



EUSTIS ENGINEERING COMPANY, INC.

GEOTECHNICAL ENGINEERS

CONSTRUCTION QUALITY CONTROL & MATERIALS TESTING

3011 28th Street • Metairie, Louisiana 70002 • 504-834-0157 / Fax 504-834-0354 / E-mail EustisEngr@aol.com

14 April 1998

State of Louisiana
Department of Natural Resources
Coastal Restoration Division
Nicholls State University
Post Office Box 2079
Thibodaux, Louisiana 70310

Attention Mr. Brian Kendrick

Gentlemen:

Borrow Borings
State of Louisiana
Whiskey Island (Phase 3b)
Terrebonne Parish, Louisiana
State Project No. TE-27
Federal Project No. PTE15

This letter contains the soil boring logs and laboratory test results for the borrow borings made as part of the Whiskey Island project in Terrebonne Parish, Louisiana. This work was performed in accordance with Eustis Engineering Company, Inc.'s letter of proposal dated 10 March 1998. This proposal was authorized in writing on 10 March by Mr. D. Brian Kendrick, Engineer Supervisor, Coastal Restoration Division, Department of Natural Resources, State of Louisiana.

Soil Borings. Twenty-five soil borings were drilled from 11 to 14 March 1998. The termination depths for the borings were determined in the field using the following criteria. If clay was present at a depth of 15 feet below the mudline, the boring was to be terminating at that depth. If sand was present at a depth of 15 feet below the mudline, the boring was to be terminated 20 feet below the mudline. The

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actual termination depths of the borings below the mudline range from 10 to 20 feet with the majority of the borings terminated 16 feet below the mudline. At the boring locations, the depth of the mudline below the water surface ranged from 6 to 10 feet. The borings were located in the field by a representative of T. Baker Smith & Sons. Detailed descriptive logs of the borings shown in both tabular and graphical form are enclosed. On the boring logs, all depths are referenced to the existing water surface.

The borings were made using a truck mounted wet rotary drill rig operating from a jack-up barge. Samples were obtained using a driven 2-in. external diameter splitspoon. Samples obtained in this manner were placed in sealed glass jars for transportation to the laboratory.

Laboratory Testing. Sieve analyses were performed on selected samples of cohesionless soils to determine particle size distributions. The results of these analyses are provided on separate particle size distribution test reports. Natural moisture contents and Atterberg liquid and plastic limits were determined for selected samples of cohesive soil. The results of these tests are provided on the boring logs.

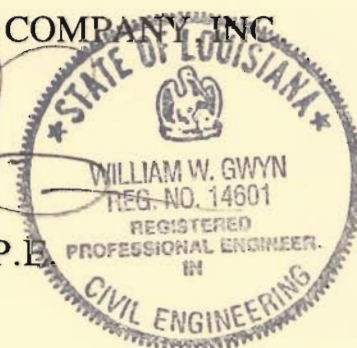
If you have any questions regarding this letter or require further information, please contact us.

Yours very truly,

EUSTIS ENGINEERING COMPANY, INC



WILLIAM W. GWYN, P.E.








RPB:aln/mcp

Enclosures

EE 15300

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.:	Scale In Feet	PP	SPT	SLR	Symbol	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 1				Refer to "Legends & Oth Tes	
										Water Content Percent	Density Dry	Density Wet	Shear Tests Type		Shear Tests ϕ
							Visual Classification	USC	Sample Number	Depth In Feet					
0						Water									
10						Tan & gray fine sand w/shell fragments	SP	1	7-8						
						Gray & tan fine sand w/clay & shell fragments	SP	2	9-10						
						Gray clayey sand w/shell fragments	SC	3	11-12						
						Gray & tan fine sand w/sandy clay layers	SP	4	13-14						
						Gray clay	CH	5	15-16						
								6	17-18						
								7	19-20						
								8	21-22						


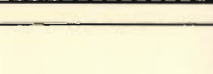
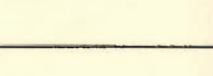

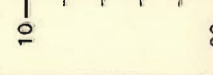

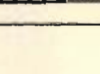
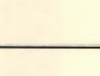
Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale in Feet	Ground Elev.:	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 2			Refer to "Legends &								
						PP	SPT	S P L R									
			Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density	Shear Tests		Atterberg Limits			Oth Tes		
									Dry	Wet	Type	ϕ	C	LL		PL	PI
0					Water												
10					Tan & gray fine sand w/shell fragments	SP	1	7-8									
							2	9-10									
					Gray & tan fine sand w/shell fragments	SP	3	11-12									
					Tan & gray fine sand w/shell fragments	SP	4	13-14									
							5	15-16									
							6	17-18									
							7	19-20									
					Dark gray clayey sand w/shell fragments	SC	9	21-22									
					Dark gray sandy clay w/clayey sand layers & shell fragments	CL	8	24-25									
5.0																	

Comments:

Ground Elev.: Datum: Gr. Water Depth: Job No.: 15300 Date Drilled: 3/12/98 Boring: 3 Refer to "Legends & Other Tests"

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests			Atterberg Limits			Other Tests
										Dry	Wet	Type	φ	C	LL	PL	PI	
0					Water													
10					Tan & gray fine sand w/shell fragments	SP	1	10-11										
					Gray fine sand w/shell fragments	SP-SM	2	12-13										
					w/silt pockets & shell fragments		3	14-15										
					Gray fine sand w/shell fragments	SP	4	16-17										
					Gray fine sand w/shell fragments	SP	5	18-19										
					Gray sandy clay w/fine sand lenses	CL	6	20-21										
							7	22-23										
							8	24-25										
30																		
40																		
50																		

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 4				Refer to "Legends &							
								Visual Classification	USC	Sample Number	Depth In Feet		Water Content Percent	Density		Shear Tests		Atterberg Limits	
										Dry	Wet	Type	φ	C	LL	PL	PI	Oth Tes	
0					Water														
10					Gray fine sand w/shell fragments	SP	11-12	1											
					w/shell fragments & organic matter		13-14	2											
							15-16	3											
							17-18	4											
							19-20	5											
							21-22	6											
							23-24	7											
							25-26	8											
							27-28	9											

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA





STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.:	Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 7			Refer to "Legends & Notes"						
									Visual Classification	USC	Sample Number		Depth In Feet	Water Content Percent	Density	Shear Tests	Atterberg Limits	
									Dry	Wet	Type	ϕ	C	LL	PL	PI	Other Tests	
0						Water												
10						Tan & gray fine sand w/silt & shell fragments	SP-SM	1	8-9									PD
						w/silt & many shell fragments		2	10-11									PD
						Gray fine sand w/silt & many shell fragments	SP-SM	3	12-13									PD
						w/silt & shell fragments		4	14-15									PD
								5	16-17									
								6	18-19									
								7	20-21									
								NR	22-23									
						Gray clay	CH											

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.: Datum: Gr. Water Depth: Job No.: 15300 Date Drilled: 3/13/98 Boring: 9 Refer to "Legends &

Scale In Feet	PP	SPT	SP L R	Symbol	Datum	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests			Atterberg Limits			Other Test	
											Dry	Wet	Type	ϕ	C	LL	PL	PI		
0						Water														
10						Tan & gray fine sand w/shell fragments	SP	1	8-9											
						Gray fine sand w/silt & shell fragments w/silt & few shell fragments	SP-SM	2	10-11											
						Gray fine sand w/sandy clay layers	SP	3	12-13											
						Gray sandy clay w/fine sand layers	CL	4	14-15											
20								5	16-17											
								6	18-19											
								7	20-21											
								8	22-23											
30																				
40																				
50																				




Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring:	Refer to "Legends &	Other Tests	Atterberg Limits			Shear Tests		Density		Water Content Percent	Depth In Feet	Sample Number	USC	Visual Classification	
											LL	PL	PI	Type	φ	Dry	Wet						
0						15300	3/13/98	10															
10					Water														9-10	1		Tan & gray fine sand w/shell fragments	
																			11-12	2	SP		
																			13-14	3			
																			15-16	4			
																			17-18	5			
																			19-20	6	SC	Gray clayey sand w/shell fragment layers	
																			21-22	7		Gray clayey sand w/shell fragments	
																			23-24	8	CH	Gray clay w/clayey sand lenses	
50																							

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale In Feet	PP	SPT	S P L R	Datum: Symbol	Gr. Water Depth:	Job No.: 15300	Date Drilled: 3/12/98	Boring: 11	Refer to "Legends &	Atterberg Limits			Shear Tests		Density	Water Content Percent	Depth In Feet	Sample Number	USC	Visual Classification	Other Tests
										LL	PL	PI	Type	φ							
0					Water																
10					Gray & tan fine sand w/shells	SP										28	10-11	1			
20					Gray fine sand w/many shell fragments	SP											12-13	2			
30					Gray clay w/fine sand lenses & shell fragments	CH											14-15	3			
40																	16-17	4			
50																	18-19	5			
																	20-21	6			
																	22-23	7			
																	24-25	8			

Comments:

Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 12				Other Tests		
								Water Content Percent		Density			Shear Tests	
				Symbol	Visual Classification	USC	Depth In Feet	Dry	Wet	Type	ϕ	LL	PL	PI
0					Water									
10					Gray & tan clayey sand w/clay layers, organic matter, & shell fragments	SC	11-12							
					Gray clayey sand w/clay layers & shell fragments	SC	13-14							
					Tan & gray fine sand w/shell fragments	SP	15-16							
					w/clayey sand lenses & shell fragments	CL	17-18							
					Gray sandy clay w/fine sand layers	CL	19-20							
					Gray sandy clay w/fine sand layers	CL	21-22							
							23-24							
							25-26							

Comments:

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

(Sheet 1 of 1)

STATE OF LOUISIANA
BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
TERREBONE PARISH, LOUISIANA

STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.: Datum: Gr. Water Depth: Job No.: 15300 Date Drilled: 3/12/98 Boring: 14 Refer to "Legends &

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests			Atterberg Limits			Other Test		
										Dry	Wet	Type	ϕ	C	LL	PL	PI			
0					Water															
10					Gray & tan fine sand w/shell fragments	SP	1	10-11												
					Gray clayey sand w/shell fragments	SC	2	12-13												
							3	14-15	46											
					Gray fine sand w/shell fragments	SP-SM	4	16-17												
							5	18-19												
							6	20-21												
					Gray clayey sand w/sandy clay layers	SC	7	22-23												
					Gray clay w/clayey sand layers & shell fragments	CH	8	24-25												
							9	26-27	34											

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring:	Refer to "Legends &	Atterberg Limits			Shear Tests		Density		Water Content Percent	Depth In Feet	Sample Number	USC	Visual Classification	USC	Other Tests
										LL	PL	PI	Type	φ	C	Dry							
0						15300	3/13/98	15															
10																		8-9	1				
																		10-11	2				
																		12-13	3				
																		14-15	4				
																		16-17	5	SP	Tan & gray fine sand w/few shell fragments		
																		18-19	6				
																		20-21	7				
																		22-23	8				
																		24-25	9				
50																							

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 16			Refer to "Legends & Oth Tes					
								Water Content Percent	Density	Shear Tests						
				Visual Classification	USC	Sample Number	Depth In Feet	Dry	Wet	Type	ϕ	C	LL	PL	PI	
0				Water												
10				Tan & gray fine sand w/shell fragments	SP	1	10-12									
				Gray sandy clay w/shell fragments	CL	2	12-13			35						
				w/few shell fragments		3	14-15									
				Gray clayey sand w/clay lenses & shell fragments	SC	4	16-17									
				w/shell fragments		5	18-19									
				Gray clay w/sand lenses & shell fragments	CH	6	20-21									
						7	22-23									
						8	24-25									
						9	26-27			60						
						10	28-29									

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.:	Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring:	Refer to "Legends &	Atterberg Limits			Shear Tests		Density		Water Content Percent	Depth In Feet	Sample Number	USC	Visual Classification	Other Tests
											LL	PL	PI	Type	φ	C	Dry						
0					Water		15300	3/14/98	21														
10						Gray clay w/fine sand lenses & shell fragments													8-9	1	CH		
						Gray fine sand w/shell fragments													10-11	2	SP-SM		
						Gray sandy clay w/shell fragments													12-13	3	CL		
						Gray fine sand w/clay layers & pockets, & shell fragments													14-15	4	SP		
																			16-17	5			
20																			20-21	6			
30																							
40																							
50																							

Comments:




STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.: Datum: Gr. Water Depth: Job No.: 15300 Date Drilled: 3/14/98 Boring: 23 Refer to "Legends &

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests			Atterberg Limits			Oth Tes
										Dry	Wet	Type	φ	C	LL	PL	PI	
0					Water													
10					Gray sandy clay w/fine sand lenses & clay pockets	CL	1	10-11	63						49	15	34	
					Gray sandy clay	CL	2	12-13										
					Gray fine sand w/shell fragments	SP	3	14-15										
					Gray clayey sand w/clay layers	SC	4	16-17	34						26	17	9	
					Gray clay w/fine sand lenses	CH	5	18-19										
							6	20-21										
							7	22-23										
							8	24-25										
30																		
40																		
50																		

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale In Feet	PP	SPT	S P L R	Datum: Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests			Atterberg Limits			Other Tests	
										Dry	Wet	Type	ϕ	C	LL	PL	PI		
0					Water														
10					Gray clay	CH	1	10-11											
					w/sandy clay lenses Gray fine sand w/clay layers & shell fragments w/shell fragments	SP	2	12-13	78										
20					Gray clay w/shell fragments	CH	3	14-15											
							4	16-17											
							5	18-19											
							6	20-21											
							7	22-23	47										
							8	24-25											

Job No.: 15300

Date Drilled: 3/14/98

Boring: 24

Refer to "Legends &

Comments:

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

(Sheet 1 of 1)

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 26			Refer to "Legends & Oth Tes					
								Water Content Percent	Density	Shear Tests						
				Visual Classification	USC	Sample Number	Depth In Feet	Dry	Wet	Type	ϕ	C	LL	PL	PI	
0					Water											
10					Gray sandy clay w/clayey sand lenses	1	10-11									
					Gray clayey sand w/shell fragments	2	12-13									
						3	14-15									
						4	16-17									
						5	18-19									
						6	20-21									
						7	22-23									
						8	24-25									

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale in Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 28			Refer to "Legends & Oth Tes					
								Visual Classification	USC	Sample Number		Depth In Feet	Water Content Percent	Density	Shear Tests	Atterberg Limits
				Symbol				Dry	Wet	Type	ϕ	C	LL	PL	PI	
0					Water											
10					Gray & brown clay	CH										
20																
30																
40																
50																

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.: Datum: Gr. Water Depth: Job No.: 15300 Date Drilled: 3/14/98 Boring: 29 Refer to "Legends & Oth Tests

Scale In Feet	PP	SPT	S P L R	Datum	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests		Atterberg Limits			Oth Tests
										Dry	Wet	Type	ϕ	C	LL	PL	
0					Water												
10					Gray clayey sand w/shell fragments	SC	1	9-10									
					Gray & tan fine sand w/silt & shell fragments	SP-SM	2	11-12									
					Gray & tan fine sand w/clay layers & pockets, & shell fragments	SP	3	13-14									
							4	15-16									
							5	17-18									
							6	19-20									
							7	21-22									
					Gray sandy clay w/shell fragments	CL	8	23-24									
50																	

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Scale In Feet	PP	SPT	SP LL R	Datum:		Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests			Atterberg Limits			Other Tests	
				Gr.	Water Depth:						Dry	Wet	Type	ϕ	C	LL	PL	PI		
0					Water															
10					Gray clayey sand w/shell fragments	SC	1	10-11												
					w/fine sand lenses & chemical odor		2	12-13												
					Gray & brown clay	CH	3	14-15	40											
					Gray fine sand w/shell fragments	SP	4	16-17												
					Greenish-gray & gray fine sand w/silt & shell fragments	SP	5	18-19												
20					Gray fine sand w/clay layers & shell fragments	SP	6	20-21												
					Gray sandy clay w/fine sand layers	CL	7	22-23												
							8	24-25												
30																				
40																				
50																				








Job No.: 15300 Date Drilled: 3/14/98 Boring: 31

Refer to "Legends &

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.: Datum: Gr. Water Depth: Job No.: 15300 Date Drilled: 3/13/98 Boring: 33 Refer to "Legends & Scales"

Scale In Feet	PP	SPT	S P L L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests			Atterberg Limits			Other Tests
										Dry	Wet	Type	ϕ	C	LL	PL	PI	
0					Water													
10					Gray sandy clay w/fine sand lenses & shell fragments	CL	1	10-11										
					Gray silty sand w/shell fragments	SM	2	12-13										
							3	14-15										
							4	16-17										
							5	18-19										
					Gray clayey sand w/fine sand layers & shell fragments	SC	6	20-21										
							7	22-23										

Comments:

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS









(Sheet 1 of 1)

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.:	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: 34			Refer to "Legends &	
					Atterberg Limits	Shear Tests	Other Tests		
Scale In Feet	SPT	Visual Classification	USC	Depth In Feet	Water Content Percent	Density	Atterberg Limits	Other Tests	
						Dry	LL	PL	
						Wet	LL	PL	
							ϕ	PI	
							Type		
							C		
0		Water							
10		Gray clayey sand w/clay layers & shell fragments	SC	10-11					
		Gray clay w/clayey sand layers & shell fragments	CH	12-13	35				
		Gray clayey sand w/shell fragments	SC	14-15					
		w/fine sand lenses & shell fragments	SP	16-17	34				
		Greenish-gray fine sand w/shell fragments		18-19					
		Gray clayey sand w/shell fragments	SC	20-21					
		Gray clay w/clayey sand layers & lenses	CH	22-23					
				24-25					

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.:	Scale In Feet	PP	SPT	Datum:		Gr. Water Depth:	Job No.:	Date Drilled:	Boring:	Refer to "Legends & Other Tests"								
				SP	SLR					Atterberg Limits	Other Tests							
				Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density	Shear Tests	Atterberg Limits	Other Tests					
										Dry	Wet	Type	ϕ	C	LL	PL	PI	
0					Water													
10					Gray clayey sand w/clay layers & shell fragments	SC	1	9-10										
					Gray clay w/clayey sand lenses	CH	2	11-12										
					Gray fine sand w/clay layers & pockets, & shell fragments	SP	3	13-14										
							4	15-16										
							5	17-18										
							6	19-20										
							7	21-22										
							8	23-24										

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.:	Scale In Feet	PP	SPT	S P L R	Datum:	Gr. Water Depth:	Job No.:	Date Drilled:	Boring: F1-M			Refer to "Legends & Oth. Tes					
									Visual Classification	USC	Sample Number		Depth In Feet	Water Content Percent	Density	Shear Tests	Atterberg Limits
									Dry	Wet	Type	φ	C	LL	PL	PI	
0					Water												
10					Gray sandy clay w/clay layers & shell fragments	CL	1	10-11									
					Gray clayey sand w/clay lenses	SC	2	12-13	45								
					Gray fine sand w/silt & few shell fragments	SP	3	14-15									
							4	16-17									
							5	18-19									
							6	20-21									
							7	22-23	32								

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA
 STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.: Datum: Gr. Water Depth: Job No.: 15300 Date Drilled: 3/12/98 Boring: F1-N Refer to "Legends & Oth Tests"

Scale In Feet	PP	SPT	S P L R	Datum: Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests		Atterberg Limits			Oth Tests
										Dry	Wet	Type	φ	C	LL	PL	
0					Water												
10					Gray clayey sand w/fine sand layers & few shell fragments	SC	1	8-9	35								
							2	10-11									
							3	12-13									
							4	14-15									
							5	16-17									
							6	18-19									
							7	20-21									
							8	22-23									
50																	

Comments:

STATE OF LOUISIANA
 BORROW BORINGS, WHISKEY ISLAND (PHASE 3b)
 TERREBONE PARISH, LOUISIANA

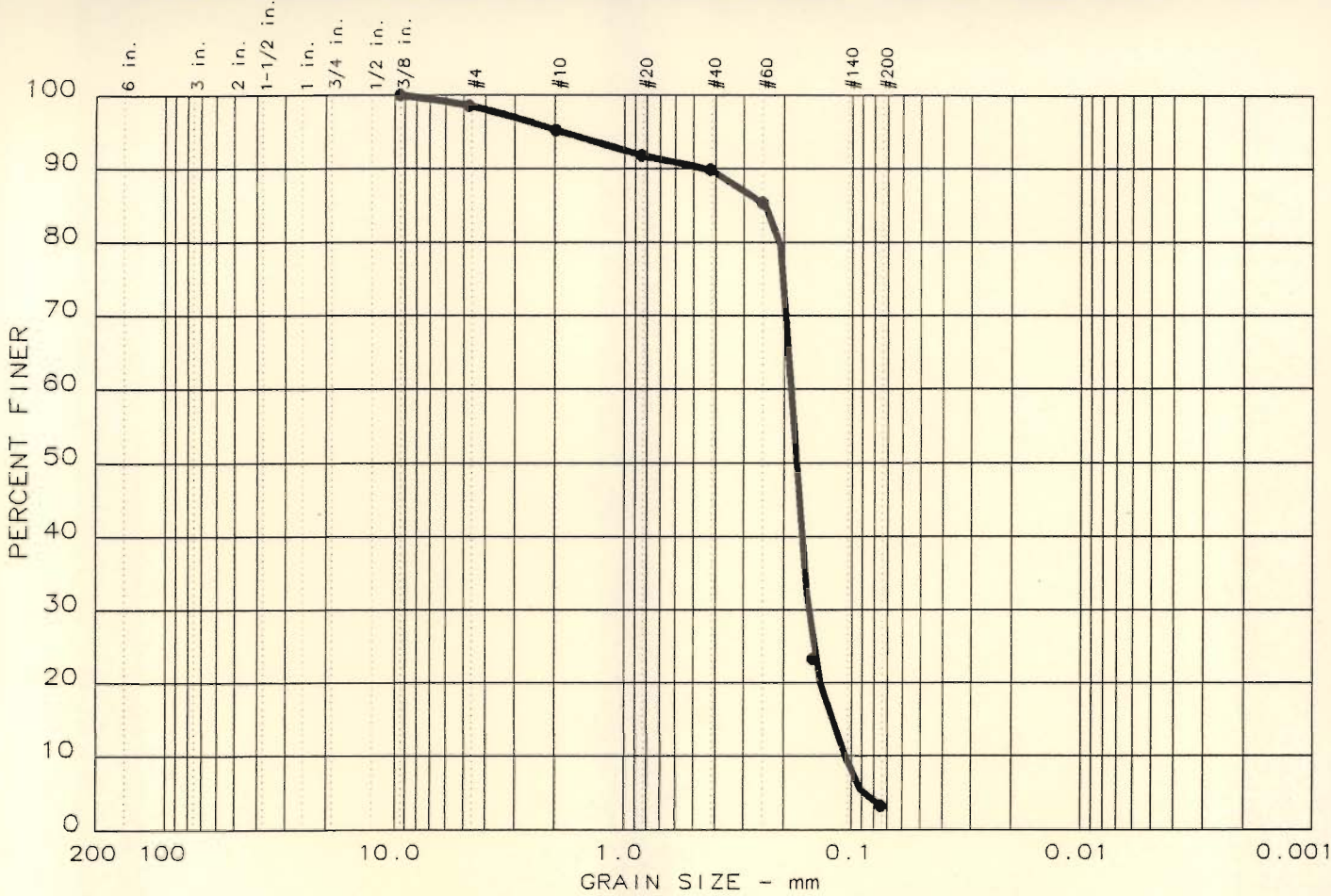
STATE PROJECT NO. TE-27, FEDERAL PROJECT NO. PTE15

Ground Elev.: Datum: Gr. Water Depth: Job No.: 15300 Date Drilled: 3/12/98 Boring: F1-S Refer to "Legends & Oth Tests

Scale In Feet	PP	SPT	S P L R	Datum:	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density		Shear Tests			Atterberg Limits			Oth Tests
										Dry	Wet	Type	ϕ	C	LL	PL	PI	
0					Water													
10					Gray clayey sand w/few shell fragments	SC	1	11-12										
					Gray fine sand w/silt & shell fragments	SP-SM	2	13-14	32									
					Gray sandy clay	CL	3	15-16										
							4	17-18										
							5	19-20										
							6	21-22										
							7	23-24										

Comments:

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	1.5	95.3	3.2		SP		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
 		
GRAIN SIZE		
D ₆₀	0.19	
D ₃₀	0.16	
D ₁₀	0.10	
 		
COEFFICIENTS		
C _c	1.23	
C _u	1.7	

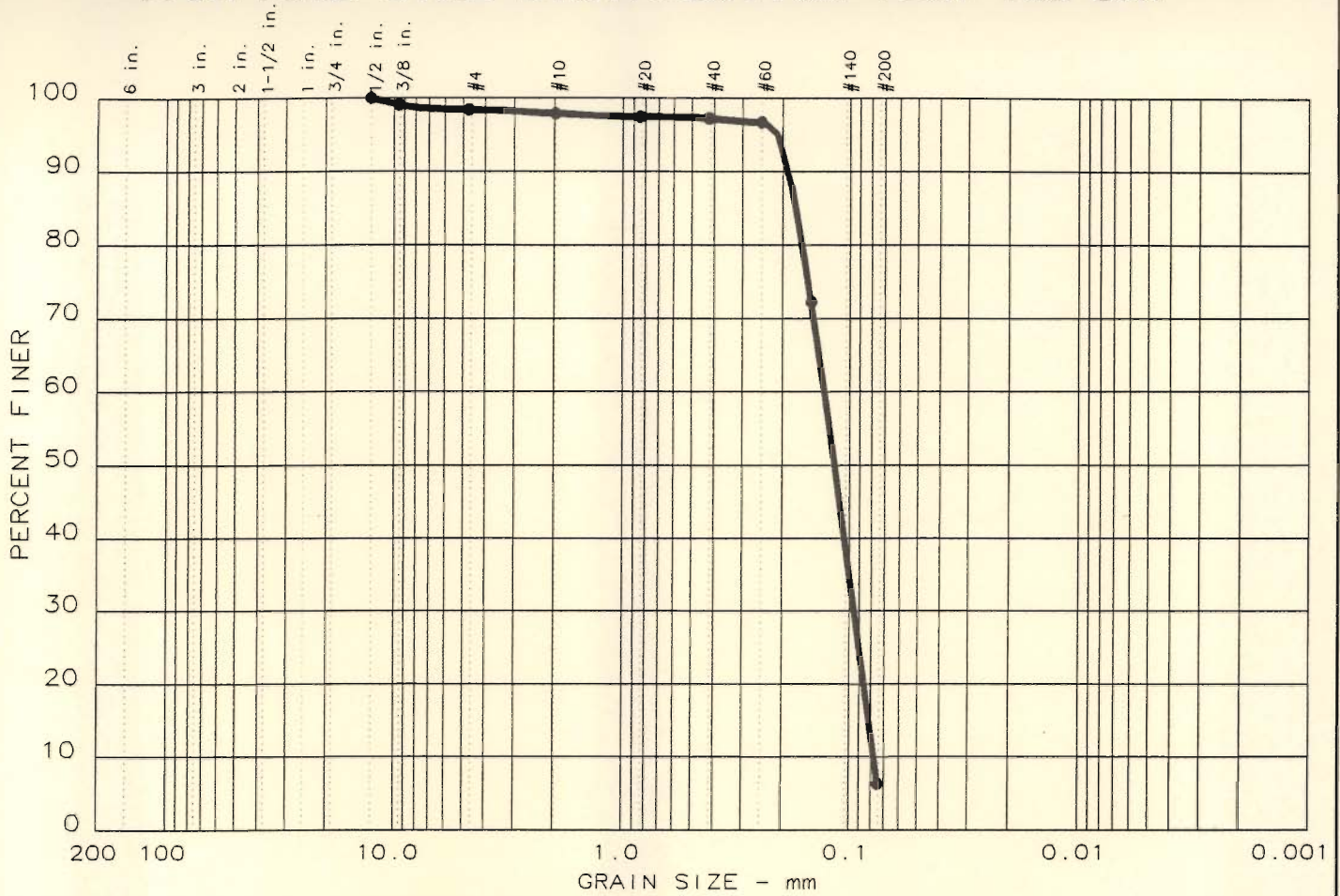
SIEVE number size	PERCENT FINER	
	●	
4	98.5	
10	95.2	
20	91.8	
40	89.8	
60	85.3	
100	23.3	
200	3.2	

Sample information:
 ● Boring 1, Sample 2
 Loose tan & gray FINE SAND w/ shell fragments

Remarks:
 Sample depth 3'-4'

Eustis Engineering Company, Inc.	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-25-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	1.6	92.1	6.3		SP-SC		

SIEVE inches size	PERCENT FINER	
	●	
0.5	100.0	
0.375	99.0	
GRAIN SIZE		
D ₆₀	0.13	
D ₃₀	0.10	
D ₁₀	0.07	
COEFFICIENTS		
C _c	0.89	
C _u	1.7	

SIEVE number size	PERCENT FINER	
	●	
4	98.4	
10	97.9	
20	97.4	
40	97.2	
60	96.7	
100	72.3	
200	6.3	

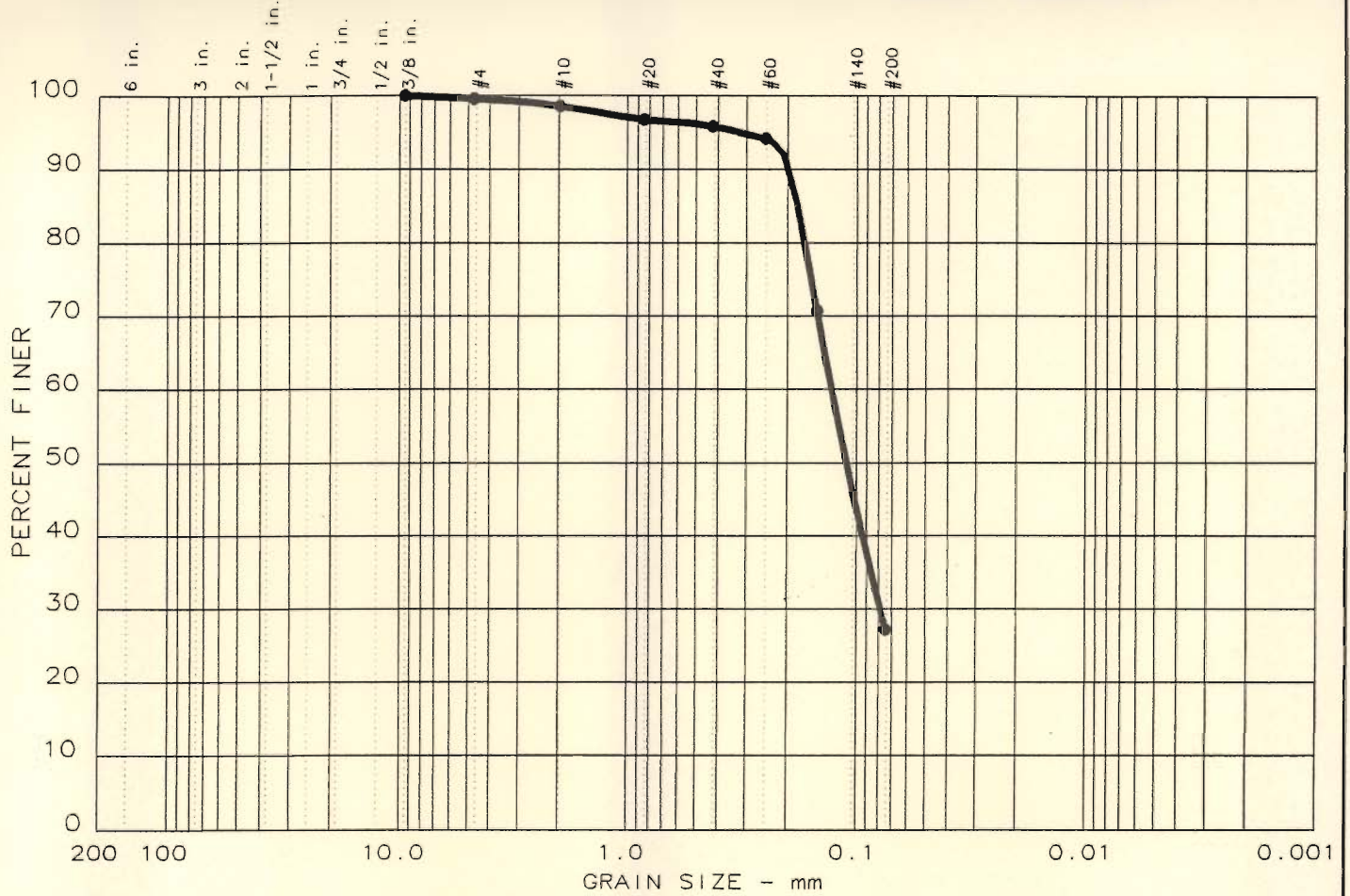
Sample information:
 ● Boring 1, Sample 4
 Loose gray & tan FINE SAND w/ cl & sh frag

Remarks:
 Sample depth 7'-8'

**Eustis
Engineering
Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.5	72.3	-	27.2	SC		

SIEVE inches size	PERCENT FINER		
	●		
0.375	100.0		
GRAIN SIZE			
D ₆₀	0.13		
D ₃₀	0.08		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
4	99.5		
10	98.5		
20	96.8		
40	95.8		
60	94.2		
100	70.7		
200	27.2		

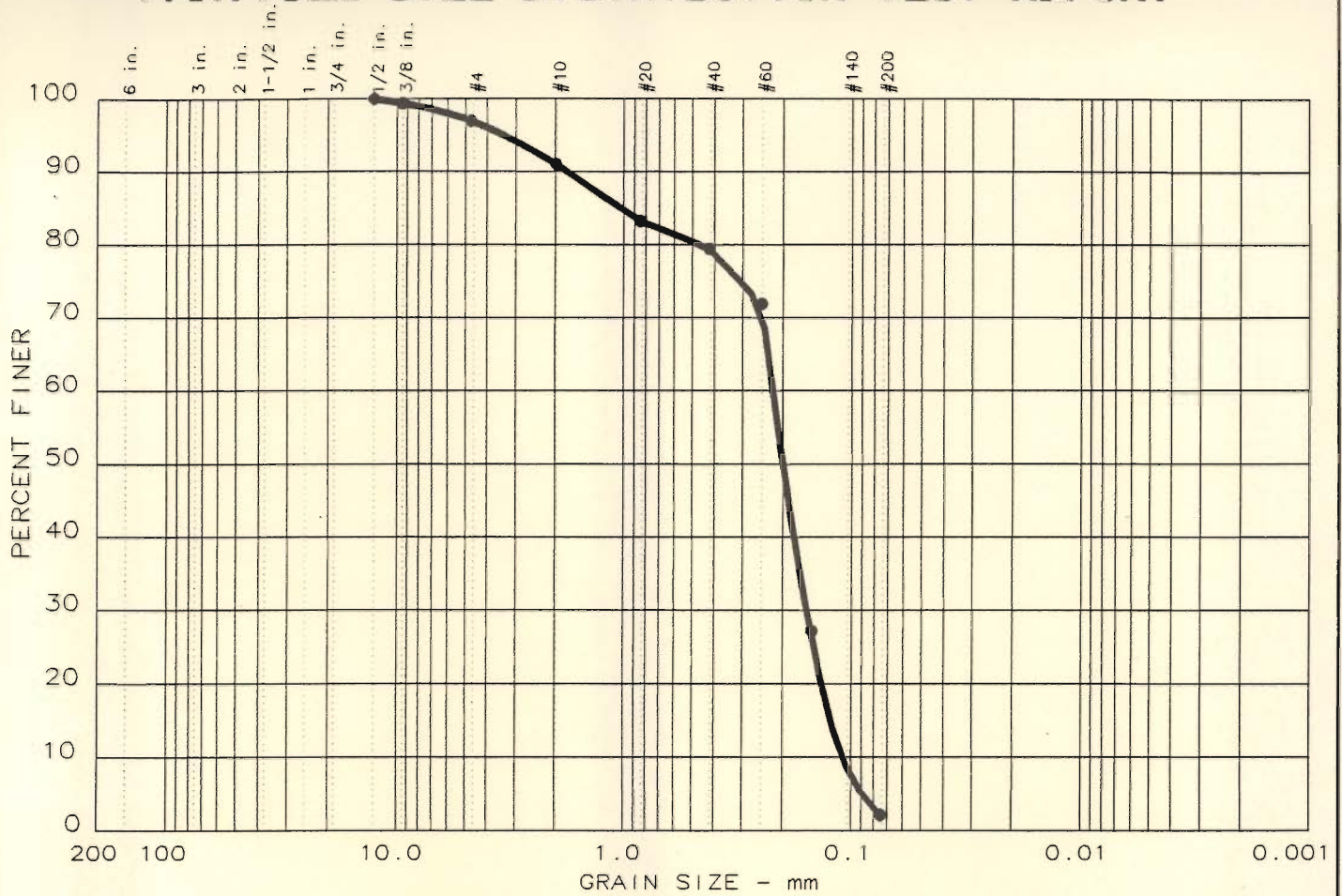
Sample information:
 ● Boring 1, Sample 6
 Loose gray CLAYEY SAND
 w/ shell fragments

Remarks:
 Sample depth 11'-12'

**Eustis
Engineering
Company, Inc.**

Project No.: 15300
 Project: DNR / Whiskey Pass
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	3.0	94.9	2.1		SP		

SIEVE inches size	PERCENT FINER		
0.5	●	100.0	
0.375	●	99.4	
X GRAIN SIZE			
D ₆₀	●	0.22	
D ₃₀	●	0.16	
D ₁₀	●	0.10	
X COEFFICIENTS			
C _c	●	1.02	
C _u	●	2.0	

SIEVE number size	PERCENT FINER		
4	●	97.0	
10	●	91.0	
20	●	83.3	
40	●	79.5	
60	●	72.0	
100	●	27.2	
200	●	2.1	

