APPENDIX A
ANNEX G -1
Continued

G-1: Geological Investigations North of the Redline

Please refer to the pdf bookmarks for direct access to each annex

APPENDIX 4

APPENDIX 4
HYDRAULIC INTERVAL TESTS

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0282
Project No.	142204		
Client	SFWMD	**Interval Test** From	60
		To	70

Location	Eastside	**Coordinates**	East 778268	North 766996	Sheet 1 of 2		
Casing Depth	60		Reference Point	Drilling Platform			
Open Hole Depth	64 After test		Height Above Ground Level	5ft			
Screen Depth							
Pump Setting Depth	20	Pump Details	Diameter	3"	Discharge	Flowmeter	No
			Capacity	15gpm		Volume Tank	Yes
Static Water Level	8.2		Generator	6000	Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
07/30/2005	9	51	0.00	8.2	0		0	
			0.25	10	1.8			
			0.50	10.33	2.13			
			0.75	10.44	2.24			
			1.00	10.49	2.29			
			1.50	10.52	2.32			
			2.00	10.55	2.35			
			2.50	10.58	2.38			
			3.00	10.58	2.38			
			3.50	10.59	2.39			
			4.00	10.59	2.39			
			4.50	10.6	2.4			
			5.00	10.6	2.4			
			5.50	10.6	2.4			
			6.00	10.61	2.41			
			8.00	10.64	2.44			
			10.00	10.65	2.45		18	Check Flow Rate
			12.00	10.66	2.46			2 minutes for 36 gallons
			14.00	10.65	2.45			
			16.00	10.68	2.48			
			18.00	10.68	2.48			
			20.00	10.66	2.46		18	Check Flow Rate
			25.00	10.64	2.44			3 minutes for 54 gallons
			30.00	10.64	2.44			Check Flow Rate
			35.00	10.66	2.46			
			40.00	10.5	2.3			
			45.00	10.48	2.28			
			50.00	10.46	2.26			
			55.00	10.46	2.26			
			60.00	10.46	2.26		18	Check Flow Rate
			75.00	10.45	2.25			1 minute for 18 gallons
	11	21	90.00	10.45	2.25			

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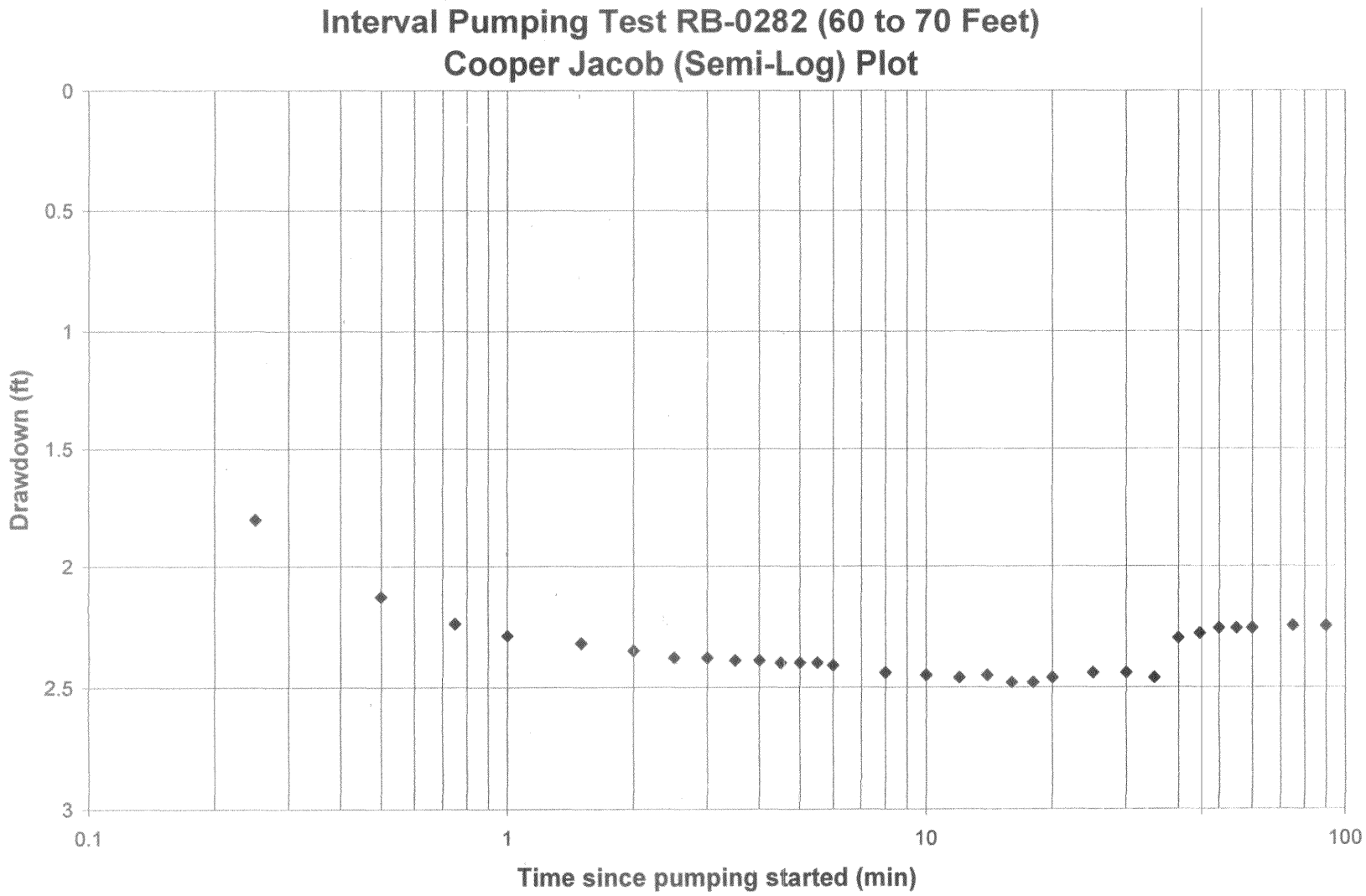
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0282**
Project No.	142204		
Client	SFWMD	**Interval Test** From	60
		To	70

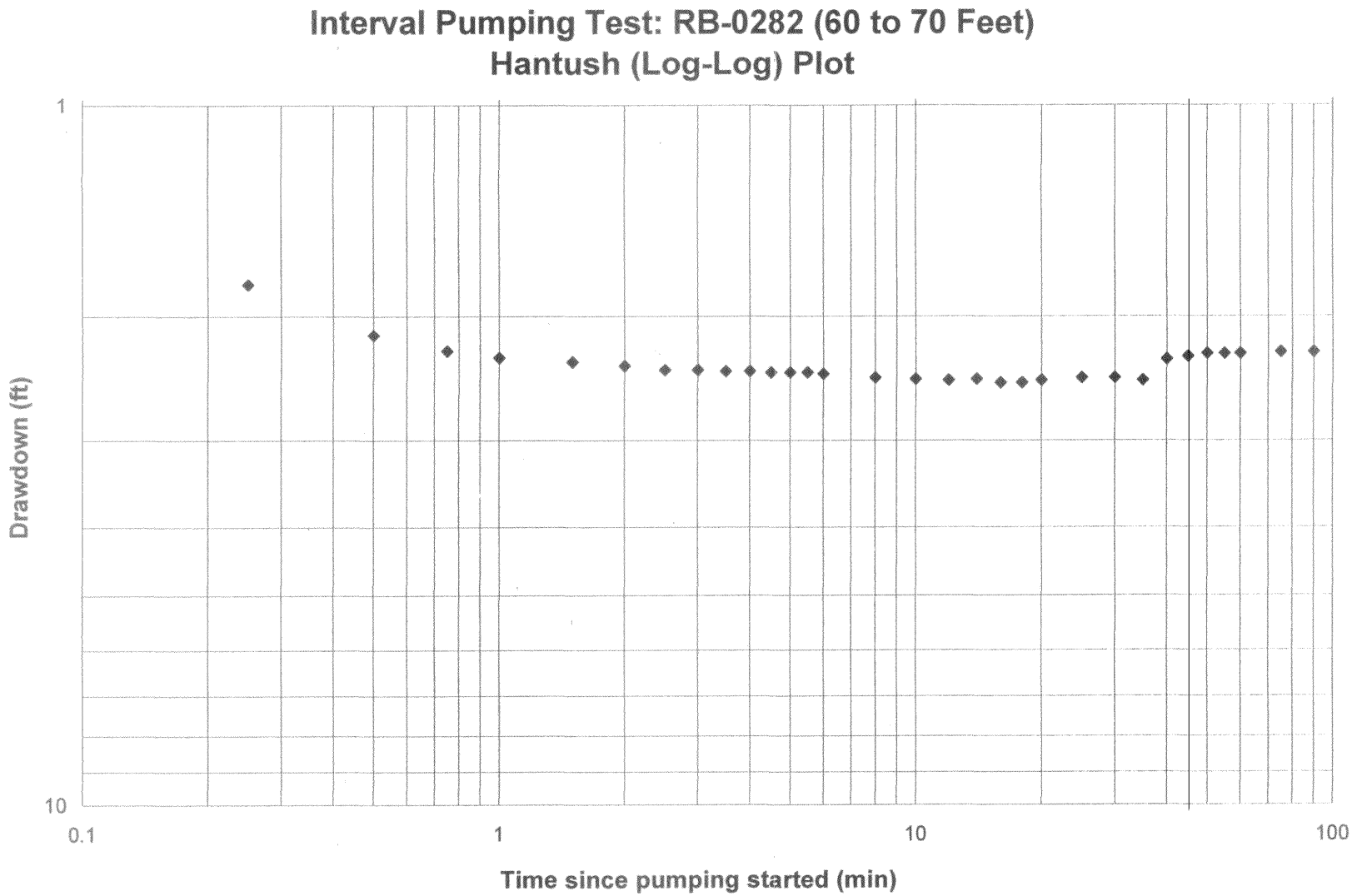
Sheet 2 of 2

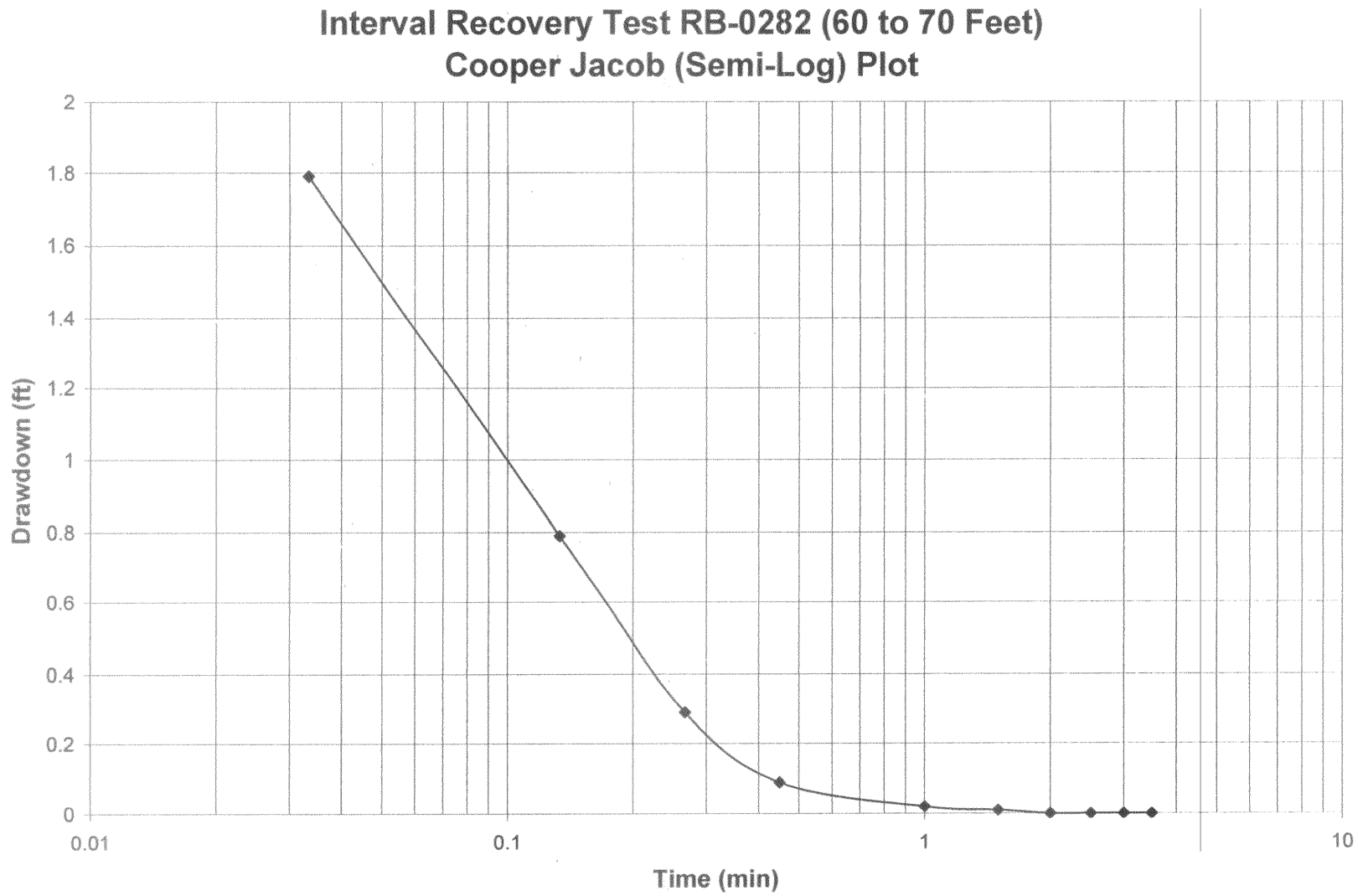
			East	North
Location	Eastside	**Coordinates**	778268	766996

Casing Depth	60		Reference Point	Drilling Platform			
Open Hole Depth	64	After test	Height Above Ground Level	5ft			
Screen Depth							
Pump Setting Depth	20		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	15gpm		Volume Tank	Yes
Static Water Level	8.2			Generator		Water Level	Transducer	Yes

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
07/30/2005	11	21	0.00	10.45	2.25		18	Last Flow Rate
			0.03	10	1.8			
			0.13	9	0.8			
			0.26	8.5	0.3			
			0.45	8.3	0.1			
			1.00	8.23	0.03			
			2.00	8.22	0.02			
			3.00	8.21	0.01			
			4.00	8.205	0.005			
			5.00	8.21	0.01			
			6.00	8.21	0.01			
			7.00	8.21	0.01			
			8.00	8.21	0.01			
			9.83	8.21	0.01			
			10.00	8.21	0.01			
			12.00	8.21	0.01			
	11	35	14.00	8.21	0.01			
			16.83					
			18.83					
			20.00					
			25.00					
			30.00					


Interval Pumping Test RB-0282 (60 to 70 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.5
1
1.5
2
2.5
3
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test: RB-0282 (60 to 70 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0282 (60 to 70 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.01
0.1
1
10
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0282
Project No.	142204		
Client	SFWMD	**Interval Test** From	80
		To	90

			East	North			Sheet 1 of 2
Location	Eastside	**Coordinates**	778268	766996			
Casing Depth	80		Reference Point	Drilling Platform			
Open Hole Depth	87 After test		Height Above Ground Level	5ft			
Screen Depth							
Pump Setting Depth	20	Pump Details	Diameter	3"	Discharge	Flowmeter	No
			Capacity	15gpm		Volume Tank	Yes
Static Water Level	8.21		Generator	6000	Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
07/30/2005	13	14	0.00	8.21	0		0	
			0.16	8.4	0.19			
			0.25	8.46	0.25			
			0.50	8.46	0.25			
			0.75	8.47	0.26			
			1.00	8.47	0.26			
			1.50	8.48	0.27			
			2.00	8.49	0.28			
			2.50	8.49	0.28			
			3.00	8.49	0.28			
			3.50	8.49	0.28			
			4.00	8.49	0.28			H_2S smell,
			4.50	8.49	0.28			turns black on
			5.00	8.49	0.28			exposure to air
			5.50	8.49	0.28			
			6.00	8.49	0.28			
			8.00	8.49	0.28			
			10.00	8.5	0.29		18	Check Flow Rate
			12.00	8.5	0.29			1 minute for 18 gallons
			14.00	8.5	0.29			
			16.00	8.5	0.29			
			18.00	8.5	0.29			
			20.00	8.5	0.29		18	Check Flow Rate
			25.00	8.51	0.3			2 minutes for 36 gallons
			30.00	8.5	0.29			Check Flow Rate
			35.00	8.51	0.3			
			40.00	8.51	0.3			
			45.00	8.51	0.3			
			50.00	8.51	0.3			
			55.00					
			60.00					Check Flow Rate

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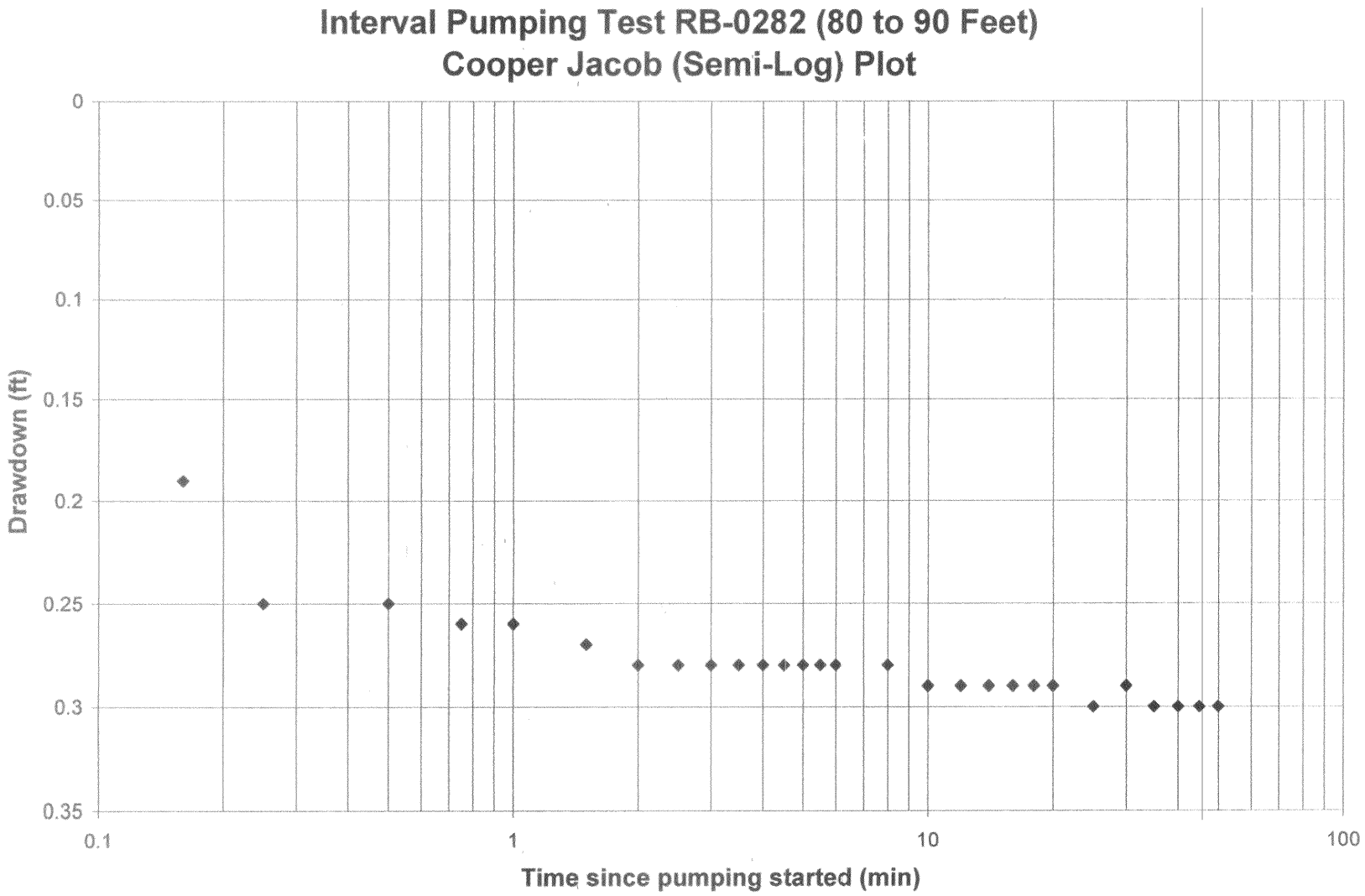
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0282**
Project No.	142204		
Client	SFWMD	**Interval Test** From	80
		To	90

