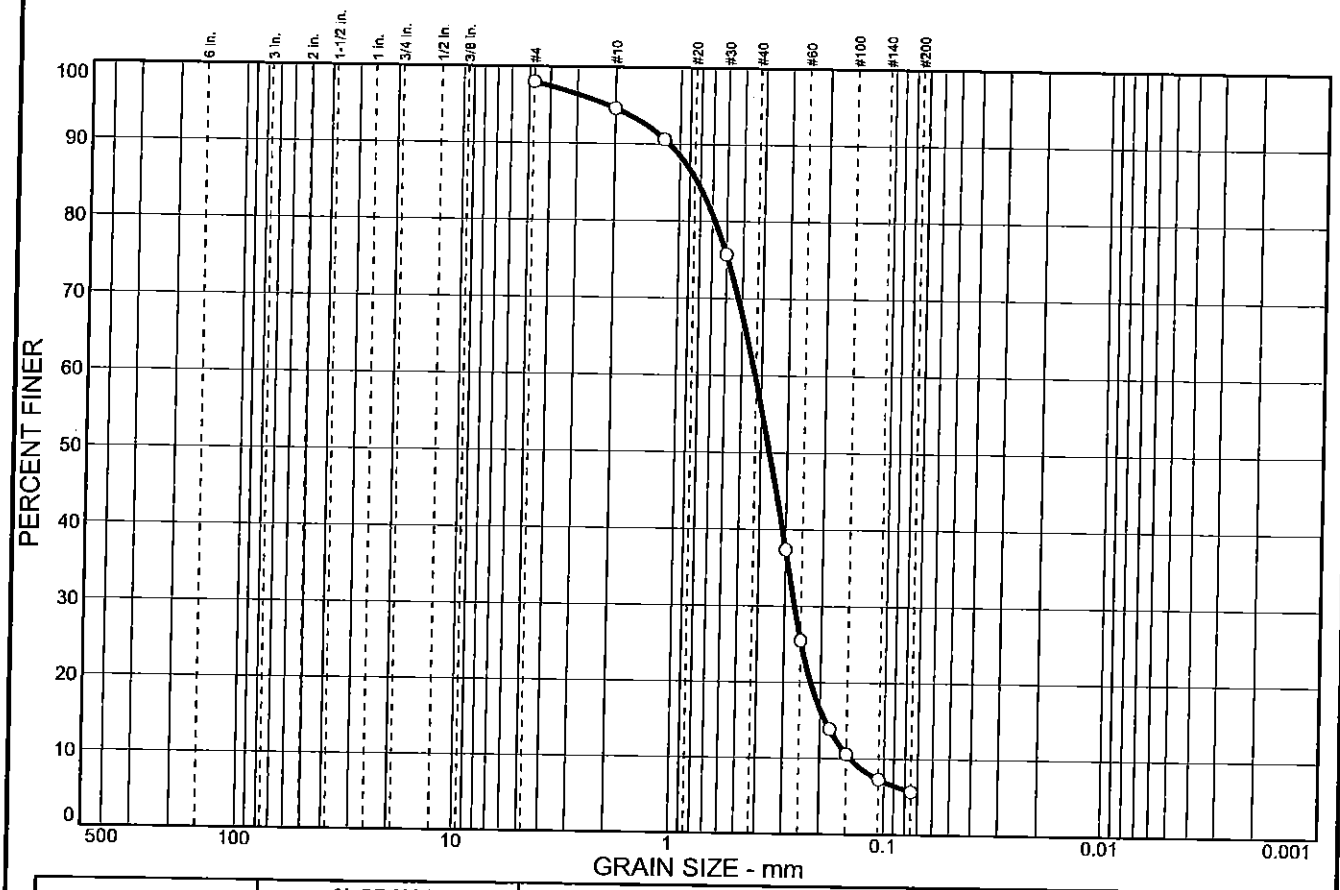
Remarks

Sample No.: 06OV-06 **Source of Sample:** **Date:** 5/17/06
Location: **Elev./Depth:** 19

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 06-6

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			3.4	35.3	53.6	5.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.0		
#10	94.6		
#16	90.6		
#30	75.7		
#50	37.4		
#60	25.5		
#80	13.9		
#100	10.6		
#140	7.3		
#200	5.7		

* (no specification provided)

Soil Description

very dark grey SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.825 D_{60}= 0.430 D_{50}= 0.363
D_{30}= 0.269 D_{15}= 0.189 D_{10}= 0.144
C_u= 3.00 C_c= 1.17

Classification

USCS= AASHTO=

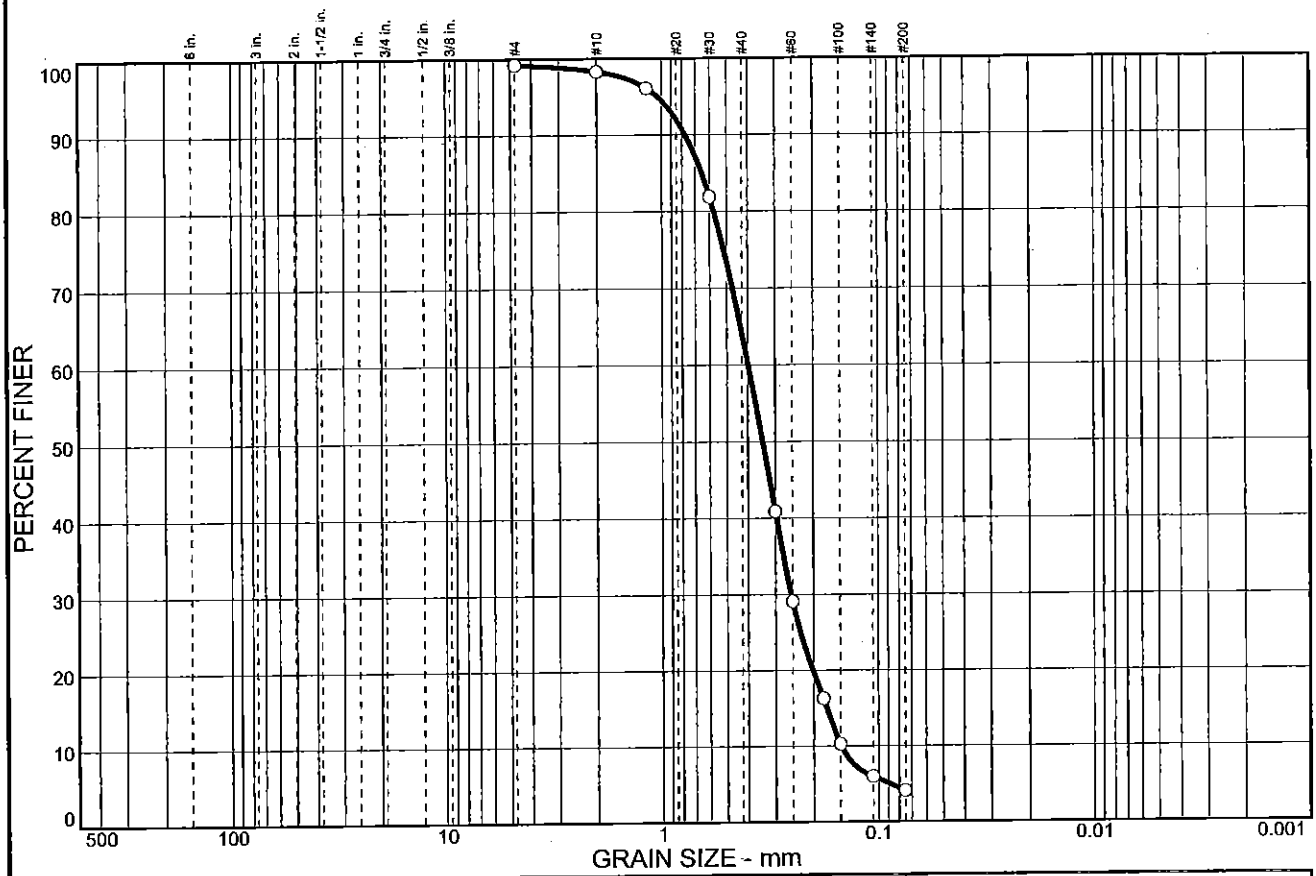
Remarks

Sample No.: 06OV-07 **Source of Sample:** **Date:** 5/18/06
Location: **Elev./Depth:** 0

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 07-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.9	34.3	59.9	4.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.2		
#10	98.3		
#16	96.1		
#30	81.9		
#50	40.9		
#60	29.1		
#80	16.3		
#100	10.3		
#140	6.0		
#200	4.1		

* (no specification provided)

Soil Description

dark olive brown SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.652 D_{60}= 0.399 D_{50}= 0.342
D_{30}= 0.254 D_{15}= 0.173 D_{10}= 0.148
C_u= 2.69 C_c= 1.09

Classification

USCS= AASHTO=

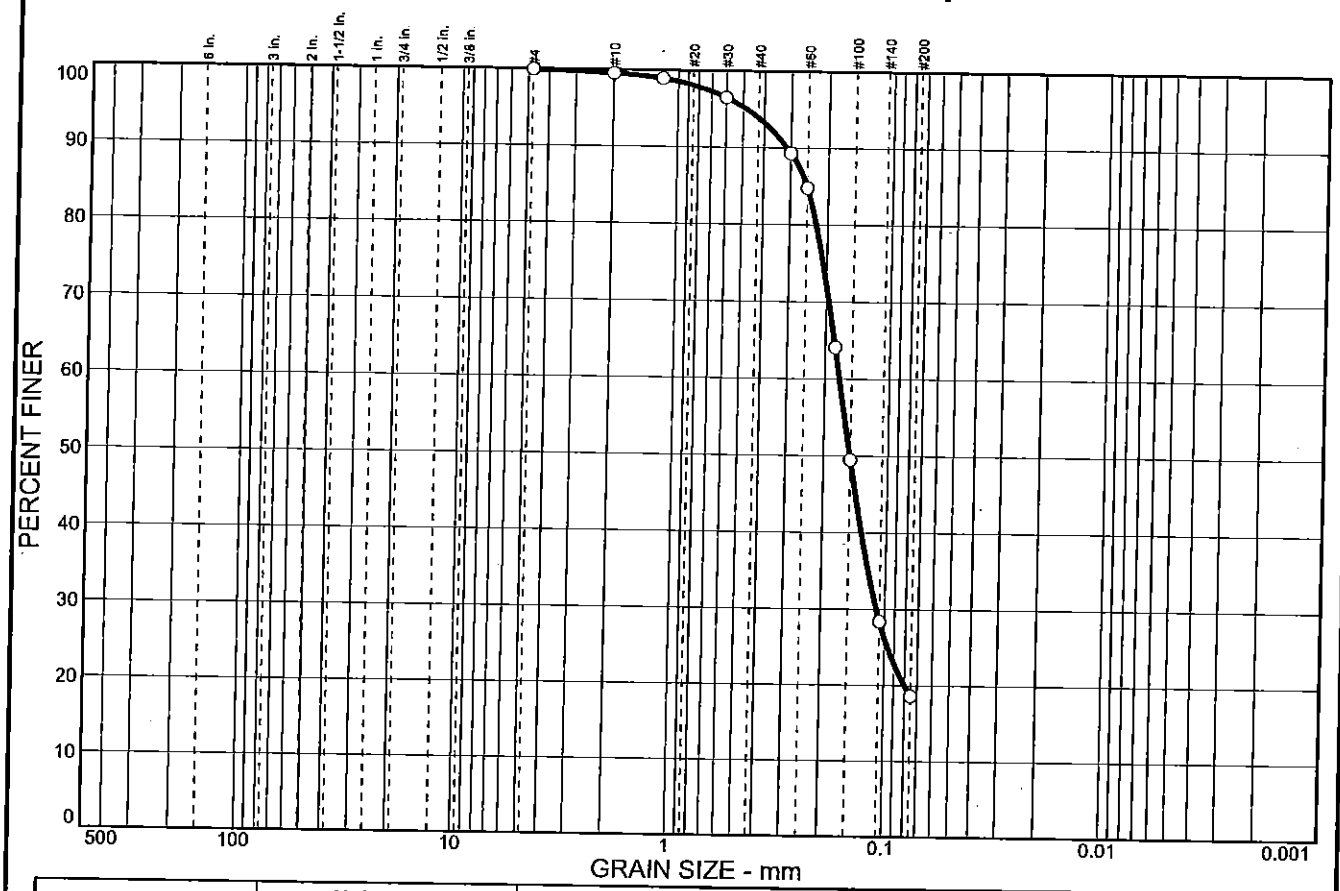
Remarks

Sample No.: 06OV-07 **Source of Sample:** **Date:** 5/18/06
Location: **Elev./Depth:** 2-4

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 07-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.4	5.6	75.3	18.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.5		
#16	98.9		
#30	96.5		
#50	89.3		
#60	84.8		
#80	64.1		
#100	49.5		
#140	28.4		
#200	18.6		

* (no specification provided)

Soil Description

very dark grayish brown SM SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.251 D_{60}= 0.171 D_{50}= 0.151
D_{30}= 0.110 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

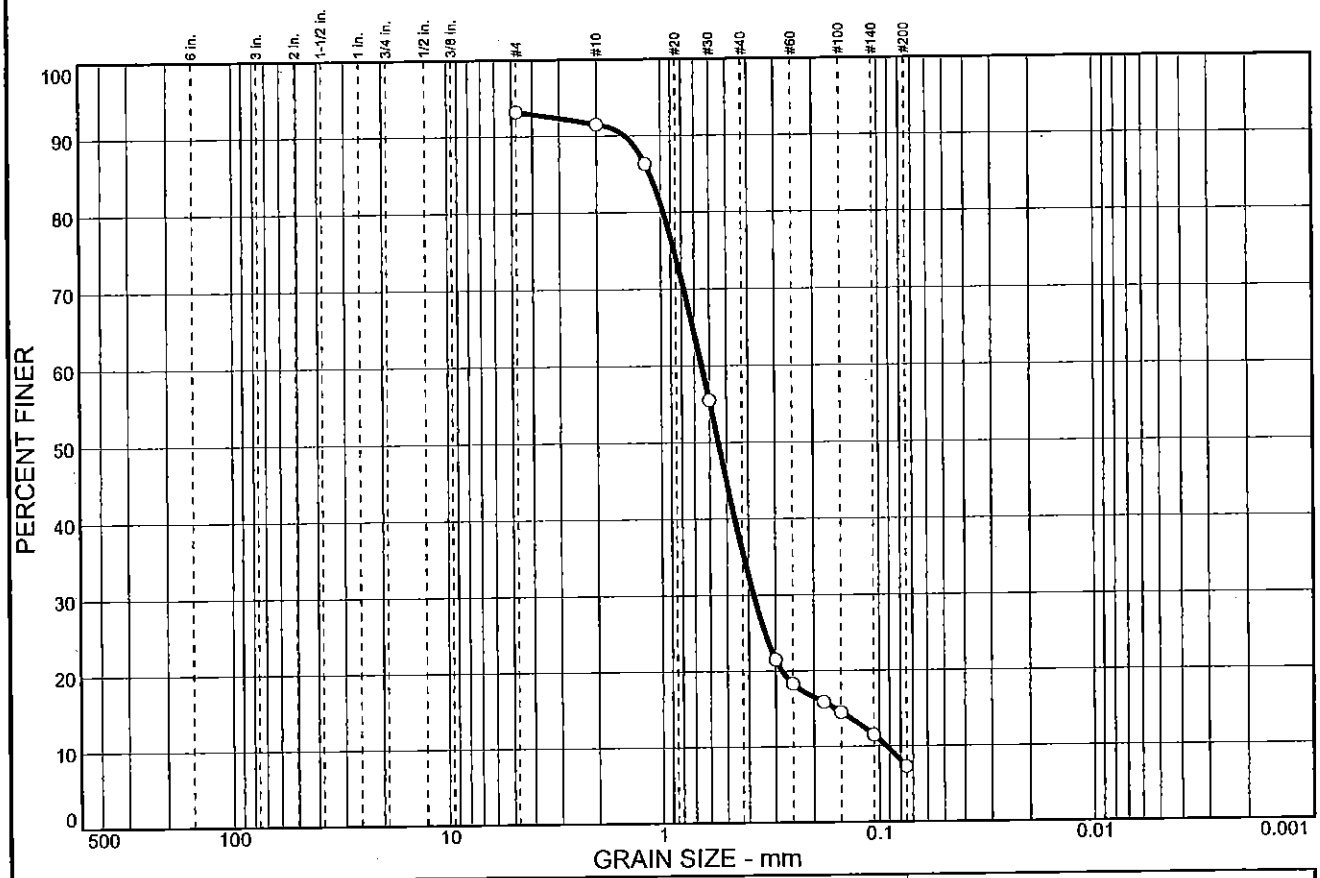
Remarks

Sample No.: 06OV-07 **Source of Sample:** **Date:** 5/18/06
Location: **Elev./Depth:** 4-5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 07-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.7	55.8	28.4	7.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	93.2		
#10	91.5		
#16	86.3		
#30	55.5		
#50	21.5		
#60	18.3		
#80	15.9		
#100	14.5		
#140	11.5		
#200	7.3		

* (no specification provided)

Soil Description

very dark gray SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.12 D_{60}= 0.649 D_{50}= 0.546
D_{30}= 0.378 D_{15}= 0.160 D_{10}= 0.0928
C_u= 6.99 C_c= 2.38

Classification

USCS= AASHTO=

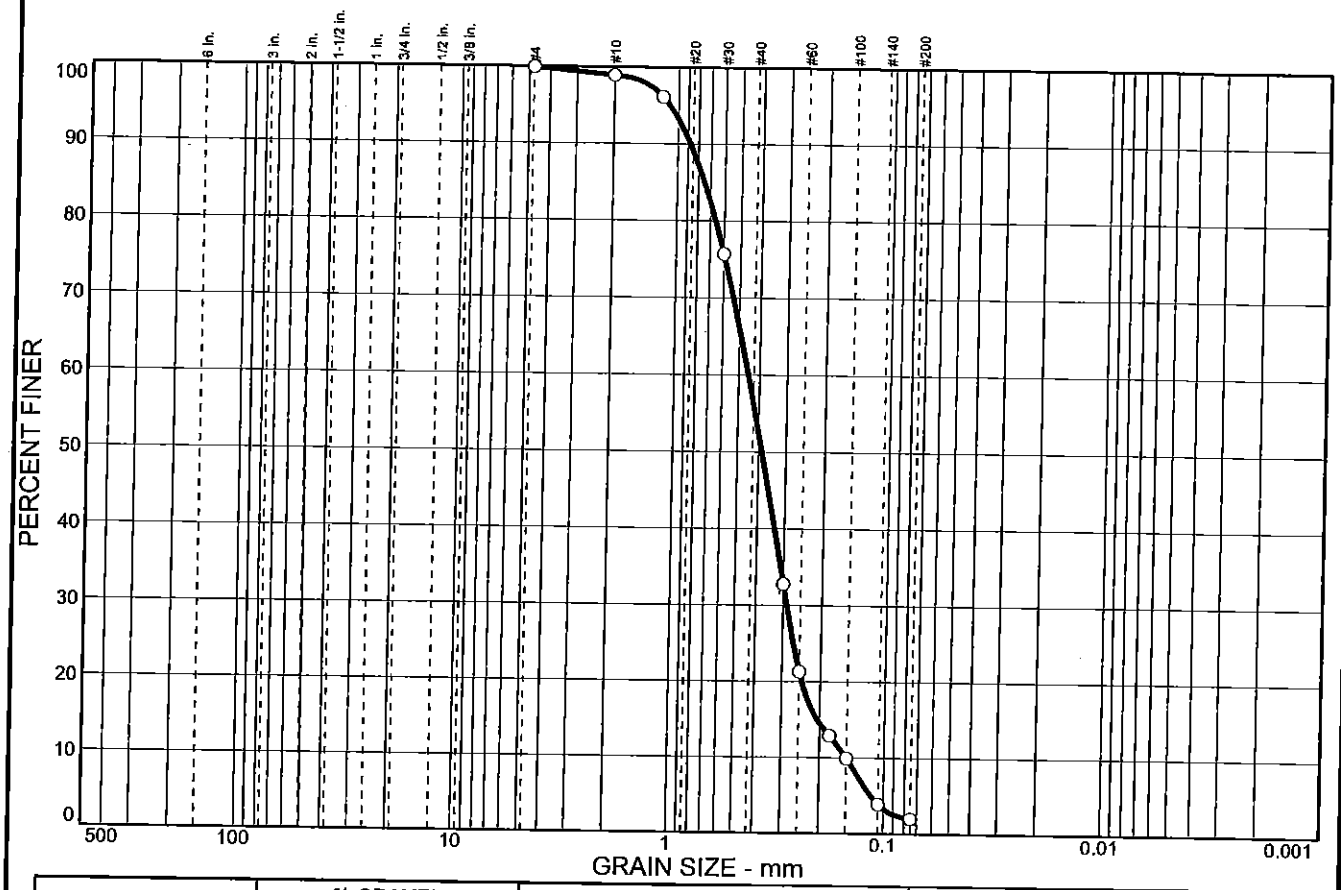
Remarks

Sample No.: 06OV-07 **Source of Sample:** **Date:** 5/18/06
Location: **Elev./Depth:** 7-8

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 07-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.0	42.7	54.2	2.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	98.9		
#16	96.1		
#30	75.7		
#50	32.8		
#60	21.3		
#80	12.9		
#100	9.9		
#140	3.9		
#200	2.0		

* (no specification provided)

Soil Description

very grayish brown SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.749 D_{60}= 0.452 D_{50}= 0.386
D_{30}= 0.288 D_{15}= 0.205 D_{10}= 0.151
C_u= 2.99 C_c= 1.22

Classification

USCS= AASHTO=

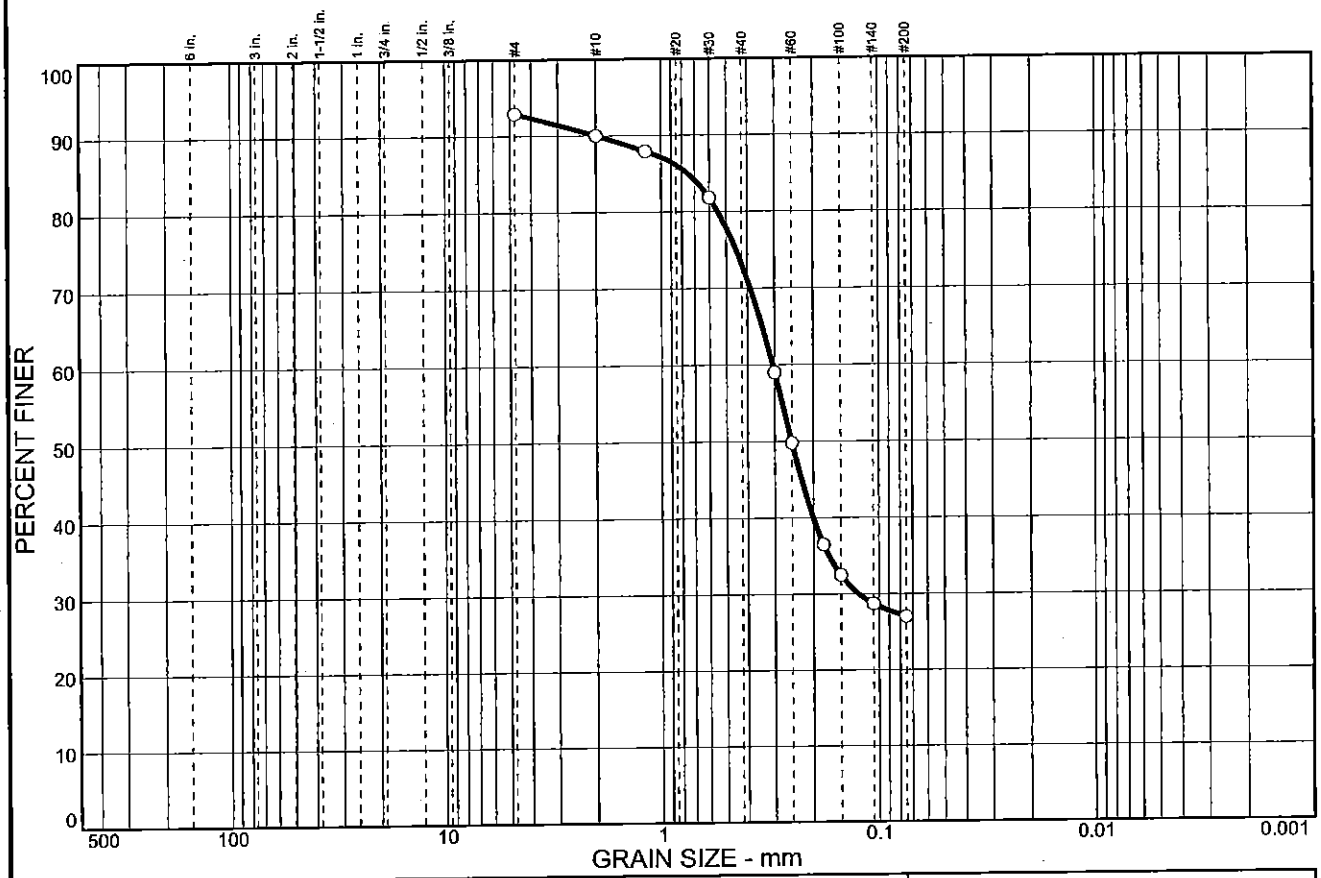
Remarks

Sample No.: 06OV-07 **Source of Sample:** **Date:** 5/18/06
Location: **Elev./Depth:** 13

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 07-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.9	16.9	46.1	27.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	92.9		
#10	90.0		
#16	87.9		
#30	81.8		
#50	59.0		
#60	49.8		
#80	36.5		
#100	32.5		
#140	28.7		
#200	27.0		

* (no specification provided)

Soil Description

SAND CLAY W/SHELL

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.753 D_{60}= 0.306 D_{50}= 0.251
D_{30}= 0.124 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

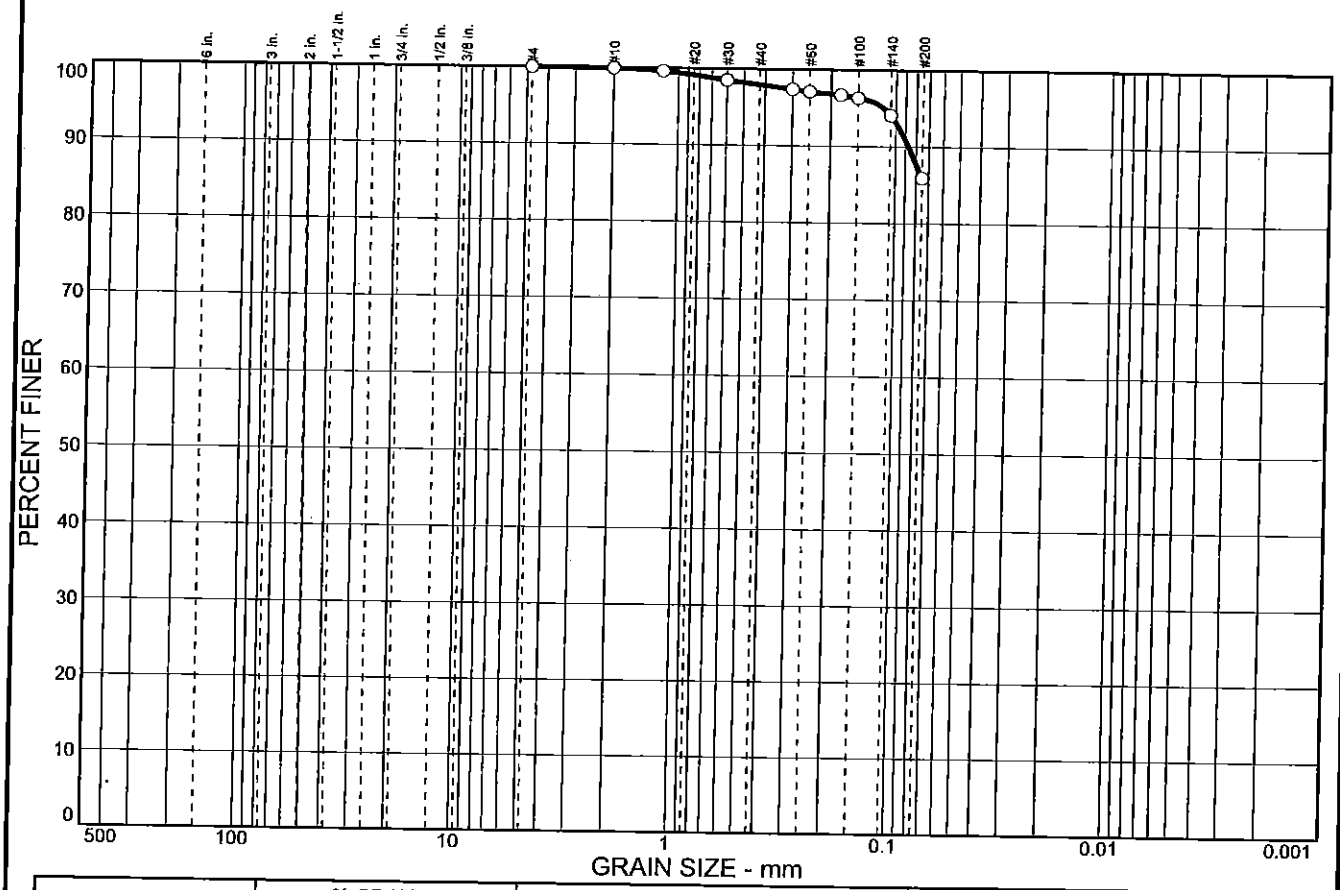
Remarks

Sample No.: 06OV-08 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 0-1

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 08-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	1.9	12.1	85.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.6		
#30	98.5		
#50	97.4		
#60	97.1		
#80	96.7		
#100	96.3		
#140	94.1		
#200	85.9		

* (no specification provided)

Soil Description

GRAY CLAY

Atterberg Limits

PL= 23 LL= 46 PI= 23

Coefficients

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

Classification

USCS= AASHTO=

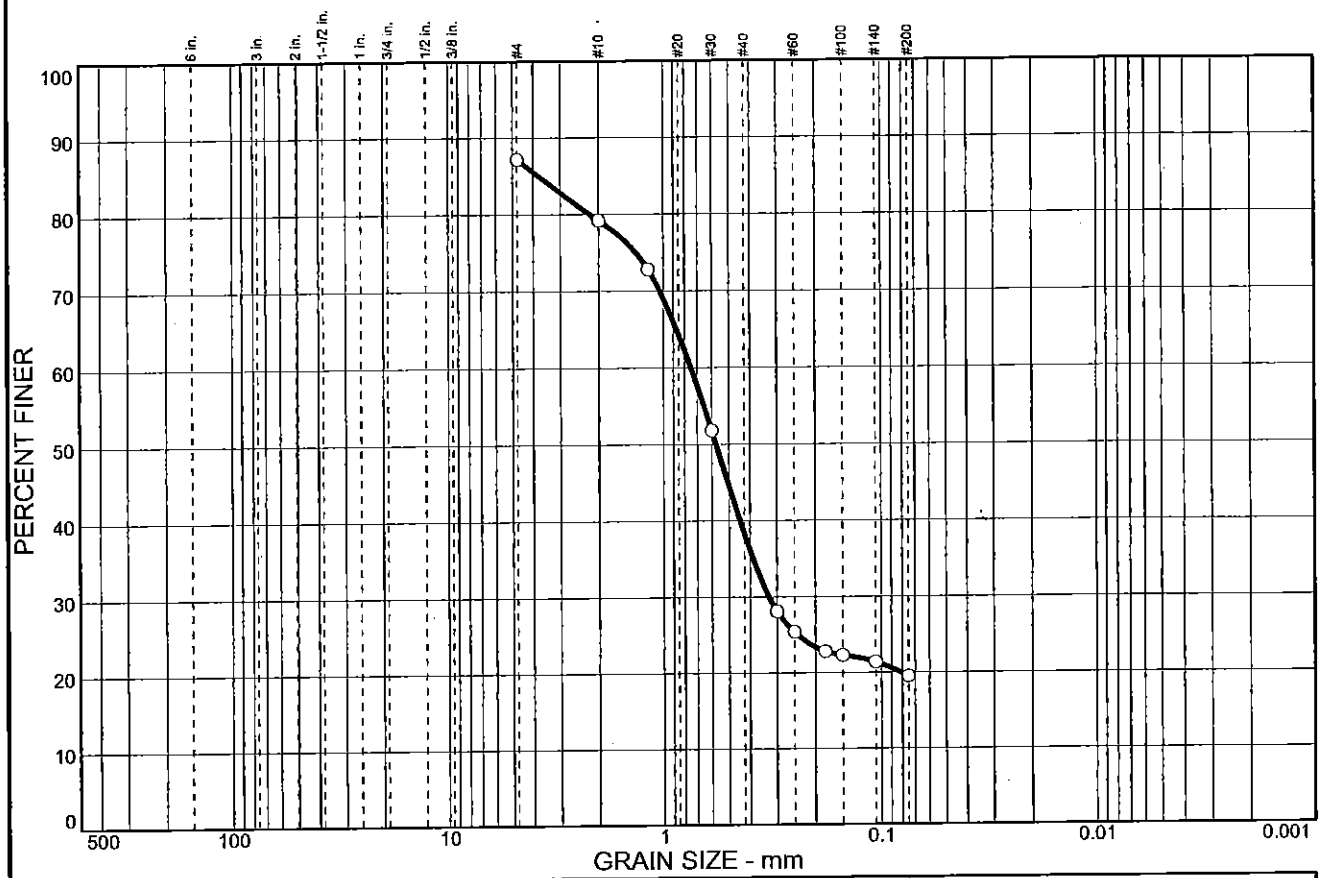
Remarks

Sample No.: 06OV-08 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 3-4

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 08-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			8.0	40.9	18.8	19.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	87.2		
#10	79.2		
#16	72.8		
#30	51.8		
#50	28.1		
#60	25.4		
#80	22.8		
#100	22.3		
#140	21.4		
#200	19.5		

* (no specification provided)

Soil Description

SANDY CLAY W/SHELL

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 3.77 D_{60}= 0.748 D_{50}= 0.573
D_{30}= 0.326 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

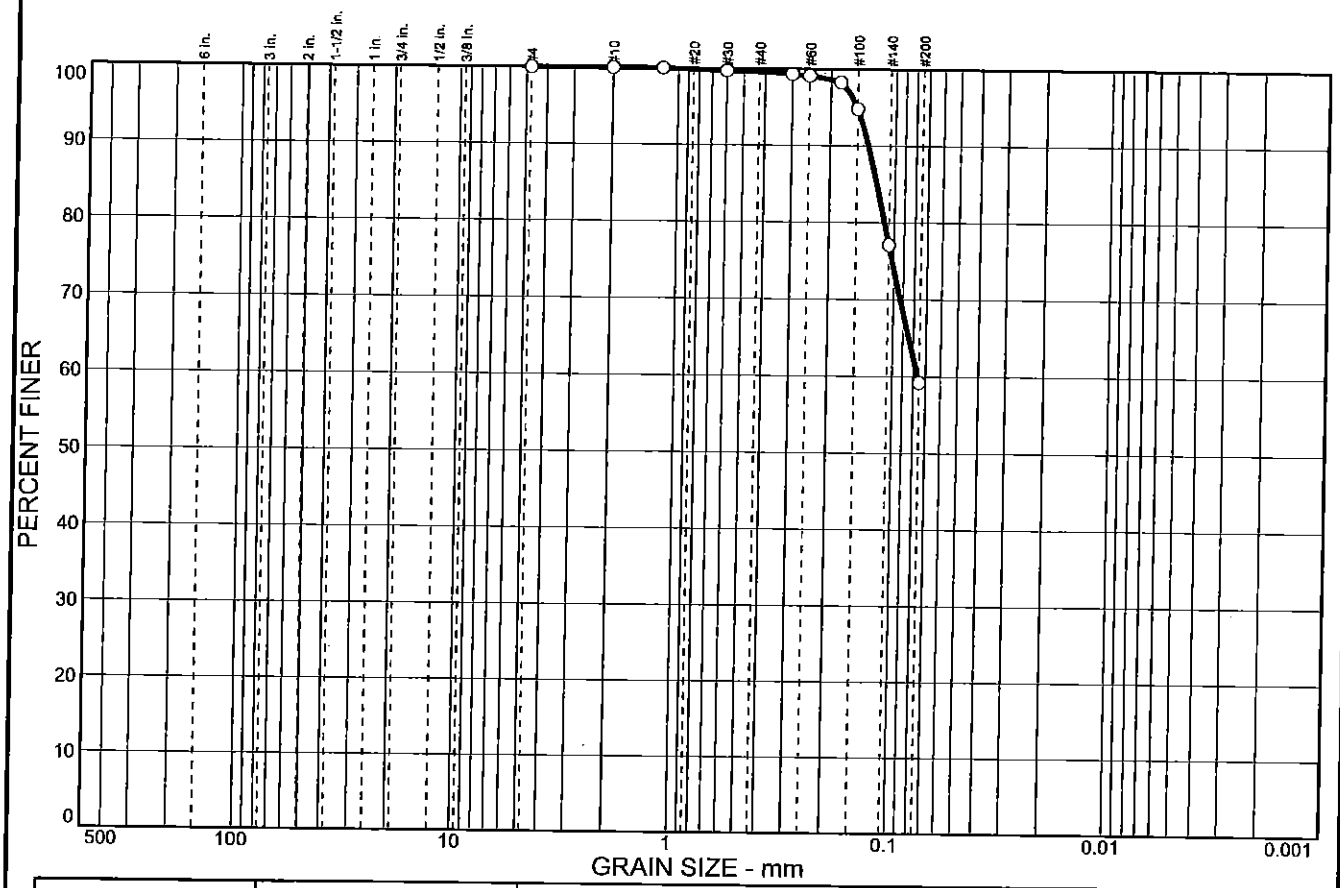
Remarks

Sample No.: 06OV-09 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 0-1

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 09-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.4	40.4	59.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.7		
#50	99.3		
#60	99.1		
#80	98.3		
#100	94.8		
#140	77.1		
#200	59.2		

* (no specification provided)

Soil Description

GRAY CLAY

Atterberg Limits

PL= 20 LL= 32 PI= 12

Coefficients

D_{85}= 0.121 D_{60}= 0.0762 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

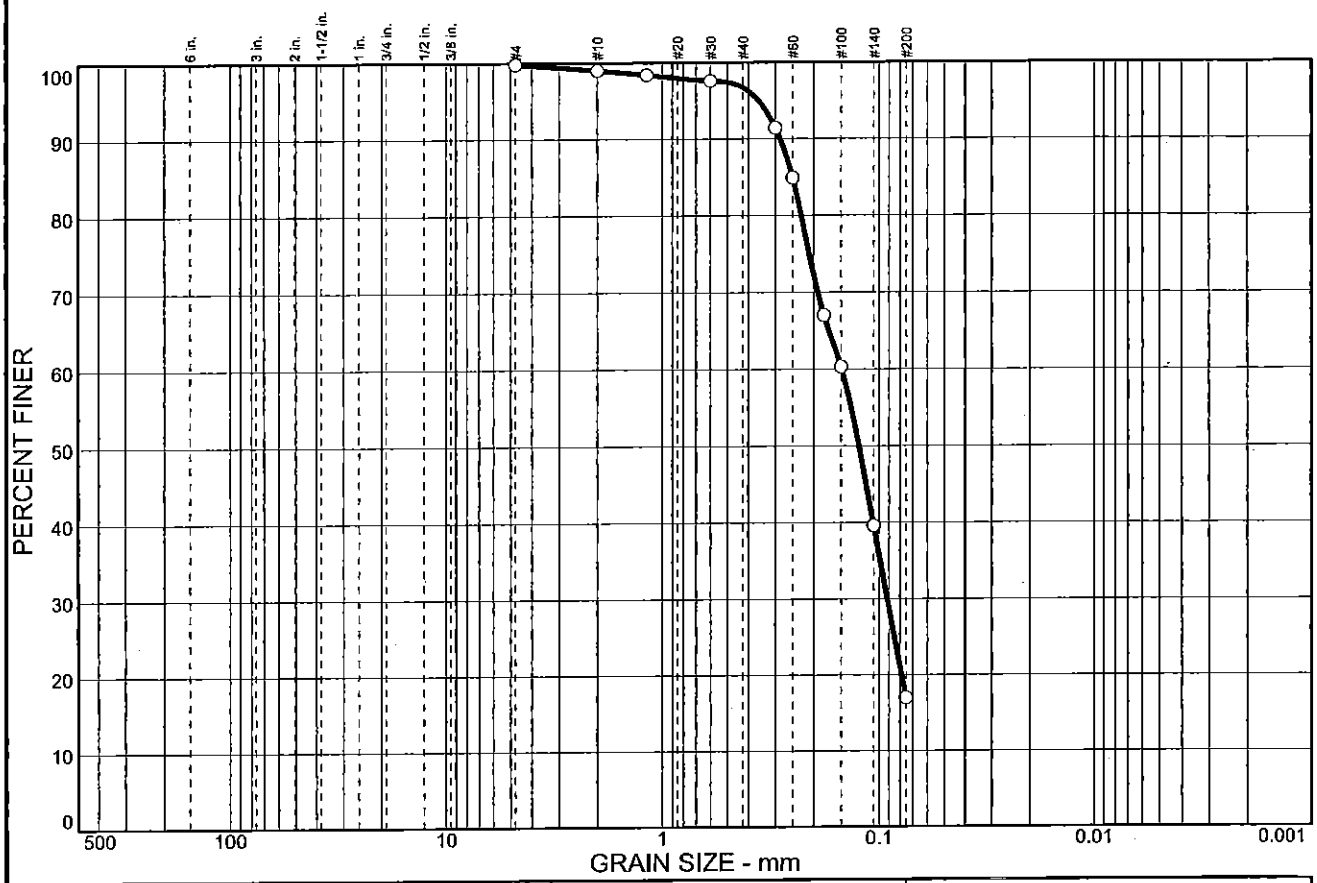
Remarks

Sample No.: 06OV-09 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 09-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.8	2.3	79.7	17.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.0		
#16	98.4		
#30	97.6		
#50	91.4		
#60	84.9		
#80	67.0		
#100	60.3		
#140	39.6		
#200	17.0		

* (no specification provided)

Soil Description

Gray SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.251 D_{60}= 0.149 D_{50}= 0.124
D_{30}= 0.0917 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

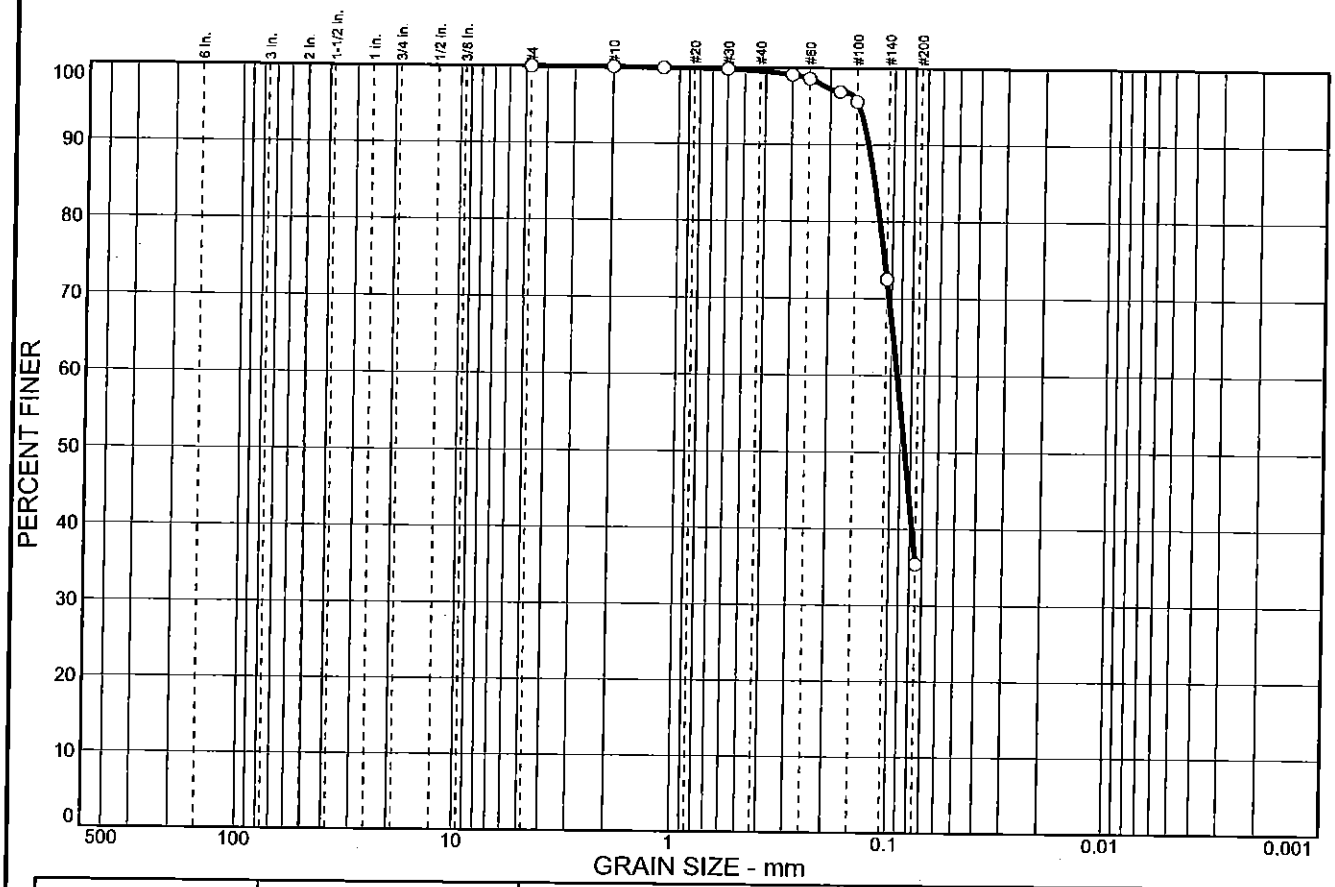
Remarks

Sample No.: 06OV-10 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 0-1

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 10-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.4	64.2	35.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.8		
#50	99.1		
#60	98.6		
#80	96.9		
#100	95.6		
#140	72.5		
#200	35.4		

* (no specification provided)

Soil Description

Gray SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.122 D_{60}= 0.0937 D_{50}= 0.0854
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

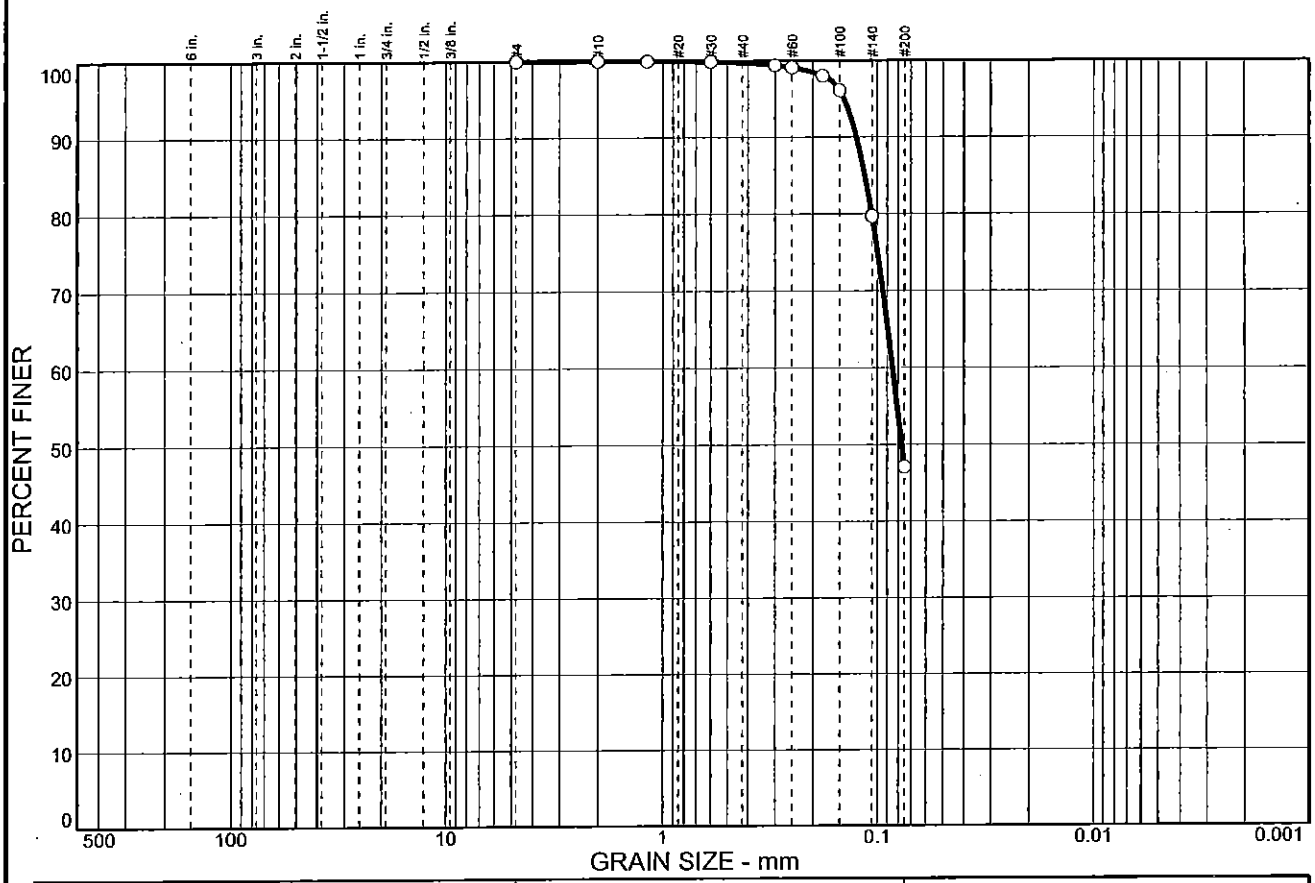
Remarks

Sample No.: 06OV-10 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 1-2

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 10-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.3	52.6	47.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#50	99.4		
#60	99.1		
#80	98.0		
#100	96.1		
#140	79.7		
#200	47.1		

* (no specification provided)

Soil Description

Gray SM/SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.114 D_{60}= 0.0851 D_{50}= 0.0771
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

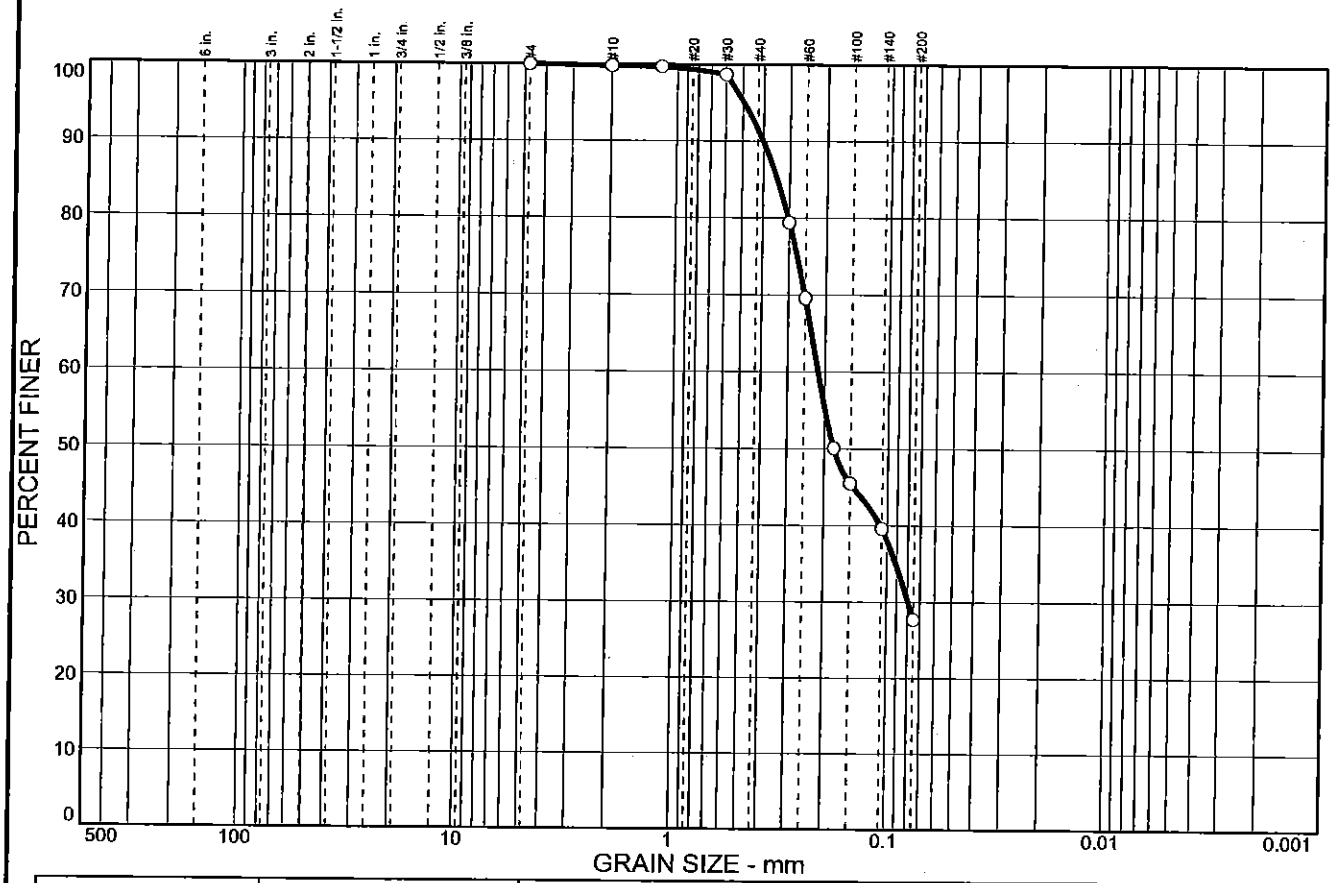
Remarks

Sample No.: 06OV-10 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 4-5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 10-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.2	8.3	63.8	27.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#16	99.7		
#30	98.7		
#50	79.4		
#60	69.6		
#80	50.1		
#100	45.5		
#140	39.6		
#200	27.7		

* (no specification provided)

Soil Description

Gray SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.344 D_{60}= 0.216 D_{50}= 0.180
D_{30}= 0.0795 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

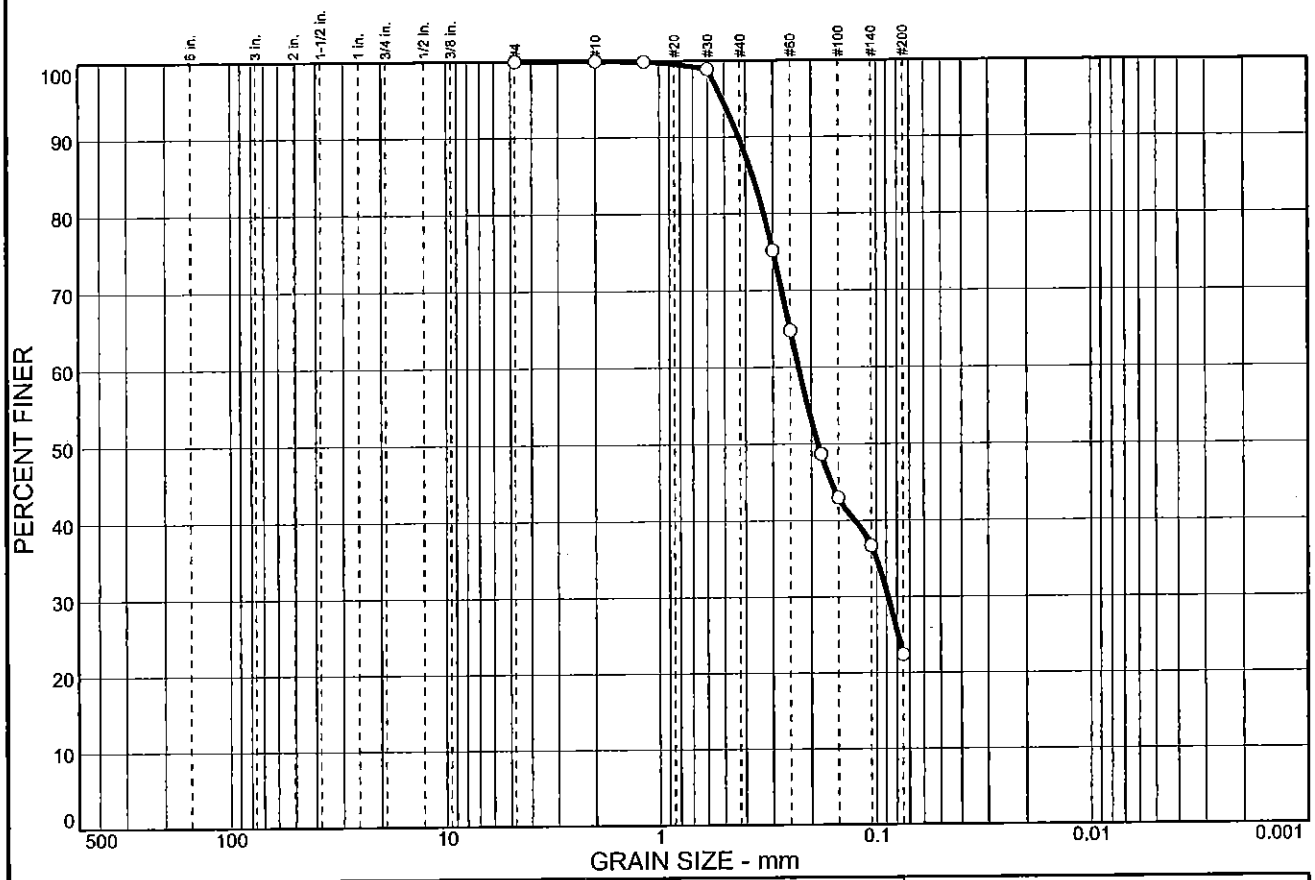
Remarks

Sample No.: 06OV-10 **Source of Sample:** **Date:** 5/19/06
Location: **Elev./Depth:** 8-8.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 10-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	10.4	67.2	22.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	98.9		
#50	75.2		
#60	64.8		
#80	48.7		
#100	43.0		
#140	36.7		
#200	22.4		