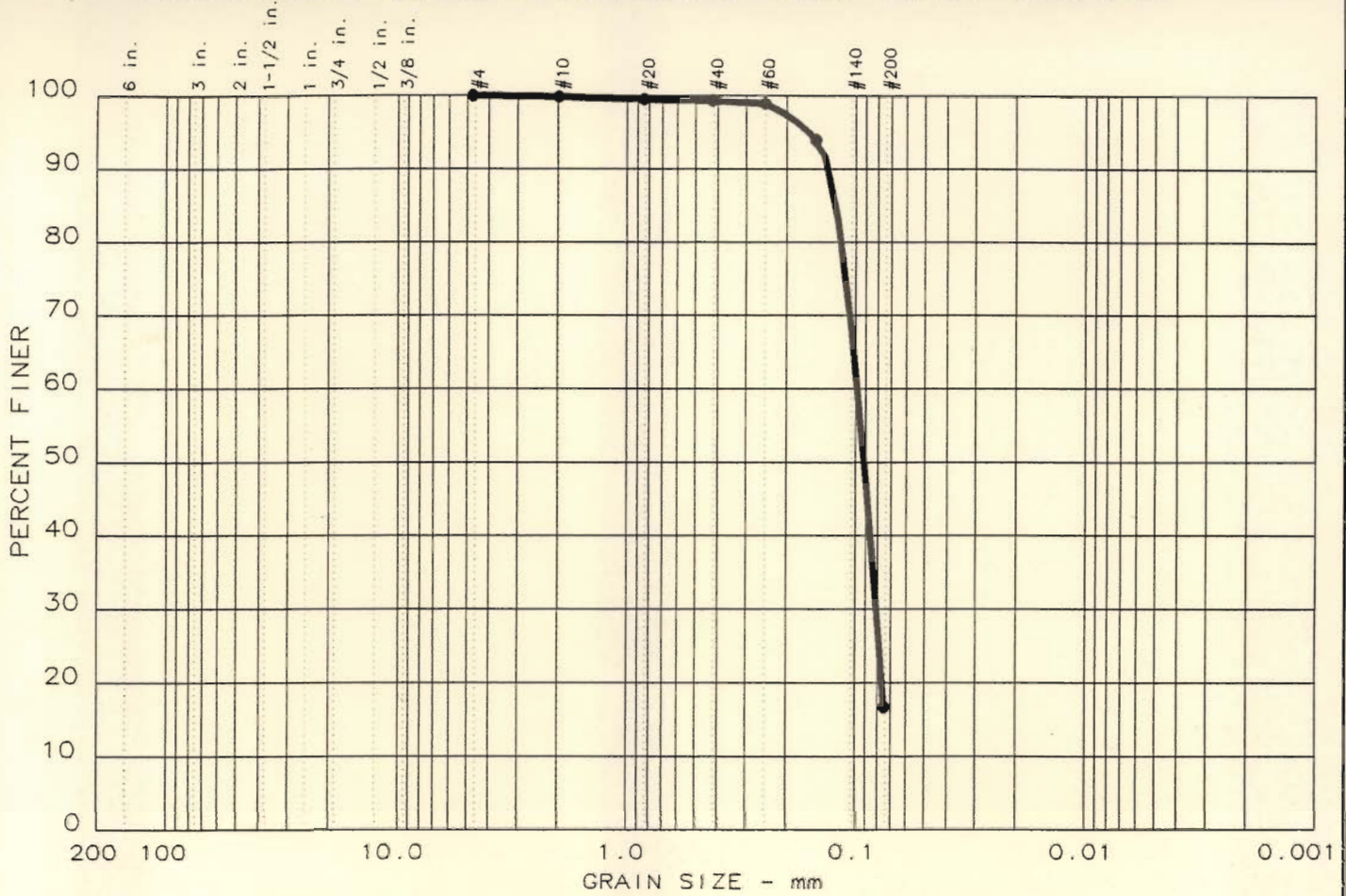
Sample information:
 ● Boring 2, Sample 2
 Loose tan & gray FINE SAND w/ shell fragments

Remarks:
 Sample depth 3'-4'

**Eustis
Engineering
Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	83.3	16.7		SC		

SIEVE inches size	PERCENT FINER		
●			
GRAIN SIZE			
D ₆₀	0.10		
D ₃₀	0.08		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

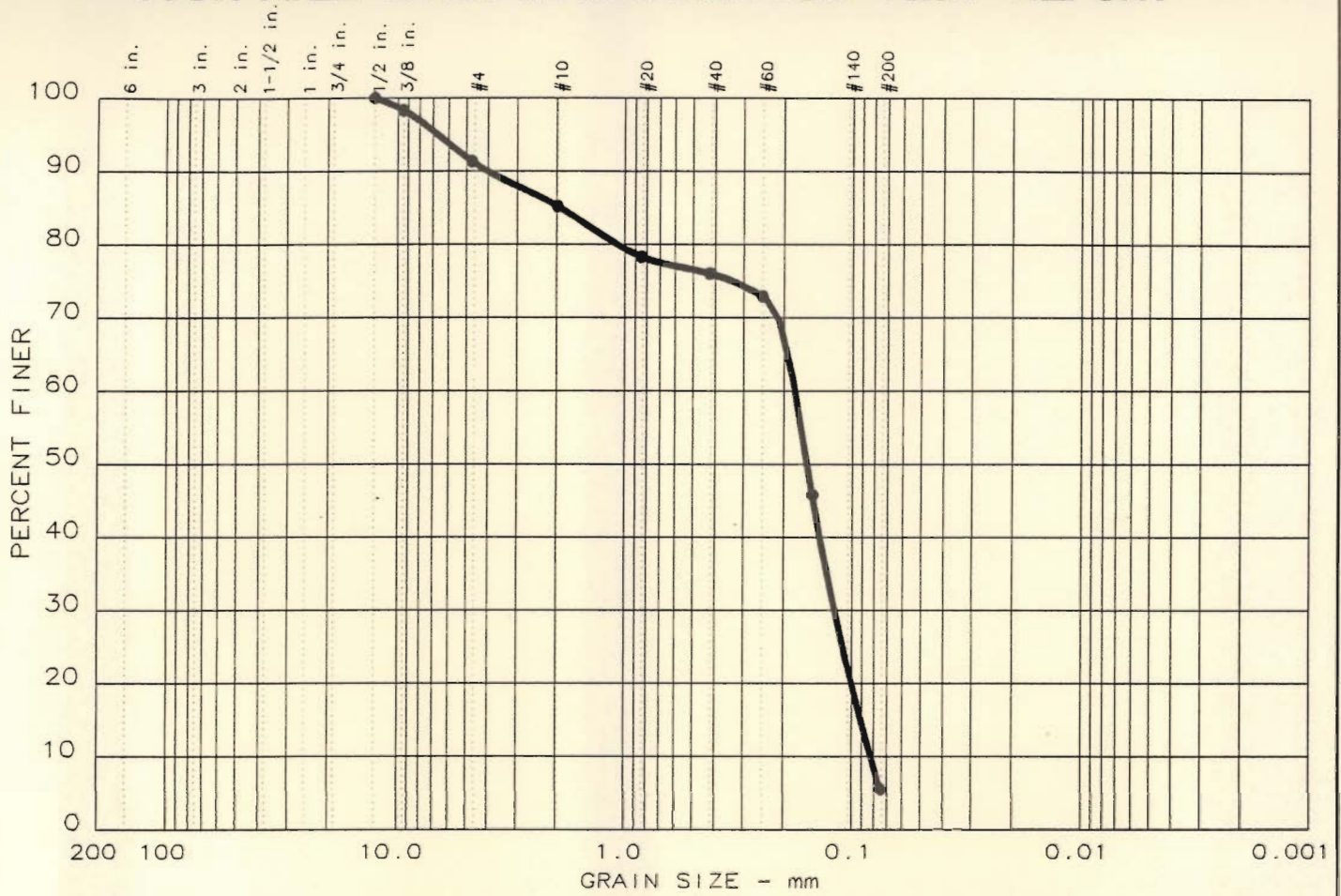
SIEVE number size	PERCENT FINER		
●			
4	100.0		
10	99.8		
20	99.5		
40	99.3		
60	98.9		
100	93.9		
200	16.7		

Sample information:
 ● Boring 2, Sample 8
 Loose dk. gray CLAYEY SAND w/ shell fragments

Remarks:
 Sample depth 15'-16'

Eustis Engineering Company, Inc.	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-26-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	8.7	85.8	5.5		SP-SM		

SIEVE inches size	PERCENT FINER	
0.5	●	100.0
0.375	●	98.3
X GRAIN SIZE		
D ₆₀	●	0.18
D ₃₀	●	0.12
D ₁₀	●	0.08
X COEFFICIENTS		
C _c	●	0.97
C _u	●	2.2

SIEVE number size	PERCENT FINER	
4	●	91.3
10	●	85.2
20	●	78.3
40	●	76.0
60	●	72.9
100	●	45.8
200	●	5.5

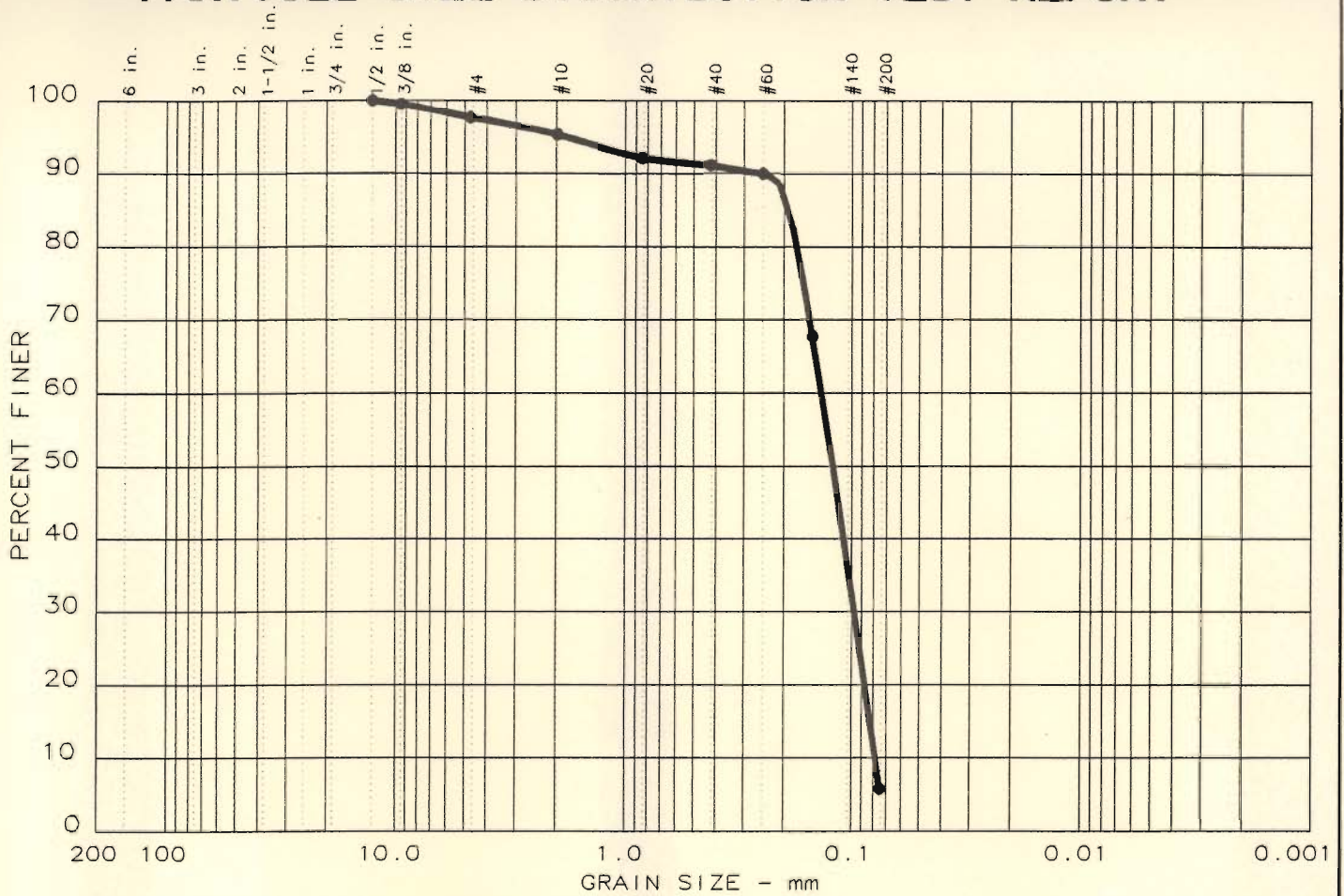
Sample information:
 ● Boring 3, Sample 2
 Loose gray FINE SAND
 w/ shell fragments

Remarks:
 Sample depth 3'-4'

**Eustis
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Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	2.4	91.8	5.8		SP-SM		

SIEVE inches size	PERCENT FINER	
	●	
0.5	100.0	
0.375	99.4	
GRAIN SIZE		
D ₆₀	0.14	
D ₃₀	0.10	
D ₁₀	0.07	
COEFFICIENTS		
C _c	0.89	
C _u	1.7	

SIEVE number size	PERCENT FINER	
	●	
4	97.6	
10	95.3	
20	92.2	
40	91.1	
60	89.9	
100	67.8	
200	5.8	

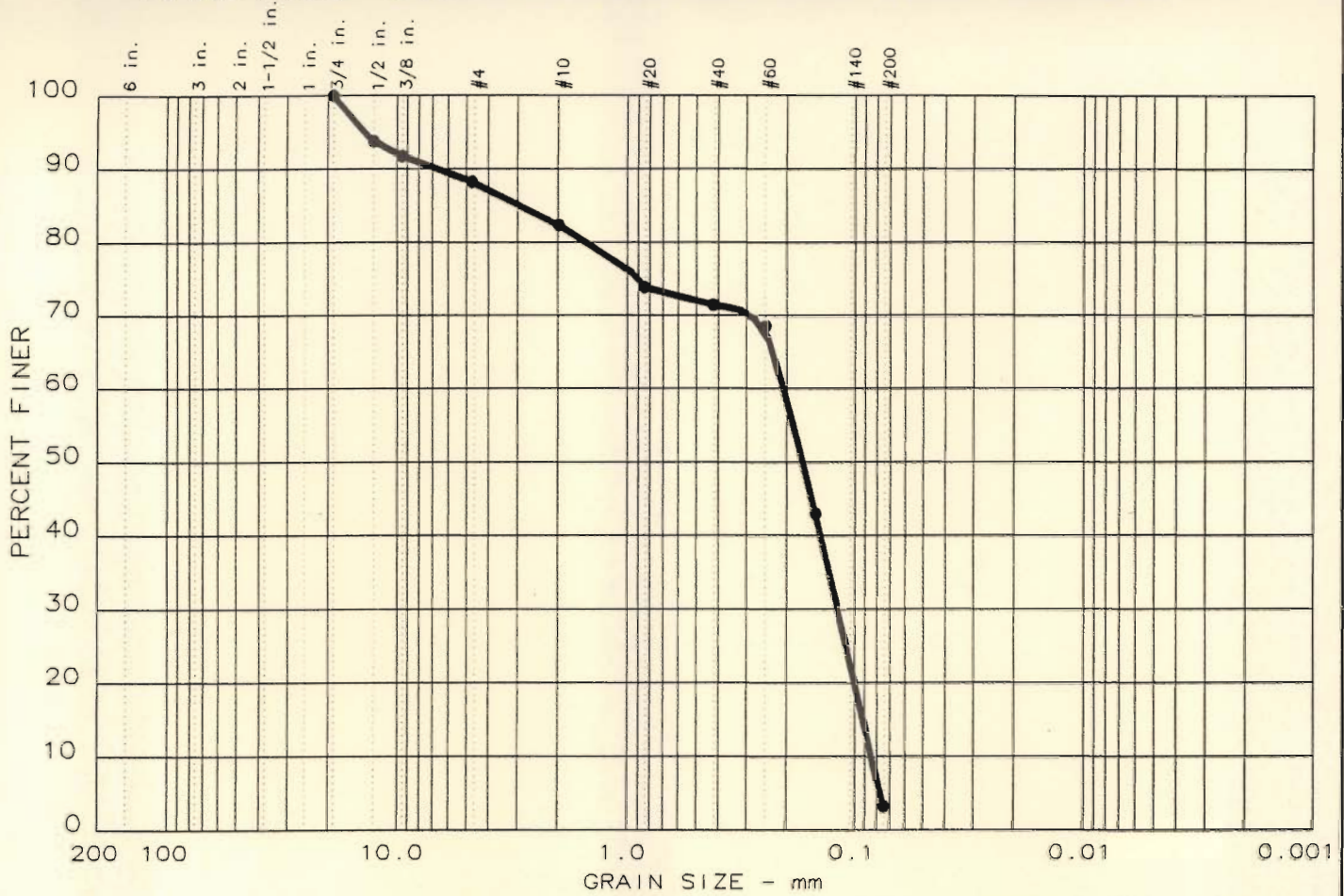
Sample information:
 ● Boring 3, Sample 4
 Loose gray FINE SAND
 w/si pocs & sh frags

Remarks:
 Sample depth 7'-8'

**Eustis
Engineering
Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	11.8	85.0	3.2		SP		

SIEVE inches size	PERCENT FINER	
	●	
0.75	100.0	
0.5	93.7	
0.375	91.7	
GRAIN SIZE		
D ₆₀	0.21	
D ₃₀	0.12	
D ₁₀	0.08	
COEFFICIENTS		
C _c	0.81	
C _u	2.5	

SIEVE number size	PERCENT FINER	
	●	
4	88.2	
10	82.3	
20	73.9	
40	71.4	
60	68.5	
100	42.9	
200	3.2	

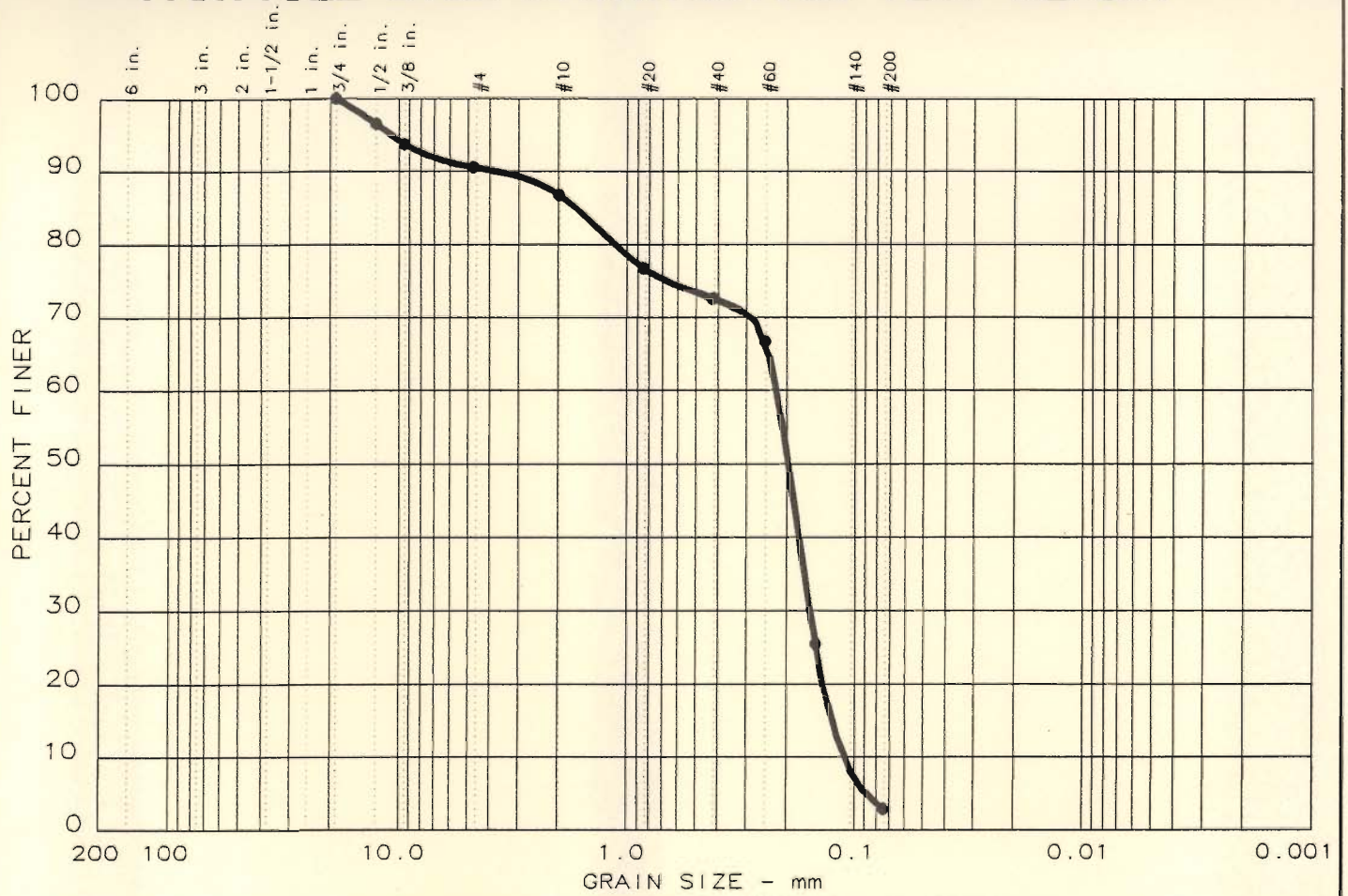
Sample information:
 ● Boring 3, Sample 6
 Loose gray FINE SAND
 w/ shell fragments

Remarks:
 Sample depth 11'-12'

**Eustis
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	9.4	87.7	2.9		SP		

SIEVE inches size	PERCENT FINER		
	●		
0.75	100.0		
0.5	96.5		
0.375	93.8		
X	GRAIN SIZE		
D ₆₀	0.22		
D ₃₀	0.16		
D ₁₀	0.11		
X	COEFFICIENTS		
C _c	1.02		
C _u	2.0		

SIEVE number size	PERCENT FINER		
	●		
4	90.6		
10	86.8		
20	76.7		
40	72.5		
60	66.8		
100	25.5		
200	2.8		

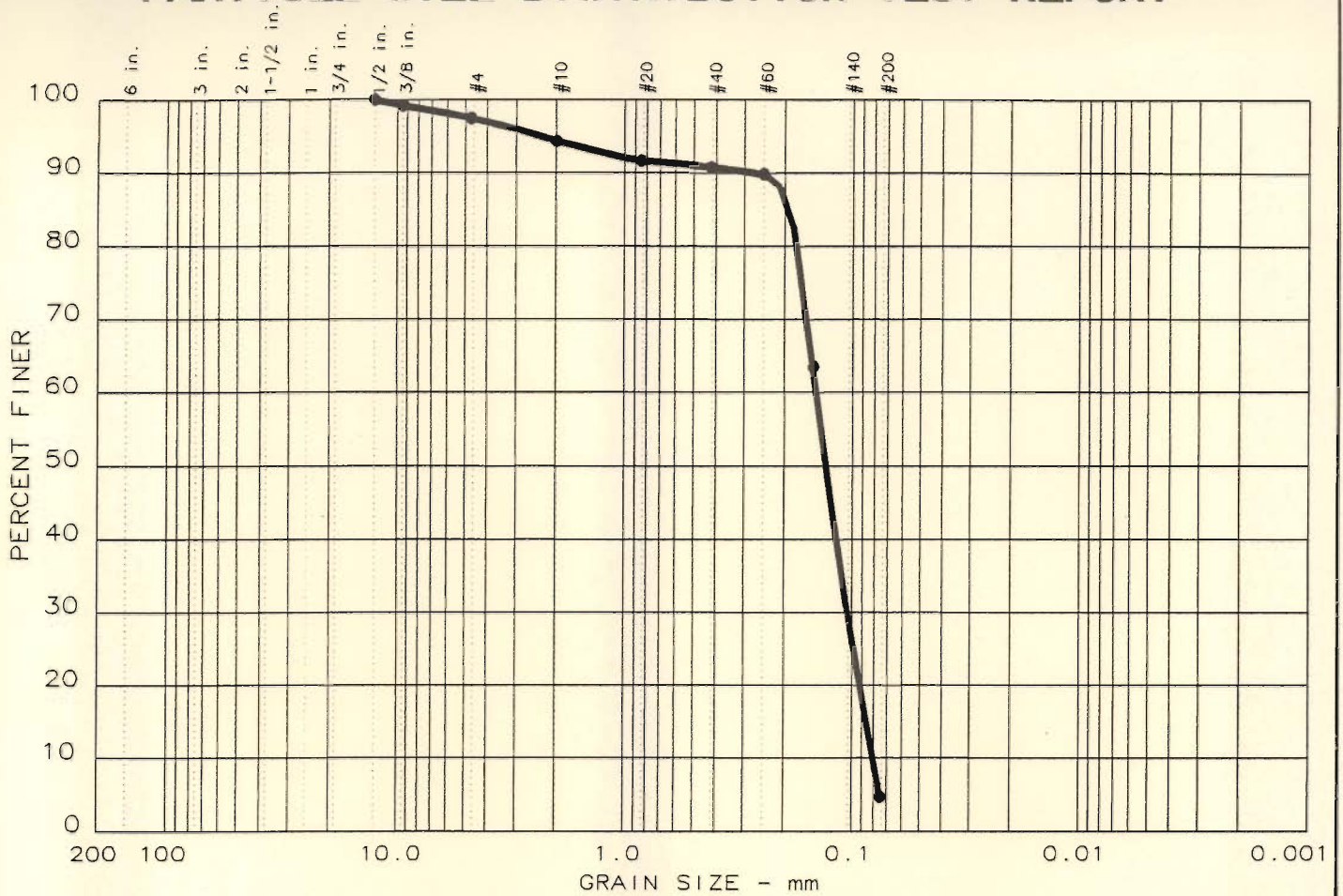
Sample information:
 ● Boring 4, Sample 2
 Loose gray FINE SAND
 w/ shell fragments

Remarks:
 Sample depth 3'-4'

**Eustis
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Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



● % +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	2.5	92.8		4.7	SP		

SIEVE inches size	PERCENT FINER		
	●		
0.5	100.0		
0.375	99.2		
X	GRAIN SIZE		
D ₆₀	0.15		
D ₃₀	0.10		
D ₁₀	0.08		
X	COEFFICIENTS		
C _c	0.94		
C _u	1.8		

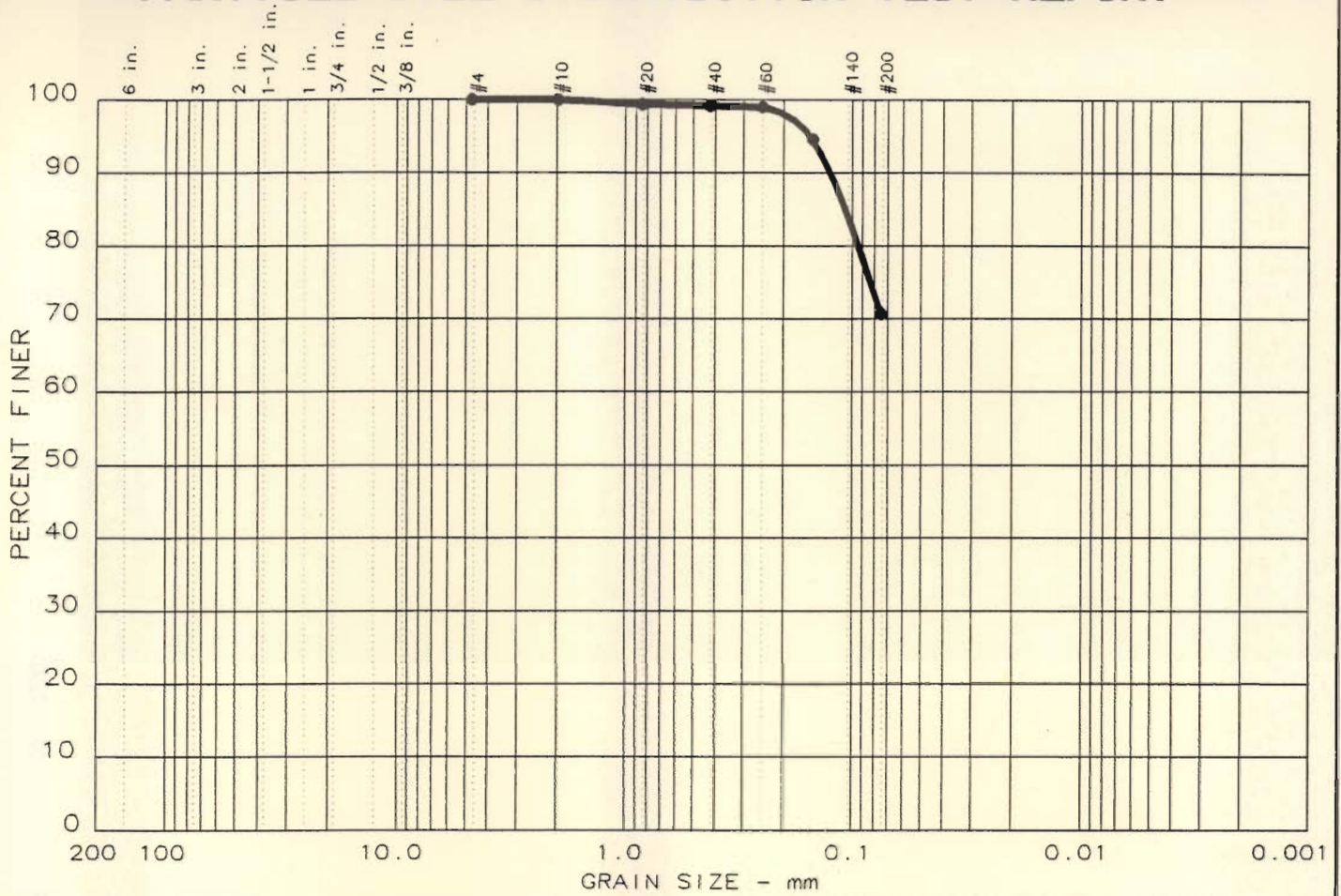
SIEVE number size	PERCENT FINER		
	●		
4	97.5		
10	94.3		
20	91.6		
40	90.8		
60	89.9		
100	63.5		
200	4.7		

Sample information:
 ● Boring 4, Sample 5
 Loose gray FINE SAND
 w/ shell fragments

Remarks:
 Sample depth 9'-10'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	29.3	70.7		CH		

SIEVE inches size	PERCENT FINER	
	●	
GRAIN SIZE		
D ₆₀		
D ₃₀		
D ₁₀		
COEFFICIENTS		
C _c		
C _u		

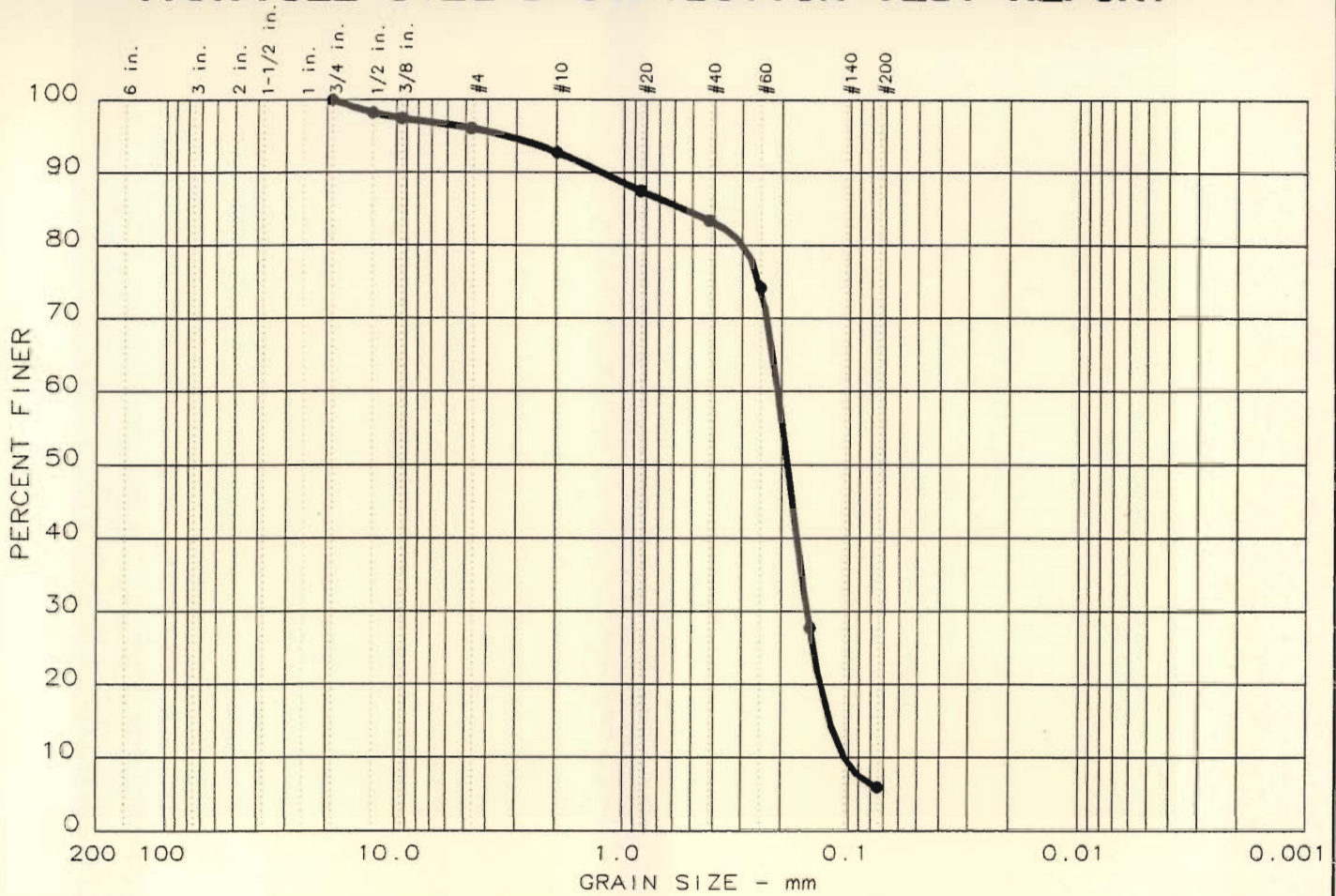
SIEVE number size	PERCENT FINER	
	●	
4	100.0	
10	99.9	
20	99.3	
40	99.1	
60	99.0	
100	94.6	
200	70.7	

Sample information:
 ● Boring 4, Sample 8
 Soft gray CLAY
 w/fine sand lay & tr sh

Remarks:
 Sample depth 15'-16'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	4.0	90.1	5.9		SP-SM		

SIEVE inches size	PERCENT FINER	
0.75	●	100.0
0.5	●	98.2
0.375	●	97.4
 		
GRAIN SIZE		
D ₆₀	●	0.21
D ₃₀	●	0.15
D ₁₀	●	0.10
 		
COEFFICIENTS		
C _c	●	1.09
C _u	●	2.0

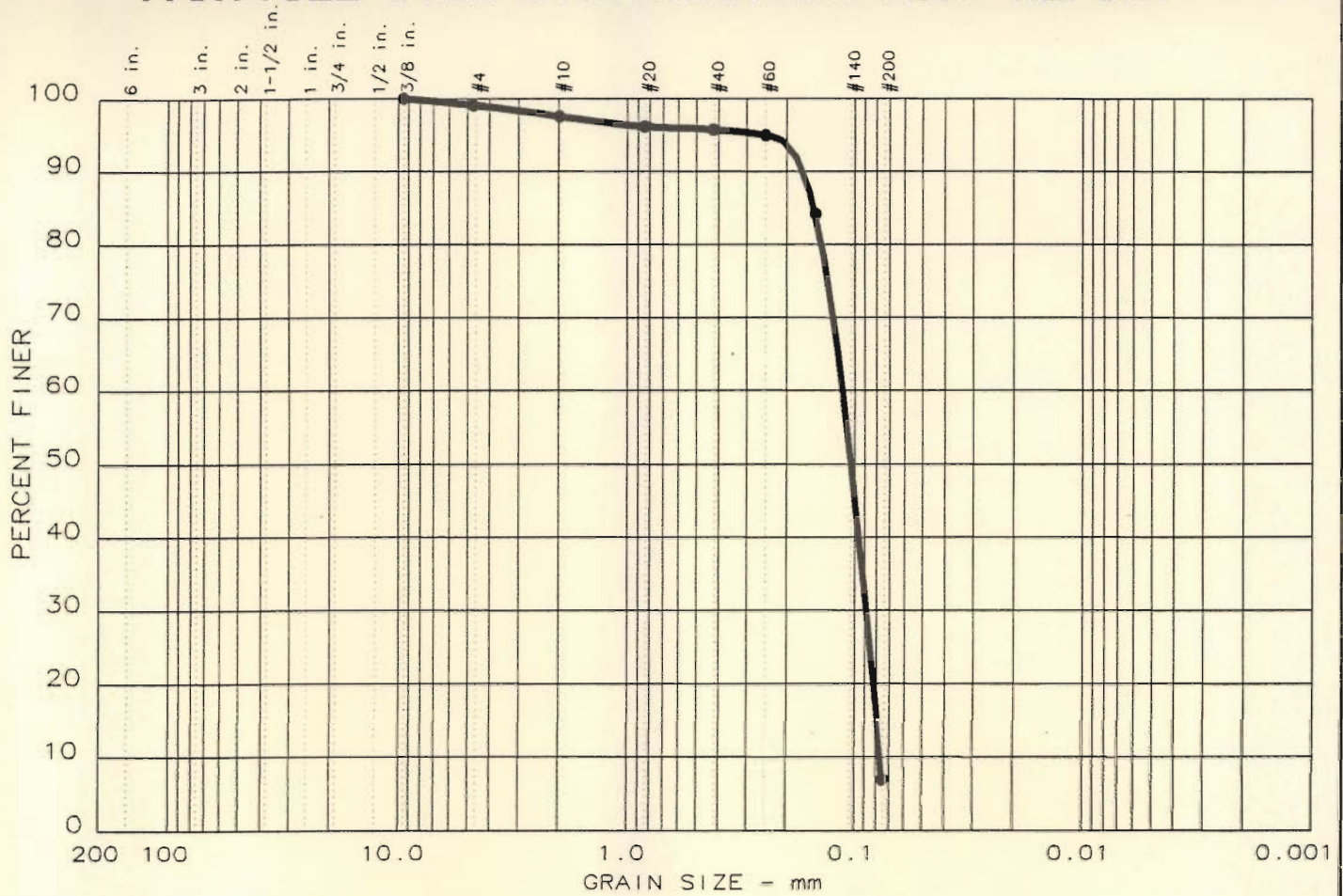
SIEVE number size	PERCENT FINER	
4	●	96.0
10	●	92.7
20	●	87.5
40	●	83.4
60	●	74.2
100	●	27.7
200	●	5.9