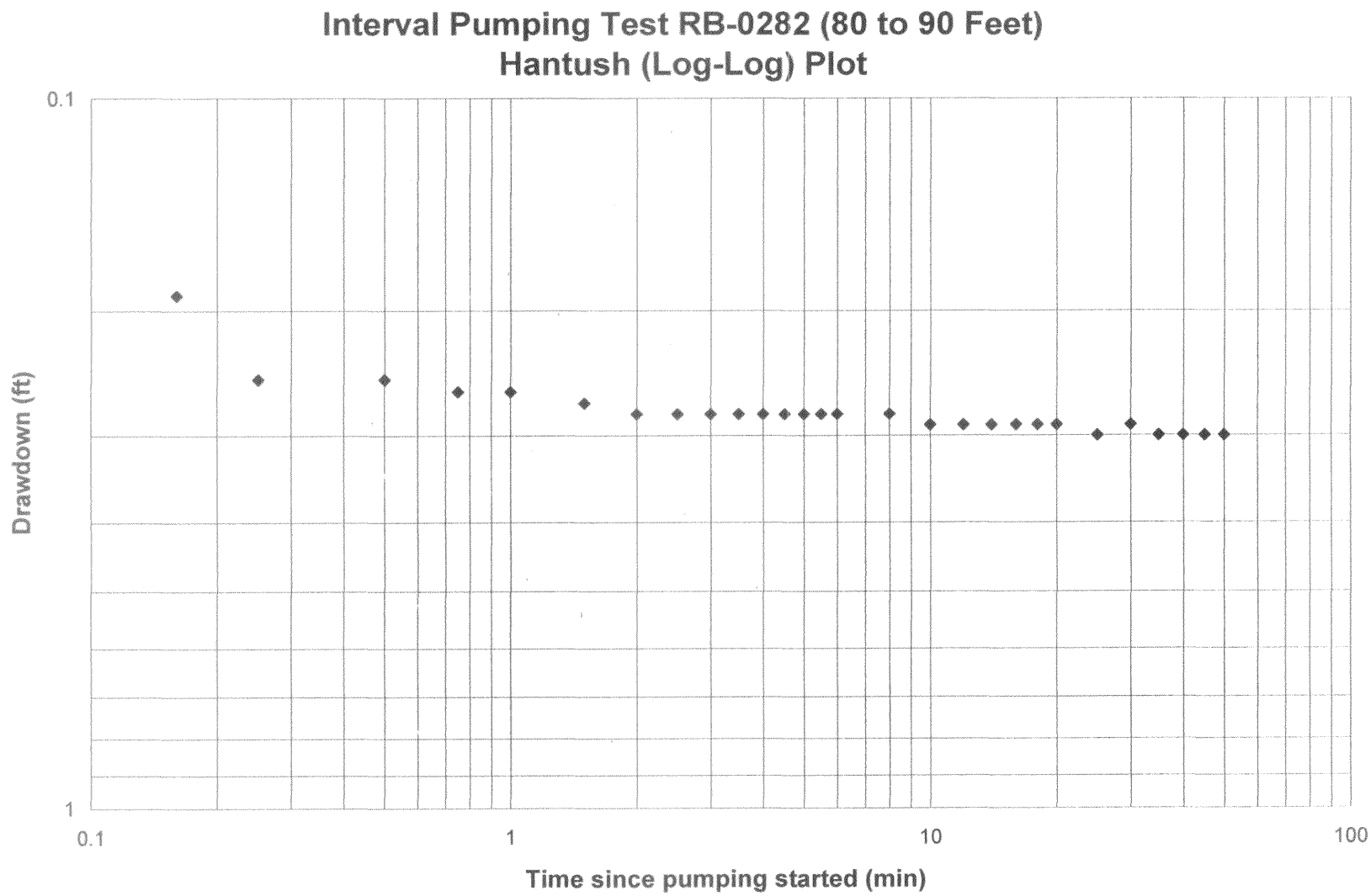
Sheet 2 of 2

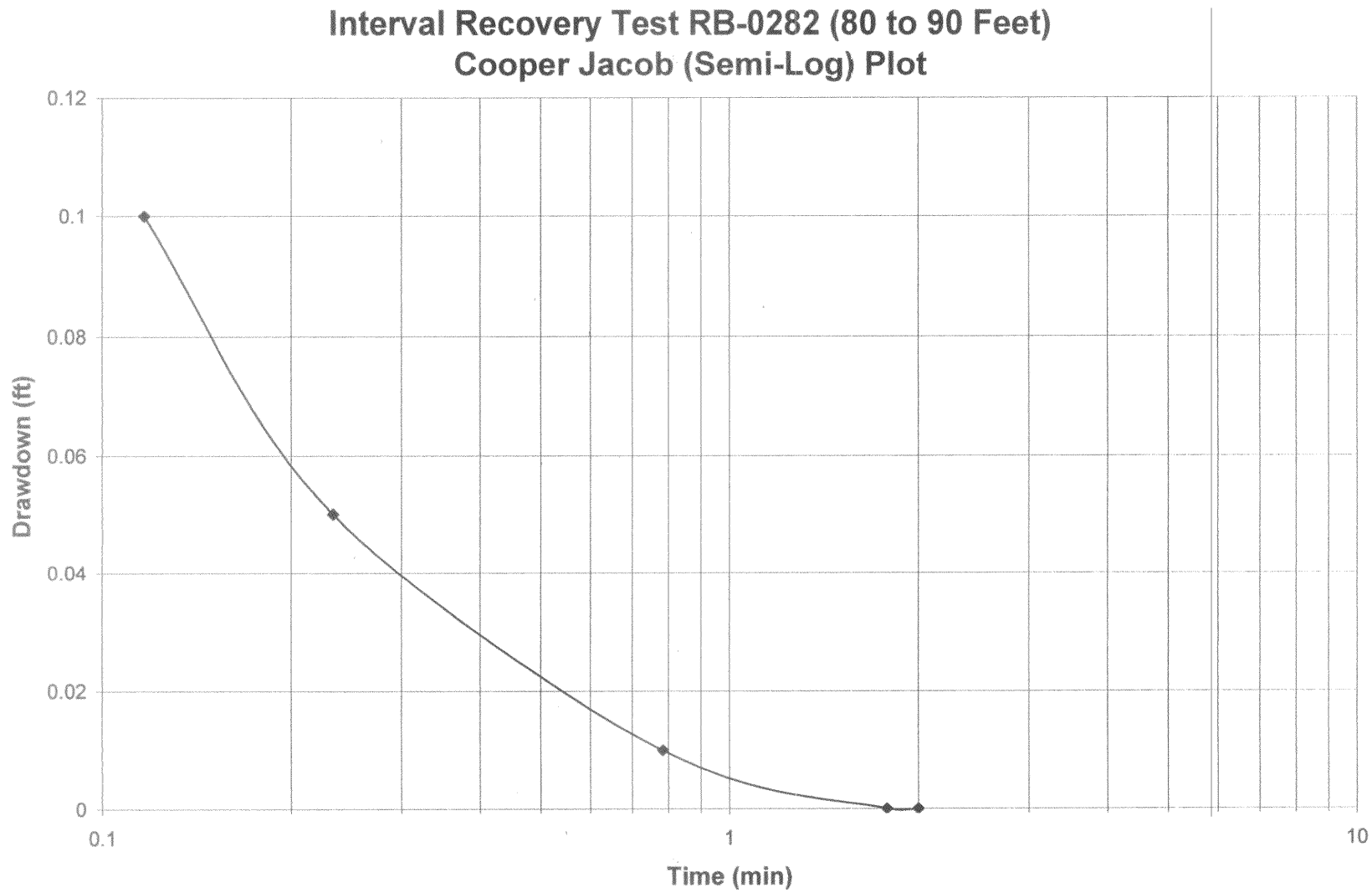
			East	North
Location	Eastside	**Coordinates**	778268	766996

Casing Depth	80		Reference Point	Drilling Platform			
Open Hole Depth	87	After test	Height Above Ground Level	5ft			
Screen Depth							
Pump Setting Depth	20		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	15gpm		Volume Tank	Yes
Static Water Level	8.21			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
07/30/2005			0.00	8.51	0.3		18	Last Flow Rate
			0.01	8.4	0.19			
			0.11	8.35	0.14			
			0.23	8.3	0.09			
			0.78	8.26	0.05			
			1.66	8.25	0.04			
			2.00	8.25	0.04			
			3.00	8.25	0.04			
			4.00	8.25	0.04			
			5.00	8.24	0.03			
			6.00	8.24	0.03			
			7.00	8.24	0.03			
			8.00	8.24	0.03			
			9.83	8.24	0.03			
			10.00	8.24	0.03			
			12.00	8.25	0.04			
			14.00	8.25	0.04			
			16.83	8.25	0.04			
			18.83	8.25	0.04			
			20.00	8.25	0.04			
			25.00	8.25	0.04			
			30.00	8.25	0.04			


Interval Pumping Test RB-0282 (80 to 90 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0282 (80 to 90 Feet)
Hantush (Log-Log) Plot
0.1
1
Drawdown (ft)
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0282 (80 to 90 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.12
0.1
0.08
0.06
0.04
0.02
0
0.1
1
10
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0282**
Project No.	142004		
Client	SFWMD	**Interval Test**	From 120ft
			To 130ft

Location	Eastside	**Coordinates**	East 778268	North 766996	Sheet 1 of 3

Casing Depth	120		Reference Point	Breakout			
Open Hole Depth	130	After test	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	50		Pump Details	Diameter	2"	Discharge	Flowmeter	No
				Capacity	2gpm		Volume Tank	Yes
Static Water Level	8.21			Generator	12 volt	Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
Jul-31	10	24	0.00	8.19	0		0	
			0.33	8.93	0.74			
			0.66	9.62	1.43			
			0.75					
			1.00	10.28	2.09			
			1.50	11.33	3.14			
			2.00	12.47	4.28			
			2.50	13.43	5.24			
			3.00	14.06	5.87			
			3.50	14.81	6.62			
			4.00	15.54	7.35			
			4.50	16.16	7.97			
			5.00	16.79	8.6			
			5.50	17.37	9.18			
			6.00	17.92	9.73			
			8.00	19.83	11.64			9' to 13.5' for 10 gallons
			10.00	21.45	13.26		2.22	Check Flow Rate
			12.00	22.77	14.58			
			14.00	23.69	15.5			
			16.00	24.42	16.23			
			18.00	25.02	16.83		2.42	9' to 17:15 for 20 gallons
			20.00	25.49	17.3			Check Flow Rate
			25.00	26.3	18.11		2.44	9' to 21:15 for 30 gallons
			30.00	26.71	18.52			Check Flow Rate
			35.00	27.1	18.91		2.44	9' to 29:30 for 50 gallons
			40.00	27.38	19.19			
			45.00	27.53	19.34			
			50.00	27.68	19.49			
			55.00	27.75	19.56		2.42	1:08:00 to 1:16:15 for 20 gallons
			60.00	27.81	19.62			Check Flow Rate
			75.00	27.98	19.79			
			90.00	27.94	19.75			
			105.00	27.91	19.72			
			120.00	27.82	19.63			

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0282
Project No.	142004		
Client	SFWMD	**Interval Test**	From 120ft
			To 130ft

Sheet 2 of 3

			East	North
Location	Eastside	**Coordinates**	778268	766996

Casing Depth	120		Reference Point	Breakout			
Open Hole Depth	130	After test	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	50		Pump Details	Diameter	2"	Discharge	Flowmeter: No
				Capacity	2gpm		Volume Tank: Yes
Static Water Level	8.21			Generator	12 volt	Water Level	Transducer: No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
	12	25	0.00	27.82	19.63			Last Flow Rate
			0.30	27.00	18.81			
			0.60	26.50	18.31			
			0.85	26.00	17.81			
			1.15	25.50	17.31			
			1.47	25.00	16.81			
			2.00	24.05	15.86			
			3.00	22.50	14.31			
			4.00	20.80	12.61			
			5.00	19.55	11.36			
			6.00	18.41	10.22			
			7.00	17.37	9.18			
			8.00	16.41	8.22			
			9.00	15.57	7.38			
			10.00	14.80	6.61			
			12.00	13.46	5.27			
			14.00	12.39	4.20			
			16.00	11.36	3.17			
			18.00	10.62	2.43			
			20.00	10.12	1.93			
			25.00	9.24	1.05			
			30.00	8.76	0.57			
			35.00	8.50	0.31			
			40.00	8.37	0.18			
			50.00	8.27	0.08			
	14		119.00	8.25	0.06			

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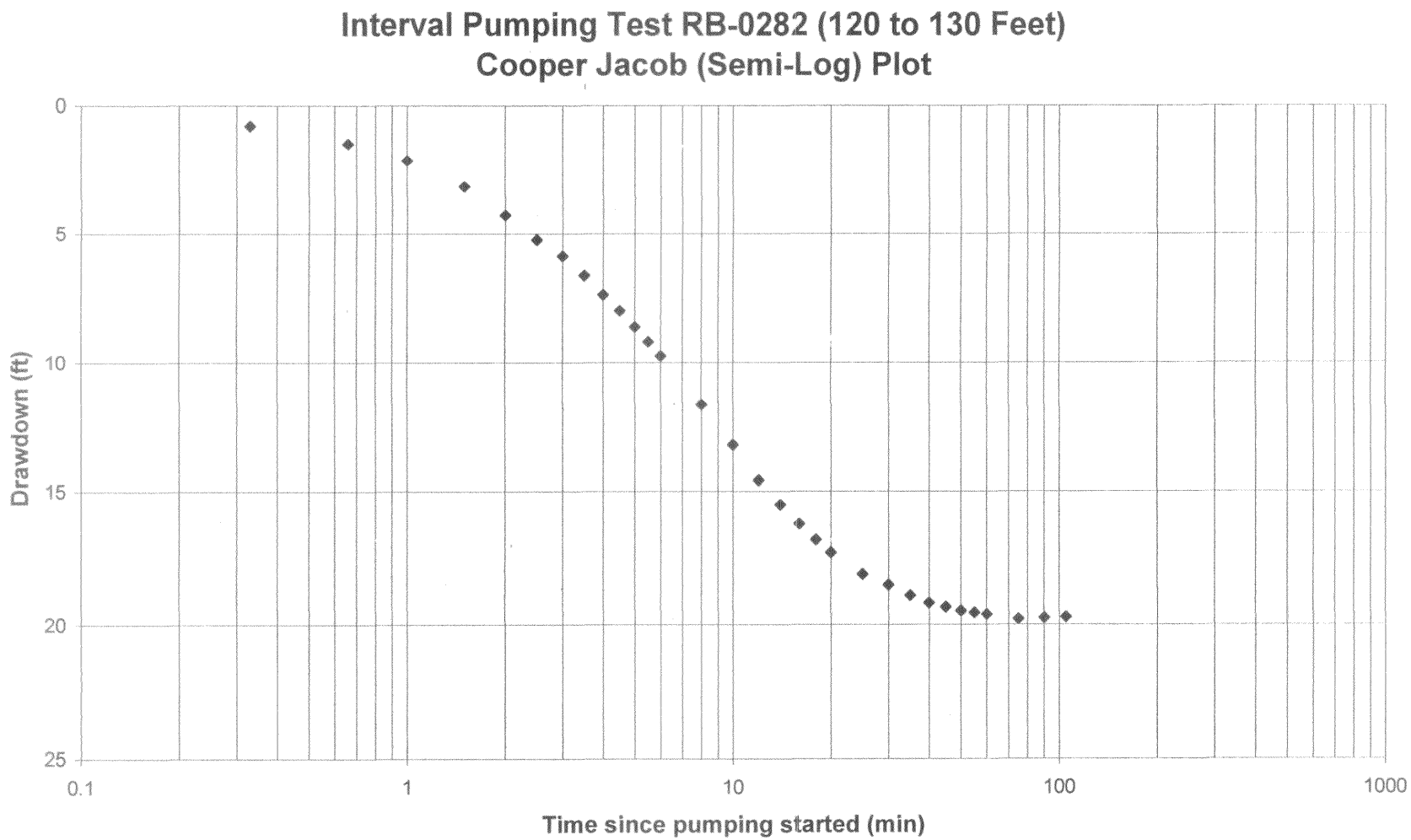
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0282
Project No.	142004		
Client	SFWMD	**Interval Test**	From 120ft
			To 130ft