* (no specification provided)

Soil Description

Gray SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.372 D_{60}= 0.229 D_{50}= 0.186
D_{30}= 0.0882 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

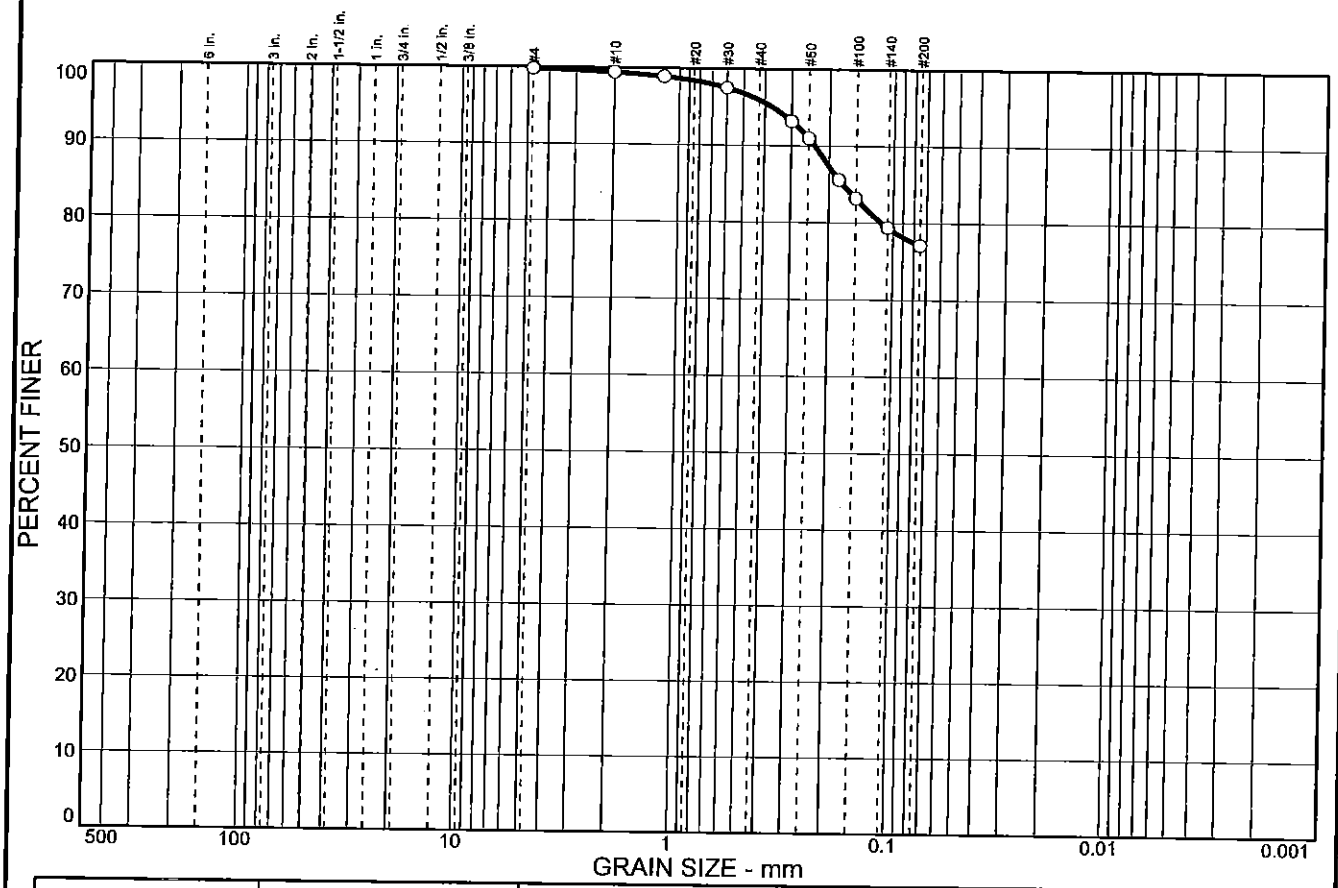
Remarks

Sample No.: 06OV-10 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 9.5-10

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 10-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.4	3.5	18.8	77.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.4		
#16	98.9		
#30	97.5		
#50	93.2		
#60	91.0		
#80	85.6		
#100	83.2		
#140	79.4		
#200	77.1		

* (no specification provided)

Soil Description

Gray sandy clay (SC)

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.173 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

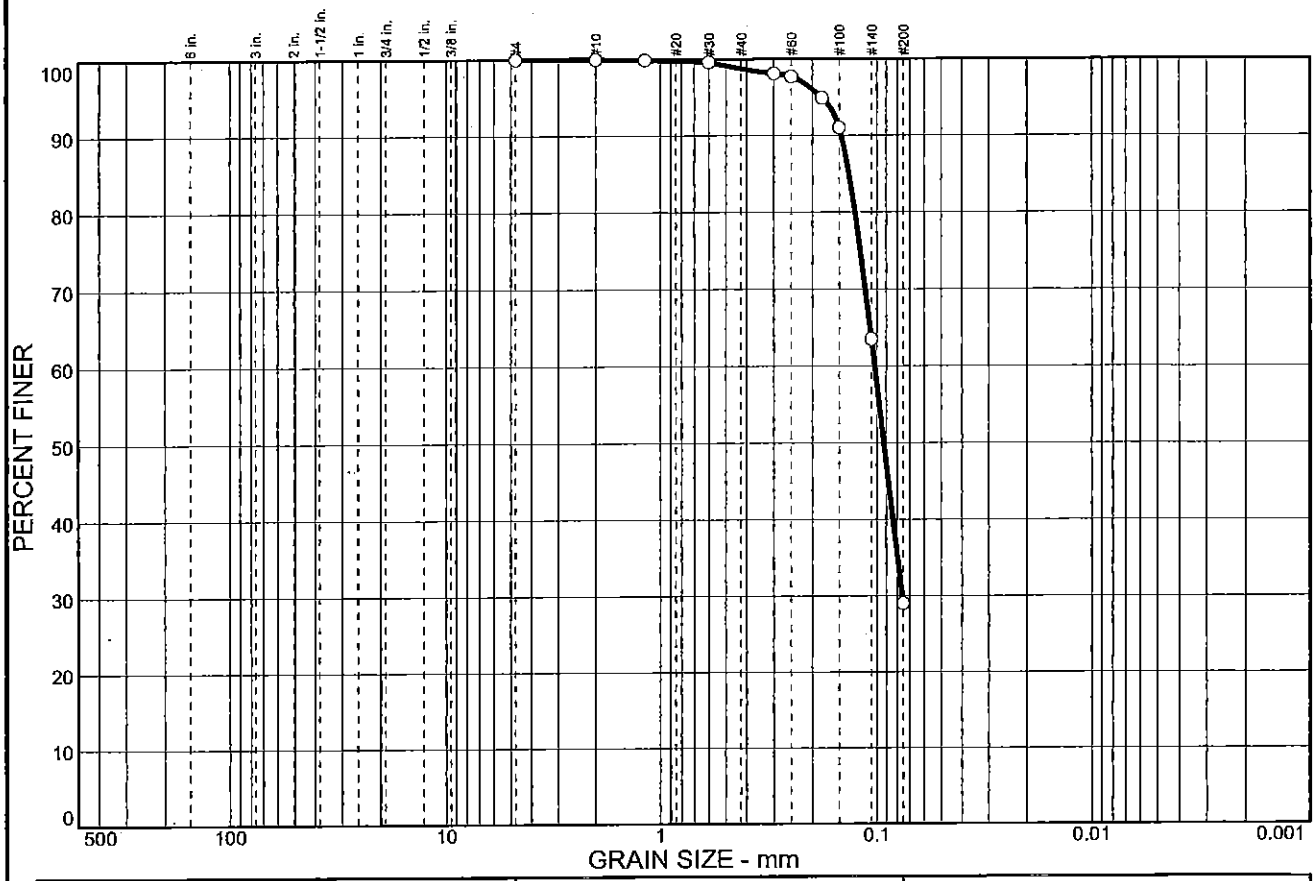
Remarks

Sample No.: 06OV-11 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 1-1.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 11-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	1.3	69.7	29.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.6		
#50	98.1		
#60	97.7		
#80	94.9		
#100	91.0		
#140	63.5		
#200	29.0		

* (no specification provided)

Soil Description

Gray sand w/clay (SM)

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.135 D_{60}= 0.102 D_{50}= 0.0925
D_{30}= 0.0758 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

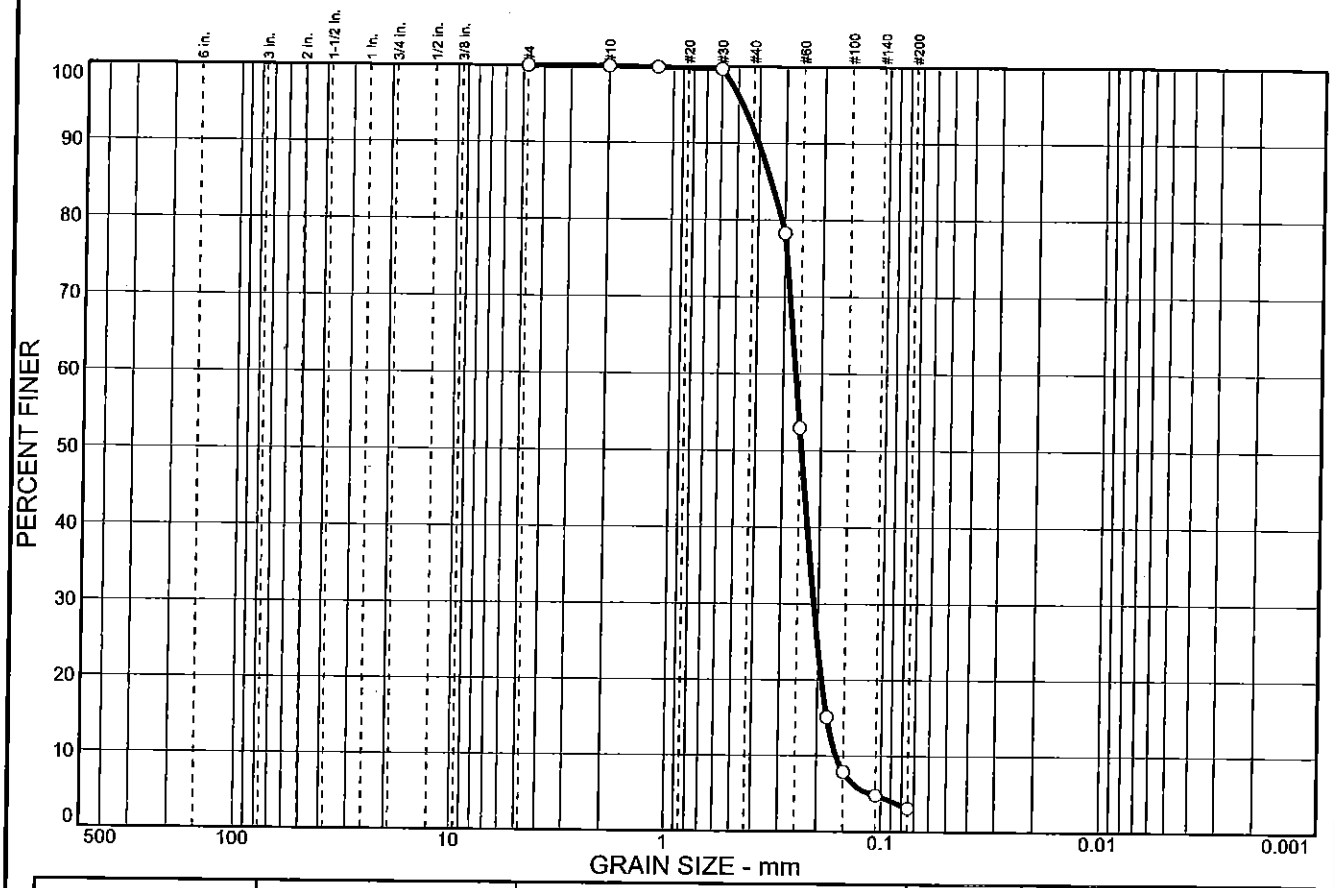
Remarks

Sample No.: 06OV-11 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 3

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 11-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	8.3	88.6	3.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.7		
#50	78.3		
#60	53.0		
#80	15.1		
#100	7.9		
#140	4.8		
#200	3.1		

* (no specification provided)

Soil Description

Light Gray fine sand (SP)

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.351 D_{60}= 0.263 D_{50}= 0.245
D_{30}= 0.210 D_{15}= 0.180 D_{10}= 0.162
C_u= 1.62 C_c= 1.03

Classification

USCS= AASHTO=

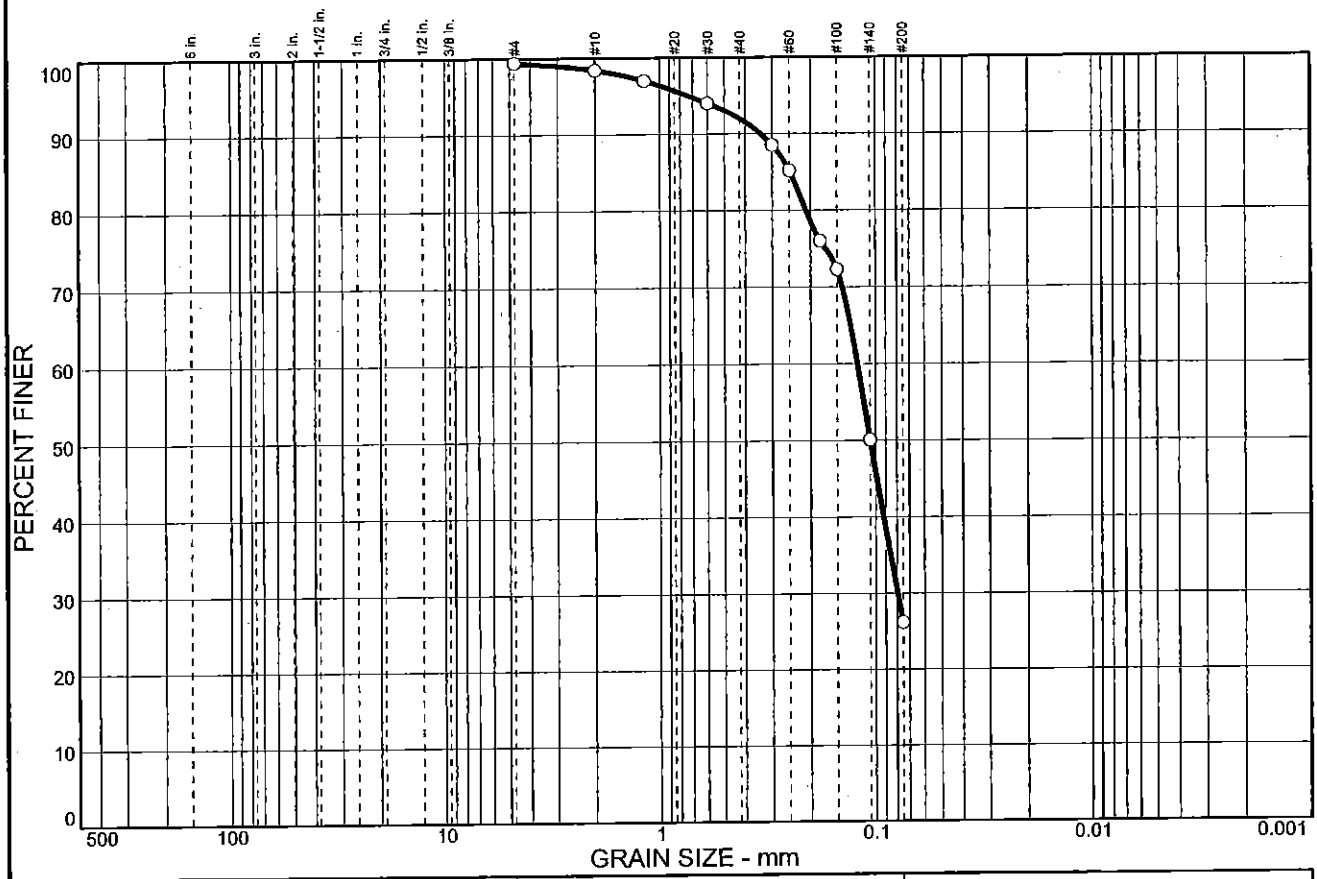
Remarks

Sample No.: 06OV-11 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 5-6

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 11-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.0	6.4	65.8	26.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.4		
#10	98.4		
#16	97.0		
#30	94.0		
#50	88.5		
#60	85.2		
#80	76.0		
#100	72.3		
#140	50.1		
#200	26.2		

* (no specification provided)

Soil Description

gray clay w/sand CL

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.248 D_{60}= 0.121 D_{50}= 0.106
D_{30}= 0.0794 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

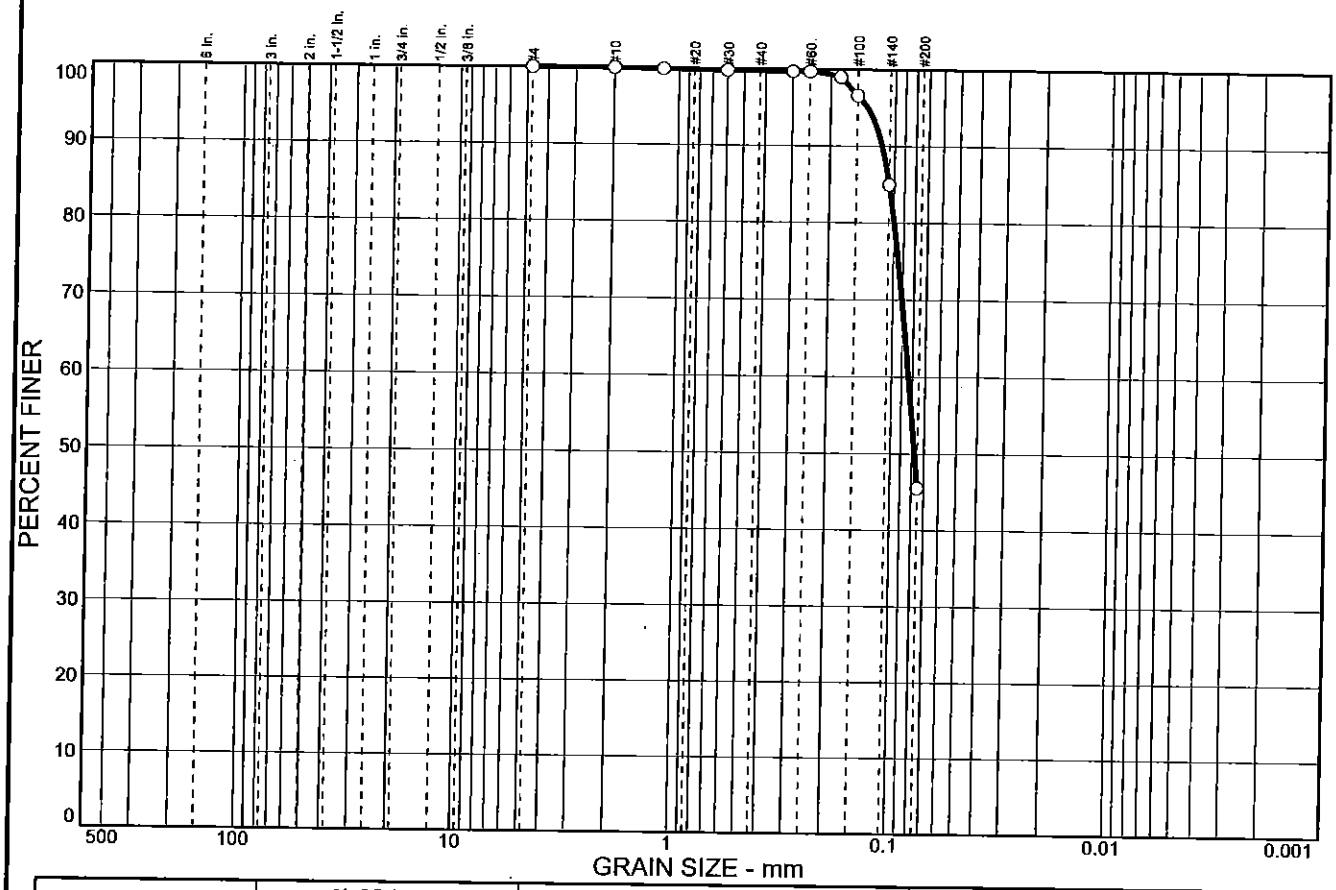
Remarks

Sample No.: 06OV-12 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 12-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.2	54.3	45.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.8		
#50	99.7		
#60	99.7		
#80	99.0		
#100	96.6		
#140	85.0		
#200	45.5		

* (no specification provided)

Soil Description

gray clay w/sand, SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.106 D_{60}= 0.0837 D_{50}= 0.0776
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

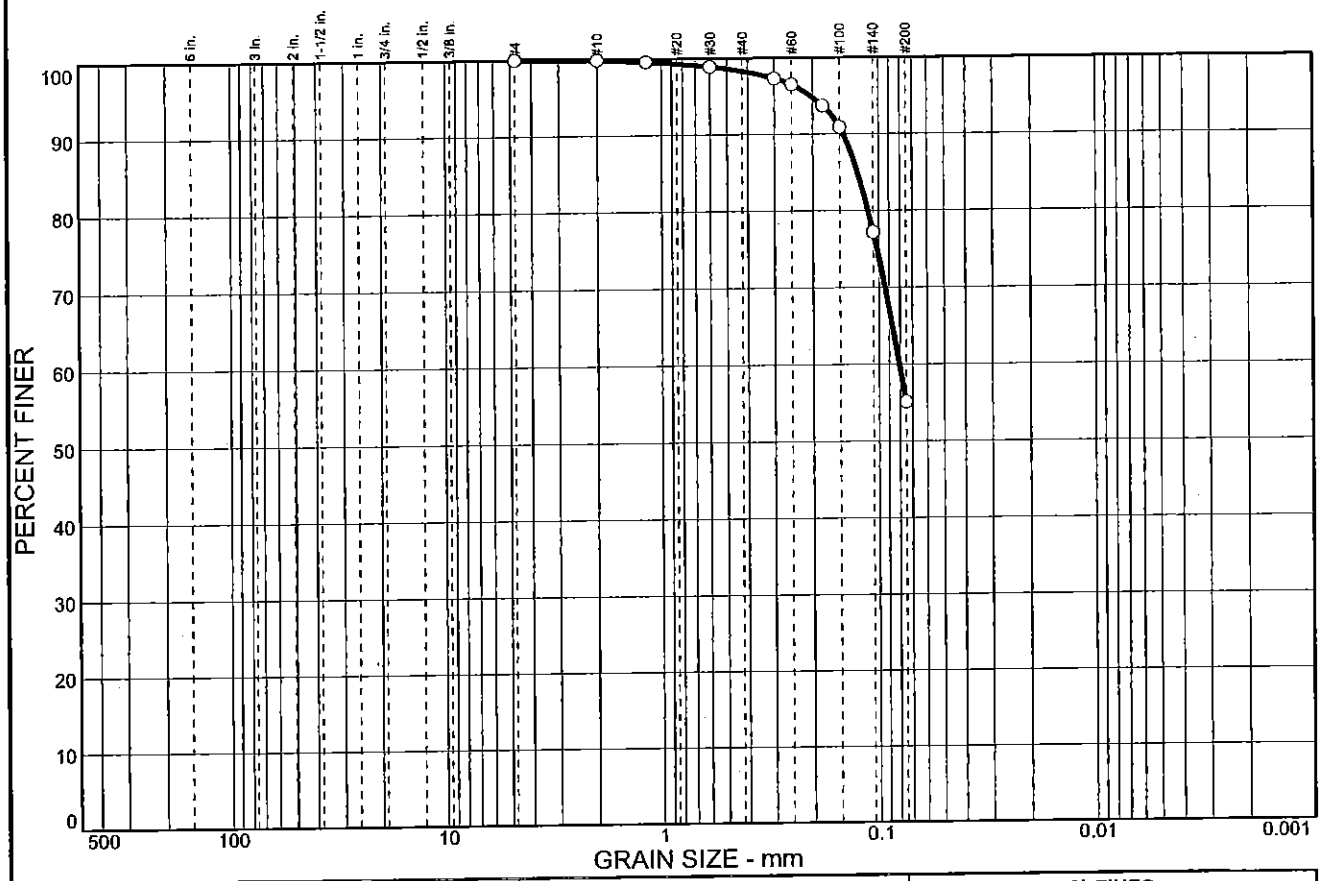
Remarks

Sample No.: 06OV-12 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 12-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	1.6	43.2	55.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.6		
#30	98.9		
#50	97.3		
#60	96.5		
#80	93.7		
#100	90.9		
#140	77.2		
#200	55.1		

* (no specification provided)

Soil Description

gray silty clay

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.125 D_{60}= 0.0806 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

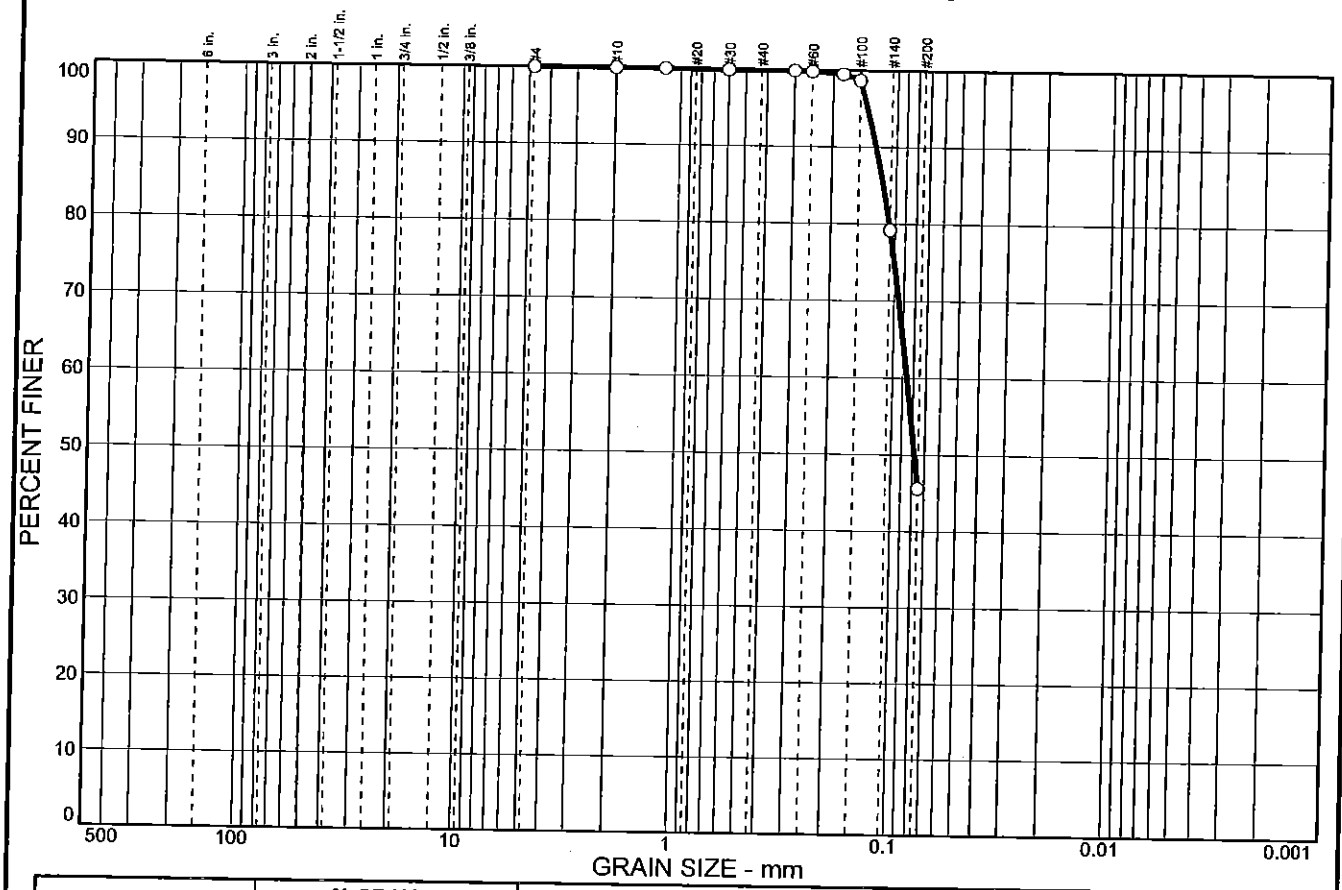
Remarks

Sample No.: 06OV-13 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 13-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.1	54.3	45.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#50	99.9		
#60	99.8		
#80	99.5		
#100	98.7		
#140	79.2		
#200	45.6		

* (no specification provided)

Soil Description

very fine gray sand
NON-PLASTIC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.115 D_{60}= 0.0860 D_{50}= 0.0781
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

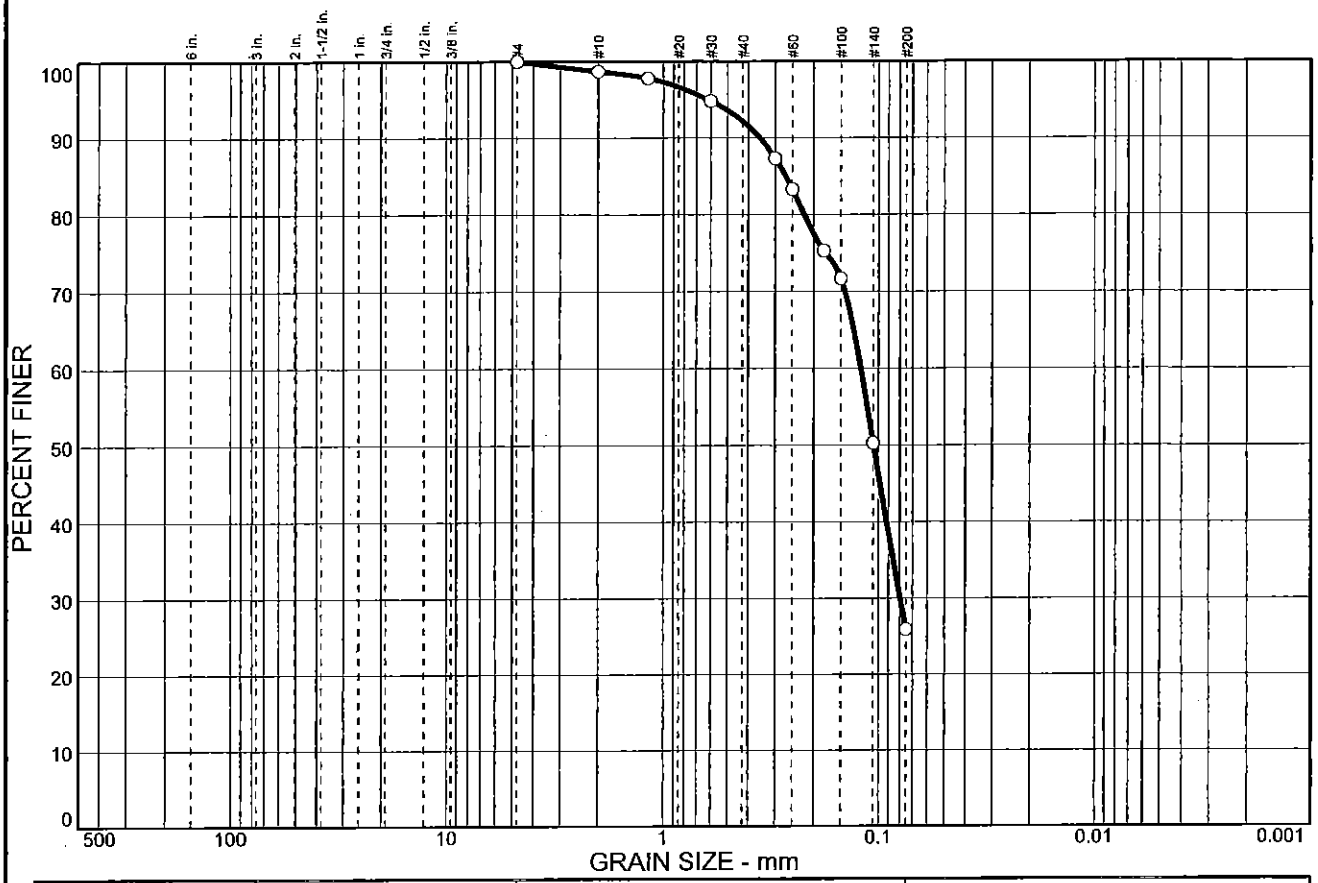
Remarks

Sample No.: 06OV-13 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 13-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.3	6.5	66.3	25.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.7		
#16	97.8		
#30	94.8		
#50	87.3		
#60	83.3		
#80	75.3		
#100	71.7		
#140	50.3		
#200	25.9		

* (no specification provided)

Soil Description

black silty sand w/shell

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.268 D_{60}= 0.121 D_{50}= 0.106
D_{30}= 0.0796 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

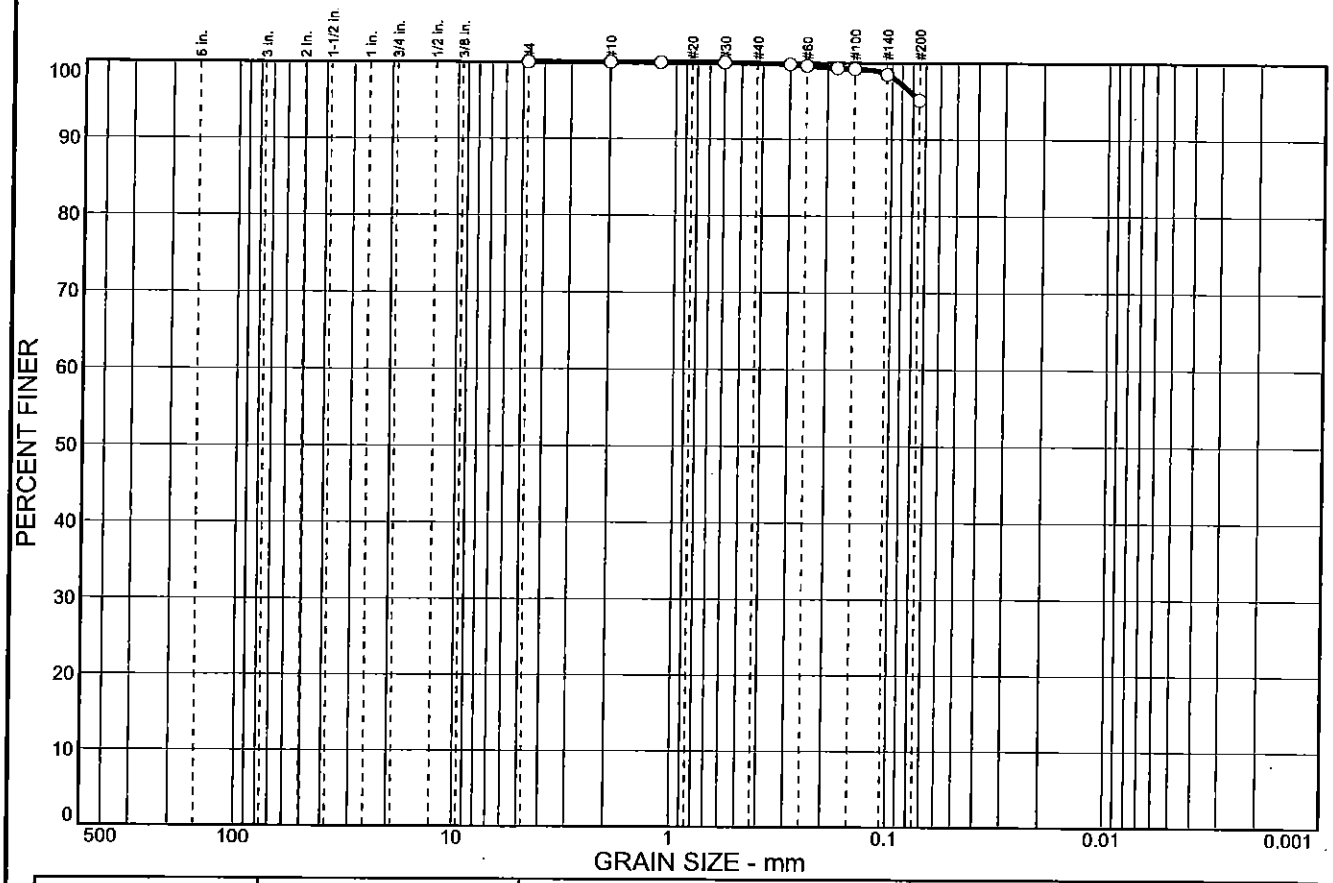
Remarks

Sample No.: 06OV-14 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 14-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.1	4.8	95.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#50	99.8		
#60	99.6		
#80	99.3		
#100	99.2		
#140	98.5		
#200	95.1		

* (no specification provided)

Soil Description

gray clay

Atterberg Limits

PL= LL= PI=

Coefficients

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

Classification

USCS= AASHTO=

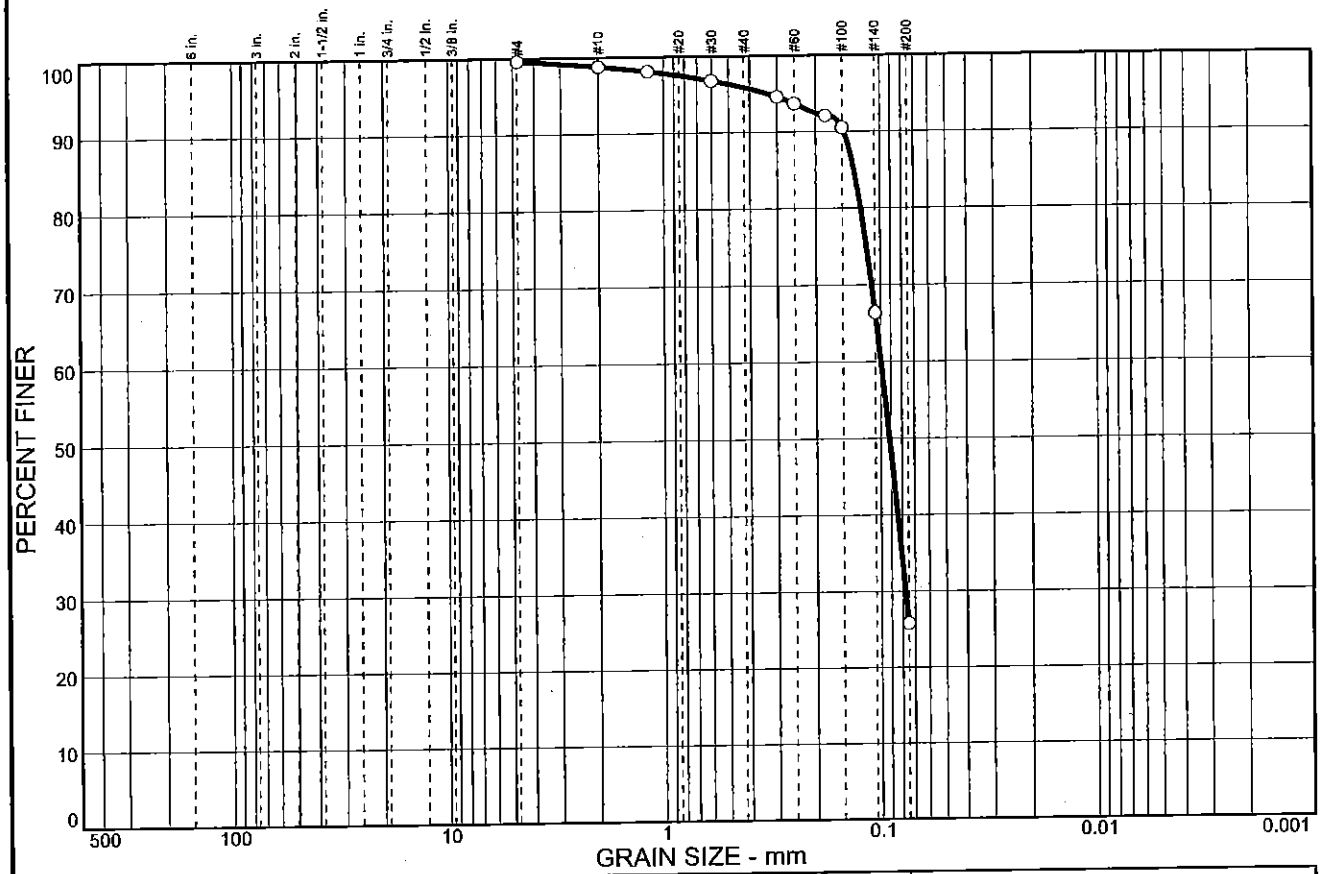
Remarks

Sample No.: 06OV-14 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 14-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.8	2.9	70.1	25.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	98.8		
#16	98.1		
#30	96.8		
#50	94.6		
#60	93.7		
#80	92.1		
#100	90.5		
#140	66.4		
#200	25.8		

* (no specification provided)

Soil Description

dark olive brown sandy clay SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.132 D_{60}= 0.0998 D_{50}= 0.0914
D_{30}= 0.0776 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

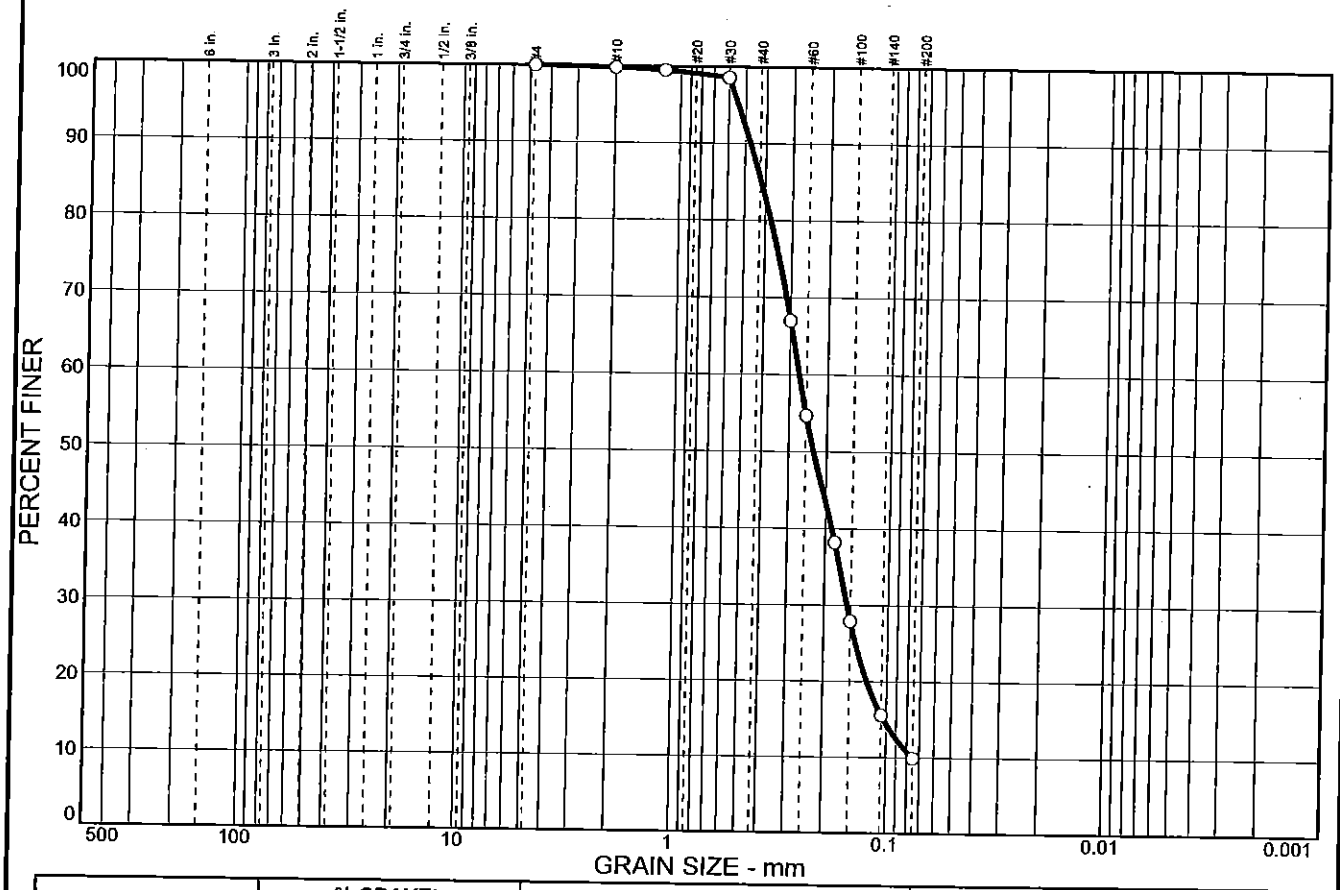
Remarks

Sample No.: 06OV-15 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 15-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.2	14.2	75.7	9.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#16	99.5		
#30	98.6		
#50	67.0		
#60	54.7		
#80	38.2		
#100	27.9		
#140	15.6		
#200	9.9		

* (no specification provided)

Soil Description

dark olive brown fine sand SM/SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.419 D_{60}= 0.271 D_{50}= 0.230
D_{30}= 0.156 D_{15}= 0.103 D_{10}= 0.0756
C_u= 3.59 C_c= 1.19

Classification

USCS= AASHTO=

Remarks

Sample No.: 06OV-15 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 2.5-3

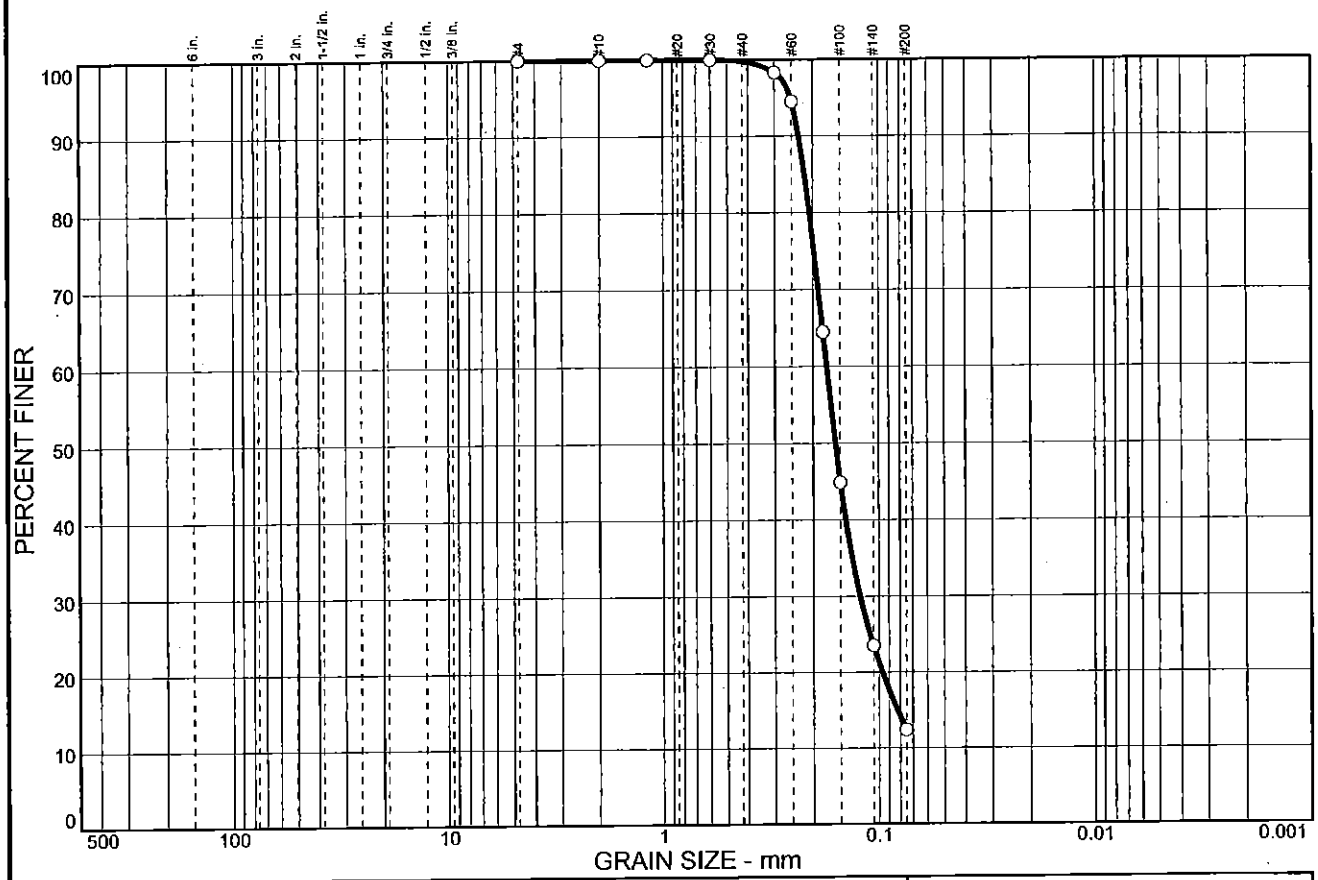
PSI

Client: Moffatt & Nichol

Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 15-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.2	87.4	12.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#50	98.3		
#60	94.5		
#80	64.5		
#100	44.9		
#140	23.5		
#200	12.4		

* (no specification provided)

Soil Description

dark olive brown fine sand SM/SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.218 D_{60}= 0.173 D_{50}= 0.158
D_{30}= 0.122 D_{15}= 0.0822 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

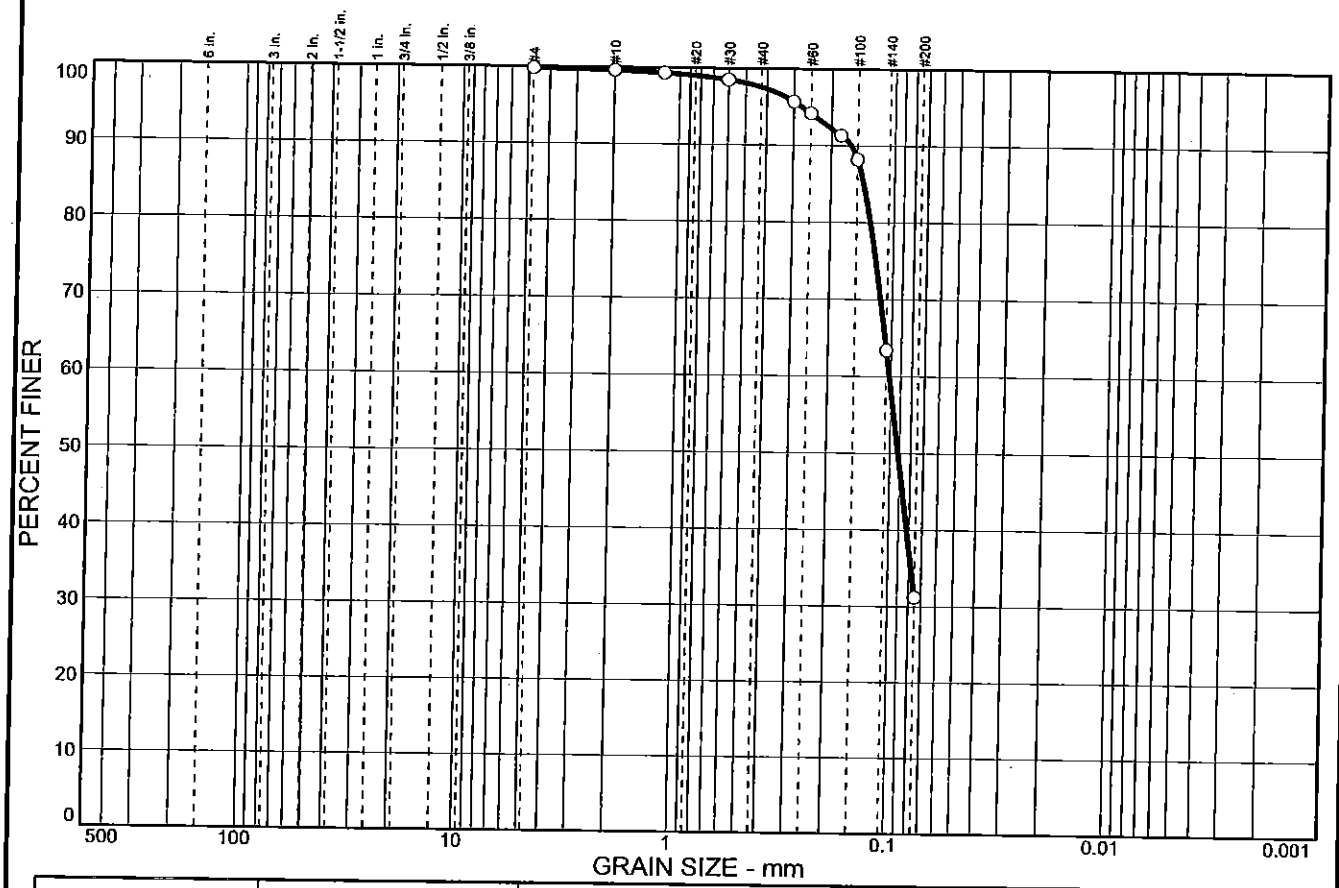
Remarks

Sample No.: 06OV-15 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 15-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.2	2.0	66.4	31.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.6		
#16	99.3		
#30	98.5		
#50	95.7		
#60	94.2		
#80	91.3		
#100	88.2		
#140	63.4		
#200	31.2		

* (no specification provided)

Soil Description

black sand w/clay SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.140 D_{60}= 0.102 D_{50}= 0.0917
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