Sample information:
 ● Boring 7, Sample 1
 Loose tan & gray FINE SAND w/ si & sh frag

Remarks:
 Sample depth 1'-2'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.9	92.1	7.0		SP-SM		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
X GRAIN SIZE		
D ₆₀	0.11	
D ₃₀	0.09	
D ₁₀	0.07	
X COEFFICIENTS		
C _c	0.91	
C _u	1.5	

SIEVE number size	PERCENT FINER	
	●	
4	99.1	
10	97.6	
20	96.2	
40	95.8	
60	95.0	
100	84.2	
200	7.0	

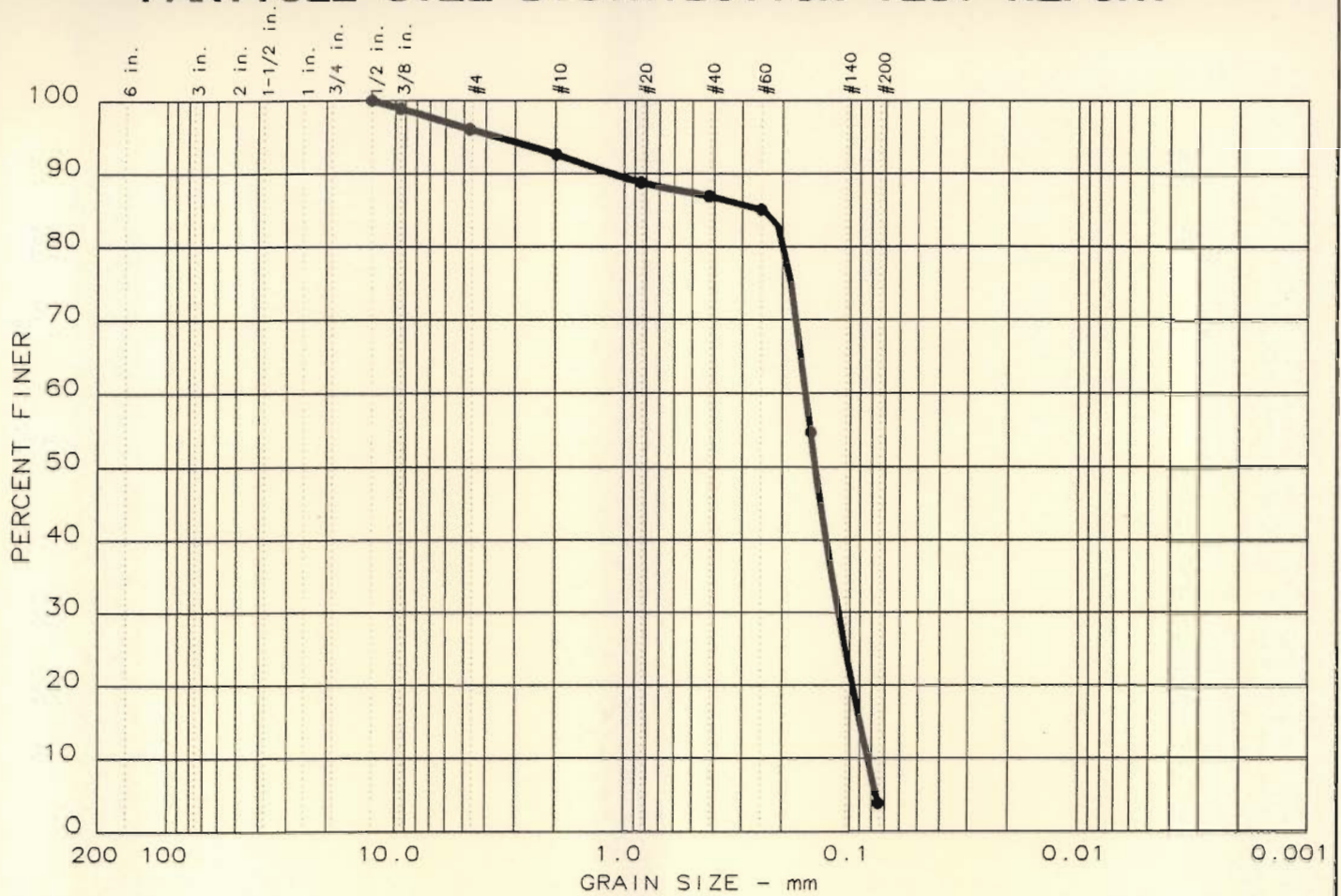
Sample information:
 ● Boring 7, Sample 4
 Loose gray FINE SAND
 w/ si & sh frags

Remarks:
 Sample depth 7'-8'

**Eustis
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Company, Inc.**

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 Project: DNR / Whiskey Pass
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PARTICLE SIZE DISTRIBUTION TEST REPORT

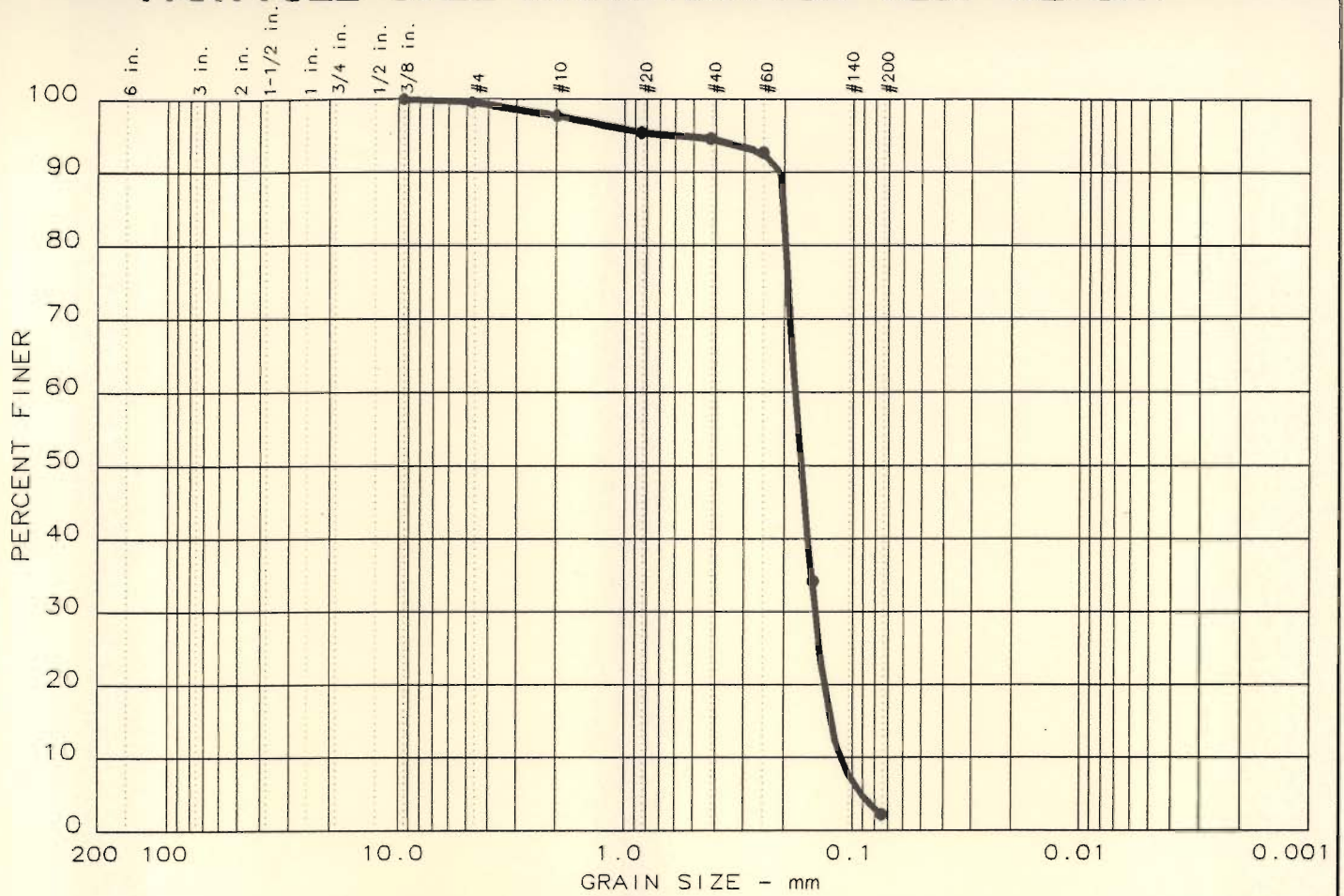


% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	3.9	92.2	3.9		SP		

SIEVE inches size	PERCENT FINER		SIEVE number size	PERCENT FINER		Sample information: • Boring 7, Sample 6 Loose gray FINE SAND w/ shell fragments
0.5	100.0		4	96.1		
0.375	98.9		10	92.6		
X GRAIN SIZE			20	88.8		
D ₆₀	0.16		40	86.9		
D ₃₀	0.11		60	85.1		
D ₁₀	0.08		100	54.7		
X COEFFICIENTS			200	3.8		
C _c	0.96					Remarks: Sample depth 11'-12'
C _u	1.9					

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.5	97.3	2.2		SP		

SIEVE inches size	PERCENT FINER	
0.375	100.0	
X GRAIN SIZE		
D ₆₀	0.18	
D ₃₀	0.15	
D ₁₀	0.11	
X COEFFICIENTS		
C _c	1.05	
C _u	1.6	

SIEVE number size	PERCENT FINER	
4	99.5	
10	97.6	
20	95.4	
40	94.5	
60	92.6	
100	34.2	
200	2.2	

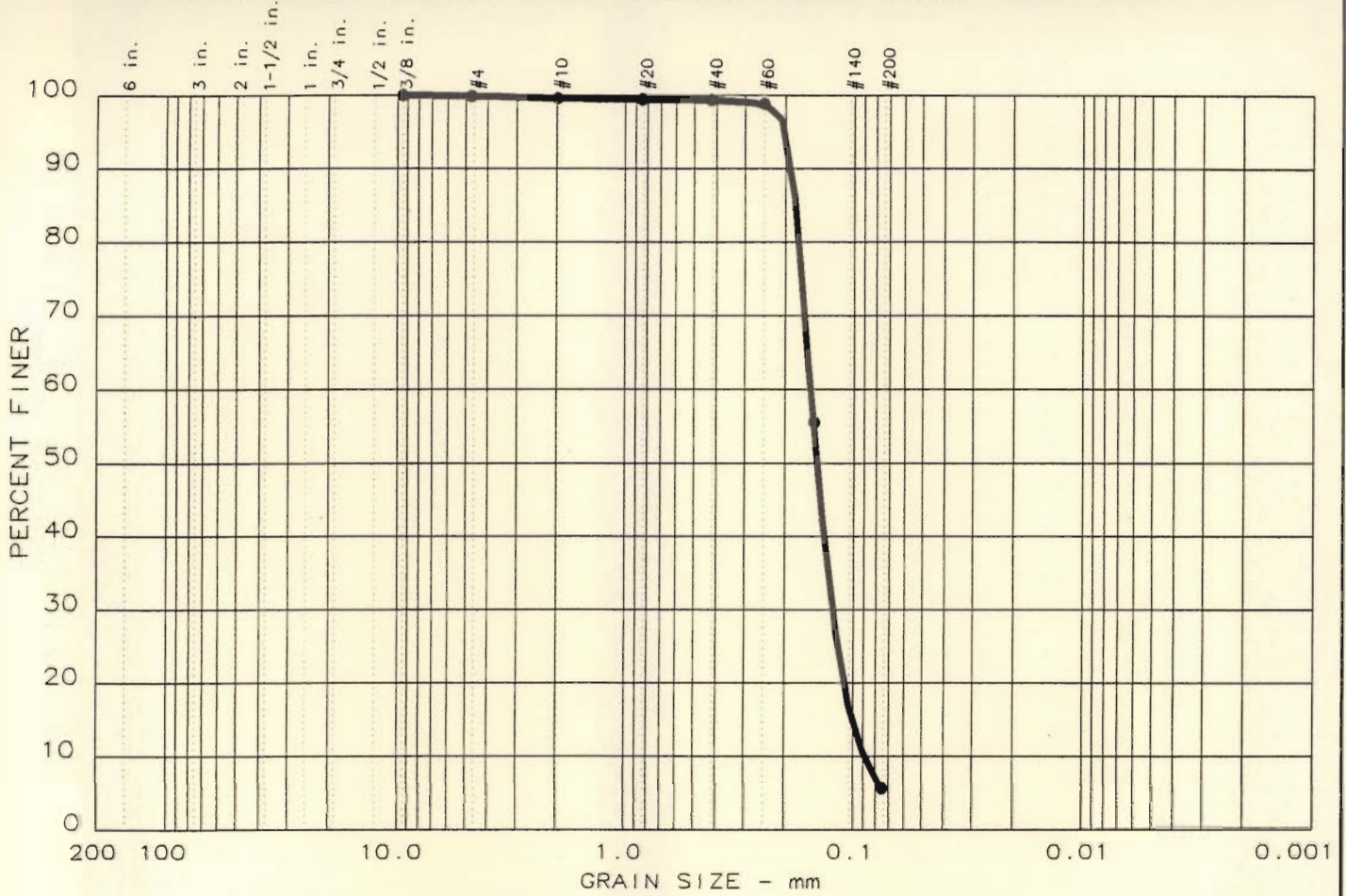
Sample information:
 • Boring 9, Sample 2
 Loose tan & gray FINE SAND w/ shell fragments

Remarks:
 Sample depth 3'-4'

**Eustis
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	94.2	5.7		SP-SM		

SIEVE inches size	PERCENT FINER	
0.375	100.0	
X GRAIN SIZE		
D ₆₀	0.15	
D ₃₀	0.12	
D ₁₀	0.08	
X COEFFICIENTS		
C _c	1.12	
C _u	1.7	

SIEVE number size	PERCENT FINER	
4	99.9	
10	99.6	
20	99.4	
40	99.3	
60	98.8	
100	55.5	
200	5.6	

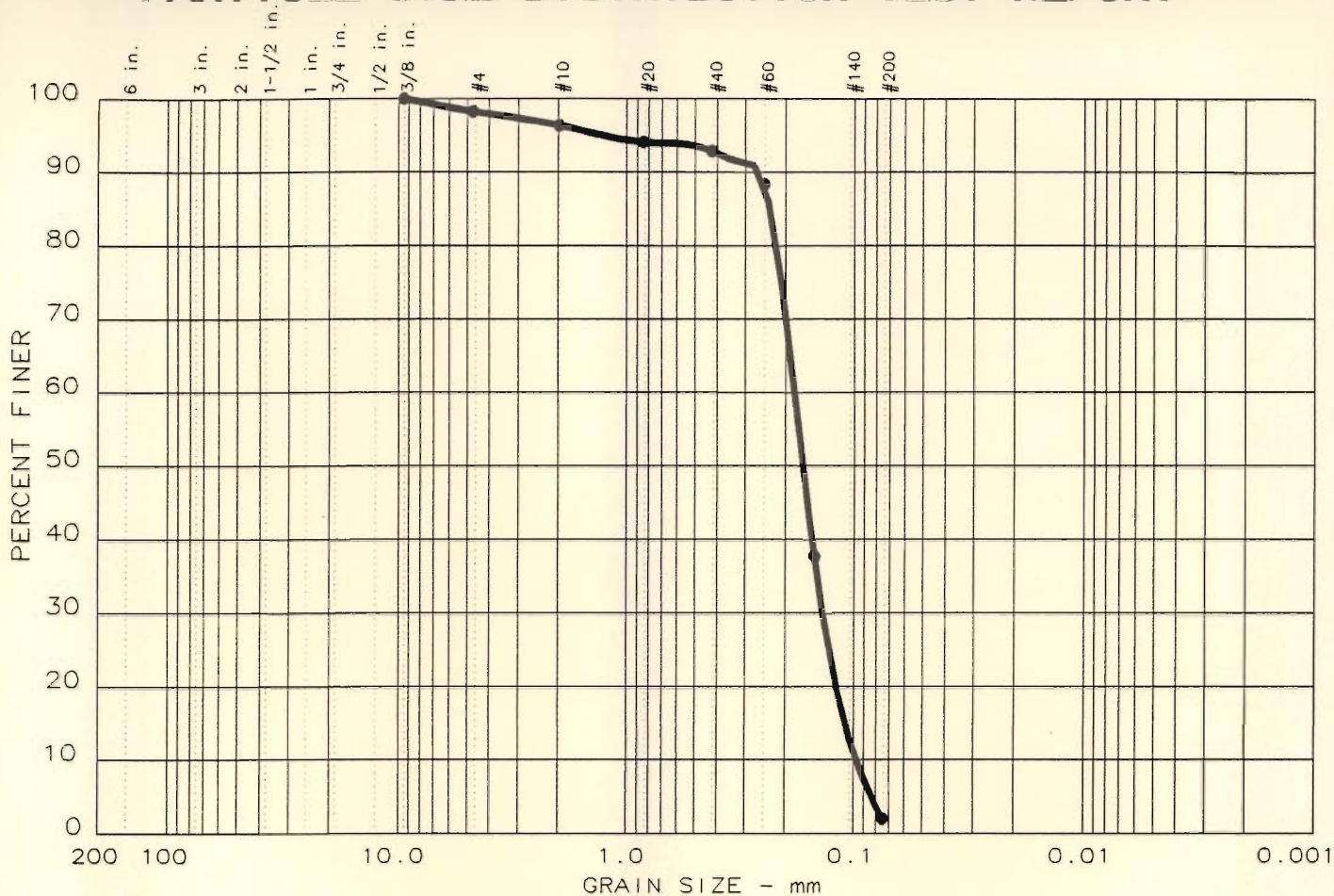
Sample information:
 • Boring 9, Sample 6
 Loose gray FINE SAND
 w/ si & few sh frags

Remarks:
 Sample depth 11'-12'

**Eustis
Engineering
Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	1.8	96.3	1.9		SP		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
 GRAIN SIZE 		
D ₆₀	0.18	
D ₃₀	0.14	
D ₁₀	0.09	
 COEFFICIENTS 		
C _c	1.07	
C _u	1.9	

SIEVE number size	PERCENT FINER	
	●	
4	98.2	
10	96.3	
20	94.1	
40	92.9	
60	88.3	
100	37.7	
200	2.0	

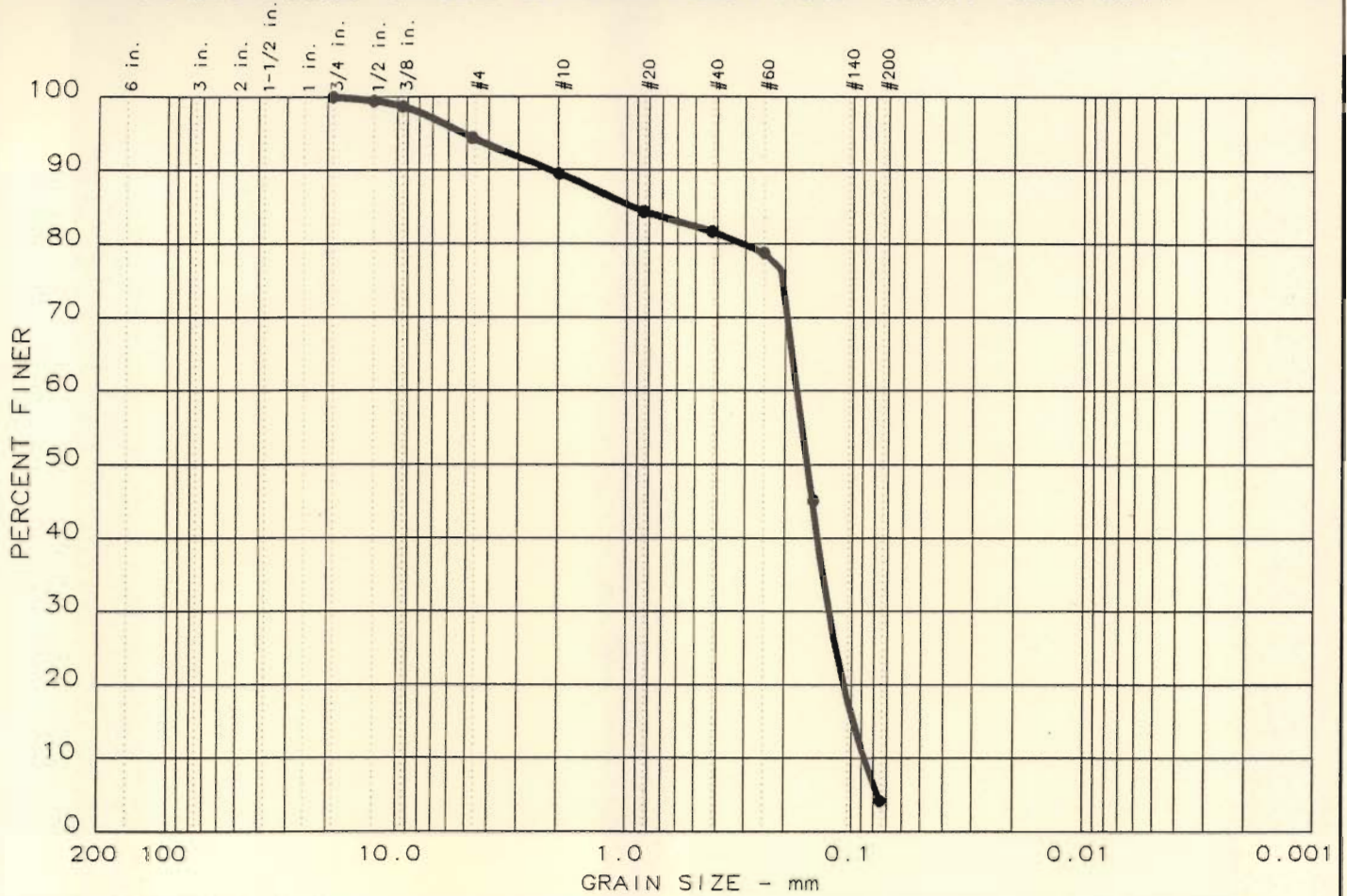
Sample information:
 ● Boring 10, Sample 3
 Loose tan & gray FINE SAND w/shell fragments

Remarks:
 Sample depth 5'-6'

**Eustis
Engineering
Company, Inc.**

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% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	5.6	90.3	4.1		SP		

SIEVE inches size	PERCENT FINER	
0.75	●	100.0
0.5	●	99.4
0.375	●	98.7
GRAIN SIZE		
D ₆₀	●	0.18
D ₃₀	●	0.13
D ₁₀	●	0.08
COEFFICIENTS		
C _c	●	1.03
C _u	●	2.0

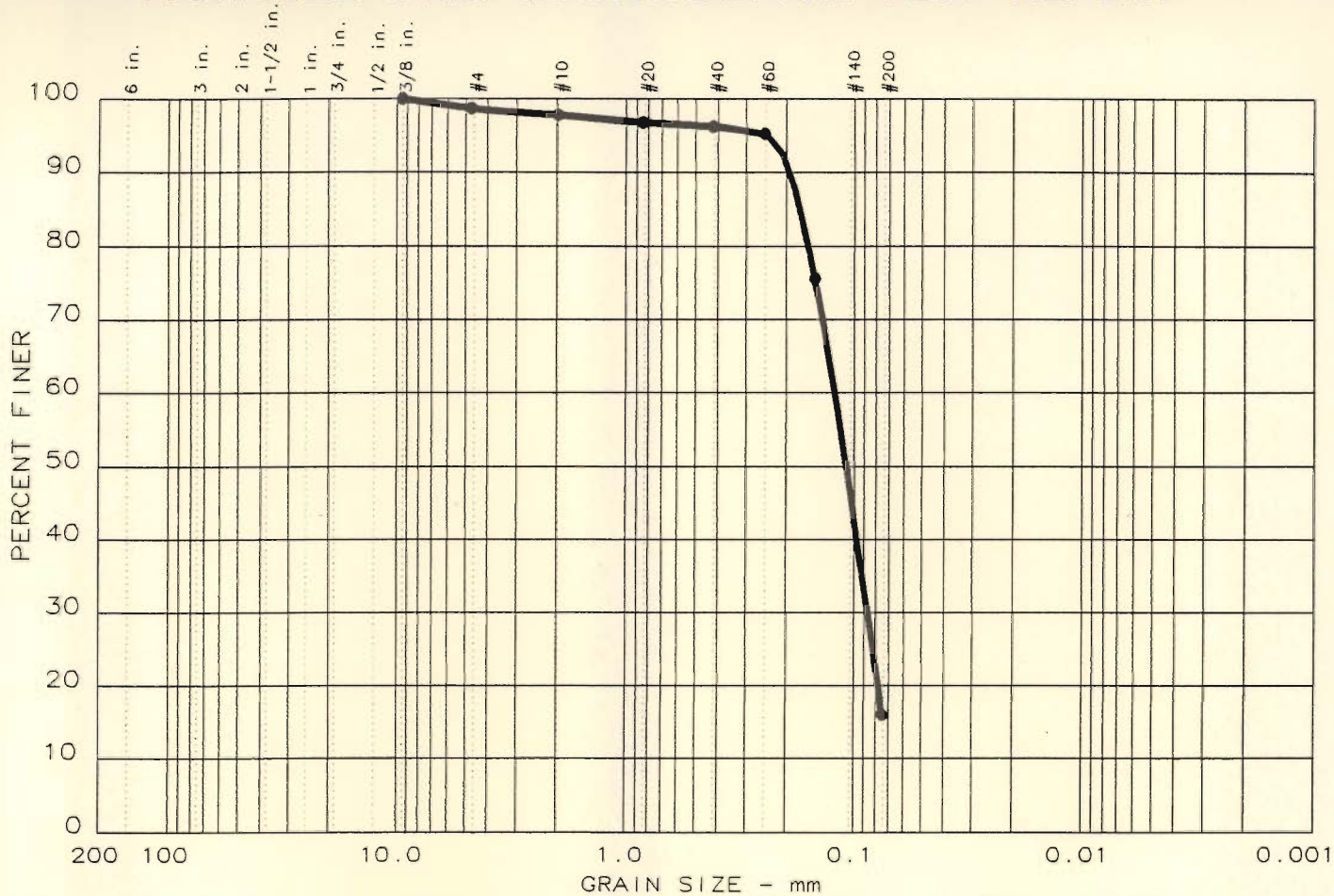
SIEVE number size	PERCENT FINER	
4	●	94.4
10	●	89.4
20	●	84.4
40	●	81.7
60	●	78.8
100	●	45.1
200	●	4.1

Sample information:
 ● Boring 10, Sample 5
 Loose tan & gray FINE SAND w/shell fragments

Remarks:
 Sample depth 9'-10'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	1.3	82.7	16.0		SC		

SIEVE inches size	PERCENT FINER		
0.375	100.0		
 GRAIN SIZE 			
D ₆₀	0.12		
D ₃₀	0.09		
D ₁₀			
 COEFFICIENTS 			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
4	98.7		
10	97.8		
20	96.8		
40	96.2		
60	95.2		
100	75.6		
200	16.0		

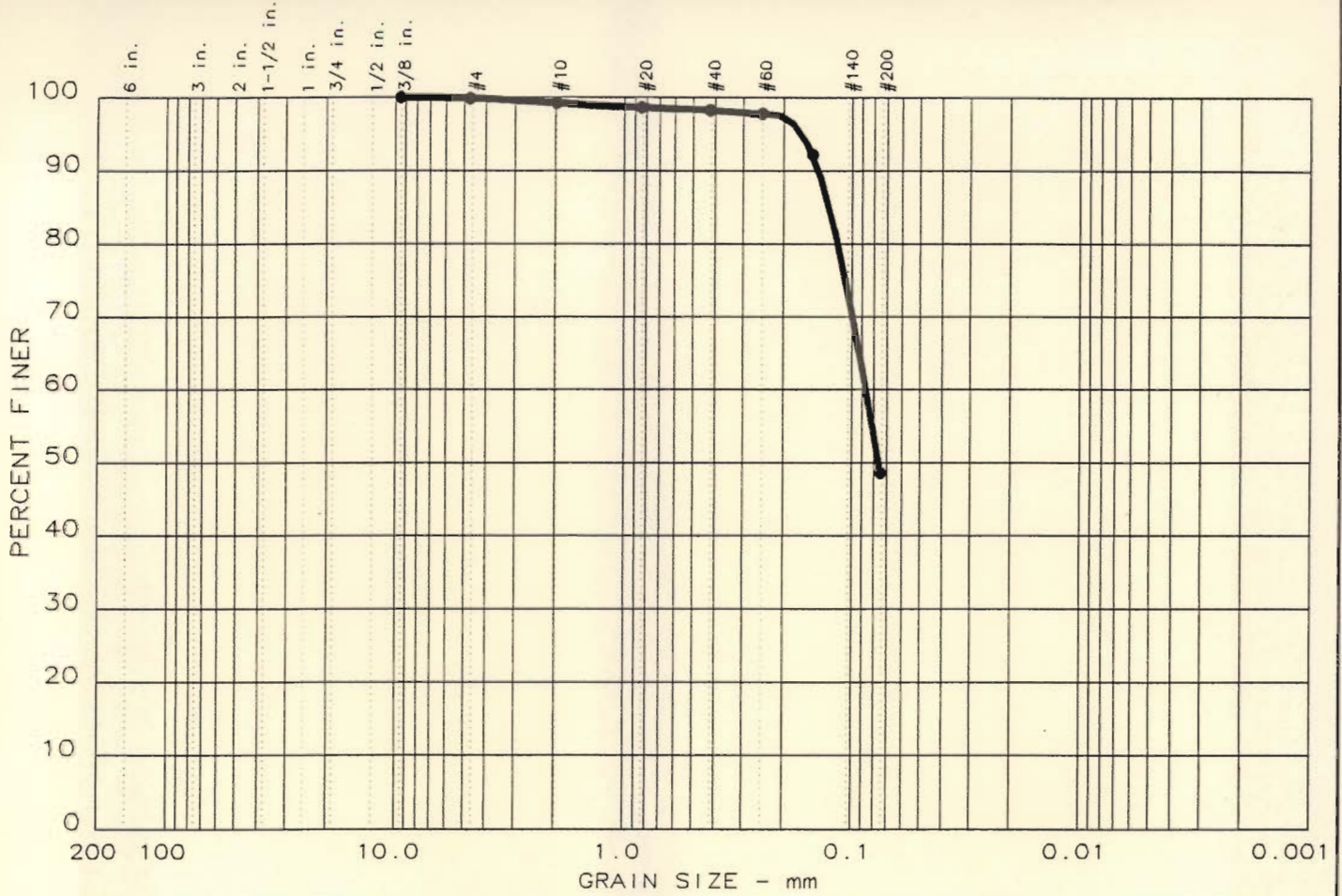
Sample information:
 • Boring 10, Sample 7
 Loose gray CLAYEY SAND
 w/ shell fragments

Remarks:
 Sample depth 13'-14'

**Eustis
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.2	51.3	48.5		SC		

SIEVE inches size	PERCENT FINER
0.375	100.0
GRAIN SIZE	
D ₆₀ D ₃₀ D ₁₀	0.09
COEFFICIENTS	
C _c C _u	

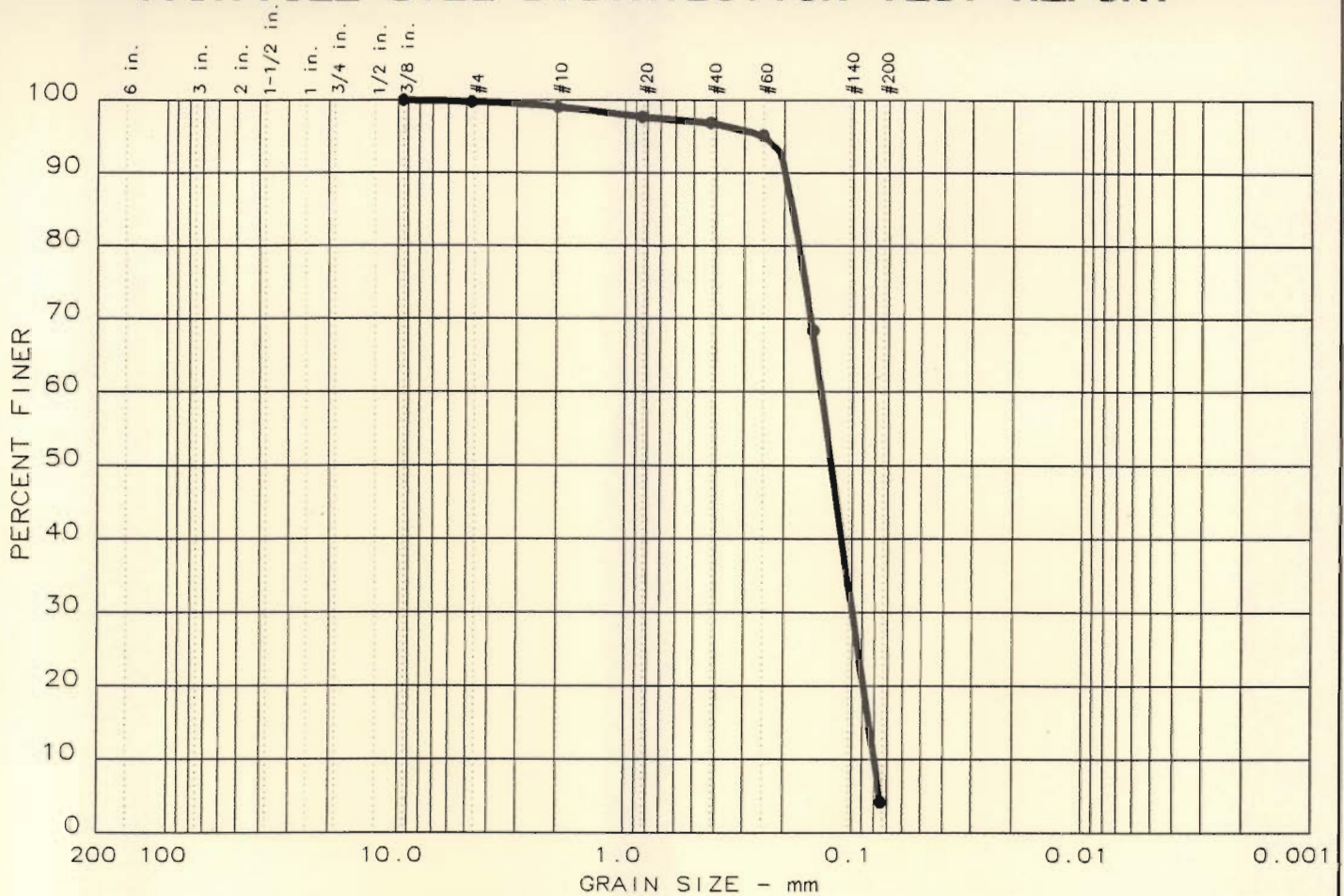
SIEVE number size	PERCENT FINER
4	99.8
10	99.2
20	98.6
40	98.2
60	97.8
100	92.2
200	48.6

Sample information:
 • Boring 11, Sample 2
 Loose gray CLAYEY SAND
 w/ sasl len & sh frag

Remarks:
 Sample depth 3'-4'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



● % +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.3	95.6	4.1		SP		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
GRAIN SIZE		
D ₆₀	0.14	
D ₃₀	0.10	
D ₁₀	0.08	
COEFFICIENTS		
C _c	0.91	
C _u	1.7	