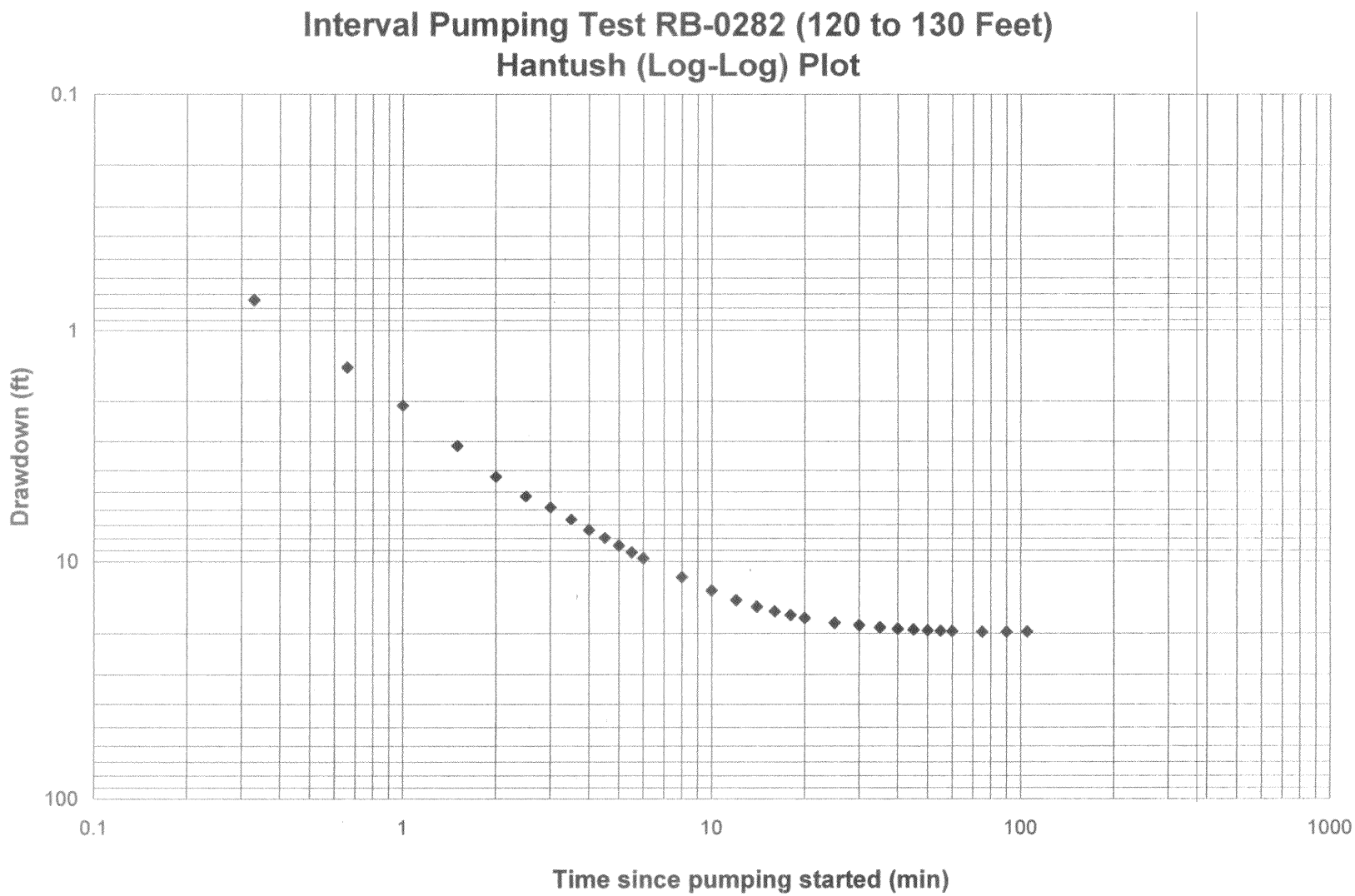
Sheet 3 of 3

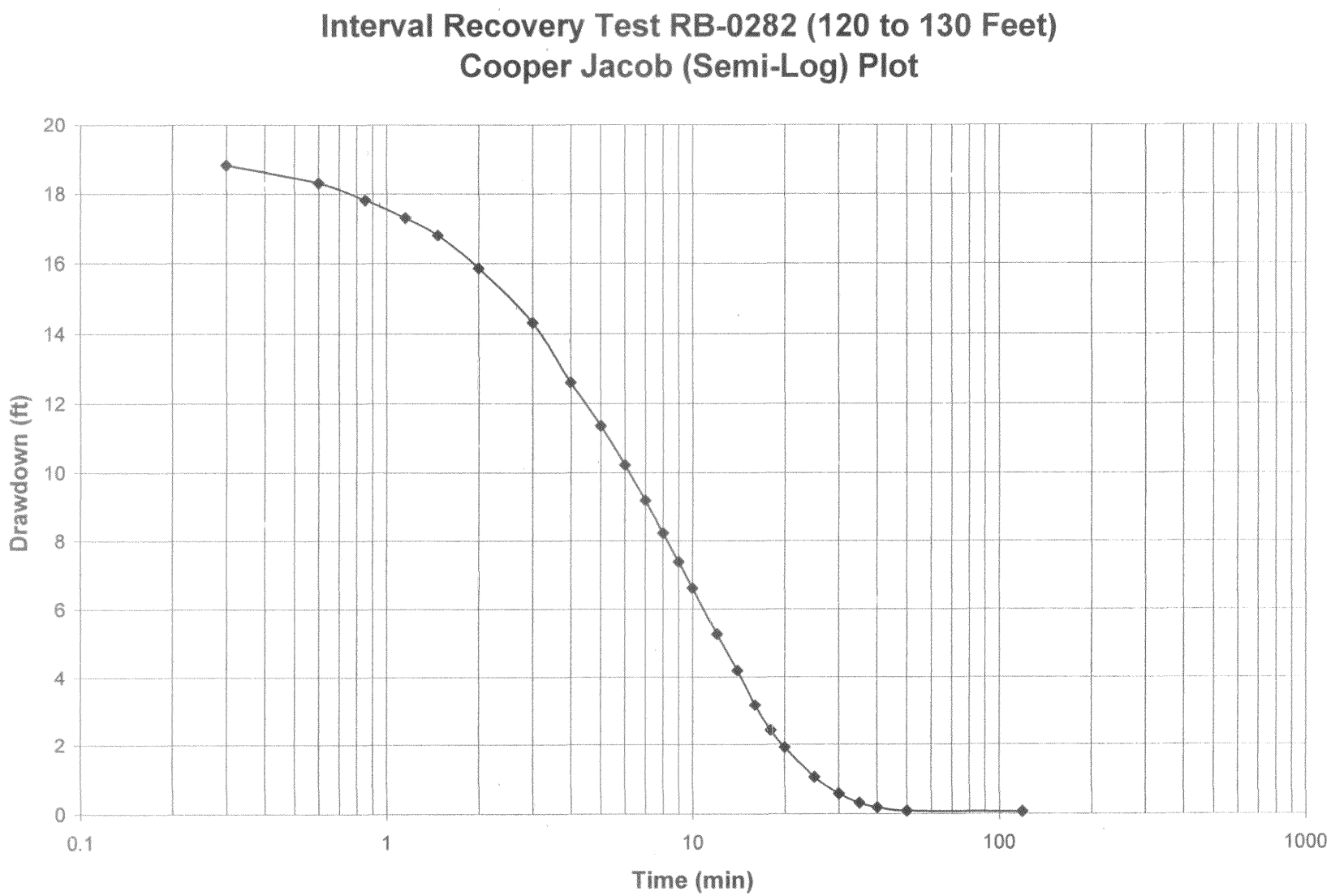
			East	North
Location	Eastside	**Coordinates**	778268	766996

Casing Depth	120		Reference Point	Breakout			
Open Hole Depth	130	After test	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	50		Pump Details	Diameter	2"	Discharge	Flowmeter	No
				Capacity	2gpm		Volume Tank	Yes
Static Water Level	8.21			Generator	12 volt	Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
7/31/05	9	45	0.00	28.88				Last Flow Rate
			4.00					
			6.00					
			6.83					
			9.01					
			10.27					
			11.70					
			13.45					
			15.35					
			17.58					
			21.15					
			27.70					


Interval Pumping Test RB-0282 (120 to 130 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
5
10
15
20
25
0.1
1
10
100
1000
Time since pumping started (min)


Interval Pumping Test RB-0282 (120 to 130 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
0.1
1
10
100
0.1
1
10
100
1000
Time since pumping started (min)


Interval Recovery Test RB-0282 (120 to 130 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
20
18
16
14
12
10
8
6
4
2
0
0.1
1
10
100
1000
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0282
Project No.	142204		
Client	SFWMD	**Interval Test** From	150
		To	160

			East	North	Sheet 1 of 2
Location	Eastside	**Coordinates**	778268	766996	

Casing Depth	150		Reference Point	Drilling Platform			
Open Hole Depth	156	After test 156	Height Above Ground Level	5ft			
Screen Depth							
Pump Setting Depth	20		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.95		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
1/8/2005	9	0	0.00	7.95	0		0	
			0.25	8.85	0.9			
			0.50	8.89	0.94			
			0.75	8.89	0.94			
			1.00	8.9	0.95			
			1.50	8.91	0.96			
			2.00	8.92	0.97			
			2.50	8.93	0.98			
			3.00	8.94	0.99			
			3.50	8.94	0.99			
			4.00	8.94	0.99			H_2S smell,
			4.50	8.945	0.995			turns black on
			5.00	8.95	1			exposure to air
			5.50	8.95	1			
			6.00	8.95	1			
			8.00	8.95	1			
			10.00	8.96	1.01			Check Flow Rate
			12.00	8.96	1.01			
			14.00	8.95	1			
			16.00	8.95	1		18	2 minutes for 36 gallons
			18.00	8.95	1			
			20.00	8.95	1			Check Flow Rate
			25.00	8.955	1.005			
			30.00	8.96	1.01			Check Flow Rate
			35.00	8.95	1		18	2 minutes for 36 gallons
			40.00	8.95	1			
			45.00	8.96	1.01			
			50.00	8.95	1			
			55.00	8.95	1		18	2 minutes for 36 gallons
			60.00	8.95	1			Check Flow Rate

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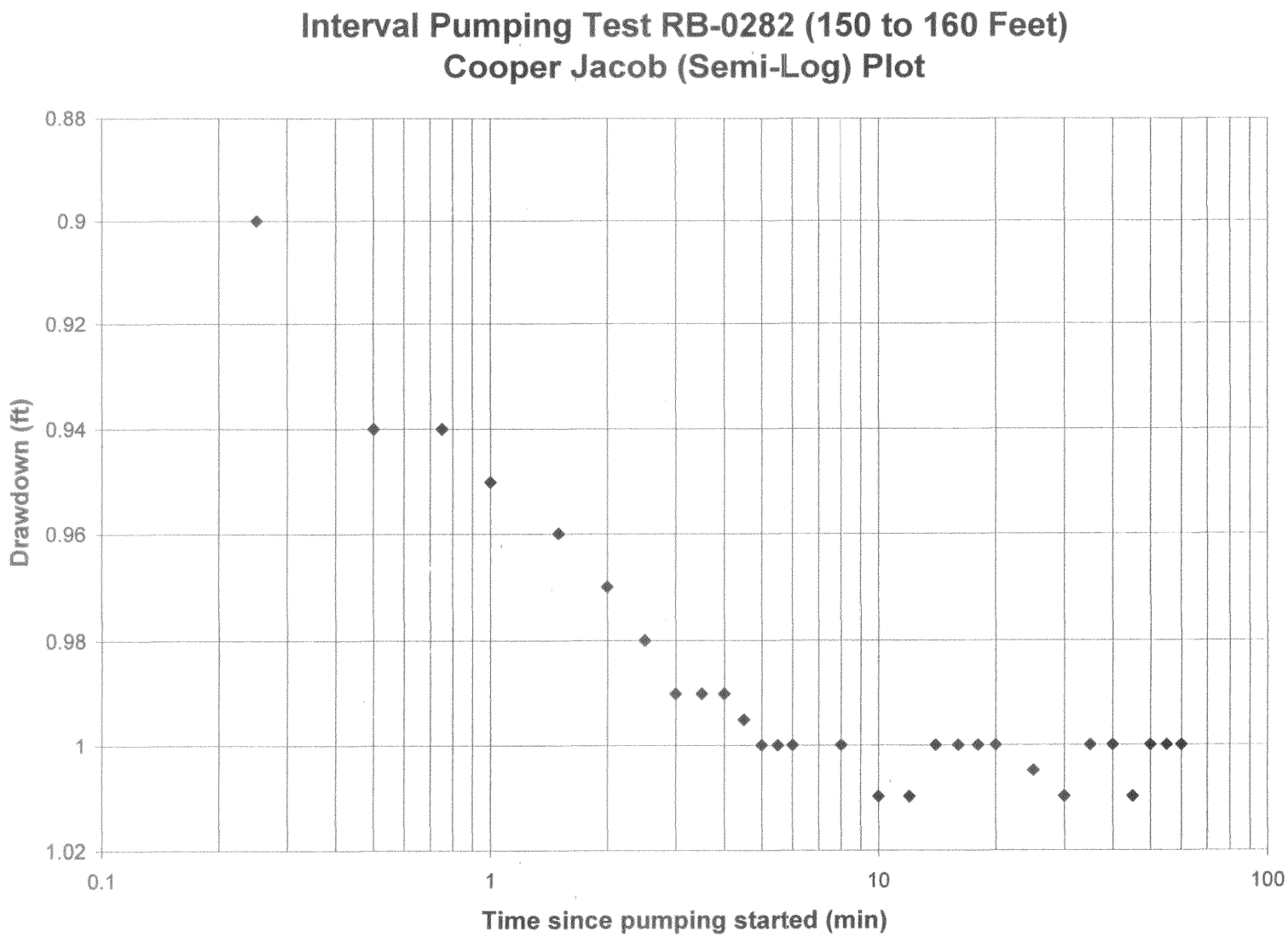
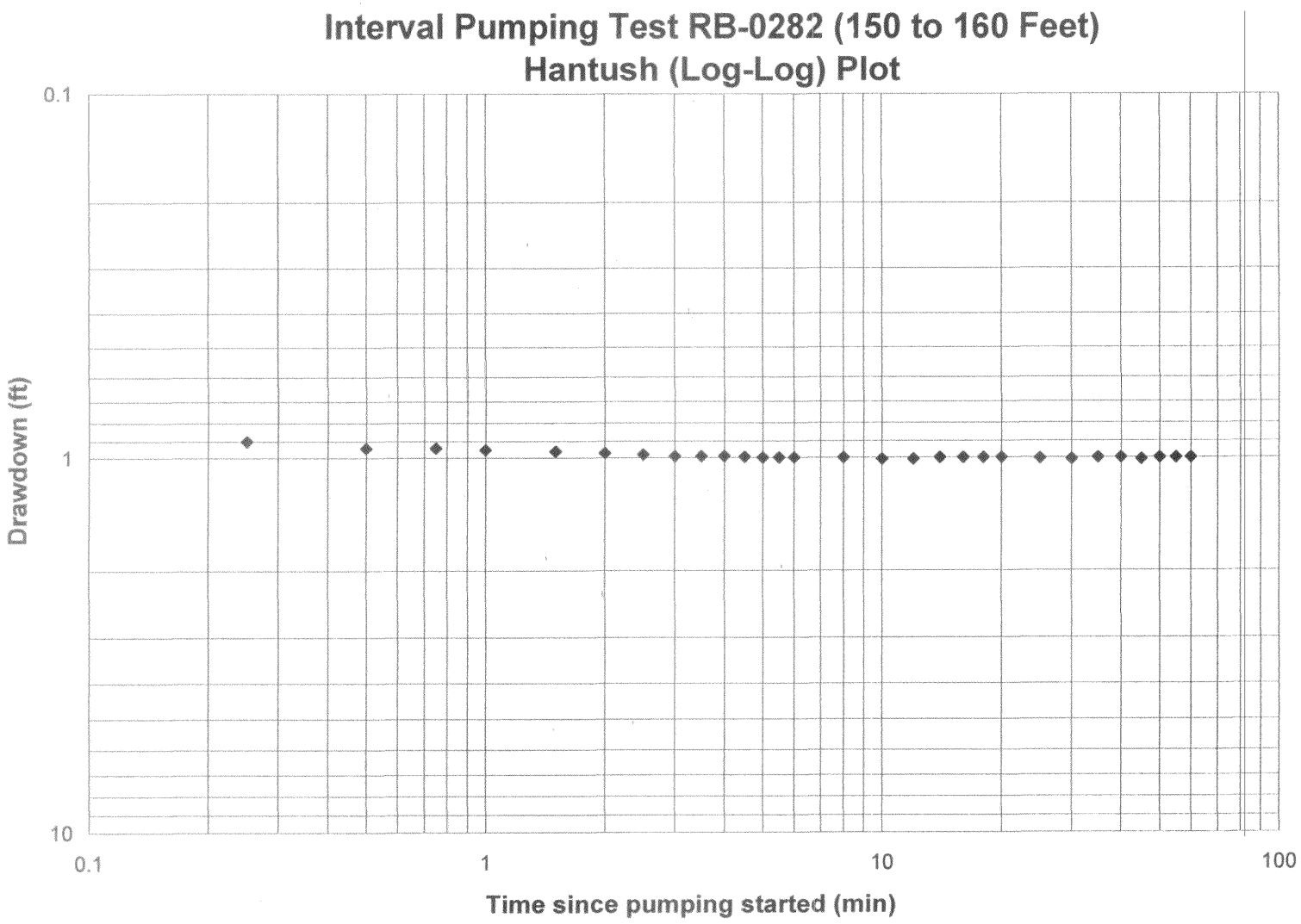
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0282
Project No.	142204		
Client	SFWMD	**Interval Test** From	150
		To	160

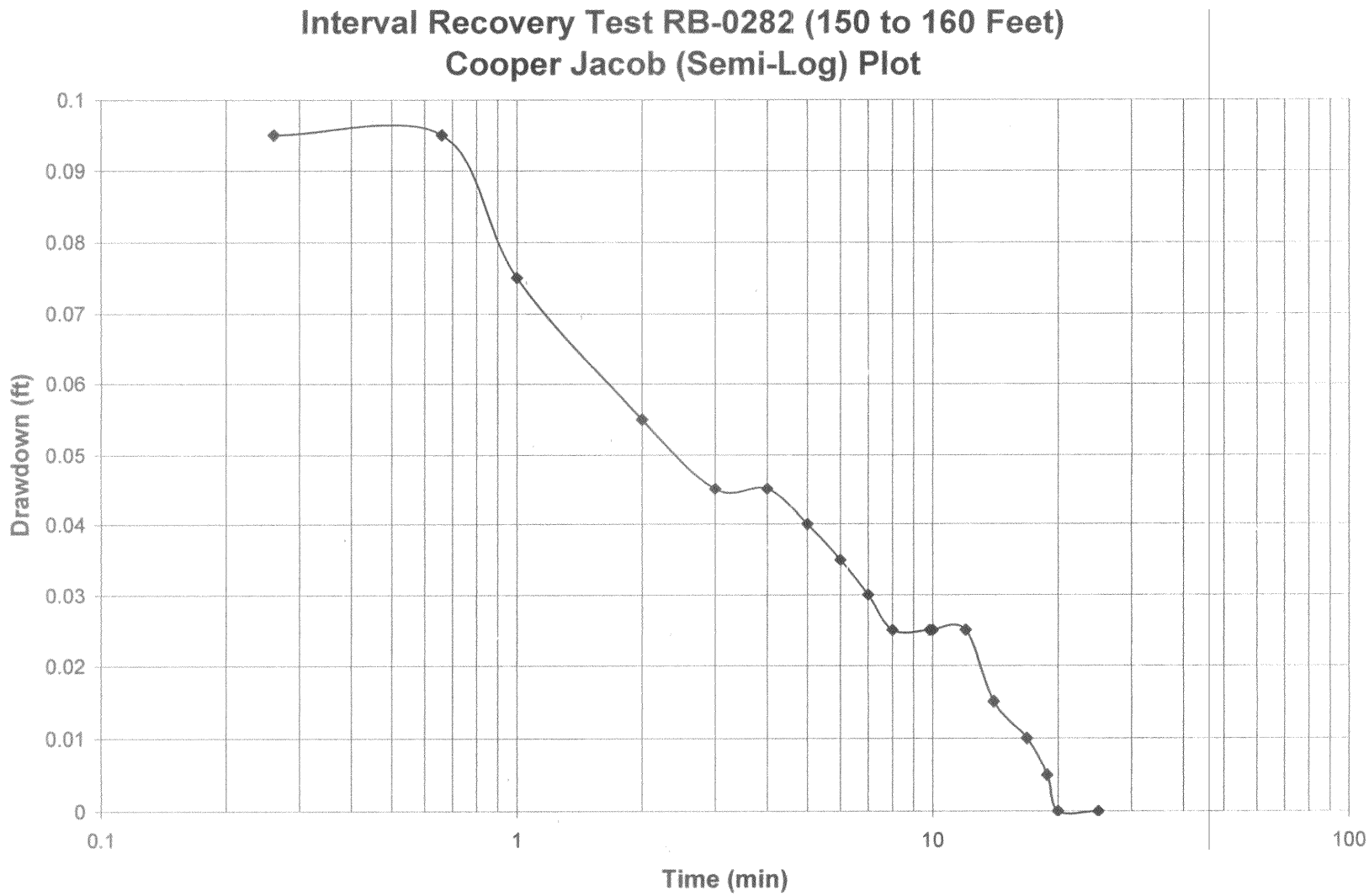
			East	North	Sheet 2 of 2
Location	Eastside	**Coordinates**	778268	766996	

Casing Depth	150		Reference Point	Drilling Platform			
Open Hole Depth	156	After test 156	Height Above Ground Level	5ft			
Screen Depth							
Pump Setting Depth	20		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.95		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
1/8/2005	10	0	0.00	8.95	1		18	Last Flow Rate
			0.26	8	0.05			
			0.66	8	0.05			
			1.00	7.98	0.03			
			2.00	7.96	0.01			
			3.00	7.95	0			
			4.00	7.95	0			
			5.00	7.945	-0.005			
			6.00	7.94	-0.01			
			7.00	7.935	-0.015			
			8.00	7.93	-0.02			
			9.83	7.93	-0.02			
			10.00	7.93	-0.02			
			12.00	7.93	-0.02			
			14.00	7.92	-0.03			
			16.83	7.915	-0.035			
			18.83	7.91	-0.04			
			20.00	7.905	-0.045			
			25.00	7.905	-0.045			
			30.00	7.905	-0.045			
			35.00	7.9	-0.05			
			40.00	7.905	-0.045			
			45.00	7.905	-0.045			


Interval Pumping Test RB-0282 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.88
0.9
0.92
0.94
0.96
0.98
1
1.02
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0282 (150 to 160 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
0.1
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0282 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0.1
1
10
100
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0283**
Project No.	142004		
Client	SFWMD	**Interval Test** From	40
		To	50

			East	North	Sheet1 of 2
Location	Southside, centre	**Coordinates**	773034	750069	

Casing Depth	40		Reference Point	Breakout			
Open Hole Depth	49	After test 49	Height Above Ground Level	4.8			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	6.39		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
12/8/2005	9	0	0.00	6.39	0		0	
			0.33	6.35	-0.04			
			0.56	6.42	0.03			
			0.83	6.43	0.04			
			1.00	6.43	0.04			
			1.50	6.425	0.035			
			2.00	6.43	0.04			
			2.50	6.43	0.04			
			3.00	6.43	0.04			
			3.50	6.43	0.04			
			4.00	6.43	0.04			
			4.50	6.43	0.04			
			5.00	6.43	0.04			
			5.50	6.43	0.04			
			6.00	6.43	0.04			
			8.00	6.43	0.04		18.5	2 minutes for 37 gallons
			10.00	6.43	0.04			Check Flow Rate
			12.00	6.43	0.04			pH=7.63, 25.1°C,EC=927 microS
			14.00	6.43	0.04			
			16.00	6.44	0.05			
			18.00	6.44	0.05		18.75	2 minutes for 37.5 gallons
			20.00	6.44	0.05			Check Flow Rate
			25.00	6.44	0.05			pH=7.43, 25.0°C,EC=892 microS
	9	30	30.00	6.44	0.05			Check Flow Rate
								Check Flow Rate
								Solution reading
							EC	1500 1527
							pH	4 4.16
							pH	7 6.94