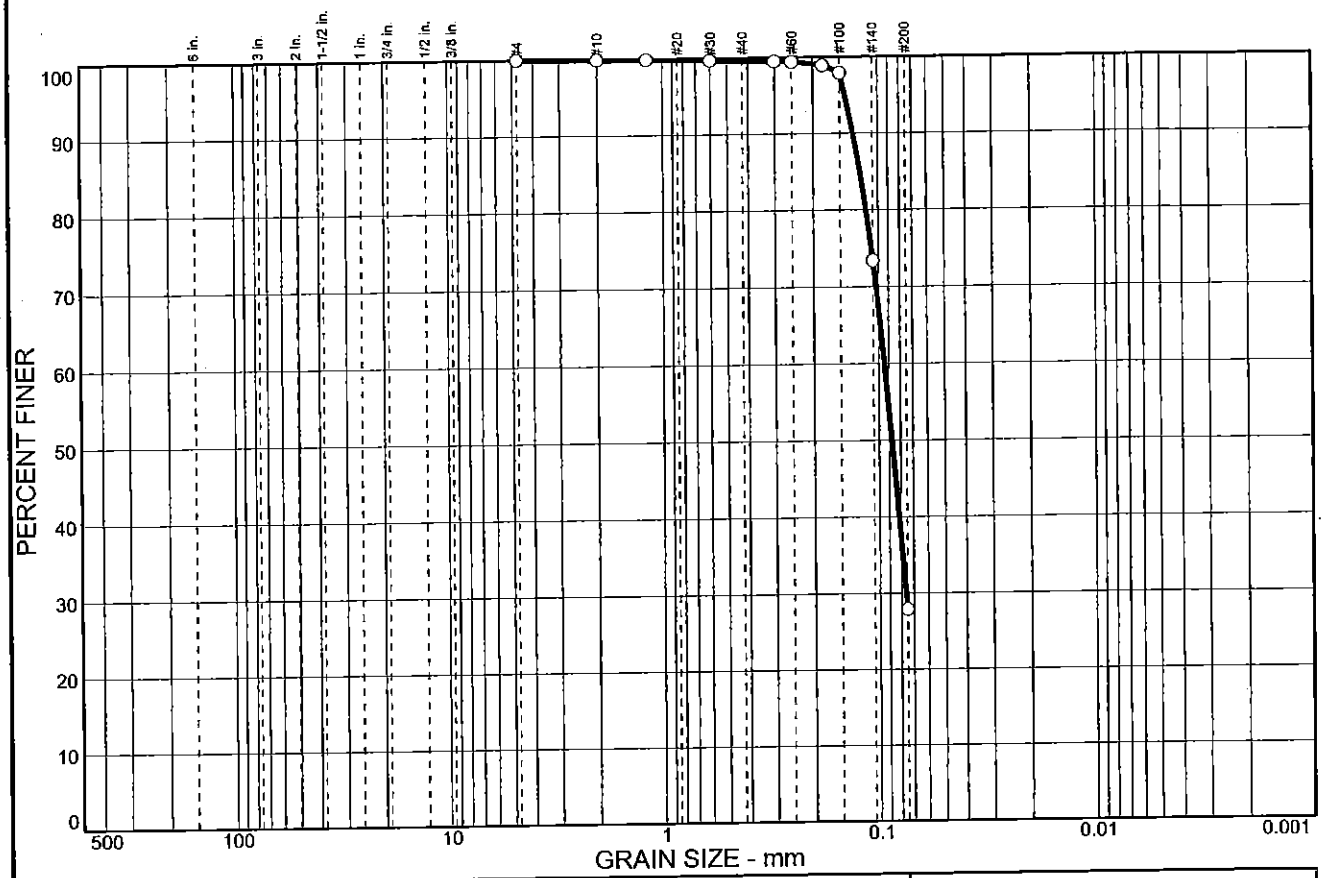
Remarks

Sample No.: 06OV-16 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 16-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.3	71.7	27.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.7		
#50	99.5		
#60	99.4		
#80	98.9		
#100	97.9		
#140	73.4		
#200	27.9		

* (no specification provided)

Soil Description

Dark Gray sand w/clay SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.121 D_{60}= 0.0943 D_{50}= 0.0875
D_{30}= 0.0761 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

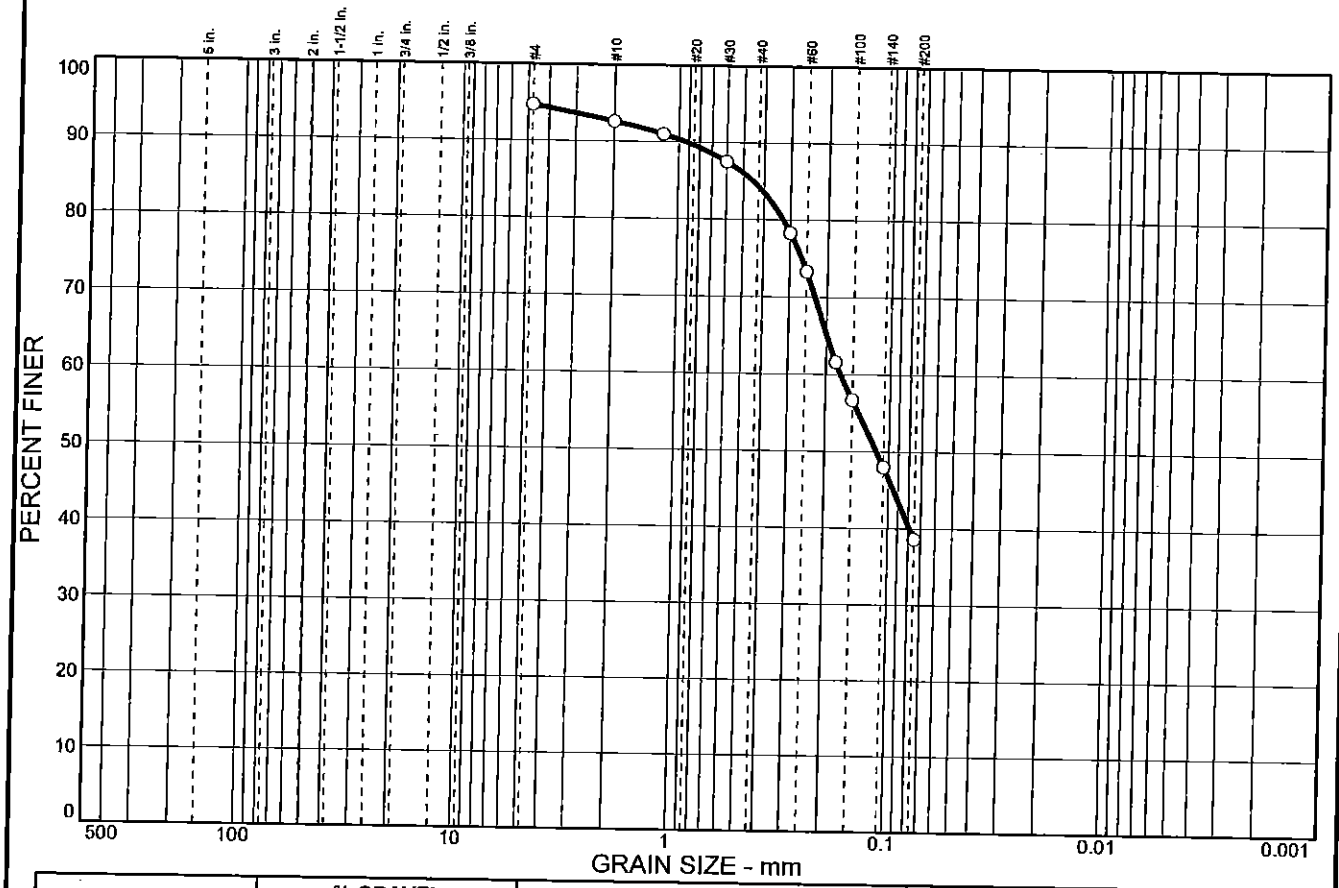
Remarks

Sample No.: 06OV-16 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 16-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.1	8.3	45.7	38.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	94.7		
#10	92.6		
#16	91.0		
#30	87.5		
#50	78.3		
#60	73.3		
#80	61.6		
#100	56.7		
#140	48.0		
#200	38.6		

* (no specification provided)

Soil Description

black silty clay w/shell SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.451 D_{60}= 0.171 D_{50}= 0.115
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

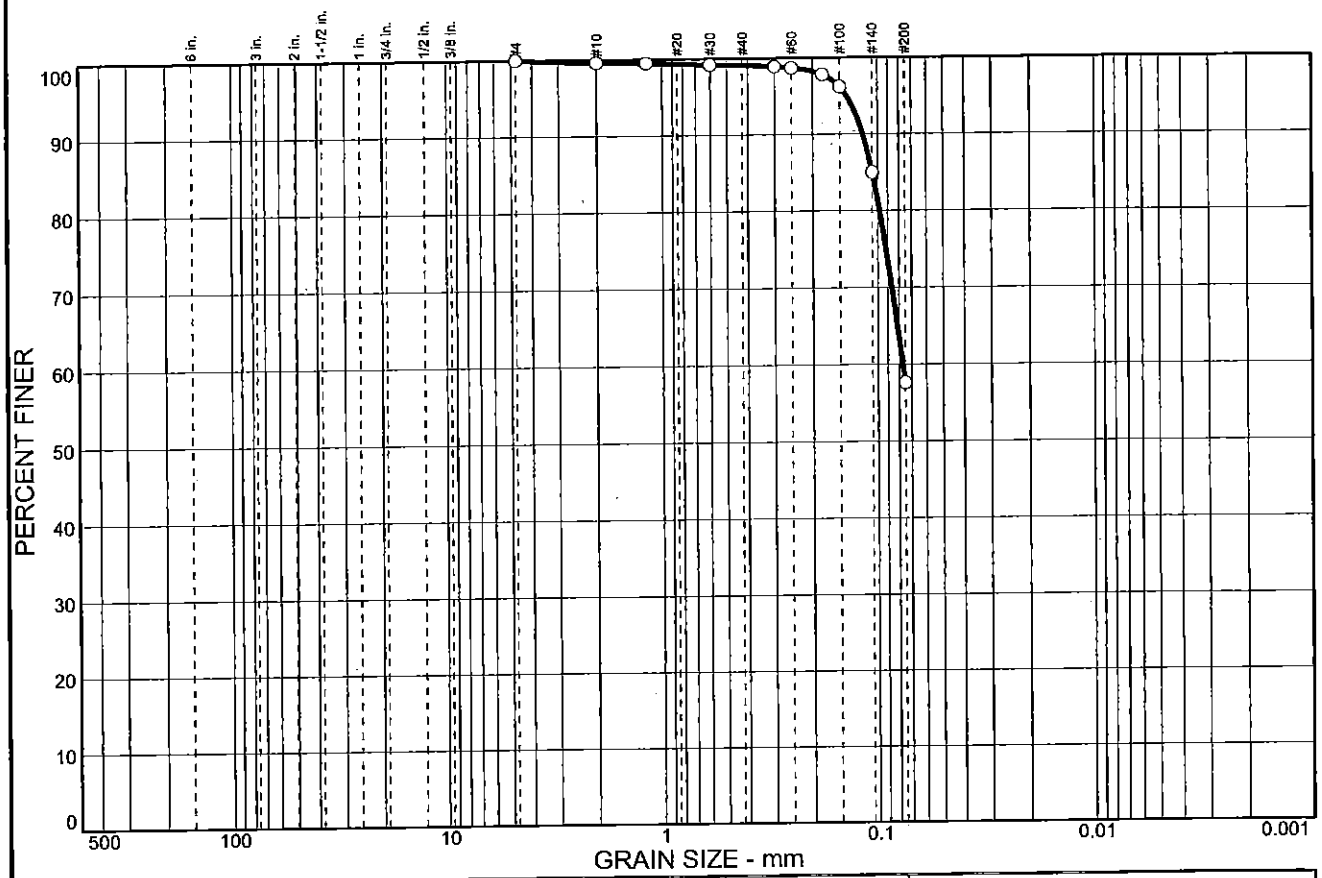
Remarks

Sample No.: 06OV-17 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 17-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	0.5	41.5	57.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.6		
#16	99.5		
#30	99.2		
#50	98.9		
#60	98.7		
#80	97.8		
#100	96.2		
#140	85.0		
#200	57.6		

* (no specification provided)

Soil Description

black clay w/sd lens, gravel CL

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.106 D_{60}= 0.0770 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

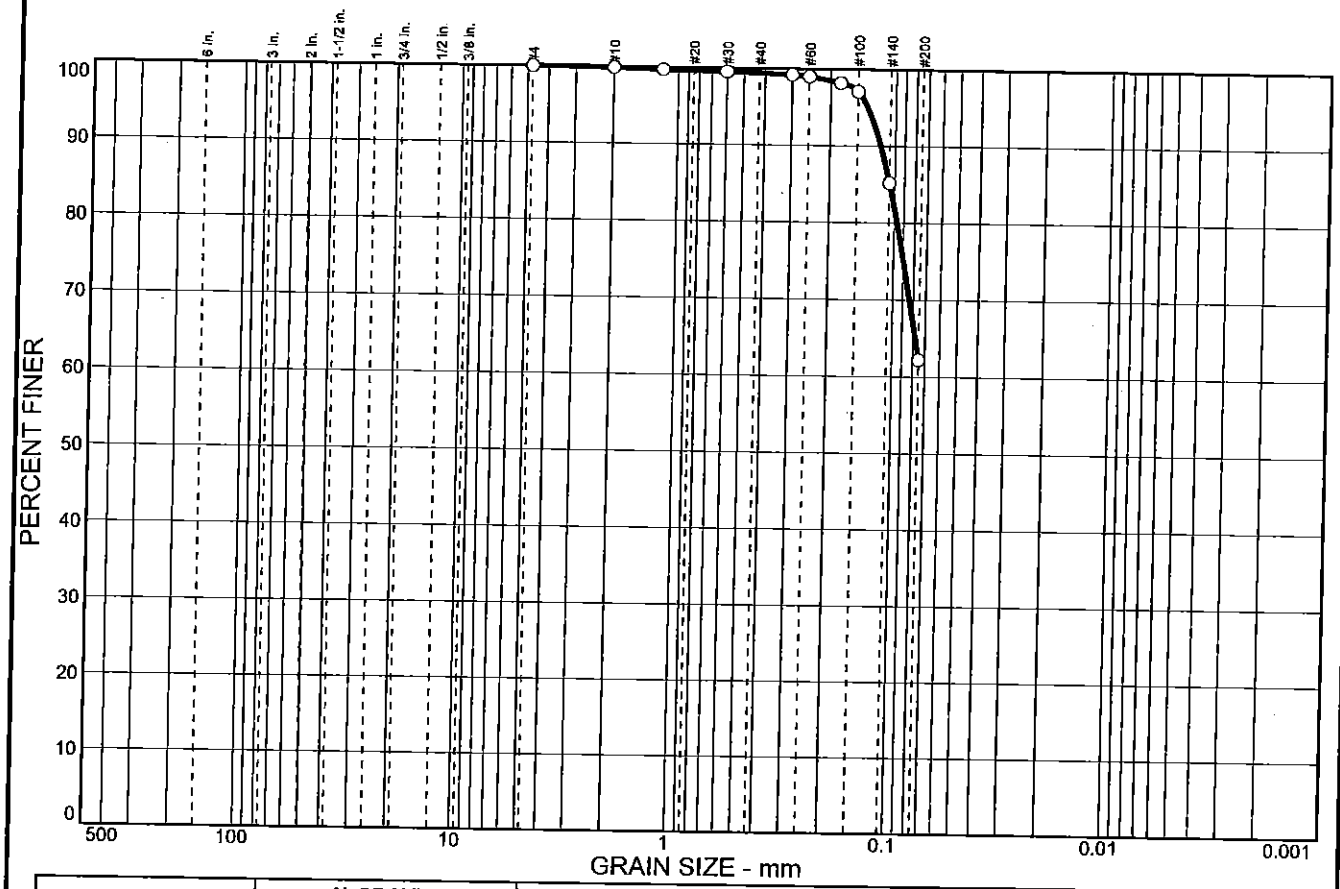
Remarks

Sample No.: 06OV-17 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 17-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.5	37.2	62.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.7		
#30	99.5		
#50	99.2		
#60	99.0		
#80	98.2		
#100	97.1		
#140	85.2		
#200	62.2		

* (no specification provided)

Soil Description

gray clay CH

Atterberg Limits

PL= 20 LL= 24 PI= 4

Coefficients

D_{85}= 0.106 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

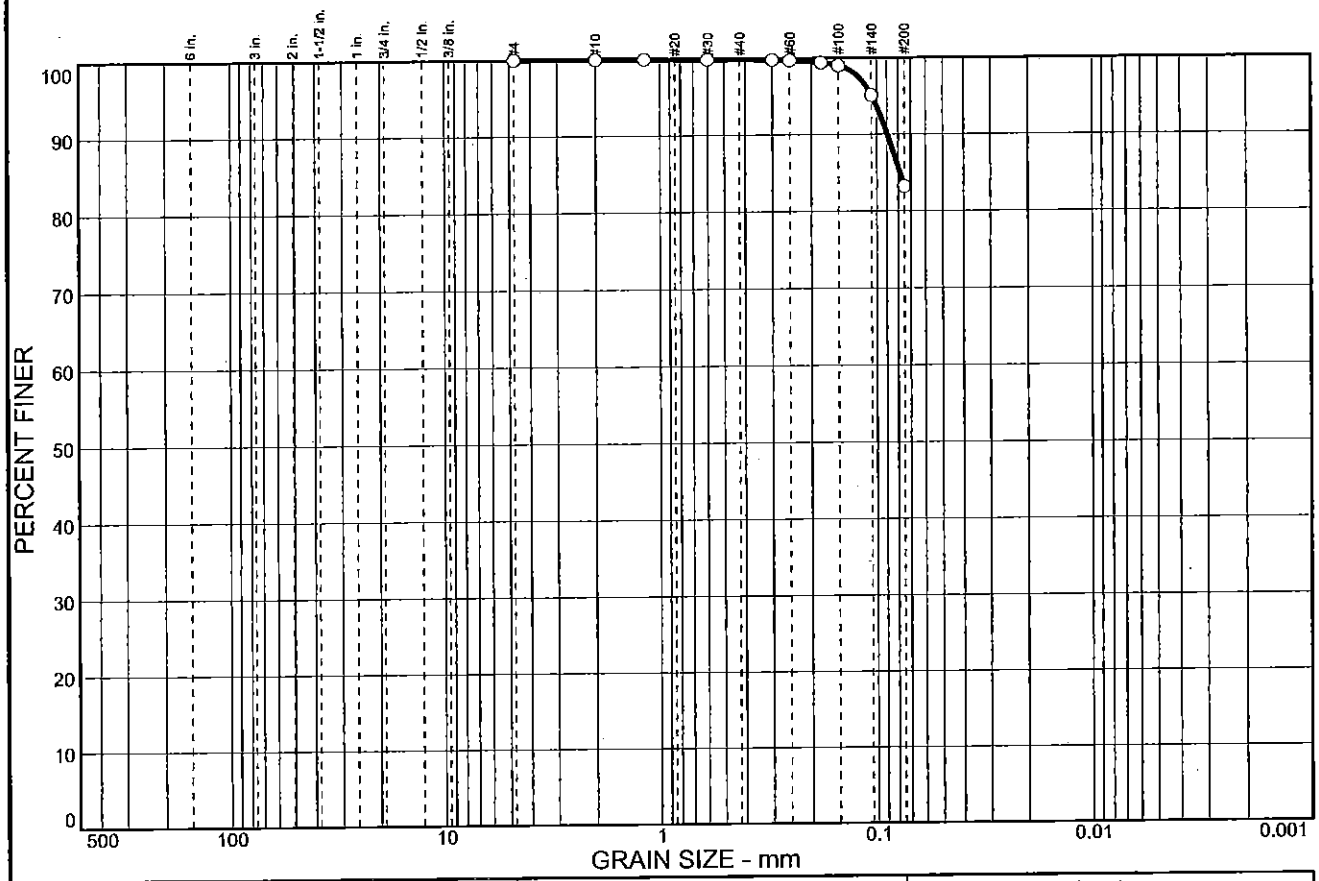
Remarks

Sample No.: 06OV-18 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 18-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.1	16.7	83.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#50	99.8		
#60	99.7		
#80	99.4		
#100	99.0		
#140	95.1		
#200	83.2		

* (no specification provided)

Soil Description

gray clay CH

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.0785 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

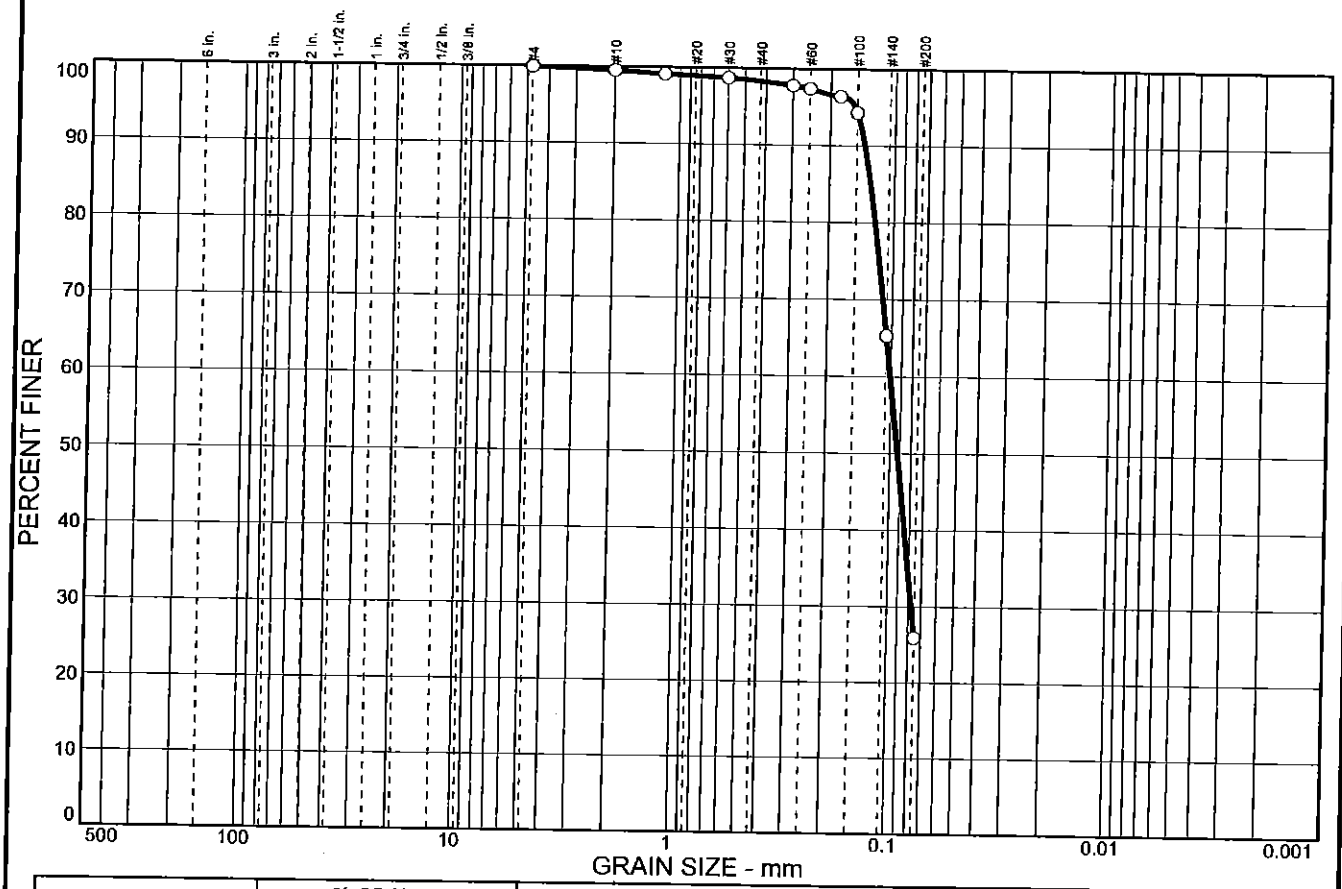
Remarks

Sample No.: 06OV-18 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 18-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.4	1.2	72.4	26.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.5		
#16	99.1		
#30	98.7		
#50	97.8		
#60	97.4		
#80	96.4		
#100	94.3		
#140	65.3		
#200	25.9		

* (no specification provided)

Soil Description

gray silty sand SC-SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.129 D_{60}= 0.101 D_{50}= 0.0925
D_{30}= 0.0777 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

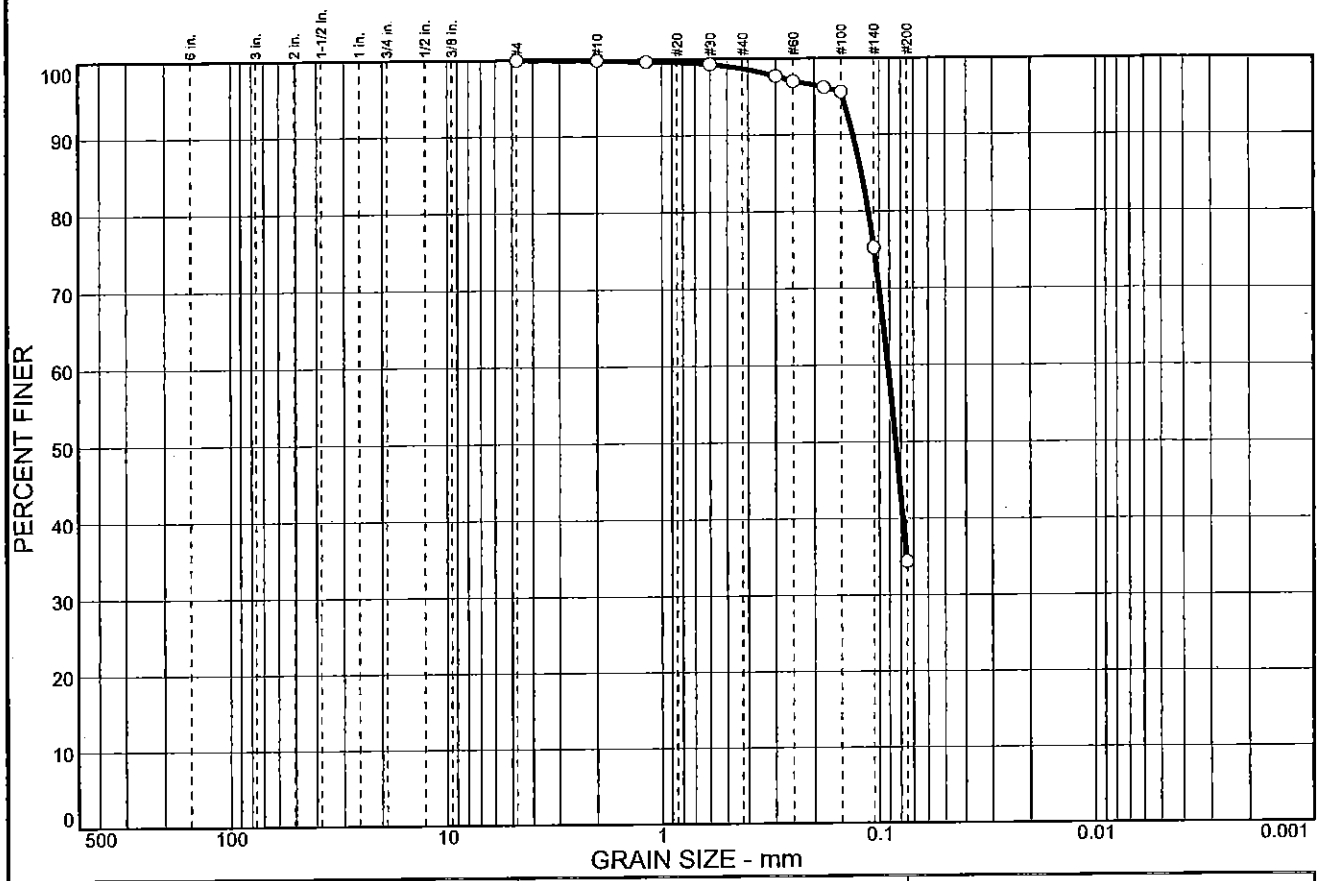
Remarks

Sample No.: 06OV-19 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 19-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	1.2	64.3	34.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.7		
#30	99.3		
#50	97.7		
#60	97.0		
#80	96.2		
#100	95.6		
#140	75.3		
#200	34.4		

* (no specification provided)

Soil Description

gray silty sand SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.121 D_{60}= 0.0916 D_{50}= 0.0845
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

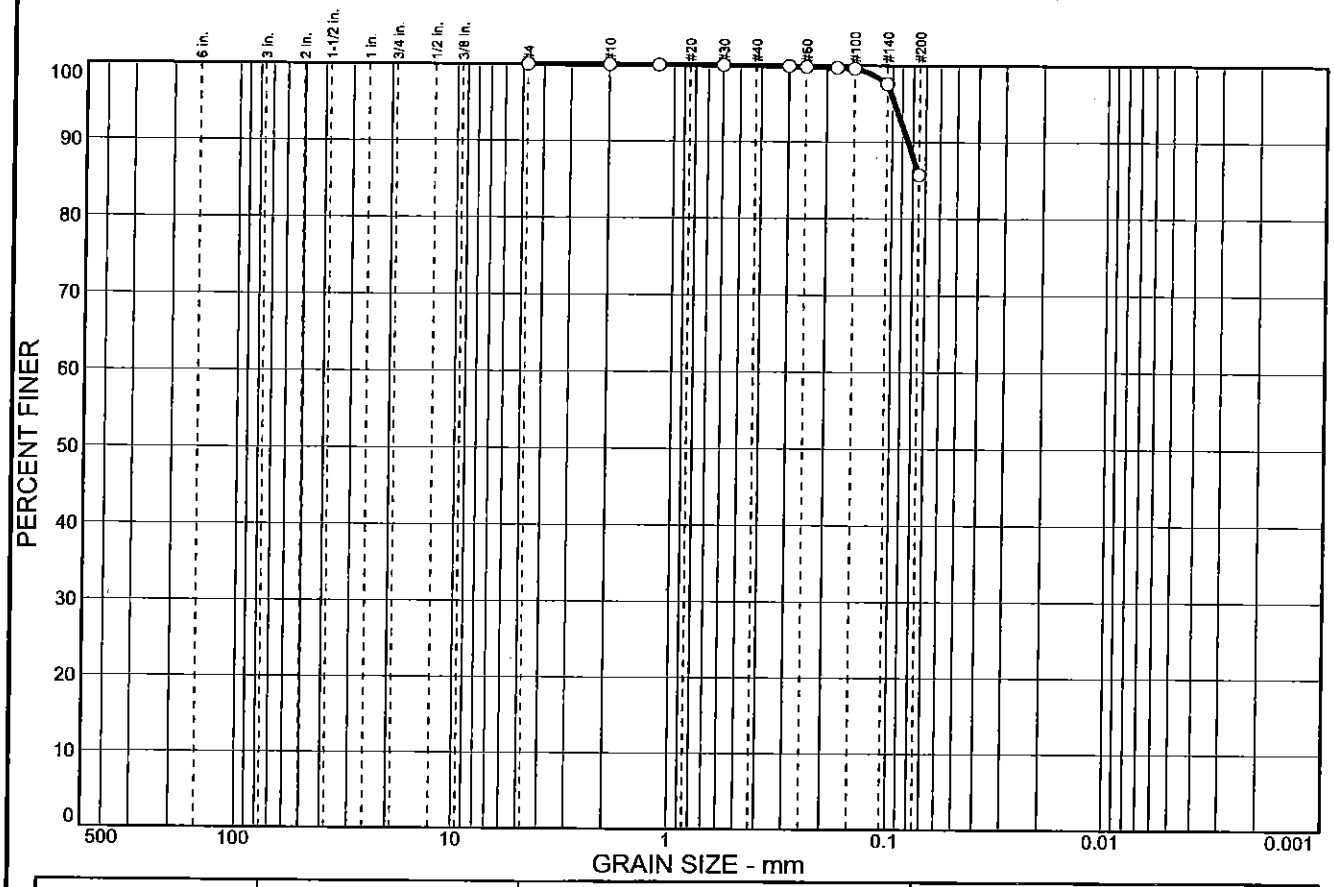
Remarks

Sample No.: 06OV-19 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 19-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.0	14.3	85.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#50	99.9		
#60	99.8		
#80	99.7		
#100	99.6		
#140	97.6		
#200	85.7		

* (no specification provided)

Soil Description

gray clay SC

Atterberg Limits

PL= 21 LL= 29 PI= 8

Coefficients

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

Classification

USCS= AASHTO=

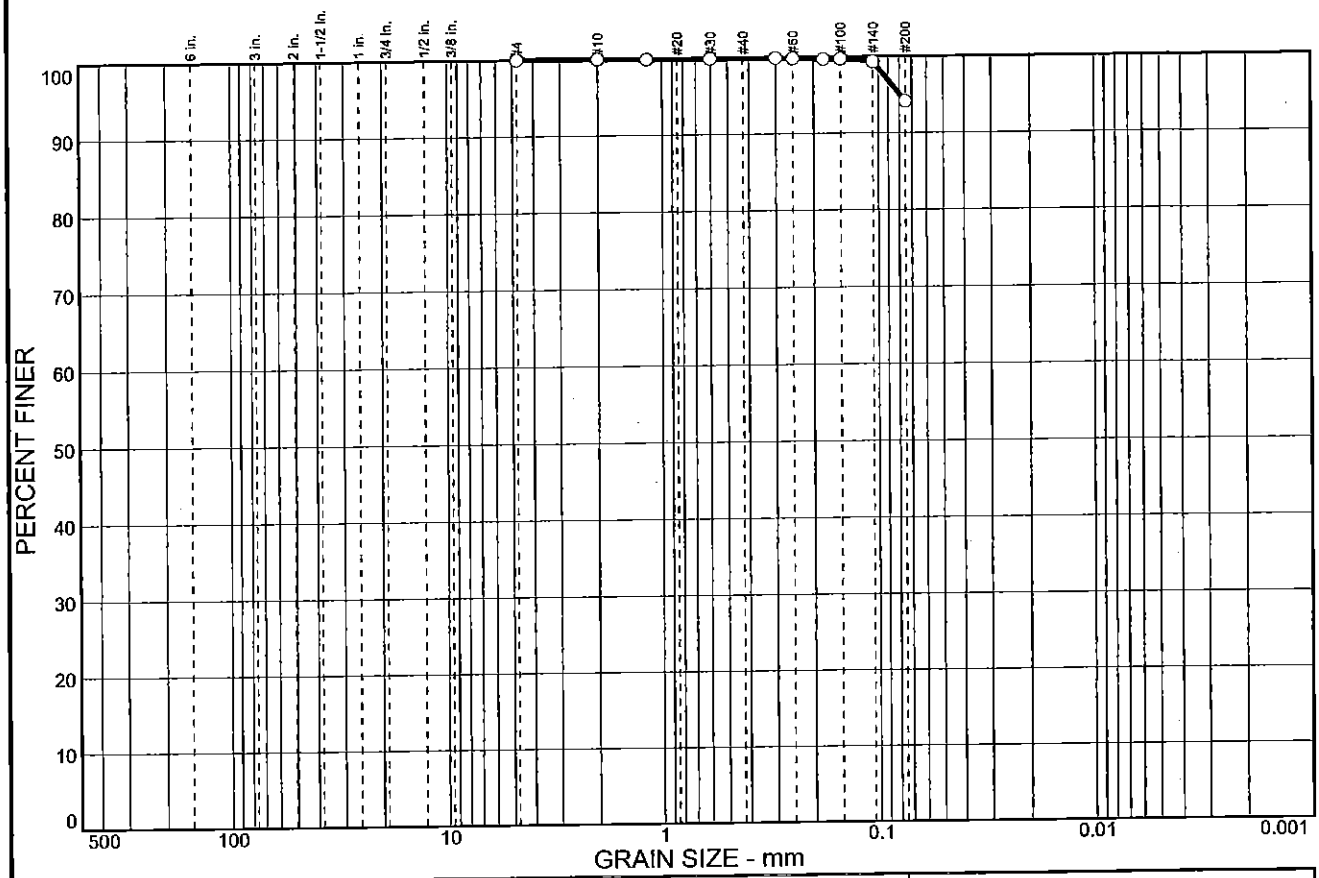
Remarks

Sample No.: 06OV-20 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 20-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.1	5.8	94.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.9		
#50	99.9		
#60	99.8		
#80	99.7		
#100	99.7		
#140	99.3		
#200	94.1		

* (no specification provided)

Soil Description

silty clay CL

Atterberg Limits

PL= 19 LL= 38 PI= 19

Coefficients

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

Classification

USCS= AASHTO=

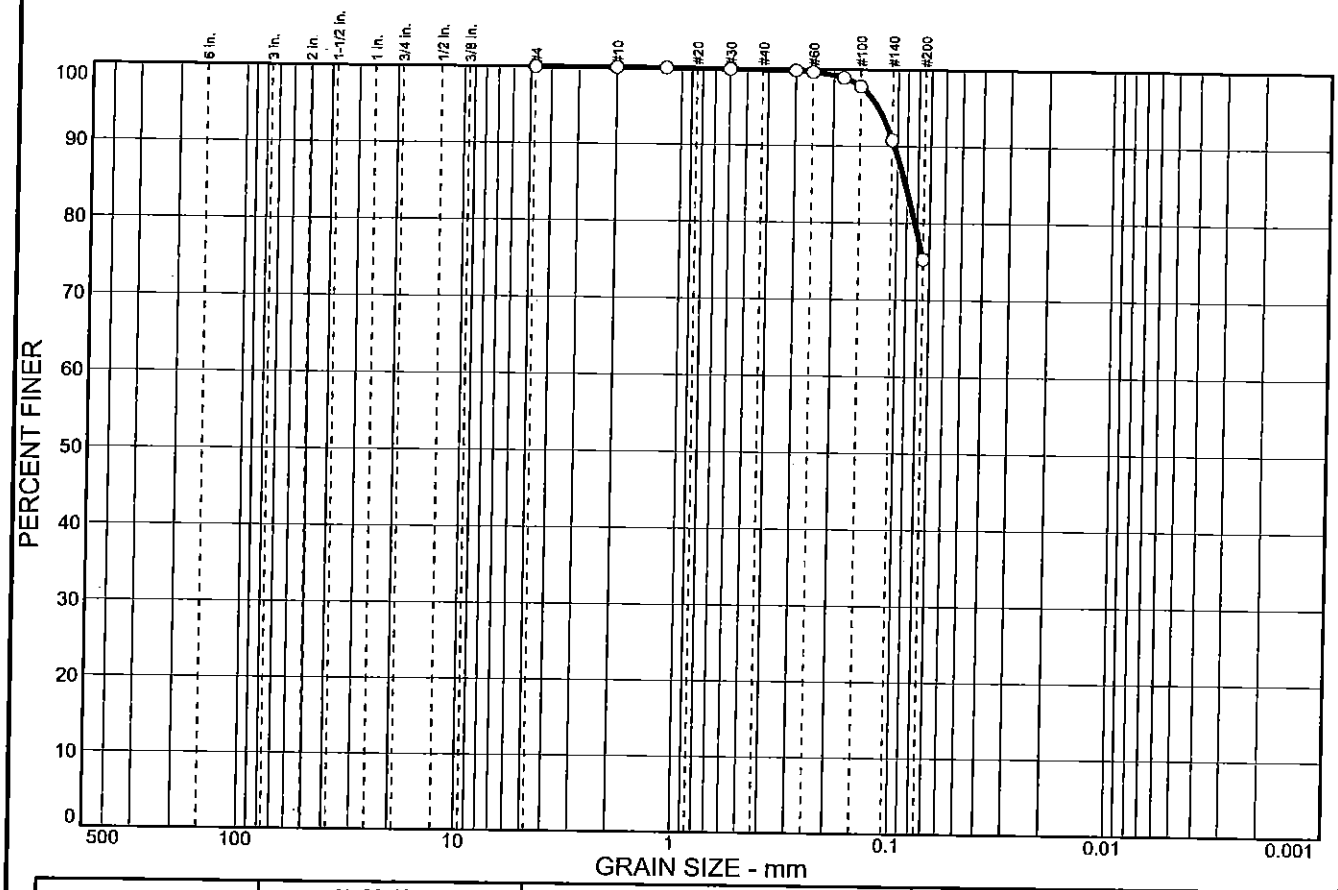
Remarks

Sample No.: 06OV-21 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 21-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.2	24.5	75.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#50	99.8		
#60	99.6		
#80	98.9		
#100	97.8		
#140	90.8		
#200	75.3		

* (no specification provided)

Soil Description

gray clay CH

Atterberg Limits

PL= 18 LL= 39 PI= 21

Coefficients

D_{85}= 0.0916 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

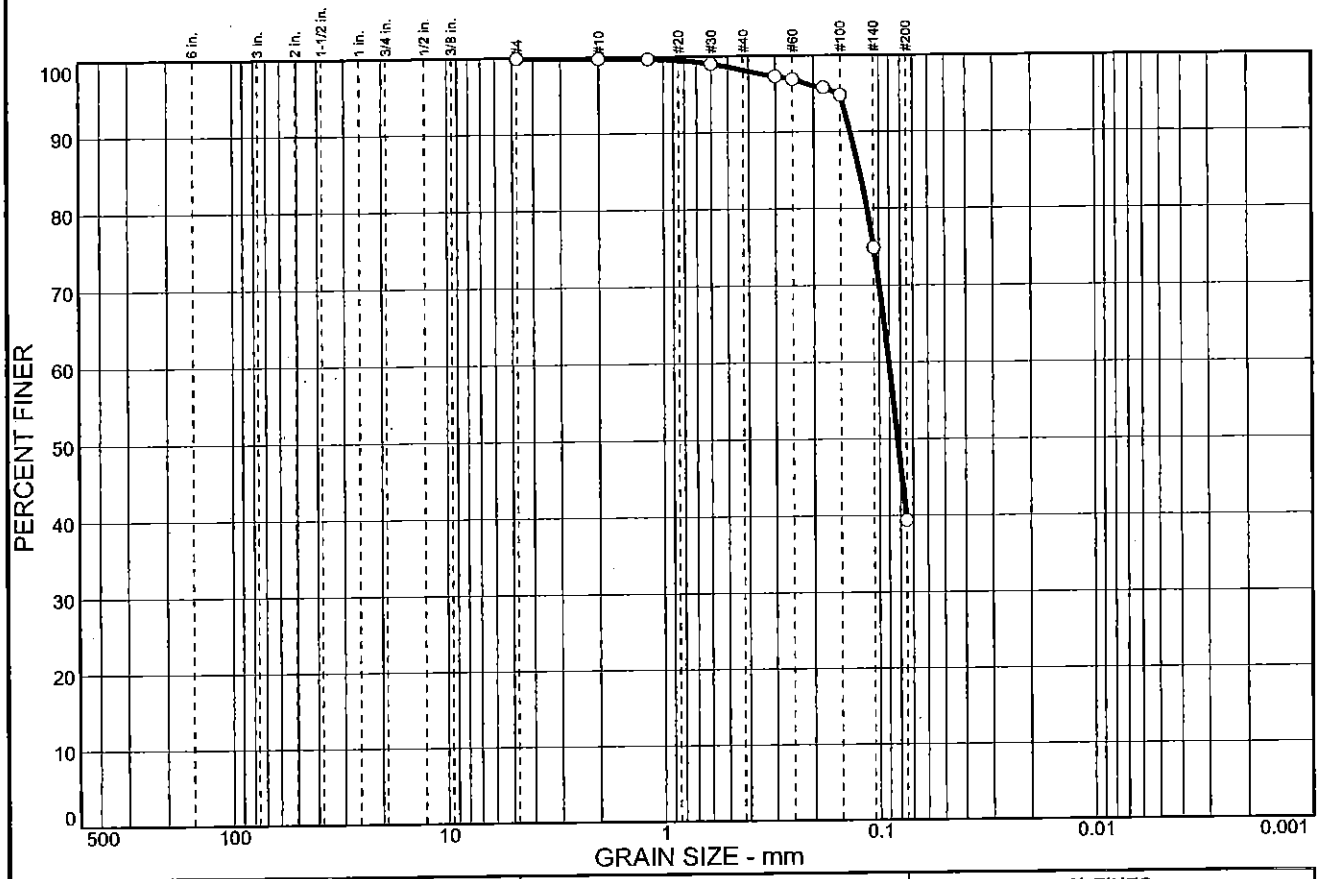
Remarks

Sample No.: 06OV-22 **Source of Sample:** **Date:** 6/7/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 22-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.1	1.7	58.7	39.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.8		
#16	99.7		
#30	99.0		
#50	97.3		
#60	96.9		
#80	95.8		
#100	94.8		
#140	74.9		
#200	39.4		

* (no specification provided)

Soil Description

gray silty clay CH

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.123 D_{60}= 0.0904 D_{50}= 0.0824
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

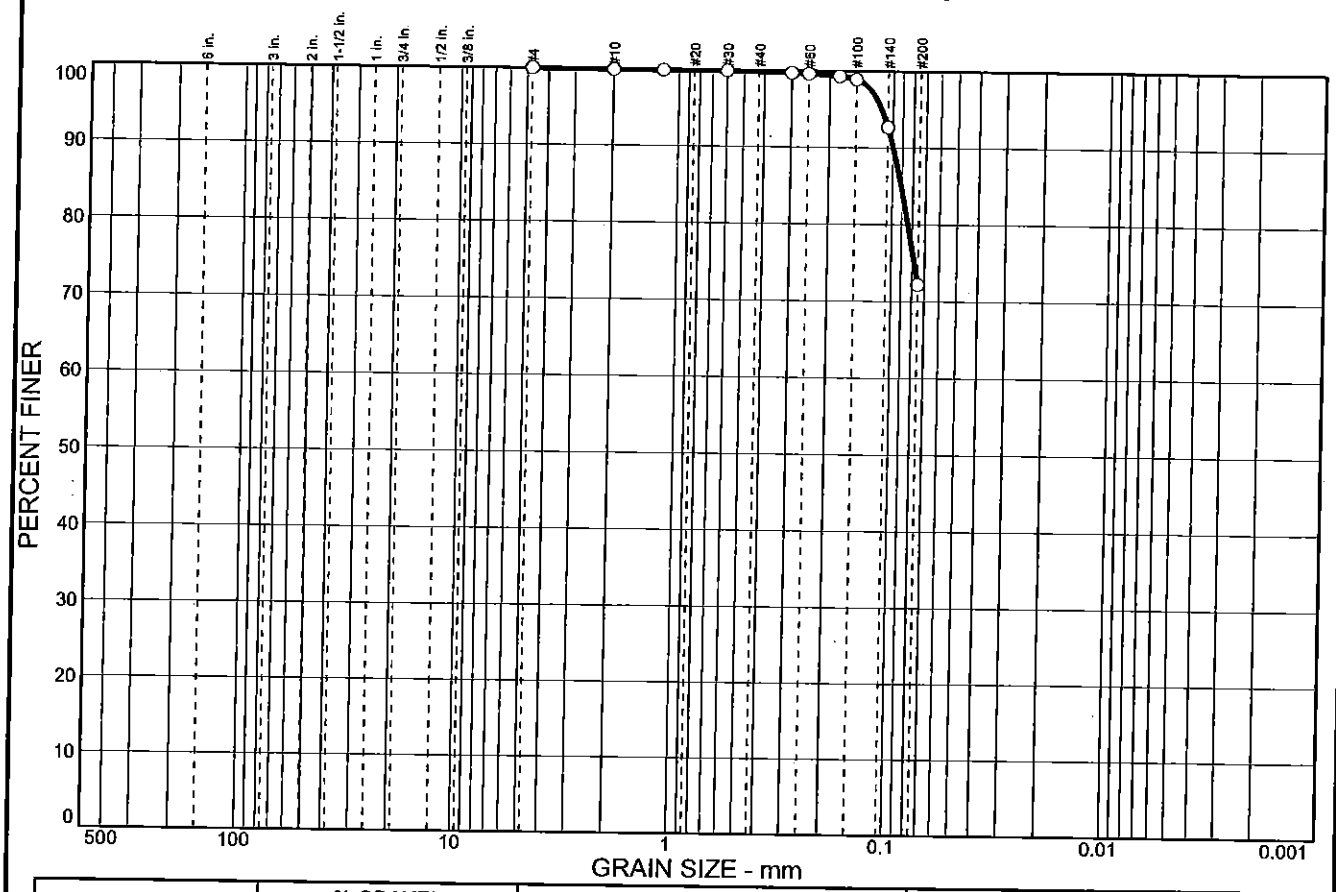
Remarks

Sample No.: 06OV-23 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 23-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.1	27.6	72.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.9		
#50	99.7		
#60	99.6		
#80	99.3		
#100	98.9		
#140	92.7		
#200	72.2		

* (no specification provided)

Soil Description

gray silty clay CH

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.0910 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

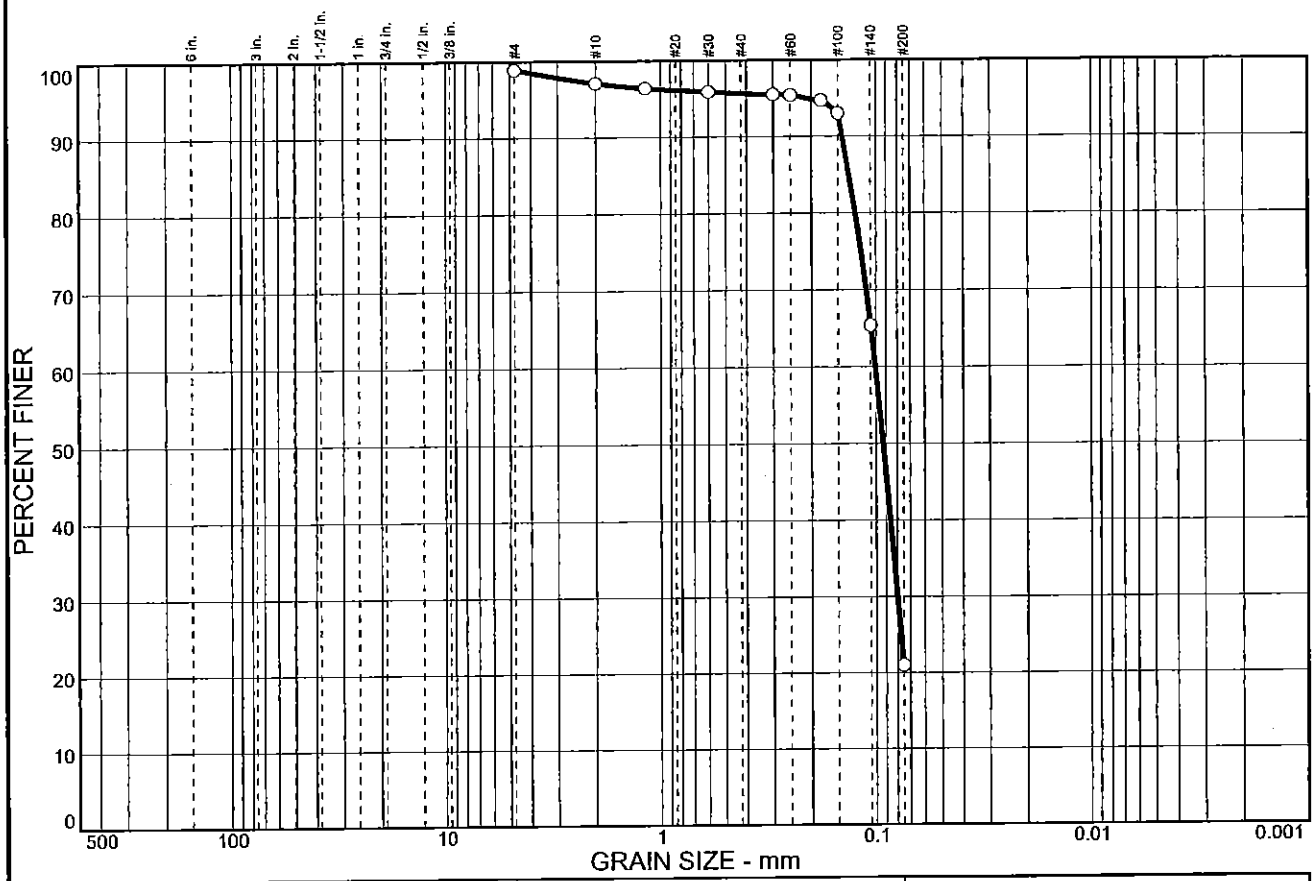
Remarks

Sample No.: 06OV-23 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 23-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.8	1.5	74.6	21.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.9		
#10	97.1		
#16	96.4		
#30	95.9		
#50	95.5		
#60	95.4		
#80	94.7		
#100	93.0		
#140	65.4		
#200	21.0		

* (no specification provided)

Soil Description

very dark gray silty sand w/shell SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.133 D_{60}= 0.101 D_{50}= 0.0929
D_{30}= 0.0800 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

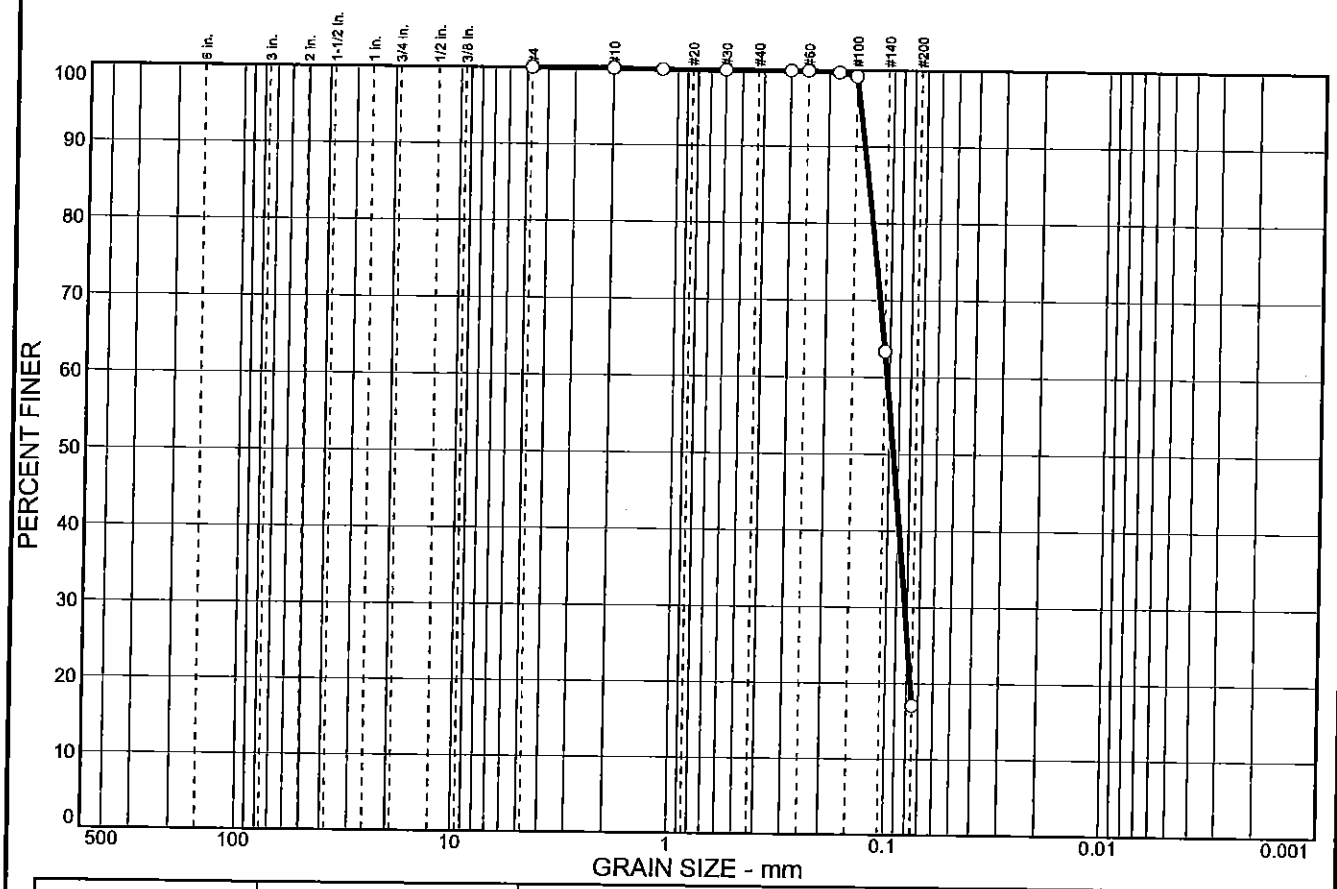
Remarks

Sample No.: 06OV-24 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 24-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.1	82.8	17.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.9		
#50	99.9		
#60	99.9		
#80	99.7		
#100	99.2		
#140	63.4		
#200	17.1		

* (no specification provided)

Soil Description

dark gray silty sand w/shell SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.129 D_{60}= 0.103 D_{50}= 0.0952
D_{30}= 0.0822 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