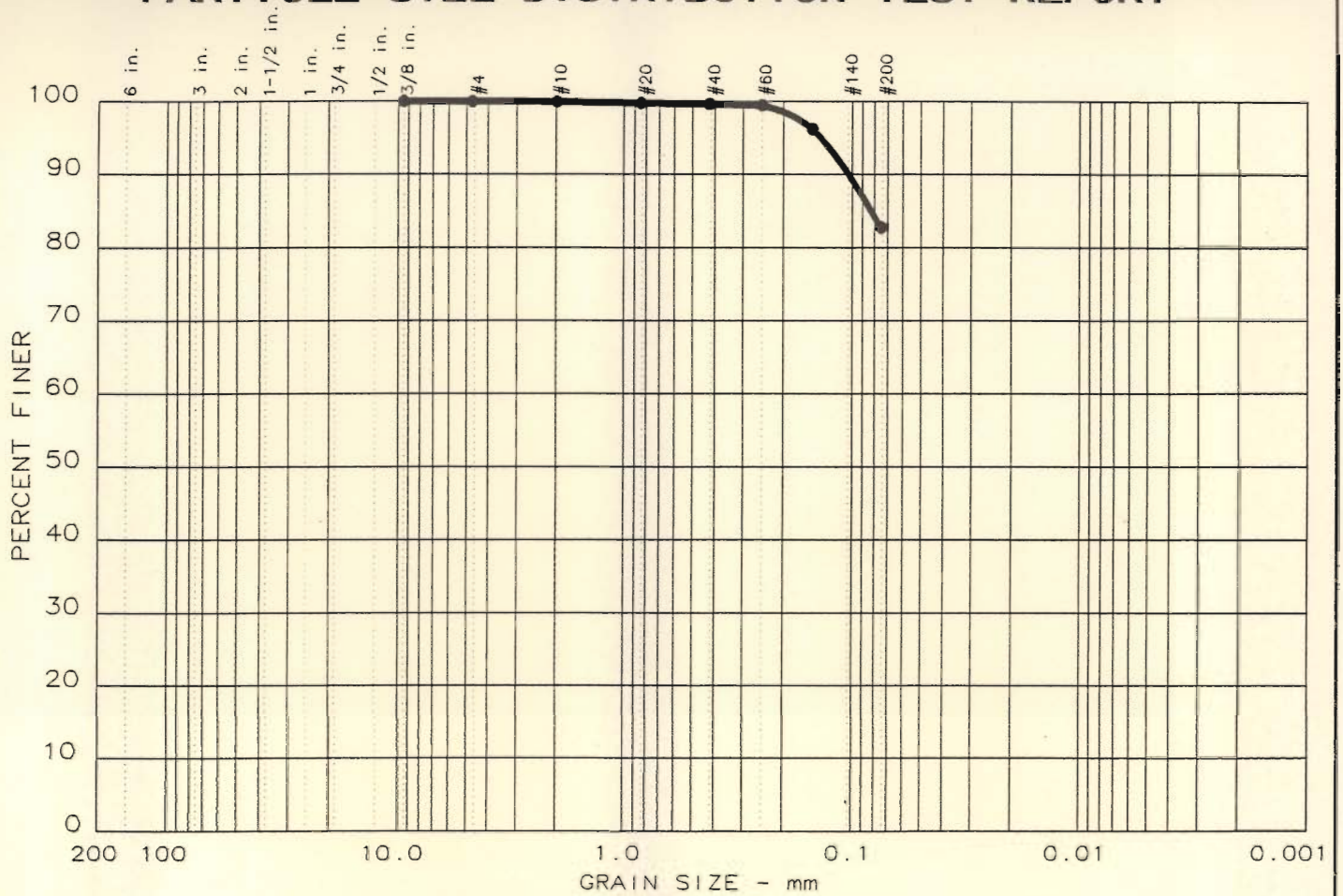
SIEVE number size	PERCENT FINER	
	●	
4	99.7	
10	99.0	
20	97.7	
40	96.8	
60	95.1	
100	68.4	
200	4.2	

Sample information:
 ● Boring 11, Sample 4
 Loose gray FINE SAND
 w/ shell fragments

Remarks:
 Sample depth 7'-8"

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PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	17.2	82.8		CH		

SIEVE inches size	PERCENT FINER		
	●		
0.375	100.0		
GRAIN SIZE			
D ₆₀			
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
4	100.0		
10	99.9		
20	99.7		
40	99.6		
60	99.4		
100	96.2		
200	82.8		

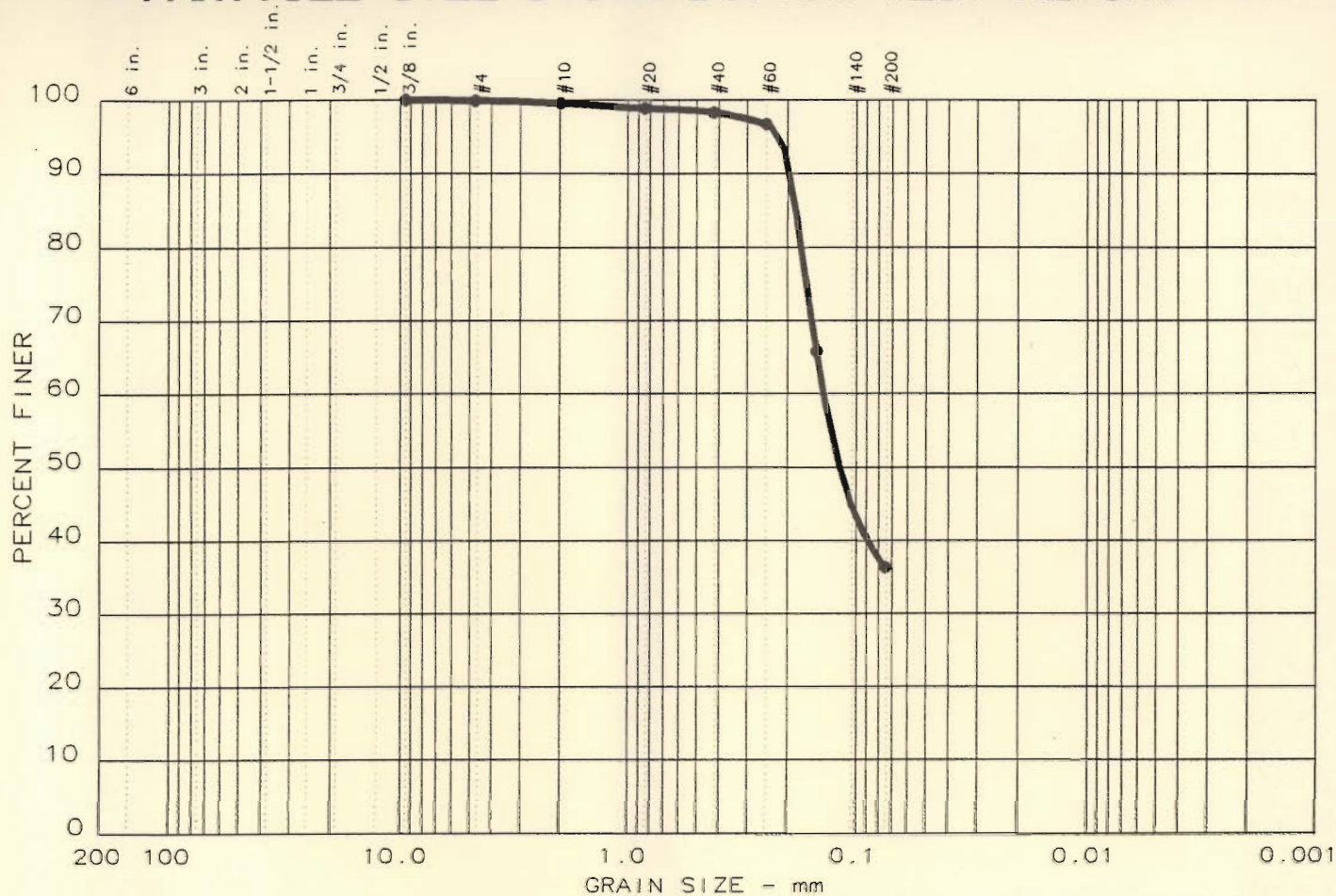
Sample information:
 ● Boring 11, Sample 7
 Very Soft gray CLAY
 w/ fisa lens, sh frags

Remarks:
 Sample depth 13'-14'

**Eustis
Engineering
Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



● % +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	63.5	36.4		SC		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
GRAIN SIZE		
D ₆₀	0.14	
D ₃₀		
D ₁₀		
COEFFICIENTS		
C _c		
C _u		

SIEVE number size	PERCENT FINER	
	●	
4	99.9	
10	99.5	
20	98.9	
40	98.3	
60	96.7	
100	65.9	
200	36.4	

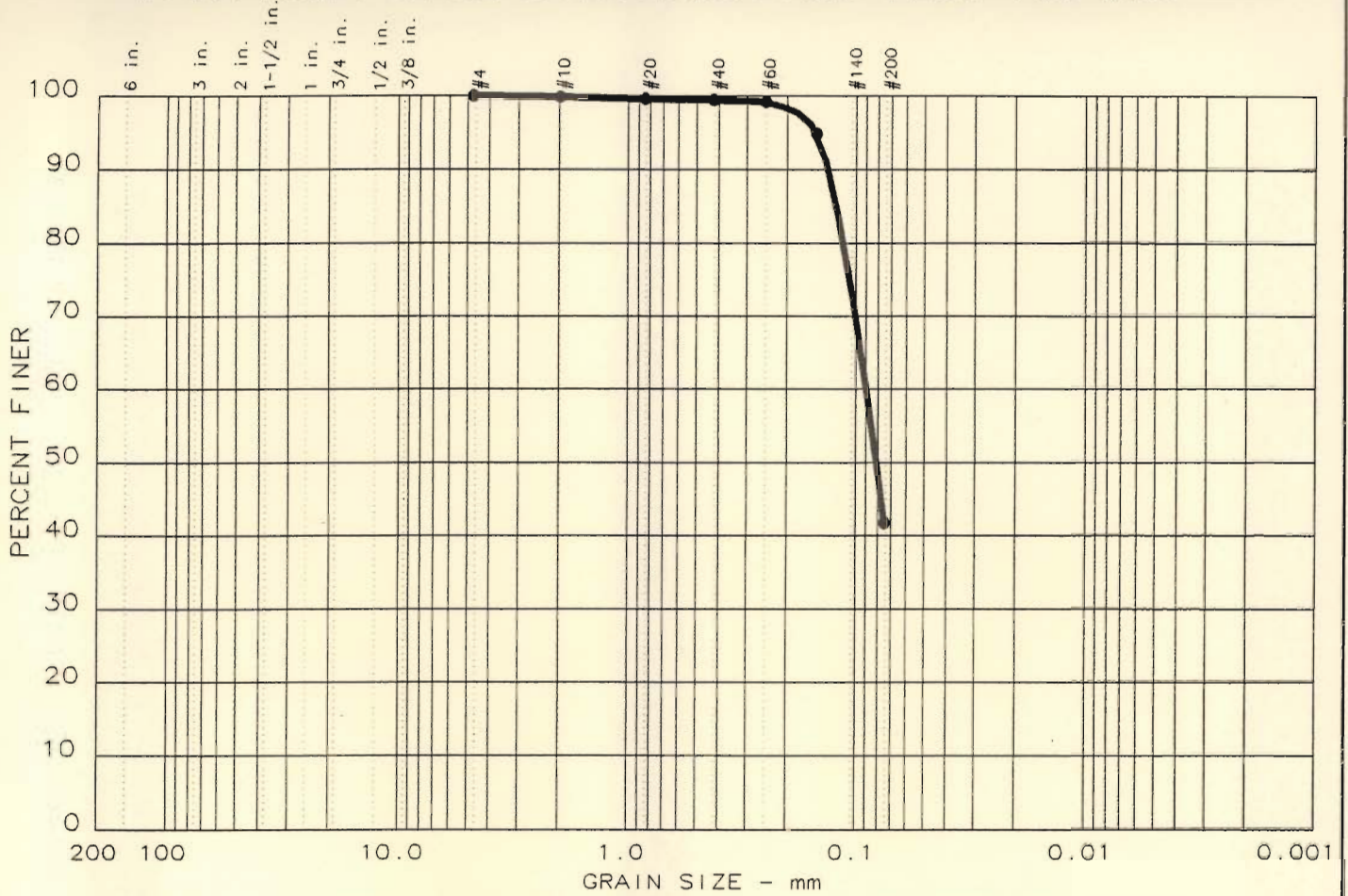
Sample information:
 ● Boring 12, Sample 1
 Loose g & t CLAYEY SAND
 w/ cl lay, om, & sh frag

Remarks:
 Sample depth 1'-2'

**Eustis
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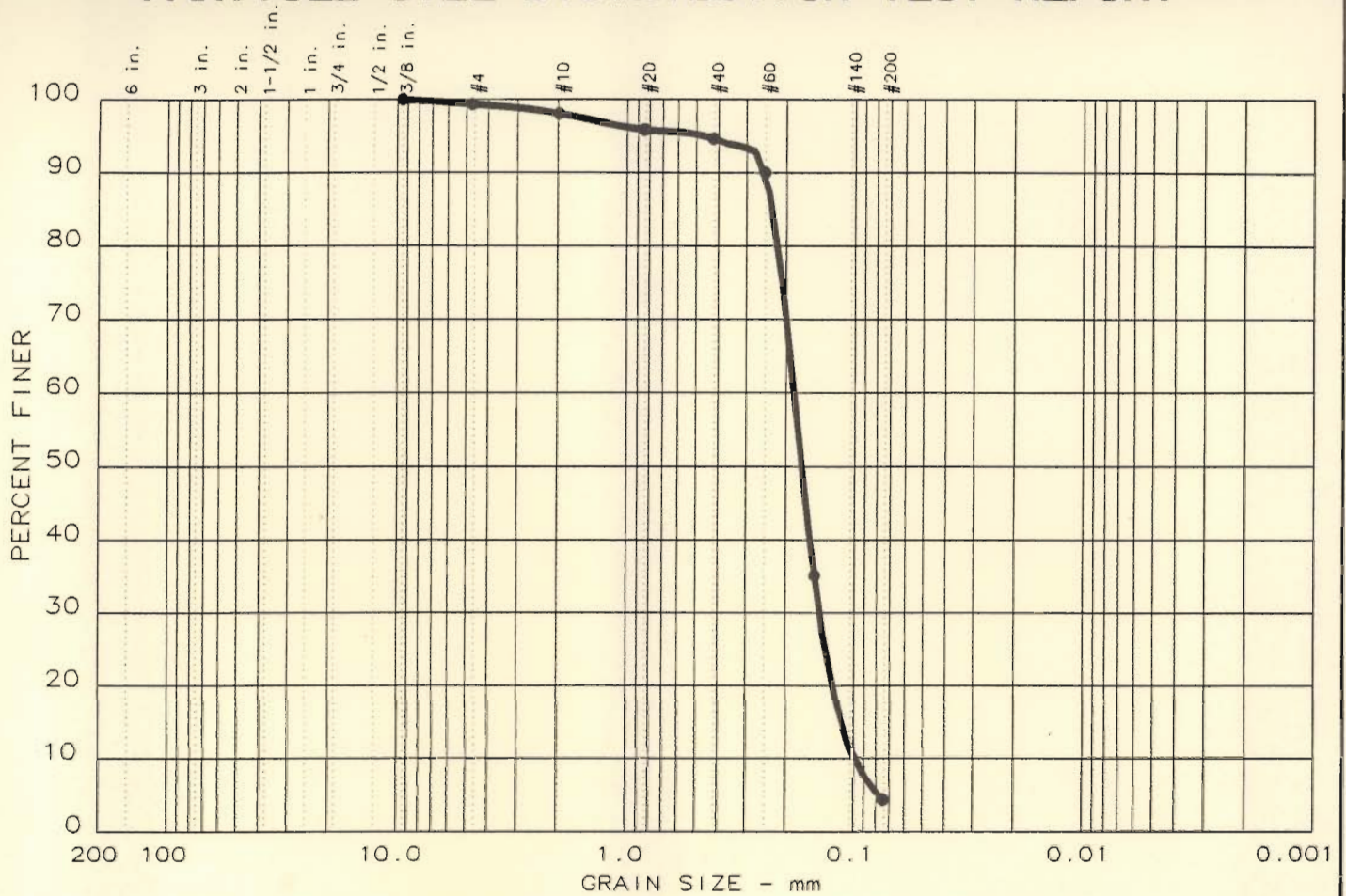


% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	58.3	41.7		SC		

SIEVE inches size	PERCENT FINER		SIEVE number size	PERCENT FINER		Sample information: • Boring 12, Sample 4 Loose gray CLAYEY SAND w/ cl lay & sh frags
	●		●			
D ₆₀	0.09		4	100.0		
D ₃₀			10	99.8		
D ₁₀			20	99.6		
GRAIN SIZE			40	99.4		
COEFFICIENTS			60	99.2		
C _c			100	94.9		
C _u			200	41.7		
Remarks: Sample depth 7'-8'						

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-26-98
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.7	95.1	4.2		SP		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
X GRAIN SIZE		
D ₆₀	0.18	
D ₃₀	0.14	
D ₁₀	0.10	
X COEFFICIENTS		
C _c	1.10	
C _u	1.8	

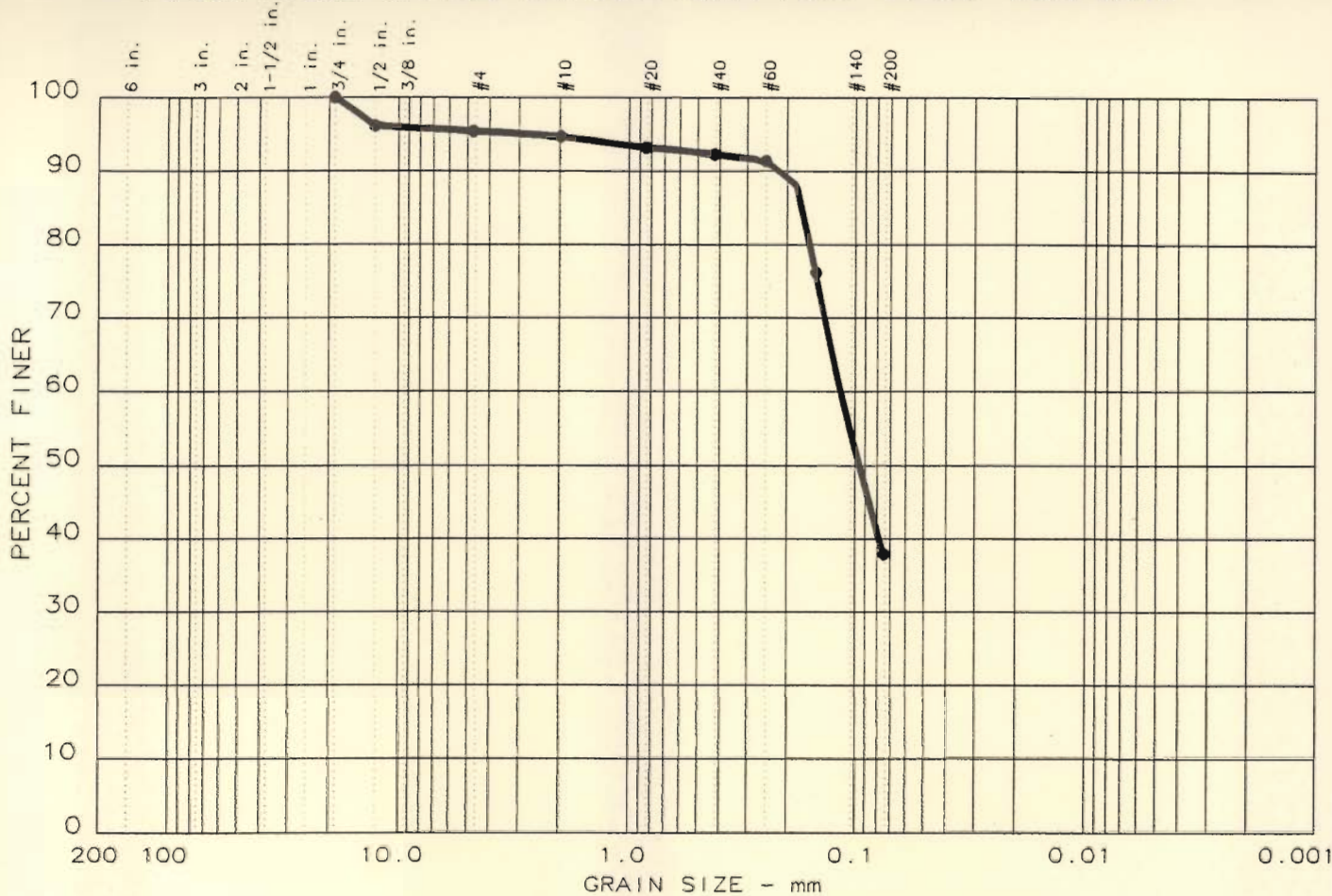
SIEVE number size	PERCENT FINER	
	●	
4	99.3	
10	98.0	
20	95.8	
40	94.6	
60	90.0	
100	35.2	
200	4.2	

Sample information:
 ● Boring 14, Sample 1
 Loose gray & tan FINE SAND w/ sh frag

Remarks:
 Sample depth 1'-2'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	4.6	57.4	38.0		SC		

SIEVE inches size	PERCENT FINER		
	●		
0.75	100.0		
0.5	96.1		
X	GRAIN SIZE		
D ₆₀	0.12		
D ₃₀			
D ₁₀			
X	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
4	95.4		
10	94.7		
20	93.2		
40	92.3		
60	91.3		
100	76.2		
200	37.9		

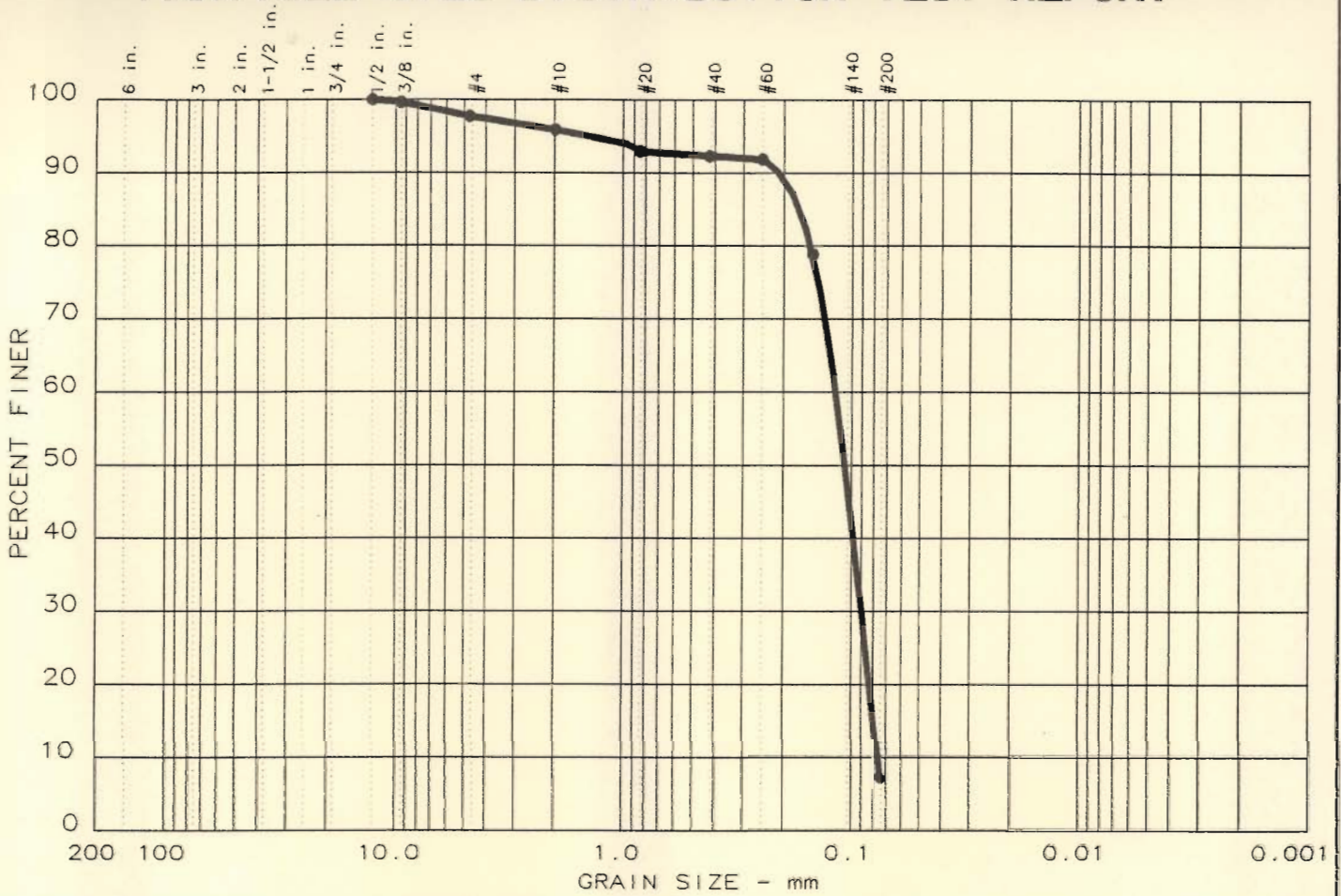
Sample information:
 ● Boring 14, Sample 3
 Very Loose gray CLAYEY SAND w/ sh frags

Remarks:
 Sample depth 5'-6'

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Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	2.3	90.5	7.2		SP-SM		

SIEVE inches size	PERCENT FINER	
	●	
0.5	100.0	
0.375	99.6	
GRAIN SIZE		
D ₆₀	0.12	
D ₃₀	0.09	
D ₁₀	0.07	
COEFFICIENTS		
C _c	0.90	
C _u	1.5	

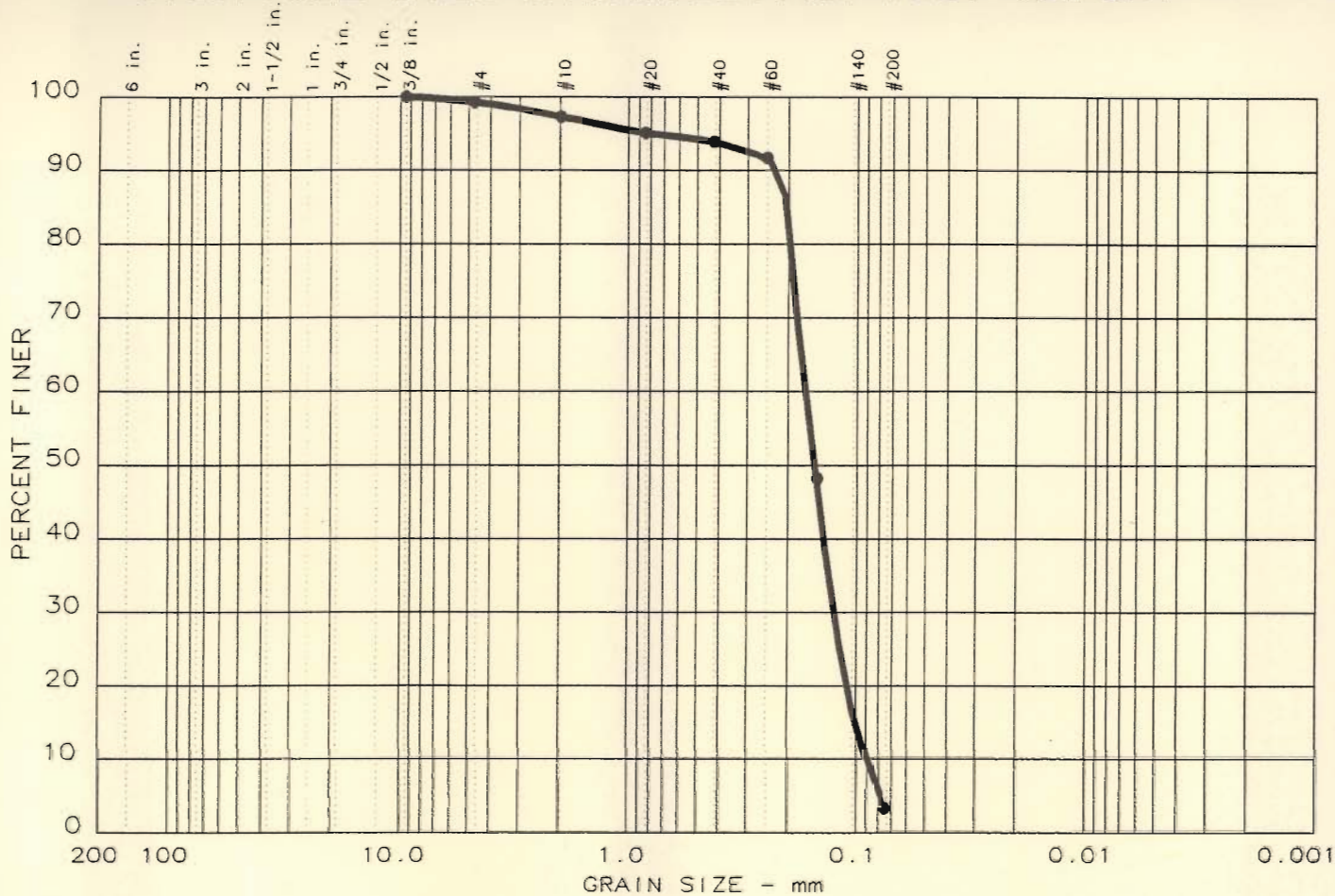
SIEVE number size	PERCENT FINER	
	●	
4	97.7	
10	95.9	
20	92.9	
40	92.3	
60	91.9	
100	78.8	
200	7.2	

Sample information:
 ● Boring 14, Sample 6
 Loose gray FINE SAND
 w/ si & sh frags

Remarks:
 Sample depth 11'-12'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.8	95.9	3.3		SP		

SIEVE inches size	PERCENT FINER		
0.375	100.0		
GRAIN SIZE			
D ₆₀	0.17		
D ₃₀	0.13		
D ₁₀	0.09		
COEFFICIENTS			
C _c	1.05		
C _u	1.9		

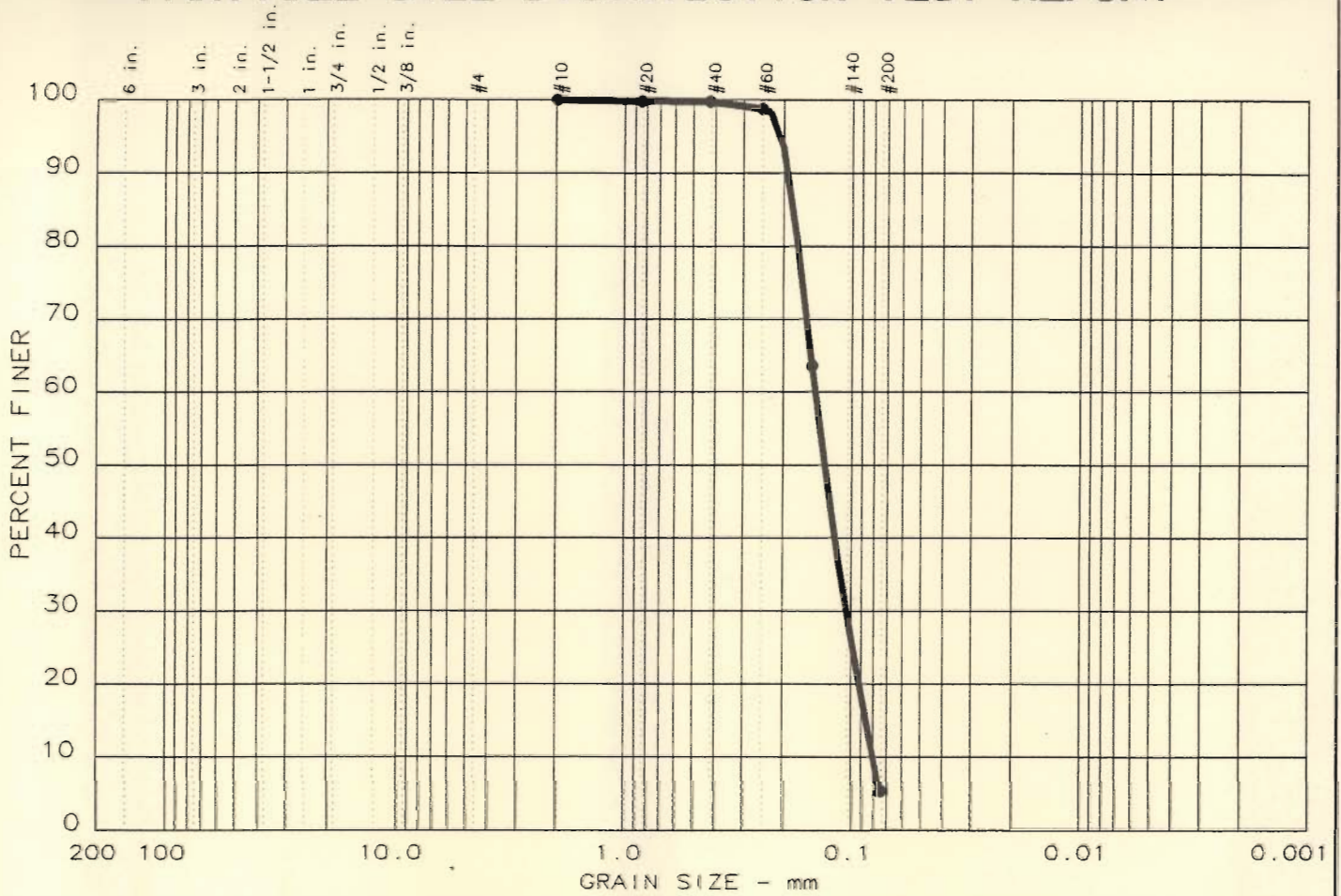
SIEVE number size	PERCENT FINER		
4	99.2		
10	97.2		
20	95.1		
40	93.9		
60	91.7		
100	48.2		
200	3.3		

Sample information:
 • Boring 15, Sample 2
 Loose tan & gray FINE SAND w/ few sh frag

Remarks:
 Sample depth 3'-4'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	94.8	5.2		SP-SM		

SIEVE inches size	PERCENT FINER	
●		
GRAIN SIZE		
D ₆₀	0.15	
D ₃₀	0.11	
D ₁₀	0.08	
COEFFICIENTS		
C _c	0.95	
C _u	1.8	

SIEVE number size	PERCENT FINER	
●		
10	100.0	
20	99.8	
40	99.7	
60	98.8	
100	63.6	
200	5.2	

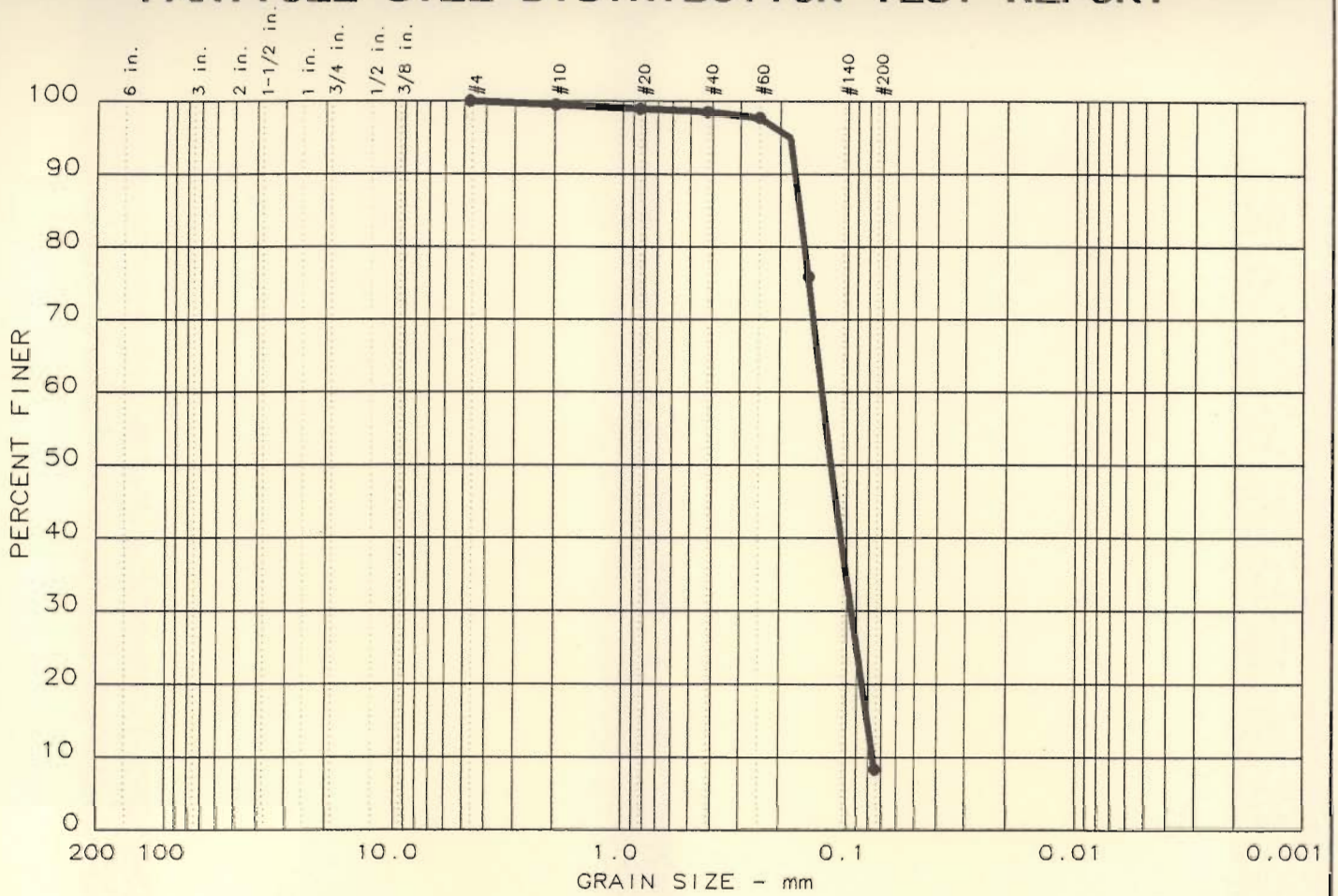
Sample information:
 ● Boring 15, Sample 5
 Loose gray FINE SAND
 w/ silt

Remarks:
 Sample depth 9'-10'

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% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	91.6	8.4		SP-SM		

SIEVE inches size	PERCENT FINER	
GRAIN SIZE		
D ₆₀	0.13	
D ₃₀	0.10	
D ₁₀	0.07	
COEFFICIENTS		
C _c	0.92	
C _u	1.7	

SIEVE number size	PERCENT FINER	
4	100.0	
10	99.4	
20	98.9	
40	98.5	
60	97.7	
100	75.9	
200	8.4	