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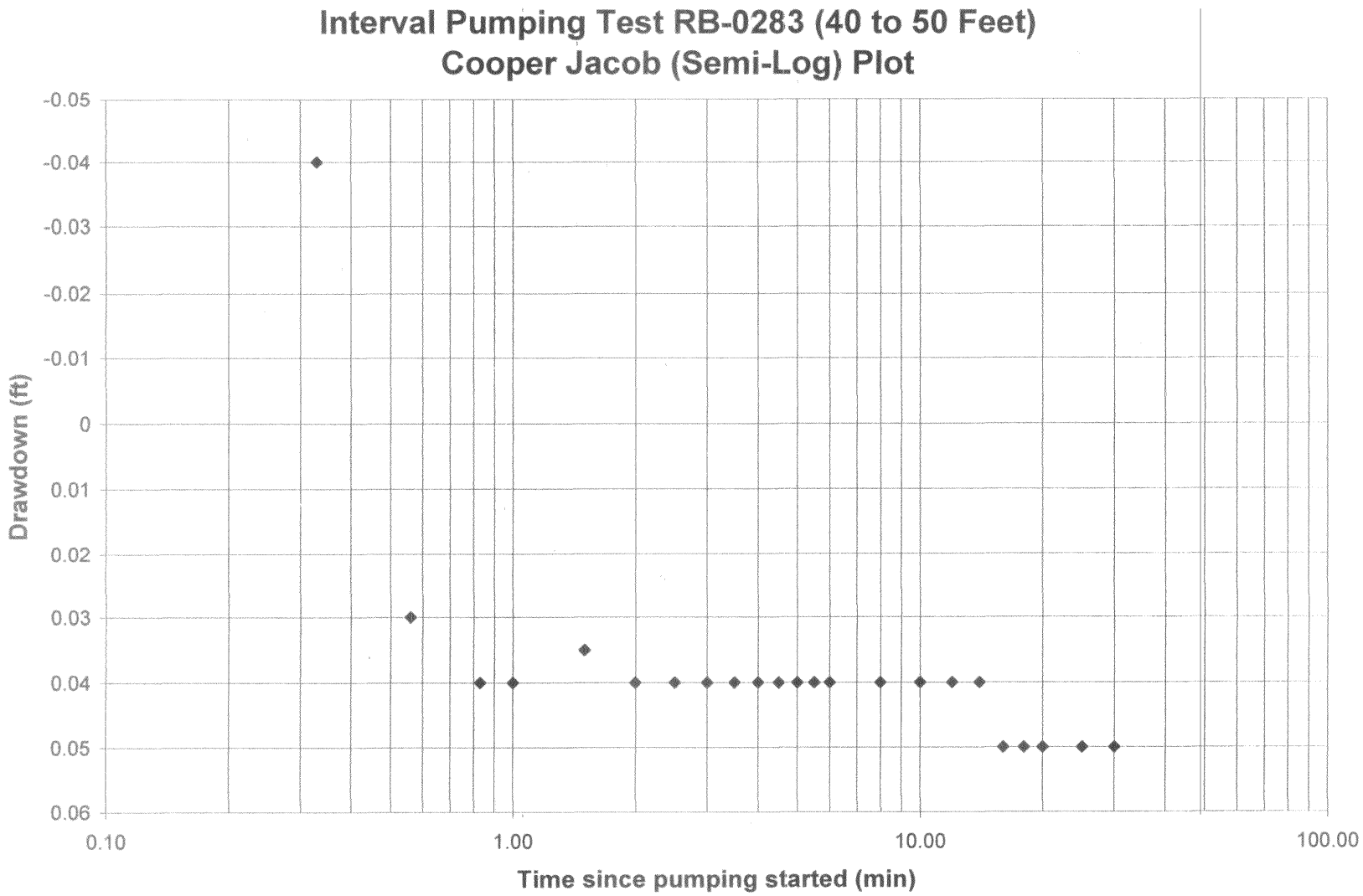
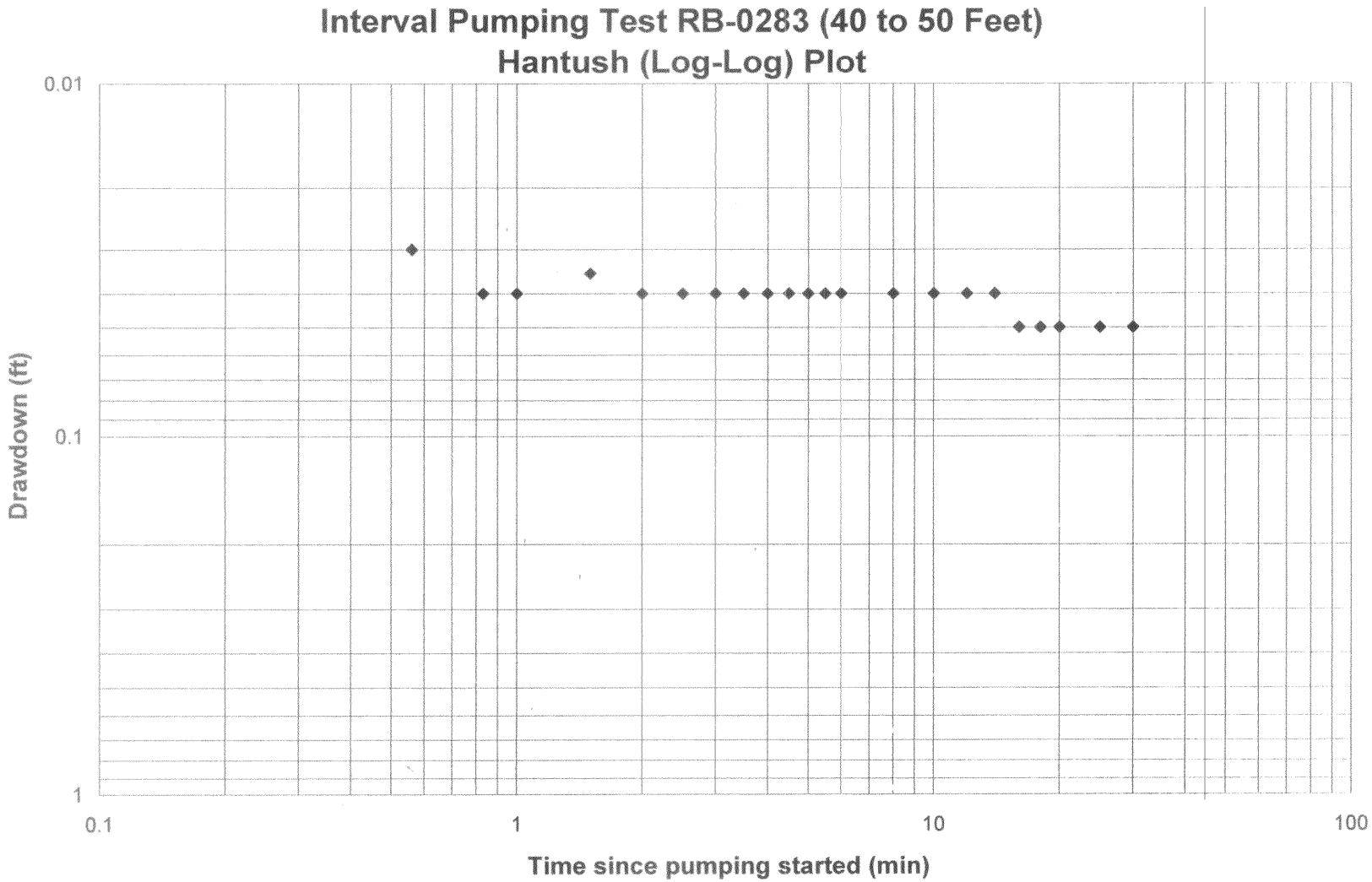
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0283
Project No.	142004		
Client	SFWMD	**Interval Test** From	40
		To	50

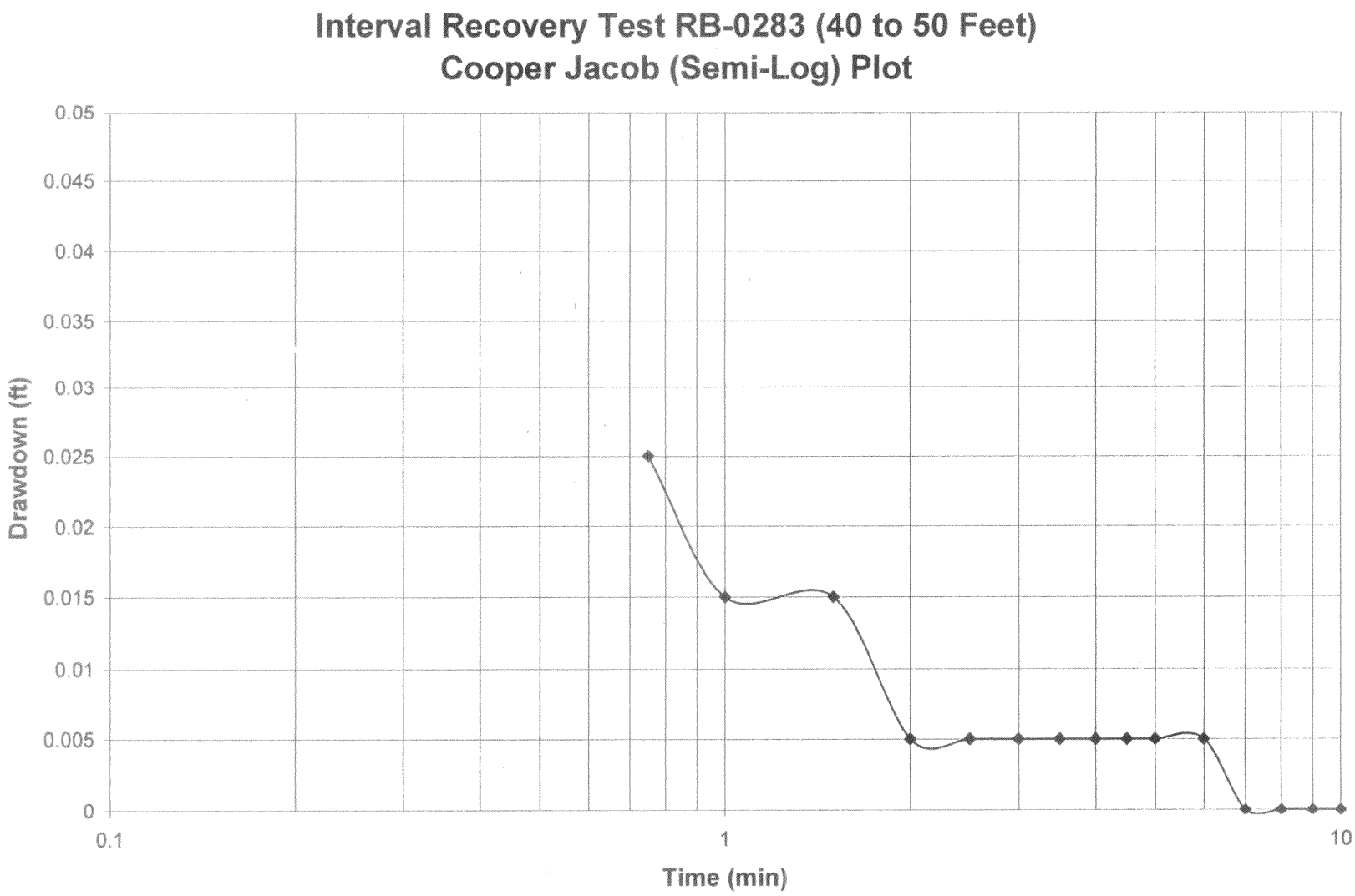
			East	North	Sheet 2 of 2
Location	Southside, centre	**Coordinates**	773034	750069	

Casing Depth	40		Reference Point	Breakout			
Open Hole Depth	49	After test 49	Height Above Ground Level	4.8			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	18gpm		Volume Tank	Yes
Static Water Level	6.39			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
12/8/2005	9	30	0.00	6.44	0.05		18.5	Last Flow Rate
			0.25	6.4	0.01			
			0.50	6.44	0.05			
			0.75	6.41	0.02			
			1.00	6.4	0.01			
			1.50	6.4	0.01			
			2.00	6.39	0			
			2.50	6.39	0			
			3.00	6.39	0			
			3.50	6.39	0			
			4.00	6.39	0			
			4.50	6.39	0			
			5.00	6.39	0			
			6.00	6.39	0			
			7.00	6.385	-0.005			
			8.00	6.385	-0.005			
			9.00	6.385	-0.005			
	9	40	10.00	6.385	-0.005			


Interval Pumping Test RB-0283 (40 to 50 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
-0.05
-0.04
-0.03
-0.02
-0.01
0
0.01
0.02
0.03
0.04
0.05
0.06
0.10
1.00
10.00
100.00
Time since pumping started (min)


Interval Pumping Test RB-0283 (40 to 50 Feet)
Hantush (Log-Log) Plot
0.01
0.1
1
Drawdown (ft)
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0283 (40 to 50 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
0.1
1
10
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0283**
Project No.	142004		
Client	SFWMD	**Interval Test** From	70
		To	80

			East	North	
Location	Southside, centre	**Coordinates**	773034	750069	Sheet1 of 2

Casing Depth	70		Reference Point	Breakout			
Open Hole Depth	80	After test	Height Above Ground Level	4.8			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.44		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
12/8/2005	12	17	0.00	7.44	0		0	
			0.25	9.15	1.71			
			0.50	9.48	2.04			
			0.75	9.57	2.13			
			1.00	9.6	2.16			
			1.50	9.61	2.17			
			2.00	9.625	2.185			
			2.50	9.63	2.19			
			3.00	9.64	2.2			
			3.50	9.645	2.205			
			4.00	9.65	2.21			
			4.50	9.645	2.205			
			5.00	9.645	2.205			
			5.50	9.64	2.2			
			6.00	9.64	2.2			
			8.00	9.645	2.205		18.5	2 minutes for 37 gallons
			10.00	9.65	2.21			Check Flow Rate
			12.00	9.655	2.215			pH=7.43, 25.0°C,EC=2.41 milliS
			14.00	9.66	2.22			
			16.00	9.645	2.205			
			18.00	9.68	2.24		18.5	2 minutes for 37 gallons
			20.00	9.69	2.25			Check Flow Rate
			25.00	9.705	2.265			pH=7.52, 24.8°C,EC=2.44 milliS
			32.00	9.725	2.285			Check Flow Rate
			35.00	9.72	2.28			
			40.00	9.72	2.28			
			45.00	9.72	2.28			
			50.00	9.72	2.28			
			55.00	9.72	2.28		18.5	2 minutes for 37 gallons
			60.00	9.72	2.28			Check Flow Rate
	13	32	75.00	9.72	2.28			pH=7.39, 24.9°C,EC=2.44 milliS
								Solution reading
							EC	1500 1527
							pH	4 4.16
							pH	7 6.94

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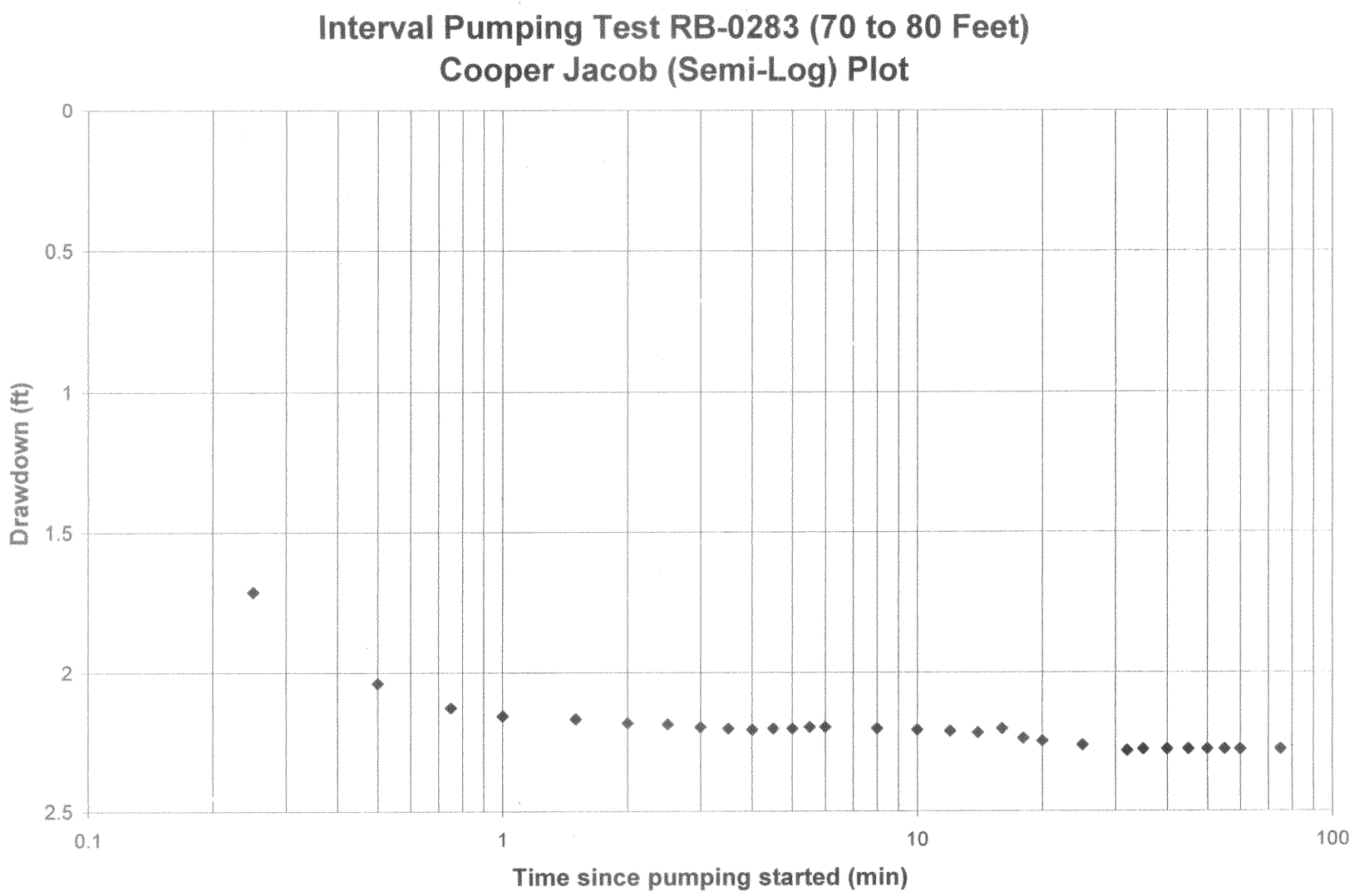
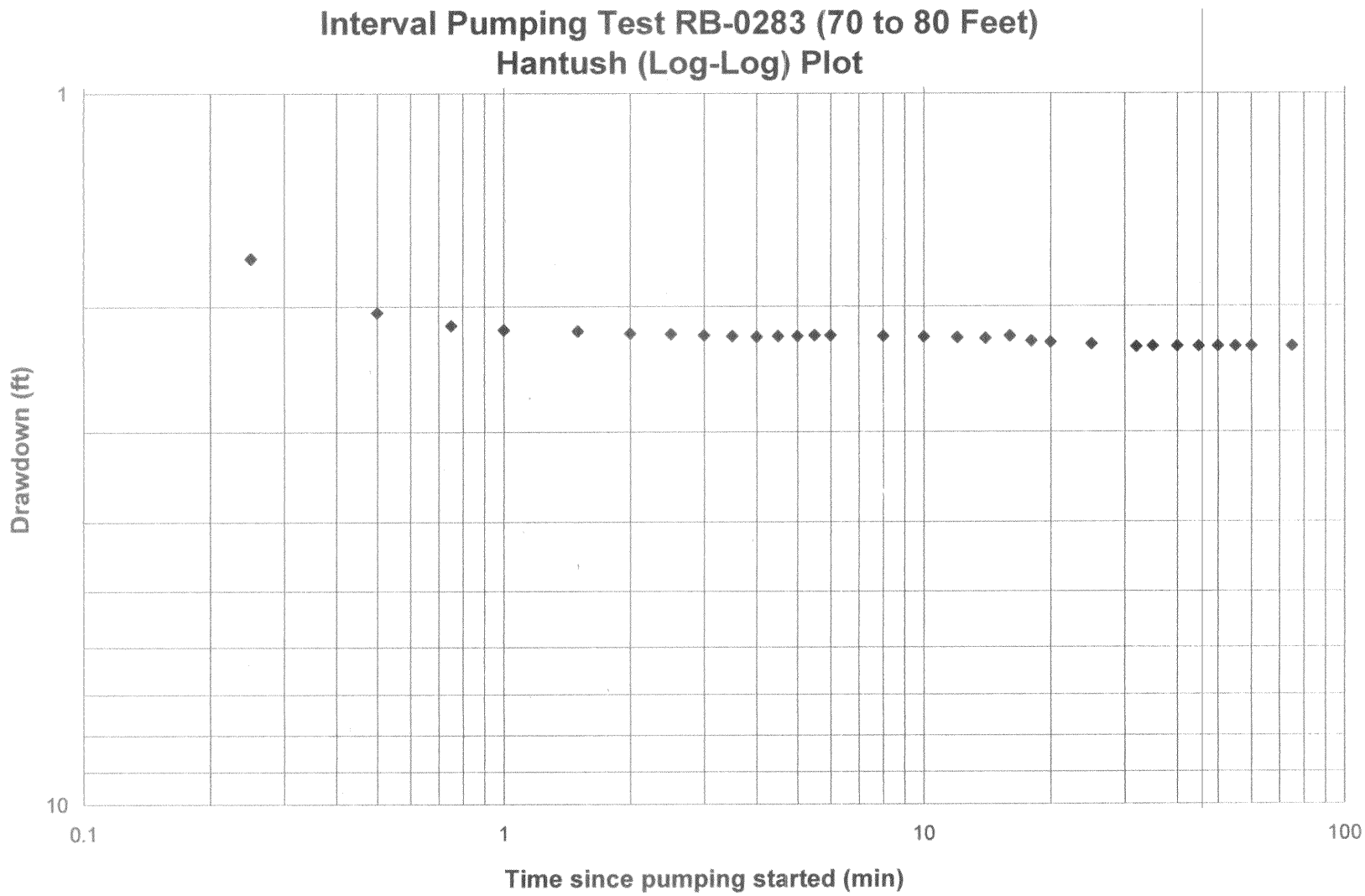
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0283
Project No.	142004		
Client	SFWMD	**Interval Test** From	70
		To	80