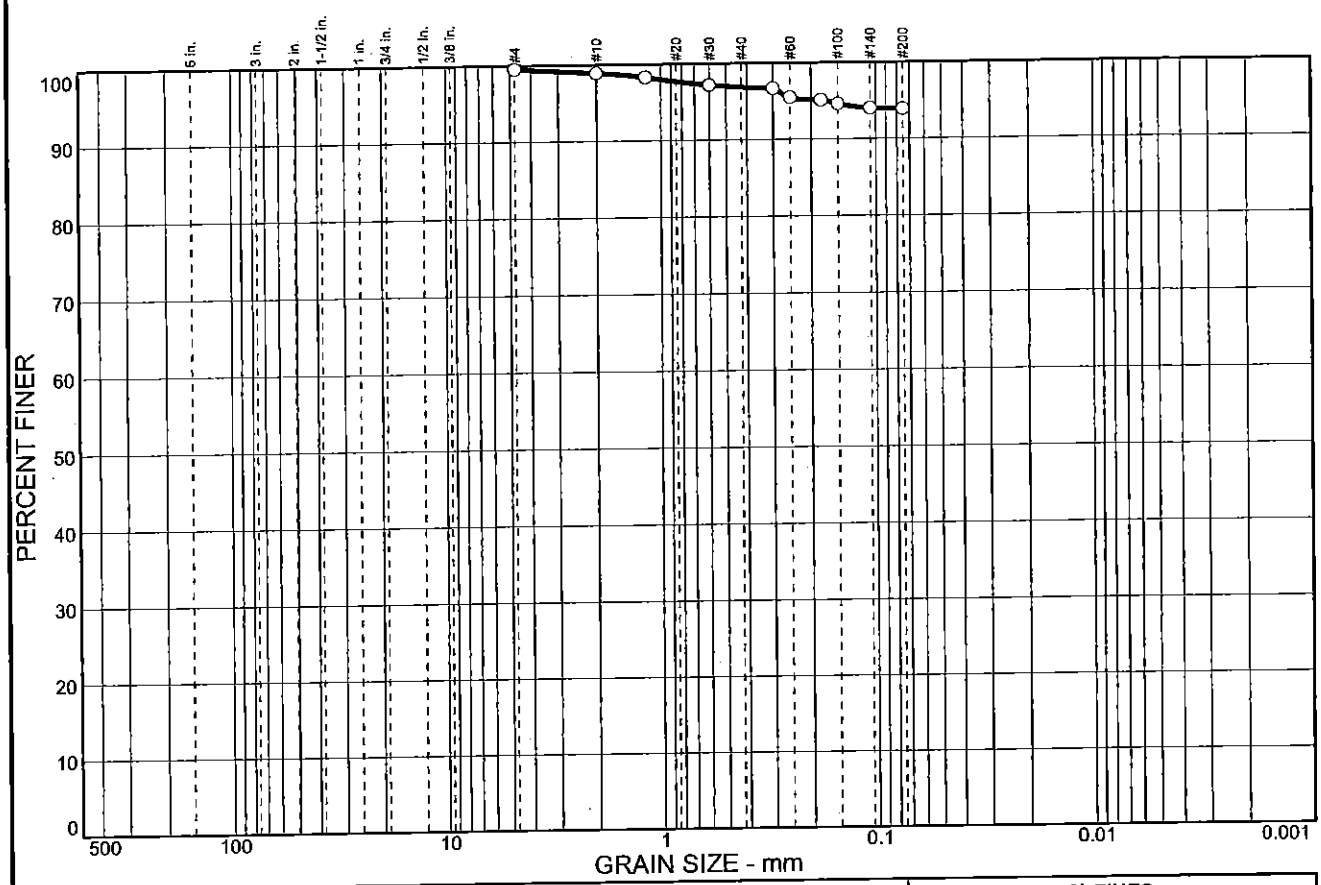
Remarks

Sample No.: 06OV-24 **Source of Sample:** **Date:** 5/22/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 24-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.6	2.0	3.0	93.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.5		
#10	98.9		
#16	98.3		
#30	97.2		
#50	96.7		
#60	95.5		
#80	95.1		
#100	94.6		
#140	94.0		
#200	93.9		

* (no specification provided)

Soil Description

dark gray clay w/ltl gr CH

Atterberg Limits

PL= LL= PI=

Coefficients

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

Classification

USCS= AASHTO=

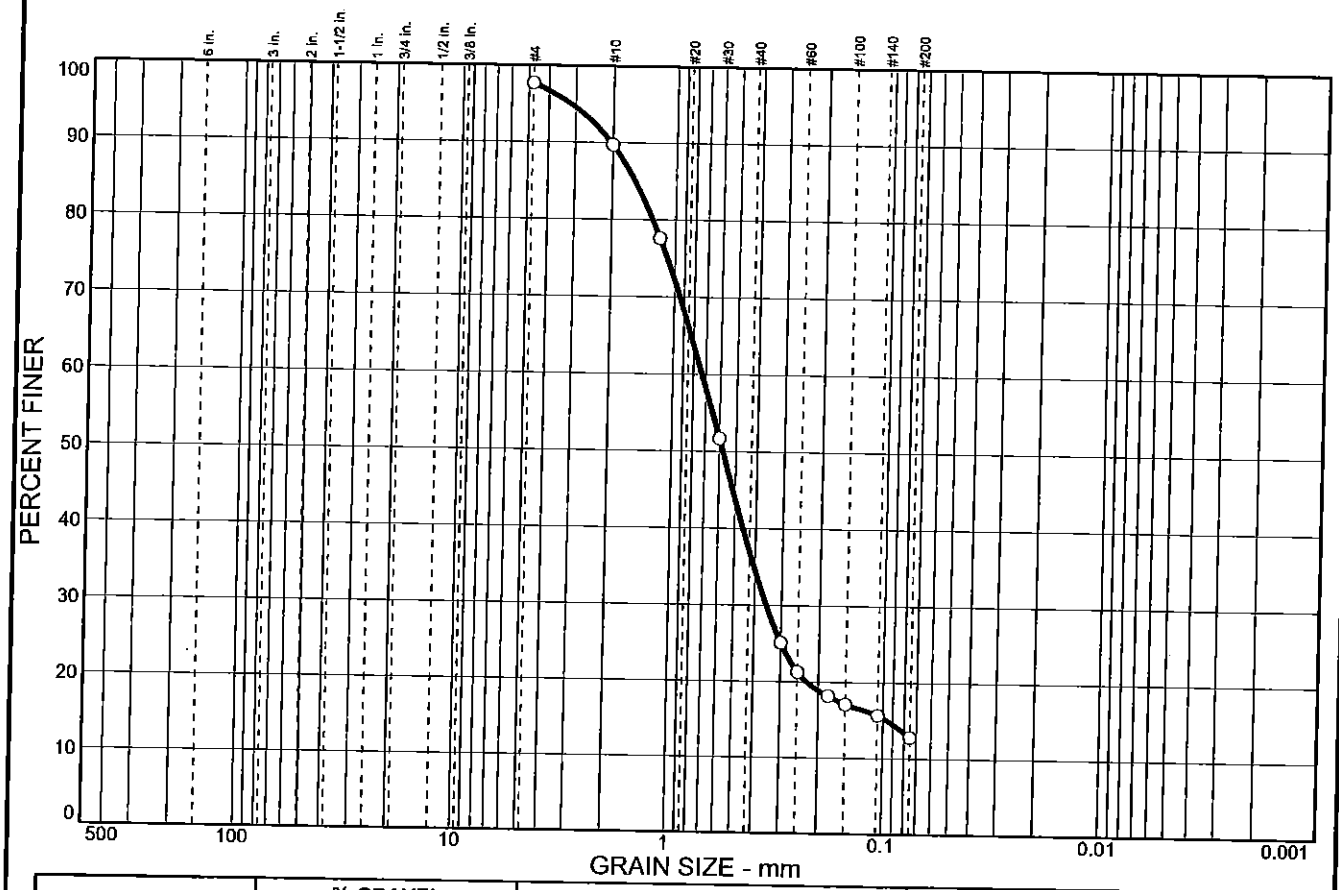
Remarks

Sample No.: 06OV-25 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 25-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			8.0	52.7	24.2	12.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	97.7		
#10	89.7		
#16	77.6		
#30	51.7		
#50	25.1		
#60	21.3		
#80	18.2		
#100	17.1		
#140	15.7		
#200	12.8		

* (no specification provided)

Soil Description

very dark gray med sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.56 D_{60}= 0.730 D_{50}= 0.577
D_{30}= 0.353 D_{15}= 0.0956 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

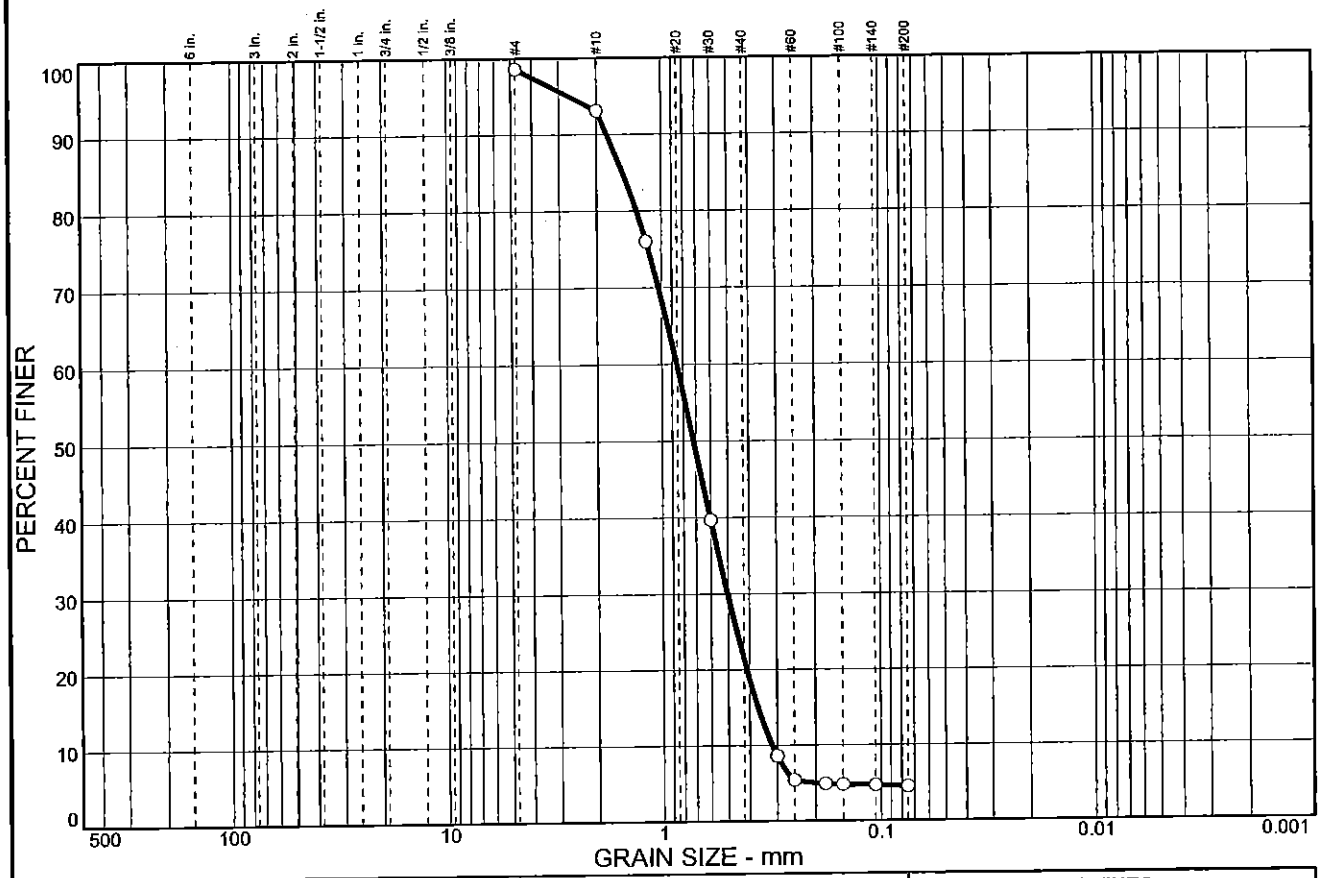
Remarks

Sample No.: 06OV-25 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 25-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			5.5	71.7	16.9	4.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.6		
#10	93.1		
#16	76.0		
#30	39.7		
#50	8.6		
#60	5.4		
#80	4.9		
#100	4.8		
#140	4.7		
#200	4.5		

* (no specification provided)

Soil Description

olive brown sand w/gravel SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.51 D_{60}= 0.855 D_{50}= 0.717
D_{30}= 0.504 D_{15}= 0.366 D_{10}= 0.316
C_u= 2.71 C_c= 0.94

Classification

USCS= AASHTO=

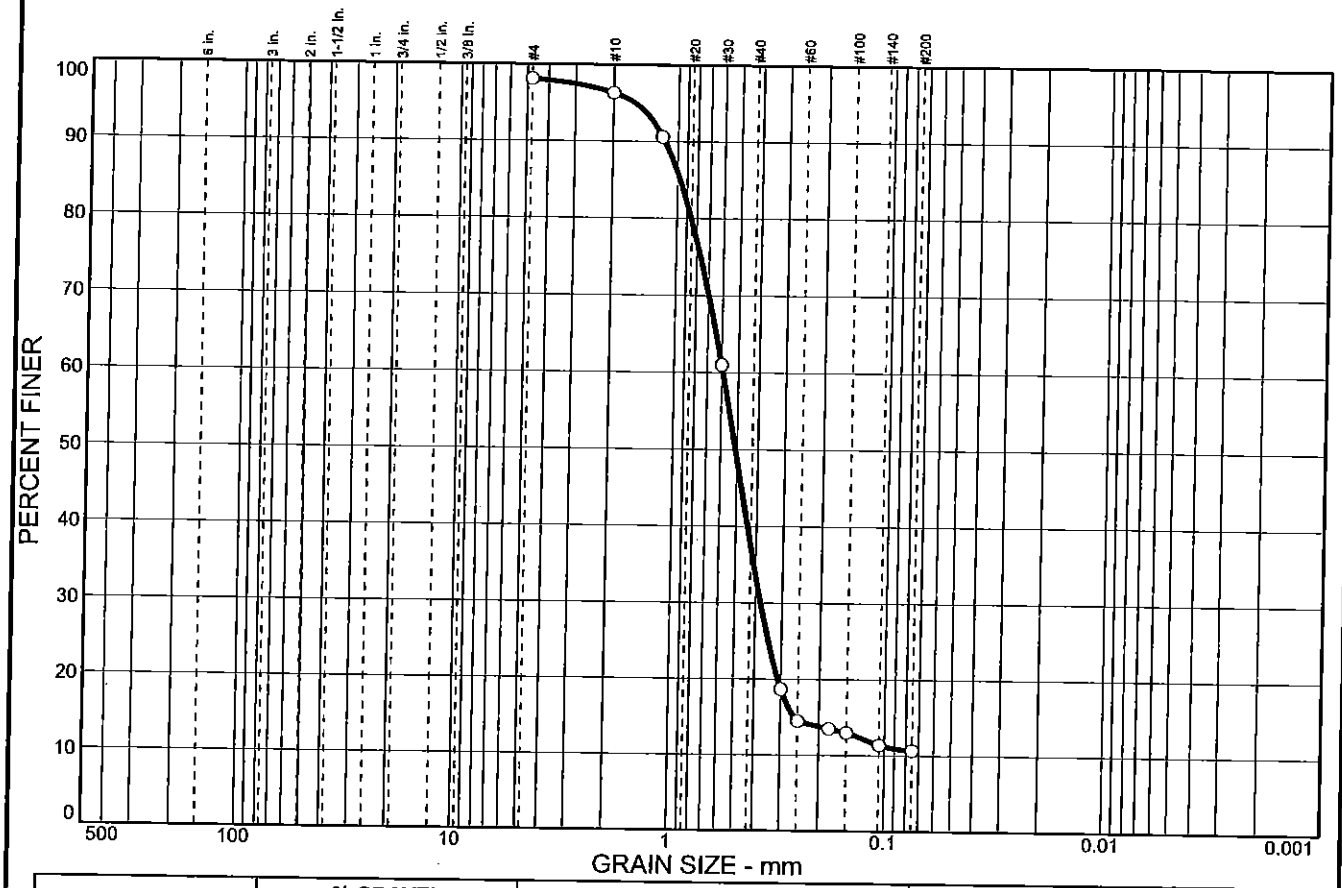
Remarks

Sample No.: 06OV-25 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 25-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.8	58.9	26.7	10.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.1		
#10	96.3		
#16	90.6		
#30	61.0		
#50	18.7		
#60	14.5		
#80	13.5		
#100	13.0		
#140	11.4		
#200	10.7		

* (no specification provided)

Soil Description

olive brown sand w/clay SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.972 D_{60}= 0.591 D_{50}= 0.510
D_{30}= 0.378 D_{15}= 0.259 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

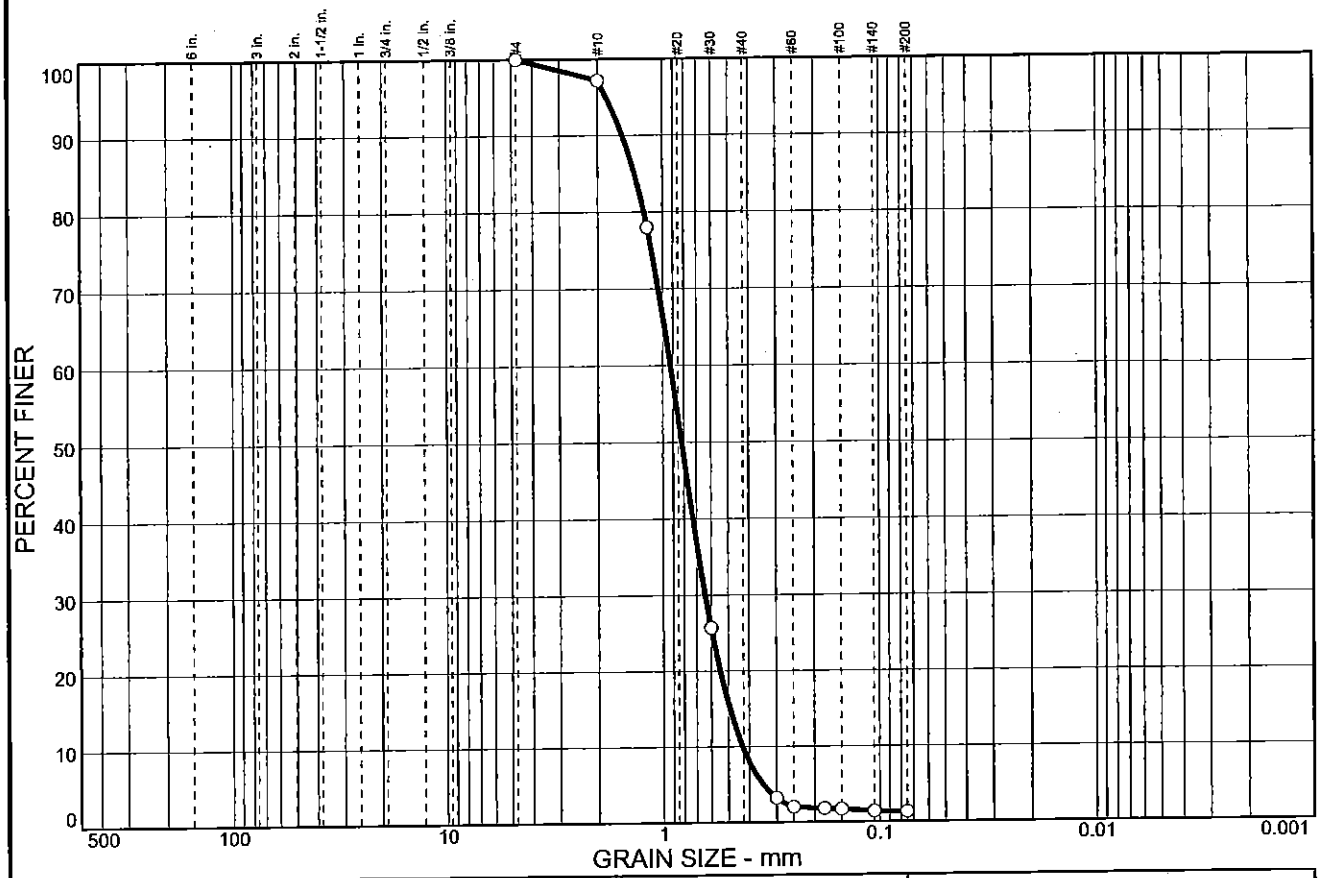
Remarks

Sample No.: 06OV-25 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 7

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 25-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	2.8	87.5	8.4	1.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	97.2		
#16	78.0		
#30	25.7		
#50	3.2		
#60	2.0		
#80	1.8		
#100	1.7		
#140	1.4		
#200	1.3		

* (no specification provided)

Soil Description

light olive brown sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.35 D_{60}= 0.923 D_{50}= 0.819
D_{30}= 0.639 D_{15}= 0.492 D_{10}= 0.429
C_u= 2.15 C_c= 1.03

Classification

USCS= AASHTO=

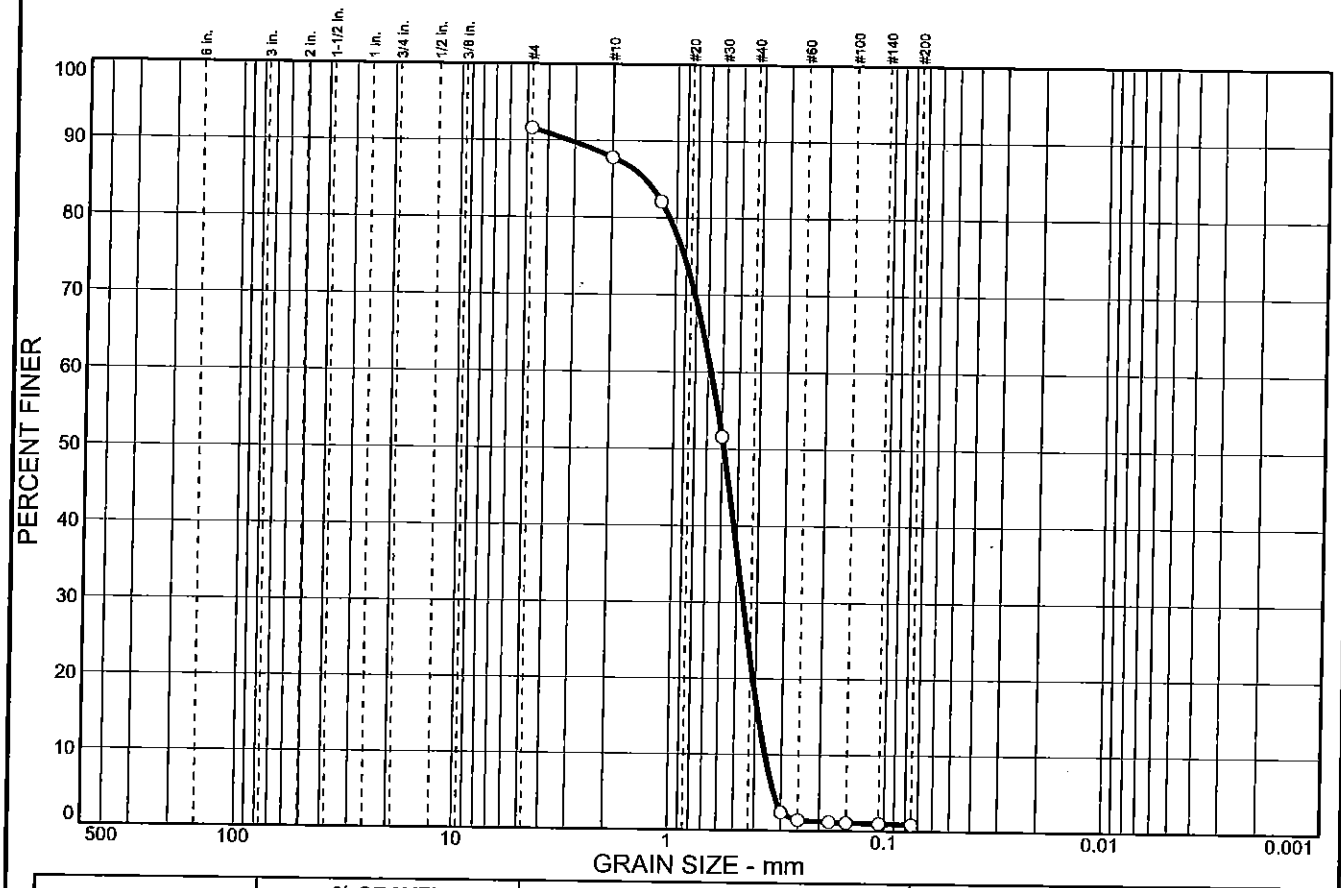
Remarks

Sample No.: 06OV-25 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 25-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			3.8	65.4	21.5	0.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	91.6		
#10	87.8		
#16	82.1		
#30	51.6		
#50	2.4		
#60	1.4		
#80	1.2		
#100	1.1		
#140	1.0		
#200	0.9		

* (no specification provided)

Soil Description

light olive brown sand w/clay, gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.41 D_{60}= 0.677 D_{50}= 0.588
D_{30}= 0.465 D_{15}= 0.387 D_{10}= 0.359
C_u= 1.89 C_c= 0.89

Classification

USCS= AASHTO=

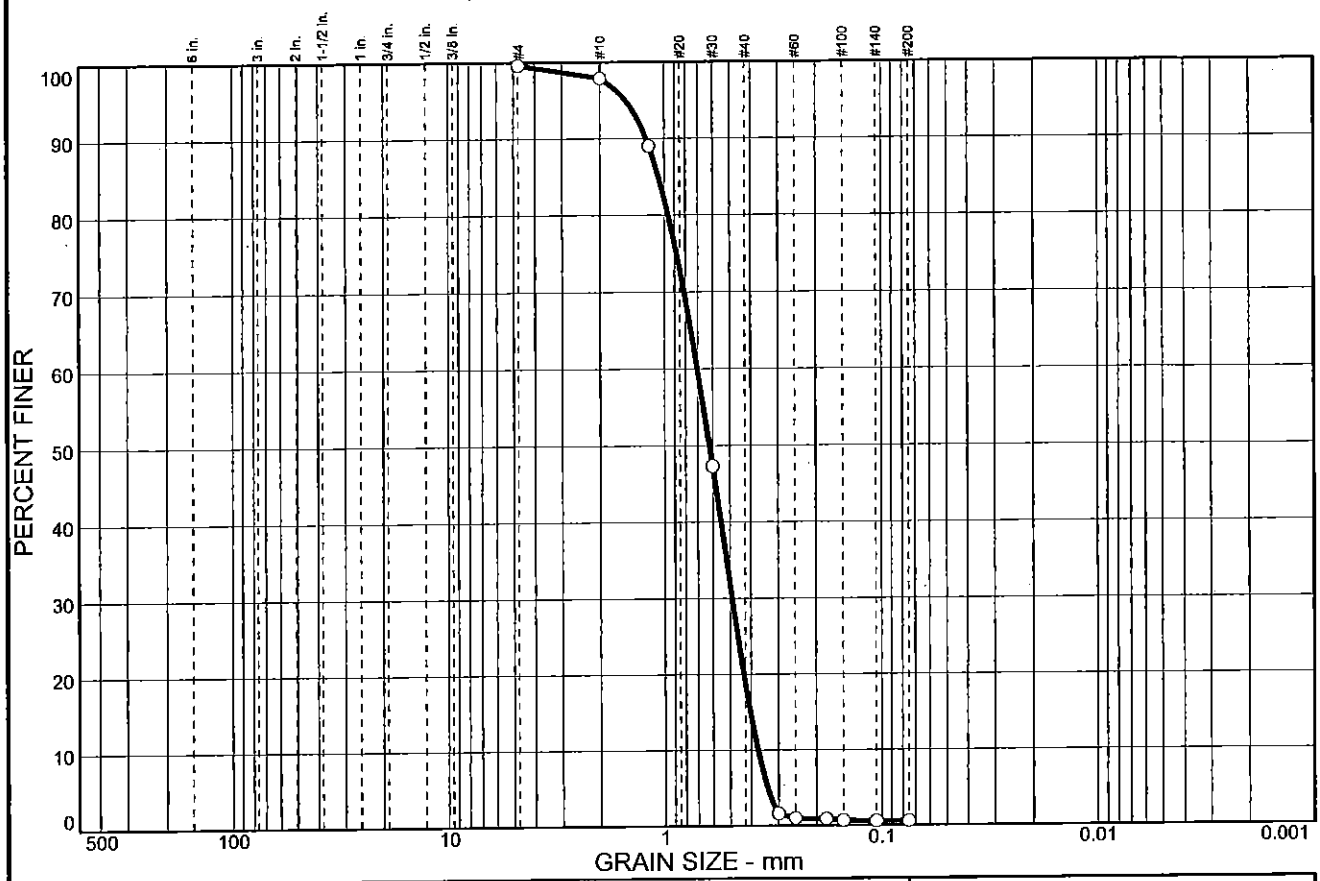
Remarks

Sample No.: 06OV-25 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 12

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 25-6

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.7	79.0	18.3	0.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	97.9		
#16	89.0		
#30	47.3		
#50	1.6		
#60	1.0		
#80	0.9		
#100	0.7		
#140	0.6		
#200	0.6		

* (no specification provided)

Soil Description

light olive brown sand w/clay

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.07 D_{60}= 0.705 D_{50}= 0.620
D_{30}= 0.489 D_{15}= 0.403 D_{10}= 0.372
C_u= 1.89 C_c= 0.91

Classification

USCS= AASHTO=

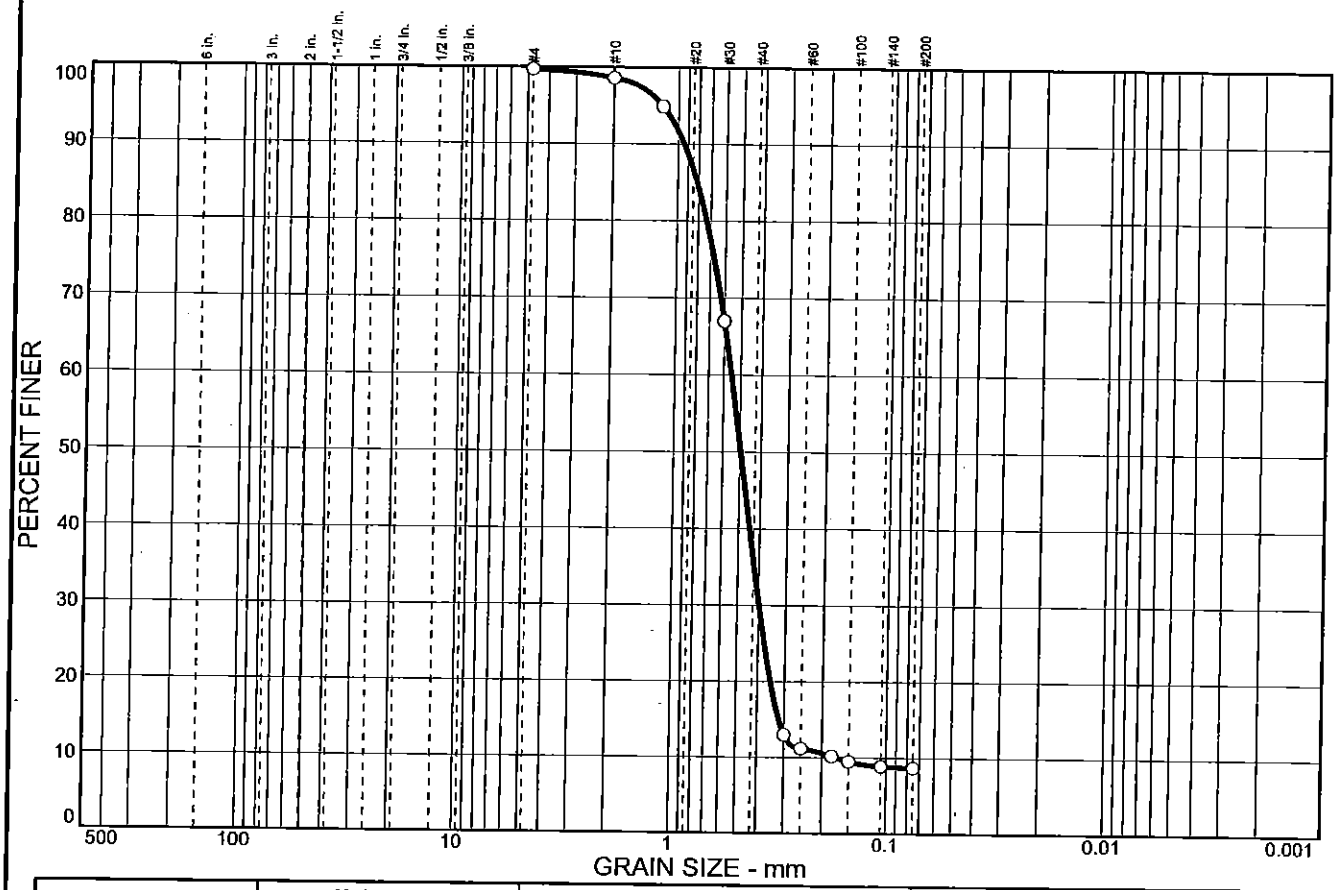
Remarks

Sample No.: 06OV-25 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 15

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 25-7

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.1	62.9	27.0	8.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.7		
#10	98.6		
#16	94.9		
#30	67.0		
#50	13.0		
#60	11.2		
#80	10.2		
#100	9.5		
#140	8.9		
#200	8.7		

* (no specification provided)

Soil Description

olive brown sand w/clay

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.814 D_{60}= 0.552 D_{50}= 0.495
D_{30}= 0.398 D_{15}= 0.318 D_{10}= 0.171
C_u= 3.22 C_c= 1.68

Classification

USCS= AASHTO=

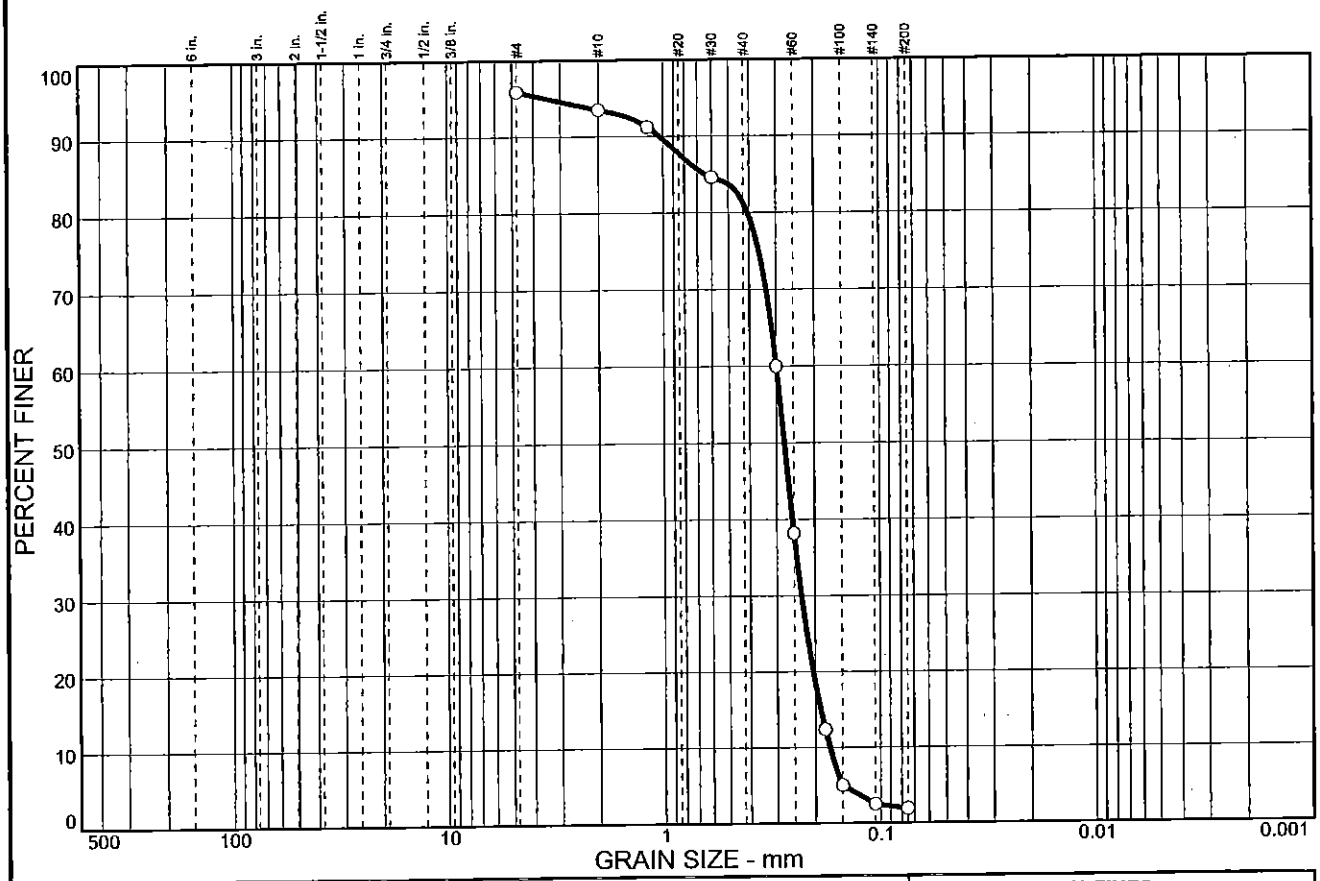
Remarks

Sample No.: 06OV-25 **Source of Sample:** **Date:** 5/16/06
Location: **Elev./Depth:** 20

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 25-8

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.4	12.3	79.3	1.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	95.9		
#10	93.5		
#16	91.2		
#30	84.6		
#50	60.0		
#60	38.2		
#80	12.4		
#100	5.0		
#140	2.5		
#200	1.9		

* (no specification provided)

Soil Description

dark grayish brown silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.641 D_{60}= 0.300 D_{50}= 0.276
D_{30}= 0.231 D_{15}= 0.189 D_{10}= 0.172
C_u= 1.75 C_c= 1.04

Classification

USCS= AASHTO=

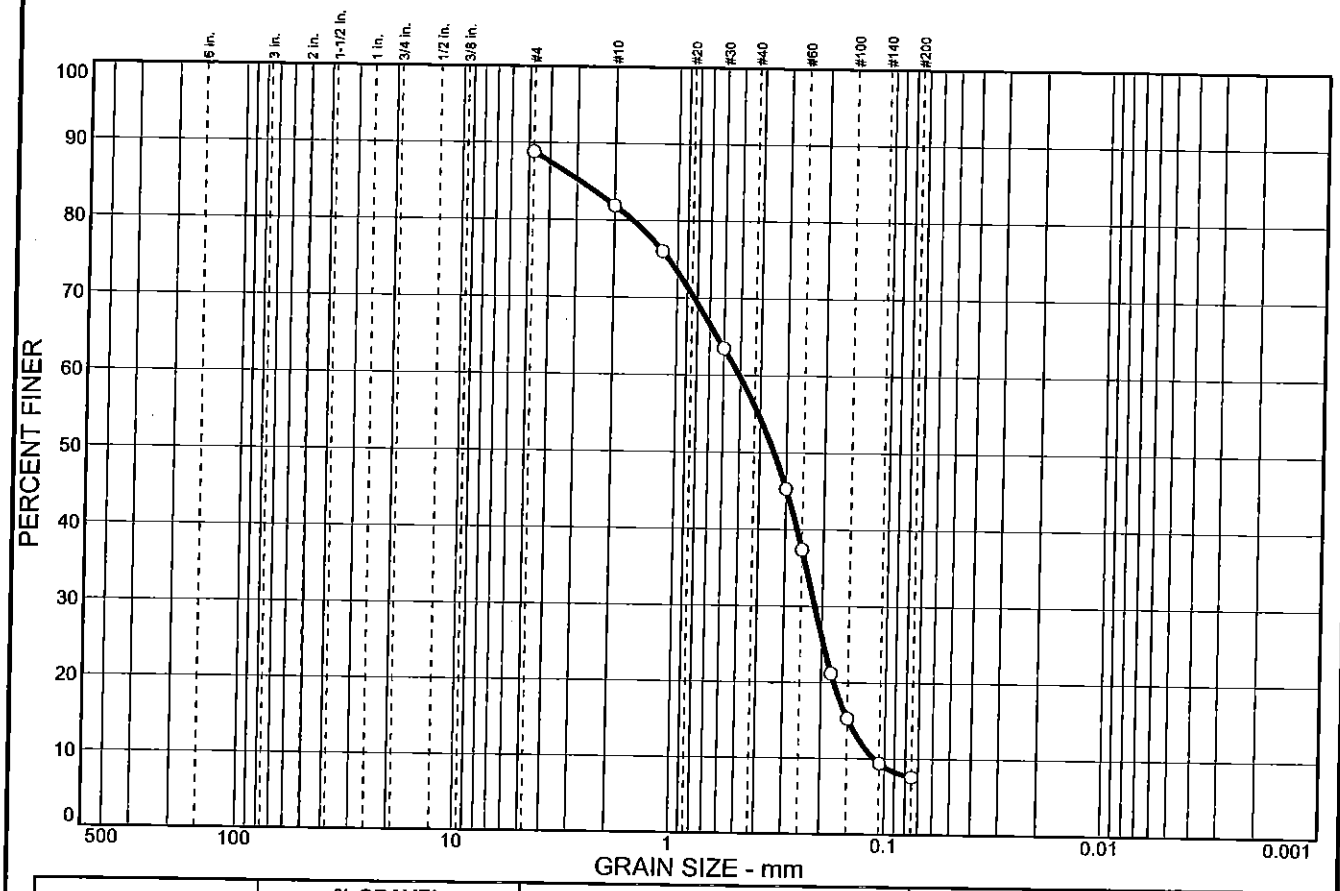
Remarks

Sample No.: 06OV-26 **Source of Sample:** **Date:** 5/24/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 26-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			6.9	25.9	48.4	7.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	88.8		
#10	81.9		
#16	76.0		
#30	63.5		
#50	45.3		
#60	37.4		
#80	21.2		
#100	15.3		
#140	9.4		
#200	7.6		

* (no specification provided)

Soil Description

gr sand w/silt SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 2.89 D_{60}= 0.506 D_{50}= 0.343
D_{30}= 0.216 D_{15}= 0.148 D_{10}= 0.112
C_u= 4.51 C_c= 0.82

Classification

USCS= AASHTO=

Remarks

Sample No.: 06OV-26 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 2-2.5

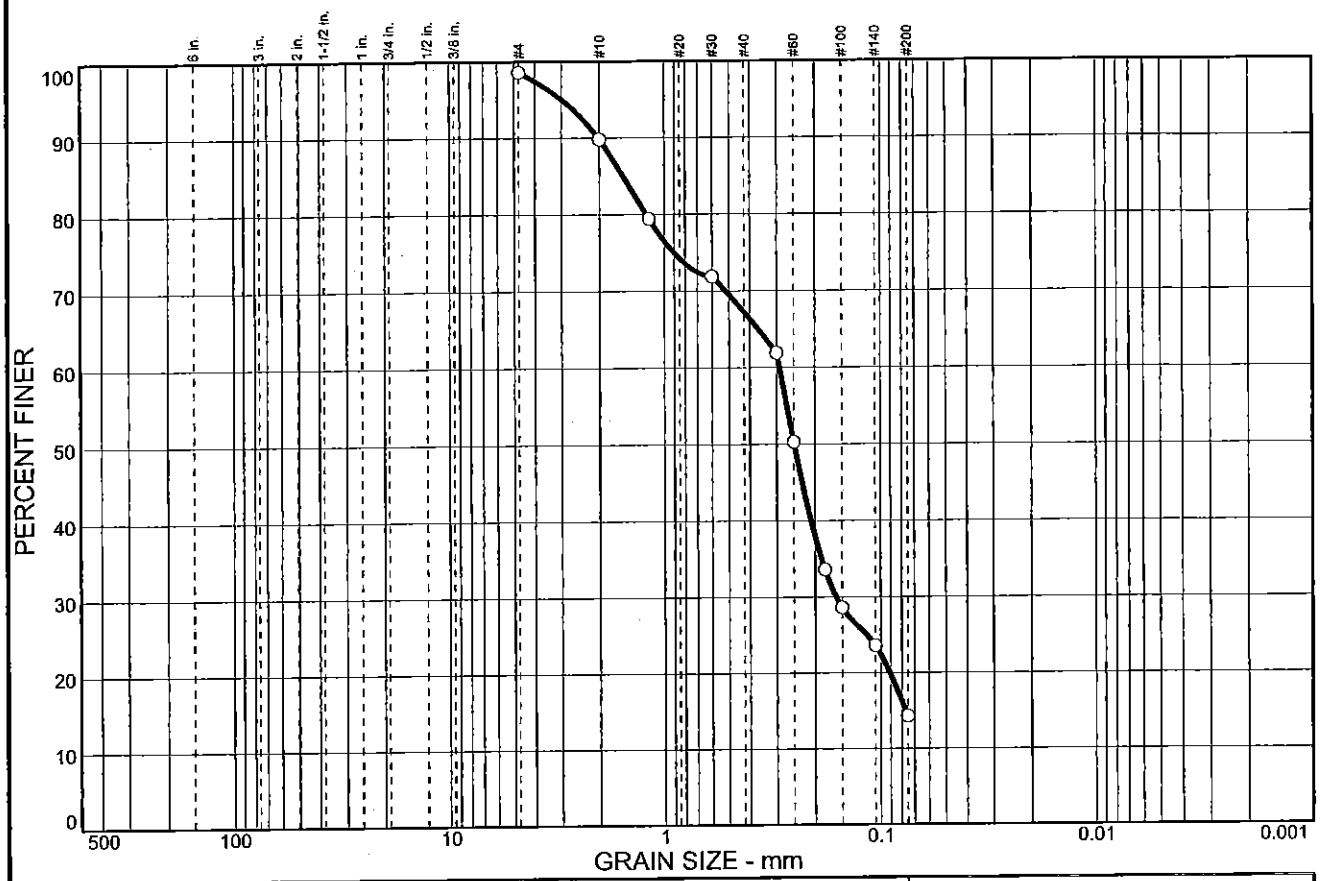
PSI

Client: Moffatt & Nichol

Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 26-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			8.8	22.6	52.9	14.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.6		
#10	89.8		
#16	79.4		
#30	71.9		
#50	61.9		
#60	50.3		
#80	33.6		
#100	28.6		
#140	23.6		
#200	14.3		

* (no specification provided)

Soil Description

black clay w/shell, sand SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.56 D_{60}= 0.291 D_{50}= 0.249
D_{30}= 0.160 D_{15}= 0.0767 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

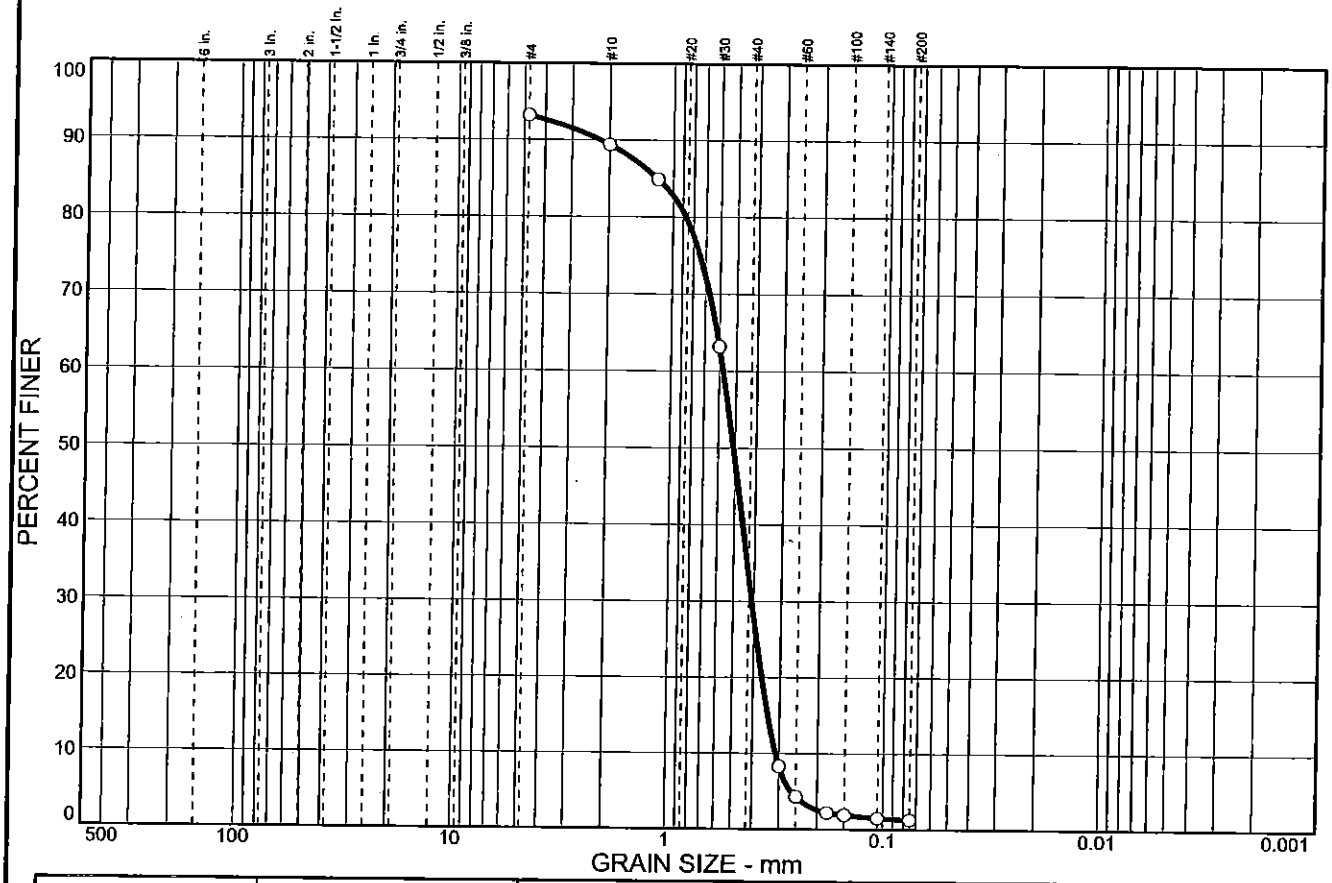
Remarks

Sample No.: 06OV-26 **Source of Sample:** **Date:** 5/23/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 26-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			3.8	56.3	31.8	1.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	93.2		
#10	89.4		
#16	84.9		
#30	63.2		
#50	8.3		
#60	4.3		
#80	2.2		
#100	1.9		
#140	1.5		
#200	1.3		

* (no specification provided)

Soil Description

light gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.19 D_{60}= 0.575 D_{50}= 0.510
D_{30}= 0.410 D_{15}= 0.340 D_{10}= 0.312
C_u= 1.84 C_c= 0.94

Classification

USCS= AASHTO=

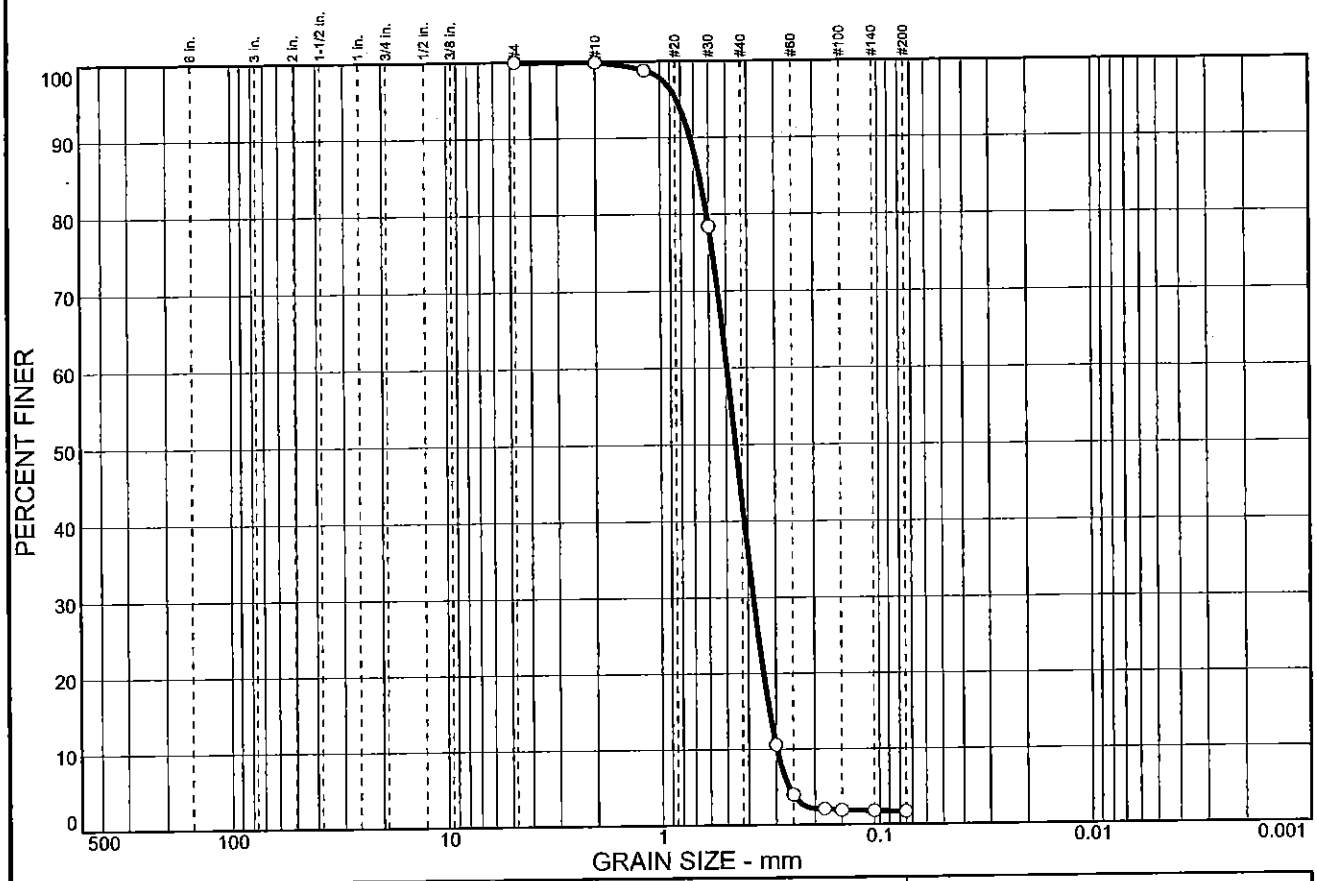
Remarks

Sample No.: 06OV-27 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 27-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	57.2	41.0	1.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	98.8		
#30	78.4		
#50	10.6		
#60	4.0		
#80	2.1		
#100	1.9		
#140	1.8		
#200	1.7		

* (no specification provided)

Soil Description

light gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.659 D_{60}= 0.496 D_{50}= 0.453
D_{30}= 0.378 D_{15}= 0.321 D_{10}= 0.297
C_u= 1.67 C_c= 0.97

Classification

USCS= AASHTO=

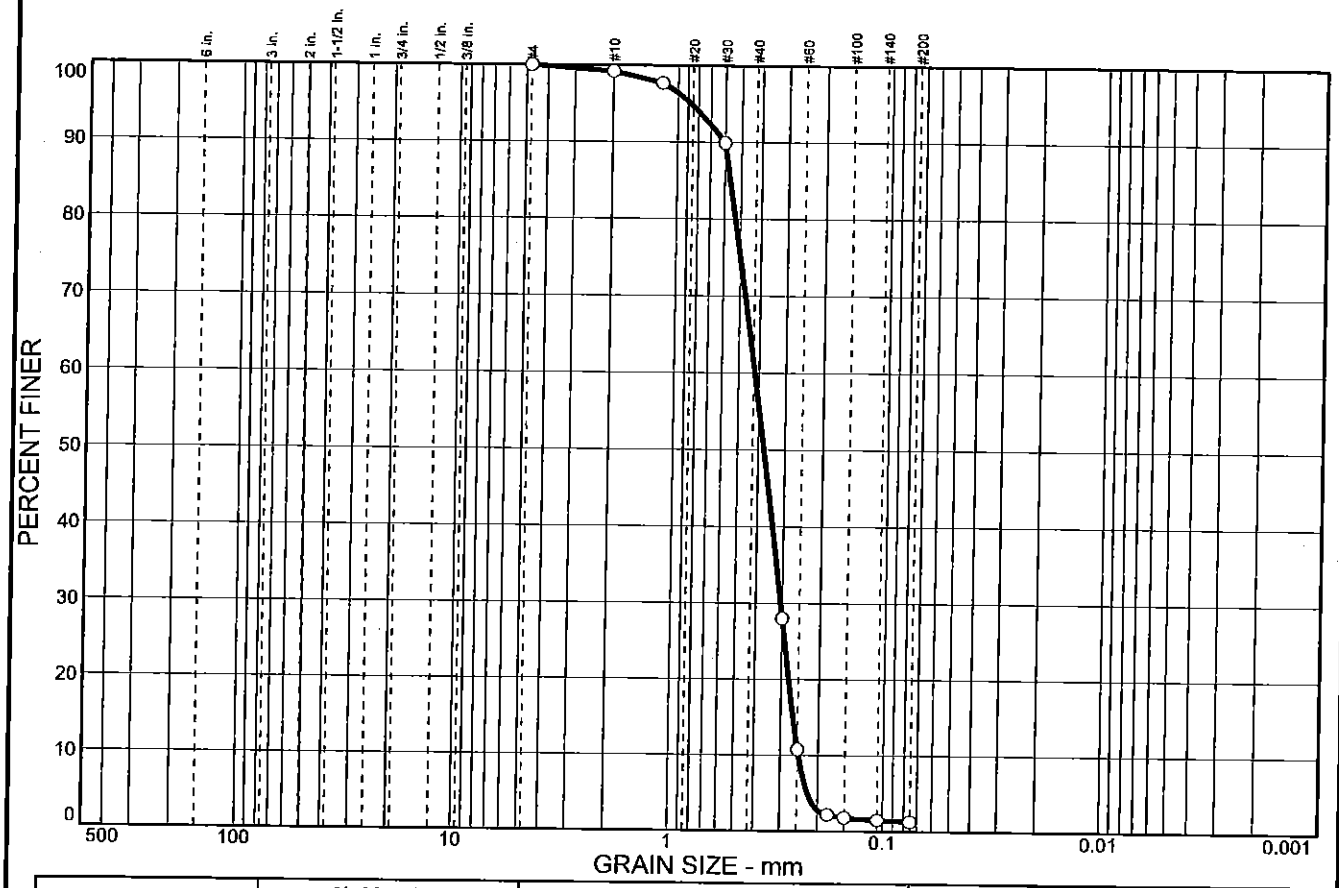
Remarks

Sample No.: 06OV-27 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 27-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.8	38.0	59.9	1.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.2		
#16	97.7		
#30	89.9		
#50	28.0		
#60	10.8		
#80	2.2		
#100	1.8		
#140	1.5		
#200	1.3		