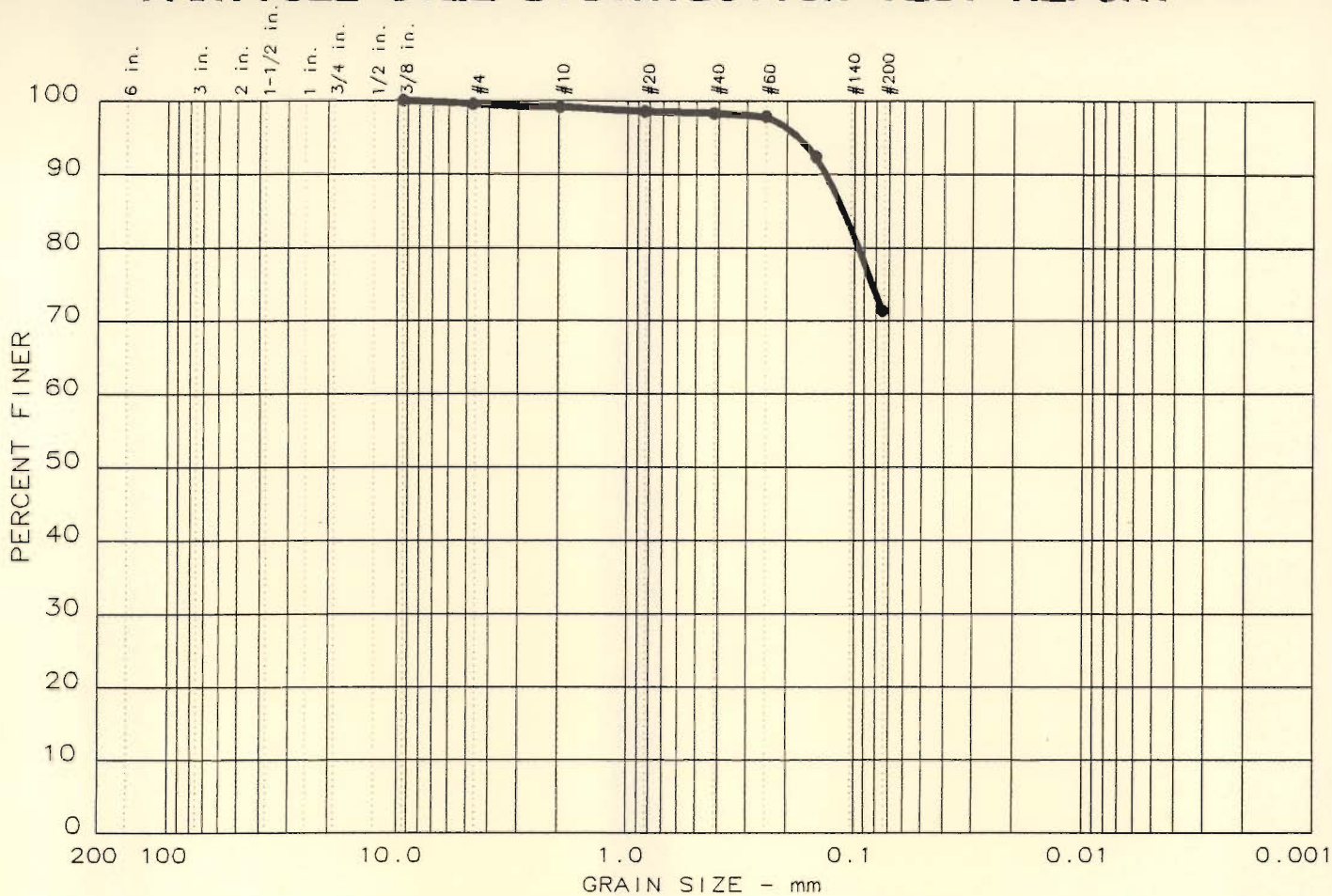
Sample information:

- Boring 15, Sample 8
- Loose tan & gray FINE SAND w/ si & sh frags

Remarks:
Sample depth 15'-16'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-26-98
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.5	28.1	71.4		CL		

SIEVE inches size	PERCENT FINER		
	●		
0.375	100.0		
GRAIN SIZE			
D ₆₀			
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
4	99.5		
10	99.1		
20	98.5		
40	98.3		
60	97.8		
100	92.3		
200	71.4		

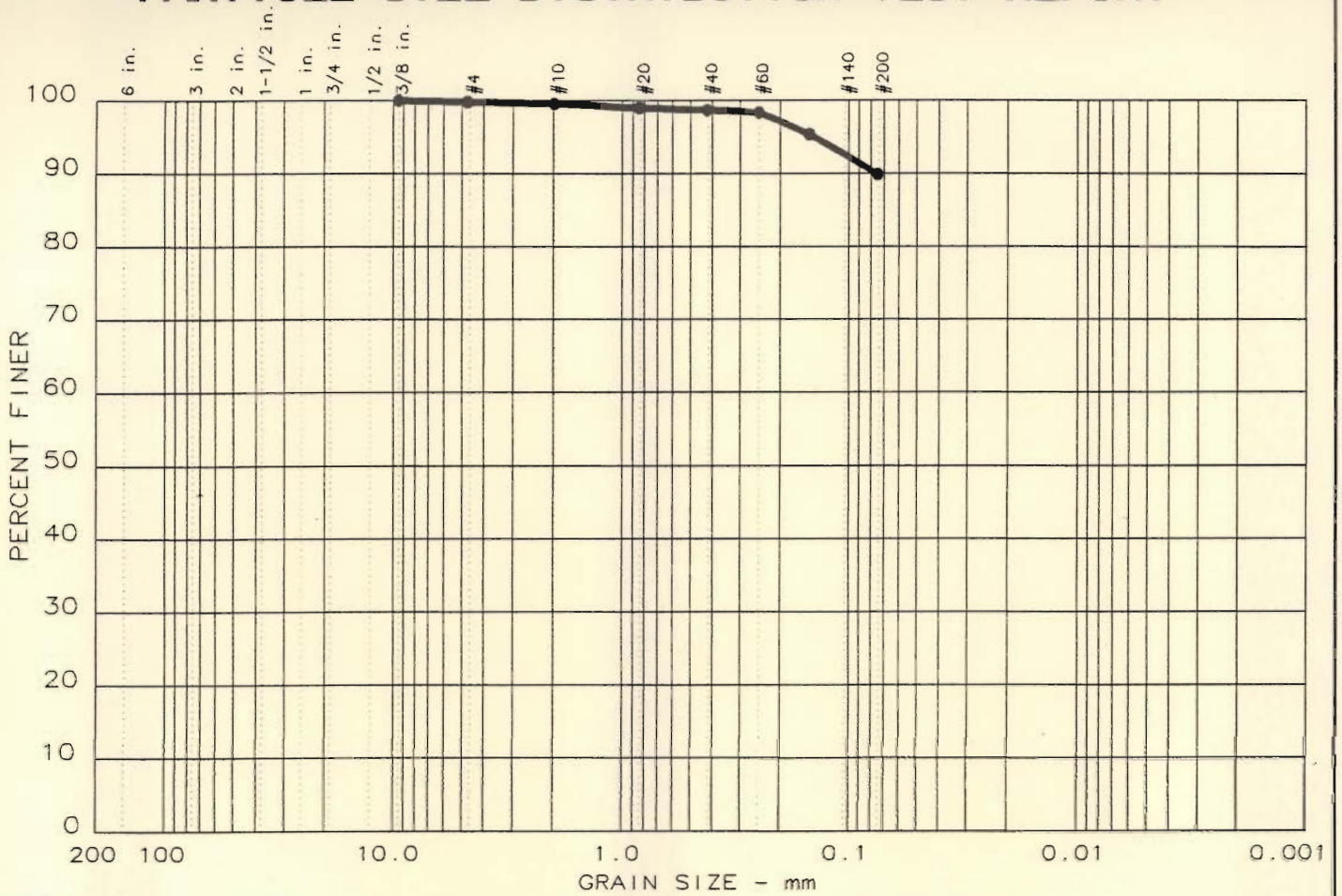
Sample information:
 ● Boring 16, Sample 2
 Very Soft gray SANDY
 CLAY w/ sh frags

Remarks:
 Sample depth 3'-4'

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% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.2	9.9	89.9		CL		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
GRAIN SIZE		
D ₆₀		
D ₃₀		
D ₁₀		
COEFFICIENTS		
C _c		
C _u		

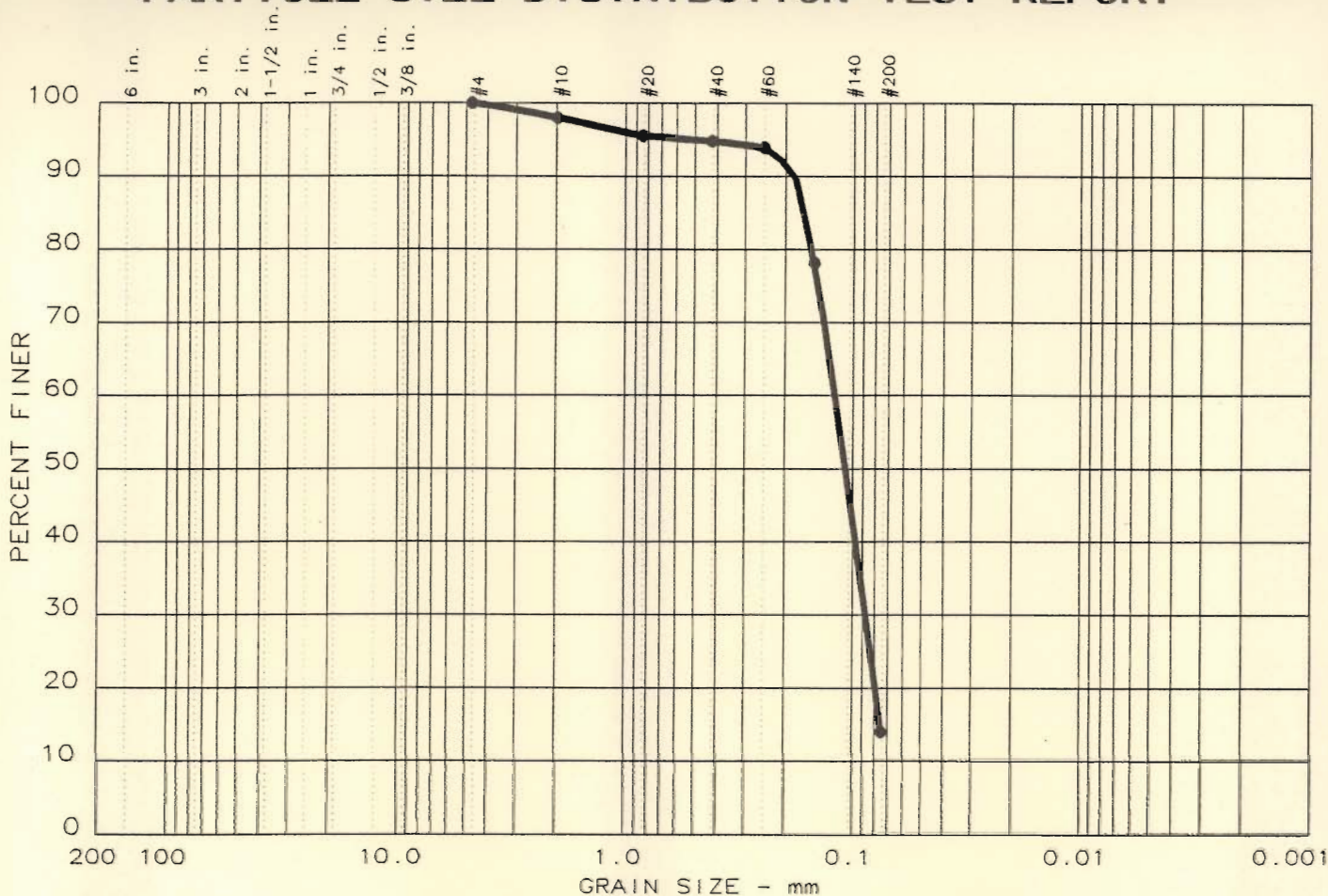
SIEVE number size	PERCENT FINER	
	●	
4	99.8	
10	99.5	
20	99.0	
40	98.7	
60	98.3	
100	95.4	
200	89.9	

Sample information:
 ● Boring 16, Sample 4
 Very Soft gray SANDY
 CLAY w/ few sh frags

Remarks:
 Sample depth 7'-8'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	86.0	14.0	14.0	SC		

SIEVE inches size	PERCENT FINER	
●		
X	GRAIN SIZE	
D ₆₀	0.12	
D ₃₀	0.09	
D ₁₀		
X	COEFFICIENTS	
C _c		
C _u		

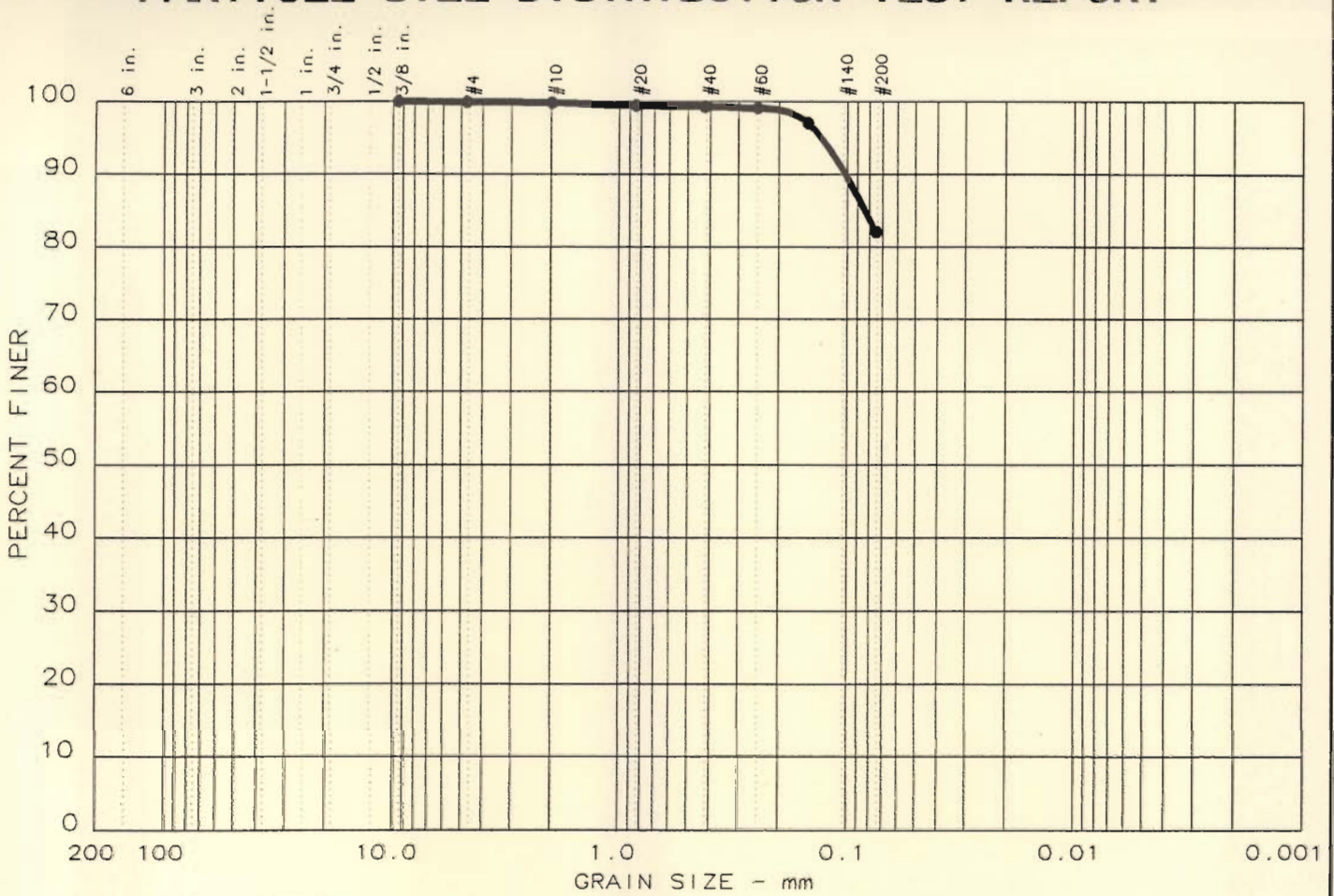
SIEVE number size	PERCENT FINER	
●		
4	100.0	
10	98.0	
20	95.6	
40	94.8	
60	93.9	
100	78.2	
200	14.0	

Sample information:
 ● Boring 16, Sample 7
 Loose gray CLAYEY SAND
 w/ cl lens & sh frags

Remarks:
 Sample depth 13'-14'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	17.8	82.1		CH		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
GRAIN SIZE		
D ₆₀		
D ₃₀		
D ₁₀		
COEFFICIENTS		
C _c		
C _u		

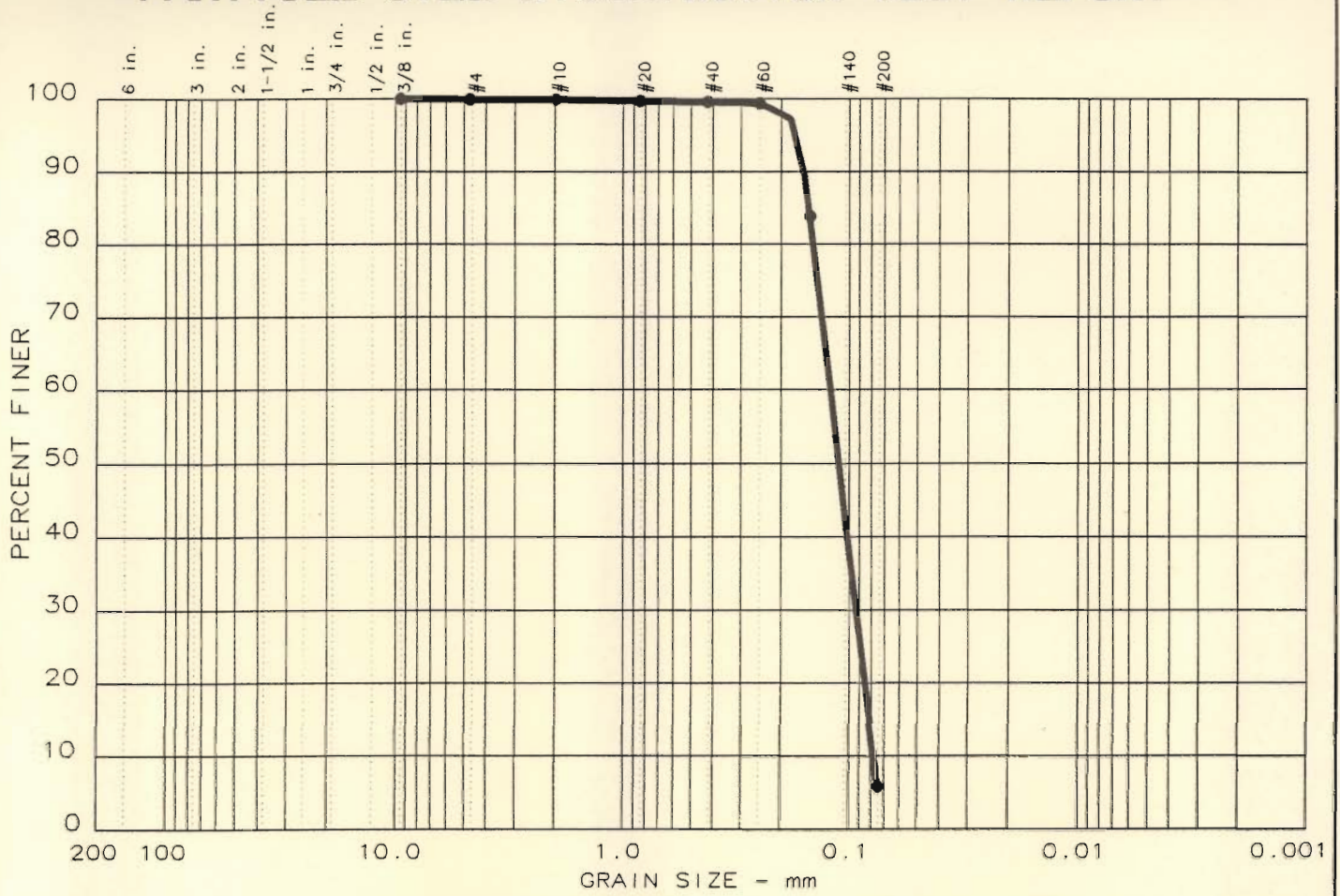
SIEVE number size	PERCENT FINER	
	●	
4	99.9	
10	99.8	
20	99.4	
40	99.3	
60	99.1	
100	97.0	
200	82.1	

Sample information:
 ● Boring 16, Sample 9
 Very Soft gray CLAY
 w/ sa lens & sh frags

Remarks:
 Sample depth 17'-18'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	94.2	5.7		SP-SM		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
 GRAIN SIZE 		
D ₆₀	0.12	
D ₃₀	0.09	
D ₁₀	0.07	
 COEFFICIENTS 		
C _c	0.92	
C _u	1.6	

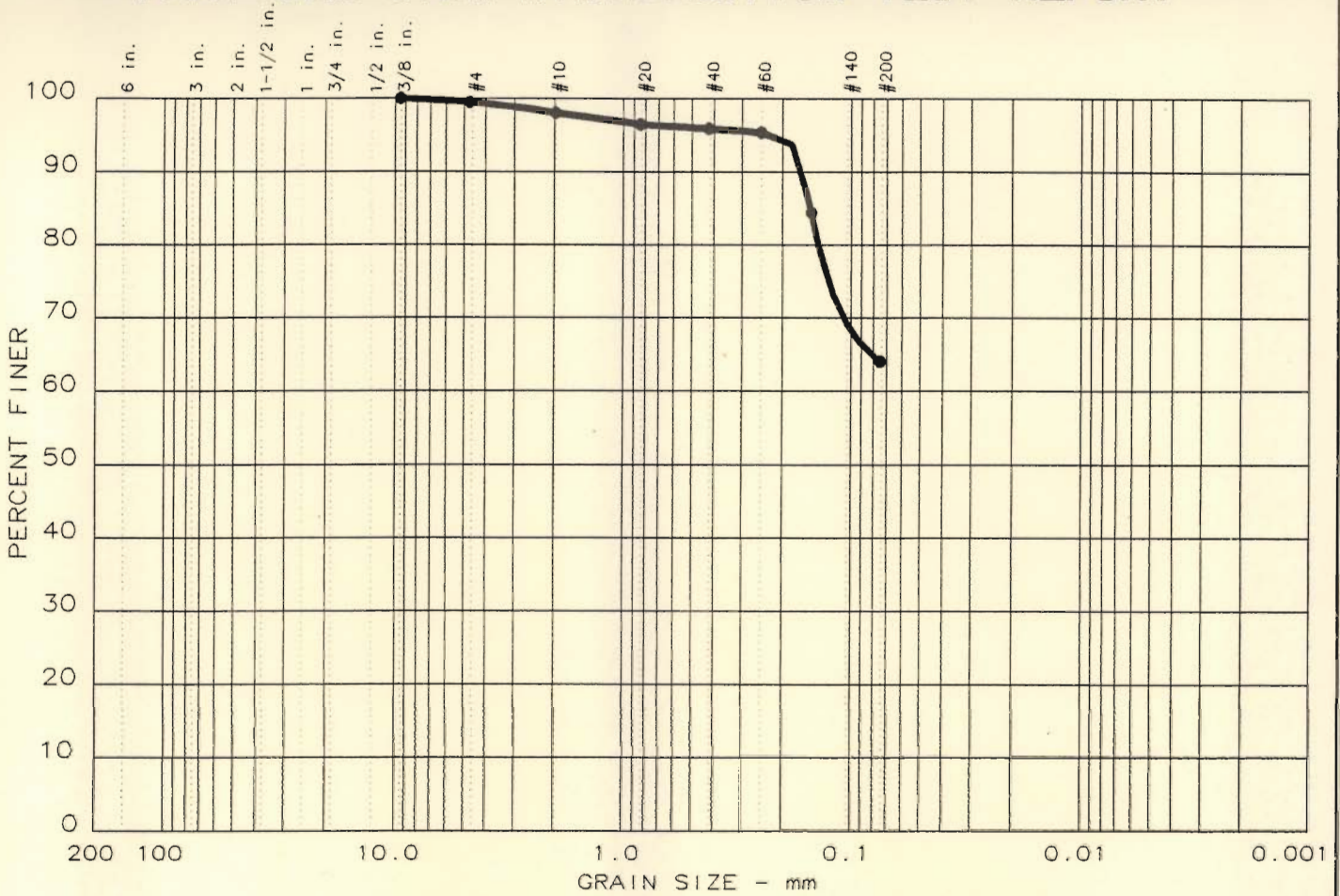
SIEVE number size	PERCENT FINER	
	●	
4	99.9	
10	99.9	
20	99.7	
40	99.6	
60	99.4	
100	83.9	
200	5.8	

Sample information:
 ● Boring 21, Sample 2
 Loose gray FINE SAND
 w/ si & sh frag

Remarks:
 Sample depth 3'-4'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.5	35.4	64.1		CL		

SIEVE inches size	PERCENT FINER		
	●		
0.375	100.0		
X GRAIN SIZE			
D ₆₀			
D ₃₀			
D ₁₀			
X COEFFICIENTS			
C _c			
C _u			

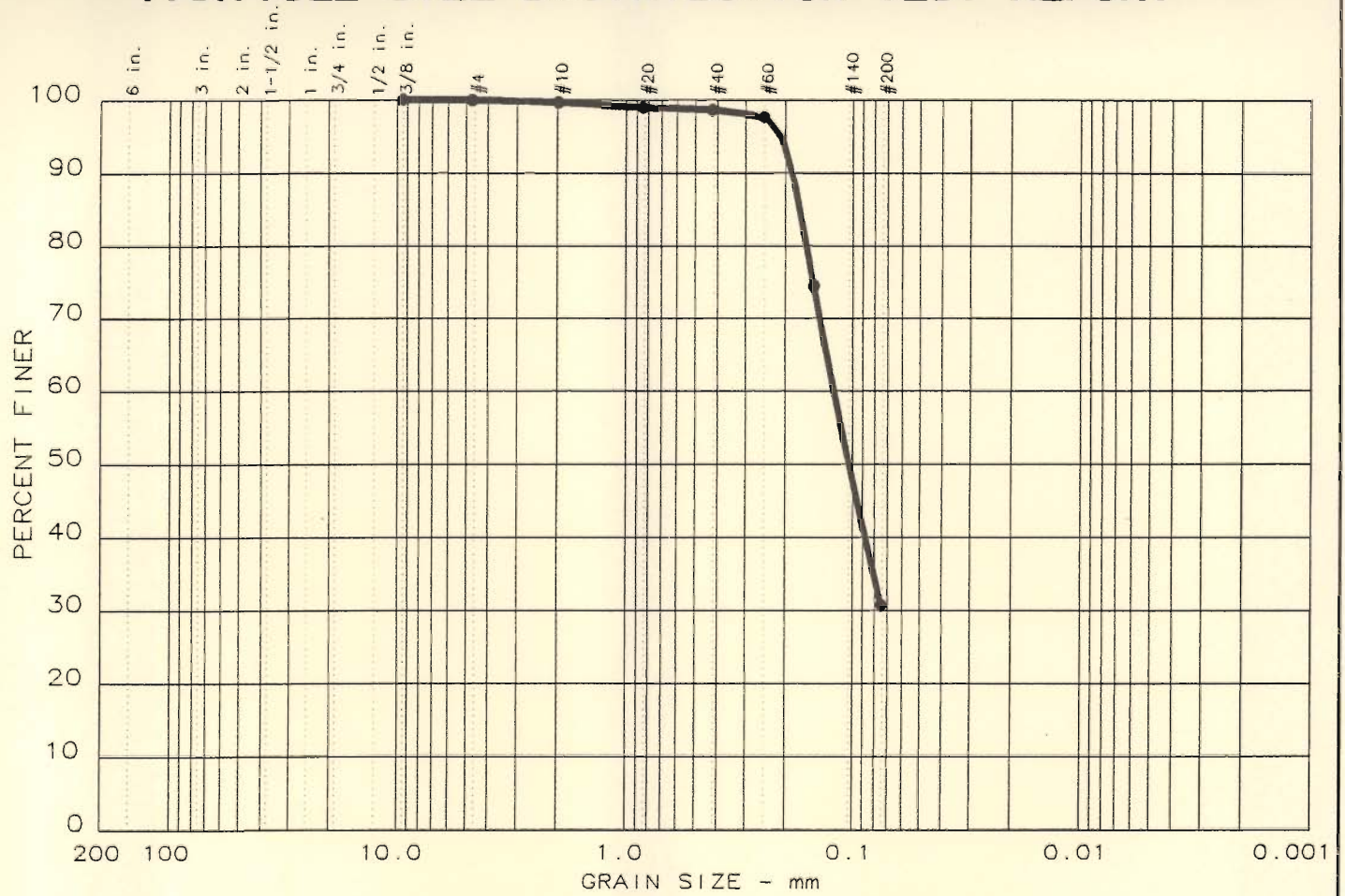
SIEVE number size	PERCENT FINER		
	●		
4	99.5		
10	98.0		
20	96.5		
40	95.9		
60	95.4		
100	84.4		
200	64.1		

Sample information:
 ● Boring 21, Sample 4
 Very Soft gray SANDY
 CLAY w/ sh frags

Remarks:
 Sample depth 7'-8'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-26-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	69.2	30.7		SC		

SIEVE inches size	PERCENT FINER		
0.375	●	100.0	
GRAIN SIZE			
D ₆₀ D ₃₀ D ₁₀	●	0.12	
COEFFICIENTS			
C _c C _u			

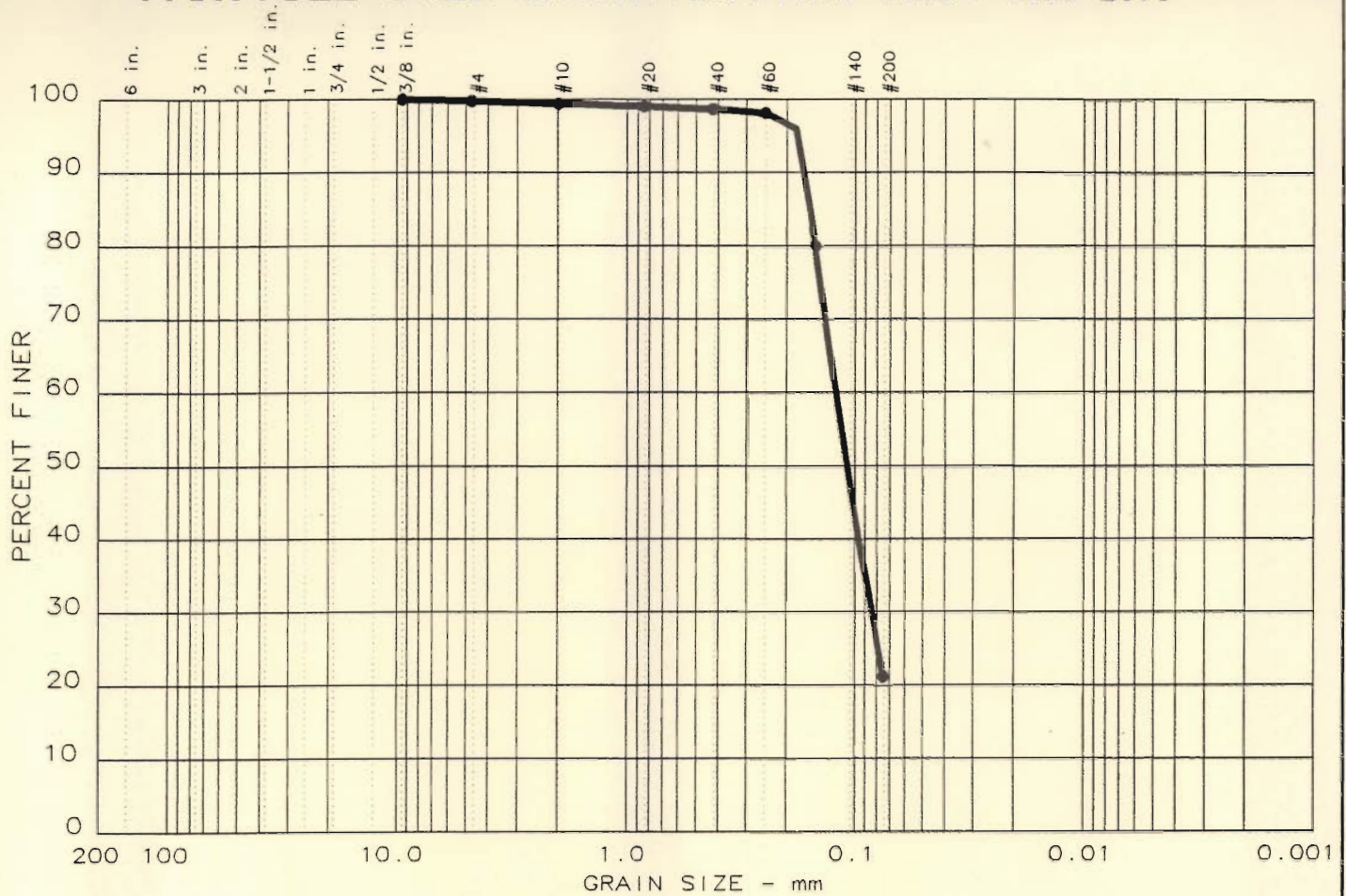
SIEVE number size	PERCENT FINER		
4	●	99.9	
10		99.6	
20		99.0	
40		98.6	
60		97.7	
100		74.5	
200		30.7	

Sample information:
 ● Boring 21, Sample 6
 Loose gray FINE SAND w/
 cl lays & poc, sh frags

Remarks:
 Sample depth 11'-12'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.2	78.5	21.3		SC		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
X GRAIN SIZE		
D ₆₀	0.12	
D ₃₀	0.08	
D ₁₀		
X COEFFICIENTS		
C _c		
C _u		

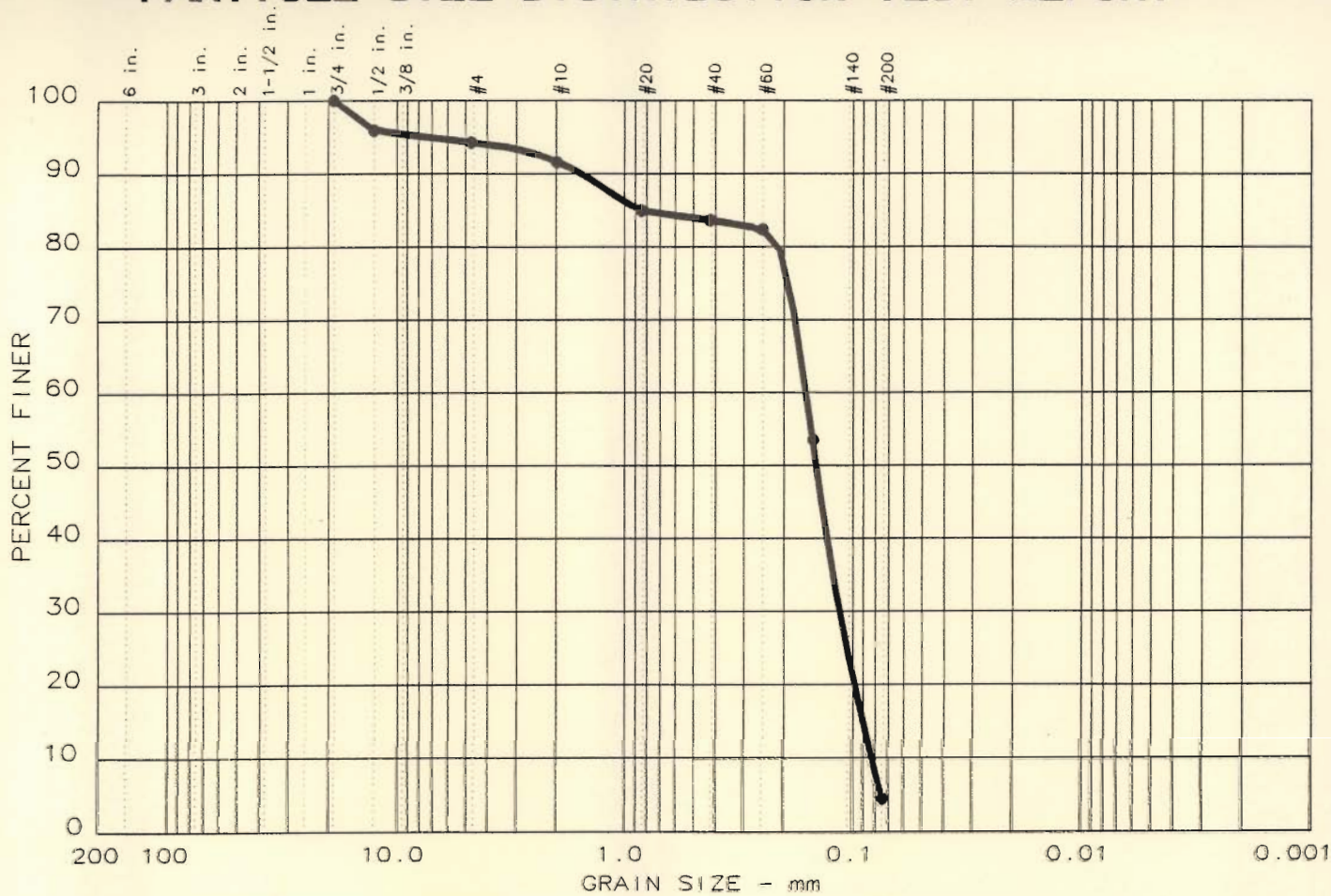
SIEVE number size	PERCENT FINER	
	●	
4	99.8	
10	99.4	
20	99.0	
40	98.6	
60	98.1	
100	80.1	
200	21.3	

Sample information:
 ● Boring 23, Sample 7
 Loose gray CLAYEY SAND
 w/ clay layer

Remarks:
 Sample depth 13'-14'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	5.8	89.8	4.4		SP		