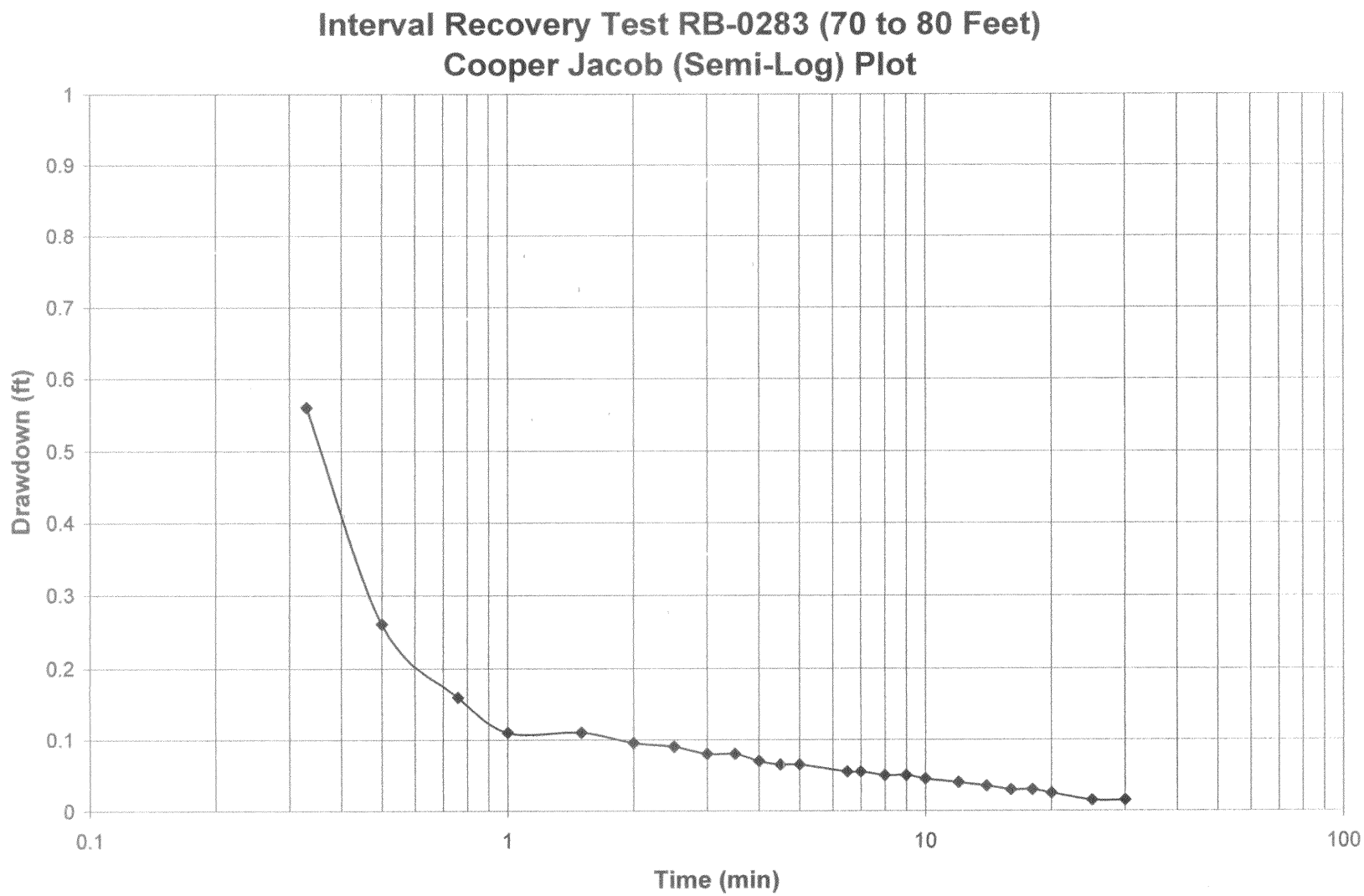
			East	North	Sheet 2 of 2
Location	Southside, centre	**Coordinates**	773034	750069	

Casing Depth	70		Reference Point	Breakout			
Open Hole Depth	80	After test	Height Above Ground Level	4.8			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.44		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
12/8/2005	13	32	0.00	9.72	2.28		18.5	Last Flow Rate
			0.16	9	1.56			
			0.26	8.2	0.76			
			0.33	8	0.56			
			0.50	7.7	0.26			
			0.76	7.6	0.16			
			1.00	7.55	0.11			
			1.50	7.55	0.11			
			2.00	7.535	0.095			
			2.50	7.53	0.09			
			3.00	7.52	0.08			
			3.50	7.52	0.08			
			4.00	7.51	0.07			
			4.50	7.505	0.065			
			5.00	7.505	0.065			
			6.50	7.495	0.055			
			7.00	7.495	0.055			
			8.00	7.49	0.05			
			9.00	7.49	0.05			
			10.00	7.485	0.045			
			12.00	7.48	0.04			
			14.00	7.475	0.035			
			16.00	7.47	0.03			
			18.00	7.47	0.03			
			20.00	7.465	0.025			
			25.00	7.455	0.015			
	14	2	30.00	7.455	0.015			


Interval Pumping Test RB-0283 (70 to 80 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.5
1
1.5
2
2.5
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0283 (70 to 80 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0283 (70 to 80 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0.1
1
10
100
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0283**
Project No.	142004		
Client	SFWMD	**Interval Test** From	110
		To	120

			East	North	Sheet1 of 2
Location	Southside, centre	**Coordinates**	773034	750069	

Casing Depth	110		Reference Point	Breakout			
Open Hole Depth	115	After test 113	Height Above Ground Level	4.66			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.58		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
08/13/2005	9	15	0.00	7.58	0		0	
			0.25	9.5	1.92			
			0.50	10.55	2.97			
			0.75	10.9	3.32			
			1.00	11.04	3.46			
			1.50	11.145	3.565			
			2.00	11.17	3.59			
			2.50	11.195	3.615			
			3.00	11.205	3.625			
			3.50	11.21	3.63			
			4.00	11.22	3.64			
			4.50	11.235	3.655			
			5.00	11.255	3.675			
			5.50	11.255	3.675			
			6.00	11.26	3.68			
			8.00	11.27	3.69			
			10.00	11.27	3.69			Check Flow Rate
			12.00	11.295	3.715			
			14.00	11.345	3.765		19	
			16.00	11.37	3.79			
			18.00	11.385	3.805			
			20.00	11.38	3.8			Check Flow Rate
			25.00	11.38	3.8		19	
			30.00	11.38	3.8			Check Flow Rate
			35.00	11.375	3.795			pH=7.65, 24.8°C,EC=2.69 milliS
			40.00	11.36	3.78			
			45.00	11.355	3.775			
			50.00	11.35	3.77			
			55.00	11.345	3.765			
			60.00	11.345	3.765		19.5	Check Flow Rate
			65.00	11.345	3.765			pH=7.44, 24.9°C,EC=2.68 milliS
	10	25	70.00	11.345	3.765			Solution reading
							EC	1500 1527
							pH	4 4.16
							pH	7 6.94

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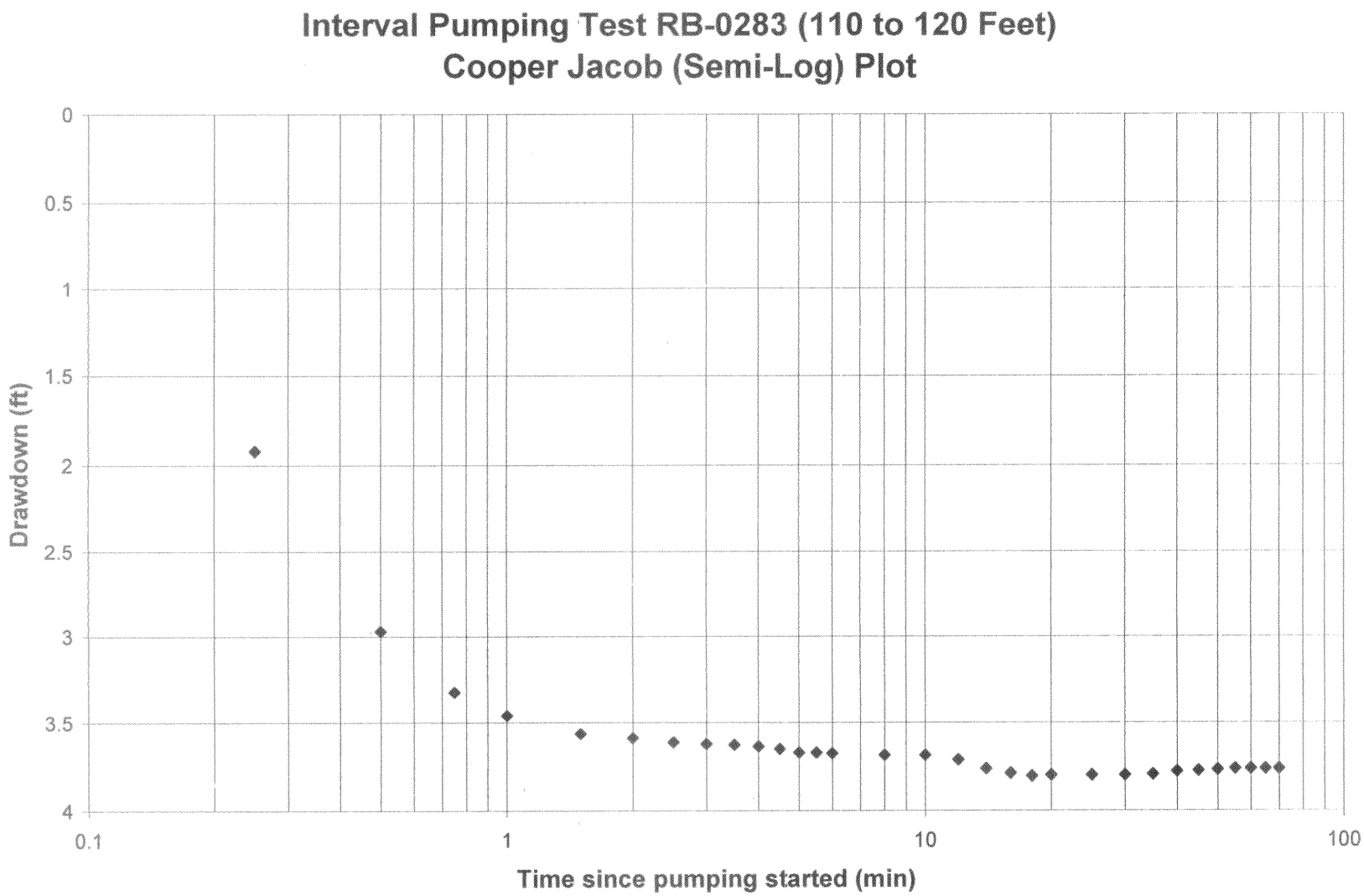
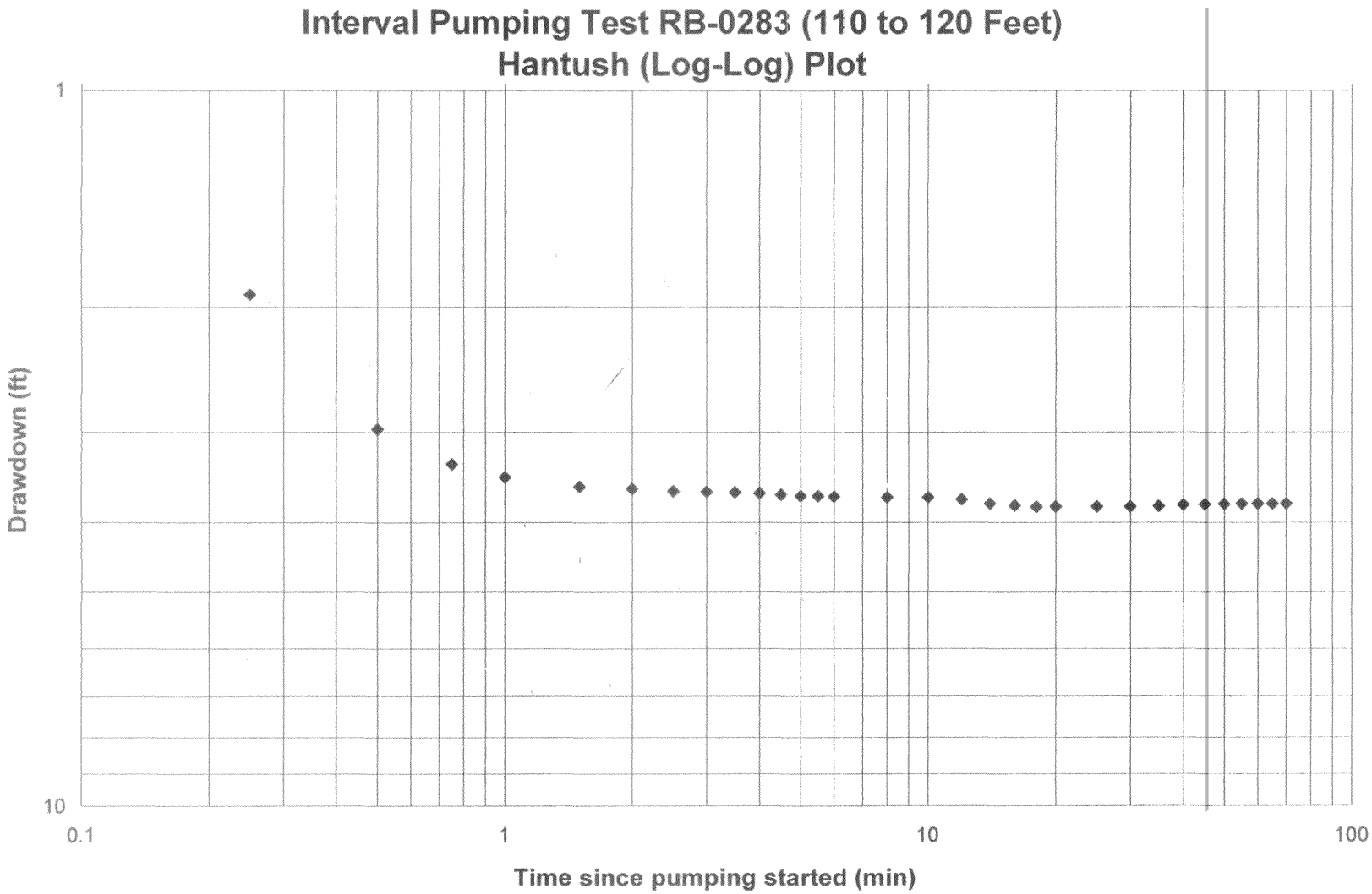
Project	Everglades AA Reservoir A-1	Pumping Test Well	RB-0283
Project No.	142004		
Client	SFWMD	Interval Test From	110
		To	120

			East	North	Sheet 2 of 2
Location	Southside, centre	Coordinates	773034	750069	

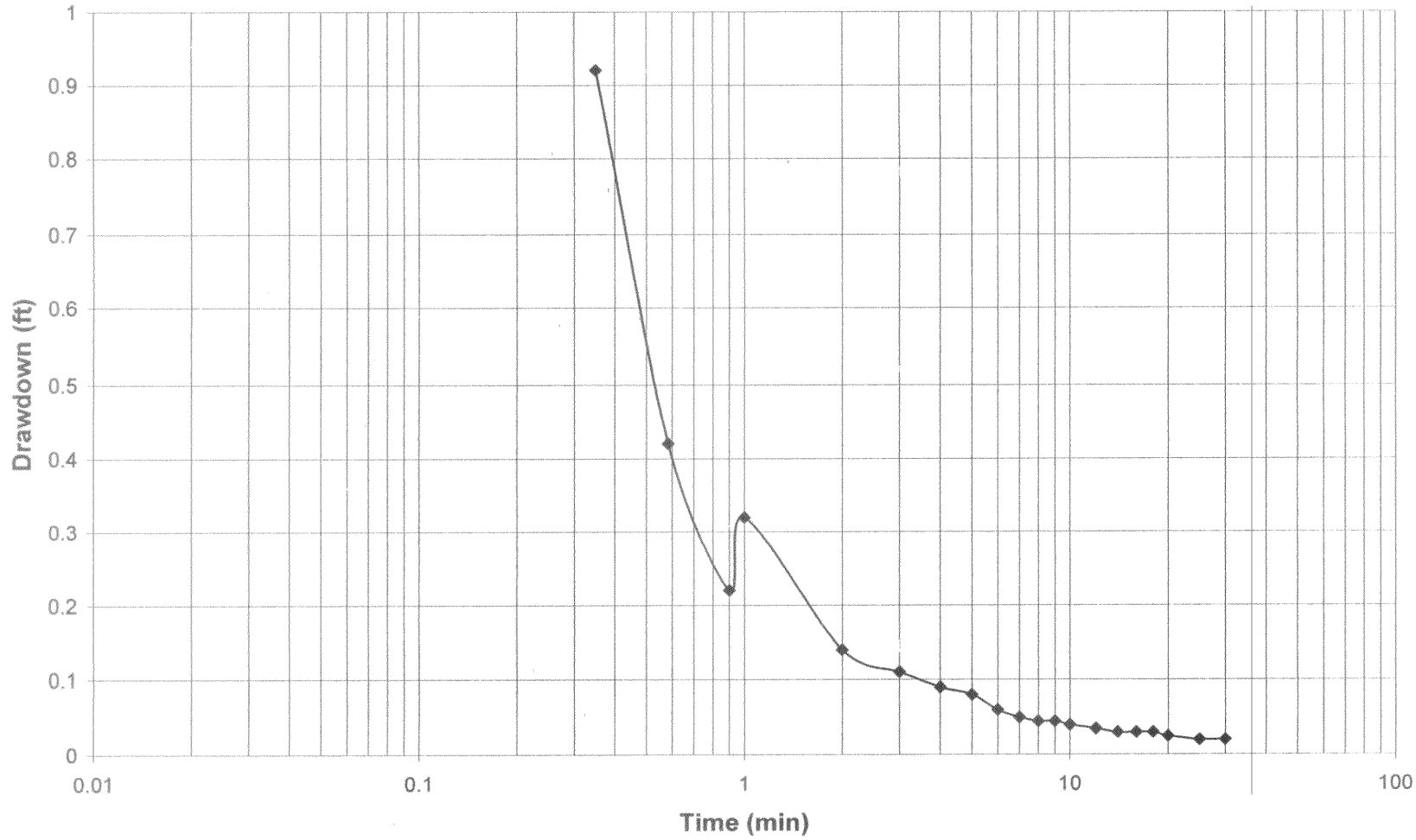
Casing Depth	110	Reference Point	Breakout				
Open Hole Depth	115 After test 113	Height Above Ground Level	4.66				
Screen Depth							
Pump Setting Depth	30	Pump Details	Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.58		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
08/13/2005	10	25	0.00	11.345	3.765		19.5	Last Flow Rate
			0.05	11	3.42			
			0.13	10	2.42			
			0.35	8.5	0.92			
			0.58	8	0.42			
			0.90	7.8	0.22			
			1.00	7.9	0.32			
			1.50	7.74	0.16			
			2.00	7.72	0.14			
			2.50	7.7	0.12			
			3.00	7.69	0.11			
			3.50	7.68	0.1			
			4.00	7.67	0.09			
			4.50	7.66	0.08			
			5.00	7.66	0.08			
			7.00	7.63	0.05			
			8.00	7.625	0.045			
			9.00	7.625	0.045			
			10.00	7.62	0.04			
			12.00	7.615	0.035			
			14.00	7.61	0.03			
			16.00	7.61	0.03			
			18.00	7.61	0.03			
			20.00	7.605	0.025			
			25.00	7.6	0.02			
	10	55	30.00	7.6	0.02			