* (no specification provided)

Soil Description

light gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.564 D_{60}= 0.419 D_{50}= 0.376
D_{30}= 0.306 D_{15}= 0.263 D_{10}= 0.247
C_u= 1.70 C_c= 0.90

Classification

USCS= AASHTO=

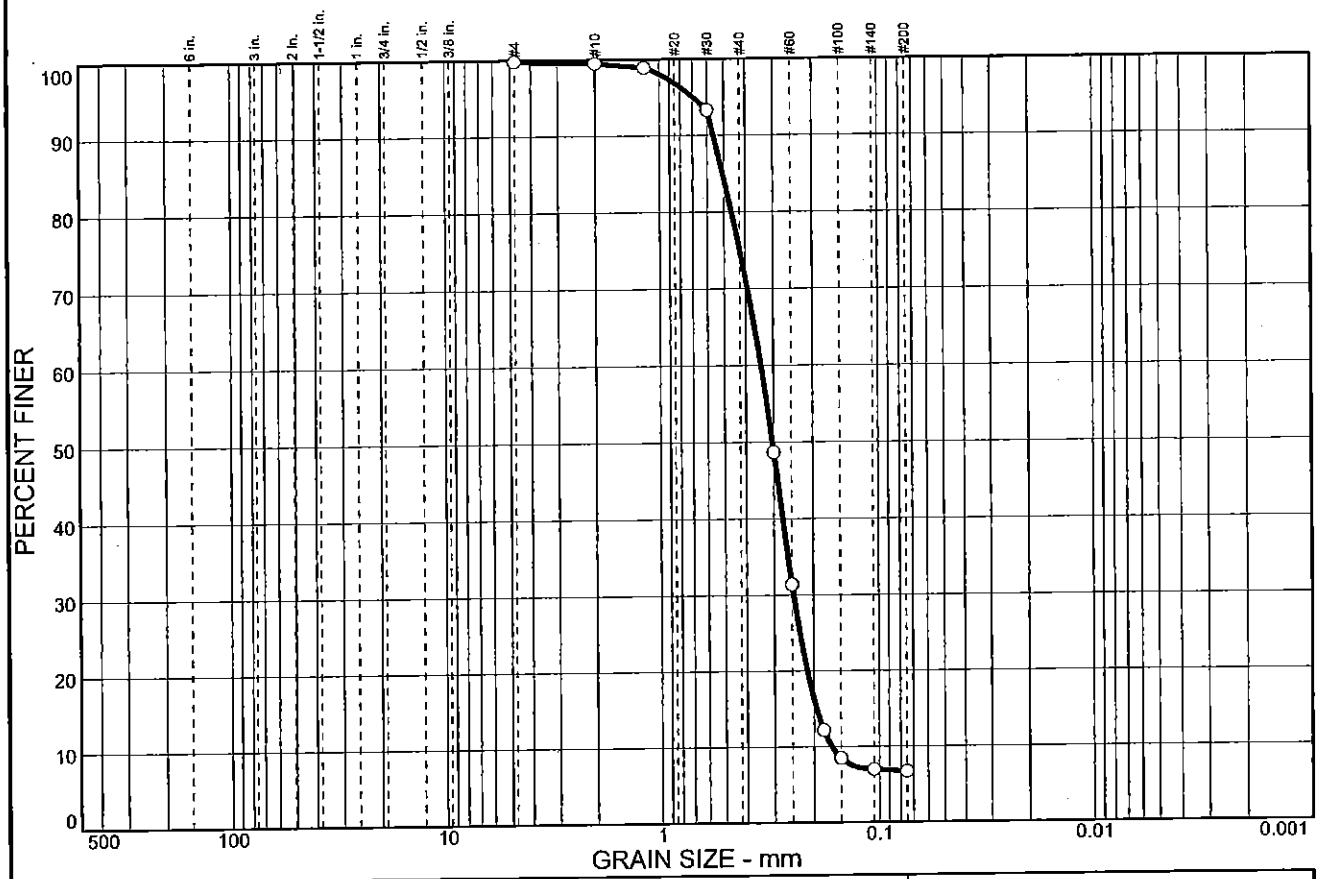
Remarks

Sample No.: 06OV-27 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 27-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.3	24.5	68.3	6.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.5		
#16	98.9		
#30	93.3		
#50	48.7		
#60	31.4		
#80	12.2		
#100	8.5		
#140	7.0		
#200	6.7		

* (no specification provided)

Soil Description

light gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.507 D_{60}= 0.342 D_{50}= 0.304
D_{30}= 0.246 D_{15}= 0.194 D_{10}= 0.165
C_u= 2.07 C_c= 1.07

Classification

USCS= AASHTO=

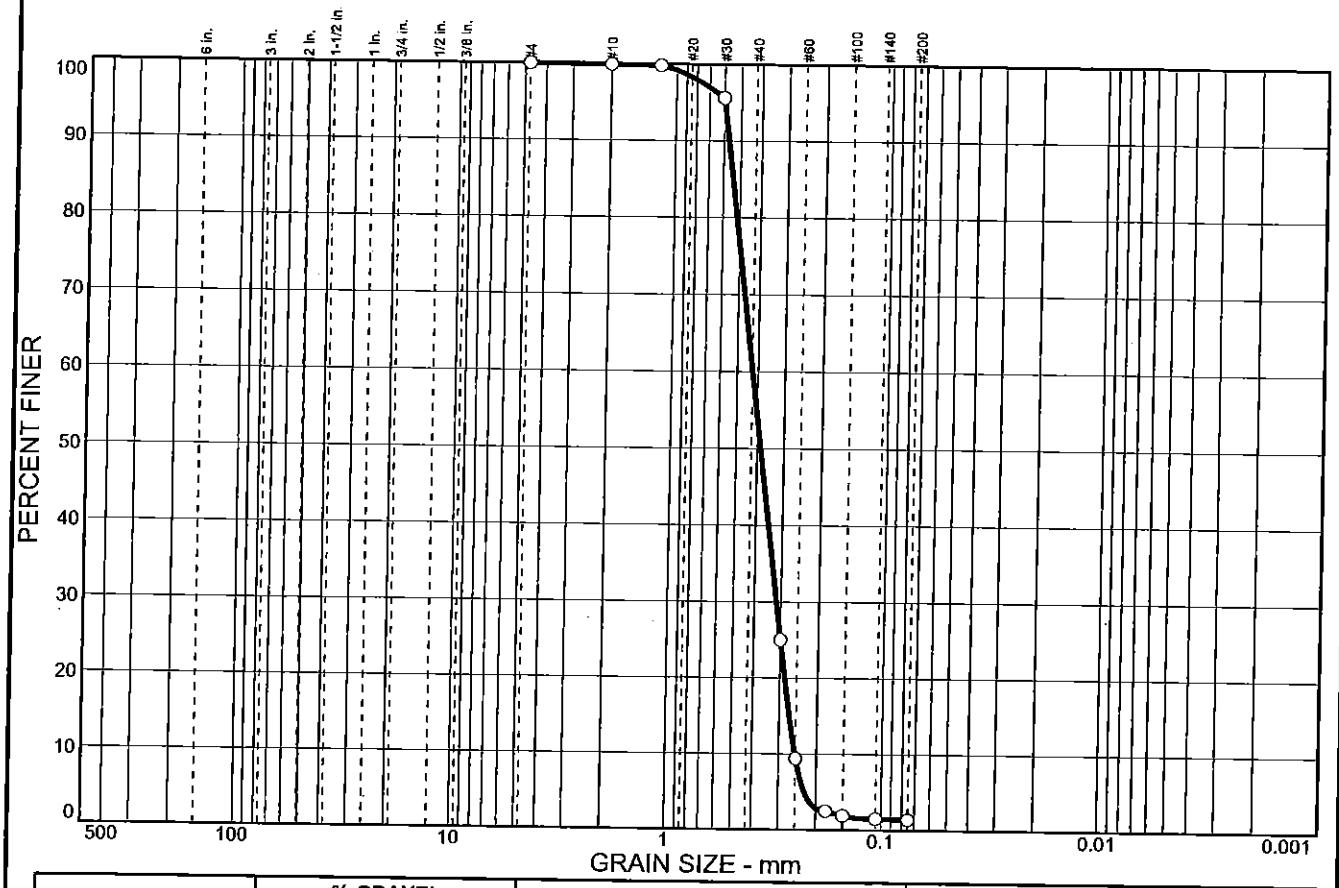
Remarks

Sample No.: 06OV-27 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 27-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	39.7	58.8	1.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.8		
#30	95.6		
#50	25.0		
#60	9.4		
#80	2.5		
#100	1.9		
#140	1.5		
#200	1.4		

* (no specification provided)

Soil Description

light gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.541 D_{60}= 0.424 D_{50}= 0.385
D_{30}= 0.316 D_{15}= 0.270 D_{10}= 0.252
C_u= 1.68 C_c= 0.93

Classification

USCS= AASHTO=

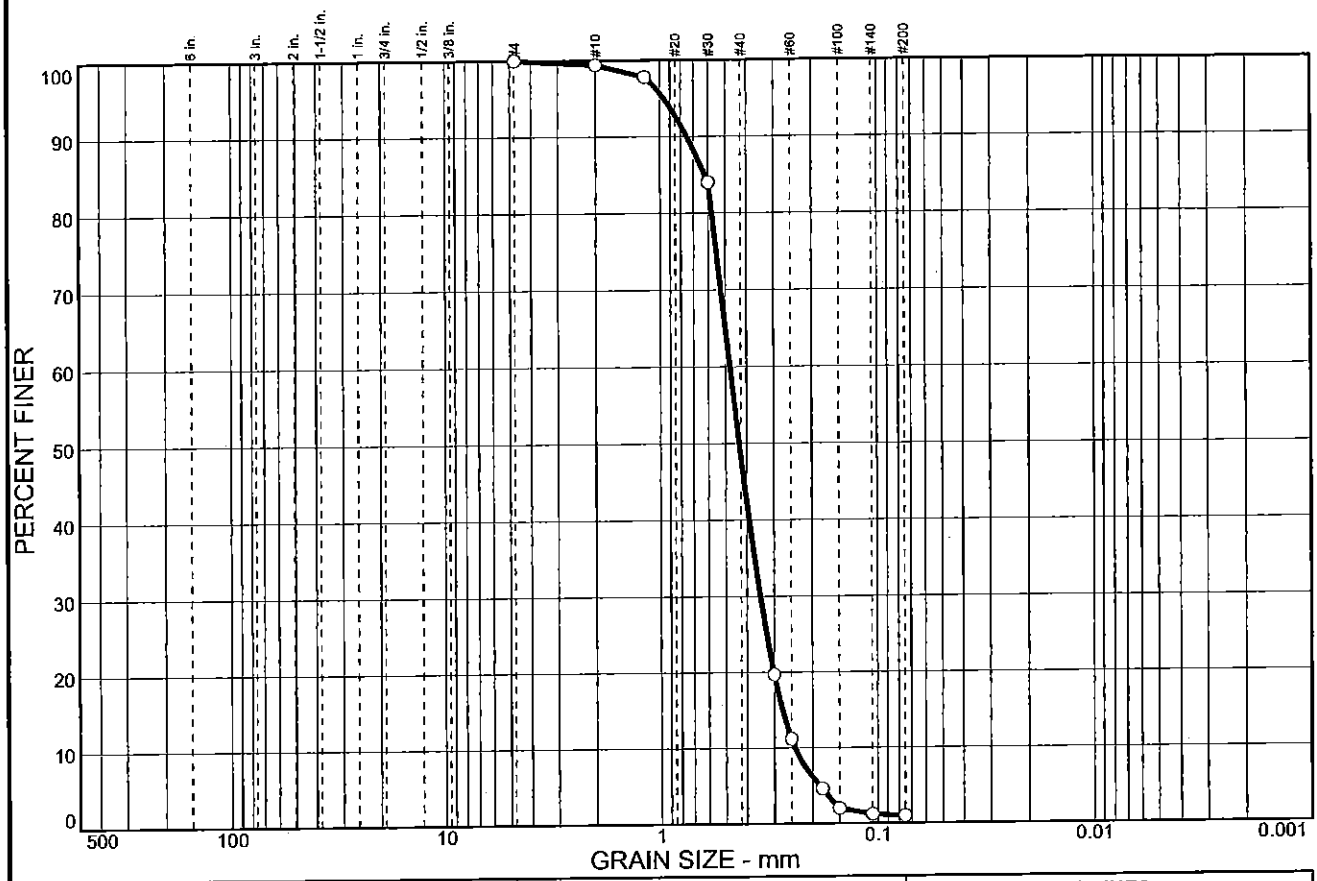
Remarks

Sample No.: 06OV-27 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 15

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 27-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.6	51.2	47.2	1.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.4		
#16	97.8		
#30	84.0		
#50	19.7		
#60	11.2		
#80	4.6		
#100	2.0		
#140	1.2		
#200	1.0		

* (no specification provided)

Soil Description

light gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.621 D_{60}= 0.477 D_{50}= 0.433
D_{30}= 0.347 D_{15}= 0.275 D_{10}= 0.241
C_u= 1.98 C_c= 1.05

Classification

USCS= AASHTO=

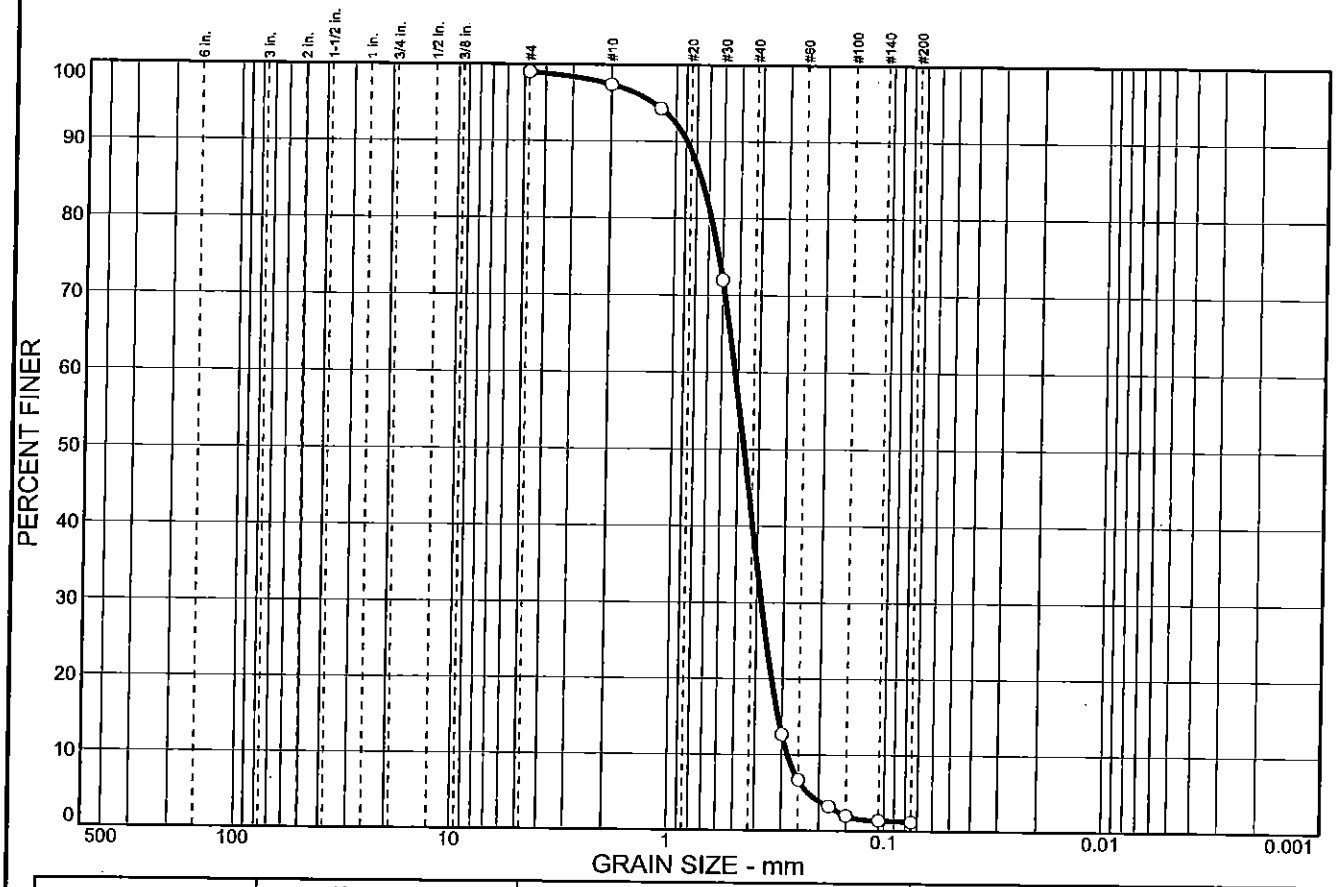
Remarks

Sample No.: 06OV-27 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 19

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 27-6

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.6	56.9	39.3	1.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.0		
#10	97.4		
#16	94.3		
#30	72.0		
#50	12.7		
#60	6.7		
#80	3.2		
#100	2.0		
#140	1.4		
#200	1.2		

* (no specification provided)

Soil Description

tn crs sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.758 D_{60}= 0.520 D_{50}= 0.468
D_{30}= 0.380 D_{15}= 0.313 D_{10}= 0.282
C_u= 1.84 C_c= 0.99

Classification

USCS= AASHTO=

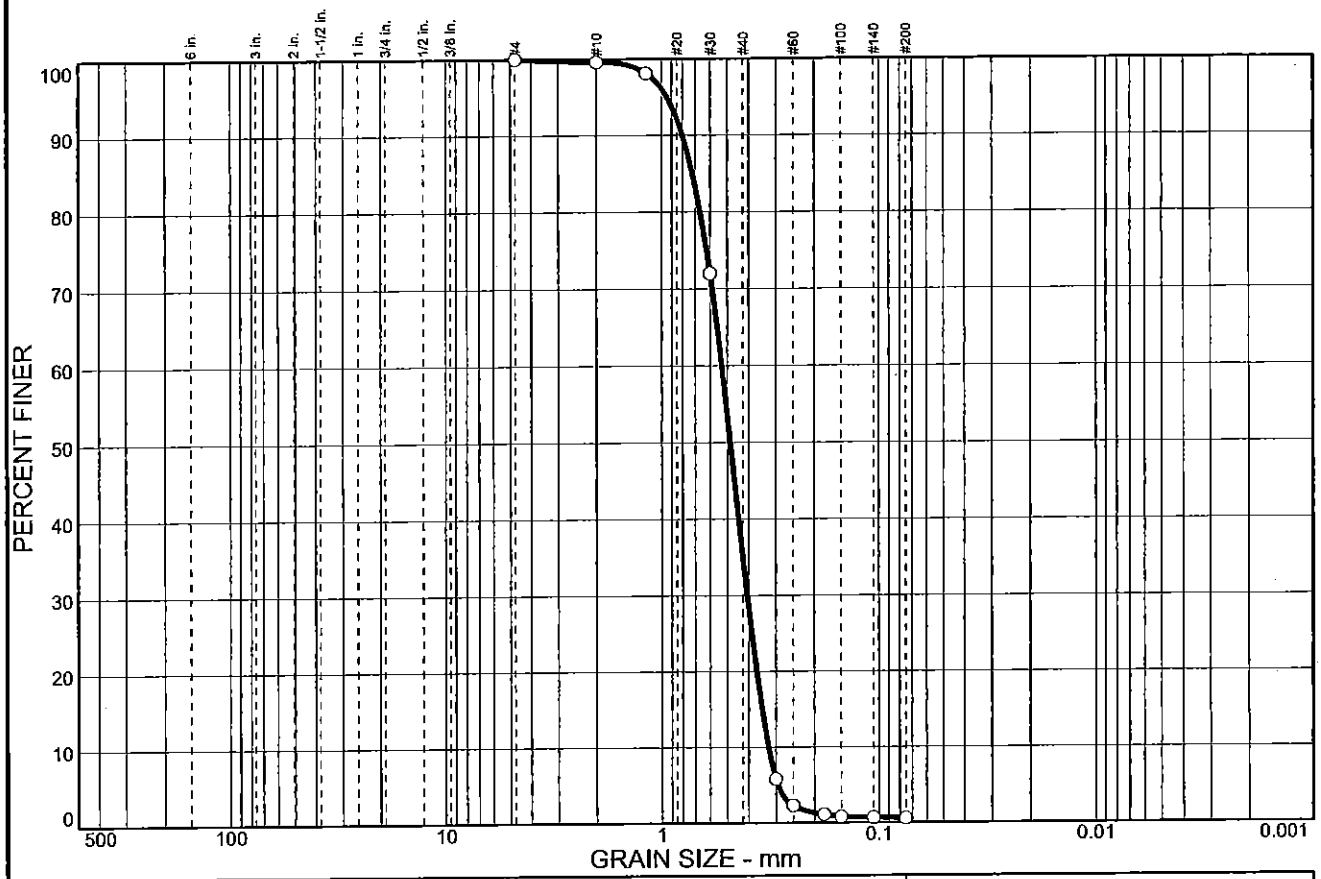
Remarks

Sample No.: 06OV-28 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 28-I

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	64.6	34.4	0.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.6		
#16	98.1		
#30	72.0		
#50	5.8		
#60	2.3		
#80	1.1		
#100	0.8		
#140	0.7		
#200	0.6		

* (no specification provided)

Soil Description

tn crs sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.721 D_{60}= 0.531 D_{50}= 0.485
D_{30}= 0.406 D_{15}= 0.347 D_{10}= 0.325
C_u= 1.64 C_c= 0.96

Classification

USCS= AASHTO=

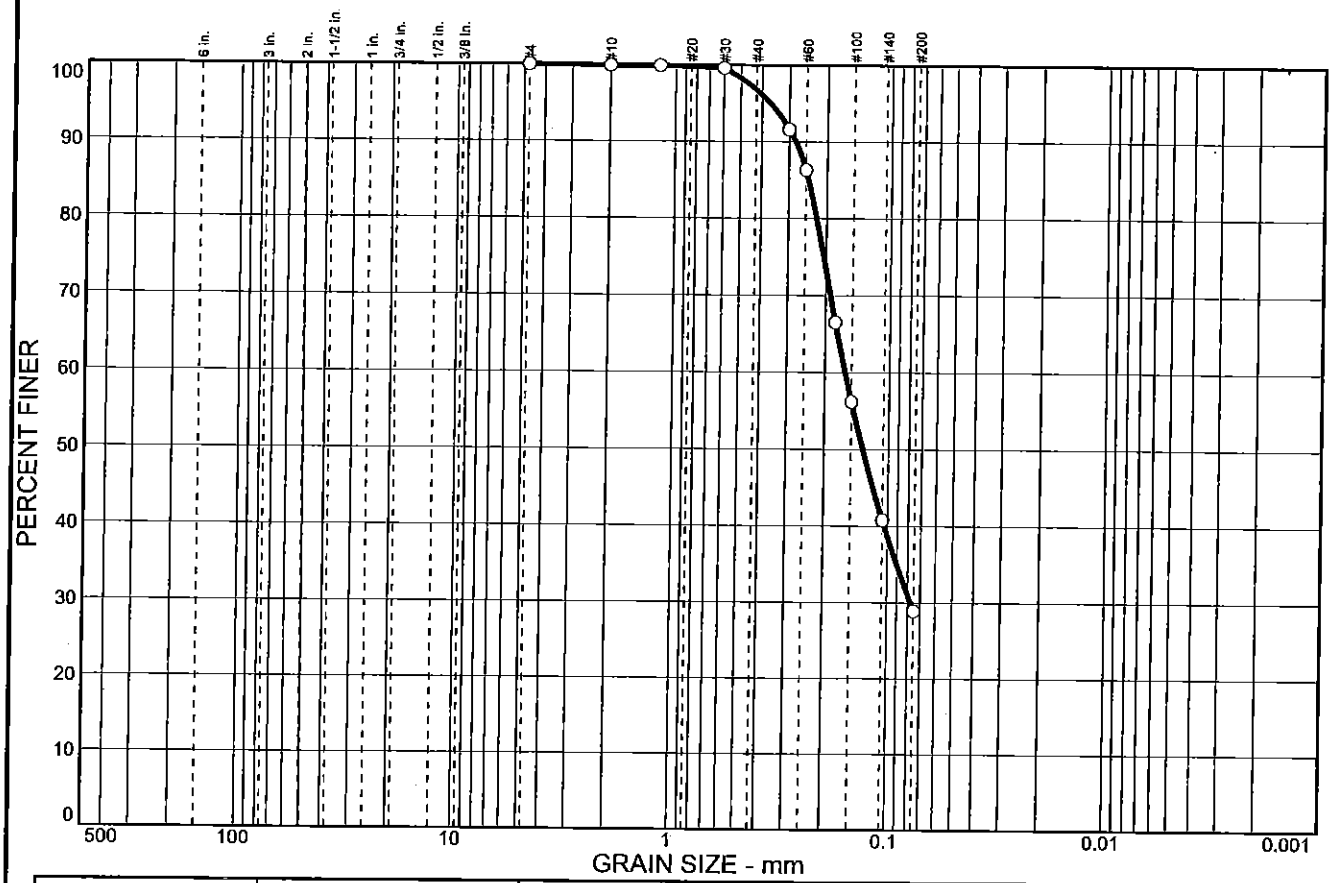
Remarks

Sample No.: 06OV-28 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 28-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	3.1	67.9	28.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.6		
#50	91.6		
#60	86.3		
#80	66.5		
#100	56.2		
#140	40.8		
#200	28.9		

* (no specification provided)

Soil Description

light gray sand w/cl SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.243 D_{60}= 0.161 D_{50}= 0.132
D_{30}= 0.0776 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

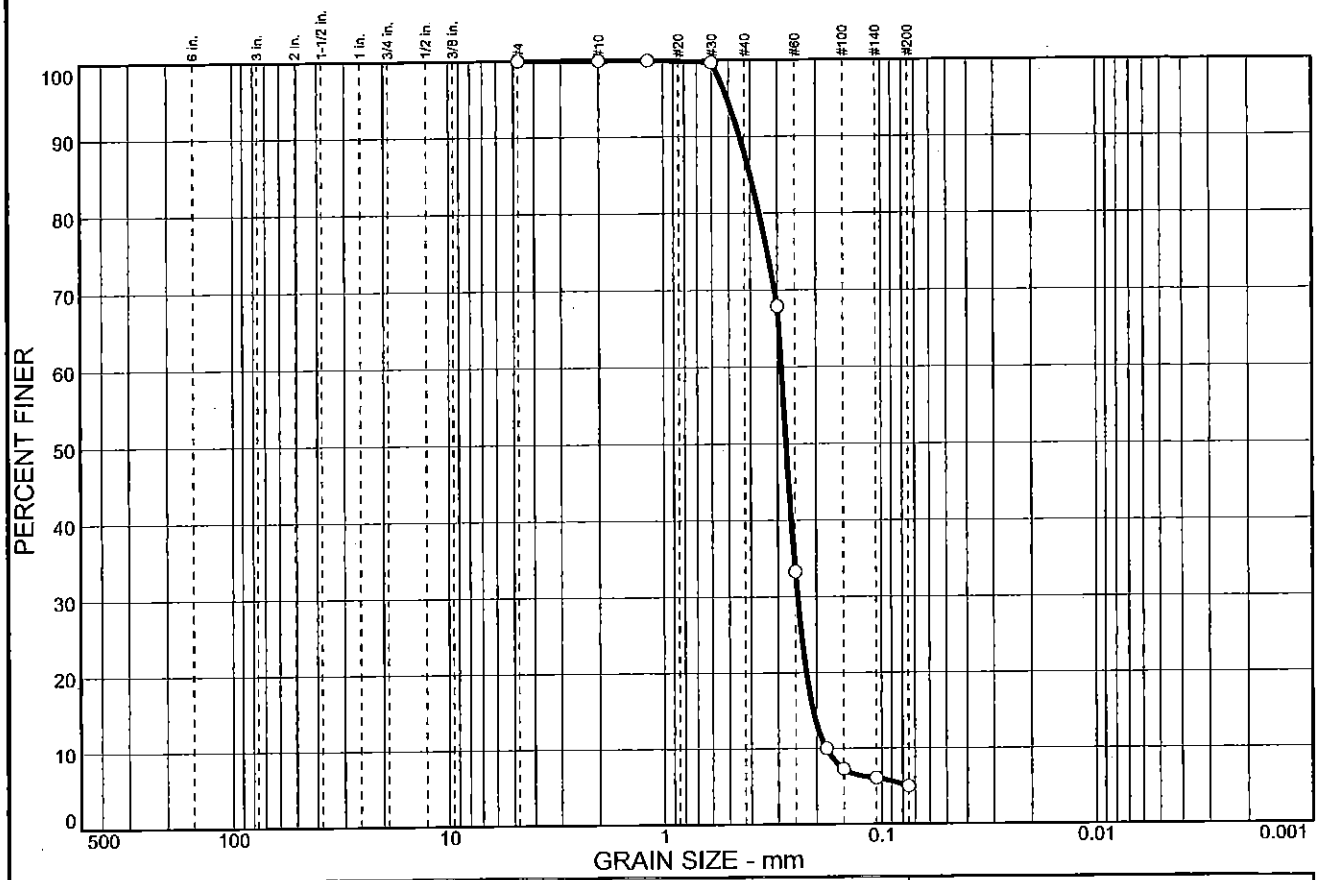
Sample No.: 06OV-28 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 28-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	12.1	82.9	5.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.7		
#50	67.9		
#60	33.3		
#80	10.0		
#100	7.3		
#140	6.1		
#200	5.0		

* (no specification provided)

Soil Description

light gray sand SM-SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.400 D_{60}= 0.289 D_{50}= 0.275
D_{30}= 0.244 D_{15}= 0.207 D_{10}= 0.180
C_u= 1.60 C_c= 1.15

Classification

USCS= AASHTO=

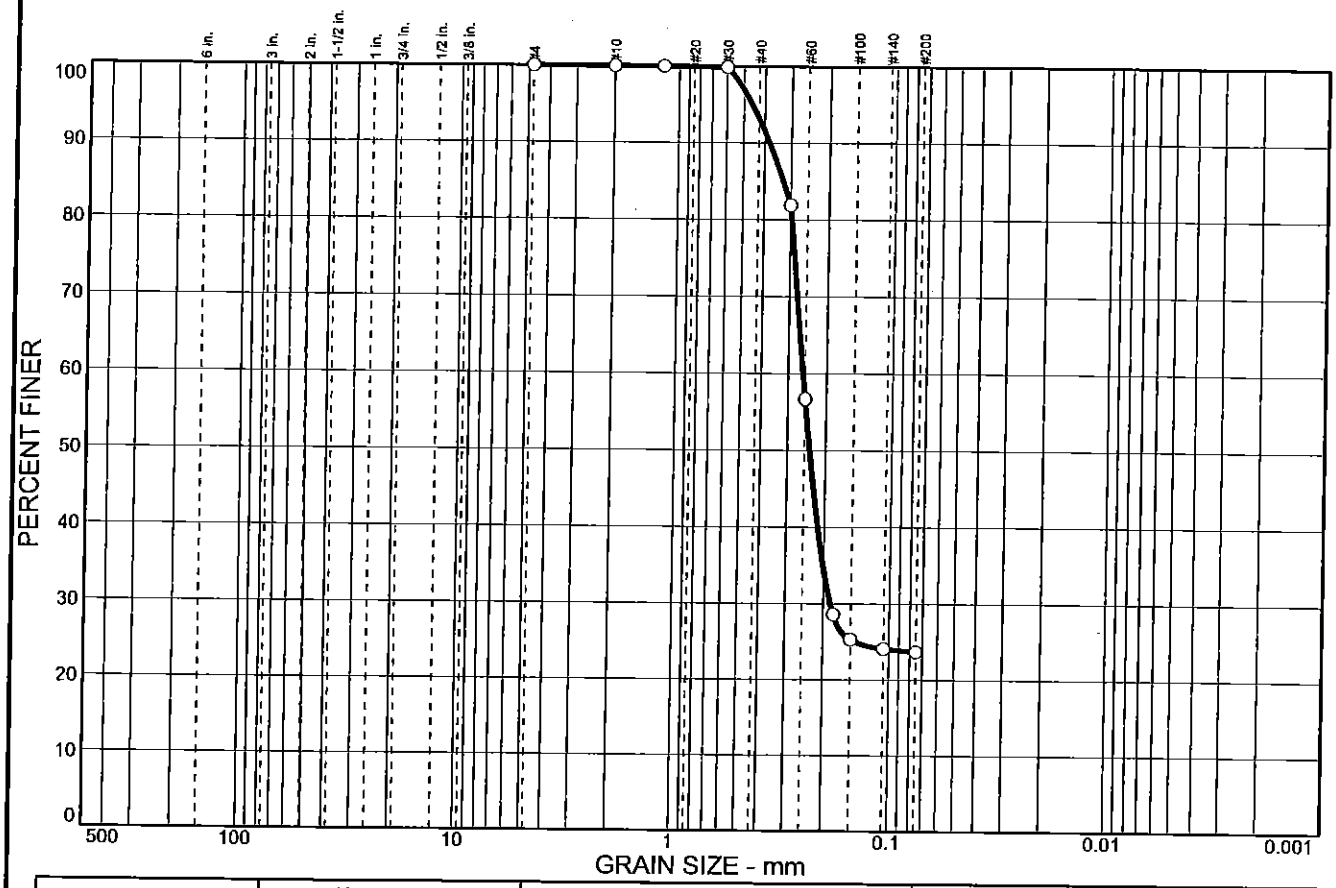
Remarks

Sample No.: 06OV-28 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 28-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	6.8	69.5	23.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#50	81.9		
#60	56.7		
#80	28.6		
#100	25.3		
#140	24.1		
#200	23.7		

* (no specification provided)

Soil Description

gray fine sand SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.326 D_{60}= 0.256 D_{50}= 0.236
D_{30}= 0.186 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

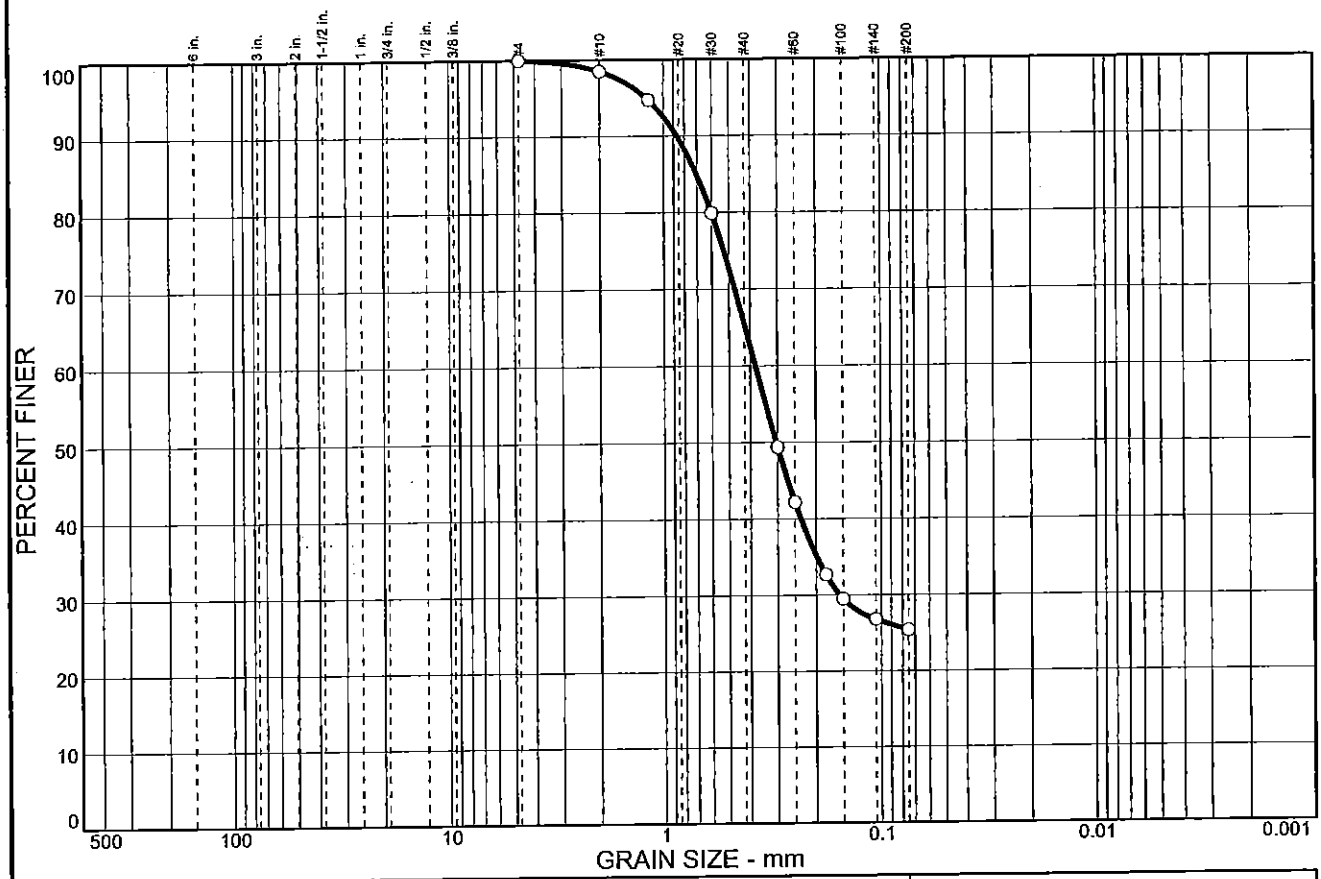
Remarks

Sample No.: 06OV-28 **Source of Sample:** **Date:** 5/30/06
Location: **Elev./Depth:** 18

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 28-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.5	33.2	39.9	25.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.5		
#16	94.7		
#30	79.9		
#50	49.4		
#60	42.2		
#80	32.7		
#100	29.5		
#140	26.8		
#200	25.4		

* (no specification provided)

Soil Description

black sandy clay CH

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.704 D_{60}= 0.379 D_{50}= 0.304
D_{30}= 0.155 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

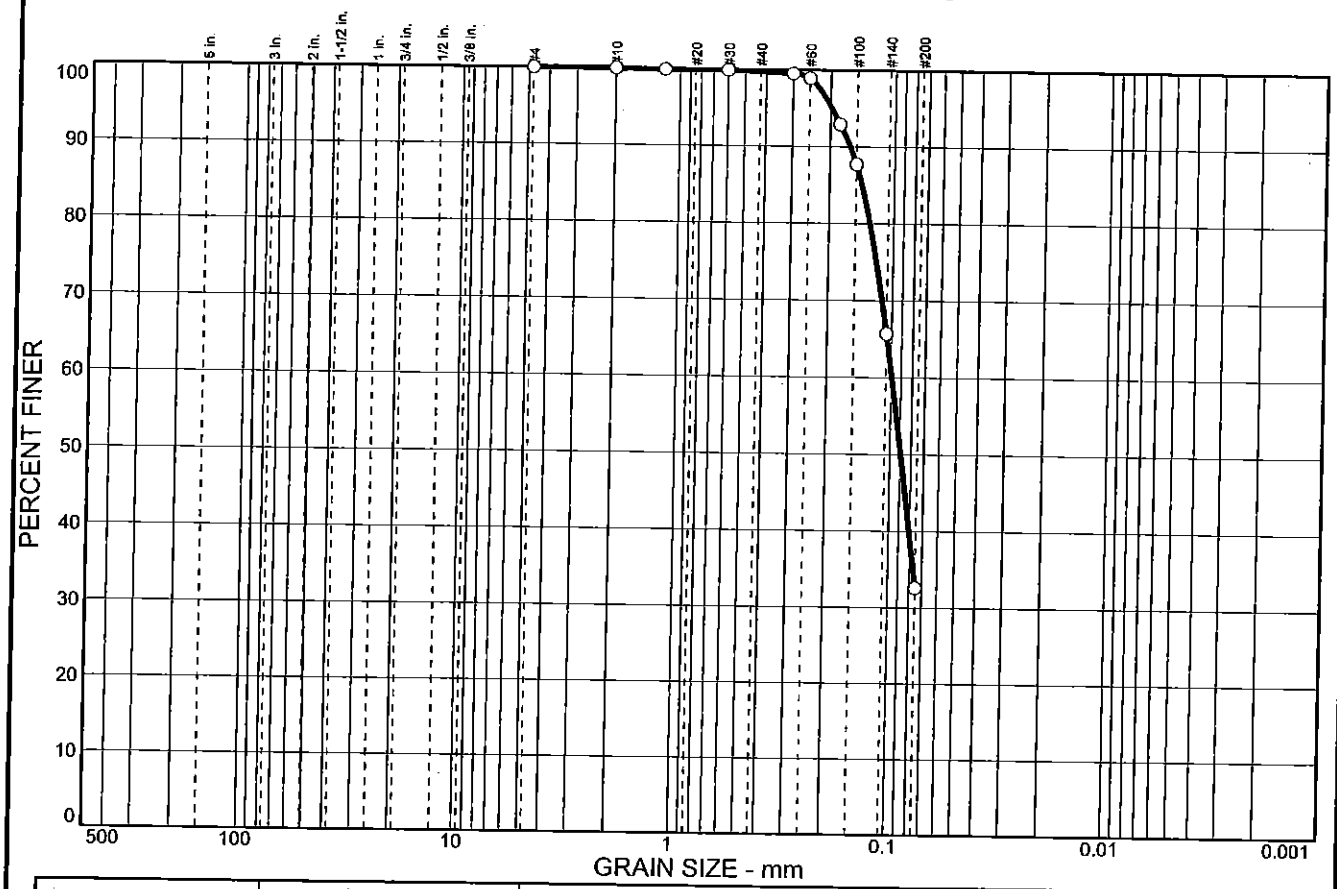
Remarks

Sample No.: 06OV-29 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 29-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.3	67.1	32.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.9		
#50	99.5		
#60	98.9		
#80	92.9		
#100	87.7		
#140	65.7		
#200	32.6		

* (no specification provided)

Soil Description

dark gray sandy clay SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.141 D_{60}= 0.0993 D_{50}= 0.0893
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

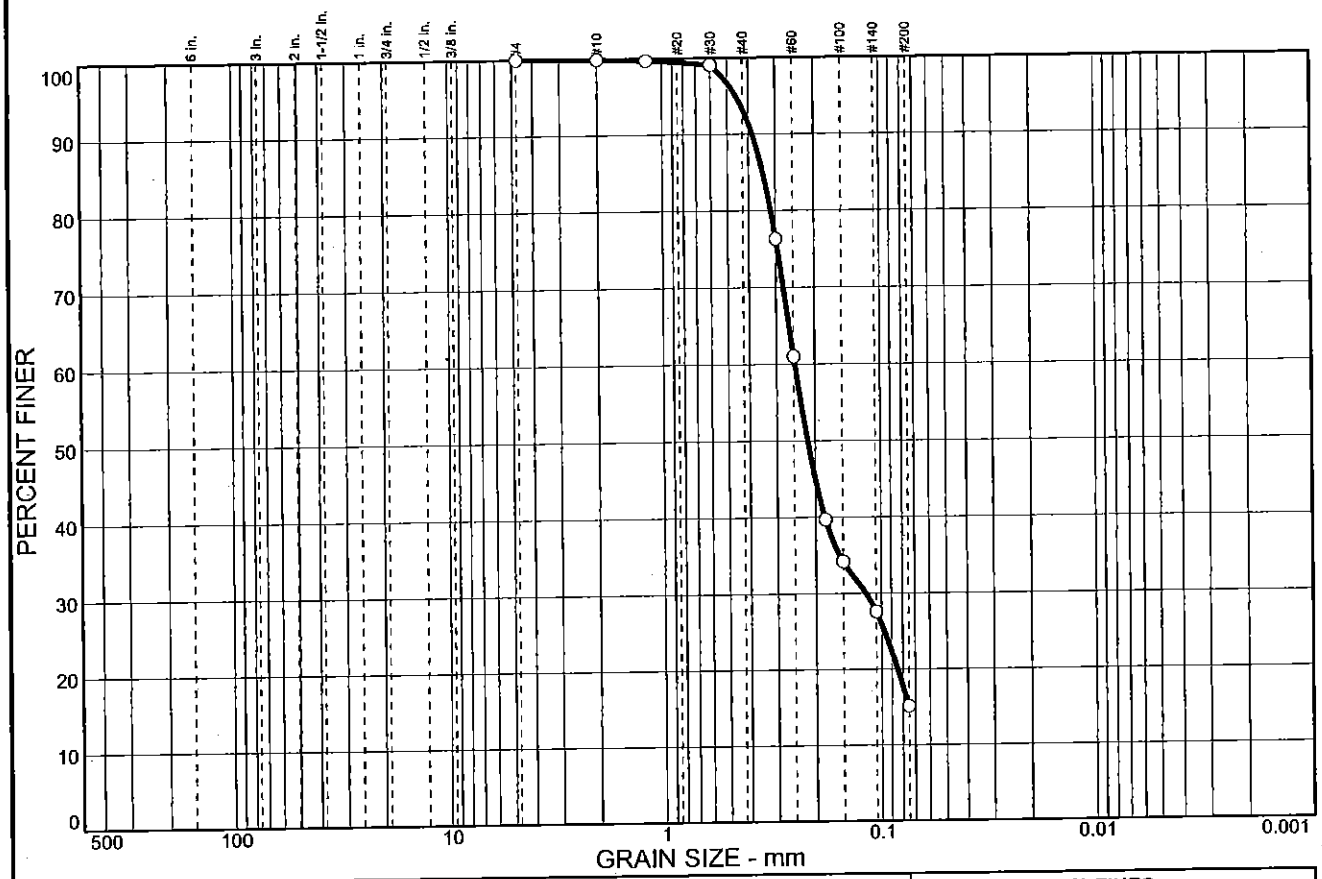
Remarks

Sample No.: 06OV-29 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 29-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	6.6	78.2	15.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.7		
#30	99.1		
#50	76.3		
#60	61.0		
#80	39.7		
#100	34.2		
#140	27.6		
#200	15.1		

* (no specification provided)

Soil Description

gray silty sand SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.344 D_{60}= 0.247 D_{50}= 0.217
D_{30}= 0.118 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

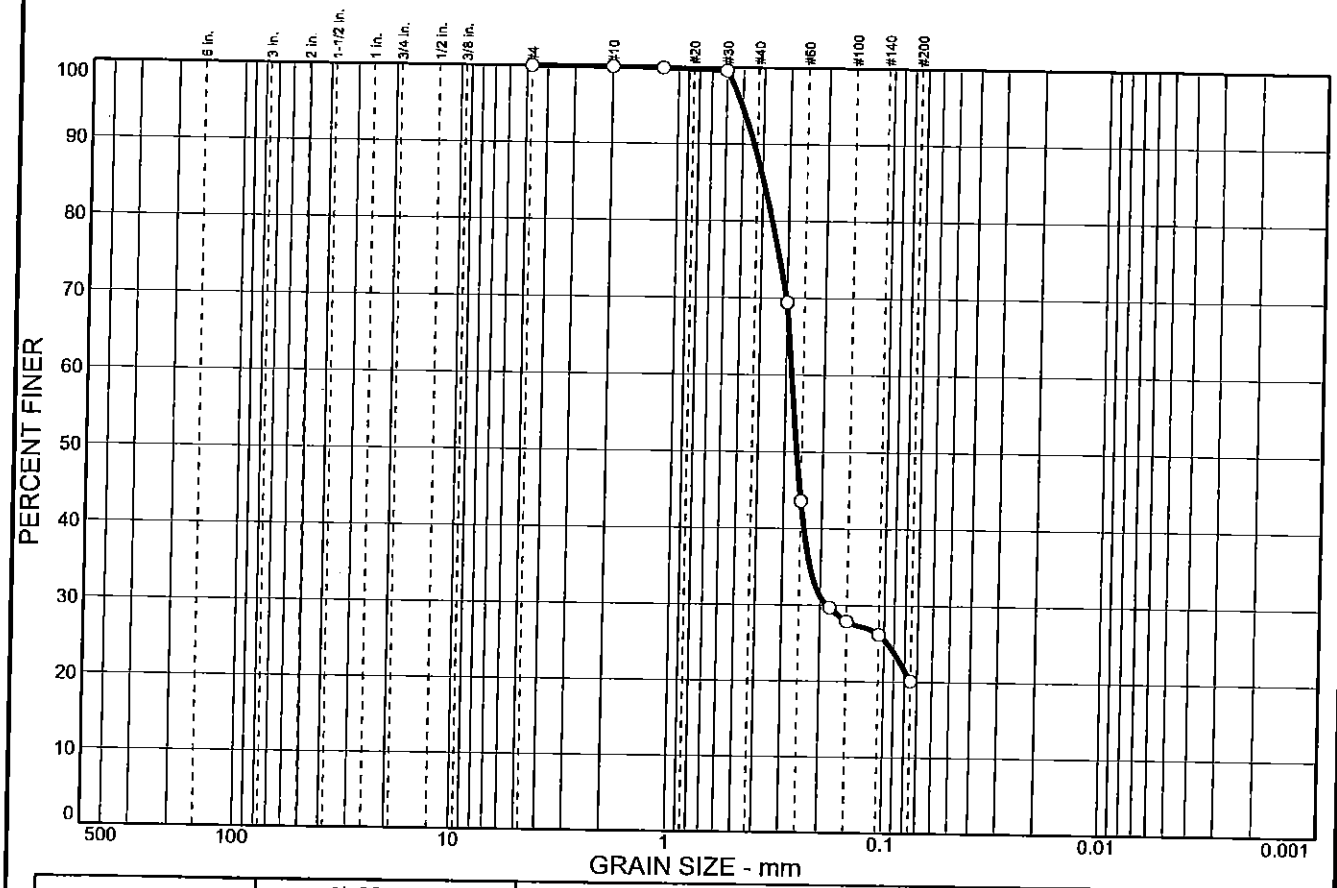
Remarks

Sample No.: 06OV-30 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 30-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	11.6	68.3	20.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.6		
#50	69.4		
#60	43.6		
#80	29.7		
#100	27.9		
#140	26.2		
#200	20.1		

* (no specification provided)

Soil Description

gray silty sand SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.395 D_{60}= 0.282 D_{50}= 0.264
D_{30}= 0.185 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

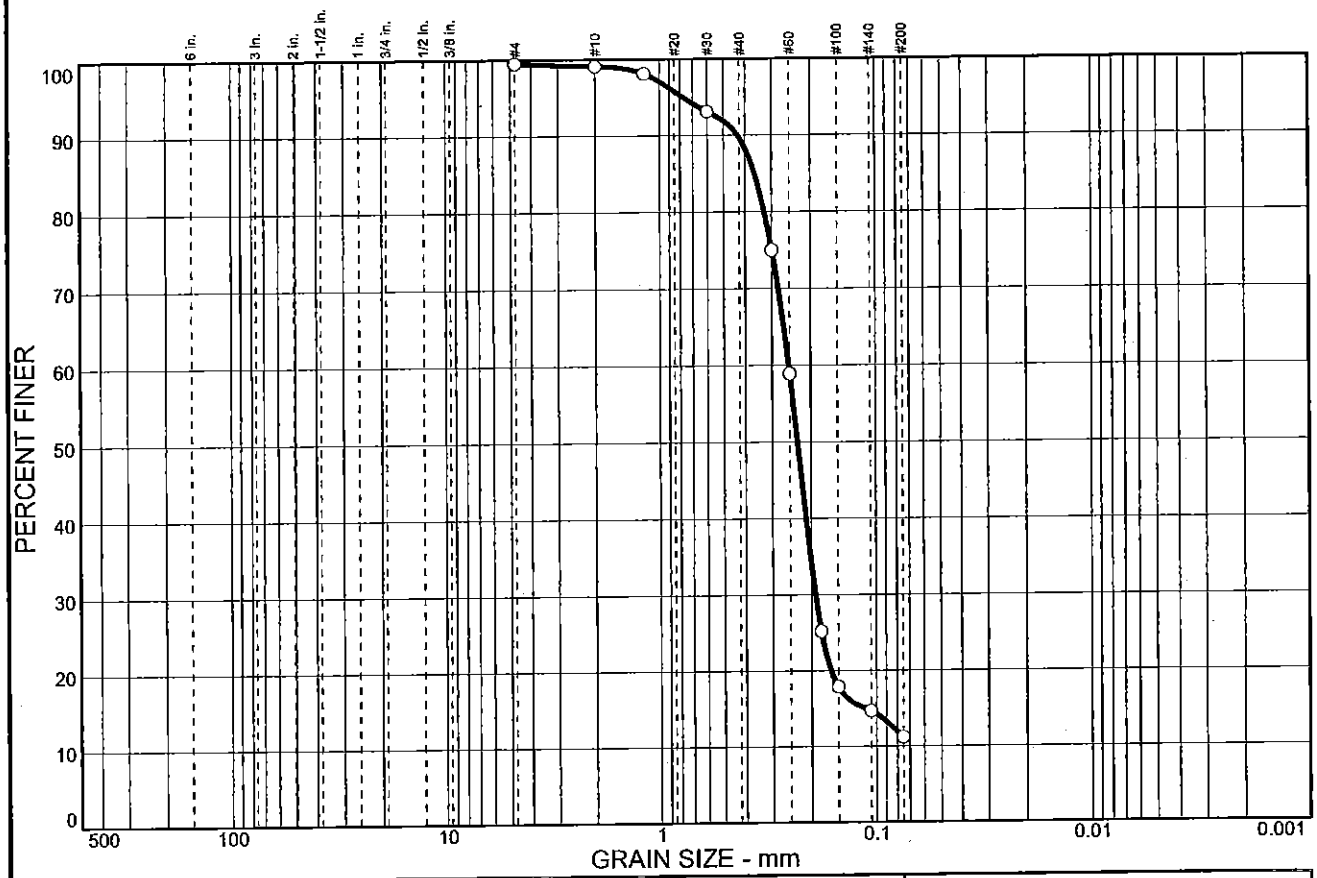
Remarks

Sample No.: 06OV-30 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 30-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.4	9.4	78.5	11.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.5		
#10	99.1		
#16	98.1		
#30	93.1		
#50	75.0		
#60	58.9		
#80	25.2		
#100	17.9		
#140	14.7		
#200	11.2		

* (no specification provided)

Soil Description

gray clayey sand SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.361 D_{60}= 0.253 D_{50}= 0.231
D_{30}= 0.191 D_{15}= 0.112 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