SIEVE inches size	PERCENT FINER	
	●	
0.75	100.0	
0.5	95.9	
X GRAIN SIZE		
D ₆₀	0.16	
D ₃₀	0.11	
D ₁₀	0.08	
X COEFFICIENTS		
C _c	0.98	
C _u	1.9	

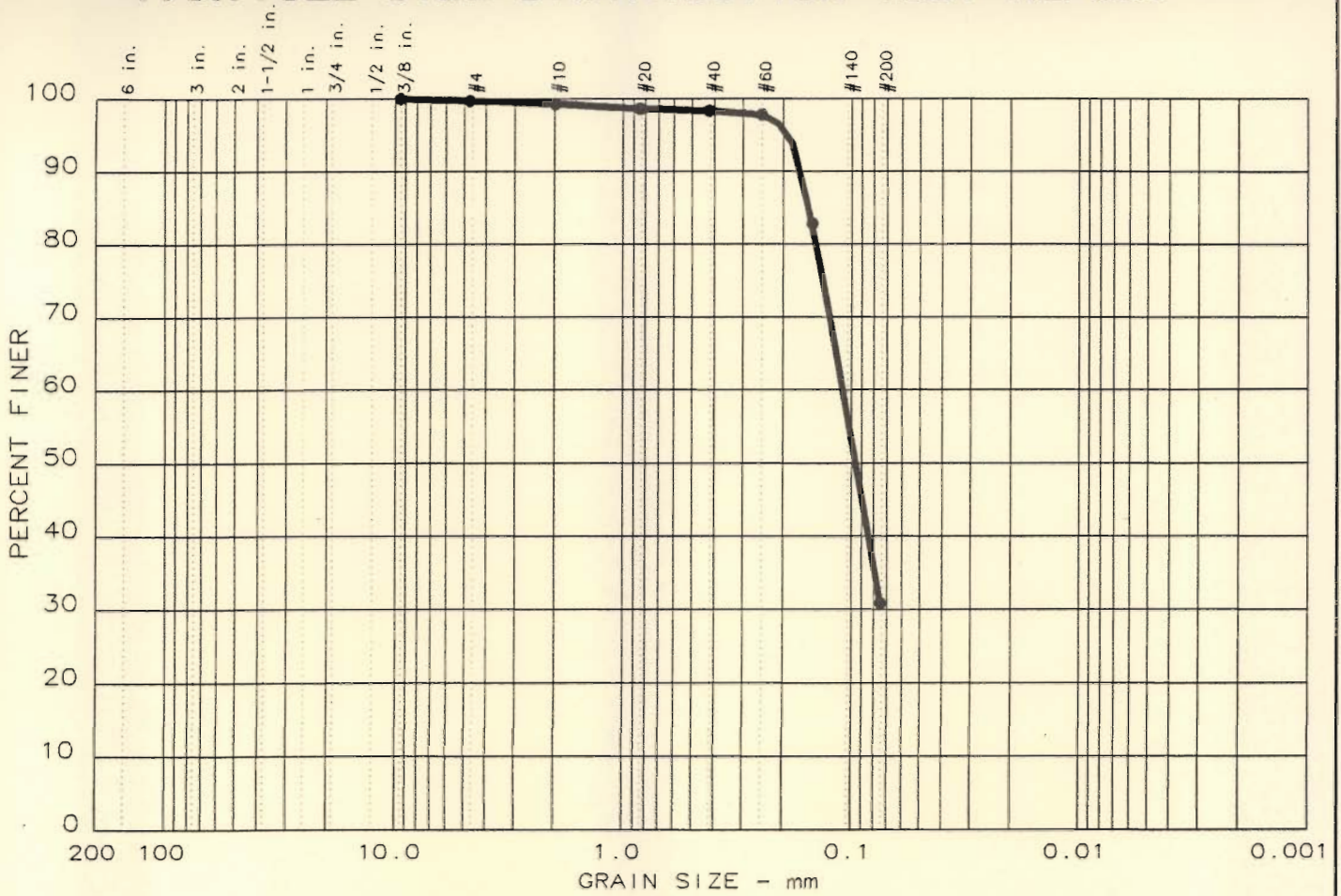
SIEVE number size	PERCENT FINER	
	●	
4	94.2	
10	91.5	
20	84.9	
40	83.6	
60	82.4	
100	53.5	
200	4.5	

Sample information:
 ● Boring 24, Sample 5
 Loose gray FINE SAND
 w/ shell fragments

Remarks:
 Sample depth 9'-10'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-26-98
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PARTICLE SIZE DISTRIBUTION TEST REPORT



● % +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.3	68.9	30.8		SC		

SIEVE inches size	PERCENT FINER		
	●		
0.375	100.0		
GRAIN SIZE			
D ₆₀ D ₃₀ D ₁₀	0.11		
COEFFICIENTS			
C _c C _u			

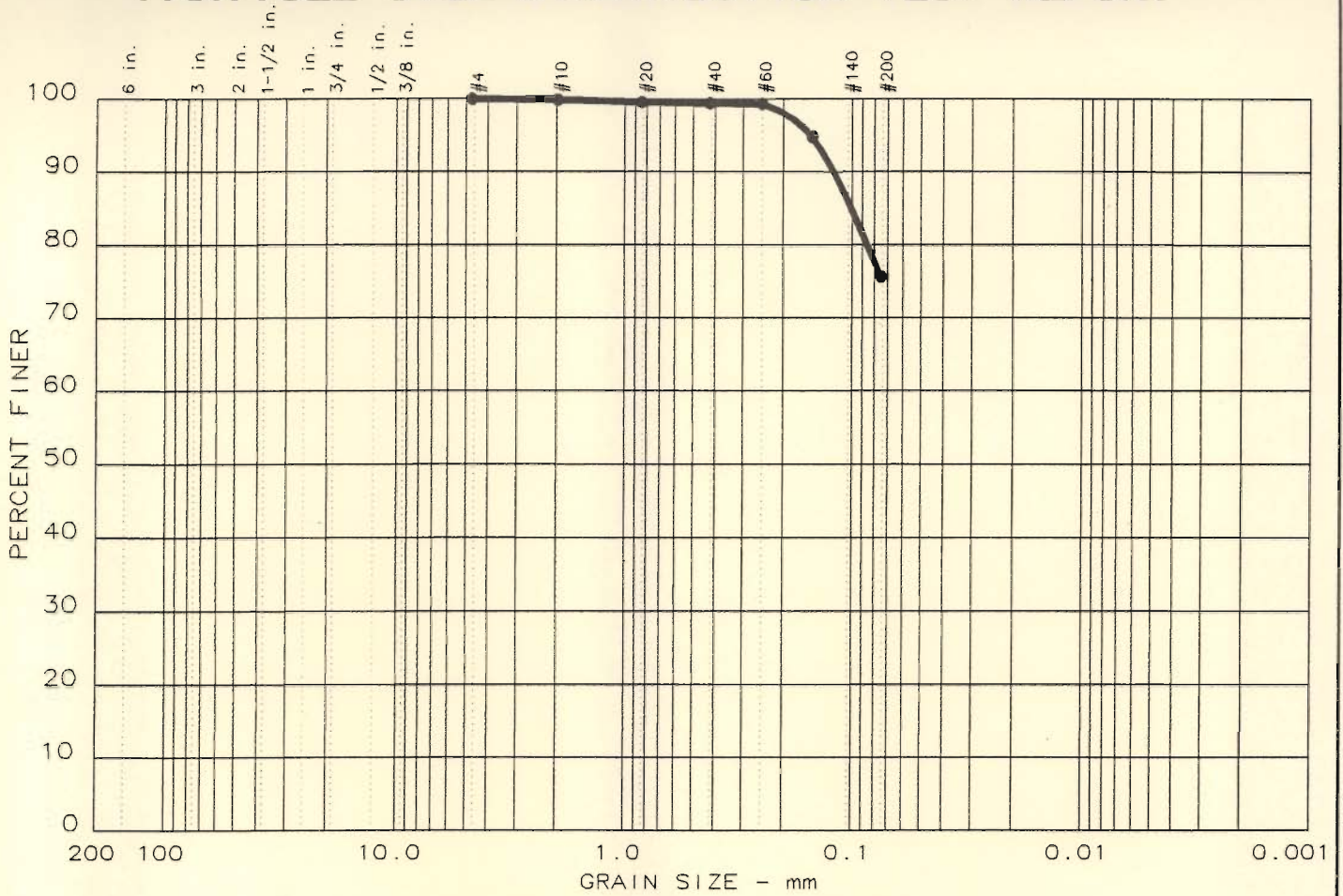
SIEVE number size	PERCENT FINER		
	●		
4	99.7		
10	99.3		
20	98.6		
40	98.3		
60	97.8		
100	82.9		
200	30.9		

Sample information:
 ● Boring 26, Sample 3
 Loose gray CLAYEY SAND
 w/ shell fragments

Remarks:
 Sample depth 5'-6'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	24.4	75.6		CL		

SIEVE inches size	PERCENT FINER		
	●		
X	GRAIN SIZE		
D ₆₀			
D ₃₀			
D ₁₀			
X	COEFFICIENTS		
C _c			
C _u			

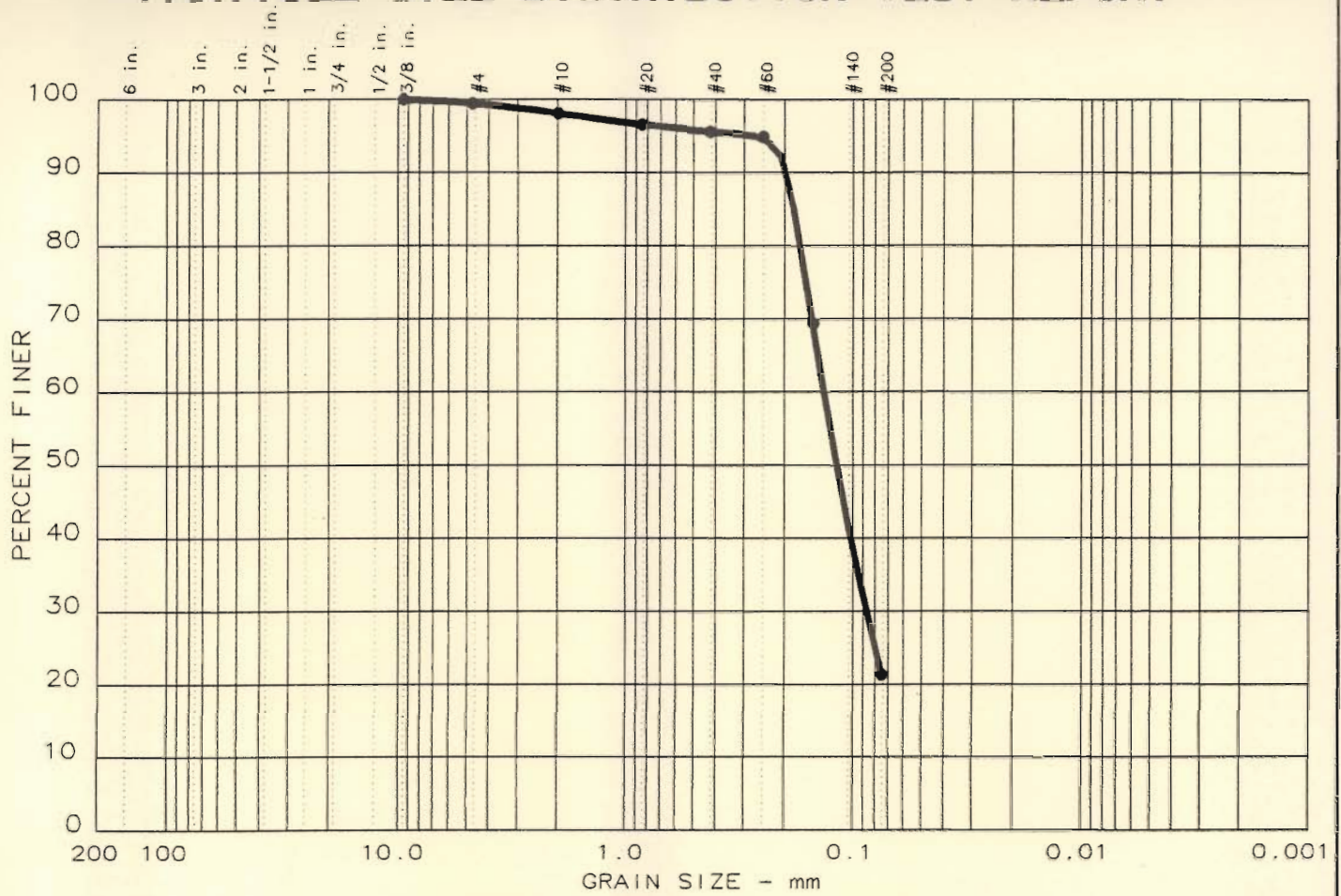
SIEVE number size	PERCENT FINER	
	●	
4	100.0	
10	99.8	
20	99.6	
40	99.4	
60	99.3	
100	94.8	
200	75.6	

Sample information:
 ● Boring 26, Sample 7
 Soft gray SANDY CLAY

Remarks:
 Sample depth 13'-14'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-26-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.6	78.1	21.3		SC		

SIEVE inches size	PERCENT FINER		
0.375	100.0		
 GRAIN SIZE 			
D ₆₀	0.13		
D ₃₀	0.09		
D ₁₀			
 COEFFICIENTS 			
C _c			
C _u			

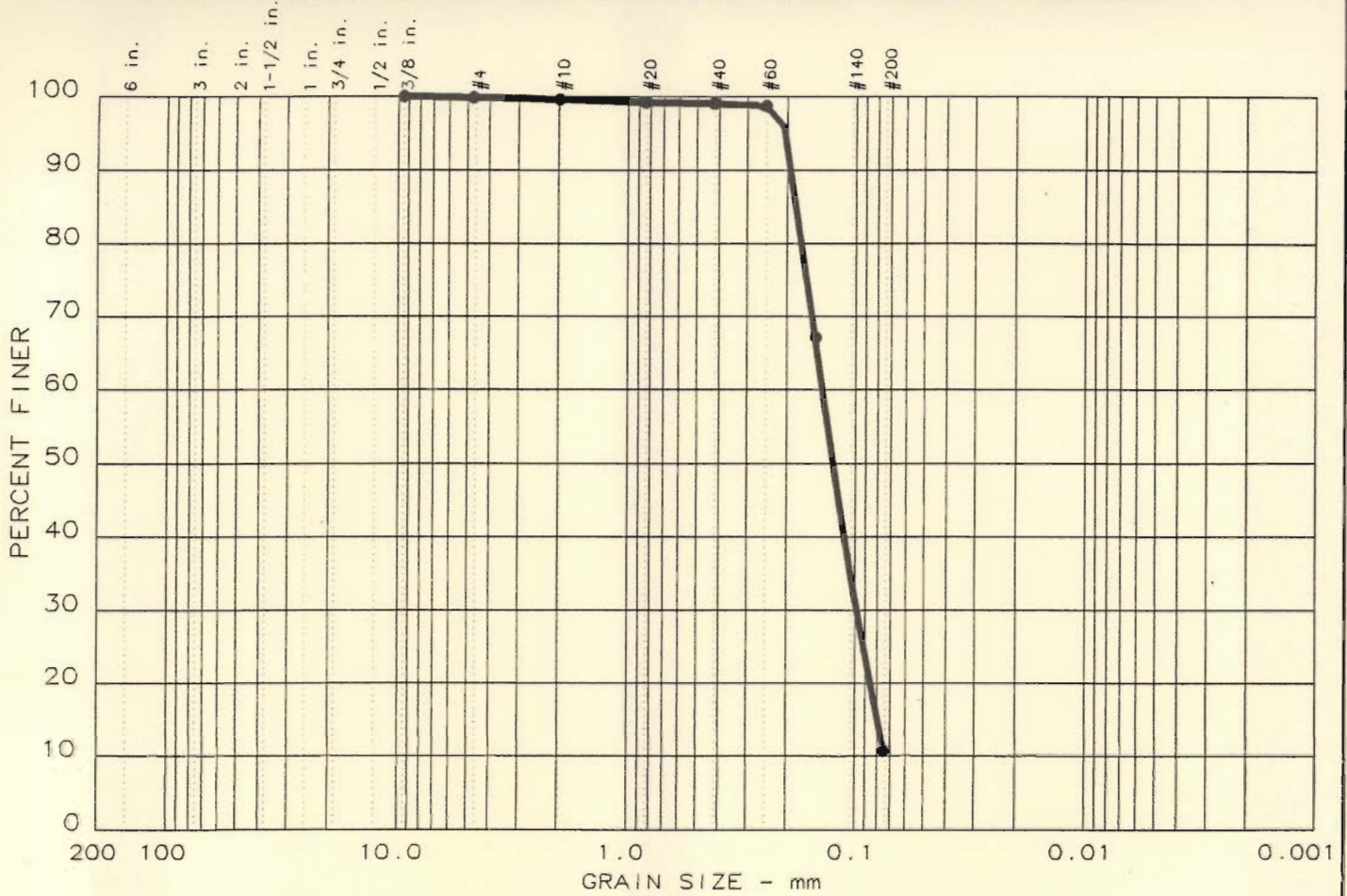
SIEVE number size	PERCENT FINER		
4	99.4		
10	98.1		
20	96.5		
40	95.7		
60	95.0		
100	69.5		
200	21.4		

Sample information:
 • Boring 29, Sample 1
 Loose gray CLAYEY SAND
 w/ sh frag

Remarks:
 Sample depth 1'-2'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.2	89.1	10.7		SP-SM		

SIEVE inches size	PERCENT FINER
0.375	100.0
GRAIN SIZE	
D ₆₀	0.14
D ₃₀	0.10
D ₁₀	
COEFFICIENTS	
C _c	
C _u	

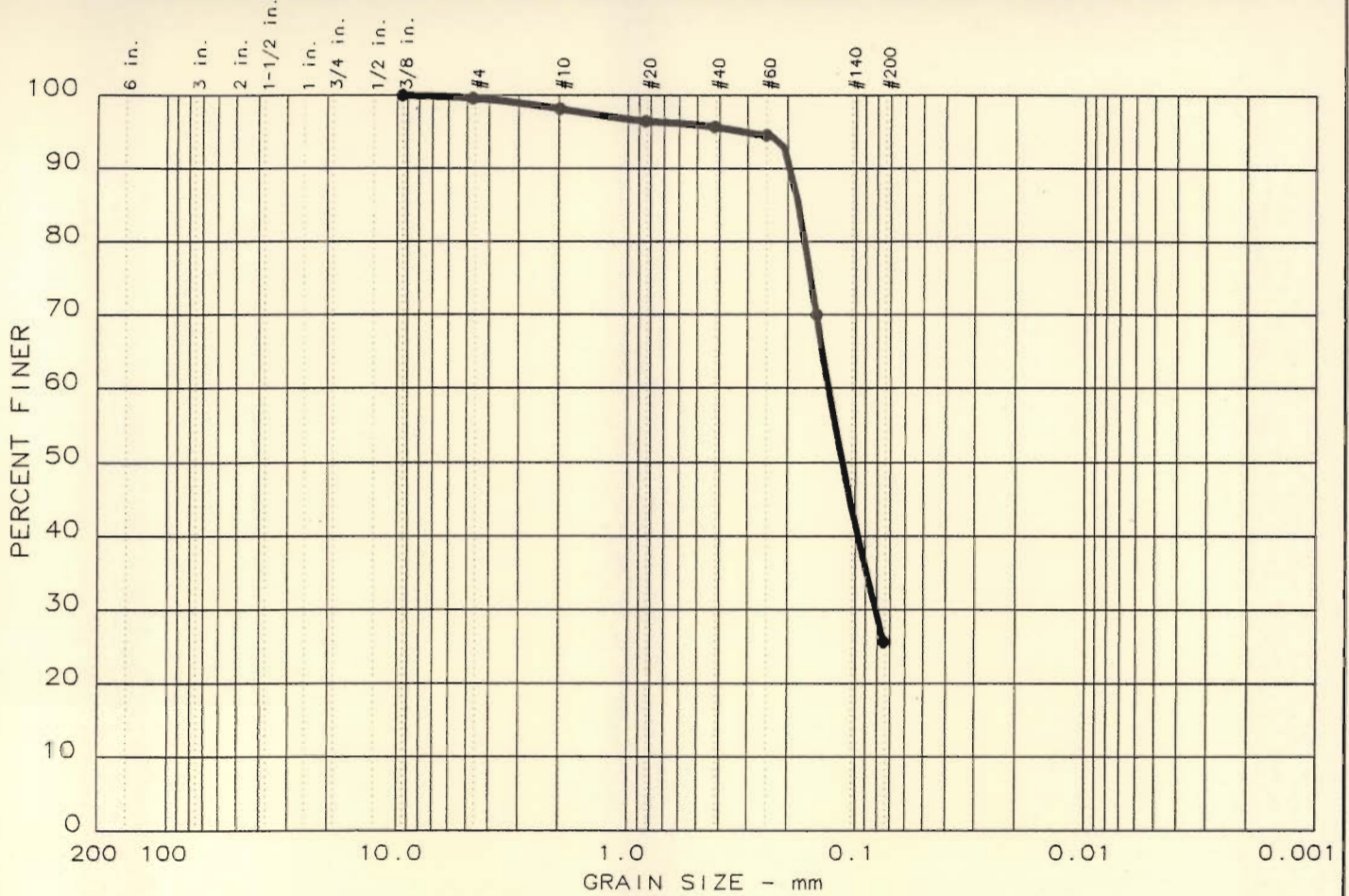
SIEVE number size	PERCENT FINER
4	99.8
10	99.6
20	99.2
40	99.0
60	98.8
100	67.2
200	10.8

Sample information:
 • Boring 29, Sample 2
 Loose gray & tan FINE SAND w/ si & sh frags

Remarks:
 Sample depth 3'-4'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.4	73.9	25.7		SC		

SIEVE inches size	PERCENT FINER	SIEVE number size	PERCENT FINER
0.375	100.0	4	99.6
		10	98.1
		20	96.5
		40	95.7
		60	94.6
		100	70.0
		200	25.7
GRAIN SIZE			
D ₆₀	0.13		
D ₃₀	0.08		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

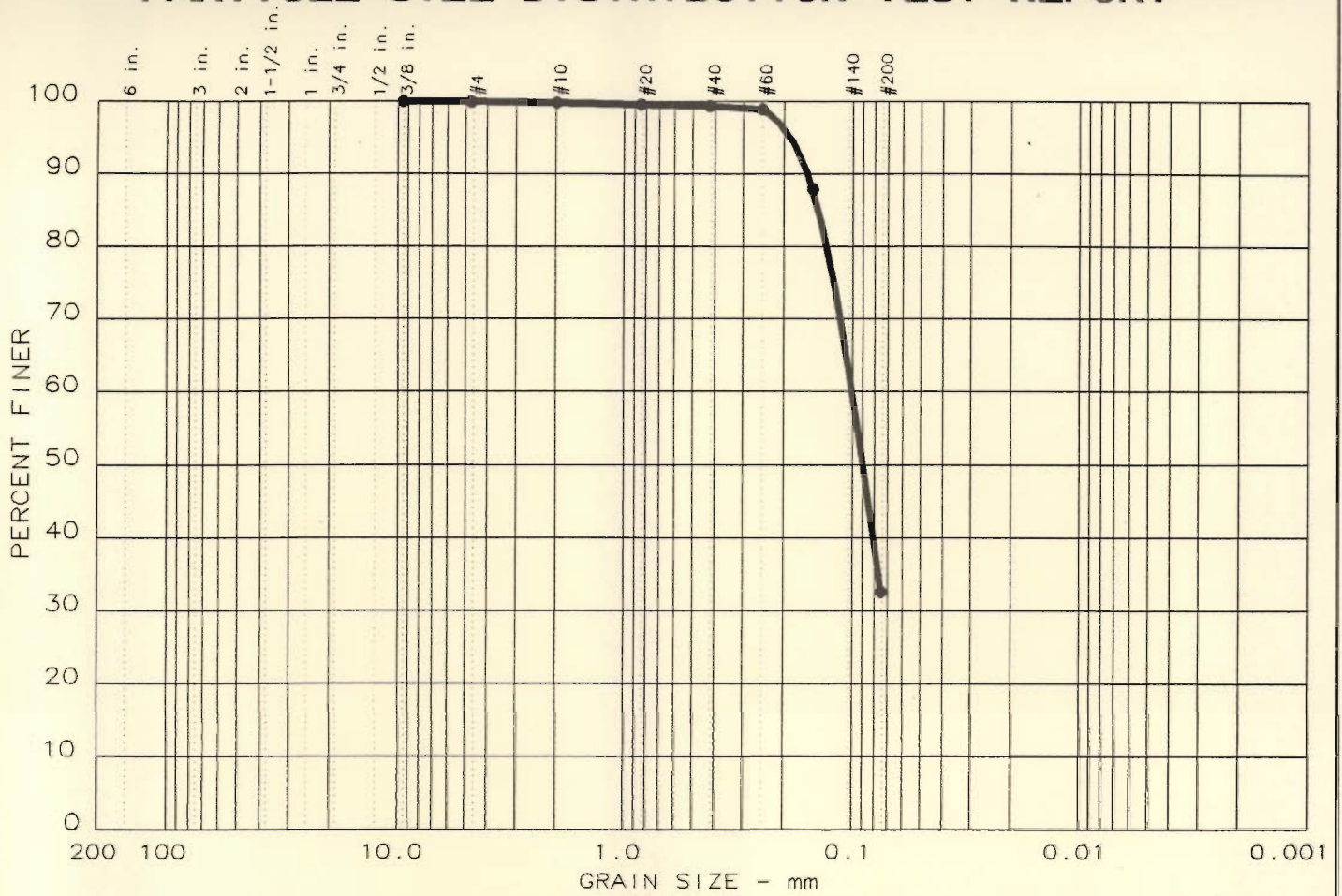
Sample information:
 • Boring 29, Sample 5
 Loose gr & t FINE SAND
 w/cl lay, poc & sh frag

Remarks:
 Sample depth 9'-10'

**Eustis
Engineering
Company, Inc.**

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	67.4	32.6		SC		

SIEVE inches size	PERCENT FINER		
	●		
0.375	100.0		
 GRAIN SIZE 			
D ₆₀	0.10		
D ₃₀			
D ₁₀			
 COEFFICIENTS 			
C _c			
C _u			

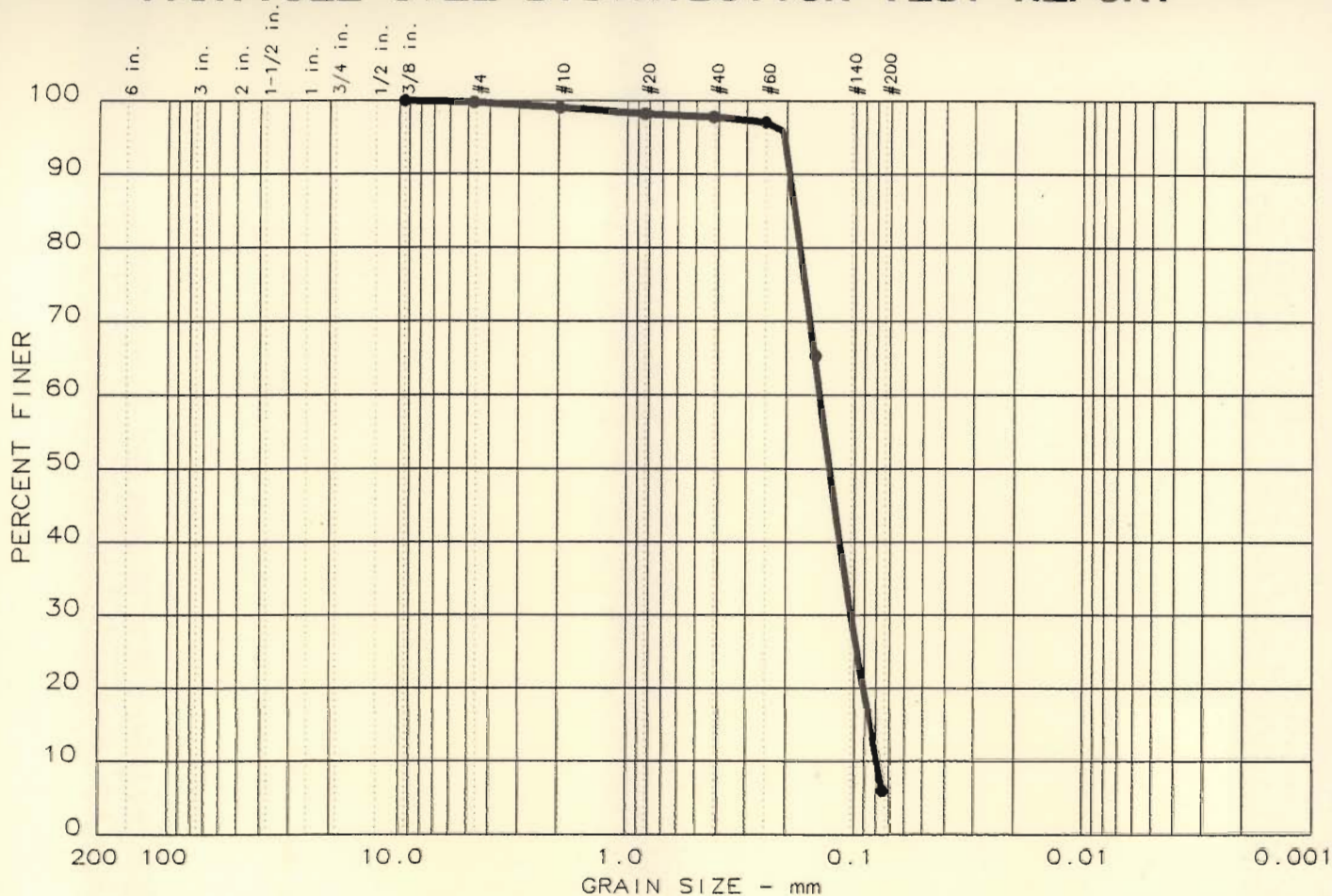
SIEVE number size	PERCENT FINER		
	●		
4	100.0		
10	99.8		
20	99.6		
40	99.3		
60	98.9		
100	87.9		
200	32.6		

Sample information:
 ● Boring 31, Sample 2
 Loose gray CLAYEY SAND

Remarks:
 Sample depth 3'-4'

Eustis Engineering Company, Inc.	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-26-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.2	93.8	6.0		SP-SM		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
GRAIN SIZE		
D ₆₀	0.14	
D ₃₀	0.10	
D ₁₀	0.07	
COEFFICIENTS		
C _c	0.95	
C _u	1.8	

SIEVE number size	PERCENT FINER	
	●	
4	99.8	
10	99.0	
20	98.2	
40	97.8	
60	97.1	
100	65.3	
200	6.0	

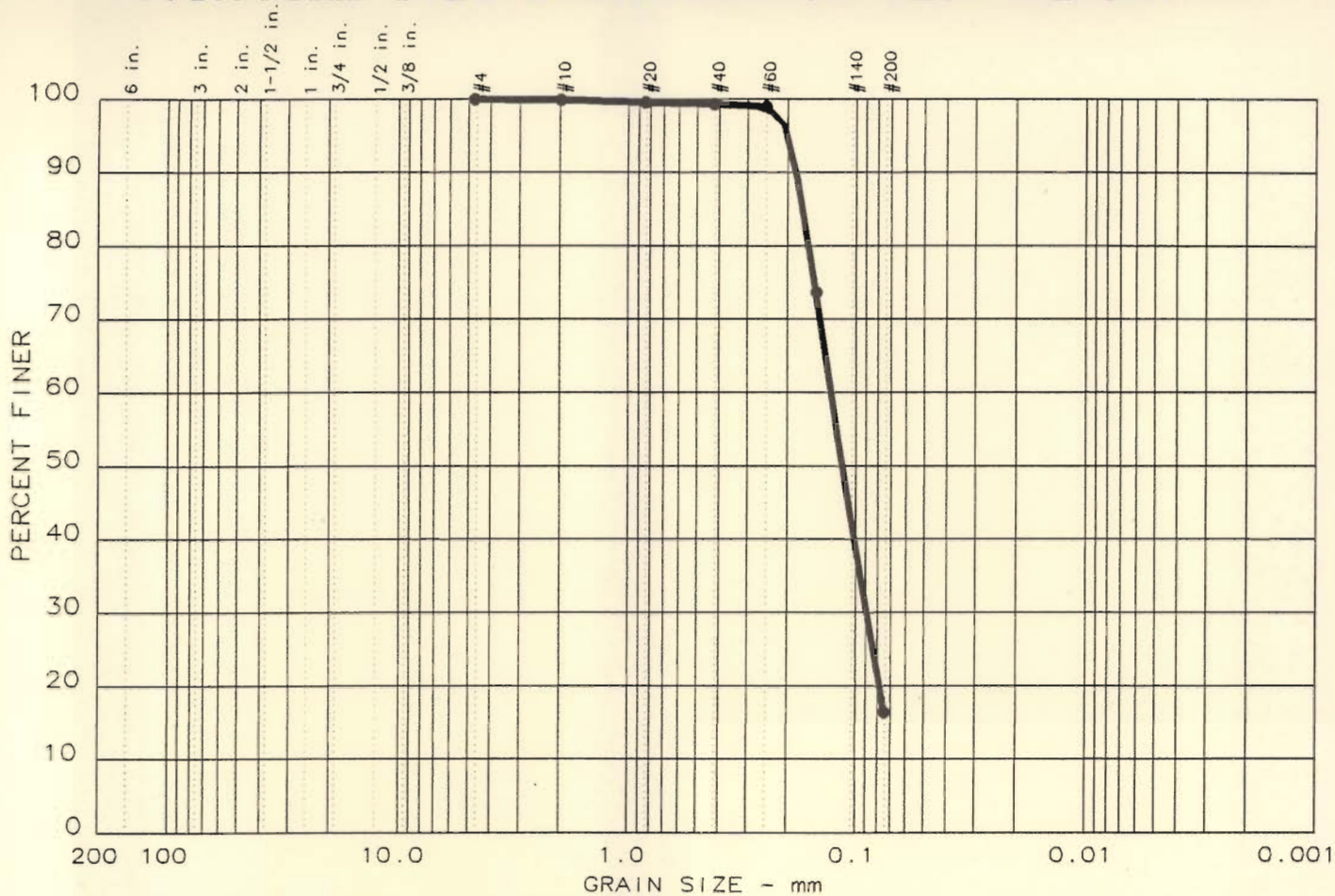
Sample information:
 ● Boring 31, Sample 6
 Loose grn - gray & gray
 FINE SAND w/si & sh frag

Remarks:
 Sample depth 11'-12'

**Eustis
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	83.5	16.5		SM		

SIEVE inches size	PERCENT FINER		
●			
GRAIN SIZE			
D ₆₀	0.13		
D ₃₀	0.09		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

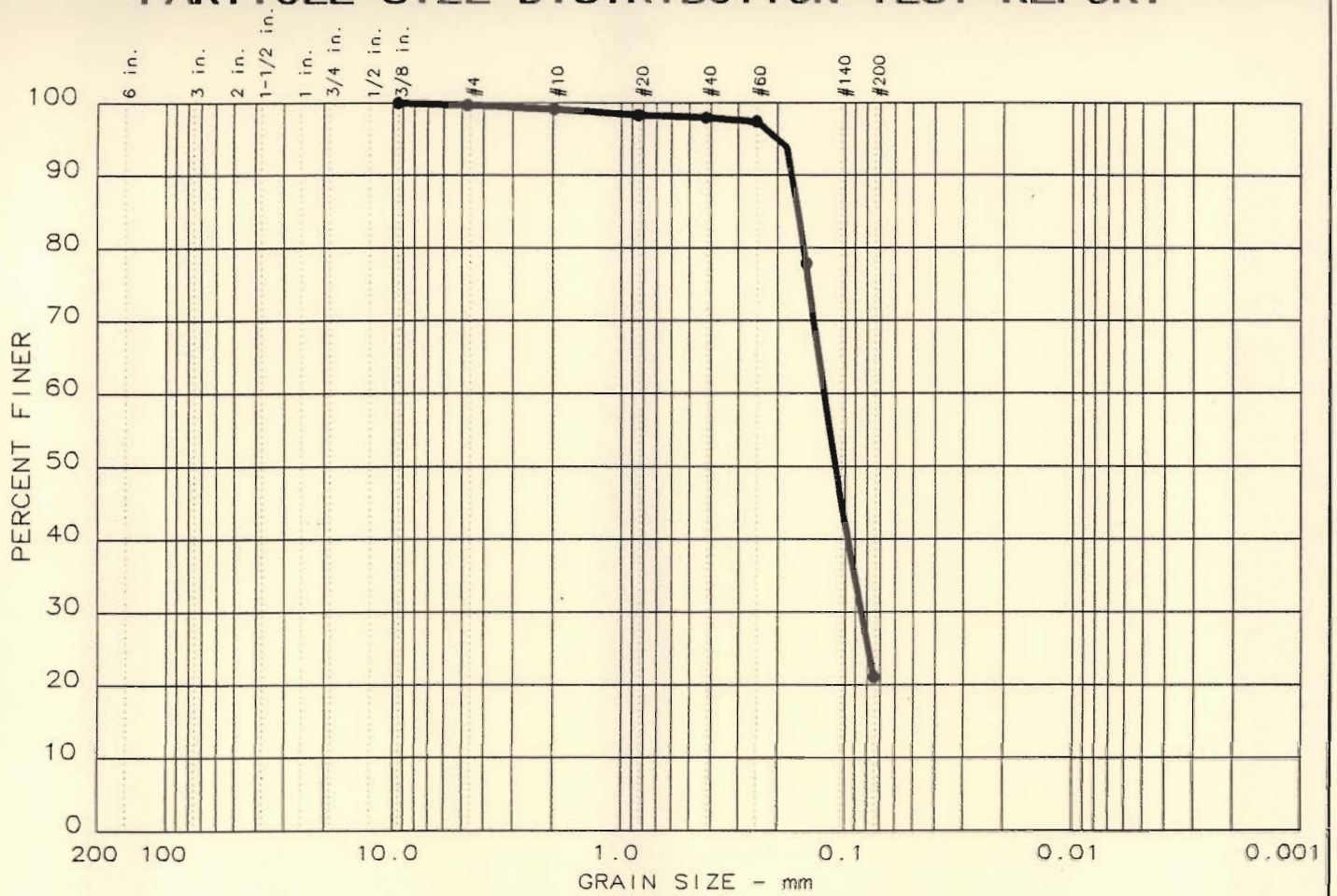
SIEVE number size	PERCENT FINER		
●			
4	100.0		
10	99.9		
20	99.5		
40	99.3		
60	98.9		
100	73.7		
200	16.5		