Interval Pumping Test RB-0283 (110 to 120 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.5
1
1.5
2
2.5
3
3.5
4
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0283 (110 to 120 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
Time since pumping started (min)

Interval Recovery Test RB-0283 (110 to 120 Feet)
Cooper Jacob (Semi-Log) Plot



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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0283**
Project No.	142004		
Client	SFWMD	**Interval Test** From	150
		To	160

			East	North	Sheet1 of 2
Location	Southside, centre	**Coordinates**	773034	750069	

Casing Depth	150		Reference Point	Breakout			
Open Hole Depth	160	After test 160	Height Above Ground Level	4.66			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.67		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
08/13/2005	13	15	0.00	7.67	0		0	
			0.25	9.45	1.78			
			0.50	9.95	2.28			
			0.75	10.08	2.41			
			1.00	10.13	2.46			
			1.50	10.16	2.49			
			2.00	10.18	2.51			
			2.50	10.185	2.515			
			3.00	10.19	2.52			
			3.50	10.2	2.53			
			4.00	10.2	2.53			
			4.50	10.21	2.54			
			5.00	10.21	2.54			
			5.50	10.22	2.55			
			6.00	10.22	2.55			
			8.00	10.23	2.56			
			10.00	10.24	2.57			Check Flow Rate
			12.00	10.245	2.575			
			14.00	10.25	2.58			
			16.00	10.25	2.58			
			18.00	10.155	2.485			
			20.00	10.26	2.59		18.5	Check Flow Rate
			25.00	10.265	2.595			pH=7.50, 25.1°C,EC=4.68 milliS
			30.00	10.265	2.595			Check Flow Rate
			35.00	10.285	2.615		18.5	pH=7.43, 24.9°C,EC=4.70milliS
			40.00	10.28	2.61			
			45.00	10.185	2.515			
			50.00	10.29	2.62			
			55.00	10.29	2.62			
			60.00	10.29	2.62		18.5	Check Flow Rate
	14.2	20	65.00	10.29	2.62			
								Solution reading
							EC	1500 1527
							pH	4 4.16
							pH	7 6.94

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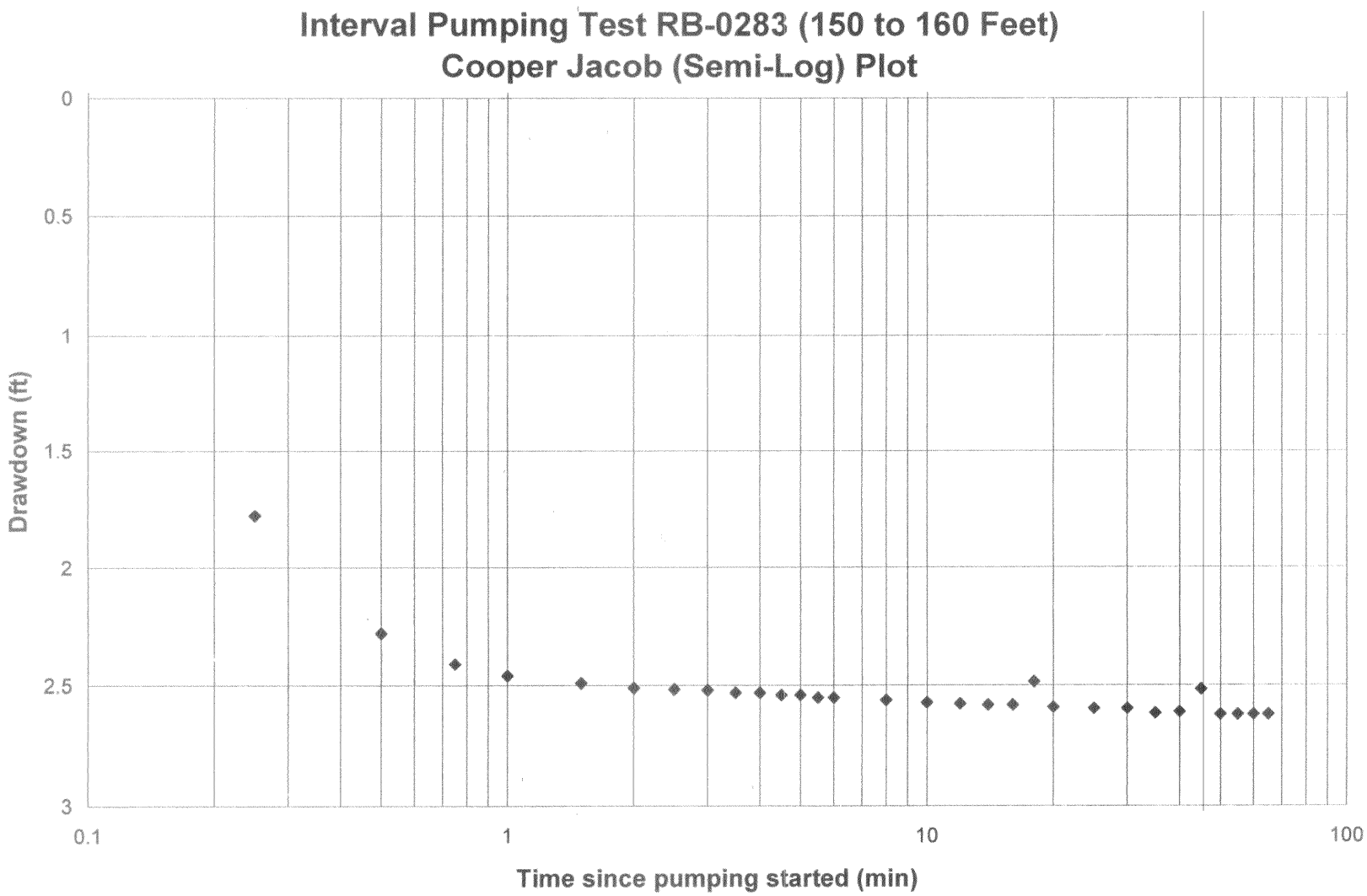
Project	Everglades AA Reservoir A-1	Pumping Test Well	RB-0283
Project No.	142004		
Client	SFWMD	Interval Test	From 150
			To 160

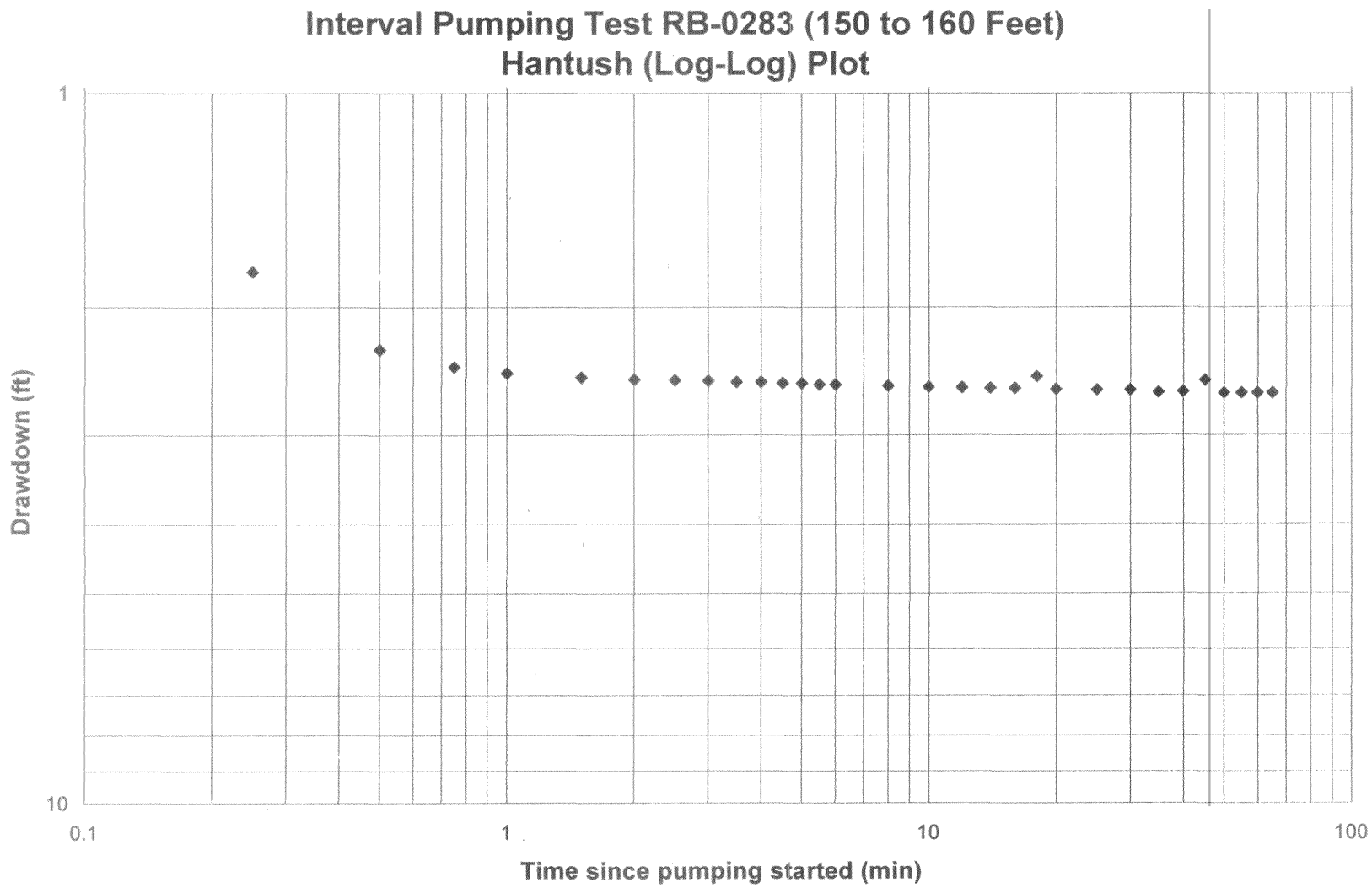
Sheet 2 of 2

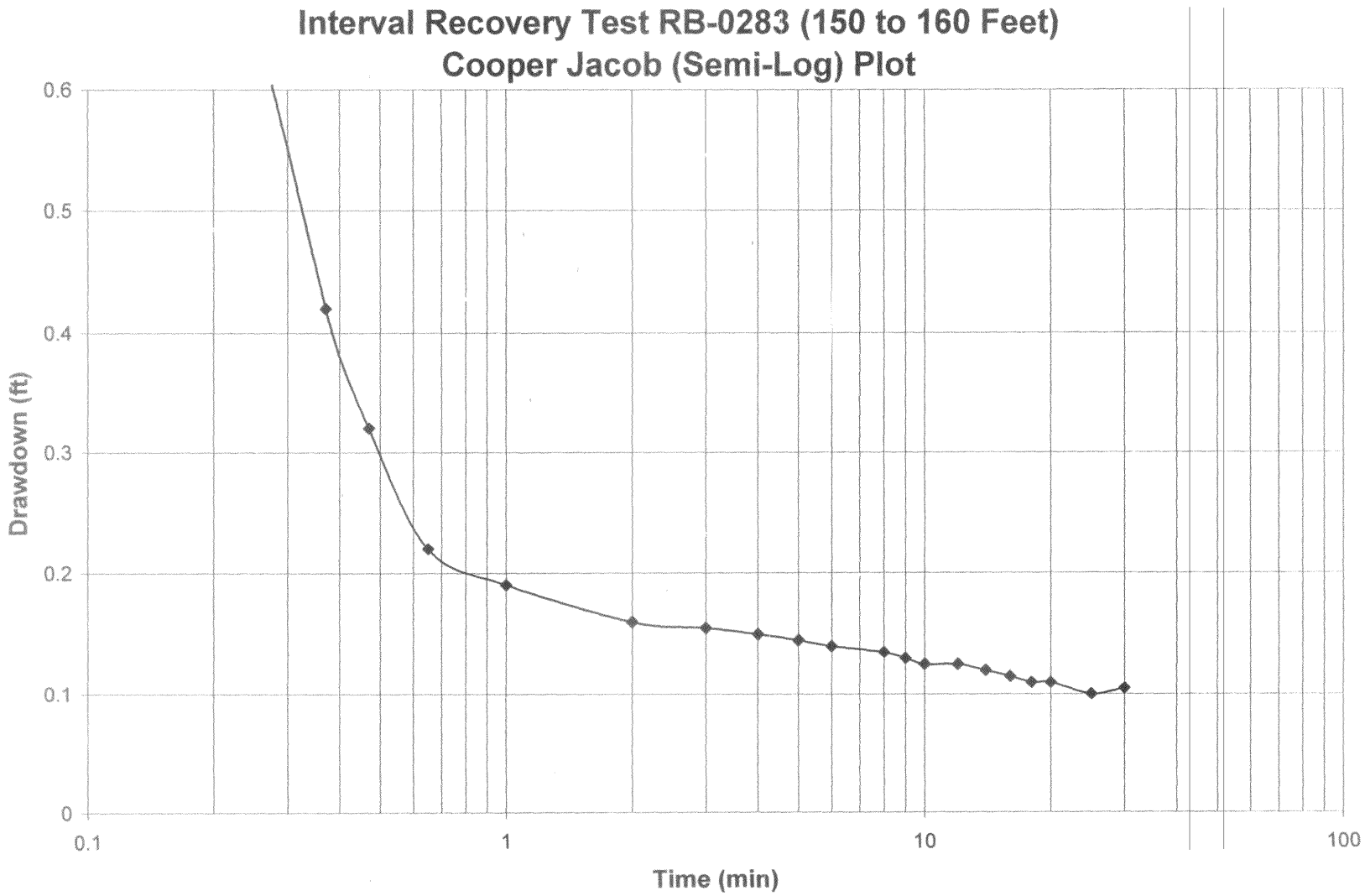
			East	North
Location	Southside, centre	Coordinates	773034	750069

Casing Depth	150		Reference Point	Breakout			
Open Hole Depth	160	After test 160	Height Above Ground Level	4.66			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter: No
				Capacity	18gpm		Volume Tank: Yes
Static Water Level	7.67			Generator		Water Level	Transducer: No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
08/13/2005	14	20	0.00	10.29	2.62		18.5	Last Flow Rate
			0.13	9	1.33			
			0.21	8.5	0.83			
			0.36	8	0.33			
			0.46	7.9	0.23			
			0.65	7.8	0.13			
			1.00	7.77	0.1			
			1.50	7.775	0.105			
			2.00	7.74	0.07			
			2.50	7.74	0.07			
			3.00	7.735	0.065			
			3.50	7.735	0.065			
			4.00	7.73	0.06			
			4.50	7.725	0.055			
			5.00	7.72	0.05			
			6.00	7.72	0.05			
			8.00	7.715	0.045			
			9.00	7.71	0.04			
			10.00	7.705	0.035			
			12.00	7.705	0.035			
			14.00	7.7	0.03			
			16.00	7.695	0.025			
			18.00	7.69	0.02			
			20.00	7.69	0.02			
			25.00	7.68	0.01			
	14	50	30.00	7.685	0.015			


Interval Pumping Test RB-0283 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.5
1
1.5
2
2.5
3
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0283 (150 to 160 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0283 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.6
0.5
0.4
0.3
0.2
0.1
0
0.1
1
10
100
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0284
Project No.	142004		
Client	SFWMD	**Interval Test** From	40
		To	50

			East	North	Sheet1 of 2
Location	Westside, centre	**Coordinates**	758050	764456	

Casing Depth	40		Reference Point	Breakout			
Open Hole Depth	46	After test 46	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.62		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
9/8/2005	13	15	0.00		0		0	
			0.33	7.72	0.1			
			0.56	7.73	0.11			
			0.83	7.73	0.11			
			1.00	7.73	0.11			
			1.50	7.73	0.11			
			2.00	7.73	0.11			
			2.50	7.73	0.11			
			3.00	7.725	0.105			
			3.50	7.725	0.105			
			4.00	7.725	0.105			
			4.50	7.725	0.105			
			5.00	7.725	0.105			
			5.50	7.72	0.1			
			6.00	7.725	0.105			
			8.00	7.725	0.105		19	2 minutes for 38 gallons
			10.00	7.72	0.1			Check Flow Rate
			12.00	7.72	0.1			
			14.00	7.73	0.11			
			16.00	7.72	0.1			
			18.00	7.72	0.1			pH=6.6, 25.4°C,EC=653 microS
			20.00	7.72	0.1			Check Flow Rate
			25.00	7.725	0.105			pH=7.3, 24.9°C,EC=644 microS
	13	45	30.00	7.725	0.105			Check Flow Rate
							18.5	2 minutes for 37 gallons
								Check Flow Rate
								Solution reading
							EC	1500 1527
							pH	4 4.16
							pH	7 6.94