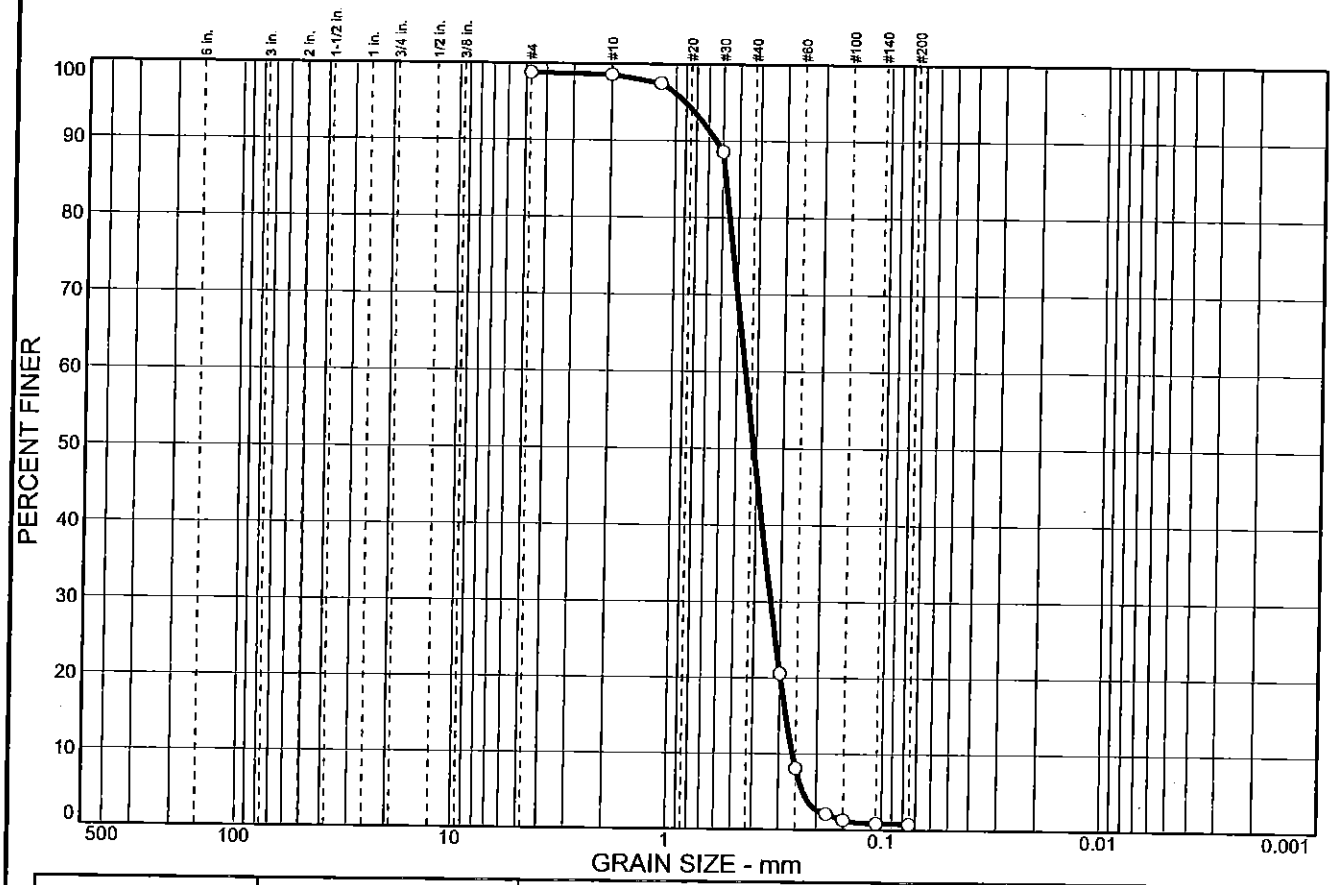
Remarks

Sample No.: 06OV-30 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 30-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.2	45.6	52.2	0.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	98.8		
#10	98.6		
#16	97.5		
#30	88.6		
#50	20.6		
#60	8.1		
#80	2.1		
#100	1.3		
#140	0.9		
#200	0.8		

* (no specification provided)

Soil Description

tan sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.579 D_{60}= 0.455 D_{50}= 0.413
D_{30}= 0.335 D_{15}= 0.279 D_{10}= 0.259
C_u= 1.76 C_c= 0.95

Classification

USCS= AASHTO=

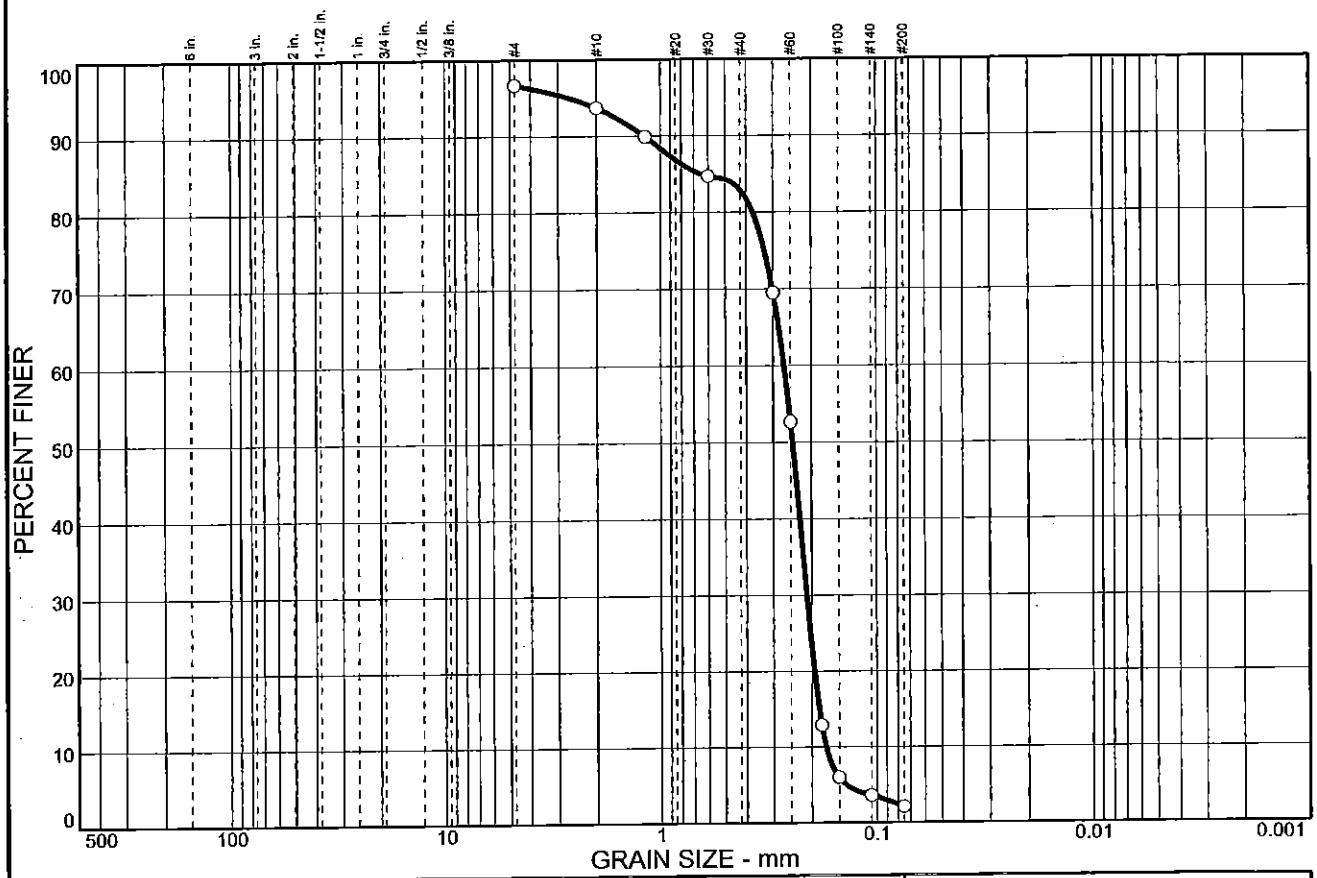
Remarks

Sample No.: 06OV-31 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 31-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			3.0	10.8	80.8	2.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	96.7		
#10	93.7		
#16	89.9		
#30	84.7		
#50	69.5		
#60	52.7		
#80	12.9		
#100	6.0		
#140	3.6		
#200	2.1		

* (no specification provided)

Soil Description

tan sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.651 D_{60}= 0.268 D_{50}= 0.244
D_{30}= 0.210 D_{15}= 0.185 D_{10}= 0.172
C_u= 1.56 C_c= 0.96

Classification

USCS= AASHTO=

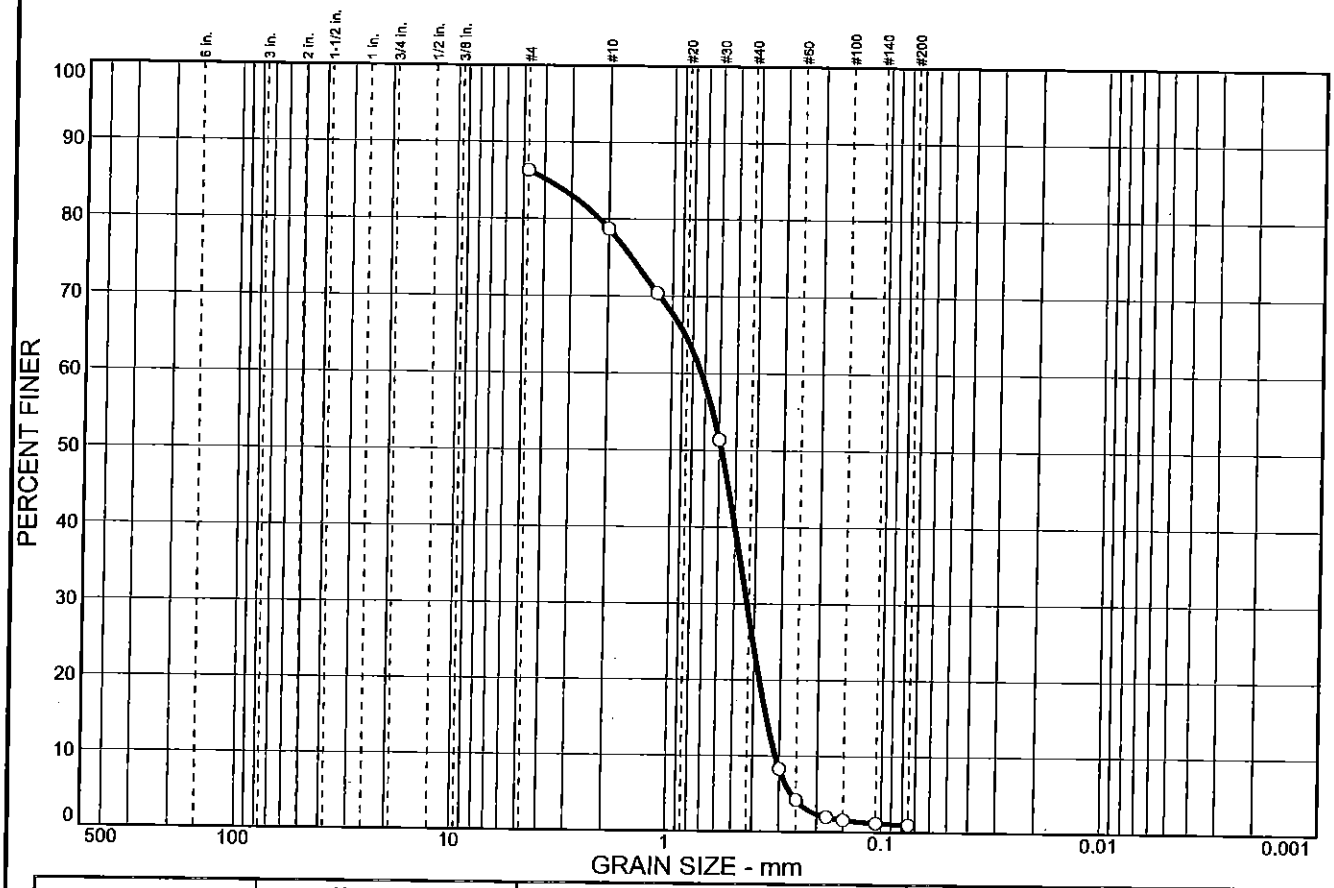
Remarks

Sample No.: 06OV-31 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 31-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			7.6	50.4	27.3	1.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	86.3		
#10	78.7		
#16	70.4		
#30	51.4		
#50	8.3		
#60	4.2		
#80	2.0		
#100	1.6		
#140	1.2		
#200	1.0		

* (no specification provided)

Soil Description

tan sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 3.90 D_{60}= 0.729 D_{50}= 0.585
D_{30}= 0.435 D_{15}= 0.347 D_{10}= 0.313
C_u= 2.33 C_c= 0.83

Classification

USCS= AASHTO=

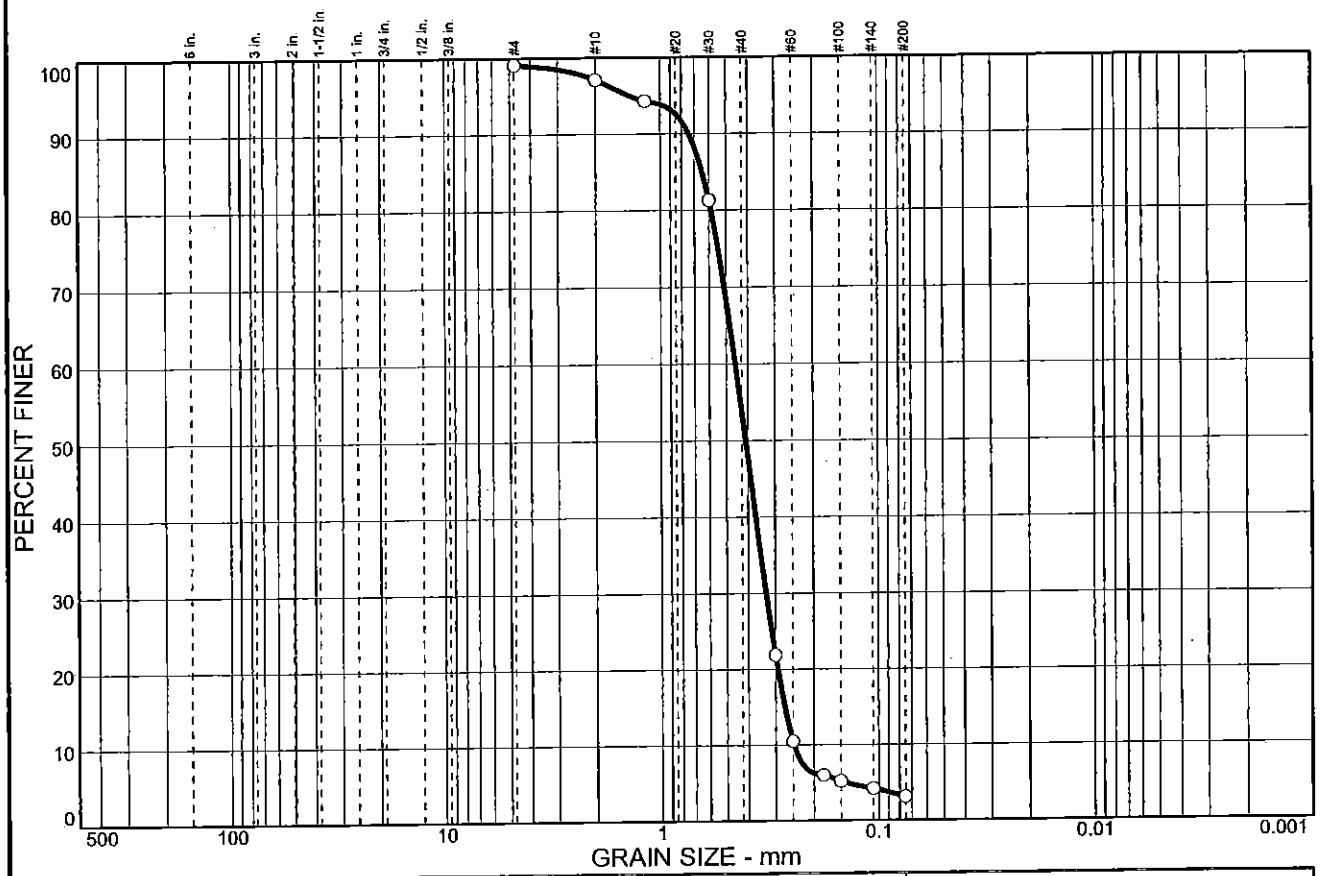
Remarks

Sample No.: 06OV-31 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 31-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.0	43.6	50.4	3.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.1		
#10	97.1		
#16	94.3		
#30	81.3		
#50	21.9		
#60	10.5		
#80	6.0		
#100	5.2		
#140	4.2		
#200	3.1		

* (no specification provided)

Soil Description

light olive brown sand w/shell SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.644 D_{60}= 0.456 D_{50}= 0.409
D_{30}= 0.331 D_{15}= 0.272 D_{10}= 0.247
C_u= 1.85 C_c= 0.97

Classification

USCS= AASHTO=

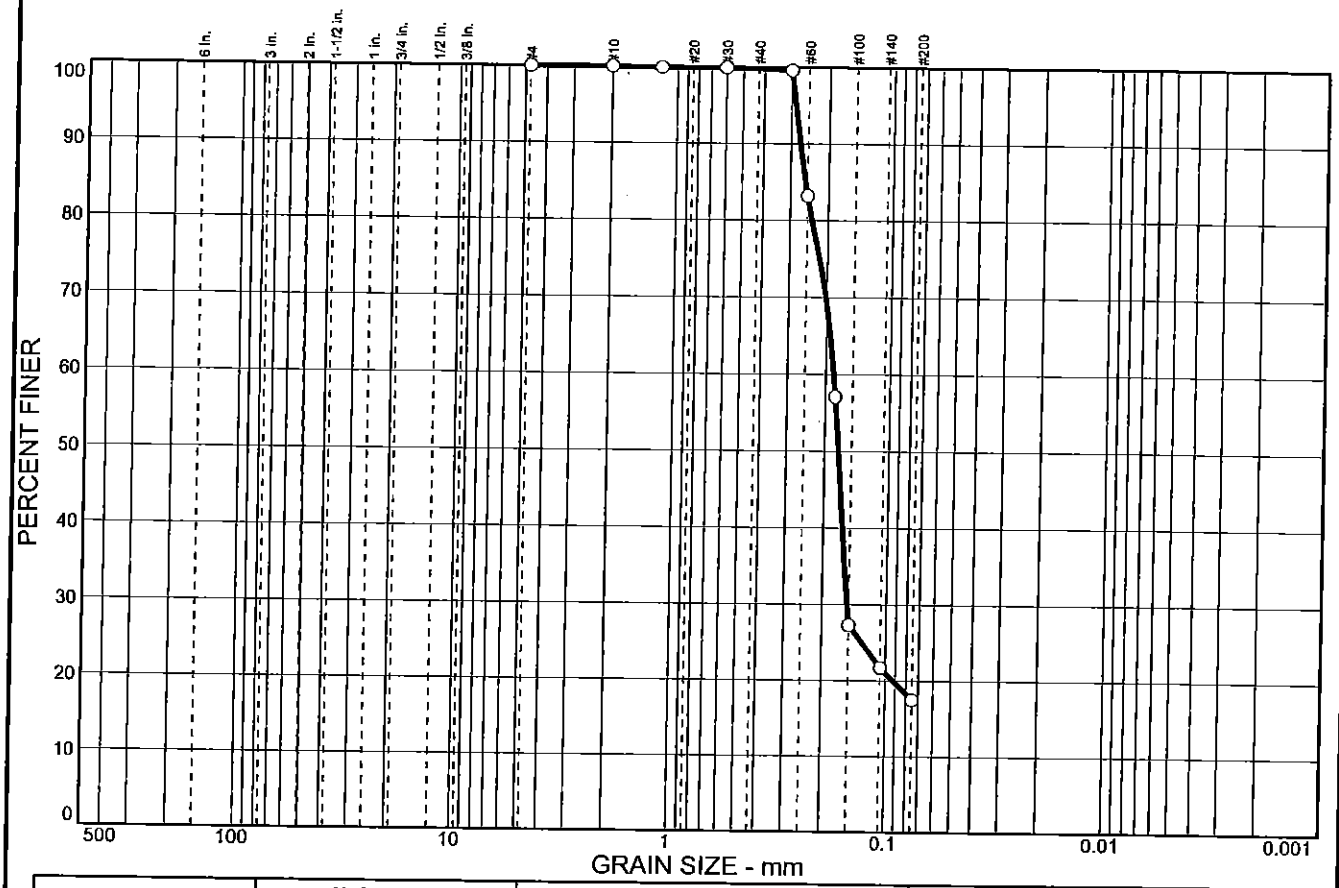
Remarks

Sample No.: 06OV-32 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 32-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.2	82.3	17.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.9		
#50	99.6		
#60	83.2		
#80	57.1		
#100	27.3		
#140	21.7		
#200	17.5		

* (no specification provided)

Soil Description

gray sand w/shell SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.256 D_{60}= 0.184 D_{50}= 0.172
D_{30}= 0.153 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

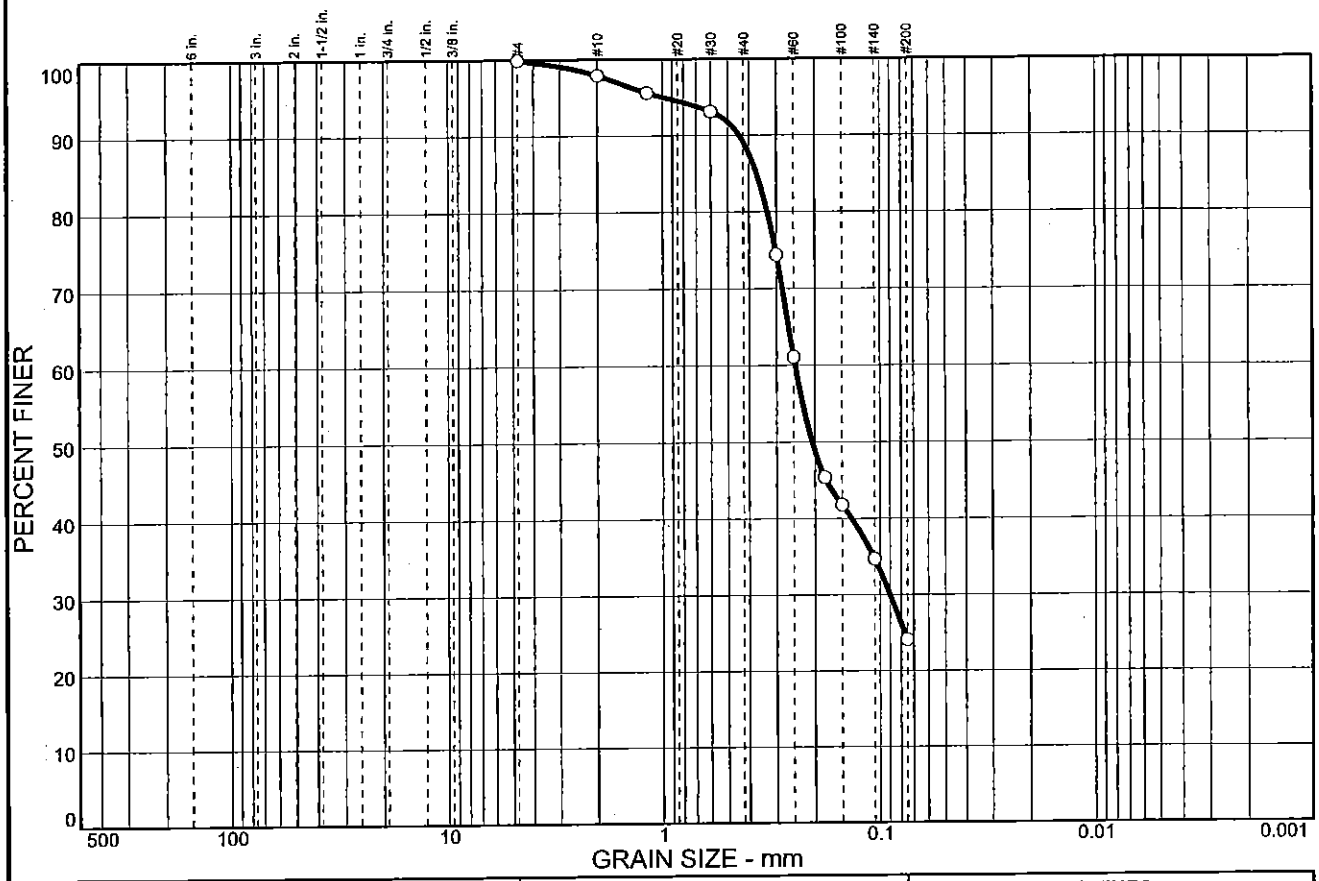
Remarks

Sample No.: 06OV-32 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 32-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.0	8.8	65.0	24.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	97.9		
#16	95.6		
#30	93.1		
#50	74.4		
#60	61.1		
#80	45.4		
#100	41.8		
#140	34.7		
#200	24.1		

* (no specification provided)

Soil Description

dark gray sand SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.369 D_{60}= 0.246 D_{50}= 0.205
D_{30}= 0.0900 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

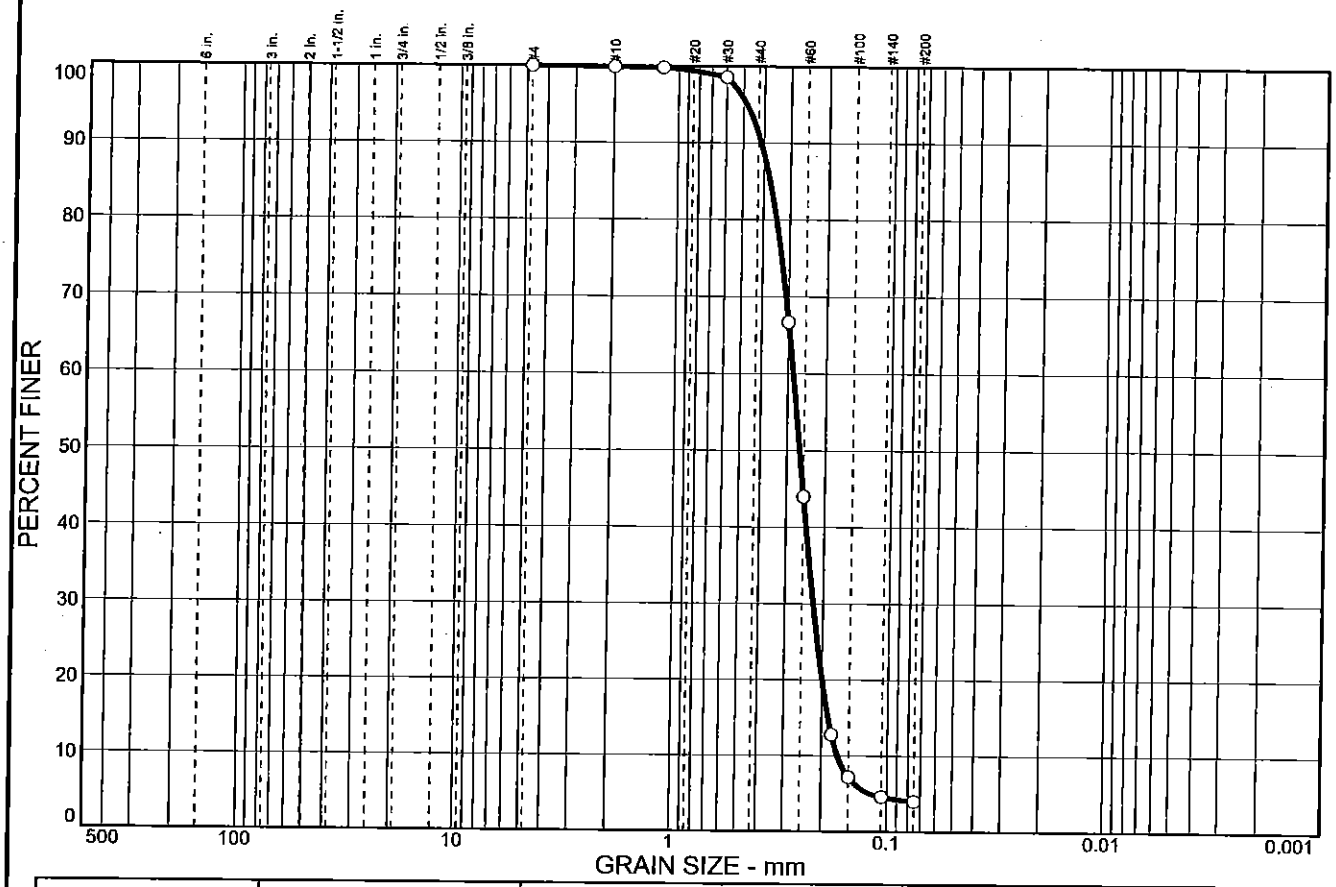
Remarks

Sample No.: 06OV-32 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 32-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	8.7	87.2	4.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.8		
#30	98.6		
#50	66.7		
#60	44.0		
#80	12.8		
#100	7.2		
#140	4.6		
#200	4.0		

* (no specification provided)

Soil Description

gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.373 D_{60}= 0.283 D_{50}= 0.262
D_{30}= 0.222 D_{15}= 0.187 D_{10}= 0.169
C_u= 1.68 C_c= 1.03

Classification

USCS= AASHTO=

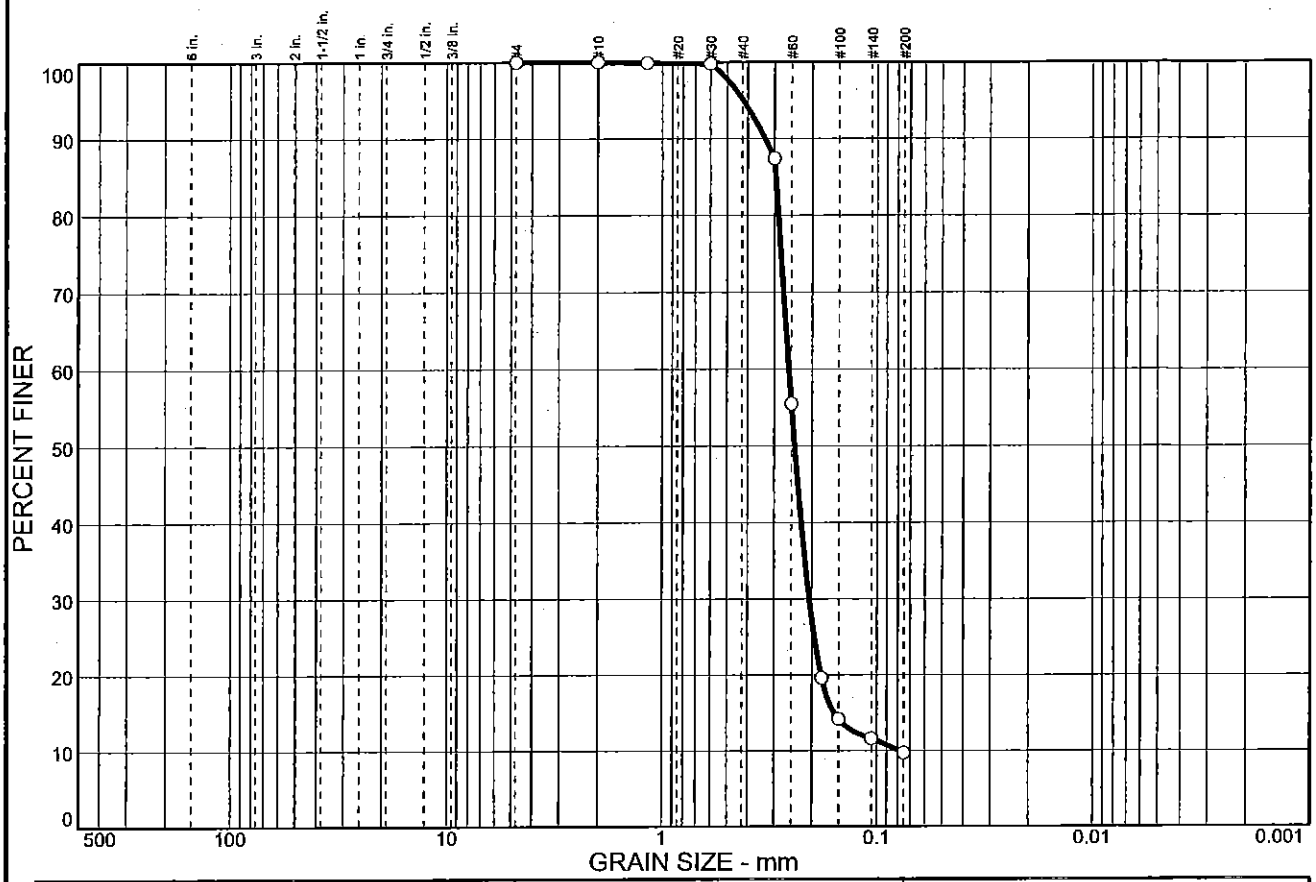
Remarks

Sample No.: 06OV-32 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 32-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	4.8	85.5	9.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.8		
#50	87.4		
#60	55.5		
#80	19.6		
#100	14.2		
#140	11.6		
#200	9.7		

* (no specification provided)

Soil Description

gray fine sd w/some clay SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.296 D_{60}= 0.257 D_{50}= 0.241
D_{30}= 0.206 D_{15}= 0.157 D_{10}= 0.0789
C_u= 3.26 C_c= 2.09

Classification

USCS= AASHTO=

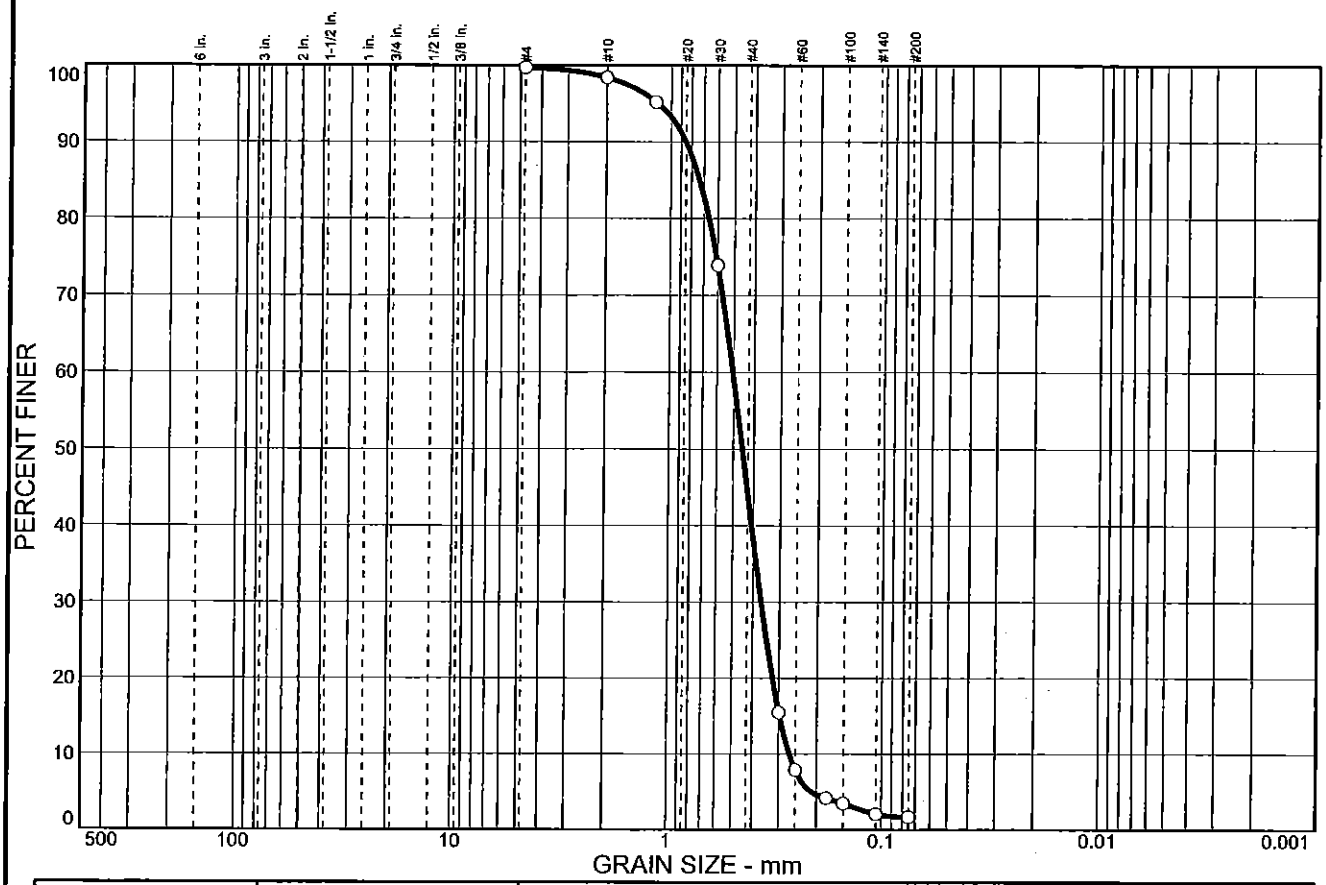
Remarks

Sample No.: 06OV-32 **Source of Sample:** **Date:** 5/31/06
Location: **Elev./Depth:** 16

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 32-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.3	54.6	42.1	1.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.7		
#10	98.4		
#16	95.2		
#30	73.9		
#50	15.5		
#60	7.9		
#80	4.2		
#100	3.5		
#140	2.1		
#200	1.7		

* (no specification provided)

Soil Description

tan and gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.735 D_{60}= 0.505 D_{50}= 0.454
D_{30}= 0.365 D_{15}= 0.297 D_{10}= 0.267
C_u= 1.89 C_c= 0.99

Classification

USCS= AASHTO=

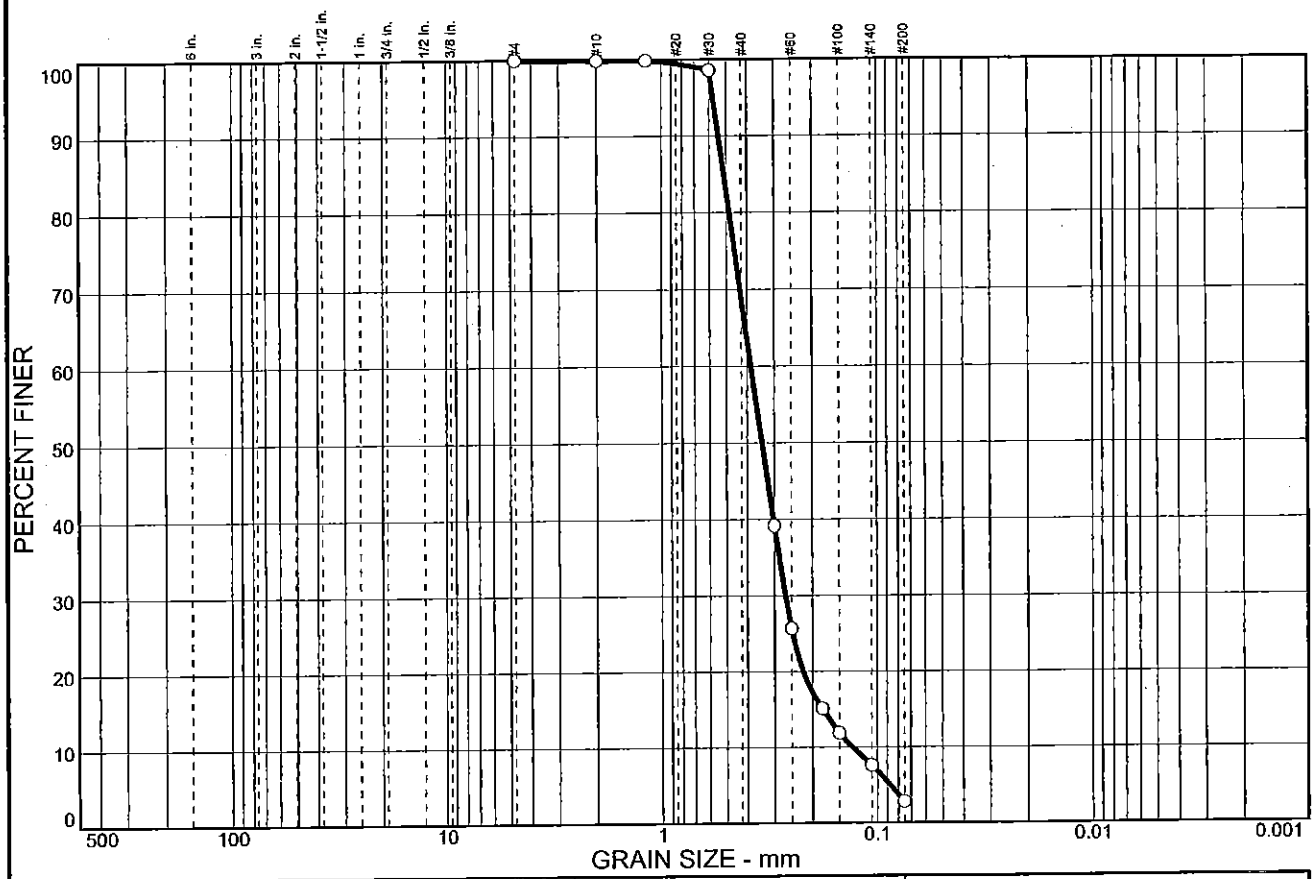
Remarks

Sample No.: 06OV-33 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 33-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	31.2	65.9	2.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	98.6		
#50	39.2		
#60	25.7		
#80	15.1		
#100	11.9		
#140	7.6		
#200	2.8		

* (no specification provided)

Soil Description

gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.513 D_{60}= 0.384 D_{50}= 0.342
D_{30}= 0.267 D_{15}= 0.179 D_{10}= 0.130
C_u= 2.95 C_c= 1.42

Classification

USCS= AASHTO=

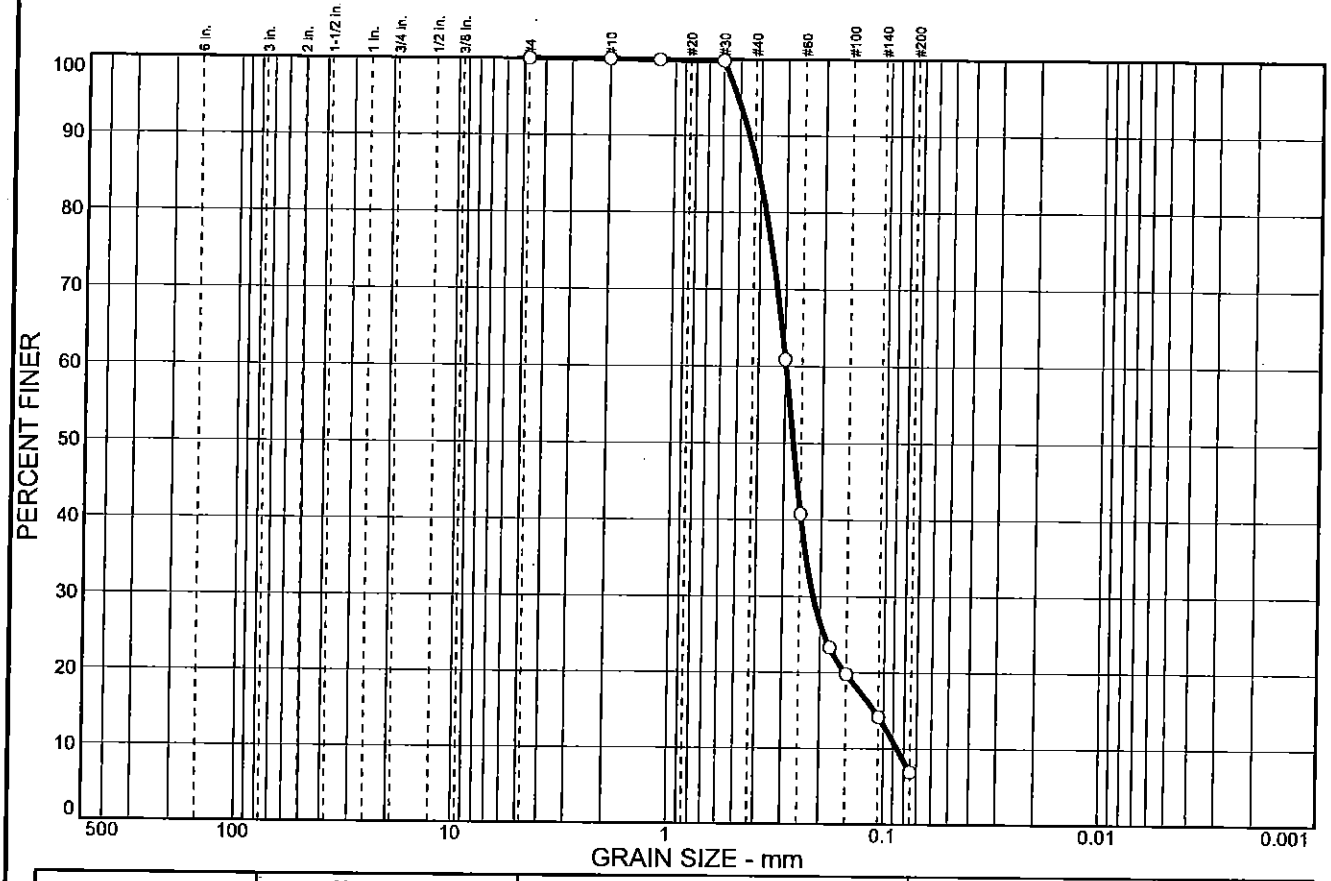
Remarks

Sample No.: 06OV-33 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 33-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	12.9	80.2	6.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.8		
#50	60.9		
#60	40.8		
#80	23.3		
#100	19.8		
#140	14.2		
#200	6.9		

* (no specification provided)

Soil Description

gray and tan sand SM-SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.408 D_{60}= 0.298 D_{50}= 0.272
D_{30}= 0.216 D_{15}= 0.111 D_{10}= 0.0862
C_u= 3.45 C_c= 1.81

Classification

USCS= AASHTO=

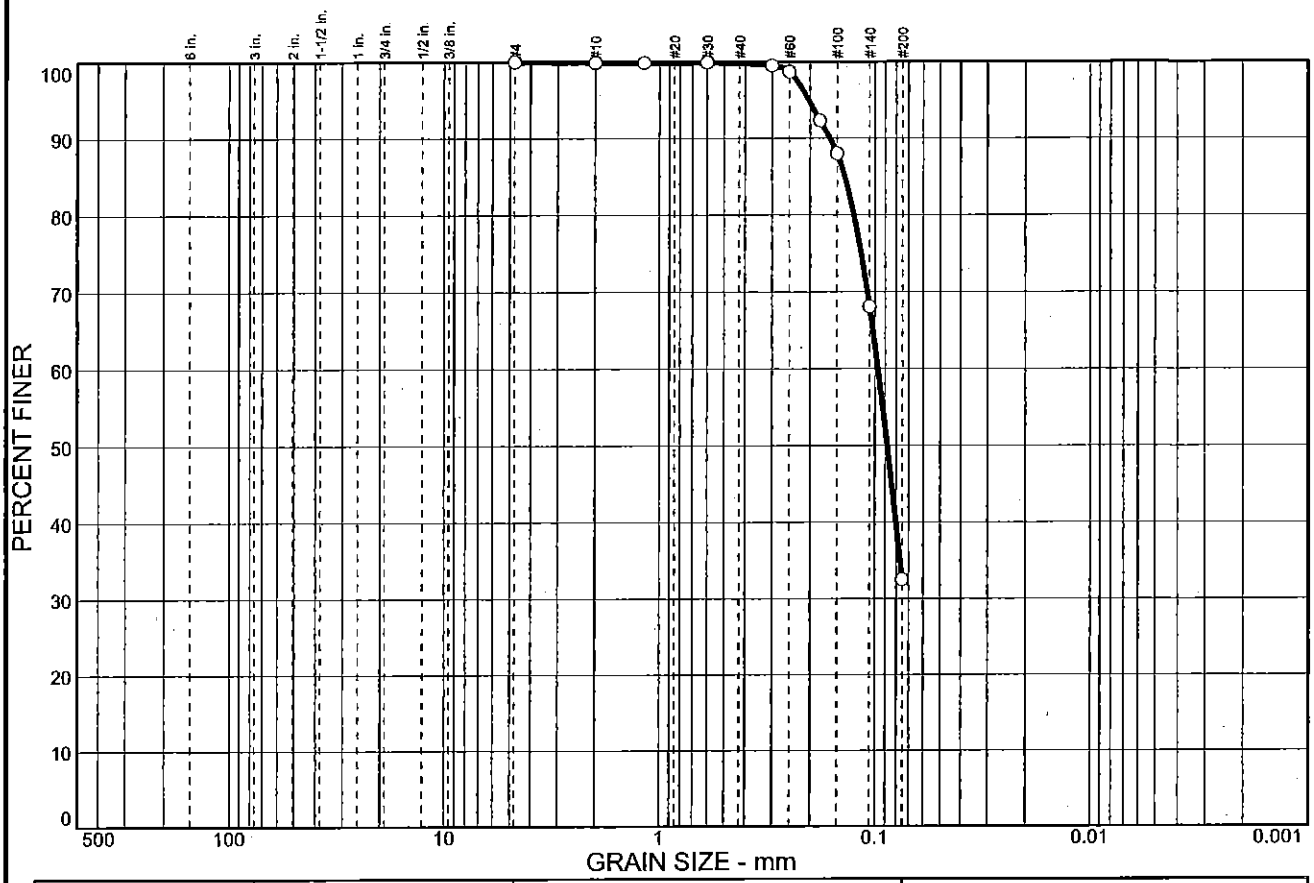
Remarks

Sample No.: 06OV-33 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 33-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.1	67.3	32.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.9		
#50	99.5		
#60	98.7		
#80	92.3		
#100	88.0		
#140	68.1		
#200	32.5		

* (no specification provided)

Soil Description

gray sand SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.138 D_{60}= 0.0970 D_{50}= 0.0879
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

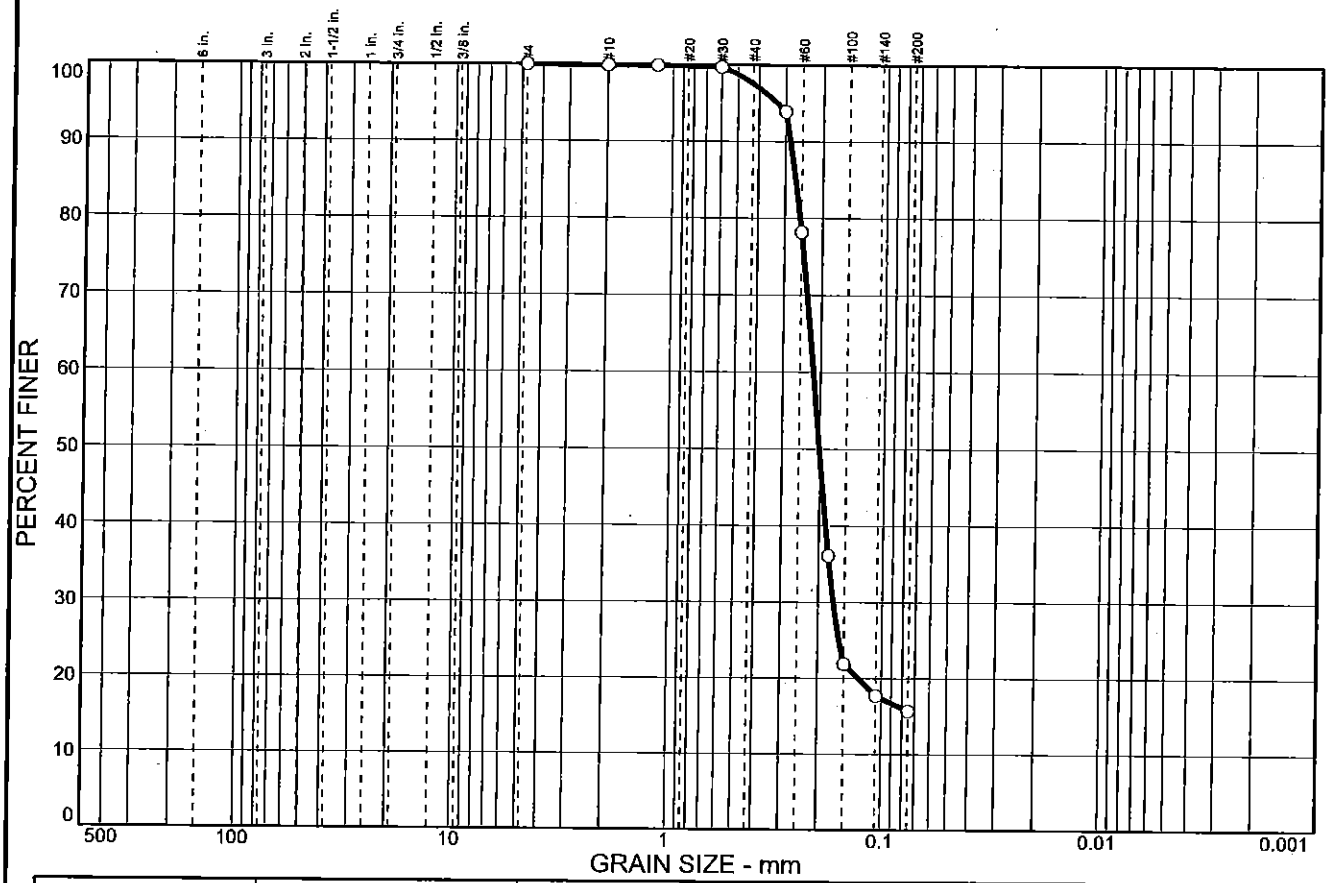
Remarks

Sample No.: 06OV-33 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 33-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	2.4	81.8	15.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.7		
#50	93.9		
#60	78.2		
#80	36.1		
#100	21.9		
#140	17.7		
#200	15.7		

* (no specification provided)

Soil Description

gray sand SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.268 D_{60}= 0.217 D_{50}= 0.201
D_{30}= 0.169 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

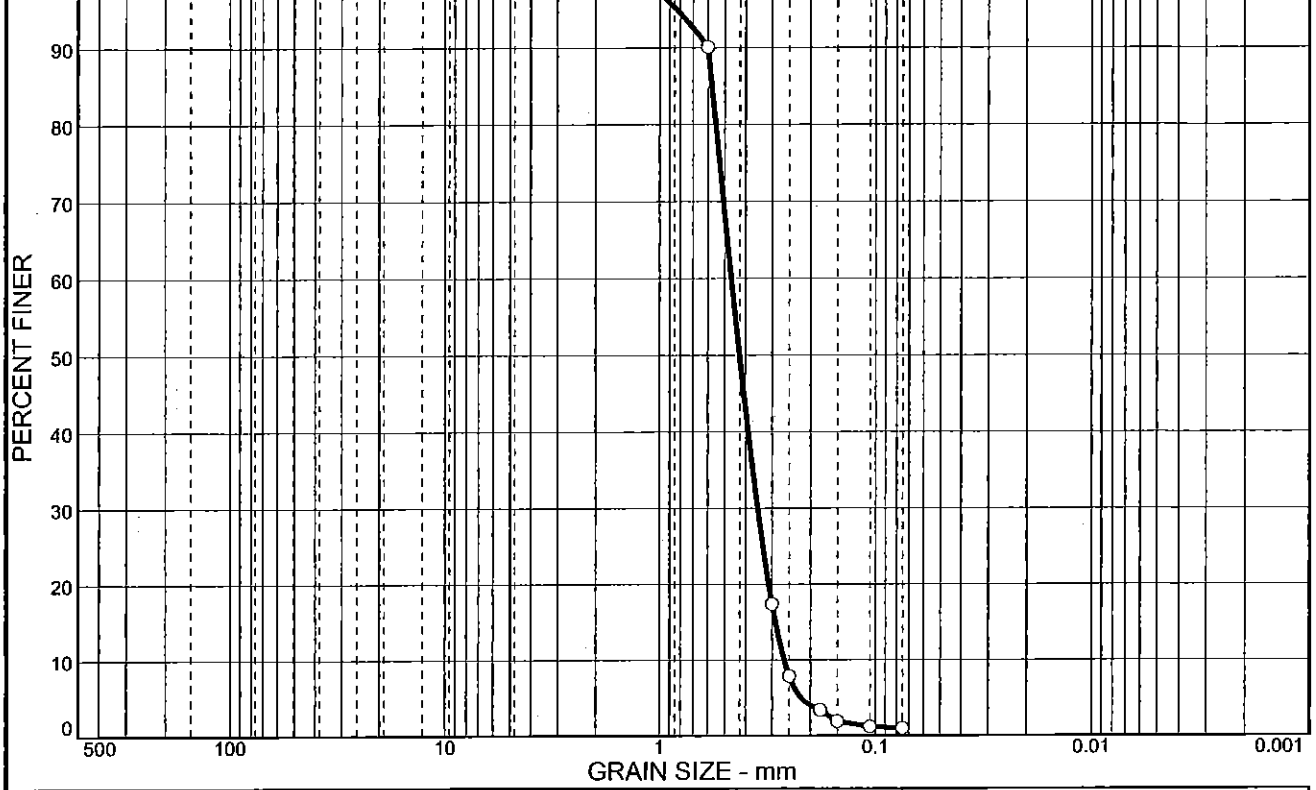
Remarks

Sample No.: 06OV-33 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 16

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 33-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	50.5	48.4	1.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	98.4		
#30	90.1		
#50	17.4		
#60	7.9		
#80	3.4		
#100	1.9		
#140	1.2		
#200	1.0		

* (no specification provided)