Sample information:
 ● Boring 33, Sample 3
 Loose gray SILTY SAND
 w/ shell fragments

Remarks:
 Sample depth 5'-6'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.3	78.6	21.1		SC		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
GRAIN SIZE		
D ₆₀	0.12	
D ₃₀	0.09	
D ₁₀		
COEFFICIENTS		
C _c		
C _u		

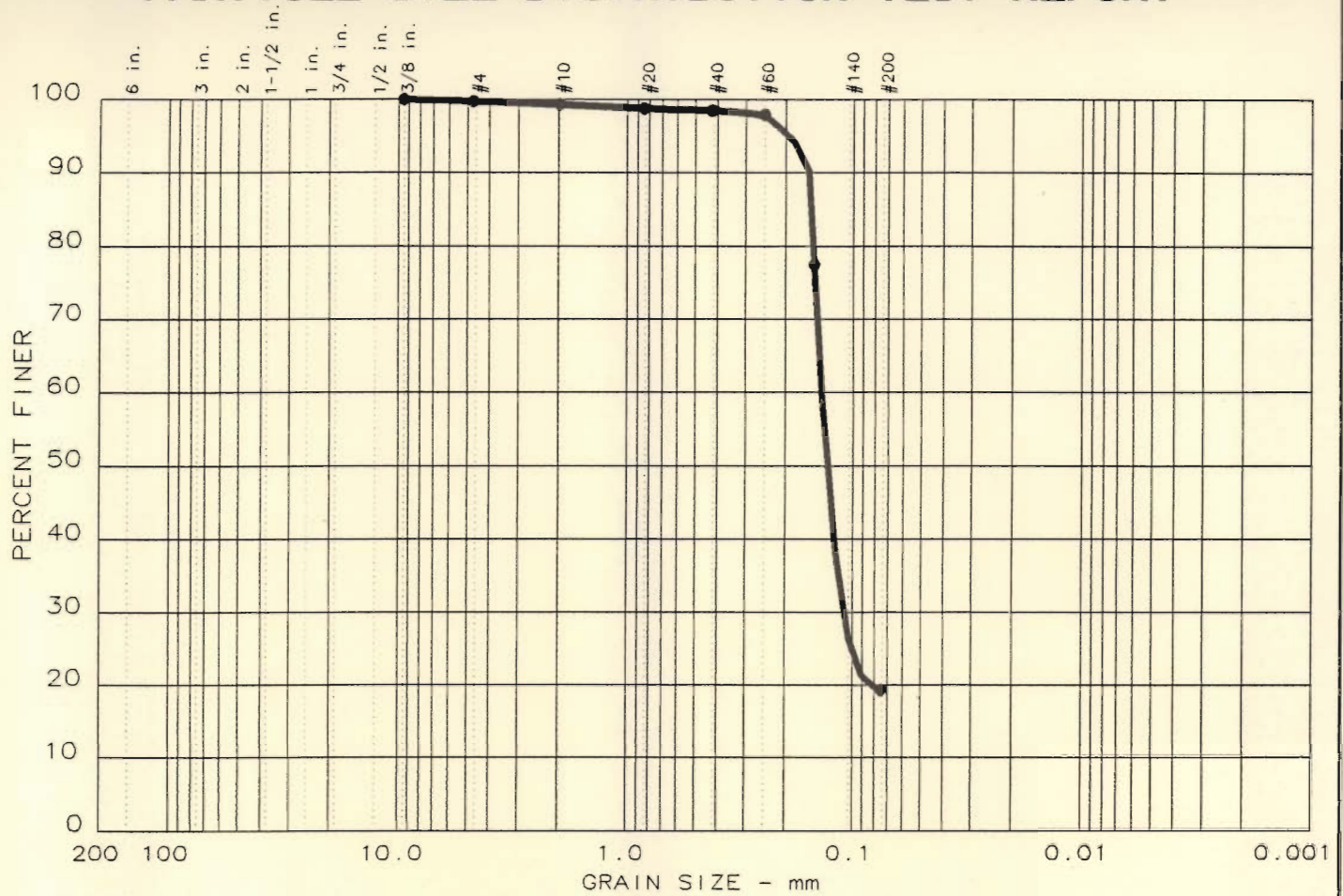
SIEVE number size	PERCENT FINER	
	●	
4	99.7	
10	99.1	
20	98.3	
40	97.9	
60	97.4	
100	77.8	
200	21.1	

Sample information:
 ● Boring 33, Sample 6
 Loose gray CLAYEY SAND
 w/ fisa lay & sh frag

Remarks:
 Sample depth 11'-12'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.3	80.4	19.3		SC		

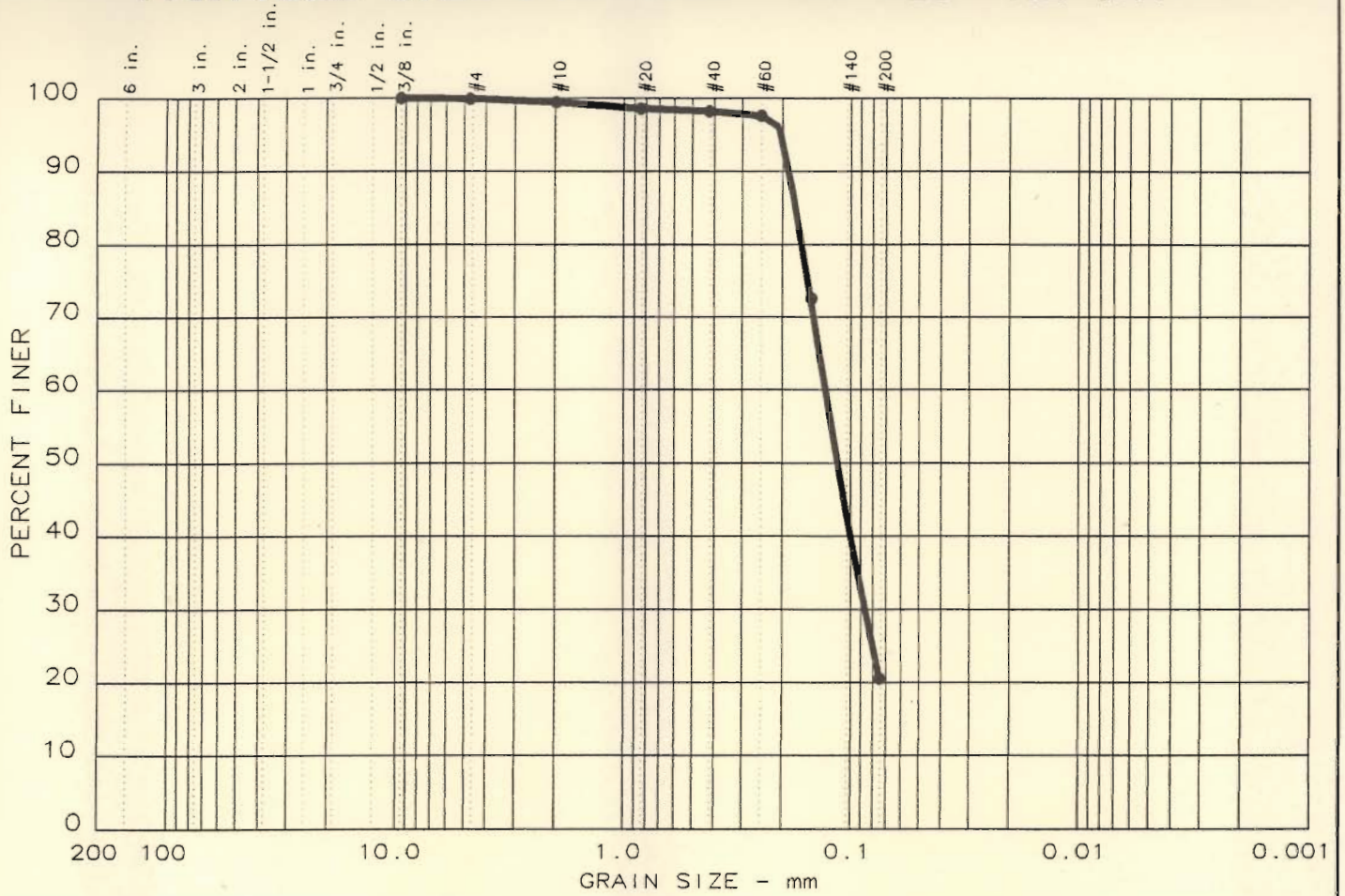
SIEVE inches size	PERCENT FINER			SIEVE number size	PERCENT FINER		
0.375	●	100.0		4	●	99.7	
				10		99.3	
				20		98.7	
				40		98.5	
				60		97.9	
				100		77.5	
				200		19.3	
 GRAIN SIZE							
D ₆₀		0.14					
D ₃₀		0.11					
D ₁₀							
 COEFFICIENTS							
C _c							
C _u							

Sample information:
 ● Boring 34, Sample 3
 Loose gray CLAYEY SAND
 w/ sh frag

Remarks:
 Sample depth 5'-6'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98
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	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.1	79.3	20.6		SC		

SIEVE inches size	PERCENT FINER		
	●		
0.375	100.0		
GRAIN SIZE			
D ₆₀	0.13		
D ₃₀	0.09		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

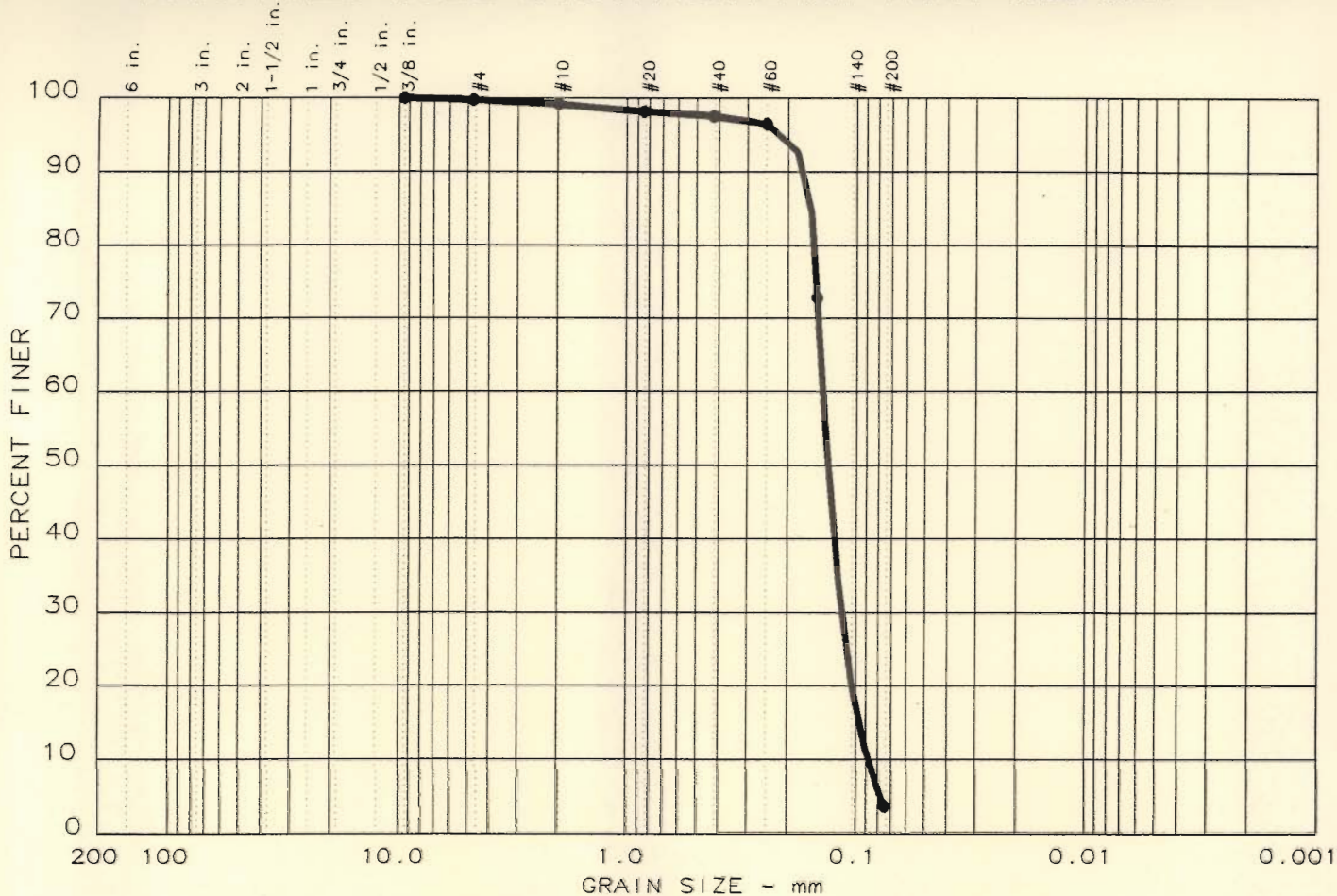
SIEVE number size	PERCENT FINER		
	●		
4	99.9		
10	99.4		
20	98.6		
40	98.2		
60	97.6		
100	72.6		
200	20.6		

Sample information:
 ● Boring 34, Sample 4
 Loose gray CLAYEY SAND
 w/ fisa lens & sh frags

Remarks:
 Sample depth 7'-8'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.2	96.0	3.8		SP		

SIEVE inches size	PERCENT FINER	
0.375	100.0	
 GRAIN SIZE		
D ₆₀	0.14	
D ₃₀	0.12	
D ₁₀	0.08	
 COEFFICIENTS		
C _c	1.08	
C _u	1.6	

SIEVE number size	PERCENT FINER	
4	99.8	
10	99.2	
20	98.2	
40	97.6	
60	96.5	
100	72.9	
200	3.7	

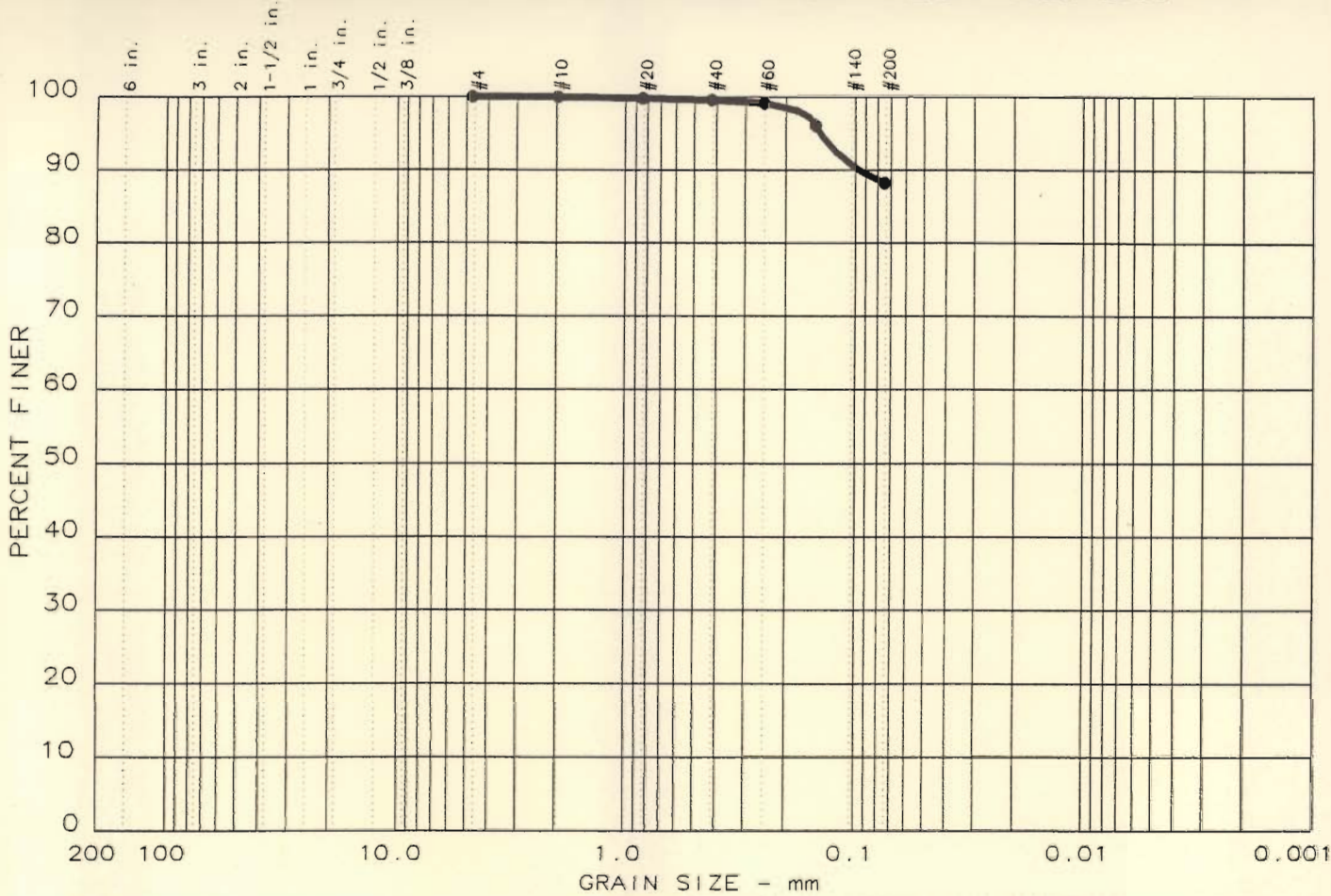
Sample information:
 • Boring 34, Sample 6
 Loose grn - gray FINE SAND w/ sh frag

Remarks:
 Sample depth 11'-12'

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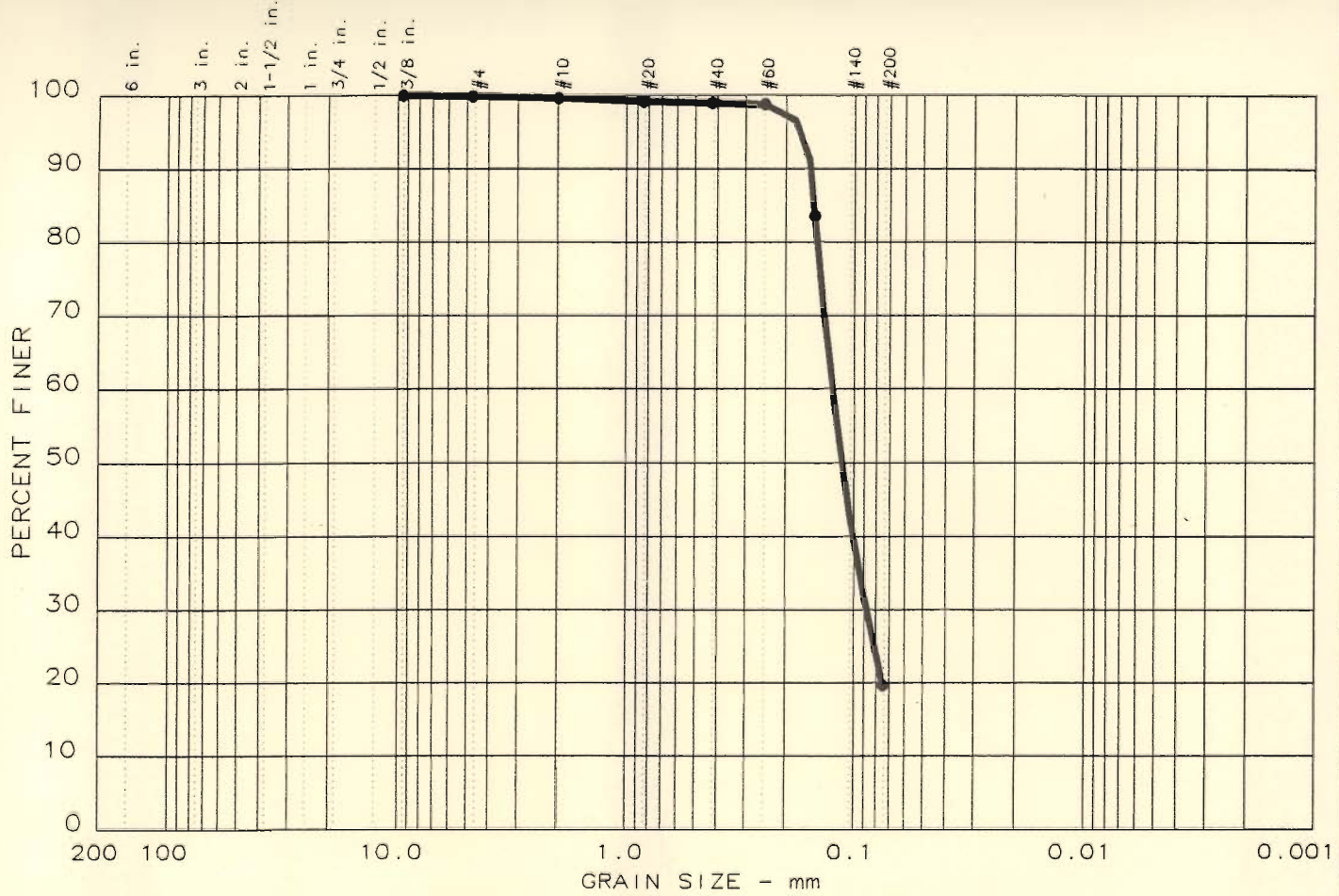
% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	11.8	88.2		CH		

SIEVE inches size	PERCENT FINER			SIEVE number size	PERCENT FINER			Sample information: ● Boring 202, Sample 2 Soft gray CLAY w/ cilsa lens
	●				●			
				4	100.0			
				10	99.9			
				20	99.8			
				40	99.5			
				60	99.1			
				100	96.0			
				200	88.2			
GRAIN SIZE								
D ₆₀								
D ₃₀								
D ₁₀								
COEFFICIENTS								
C _c								
C _u								

Remarks:
Sample depth 3'-4'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98
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PARTICLE SIZE DISTRIBUTION TEST REPORT



● % +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	80.2	19.7		SC		

SIEVE inches size	PERCENT FINER		
0.375	●		
0.375	100.0		
X GRAIN SIZE			
D ₆₀	0.13		
D ₃₀	0.09		
D ₁₀			
X COEFFICIENTS			
C _c			
C _u			

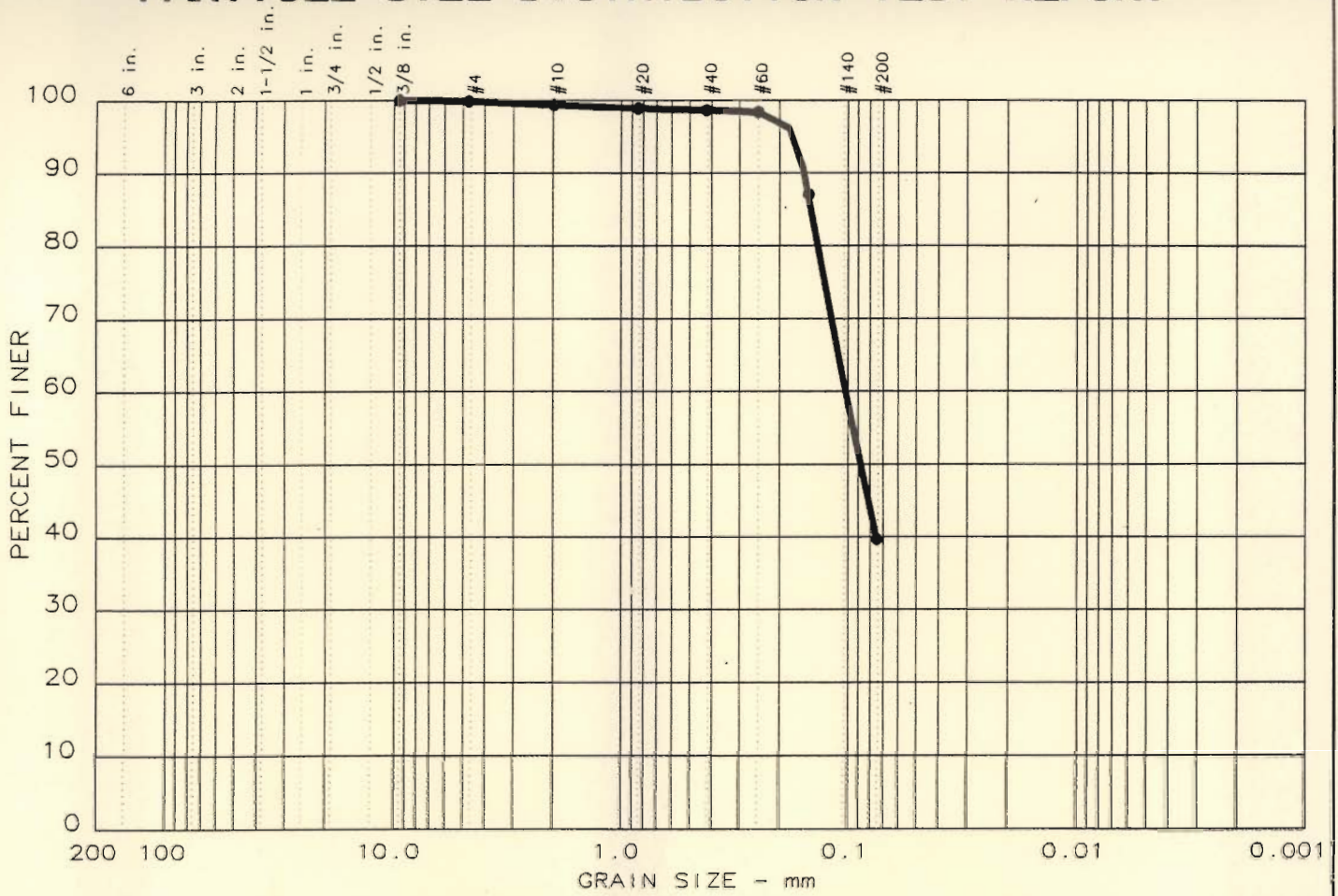
SIEVE number size	PERCENT FINER		
●			
4	99.9		
10	99.6		
20	99.2		
40	99.0		
60	98.7		
100	83.6		
200	19.7		

Sample information:
 ● Boring 202, Sample 5
 Loose gray FINE SAND
 w/cl lay, poc & sh frag

Remarks:
 Sample depth 9'-10'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	60.2	39.7		SC		

SIEVE inches size	PERCENT FINER		
0.375	100.0		
X	GRAIN SIZE		
D ₆₀ D ₃₀ D ₁₀	0.10		
X	COEFFICIENTS		
C _c C _u			

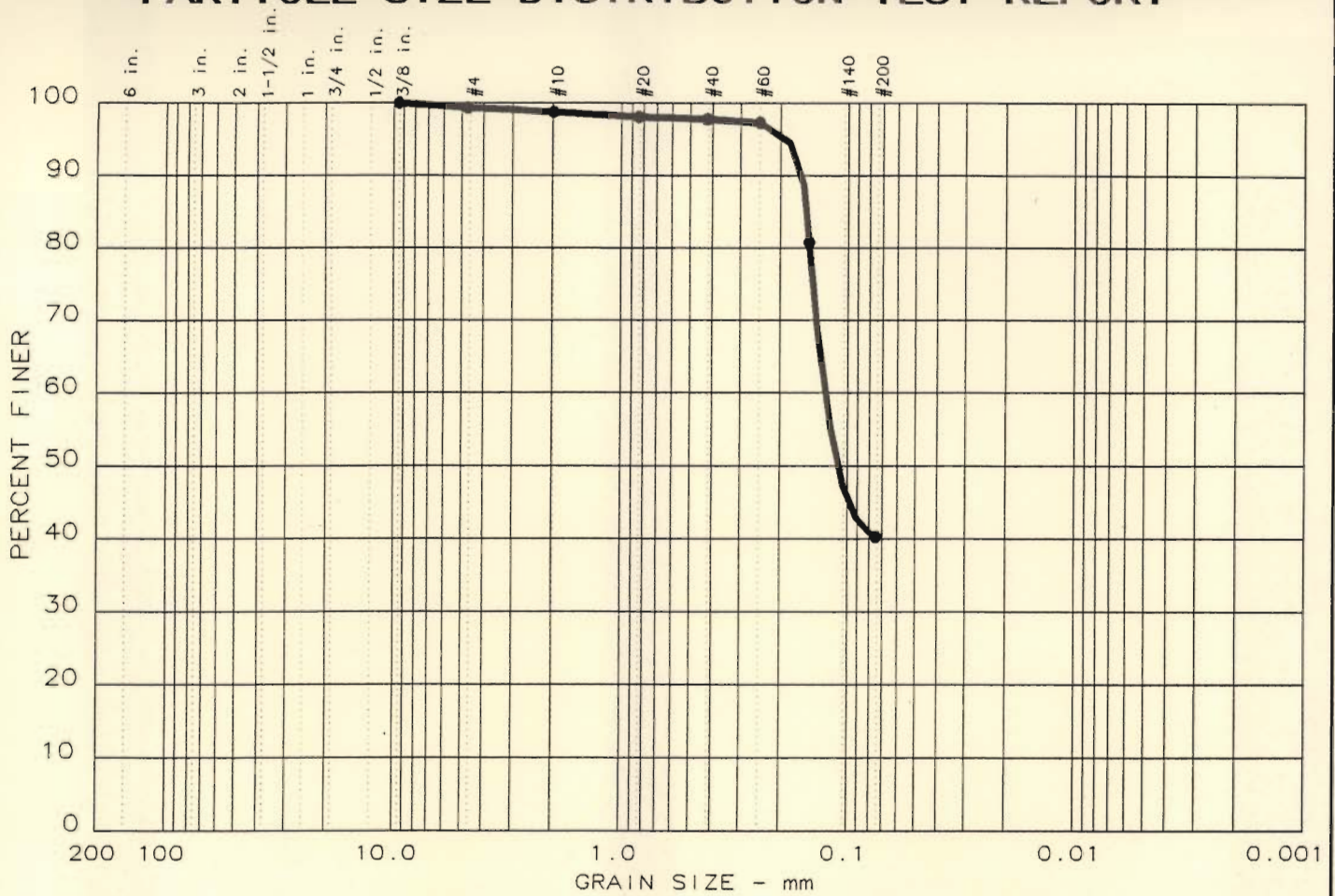
SIEVE number size	PERCENT FINER		
4	99.9		
10	99.4		
20	98.9		
40	98.7		
60	98.4		
100	87.0		
200	39.7		

Sample information:
 • Boring 202, Sample 7
 Loose gray CLAYEY SAND
 w/ tr sh frag

Remarks:
 Sample depth 15'-16"

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.7	59.0	40.3		SC		

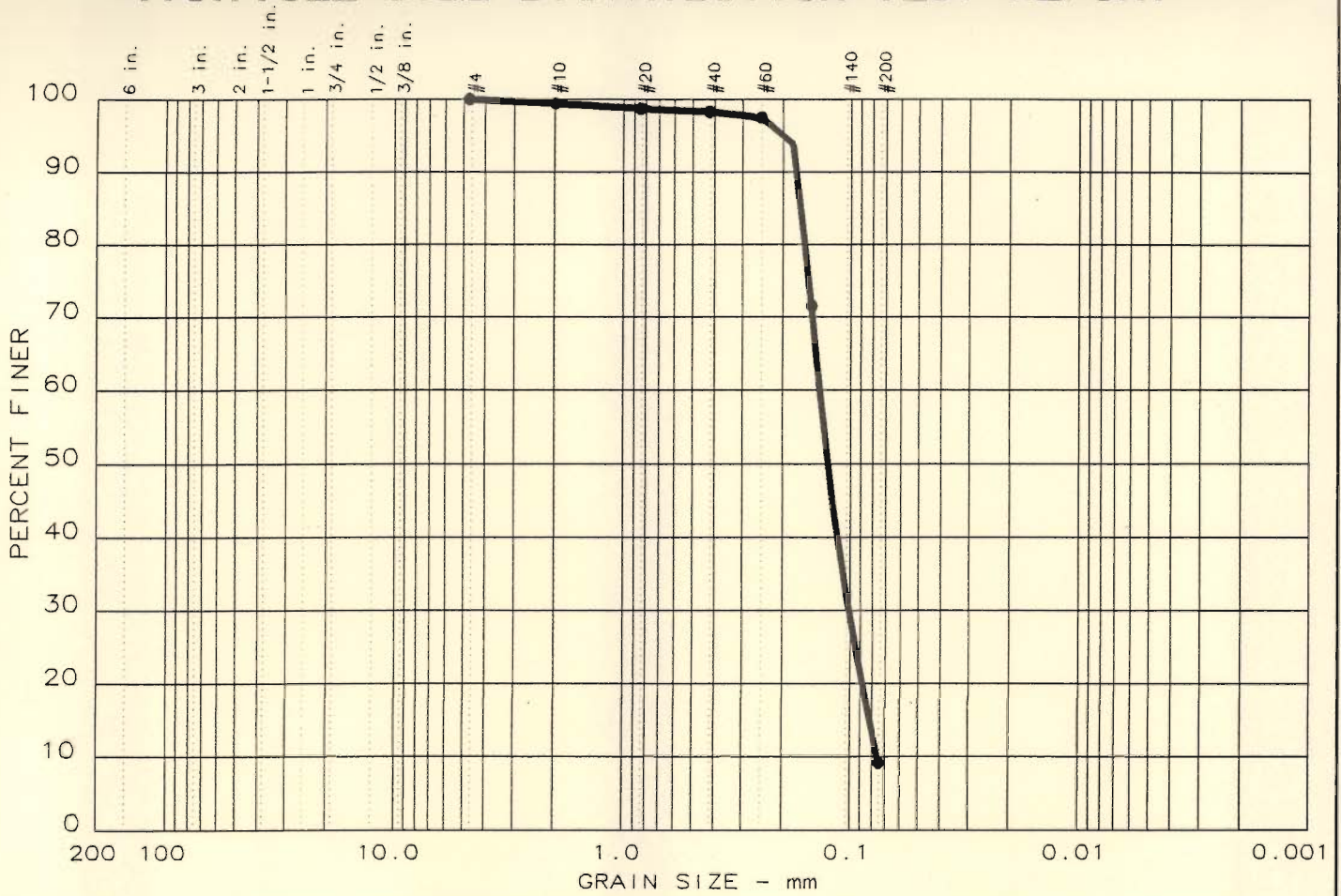
SIEVE inches size	PERCENT FINER		SIEVE number size	PERCENT FINER	
0.375	●	100.0	4	●	99.3
			10		98.7
			20		98.0
			40		97.7
			60		97.3
			100		80.8
			200		40.3
X GRAIN SIZE					
D ₆₀		0.13			
D ₃₀					
D ₁₀					
X COEFFICIENTS					
C _c					
C _u					

Sample information:
 ● Boring F-1M, Sample 2
 Loose gray CLAYEY SAND
 w/ cl lens

Remarks:
 Sample depth 3'-4'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	<p>Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98</p> <p style="text-align: right;">Data Sheet No. _____</p>
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	90.8	9.2		SP-SM		

SIEVE inches size	PERCENT FINER	
●		
 		
GRAIN SIZE		
D ₆₀	0.14	
D ₃₀	0.10	
D ₁₀	0.07	
 		
COEFFICIENTS		
C _c	0.99	
C _u	1.8	

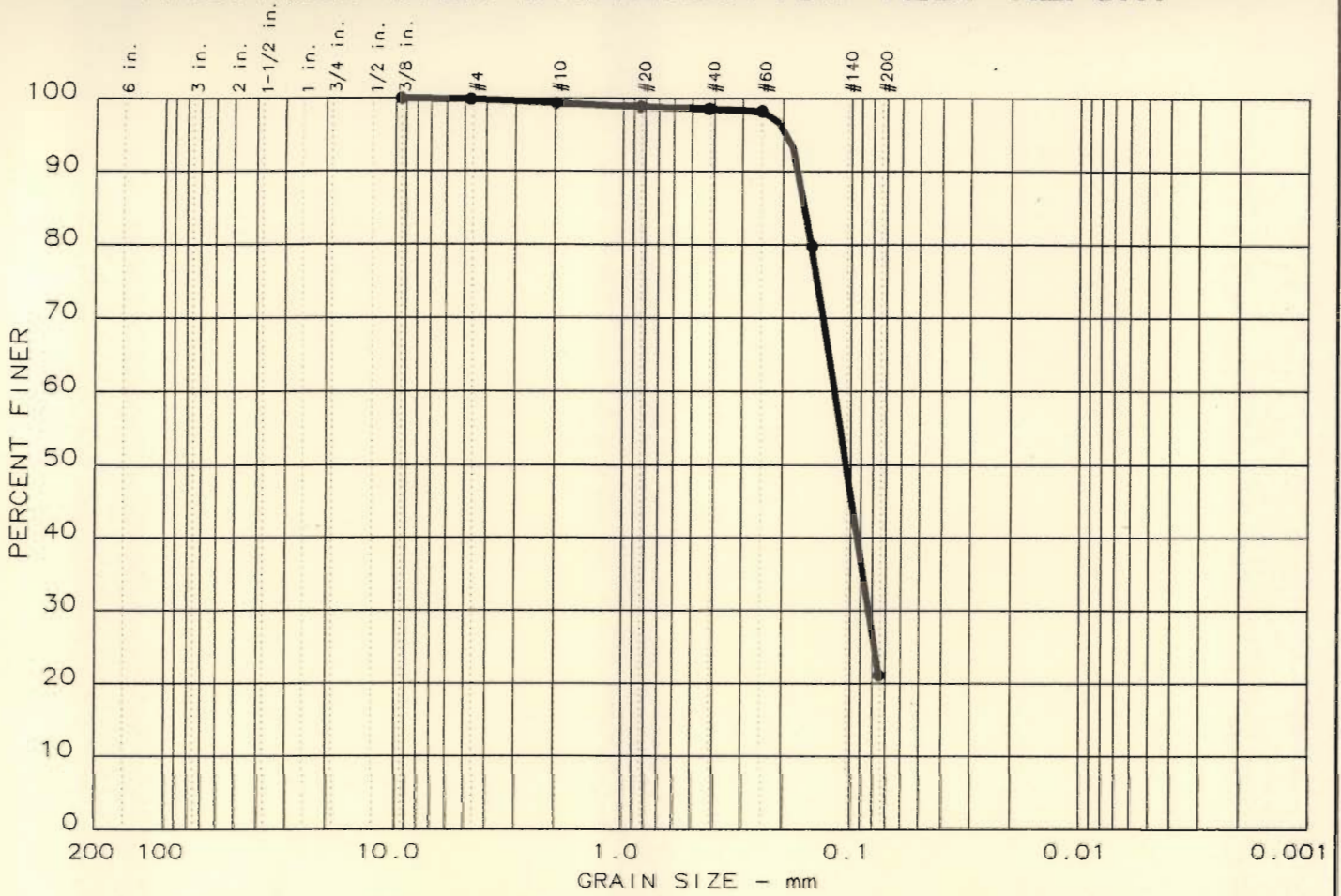
SIEVE number size	PERCENT FINER	
●		
4	100.0	
10	99.4	
20	98.7	
40	98.3	
60	97.5	
100	71.5	
200	9.2	