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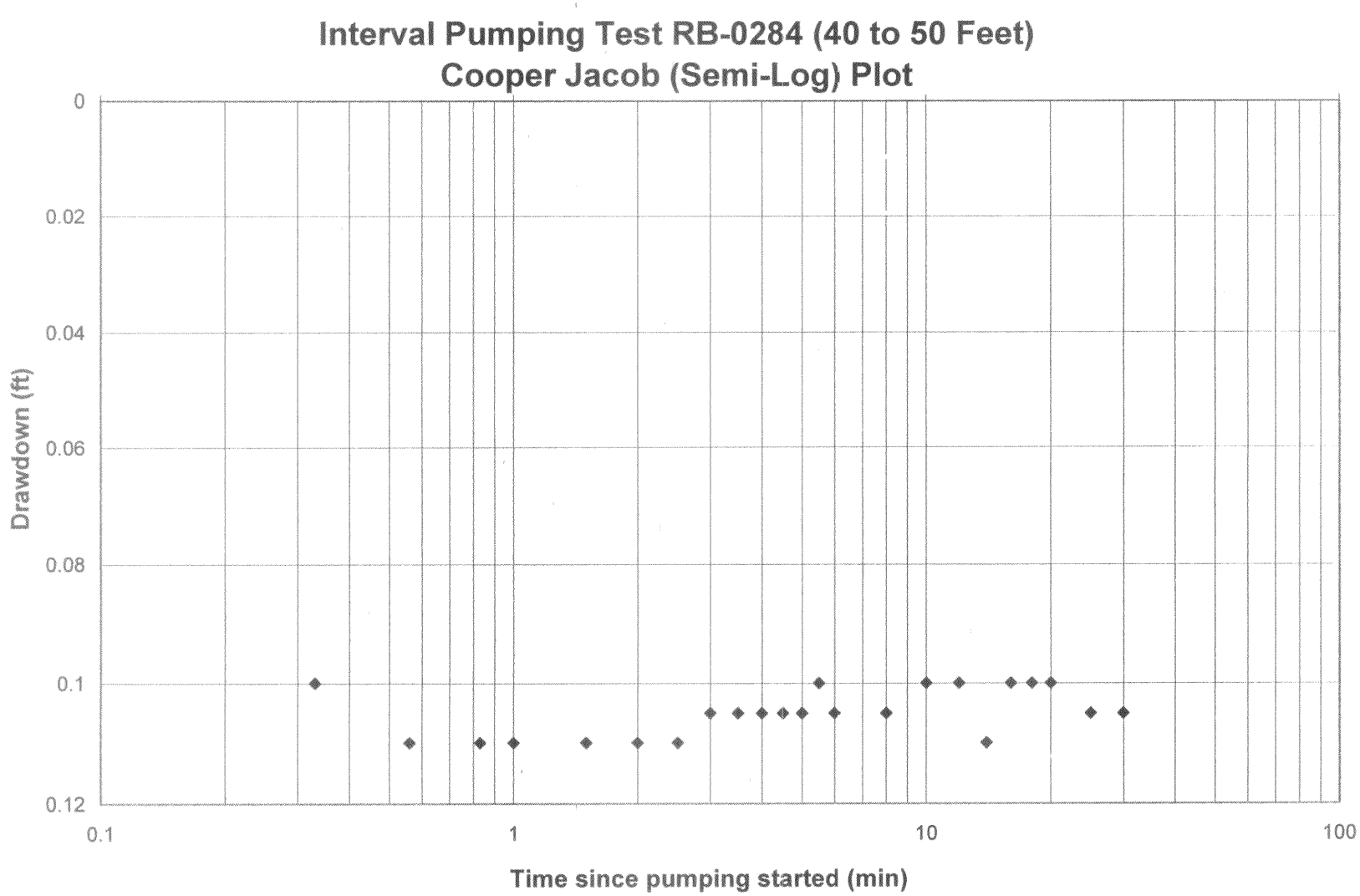
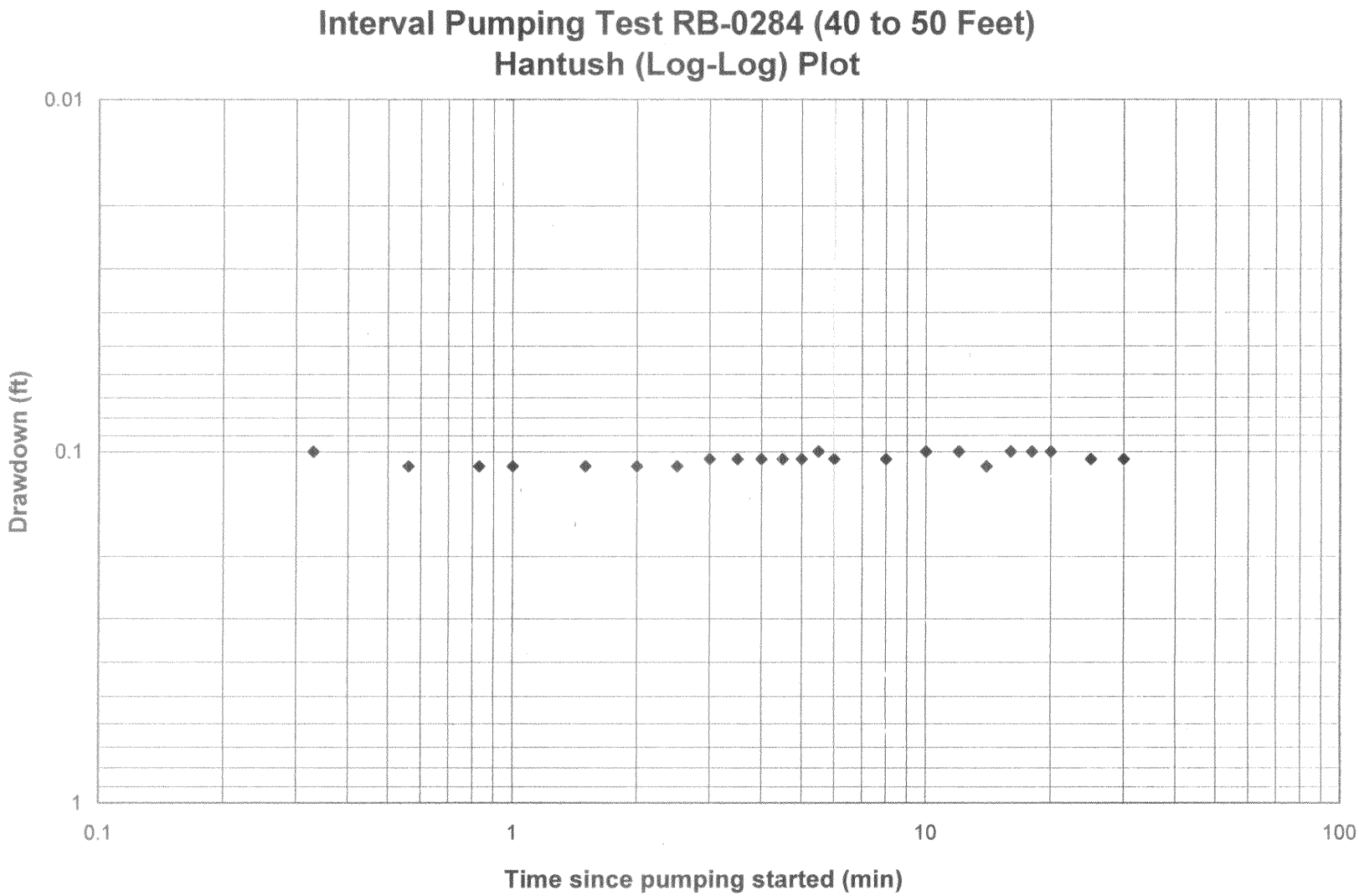
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0284
Project No.	142004		
Client	SFWMD	**Interval Test** From	40
		To	50

			East	North	Sheet 2 of 2
Location	Westside, centre	**Coordinates**	758050	764456	

Casing Depth	40		Reference Point	Breakout			
Open Hole Depth	46	After test 46	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.62		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
9/8/2005	13	45	0.00	7.725	0.125		18.5	Last Flow Rate
			0.10	7.6	0			
			0.50	7.6	0			
			1.00	7.6	0			
			1.50	7.6	0			
			2.00	7.6	0			
			2.50	7.6	0			
			3.00	7.6	0			
			3.50	7.6	0			
			4.00	7.6	0			
			4.50	7.6	0			
			5.00	7.6	0			
			6.00	7.6	0			
			7.00	7.6	0			
			8.00	7.6	0			
			9.00	7.6	0			
			10.00	7.6	0			


Interval Pumping Test RB-0284 (40 to 50 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.02
0.04
0.06
0.08
0.1
0.12
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0284 (40 to 50 Feet)
Hantush (Log-Log) Plot
0.01
0.1
1
Drawdown (ft)
0.1
1
10
100
Time since pumping started (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0284**
Project No.	142004		
Client	SFWMD	**Interval Test** From	70
		To	80

			East	North	Sheet1 of 2
Location	Westside, centre	**Coordinates**	758050	764456	

Casing Depth	70		Reference Point	Breakout			
Open Hole Depth	77	After test 77	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.45		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
9/8/2005	15	15	0.00	7.45	0		0	
			0.25	8.04	0.59			
			0.50	8.06	0.61			
			0.75	8.07	0.62			
			1.00	8.07	0.62			
			1.50	8.075	0.625			
			2.00	8.08	0.63			
			2.50	8.08	0.63			
			3.00	8.085	0.635			
			3.50	8.085	0.635			
			4.00	8.085	0.635			
			4.50	8.085	0.635			
			5.00	8.085	0.635			
			5.50	8.085	0.635			
			6.00	8.09	0.64			
			8.00	8.09	0.64		18.75	2 minutes for 37.5 gallons
			10.00	8.09	0.64			Check Flow Rate
			12.00	8.09	0.64			
			14.00	8.095	0.645			pH=7.28, 25.7°C,EC=993 microS
			16.00					
			18.00	8.095	0.645		18.5	2 minutes for 37 gallons
			21.00	8.105	0.655			Check Flow Rate
			25.00	8.1	0.65			pH=7.29, 25.8°C,EC=999 microS
			30.00	8.1	0.65			Check Flow Rate
			35.00	8.105	0.655			
			40.00	8.105	0.655			
			45.00	8.11	0.66			
			50.00	8.11	0.66			pH=7.41, 25.7°C,EC=1017 microS
			55.00	8.11	0.66			2 minutes for 37 gallons
	16	15	60.00	8.11	0.66			Check Flow Rate
								Solution reading
							EC	1500 1527
							pH	4 4.16
							pH	7 6.94

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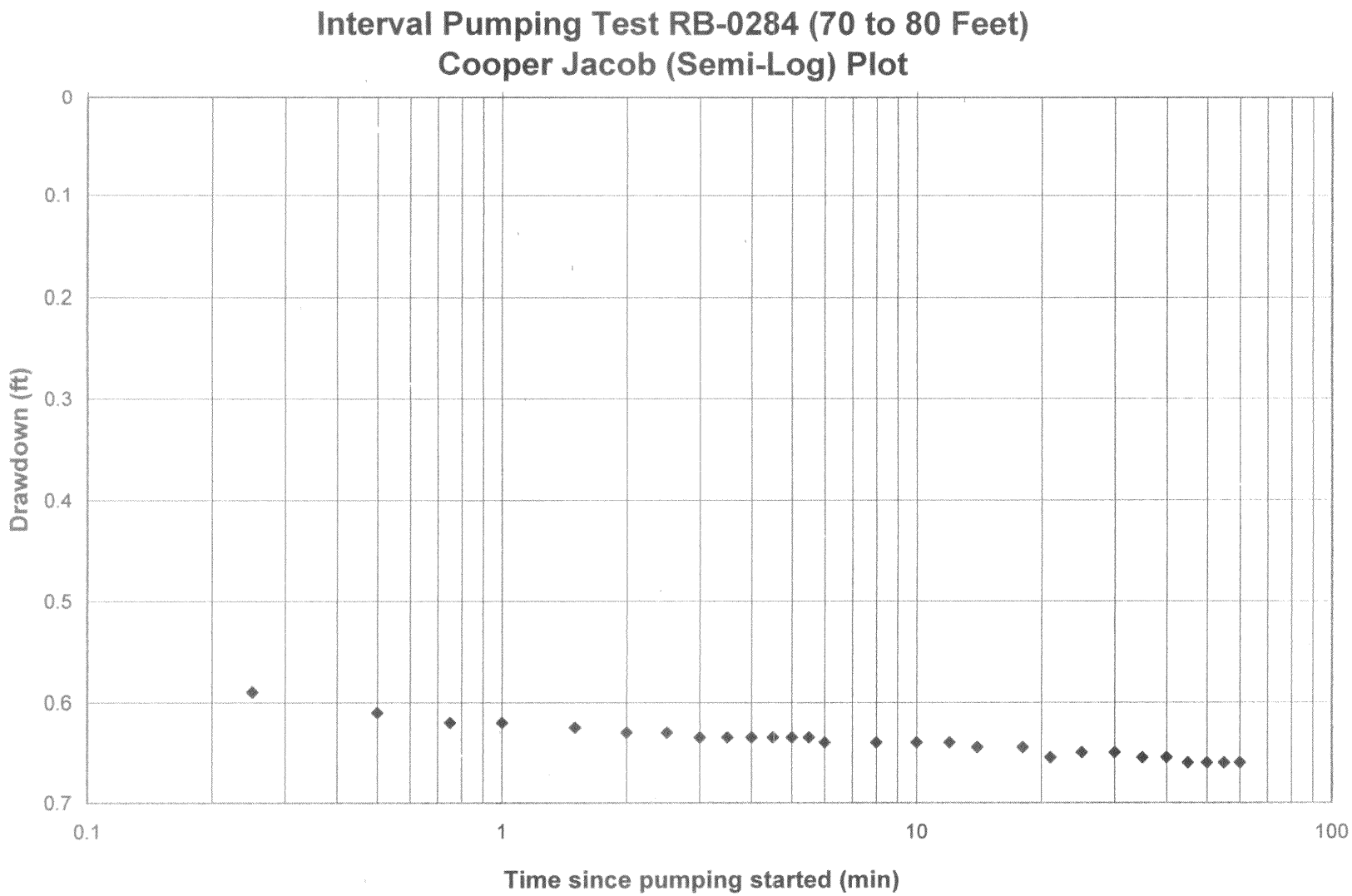
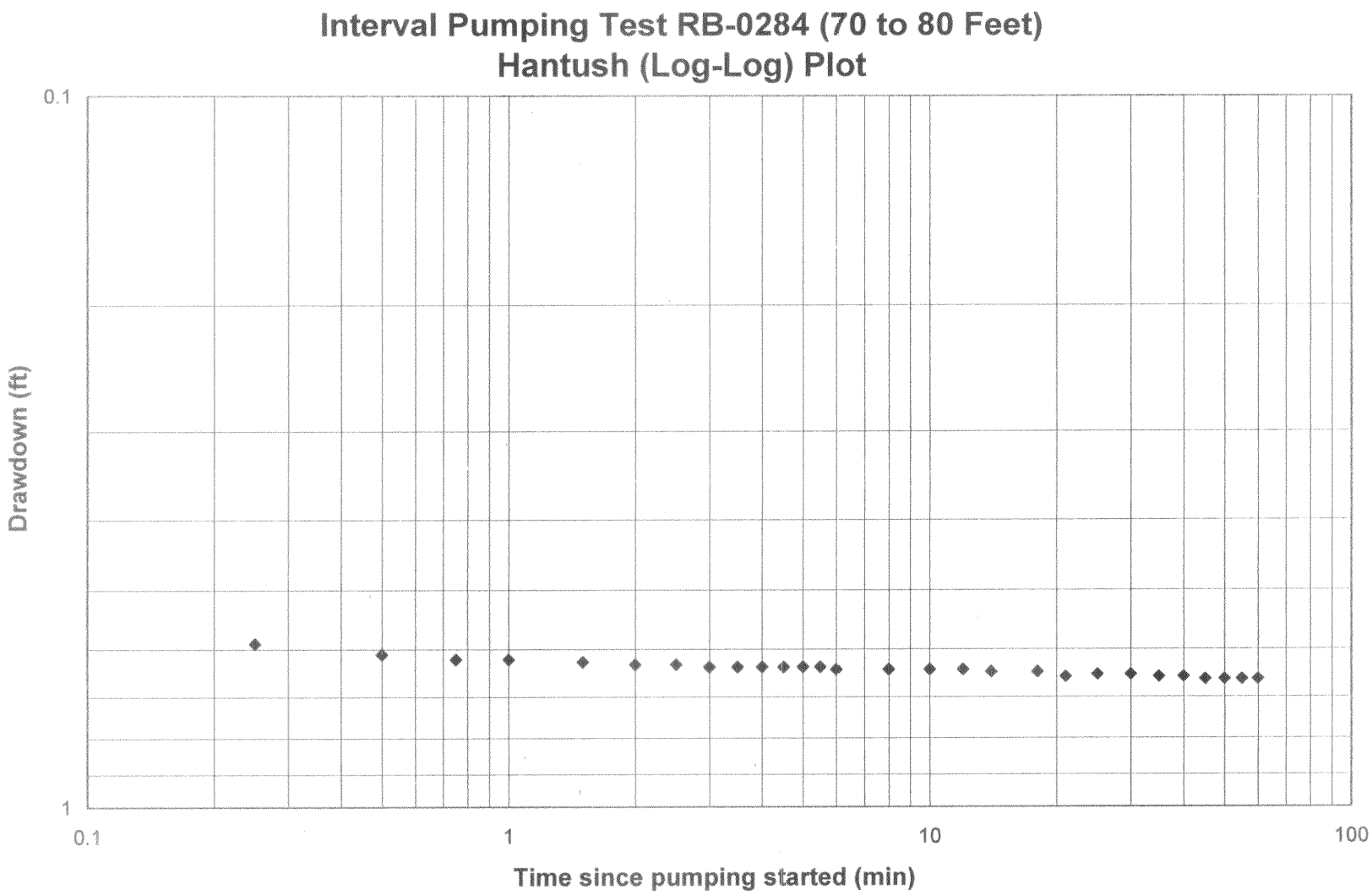
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0284
Project No.	142004		
Client	SFWMD	**Interval Test** From	70
		To	80

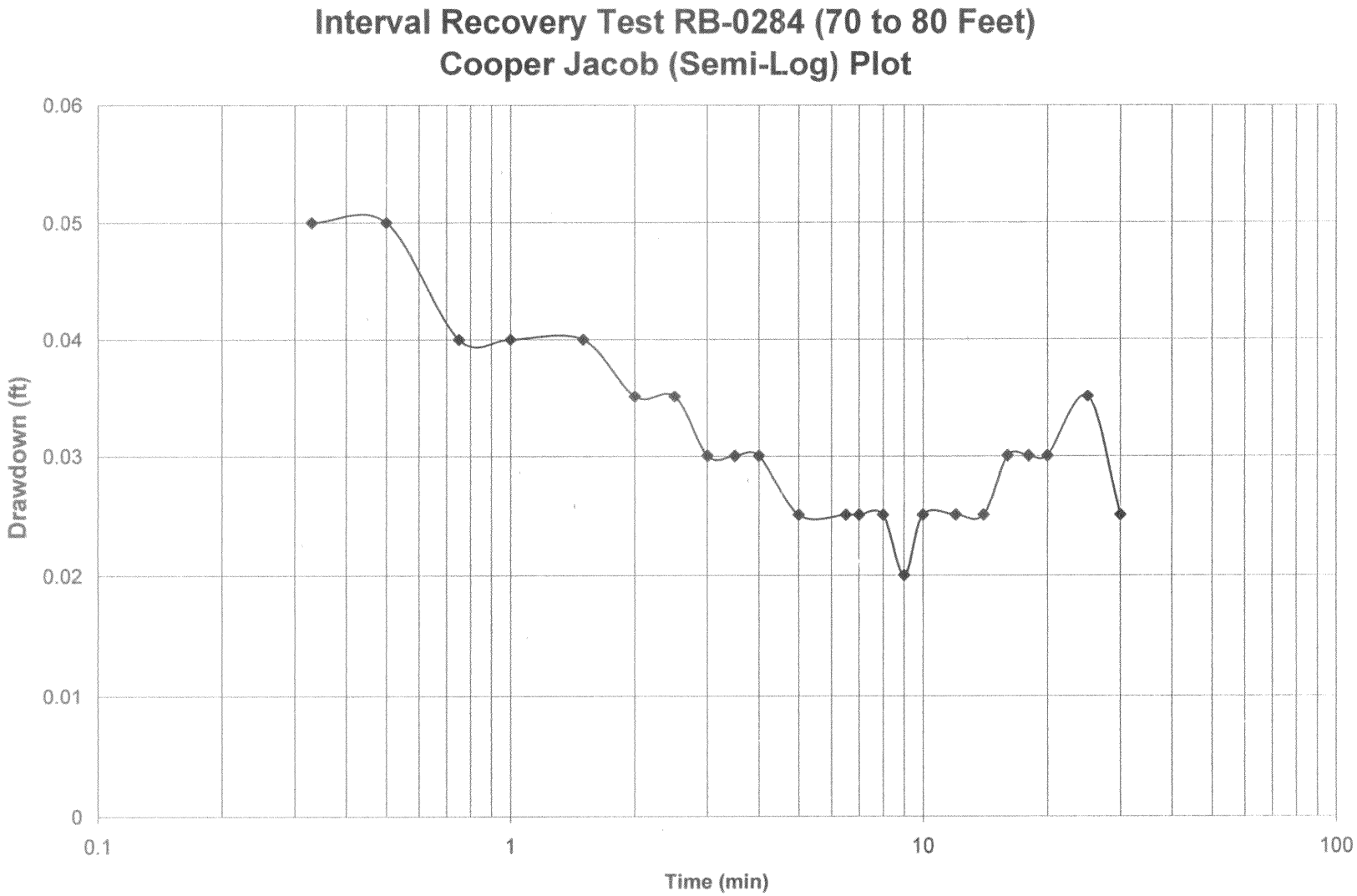
			East	North	Sheet 2 of 2
Location	Westside, centre	**Coordinates**	758050	764456	

Casing Depth	70		Reference Point	Breakout			
Open Hole Depth	77	After test 77	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.45		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
9/8/2005	16	15	0.00	8.11	0.66		18.5	Last Flow Rate
			0.33	7.5	0.05			
			0.50	7.5	0.05			
			0.75	7.49	0.04			
			1.00	7.49	0.04			
			1.50	7.49	0.04			
			2.00	7.485	0.035			
			2.50	7.485	0.035			
			3.00	7.48	0.03			
			3.50	7.48	0.03			
			4.00	7.48	0.03			
			4.50					
			5.00	7.475	0.025			
			6.50	7.475	0.025			
			7.00	7.475	0.025			
			8.00	7.475	0.025			
			9.00	7.47	0.02			
			10.00	7.475	0.025			
			12.00	7.475	0.025			
			14.00	7.475	0.025			
			16.00	7.48	0.03			
			18.00	7.48	0.03			
			20.00	7.48	0.03			
			25.00	7.485	0.035			
	16	45	30.00	7.475	0.025			