Soil Description

tan gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.575 D_{60}= 0.466 D_{50}= 0.427
D_{30}= 0.351 D_{15}= 0.289 D_{10}= 0.264
C_u= 1.77 C_c= 1.00

Classification

USCS= AASHTO=

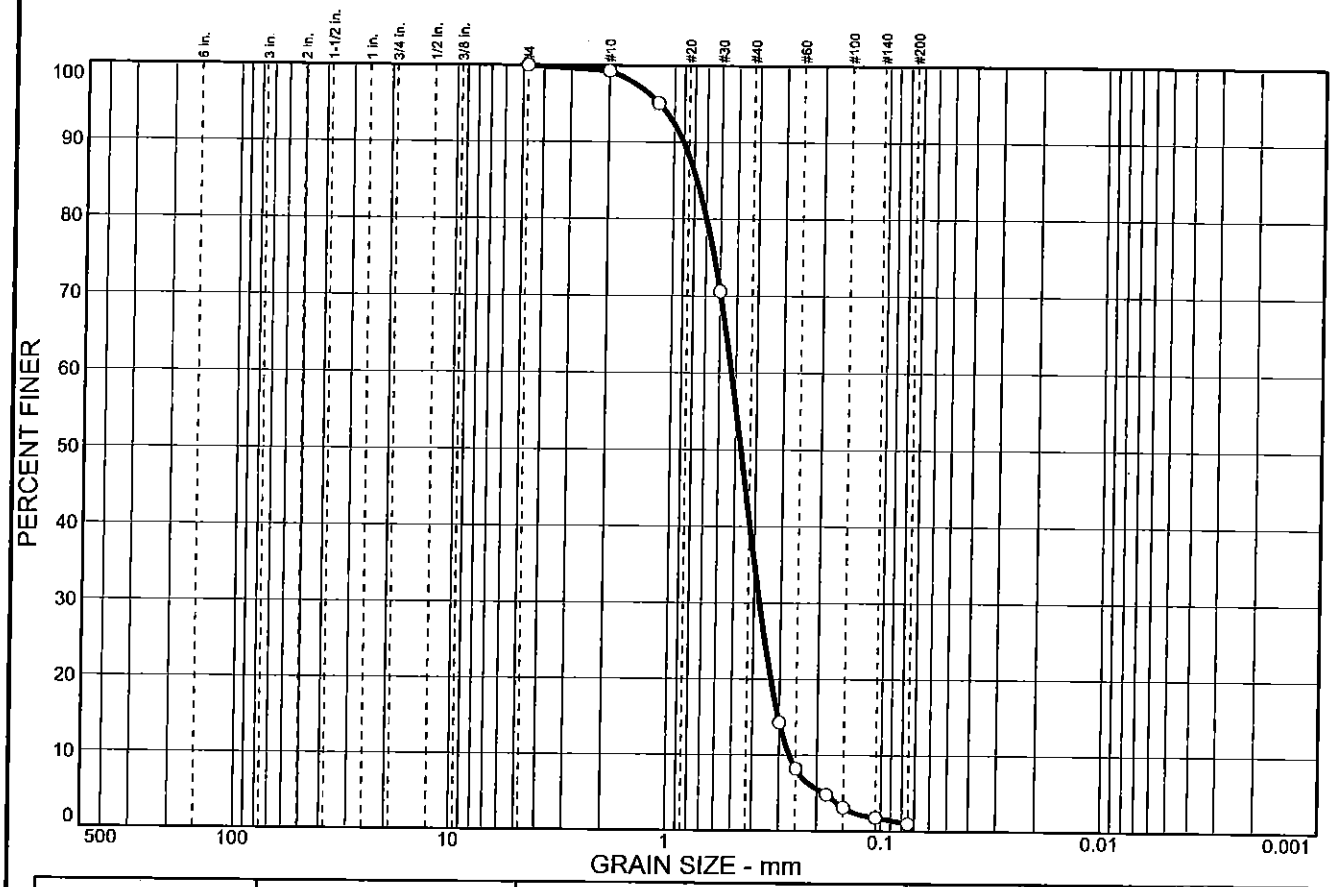
Remarks

Sample No.: 06OV-34 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 34-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.7	58.7	39.6	1.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.3		
#16	95.1		
#30	70.6		
#50	14.3		
#60	8.2		
#80	4.8		
#100	3.1		
#140	1.8		
#200	1.0		

* (no specification provided)

Soil Description

tan gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.779 D_{60}= 0.526 D_{50}= 0.470
D_{30}= 0.377 D_{15}= 0.304 D_{10}= 0.269
C_u= 1.96 C_c= 1.00

Classification

USCS= AASHTO=

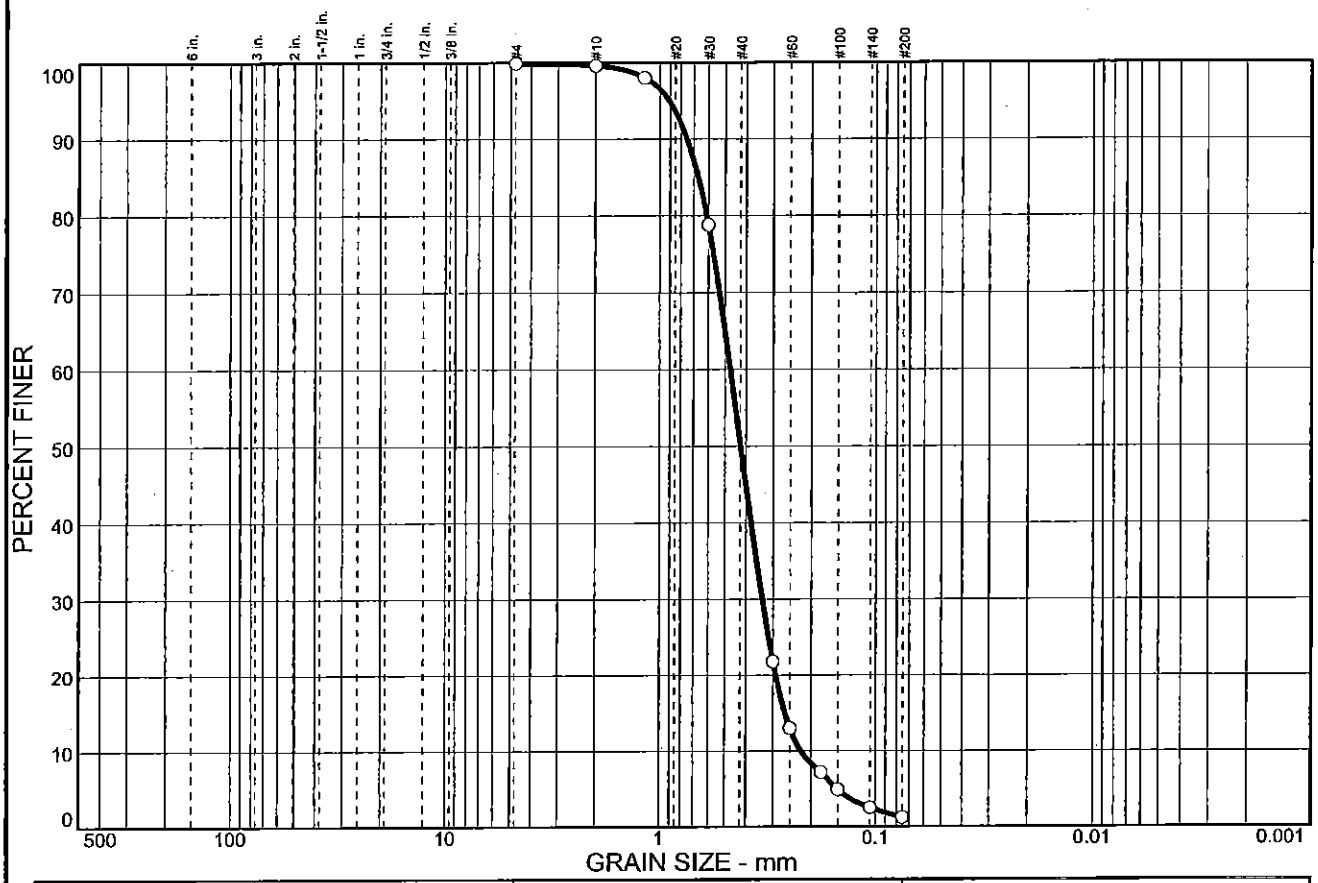
Remarks

Sample No.: 06OV-34 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 34-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.3	49.4	49.0	1.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.6		
#16	98.0		
#30	78.8		
#50	21.8		
#60	13.0		
#80	7.2		
#100	4.9		
#140	2.5		
#200	1.2		

* (no specification provided)

Soil Description

tan gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.669 D_{60}= 0.473 D_{50}= 0.424
D_{30}= 0.337 D_{15}= 0.264 D_{10}= 0.222
C_u= 2.13 C_c= 1.08

Classification

USCS= AASHTO=

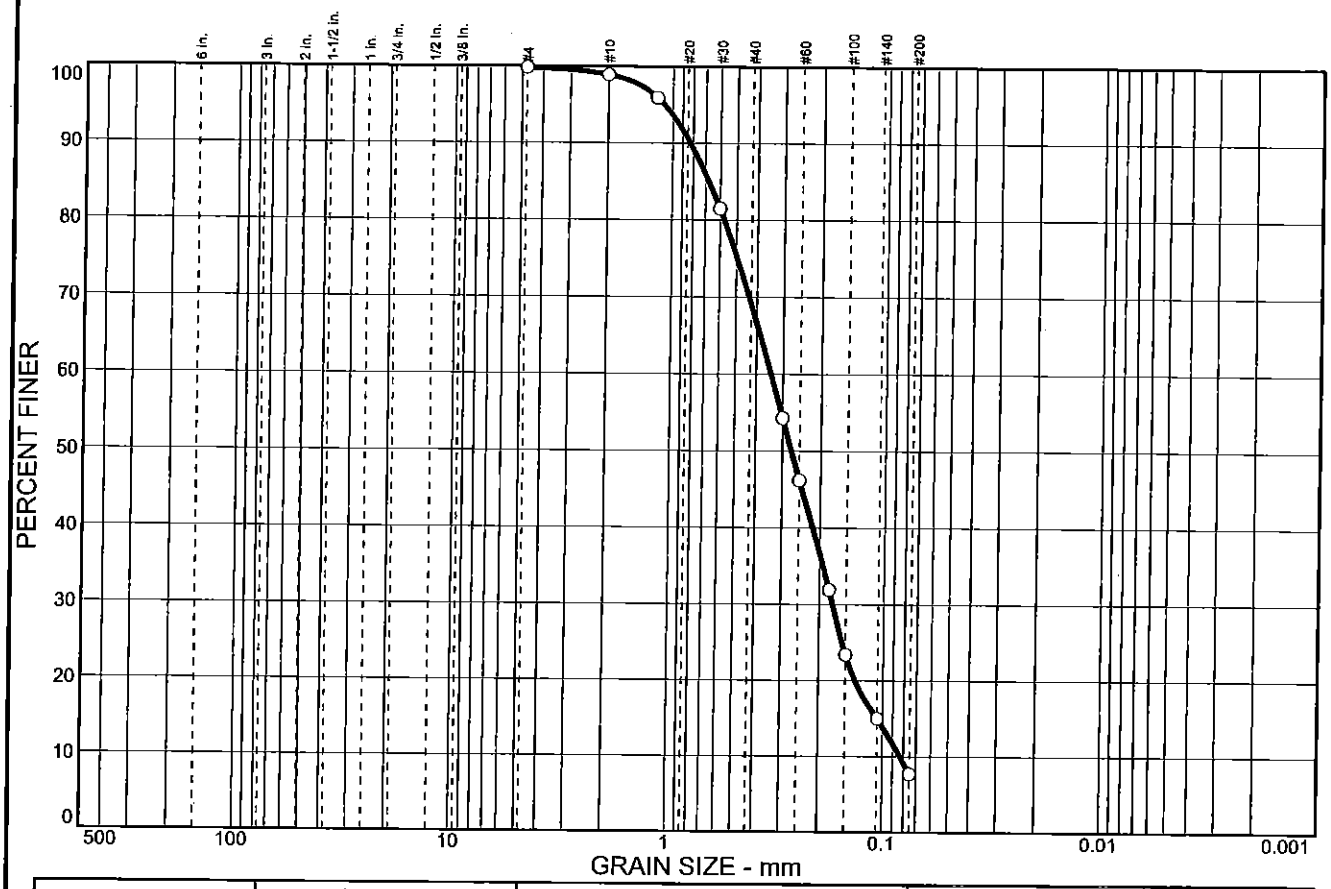
Remarks

Sample No.: 06OV-34 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 34-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.9	29.8	61.4	7.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	98.9		
#16	95.9		
#30	81.5		
#50	54.3		
#60	46.2		
#80	31.9		
#100	23.4		
#140	15.0		
#200	7.7		

* (no specification provided)

Soil Description

gray sand SM/SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.675 D_{60}= 0.341 D_{50}= 0.273
D_{30}= 0.173 D_{15}= 0.106 D_{10}= 0.0832
C_u= 4.11 C_c= 1.06

Classification

USCS= AASHTO=

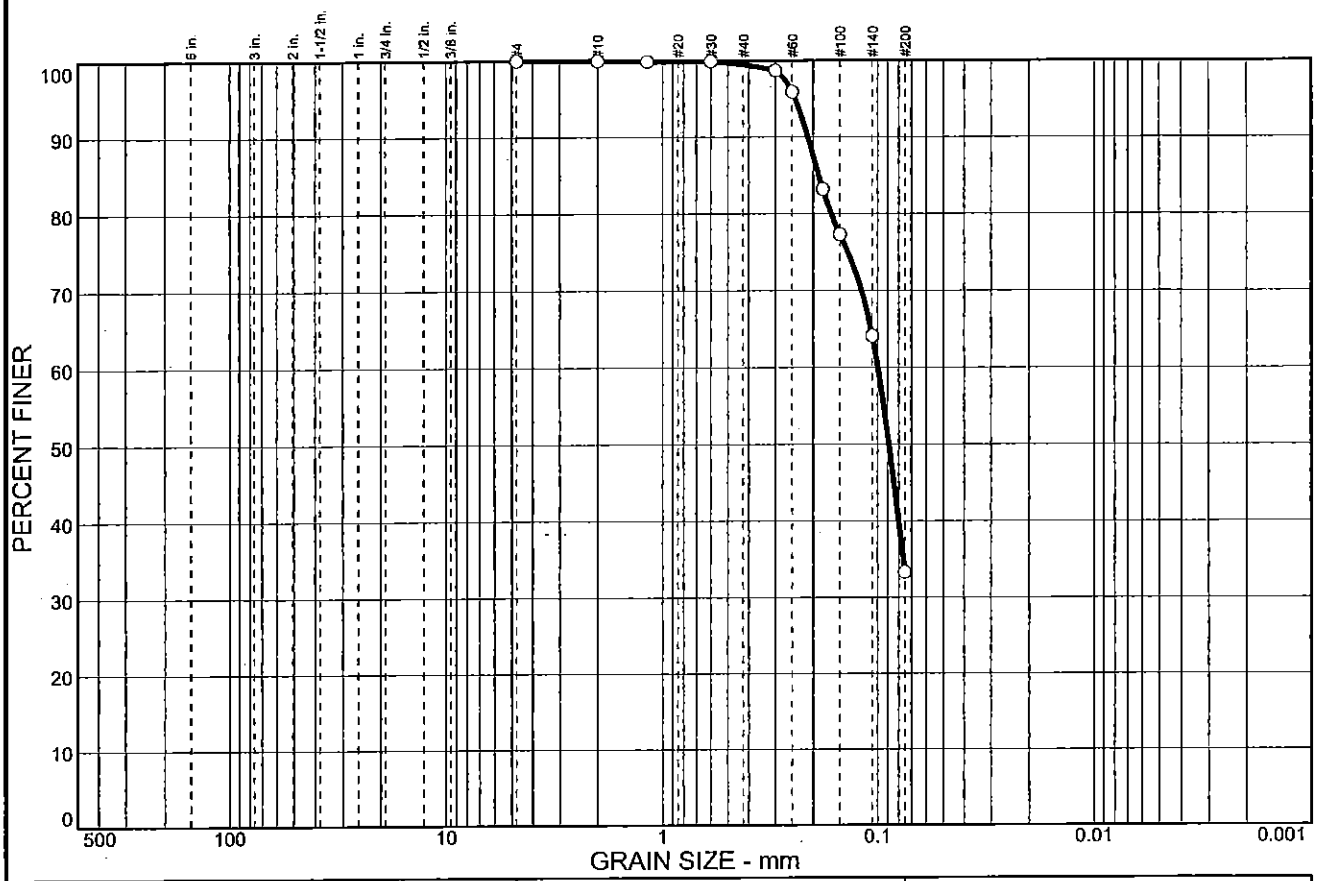
Remarks

Sample No.: 06OV-34 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 34-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.6	66.1	33.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.9		
#50	98.7		
#60	95.9		
#80	83.2		
#100	77.3		
#140	64.1		
#200	33.3		

* (no specification provided)

Soil Description

gray clay w/some sand CL

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.188 D_{60}= 0.0999 D_{50}= 0.0888
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

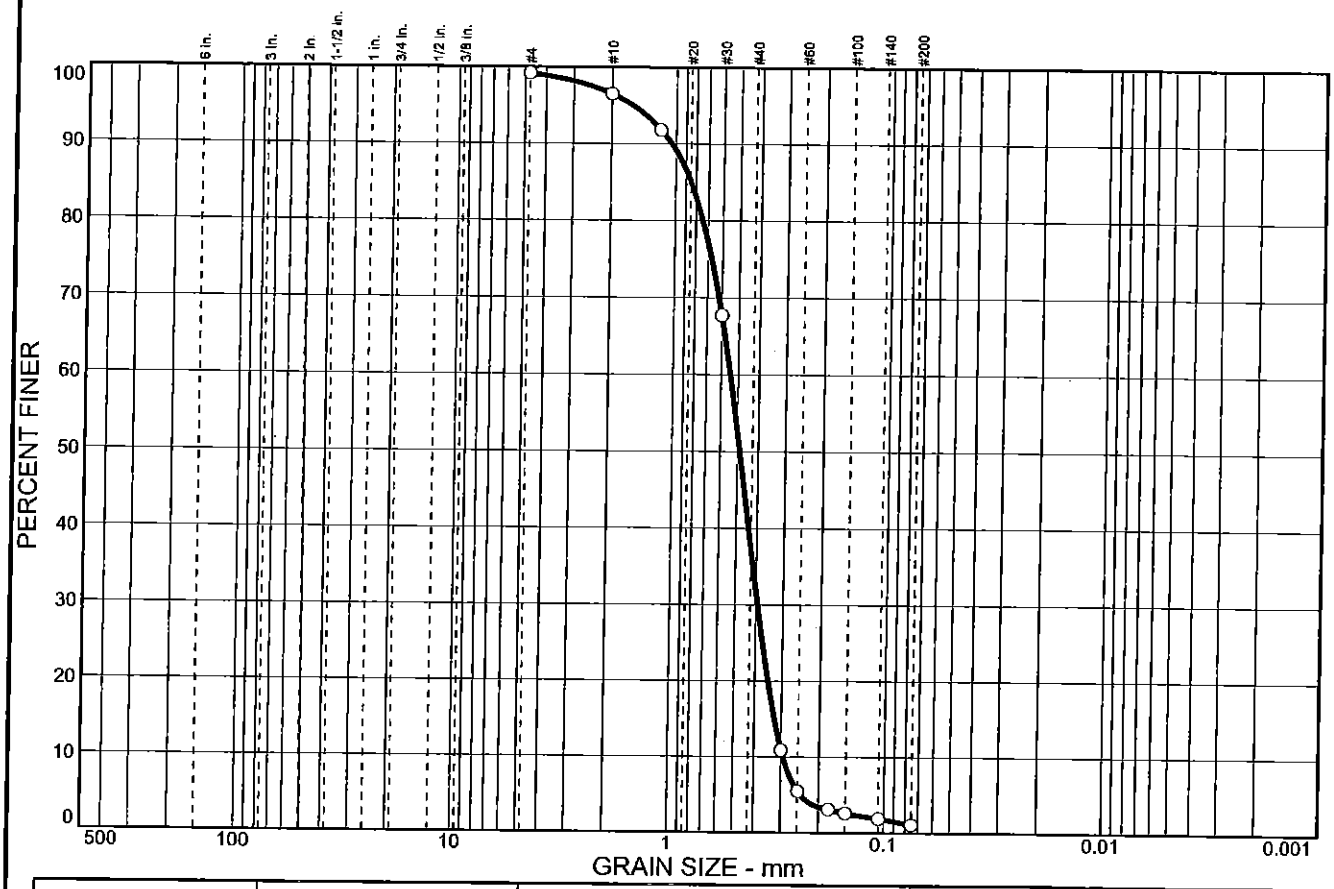
Remarks

Sample No.: 06OV-34 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 15

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 34-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			2.7	59.3	36.1	1.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.2		
#10	96.5		
#16	91.8		
#30	67.7		
#50	10.9		
#60	5.5		
#80	3.1		
#100	2.6		
#140	1.9		
#200	1.1		

* (no specification provided)

Soil Description

light gray crs sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.847 D_{60}= 0.545 D_{50}= 0.487
D_{30}= 0.393 D_{15}= 0.323 D_{10}= 0.294
C_u= 1.85 C_c= 0.96

Classification

USCS= AASHTO=

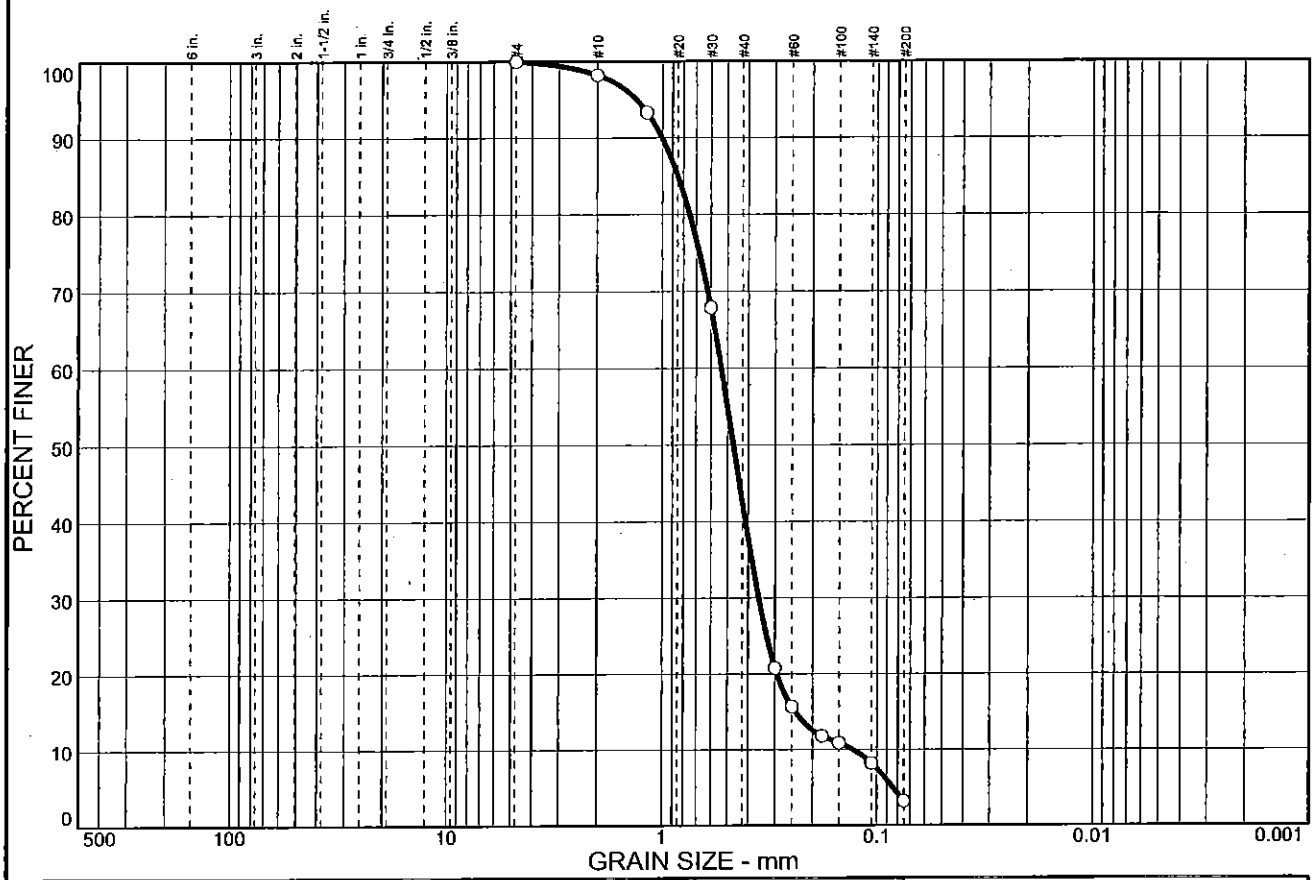
Remarks

Sample No.: 06OV-35 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 35-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.8	55.9	39.1	3.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.2		
#16	93.3		
#30	67.9		
#50	20.8		
#60	15.7		
#80	11.8		
#100	10.9		
#140	8.2		
#200	3.2		

* (no specification provided)

Soil Description

light gray crs sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.851 D_{60}= 0.535 D_{50}= 0.469
D_{30}= 0.357 D_{15}= 0.241 D_{10}= 0.129
C_u= 4.15 C_c= 1.85

Classification

USCS= AASHTO=

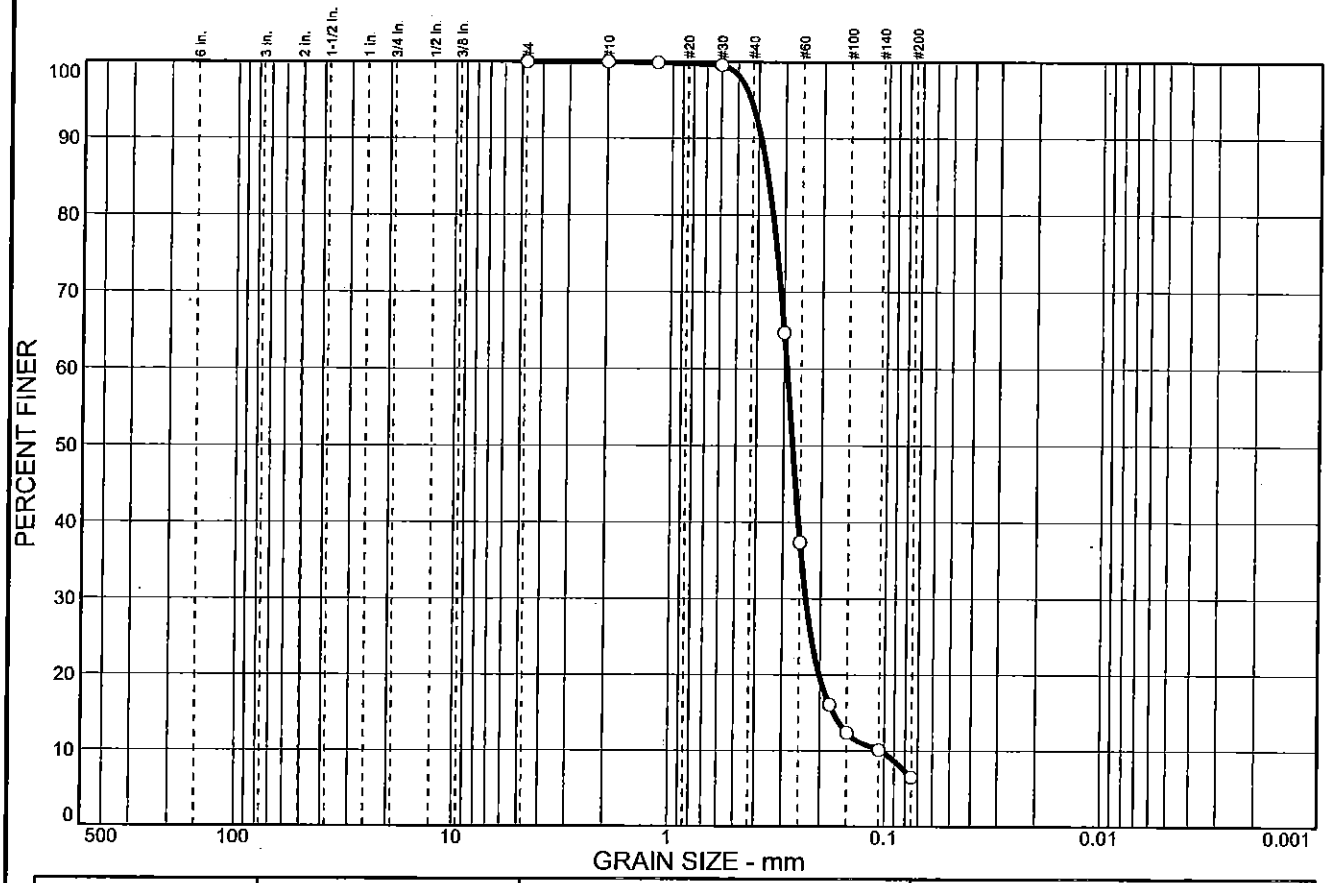
Remarks

Sample No.: 06OV-35 **Source of Sample:** **Date:** 6/1/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 35-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	5.8	87.7	6.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.6		
#50	64.7		
#60	37.4		
#80	16.1		
#100	12.4		
#140	10.1		
#200	6.5		

* (no specification provided)

Soil Description

dark gray sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.362 D_{60}= 0.291 D_{50}= 0.273
D_{30}= 0.234 D_{15}= 0.172 D_{10}= 0.104
C_u= 2.78 C_c= 1.80

Classification

USCS= AASHTO=

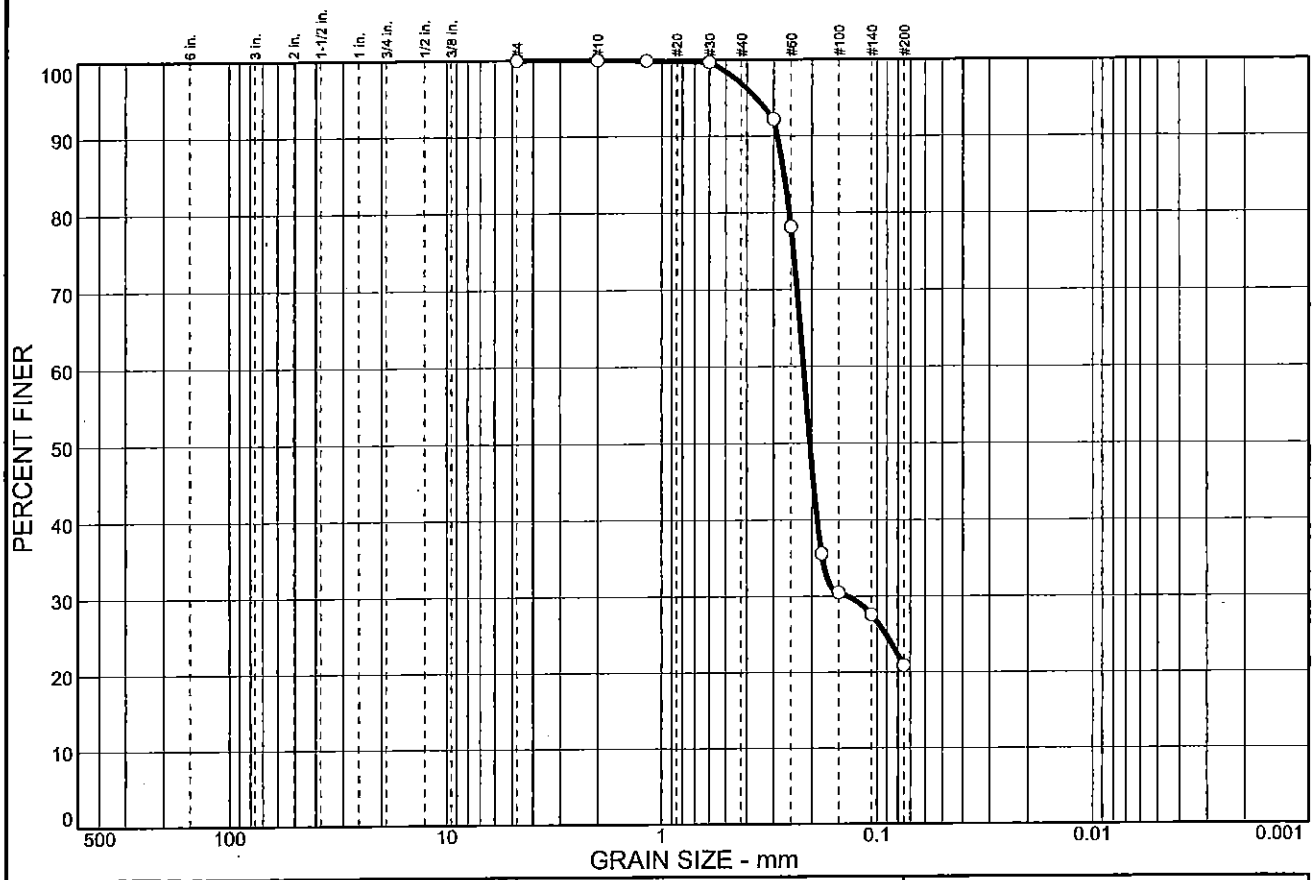
Remarks

Sample No.: 06OV-35 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 35-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	3.1	76.0	20.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	99.7		
#50	92.2		
#60	78.2		
#80	35.6		
#100	30.5		
#140	27.6		
#200	20.9		

* (no specification provided)

Soil Description

dark gray sand SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.269 D_{60}= 0.219 D_{50}= 0.204
D_{30}= 0.137 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

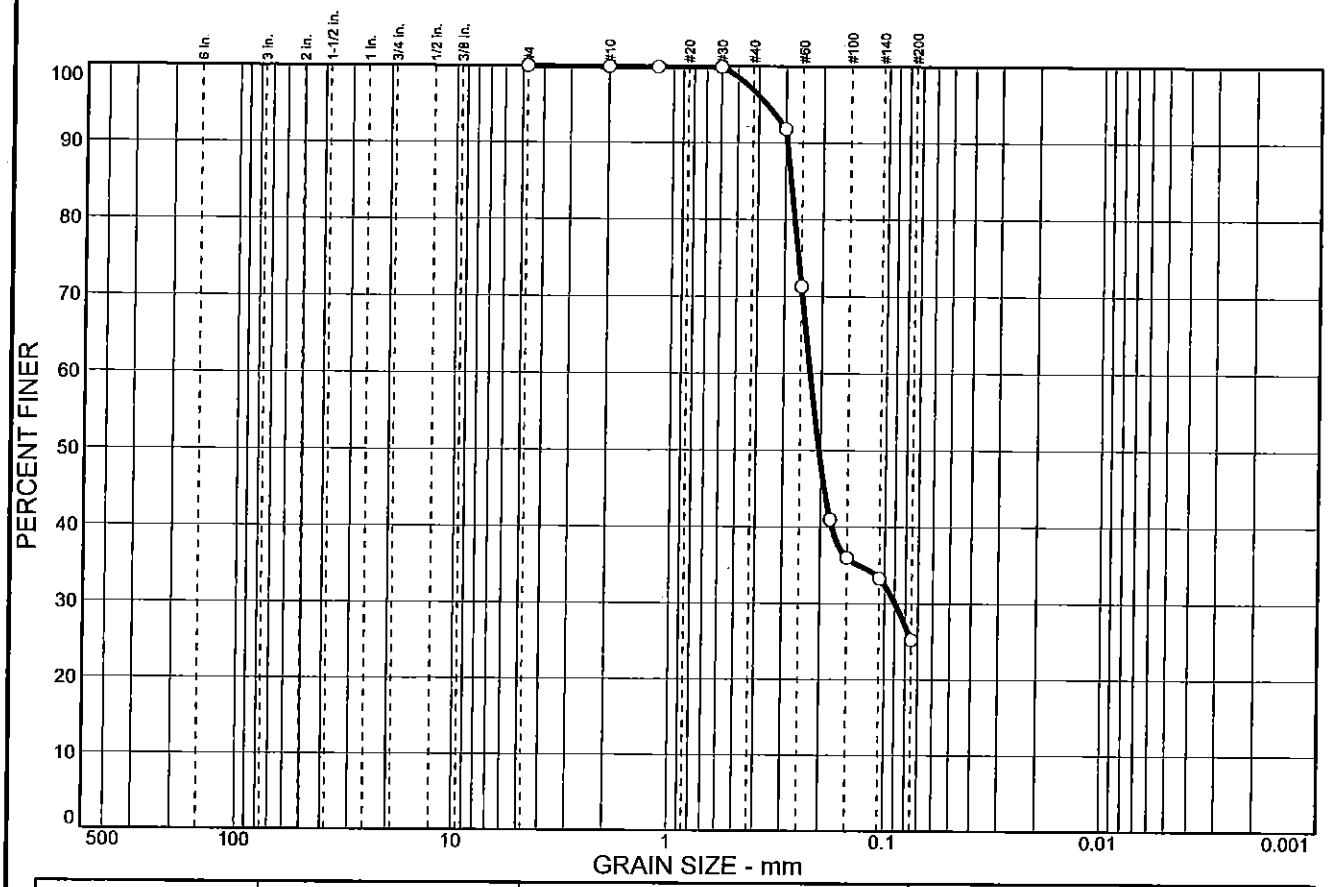
Sample No.: 06OV-35 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 35-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	3.0	71.7	25.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.9		
#50	91.8		
#60	71.3		
#80	41.0		
#100	36.0		
#140	33.3		
#200	25.2		

* (no specification provided)

Soil Description

dark gray sand w/clay SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.282 D_{60}= 0.226 D_{50}= 0.204
D_{30}= 0.0895 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

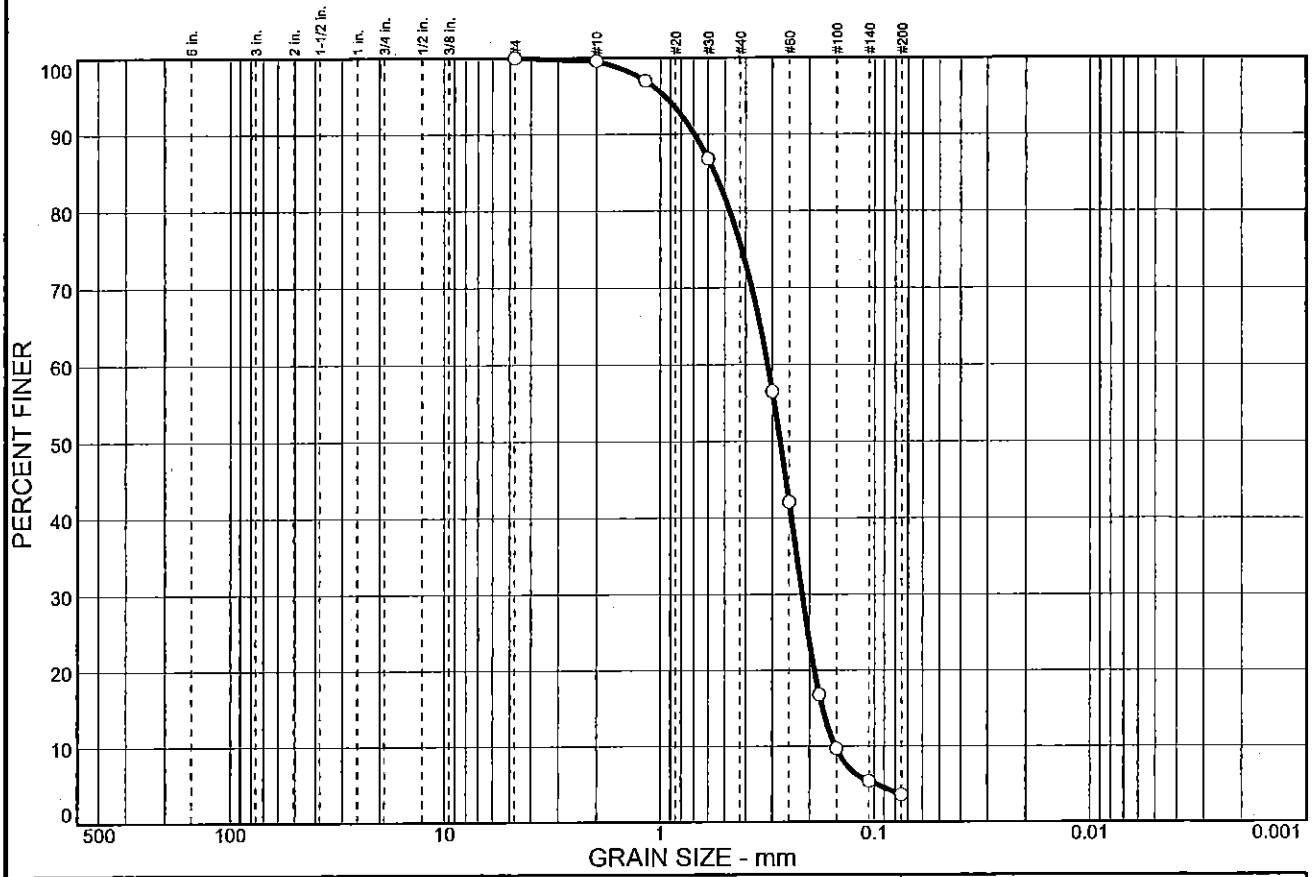
Remarks

Sample No.: 06OV-35 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 13

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 35-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	23.8	72.2	3.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.6		
#16	97.0		
#30	86.8		
#50	56.5		
#60	42.1		
#80	16.8		
#100	9.7		
#140	5.4		
#200	3.6		

* (no specification provided)

Soil Description

tan sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.559 D_{60}= 0.316 D_{50}= 0.275
D_{30}= 0.217 D_{15}= 0.174 D_{10}= 0.152
C_u= 2.08 C_c= 0.98

Classification

USCS= AASHTO=

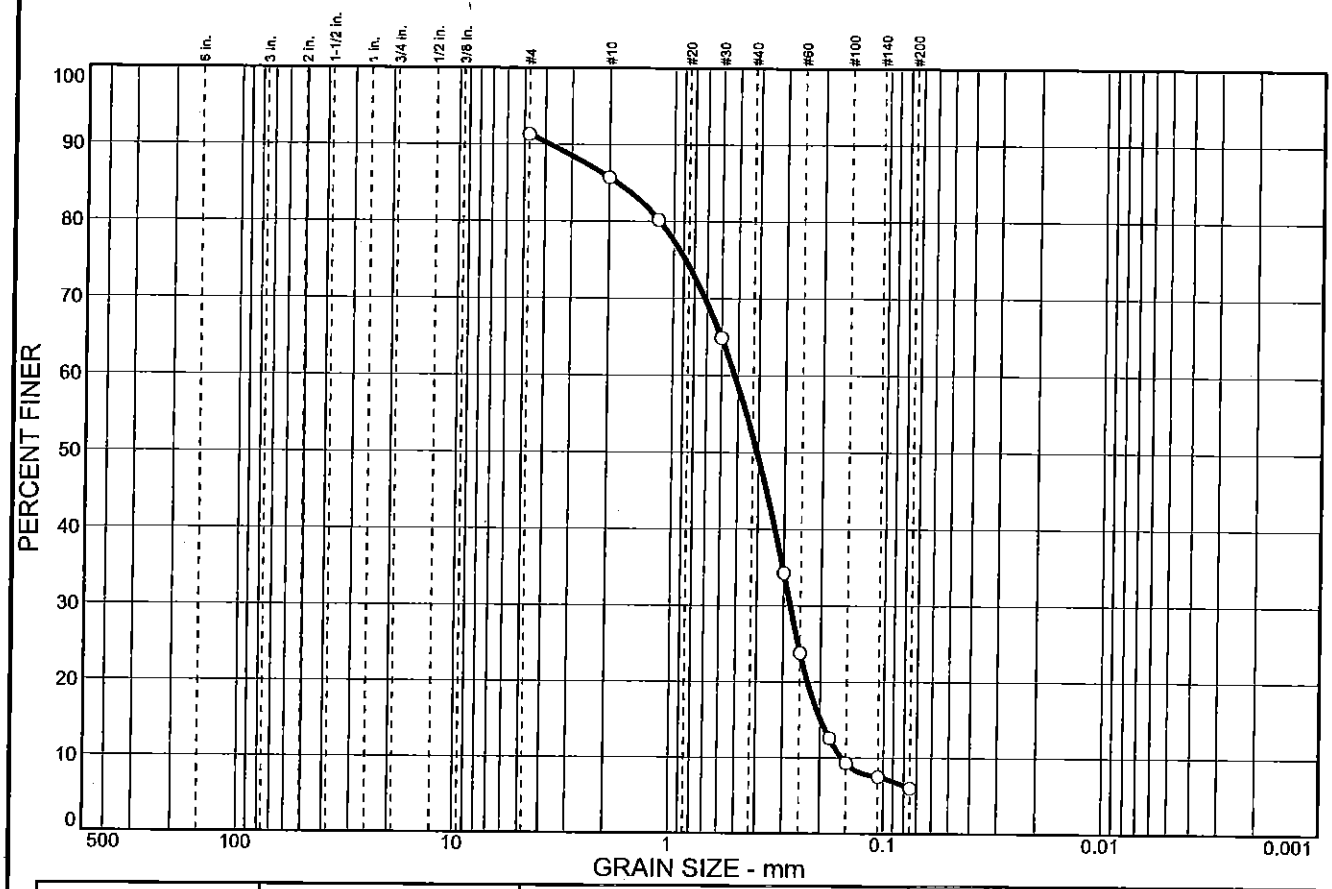
Remarks

Sample No.: 06OV-36 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 36-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			5.6	33.7	46.0	6.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	91.3		
#10	85.7		
#16	80.2		
#30	64.9		
#50	34.3		
#60	23.8		
#80	12.6		
#100	9.3		
#140	7.5		
#200	6.0		

* (no specification provided)

Soil Description

tan sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.83 D_{60}= 0.519 D_{50}= 0.406
D_{30}= 0.279 D_{15}= 0.198 D_{10}= 0.158
C_u= 3.30 C_c= 0.95

Classification

USCS= AASHTO=

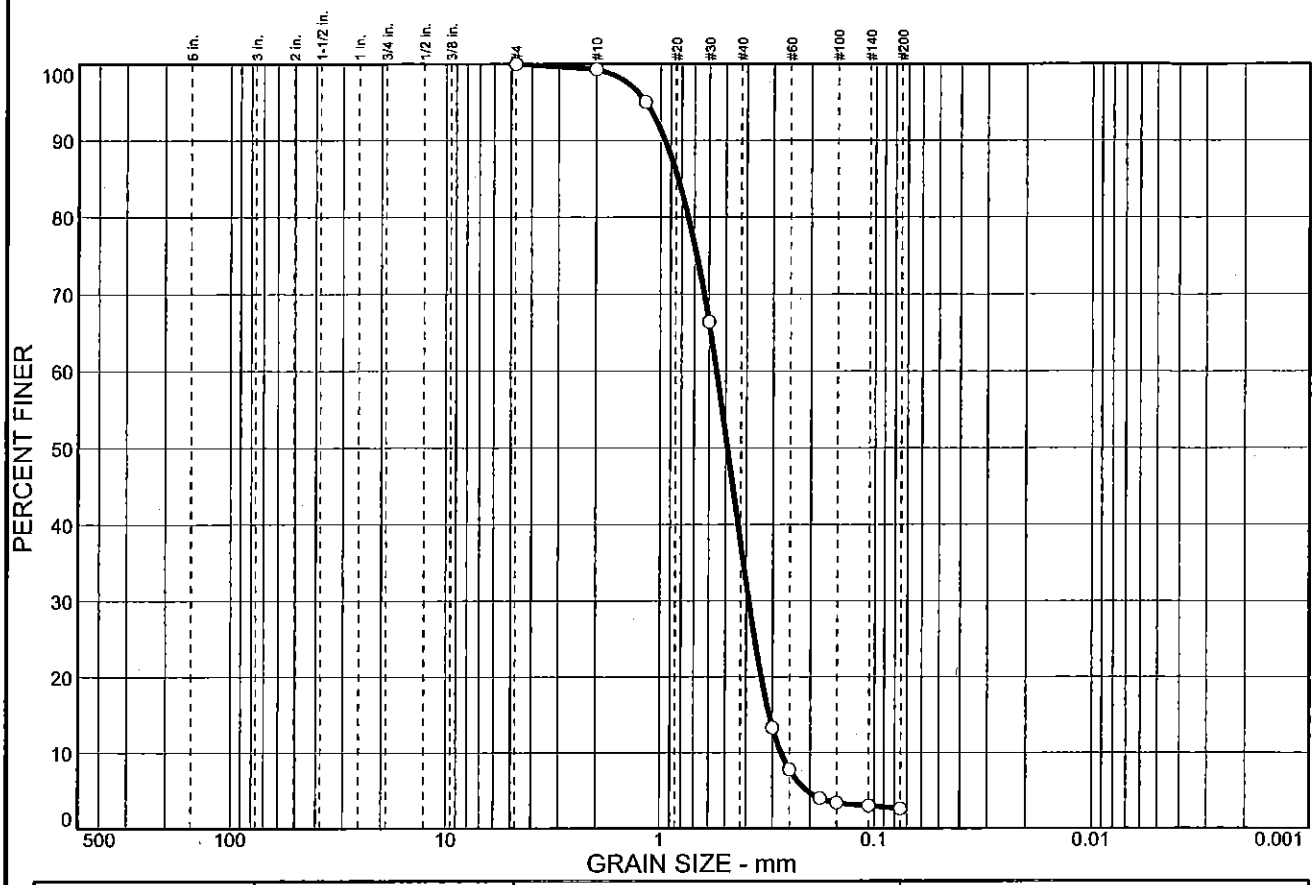
Remarks

Sample No.: 06OV-36 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 36-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.7	61.9	34.8	2.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.3		
#16	95.0		
#30	66.4		
#50	13.3		
#60	7.8		
#80	4.0		
#100	3.4		
#140	3.0		
#200	2.6		

* (no specification provided)

Soil Description

tan sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.833 D_{60}= 0.553 D_{50}= 0.491
D_{30}= 0.389 D_{15}= 0.311 D_{10}= 0.274
C_u= 2.02 C_c= 1.00

Classification

USCS= AASHTO=

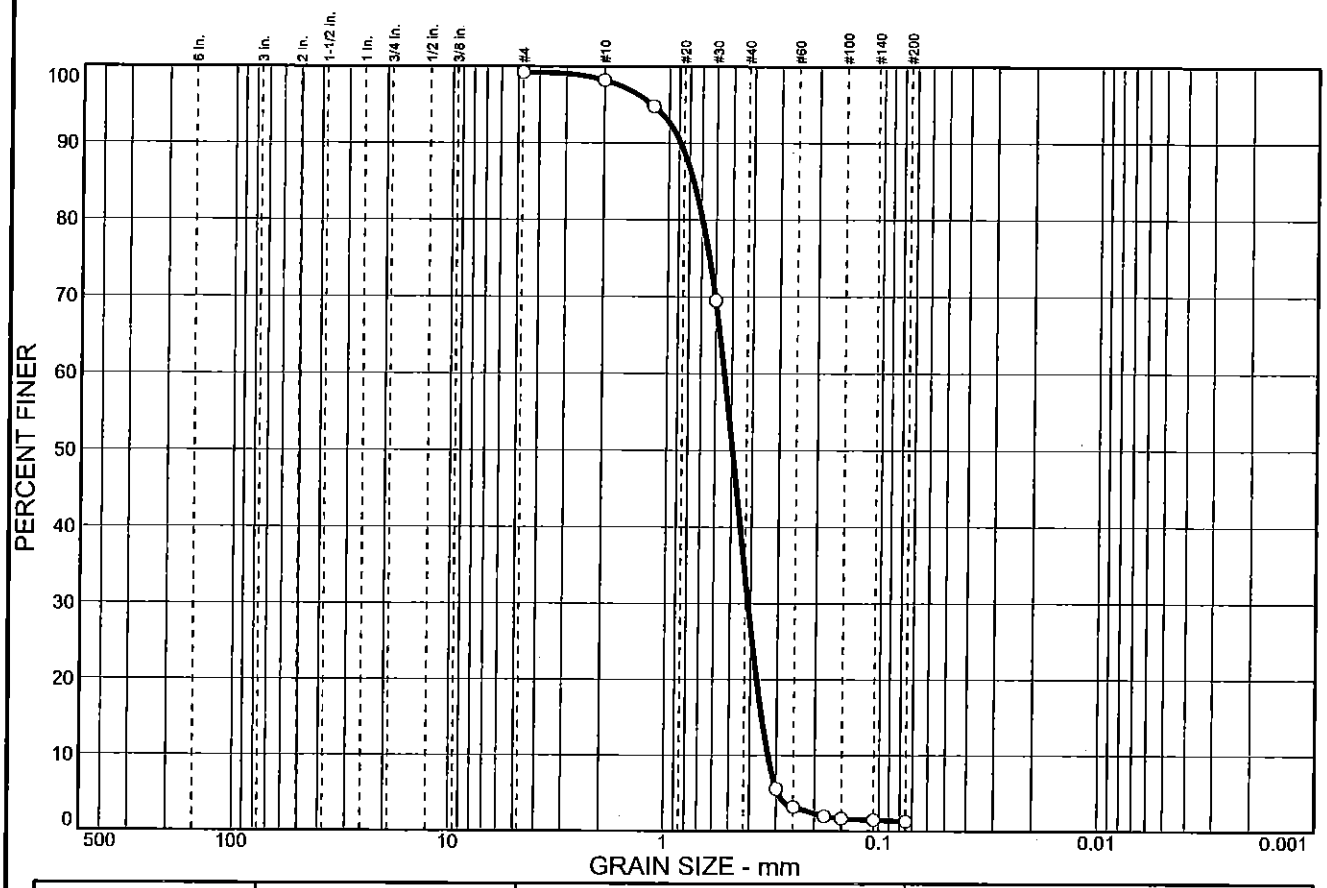
Remarks

Sample No.: 06OV-36 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 36-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.0	64.9	32.0	1.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.2		
#10	98.2		
#16	94.8		
#30	69.5		
#50	5.6		
#60	3.2		
#80	2.0		
#100	1.7		
#140	1.5		
#200	1.3		

* (no specification provided)

Soil Description

tan sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.766 D_{60}= 0.543 D_{50}= 0.494
D_{30}= 0.412 D_{15}= 0.352 D_{10}= 0.328
C_u= 1.65 C_c= 0.95

Classification

USCS= AASHTO=

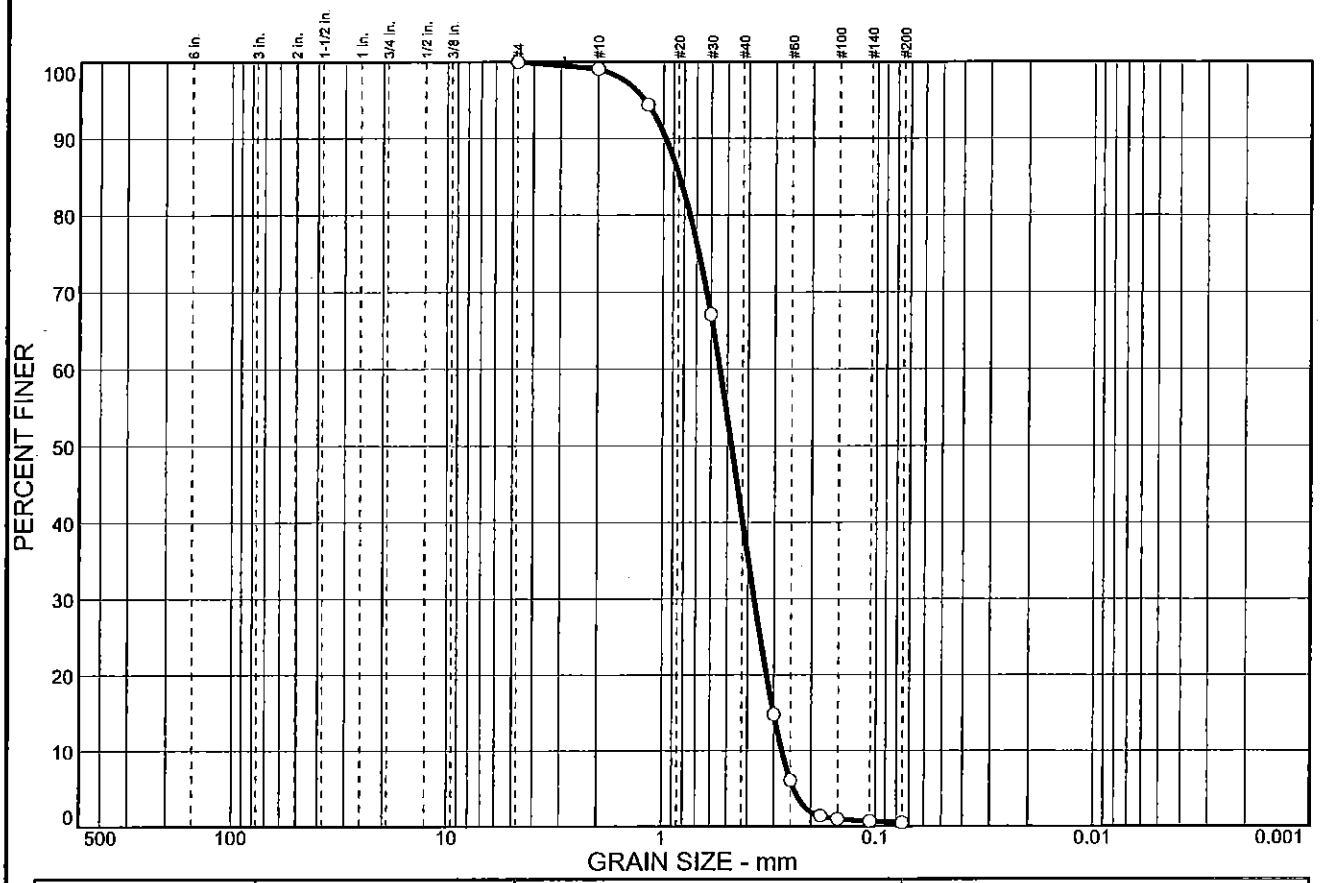
Remarks

Sample No.: 06OV-36 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 36-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.9	58.6	40.0	0.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.1		
#16	94.4		
#30	67.1		
#50	14.8		
#60	6.1		
#80	1.4		
#100	1.0		
#140	0.7		
#200	0.5		