Sample information:
 ● Boring F-1M, Sample 5
 Loose gray FINE SAND
 w/ si & few sh frags

Remarks:
 Sample depth 9'-10'

Eustis Engineering Company, Inc.	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98
	Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	78.7	21.2		SC		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
GRAIN SIZE		
D ₆₀	0.12	
D ₃₀	0.08	
D ₁₀		
COEFFICIENTS		
C _c		
C _u		

SIEVE number size	PERCENT FINER	
	●	
4	99.9	
10	99.3	
20	98.8	
40	98.6	
60	98.2	
100	79.9	
200	21.2	

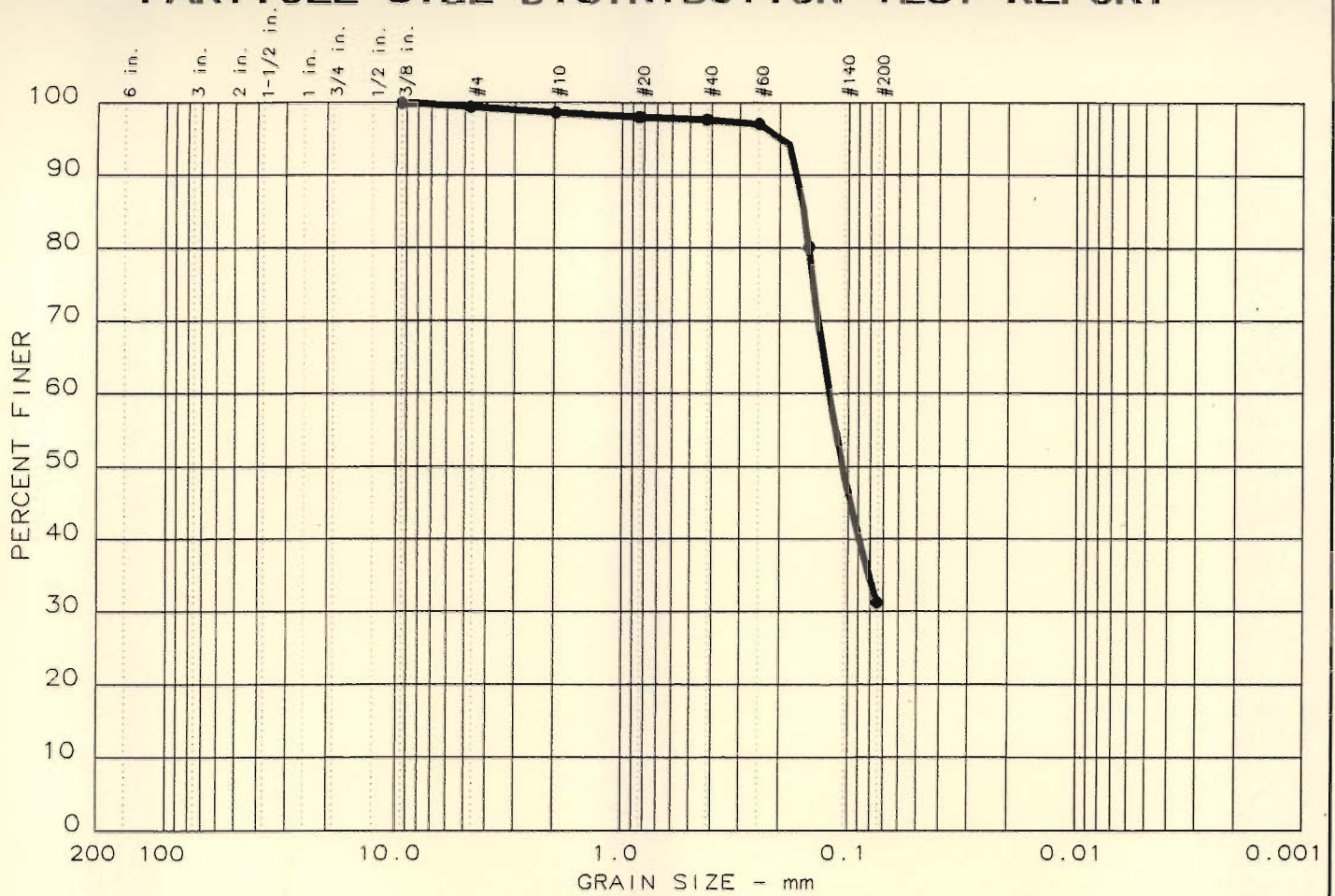
Sample information:
 ● Boring F-1N, Sample 2
 Loose gray CLAYEY SAND
 w/fisa lay & few sh frag

Remarks:
 Sample depth 3'-4'

**Eustis
Engineering
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PARTICLE SIZE DISTRIBUTION TEST REPORT



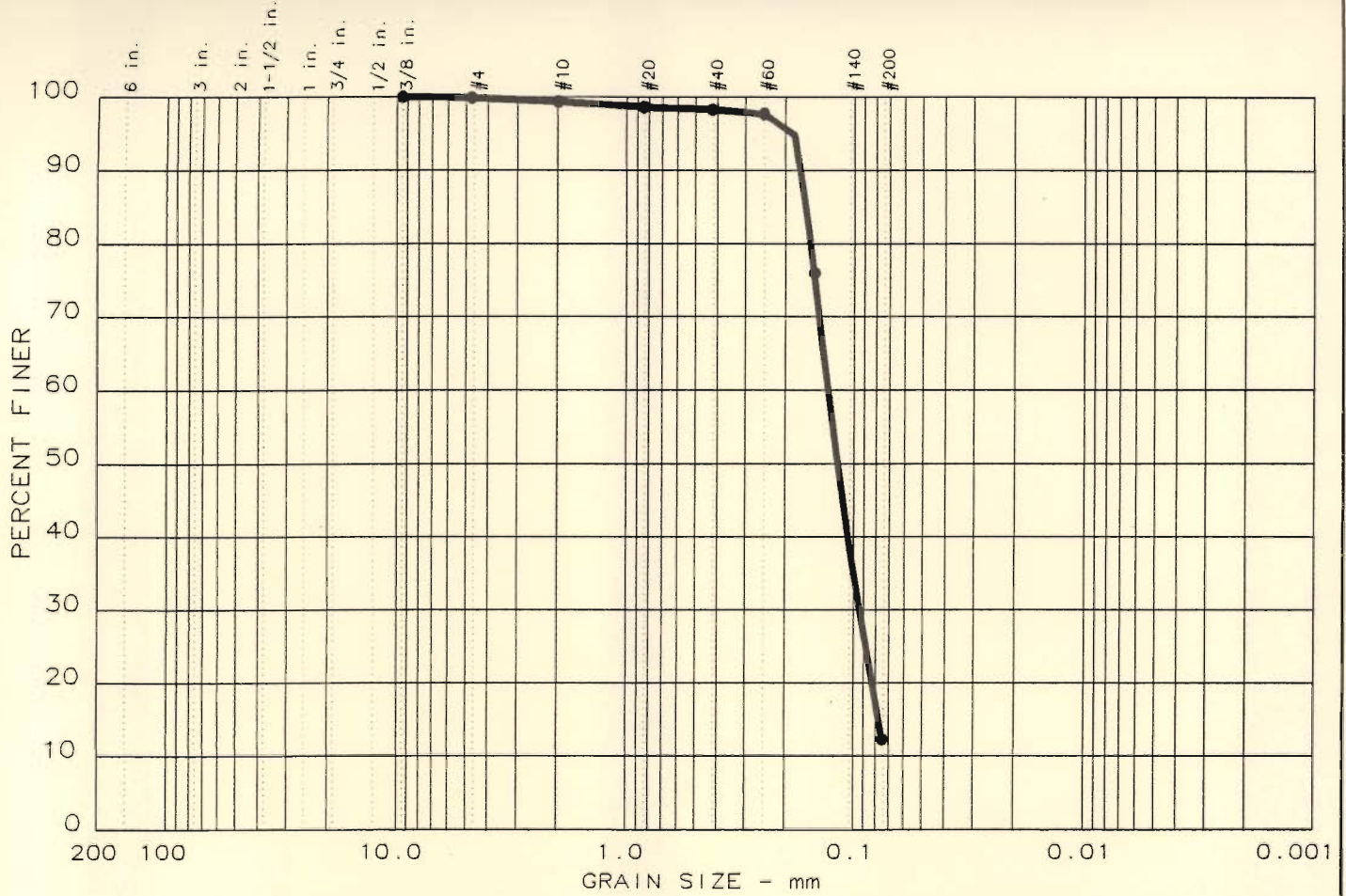
	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.6	68.2	31.2		SC		

SIEVE inches size	PERCENT FINER			SIEVE number size	PERCENT FINER		
0.375	●	100.0		4	●	99.4	
X	GRAIN SIZE			10	●	98.6	
D ₆₀	●	0.12		20	●	98.0	
D ₃₀				40	●	97.6	
D ₁₀				60	●	97.1	
X	COEFFICIENTS			100	●	80.2	
C _c				200	●	31.2	
C _u							

Sample information:
 ● Boring F-1N, Sample 4
 Loose gray CLAYEY SAND
 w/fisa lay & few sh frag

Remarks:
 Sample depth 7'-8'

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	87.5	12.4		SC		

SIEVE inches size	PERCENT FINER		
0.375	100.0		
 	GRAIN SIZE		
D ₆₀	0.13		
D ₃₀	0.09		
D ₁₀			
 	COEFFICIENTS		
C _c			
C _u			

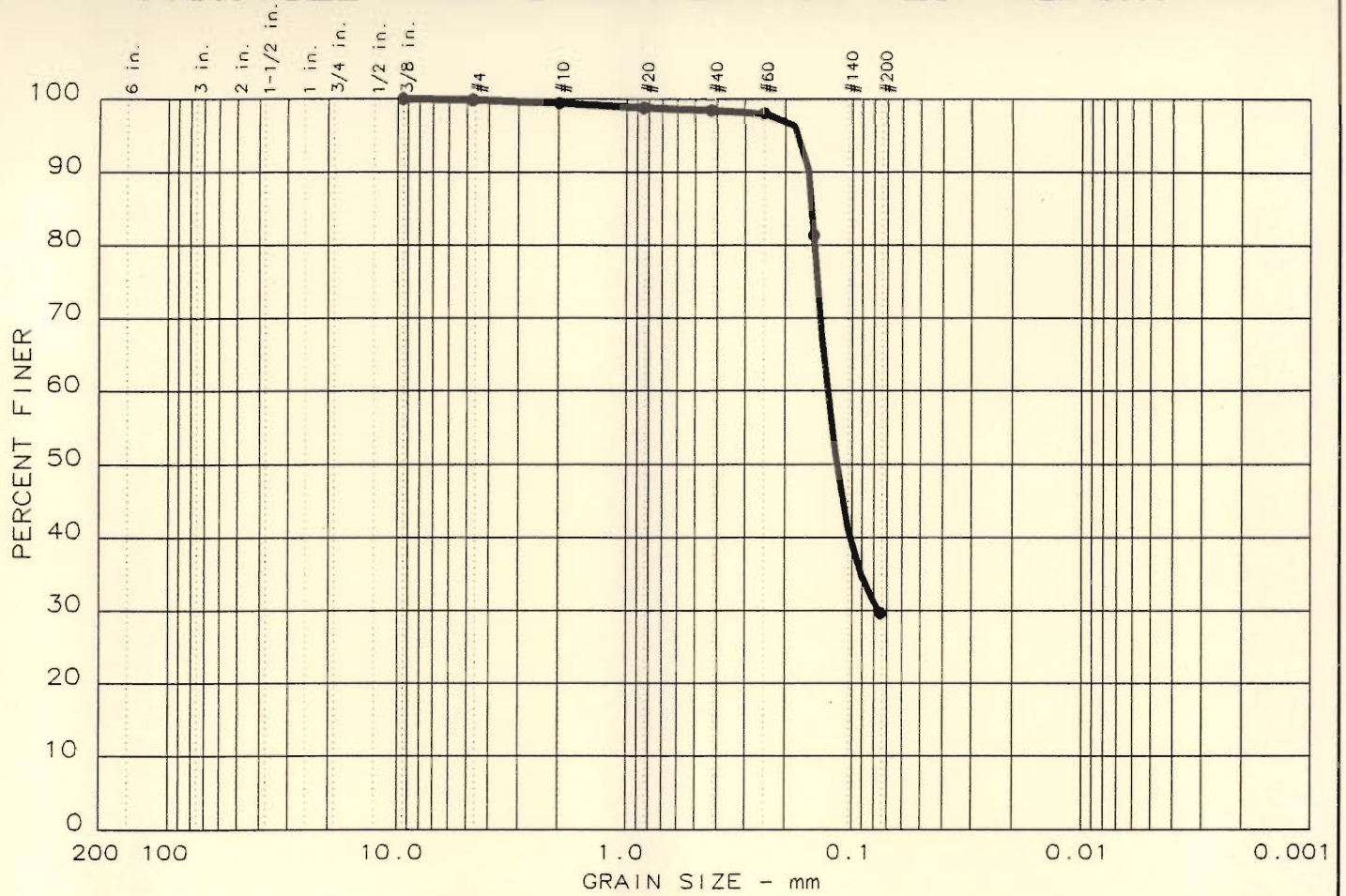
SIEVE number size	PERCENT FINER		
4	99.9		
10	99.4		
20	98.6		
40	98.3		
60	97.7		
100	76.0		
200	12.3		

Sample information:
 ● Boring F-1N, Sample 6
 Loose gray FINE SAND
 w/cl pocs & few sh frag

Remarks:
 Sample depth 11'-12'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	70.2	29.7		SC		

SIEVE inches size	PERCENT FINER		
0.375	100.0		
GRAIN SIZE			
D ₆₀	0.13		
D ₃₀	0.08		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

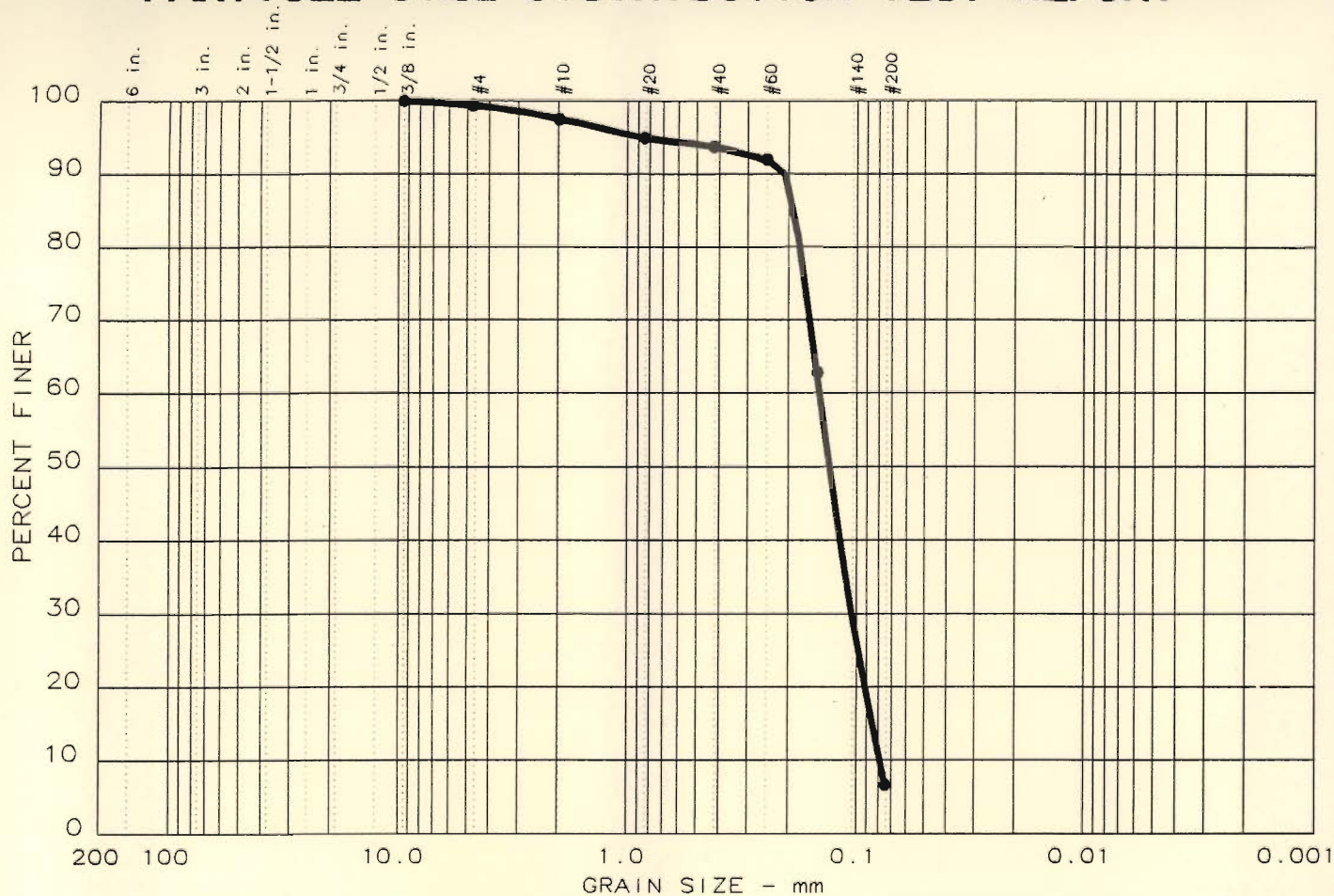
SIEVE number size	PERCENT FINER		
4	99.9		
10	99.4		
20	98.8		
40	98.5		
60	98.0		
100	81.4		
200	29.7		

Sample information:
 ● Boring F-1S, Sample 2
 Loose gray CLAYEY SAND
 w/sacl len & few sh frag

Remarks:
 Sample depth 3'-4'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.6	92.7	6.7		SP-SM		

SIEVE inches size	PERCENT FINER	
0.375	100.0	
 GRAIN SIZE 		
D ₆₀	0.15	
D ₃₀	0.11	
D ₁₀	0.07	
 COEFFICIENTS 		
C _c	0.96	
C _u	1.9	

SIEVE number size	PERCENT FINER	
4	99.4	
10	97.5	
20	95.0	
40	93.7	
60	92.0	
100	62.8	
200	6.6	

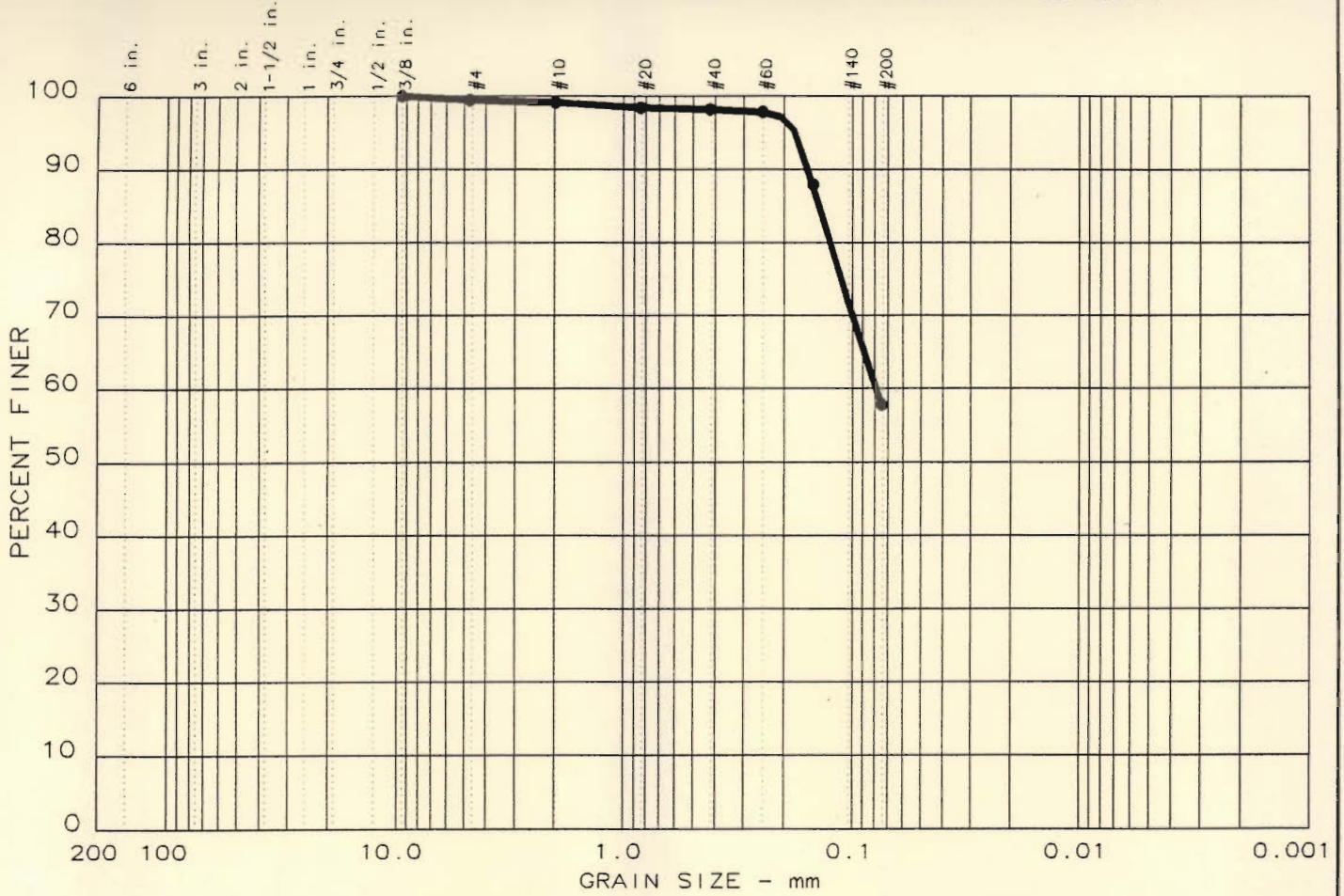
Sample information:
 ● Boring F-1S, Sample 4
 Loose gray FINE SAND
 w/ si & shell fragments

Remarks:
 Sample depth 7'-8'

**Eustis
Engineering
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.6	41.6	57.8		CL		

SIEVE inches size	PERCENT FINER		
0.375	100.0		
 	GRAIN SIZE		
D ₆₀ D ₃₀ D ₁₀	0.08		
 	COEFFICIENTS		
C _c C _u			

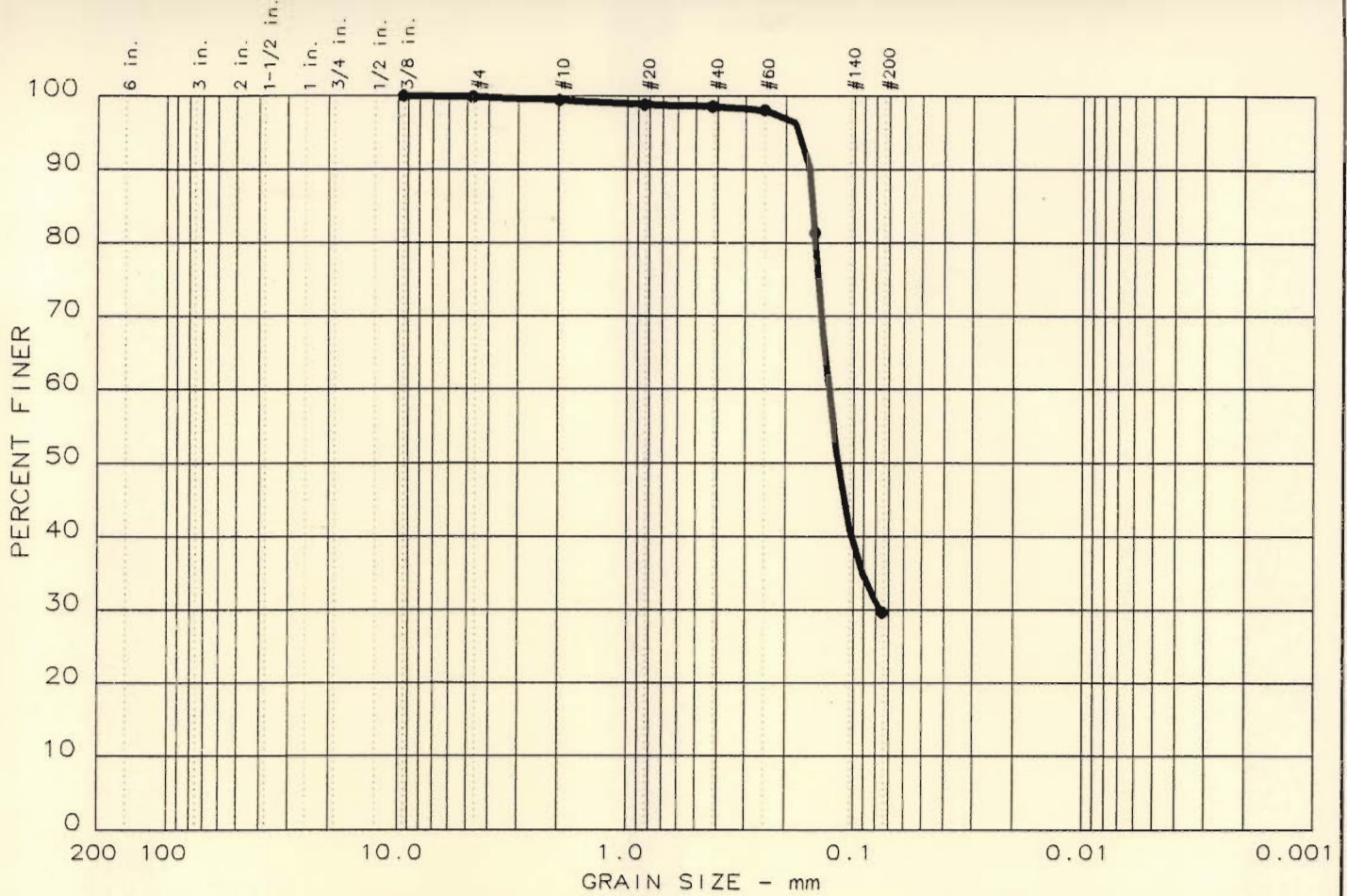
SIEVE number size	PERCENT FINER		
4	99.4		
10	99.1		
20	98.4		
40	98.2		
60	97.8		
100	87.9		
200	57.8		

Sample information:
 • Boring F-1S, Sample 6
 Very Soft gray SANDY CLAY

Remarks:
 Sample depth 11'-12'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98 Data Sheet No. _____
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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.1	70.2	29.7		SC		

SIEVE inches size	PERCENT FINER	
0.375	●	100.0
X GRAIN SIZE		
D ₆₀	●	0.13
D ₃₀	●	0.08
D ₁₀	●	
X COEFFICIENTS		
C _c		
C _u		

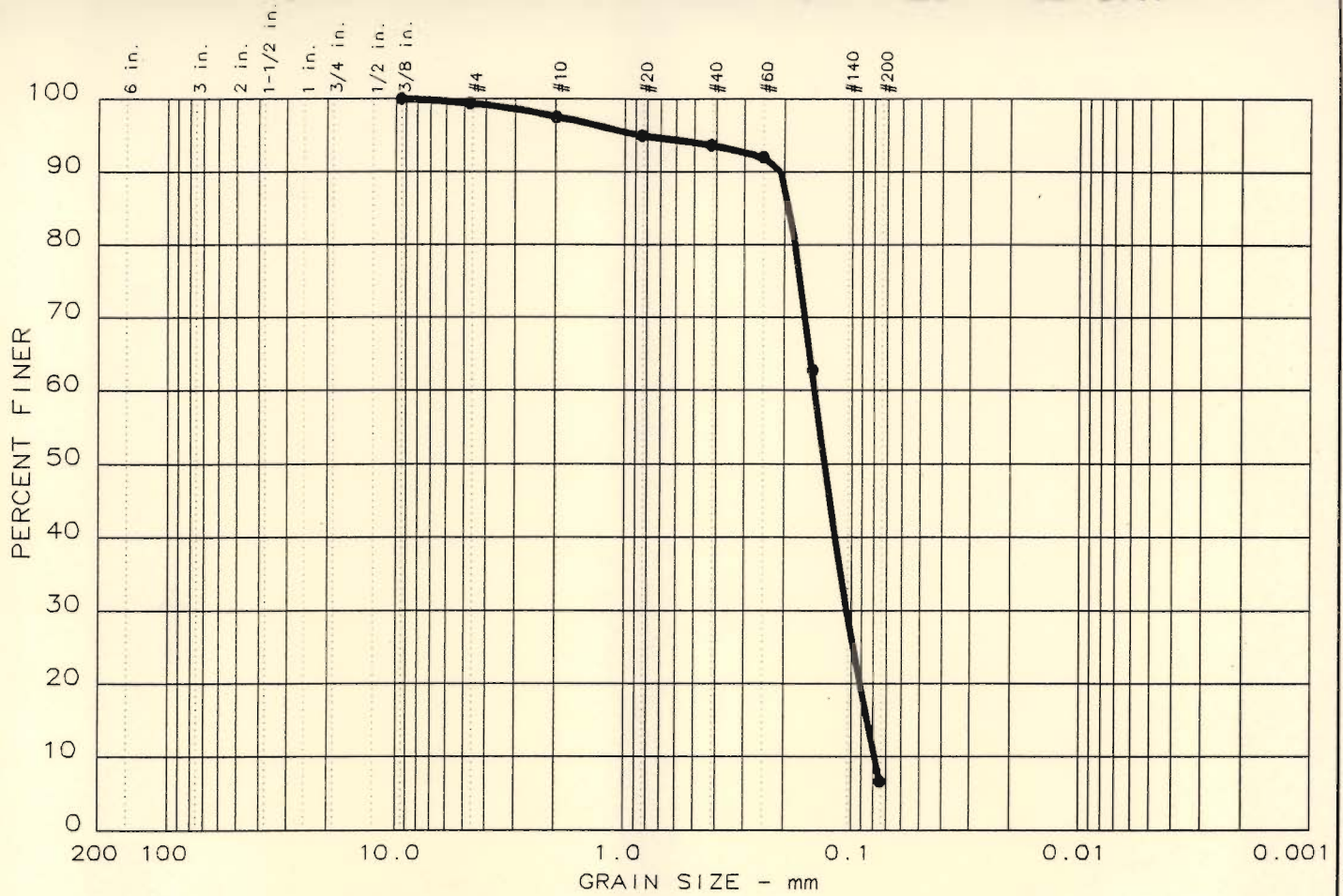
SIEVE number size	PERCENT FINER	
4	●	99.9
10	●	99.4
20	●	98.8
40	●	98.5
60	●	98.0
100	●	81.4
200	●	29.7

Sample information:
 ● Boring F-1S, Sample 2
 Loose gray CLAYEY SAND
 w/sacl len & few sh frag

Remarks:
 Sample depth 3'-4'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98
	Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.6	92.7	6.7		SP-SM		

SIEVE inches size	PERCENT FINER	
	●	
0.375	100.0	
× GRAIN SIZE		
D ₆₀	0.15	
D ₃₀	0.11	
D ₁₀	0.07	
× COEFFICIENTS		
C _c	0.96	
C _u	1.9	

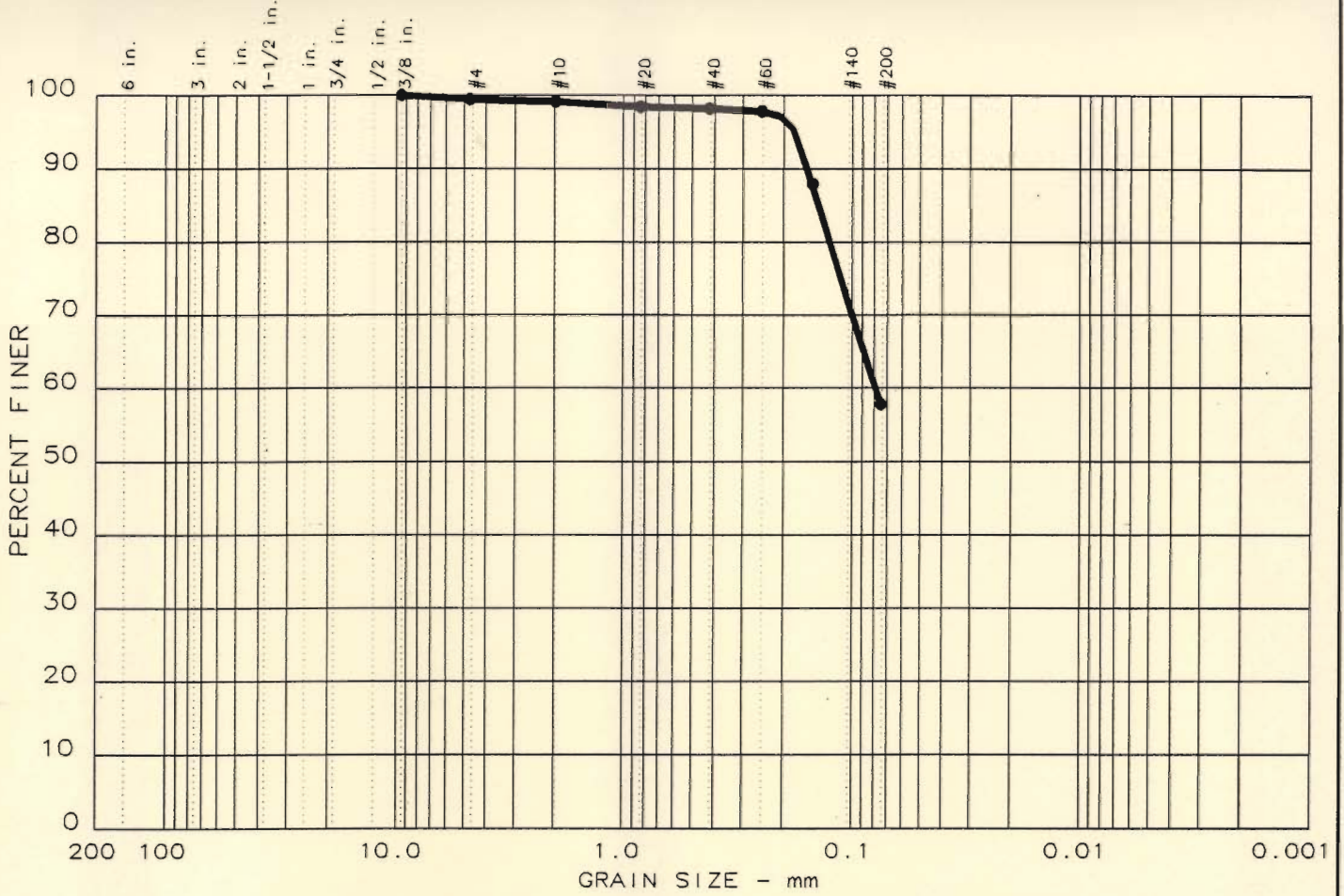
SIEVE number size	PERCENT FINER	
	●	
4	99.4	
10	97.5	
20	95.0	
40	93.7	
60	92.0	
100	62.8	
200	6.6	

Sample information:
 ● Boring F-1S, Sample 4
 Loose gray FINE SAND
 w/ si & shell fragments

Remarks:
 Sample depth 7'-8'

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.6	41.6	57.8		CL		

SIEVE inches size	PERCENT FINER		
	●		
0.375	100.0		
GRAIN SIZE			
D ₆₀ D ₃₀ D ₁₀	0.08		
COEFFICIENTS			
C _c C _u			

SIEVE number size	PERCENT FINER		
	●		
4	99.4		
10	99.1		
20	98.4		
40	98.2		
60	97.8		
100	87.9		
200	57.8		

Sample information:
 ● Boring F-1S, Sample 6
 Very Soft gray SANDY CLAY

Remarks:
 Sample depth 11'-12'

<h2 style="margin: 0;">Eustis Engineering Company, Inc.</h2>	Project No.: 15300 Project: DNR / Whiskey Pass Date: 03-27-98 Data Sheet No. _____
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