* (no specification provided)

Soil Description

tan sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.844 D_{60}= 0.543 D_{50}= 0.478
D_{30}= 0.373 D_{15}= 0.301 D_{10}= 0.275
C_u= 1.98 C_c= 0.93

Classification

USCS= AASHTO=

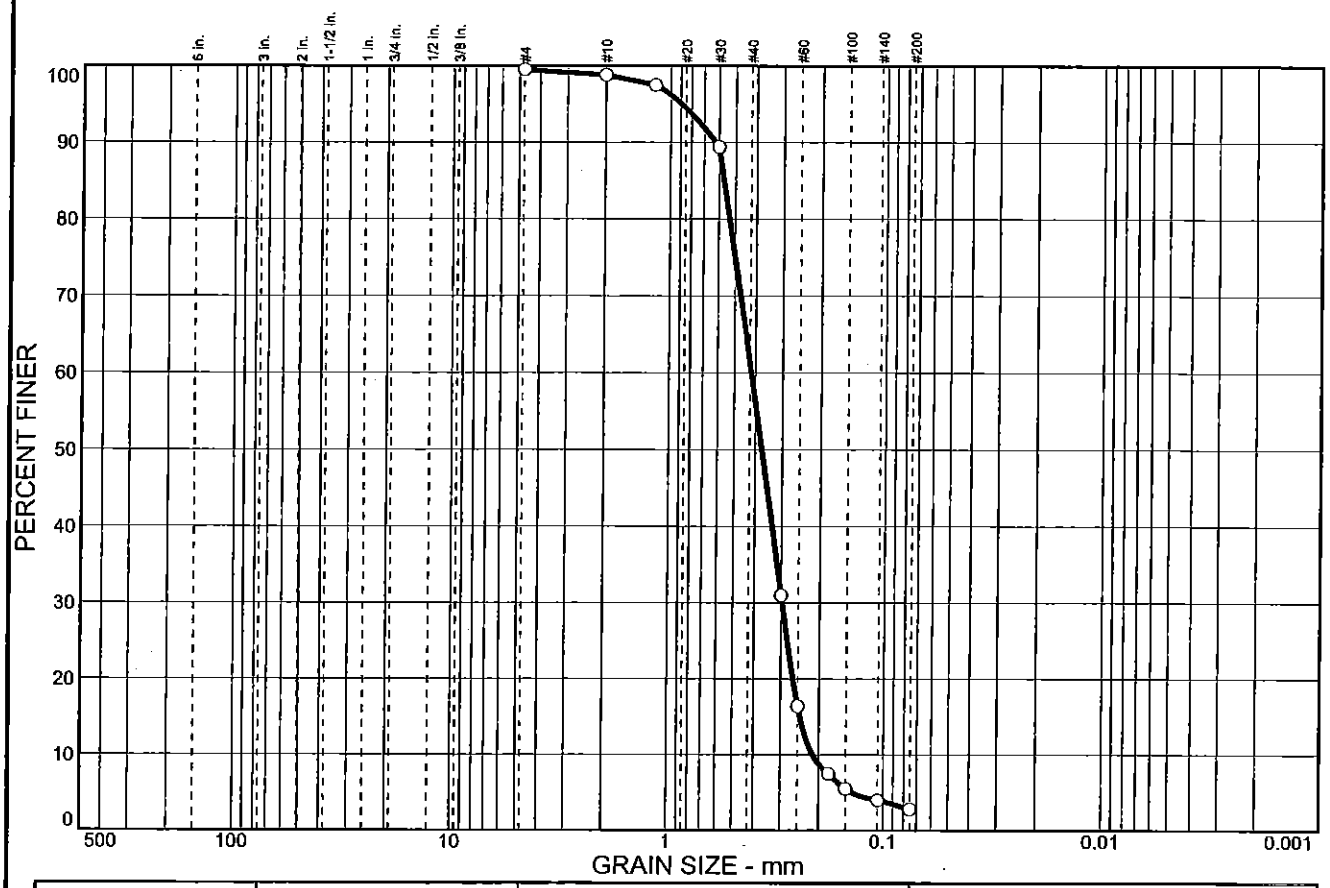
Remarks

Sample No.: 06OV-36 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 15

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 36-5

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.7	37.6	58.4	2.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.5		
#10	98.8		
#16	97.5		
#30	89.4		
#50	31.0		
#60	16.4		
#80	7.5		
#100	5.5		
#140	4.0		
#200	2.8		

* (no specification provided)

Soil Description

dark grayish brown sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.568 D_{60}= 0.419 D_{50}= 0.373
D_{30}= 0.297 D_{15}= 0.244 D_{10}= 0.213
C_u= 1.97 C_c= 0.99

Classification

USCS= AASHTO=

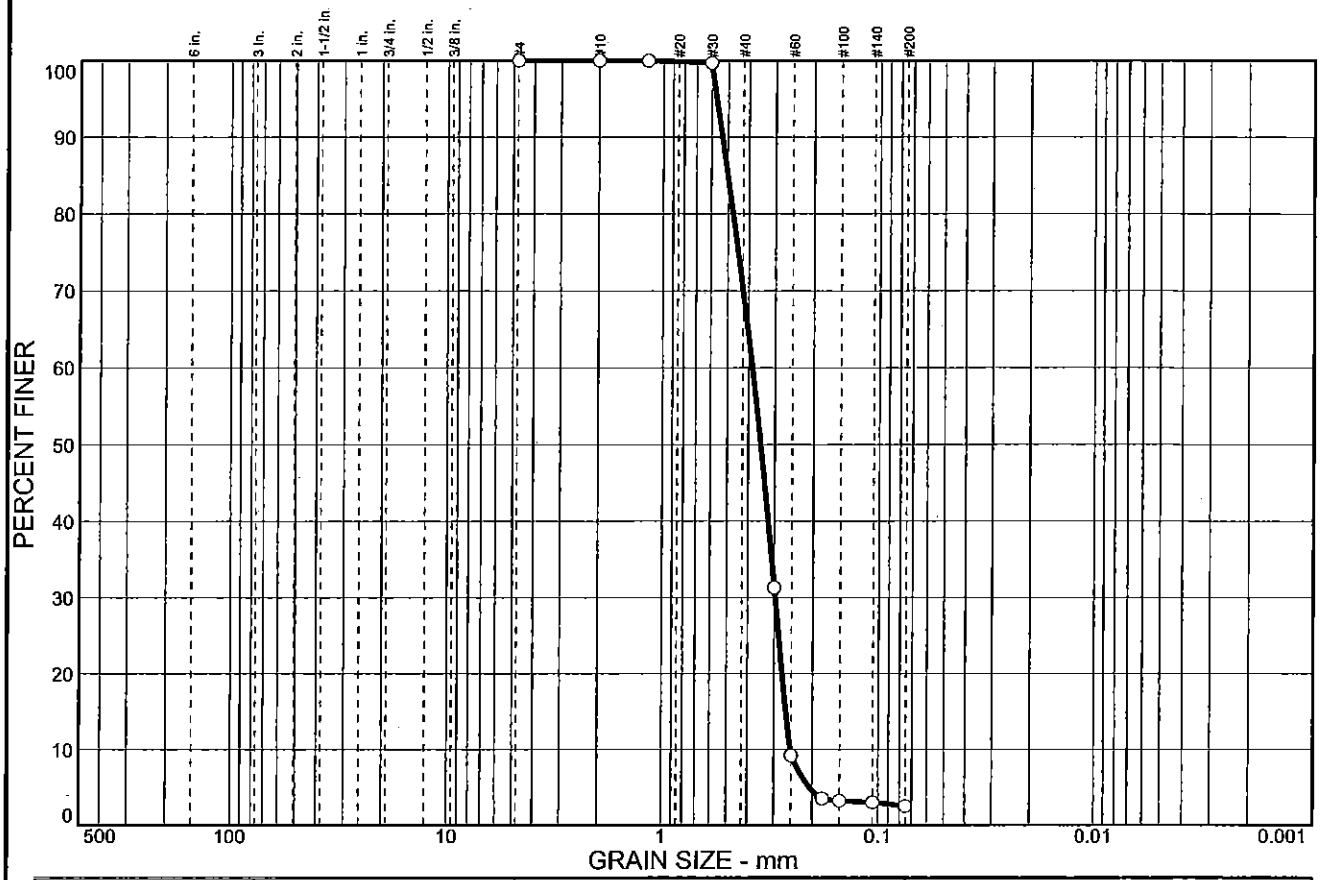
Remarks

Sample No.: 06OV-37 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 37-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	29.9	67.6	2.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.7		
#50	31.3		
#60	9.2		
#80	3.5		
#100	3.2		
#140	3.0		
#200	2.5		

* (no specification provided)

Soil Description

dark grayish brown sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.502 D_{60}= 0.384 D_{50}= 0.350
D_{30}= 0.297 D_{15}= 0.265 D_{10}= 0.252
C_u= 1.52 C_c= 0.91

Classification

USCS= AASHTO=

Remarks

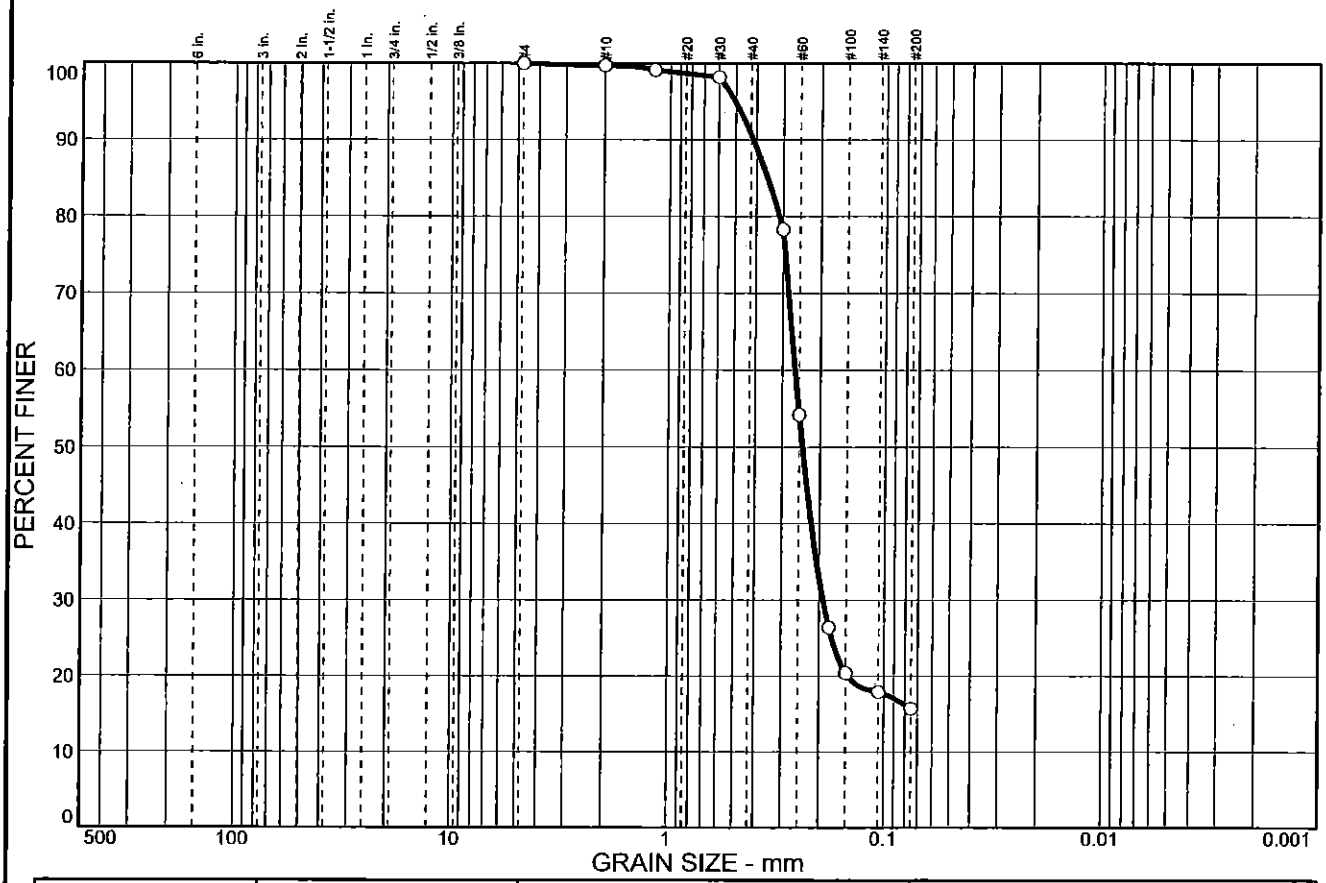
Sample No.: 06OV-37 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 37-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	9.0	75.0	15.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.7		
#16	99.1		
#30	98.2		
#50	78.3		
#60	54.2		
#80	26.4		
#100	20.4		
#140	17.9		
#200	15.7		

* (no specification provided)

Soil Description

black sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.356 D_{60}= 0.262 D_{50}= 0.241
D_{30}= 0.192 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

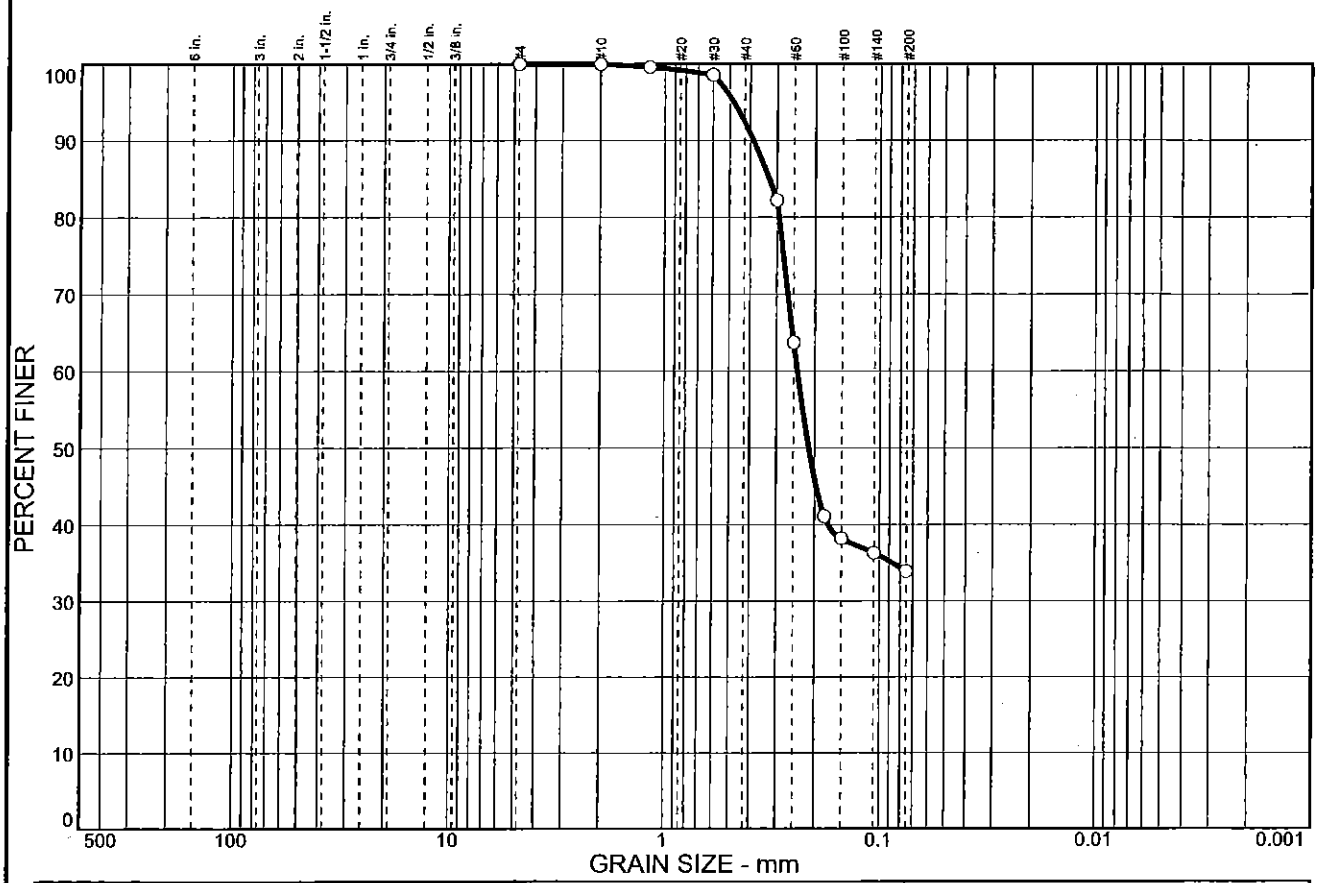
Remarks

Sample No.: 06OV-37 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 37-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	7.6	58.5	33.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.6		
#30	98.6		
#50	82.2		
#60	63.7		
#80	41.1		
#100	38.2		
#140	36.3		
#200	33.9		

* (no specification provided)

Soil Description

very dark gray sand SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.326 D_{60}= 0.240 D_{50}= 0.213
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

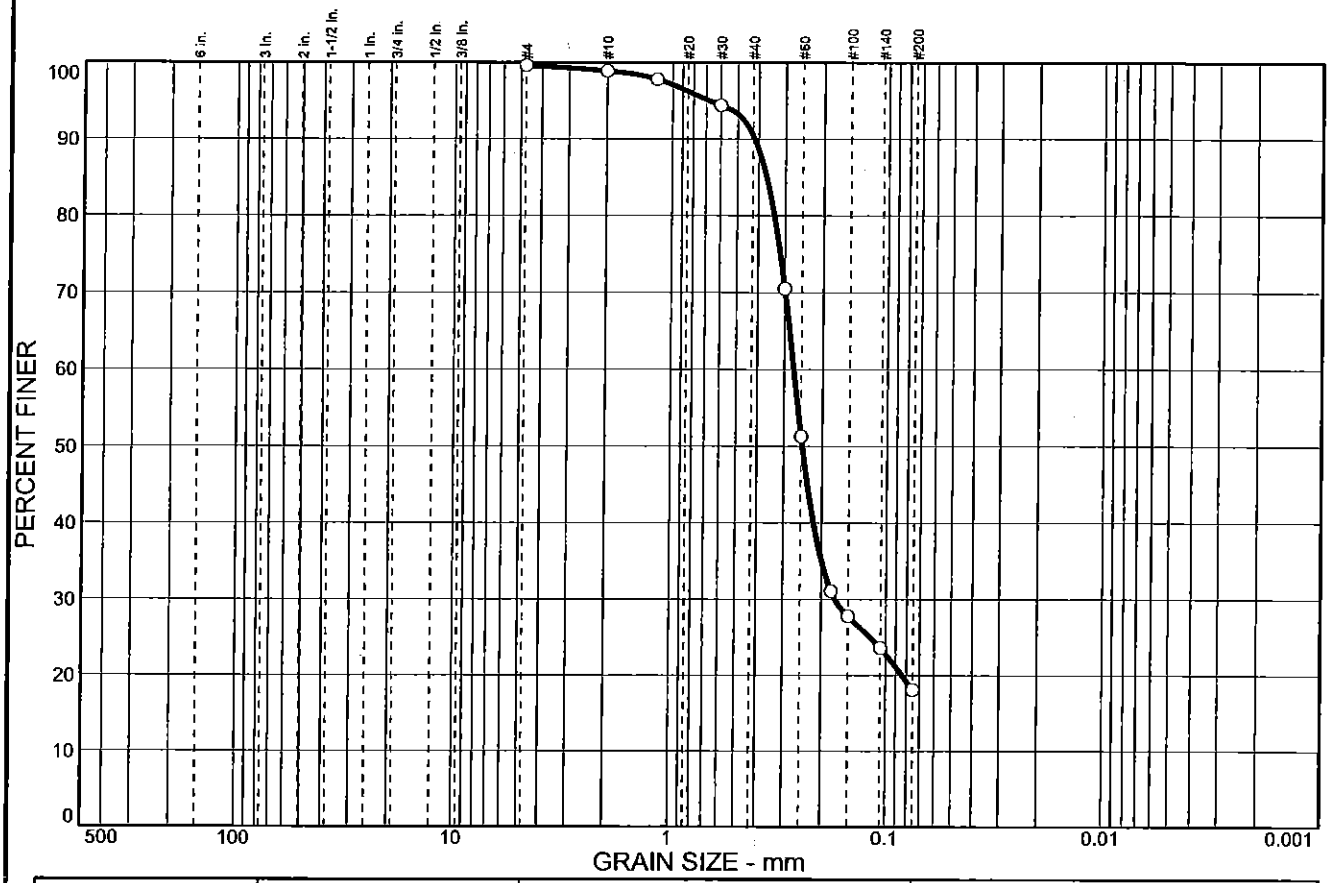
Remarks

Sample No.: 06OV-37 **Source of Sample:** **Date:** 6/2/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 37-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.7	8.5	72.3	18.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	98.9		
#16	97.8		
#30	94.4		
#50	70.5		
#60	51.3		
#80	31.1		
#100	27.8		
#140	23.6		
#200	18.1		

* (no specification provided)

Soil Description

very dark gray silty sand w/clay SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.367 D_{60}= 0.272 D_{50}= 0.247
D_{30}= 0.172 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

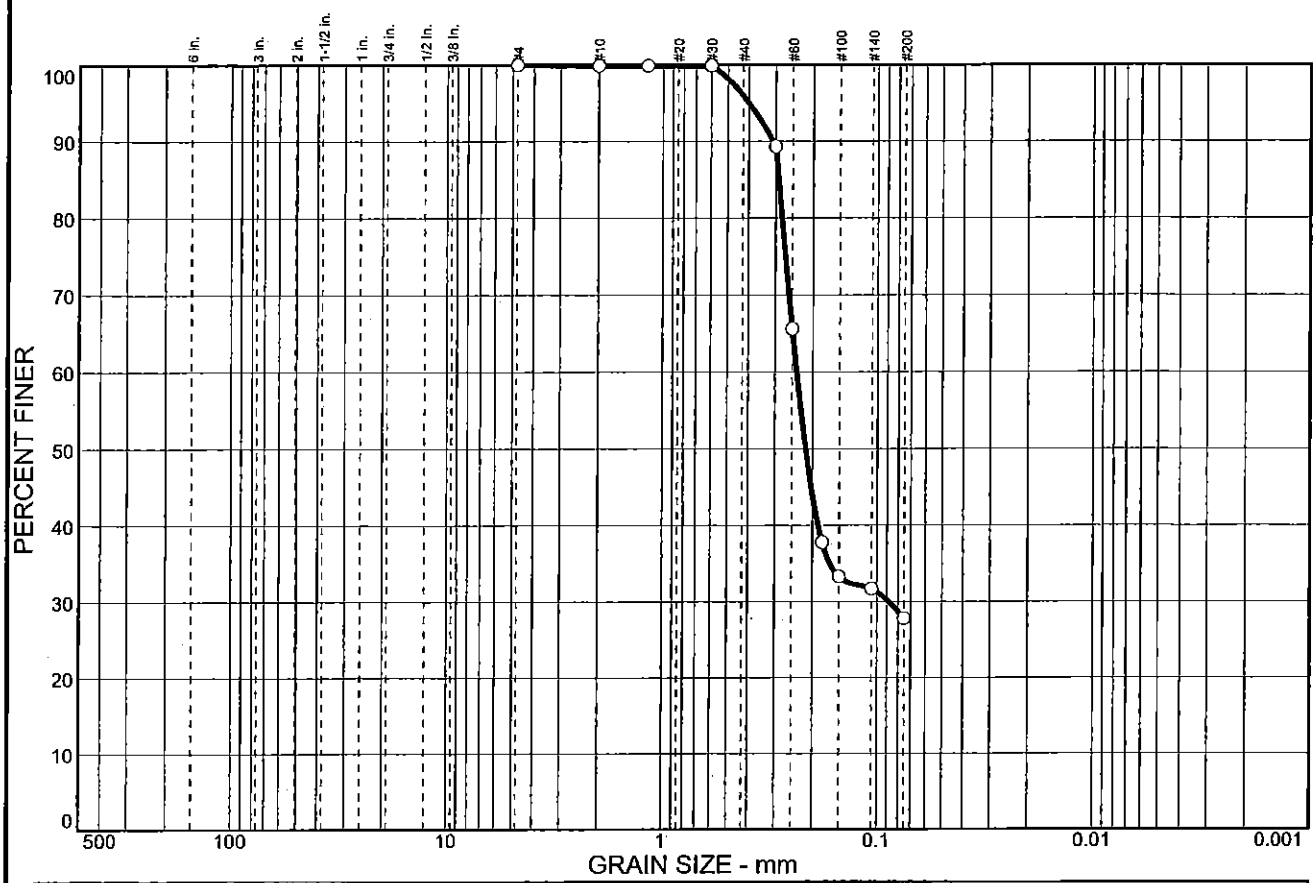
Remarks

Sample No.: 06OV-38 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 38-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	3.9	68.2	27.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#16	99.9		
#30	99.9		
#50	89.3		
#60	65.6		
#80	37.8		
#100	33.3		
#140	31.7		
#200	27.8		

* (no specification provided)

Soil Description

very dark gray silty sand w/clay lens SP-SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.291 D_{60}= 0.238 D_{50}= 0.216
D_{30}= 0.0883 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

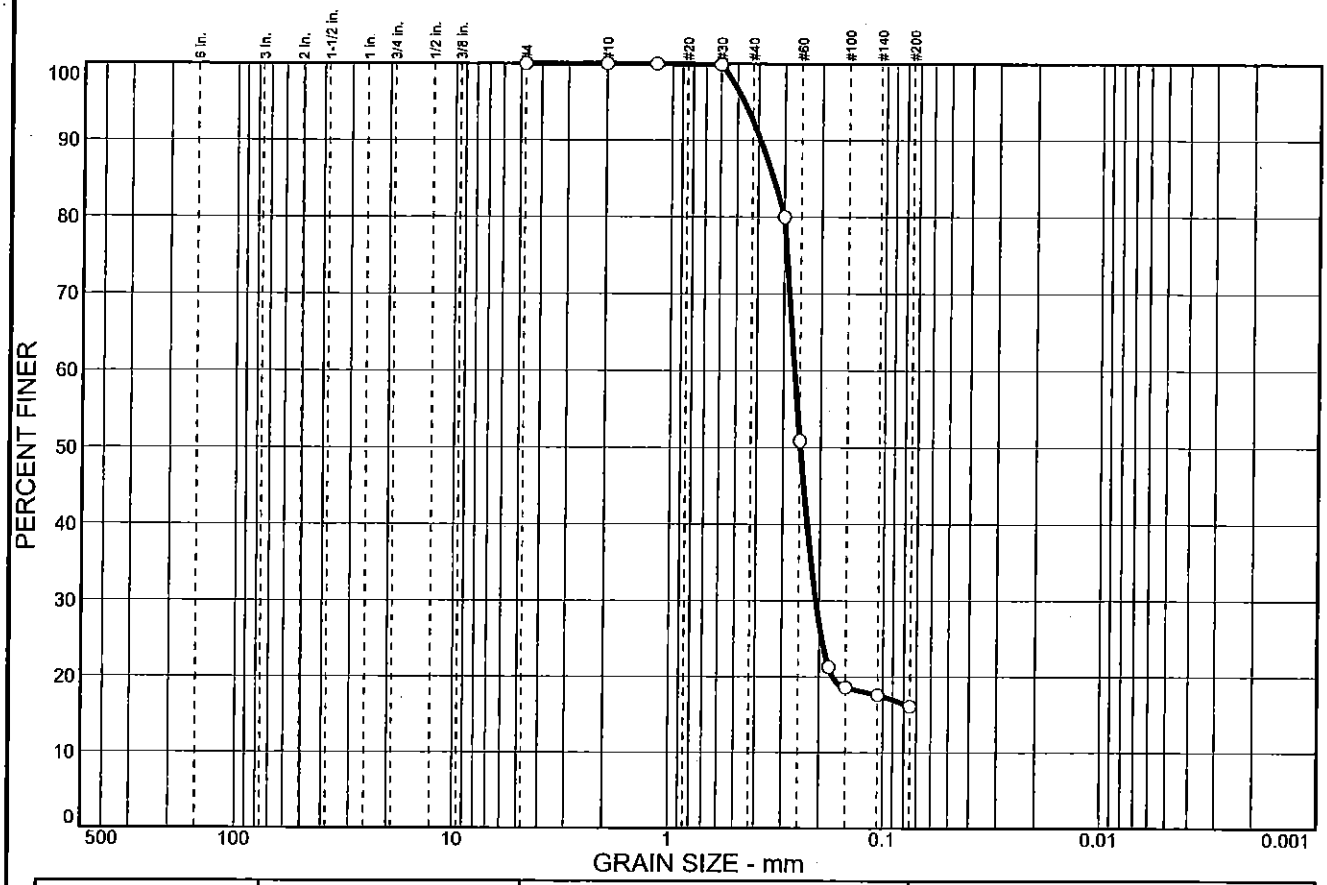
Remarks

Sample No.: 06OV-38 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 38-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	7.5	76.4	16.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	99.9		
#50	80.0		
#60	50.9		
#80	21.3		
#100	18.6		
#140	17.6		
#200	16.1		

* (no specification provided)

Soil Description

very dark gray silty sand w/clay lens SP-SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.339 D_{60}= 0.266 D_{50}= 0.248
D_{30}= 0.208 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

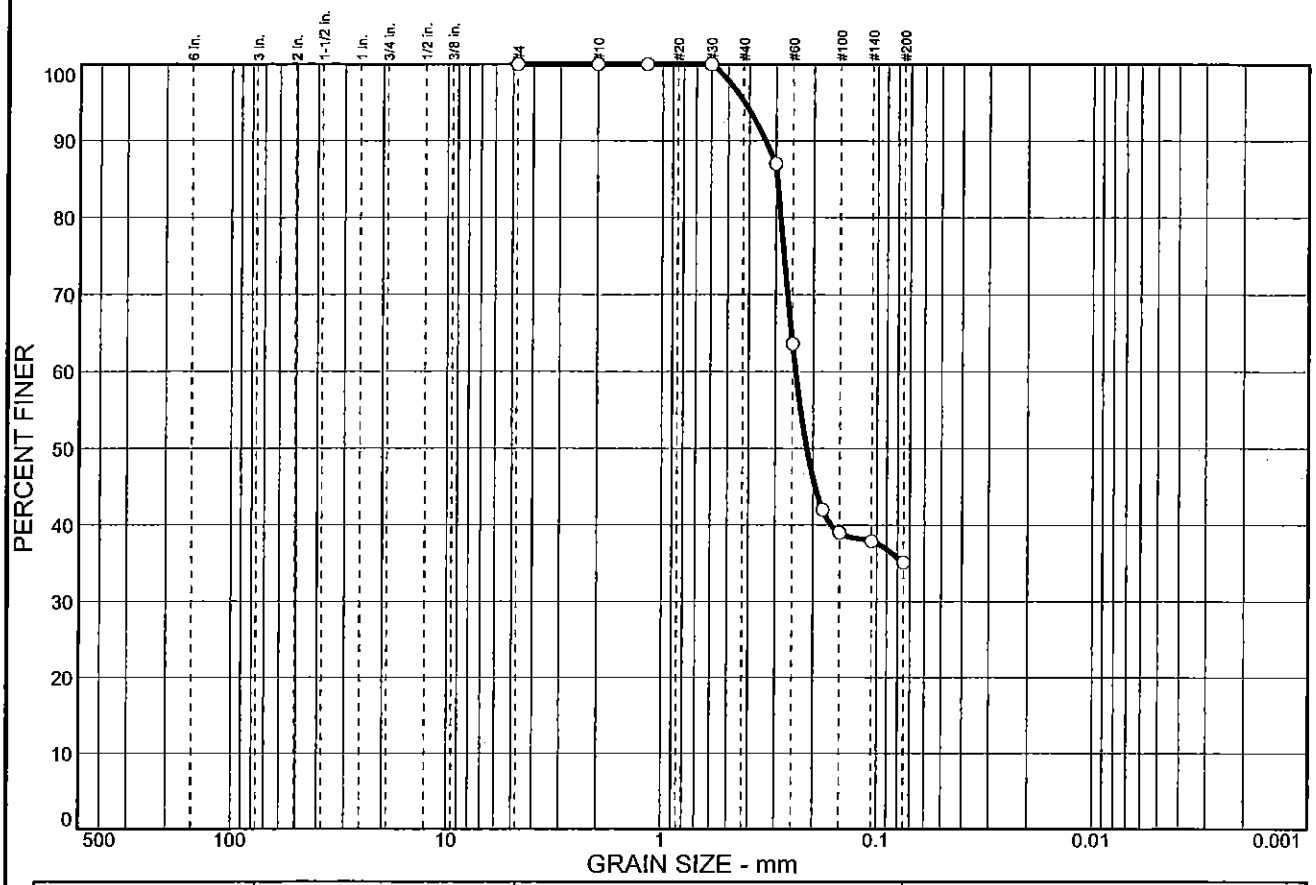
Remarks

Sample No.: 06OV-38 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 38-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	4.8	60.1	35.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	100.0		
#30	100.0		
#50	87.0		
#60	63.6		
#80	42.0		
#100	39.0		
#140	37.9		
#200	35.1		

* (no specification provided)

Soil Description

very dark gray silty sand w/clay lens SC

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.296 D_{60}= 0.242 D_{50}= 0.214
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

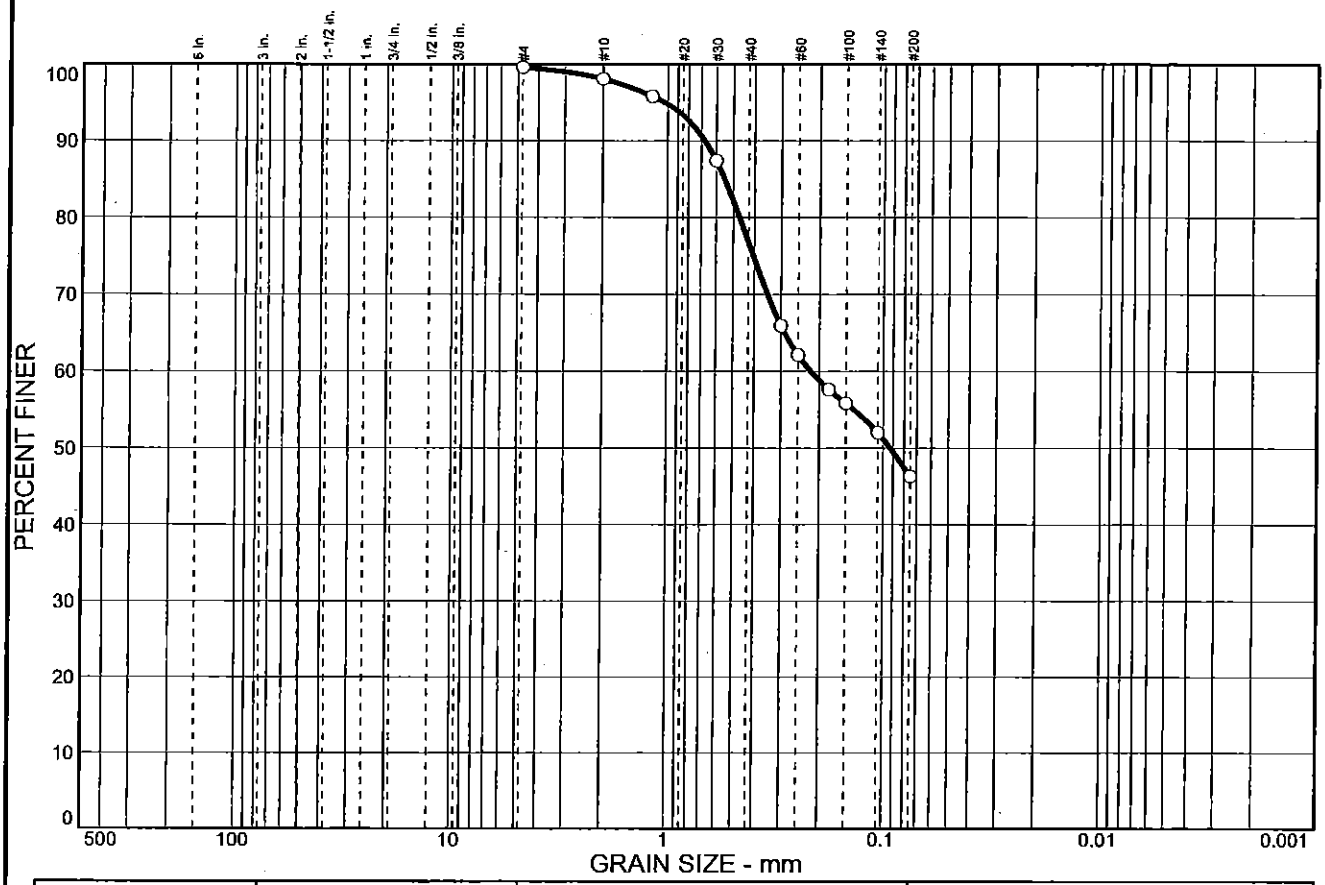
Sample No.: 06OV-38 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 38-4

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			1.5	21.4	30.4	46.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.6		
#10	98.1		
#16	95.8		
#30	87.4		
#50	65.9		
#60	62.1		
#80	57.6		
#100	55.8		
#140	52.0		
#200	46.3		

* (no specification provided)

Soil Description

very dark grayish brown sand w/clay, shell CH

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.549 D_{60}= 0.219 D_{50}= 0.0929
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

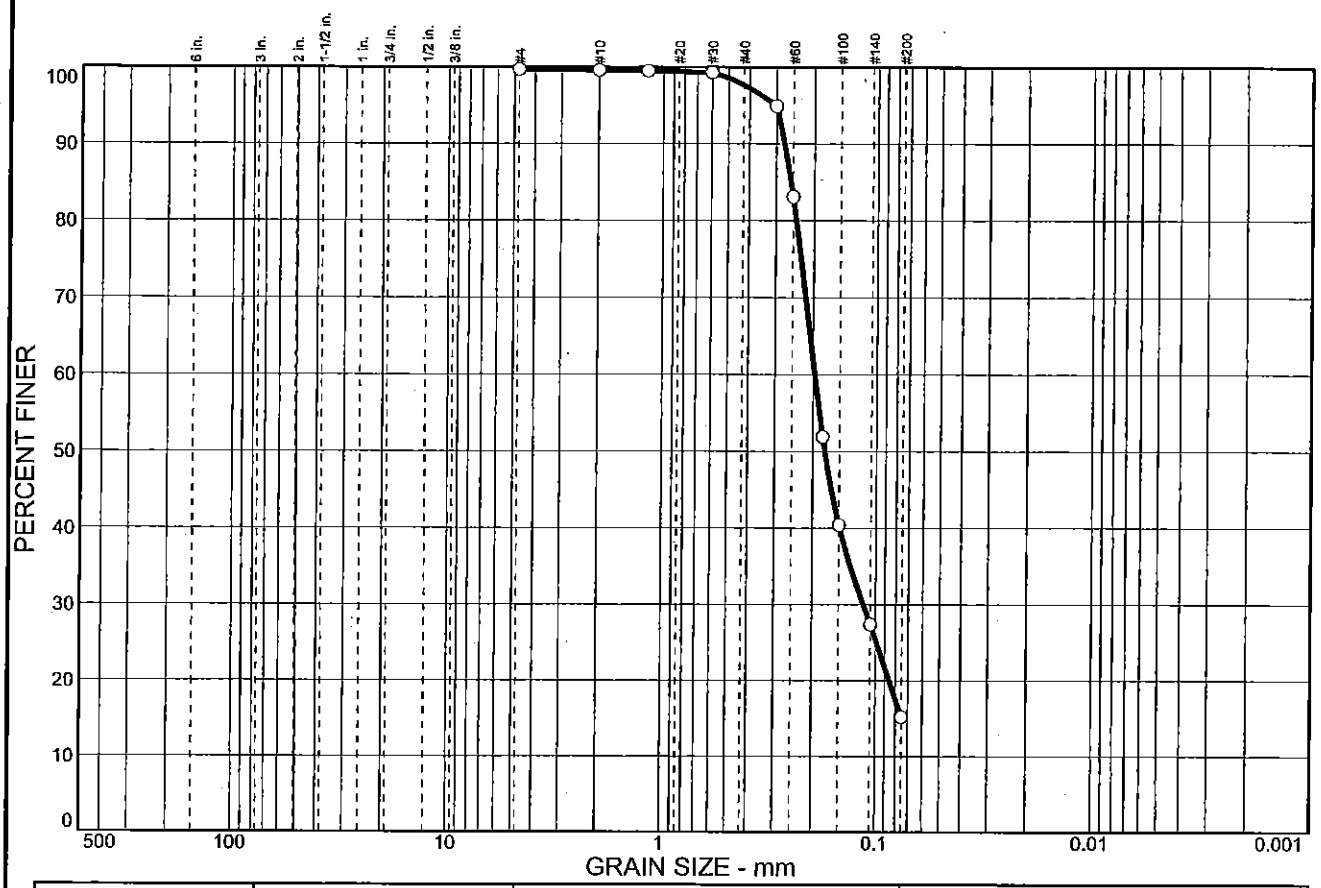
Remarks

Sample No.: 06OV-39 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 39-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.1	2.0	82.4	15.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.7		
#10	99.6		
#16	99.5		
#30	99.3		
#50	94.9		
#60	83.1		
#80	51.9		
#100	40.4		
#140	27.4		
#200	15.2		

* (no specification provided)

Soil Description

very dark grayish brown silty clay with shell SM

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.256 D_{60}= 0.197 D_{50}= 0.176
D_{30}= 0.115 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

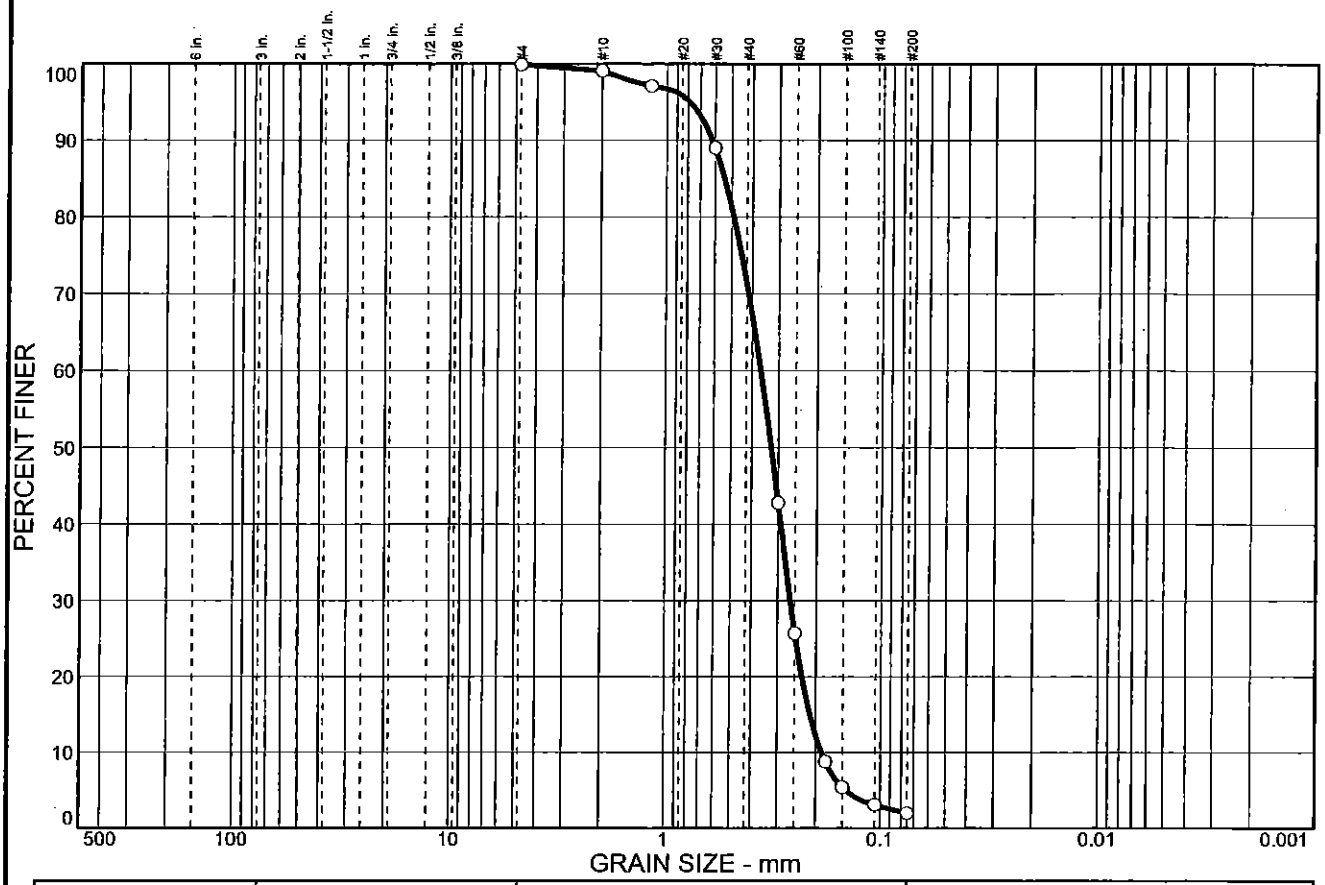
Sample No.: 06OV-39 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 39-2

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.8	27.7	69.4	2.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.9		
#10	99.1		
#16	97.1		
#30	89.0		
#50	42.8		
#60	25.7		
#80	8.8		
#100	5.4		
#140	3.1		
#200	2.0		

* (no specification provided)

Soil Description

dark olive brown sand SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.542 D_{60}= 0.364 D_{50}= 0.324
D_{30}= 0.263 D_{15}= 0.212 D_{10}= 0.188
C_u= 1.94 C_c= 1.01

Classification

USCS= AASHTO=

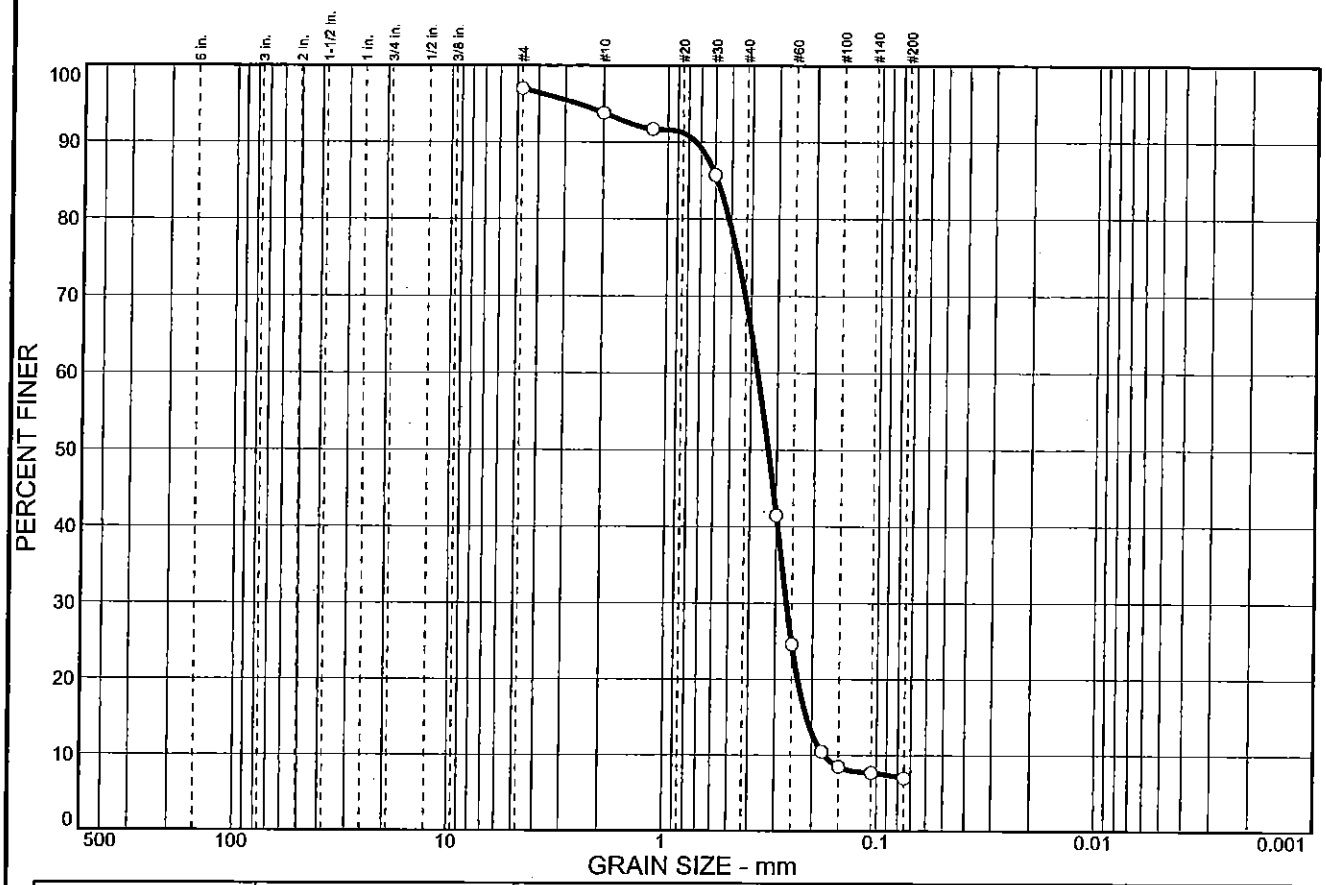
Remarks

Sample No.: 06OV-40 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 0-0.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing
Project No: 238-60027 **Plate** 40-1

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			3.2	24.4	62.4	7.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	97.0		
#10	93.8		
#16	91.7		
#30	85.7		
#50	41.5		
#60	24.6		
#80	10.5		
#100	8.5		
#140	7.7		
#200	7.0		

* (no specification provided)

Soil Description

gray sand w/organics SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.587 D_{60}= 0.372 D_{50}= 0.329
D_{30}= 0.266 D_{15}= 0.212 D_{10}= 0.175
C_u= 2.13 C_c= 1.09

Classification

USCS= AASHTO=

Remarks

Sample No.: 06OV-40 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 2-2.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 40-2

Particle Size Distribution Report

% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	34.3	30.3	35.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#16	99.9		
#30	65.7		
#50	65.7		
#60	58.0		
#80	45.5		
#100	42.0		
#140	38.8		
#200	35.4		

* (no specification provided)

Soil Description

gray sand with shell, clay lens CH/SP

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.945 D_{60}= 0.262 D_{50}= 0.206
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

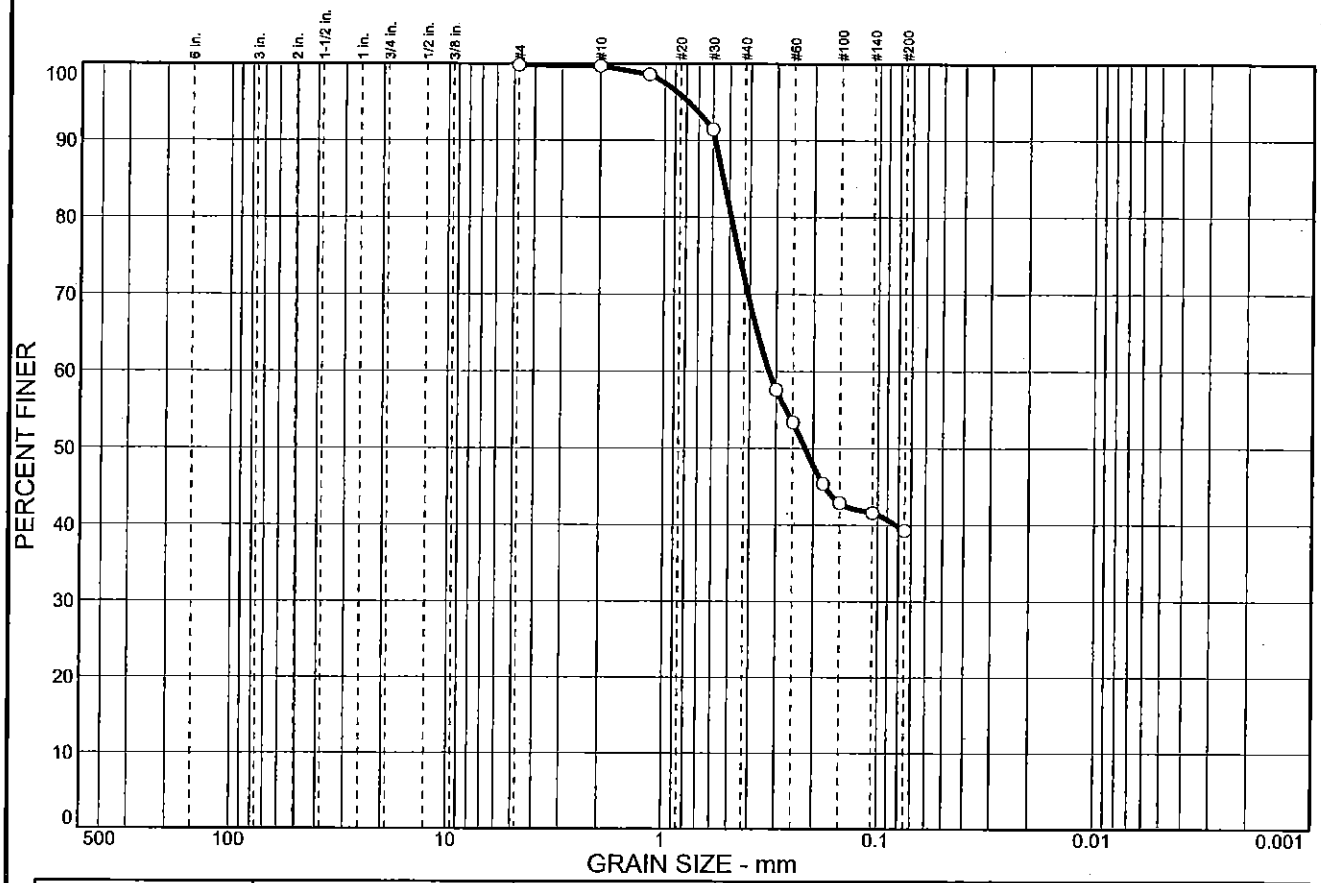
Sample No.: 06OV-40 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 5-5.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 40-3

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
			0.1	27.7	32.7	39.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	99.8		
#10	99.7		
#16	98.6		
#30	91.4		
#50	57.6		
#60	53.4		
#80	45.4		
#100	42.9		
#140	41.6		
#200	39.3		

* (no specification provided)

Soil Description

gray sand SC/CH

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.537 D_{60}= 0.324 D_{50}= 0.218
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 06OV-40 **Source of Sample:** **Date:** 6/5/06
Location: **Elev./Depth:** 10-10.5

PSI

Client: Moffatt & Nichol
Project: Sand Borrow - Ocean View Soils Laboratory Testing

Project No: 238-60027 **Plate** 40-4