Interval Pumping Test RB-0284 (70 to 80 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0284 (70 to 80 Feet)
Hantush (Log-Log) Plot
0.1
1
Drawdown (ft)
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0284 (70 to 80 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.06
0.05
0.04
0.03
0.02
0.01
0
0.1
1
10
100
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0284**
Project No.	142004		
Client	SFWMD	**Interval Test** From	110
		To	120

			East	North	Sheet1 of 2
Location	Westside, centre	**Coordinates**	758050	764456	

Casing Depth	110		Reference Point	Breakout			
Open Hole Depth	118.5	After test 118	Height Above Ground Level	4.8			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.655		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
10/8/2005	8	35	0.00	7.655	0		0	
			0.25	9.13	1.475			
			0.50	9.3	1.645			
			0.75	9.33	1.675			
			1.00	9.34	1.685			
			1.50	9.35	1.695			
			2.00	9.36	1.705			
			2.50	9.36	1.705			
			3.00	9.365	1.71			
			3.50	9.365	1.71			
			4.00	9.37	1.715			
			4.50	9.37	1.715			
			5.00	9.375	1.72			
			5.50	9.375	1.72			
			6.00	9.375	1.72			
			8.00	9.38	1.725		18.5	2 minutes for 37 gallons
			10.00	9.385	1.73			Check Flow Rate
			12.00	9.38	1.725			
			14.00	9.385	1.73			pH=7.31, 25.3°C,EC=4.66 milliS
			16.00	9.39	1.735			
			18.00	9.39	1.735			
			21.00	9.39	1.735			Check Flow Rate
			25.00	9.395	1.74			pH=7.46, 25.2°C,EC=4.70 milliS
	9	5	30.00	9.395	1.74			Check Flow Rate
							18.5	2 minutes for 37 gallons
								Check Flow Rate
								Solution reading
							EC	1500 1527
							pH	4 4.16
							pH	7 6.94

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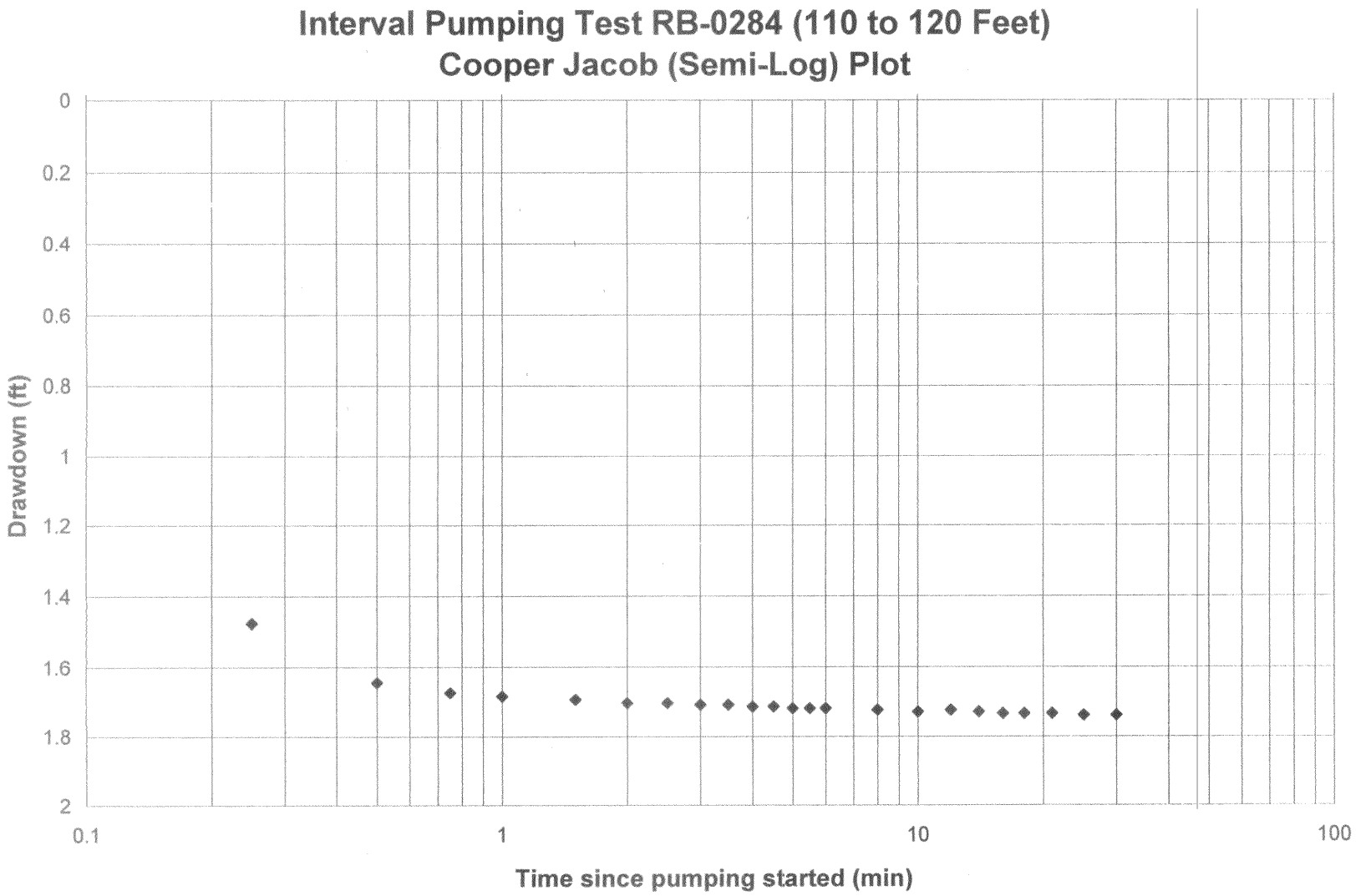
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0284
Project No.	142004		
Client	SFWMD	**Interval Test** From	110
		To	120

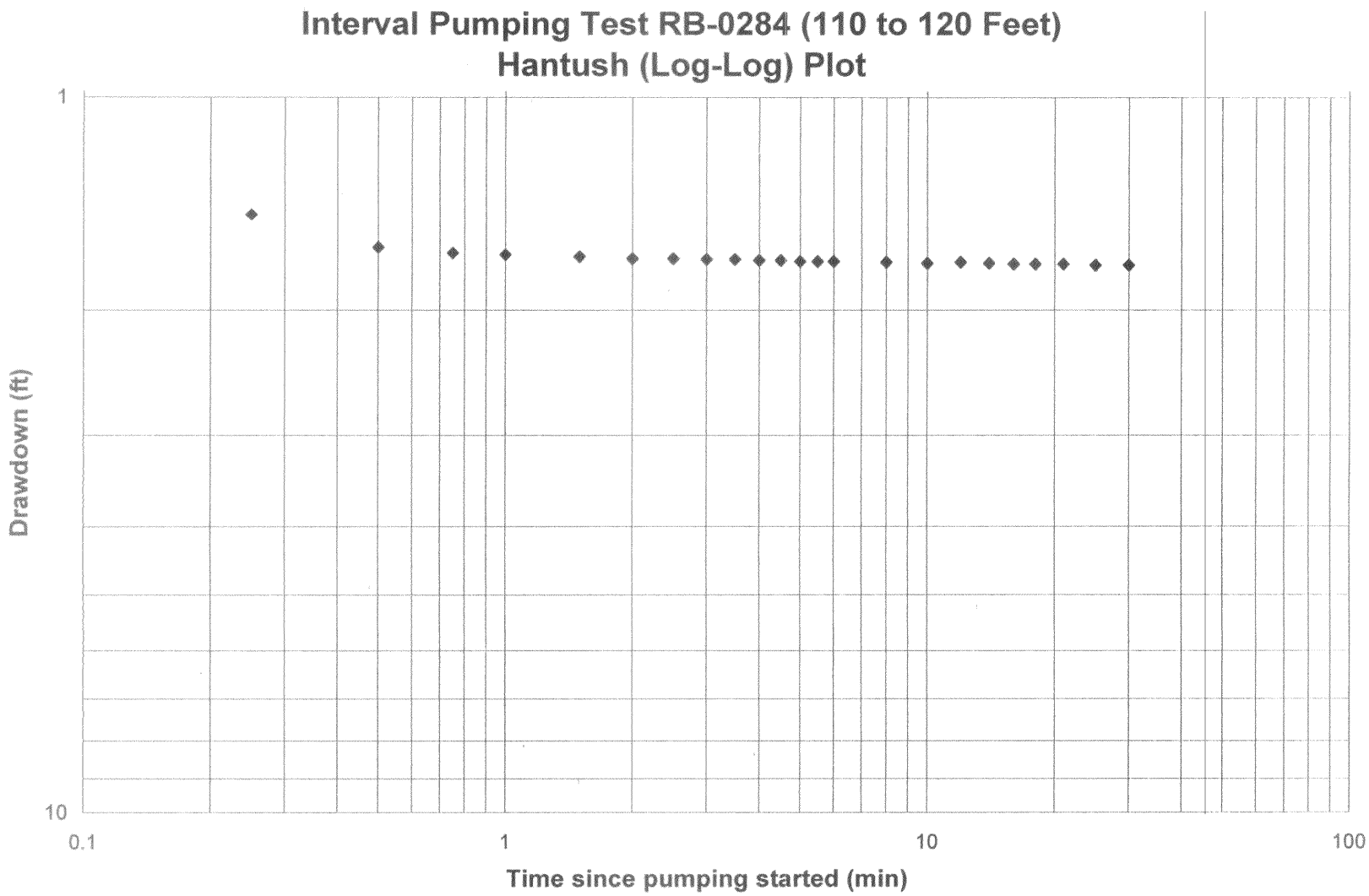
Sheet 2 of 2

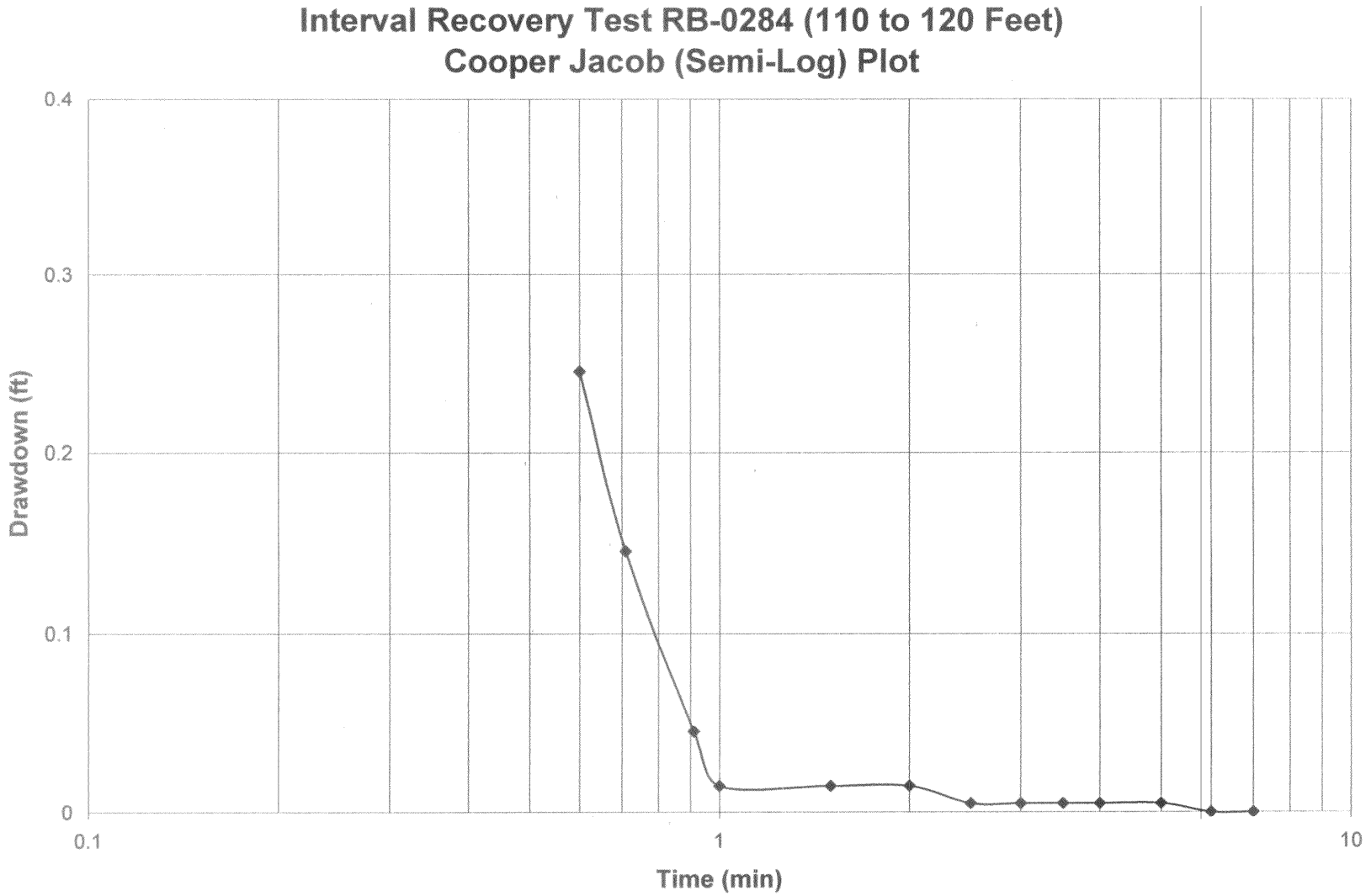
			East	North
Location	Westside, centre	**Coordinates**	758050	764456

Casing Depth	110		Reference Point	Breakout			
Open Hole Depth	118.5	After test 118	Height Above Ground Level	4.8			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.655			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
10/8/2005	9	5	0.00	9.395	1.74		18.5	Last Flow Rate
			0.53	9	1.345			
			0.60	7.9	0.245			
			0.71	7.8	0.145			
			0.91	7.7	0.045			
			1.00	7.67	0.015			
			1.50	7.67	0.015			
			2.00	7.67	0.015			
			2.50	7.66	0.005			
			3.00	7.66	0.005			
			3.50	7.66	0.005			
			4.00	7.66	0.005			
			5.00	7.66	0.005			
			6.00	7.655	0			
			7.00	7.655	0			
			8.00	7.655	0			
			9.00	7.655	0			
	9	15	10.00	7.655	0			
			12.00					
			14.00					
			16.00					
			18.00					
			20.00					
			25.00					
			30.00					


Interval Pumping Test RB-0284 (110 to 120 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0284 (110 to 120 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0284 (110 to 120 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.4
0.3
0.2
0.1
0
0.1
1
10
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0284**
Project No.	142004		
Client	SFWMD	**Interval Test** From	150
		To	160

			East	North	Sheet1 of 2
Location	Westside, centre	**Coordinates**	758050	764456	

Casing Depth	150		Reference Point	Breakout			
Open Hole Depth	160	After test 159	Height Above Ground Level	4.8			
Screen Depth							
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.79		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
10/8/2005	11	40	0.00	7.79	0		0	1hr25' development
			0.25	9.75	1.96			
			0.50	10.18	2.39			
			0.75	10.32	2.53			
			1.00	10.35	2.56			
			1.50	10.38	2.59			
			2.00	10.4	2.61			
			2.50	10.4	2.61			
			3.00	10.405	2.62			
			3.50	10.41	2.62			
			4.00	10.415	2.63			
			4.50	10.42	2.63			
			5.00	10.42	2.63			
			5.50	10.43	2.64			
			6.00	10.43	2.64			
			8.00	10.445	2.66			
			10.00	10.445	2.66			Check Flow Rate
			12.00	10.45	2.66			
			14.00	10.45	2.66		18.75	2 minutes for 37.5 gallons
			16.00	10.46	2.67			
			18.00					pH=7.32, 25.3°C,EC=7.24 milliS
			21.00	10.45	2.66			Check Flow Rate
			25.00	10.455	2.67			
			30.00	10.46	2.67			Check Flow Rate
			35.00	10.47	2.68		18.5	2 minutes for 37 gallons
			40.00	10.47	2.68			pH=7.49, 25.2°C,EC=7.26 milliS
			45.00	10.47	2.68			
			50.00	10.47	2.68			pH=7.55, 25.1°C,EC=7.29 milliS
			55.00	10.47	2.68		18.5	2 minutes for 37 gallons
	12	40	60.00	10.47	2.68			Check Flow Rate
								Solution reading
							EC	1500 1527
							pH	4 4.16
							pH	7 6.94

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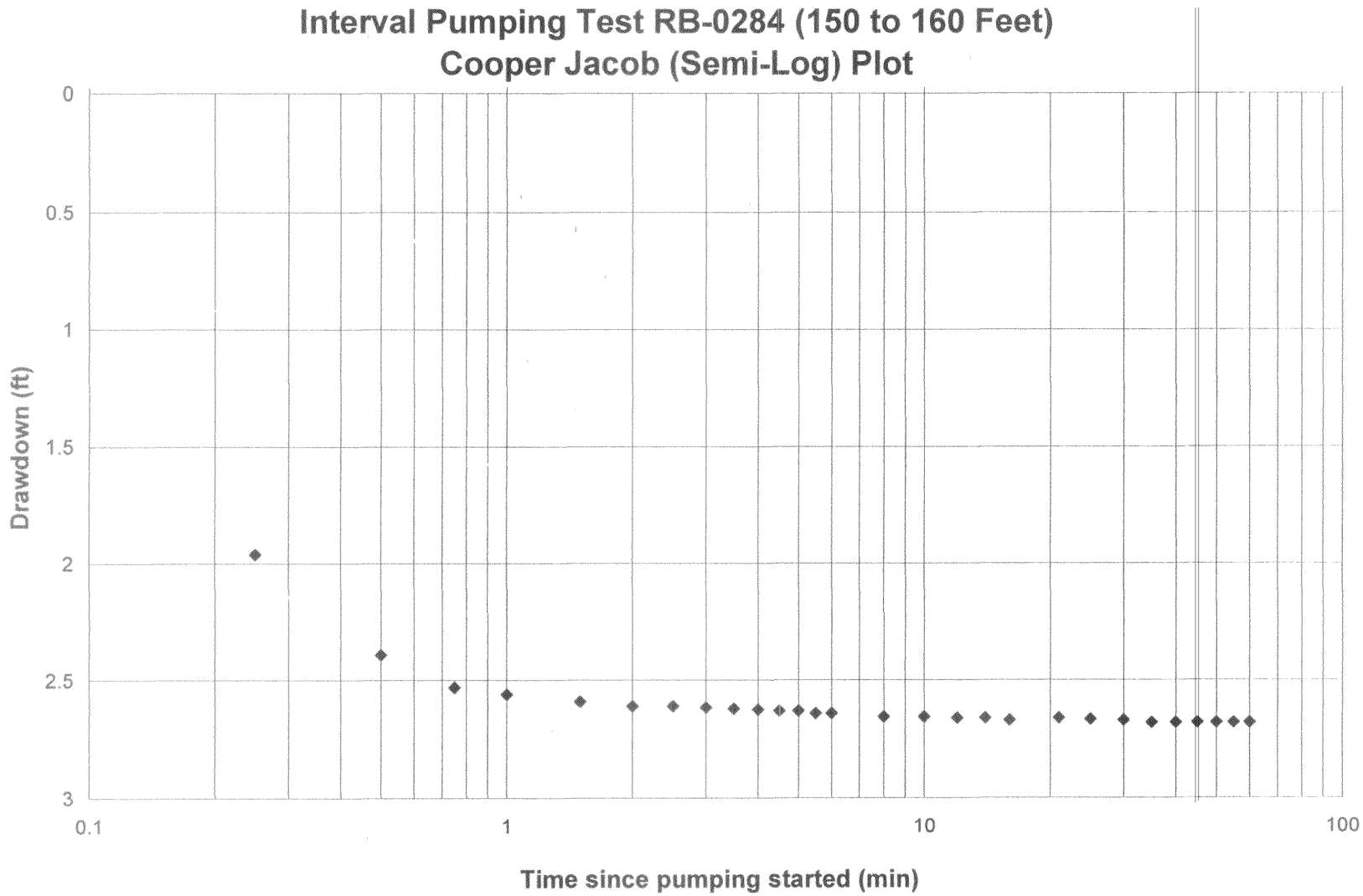
Project	Everglades AA Reservoir A-1	Pumping Test Well	RB-0284
Project No.	142004		
Client	SFWMD	Interval Test From	150
		To	160

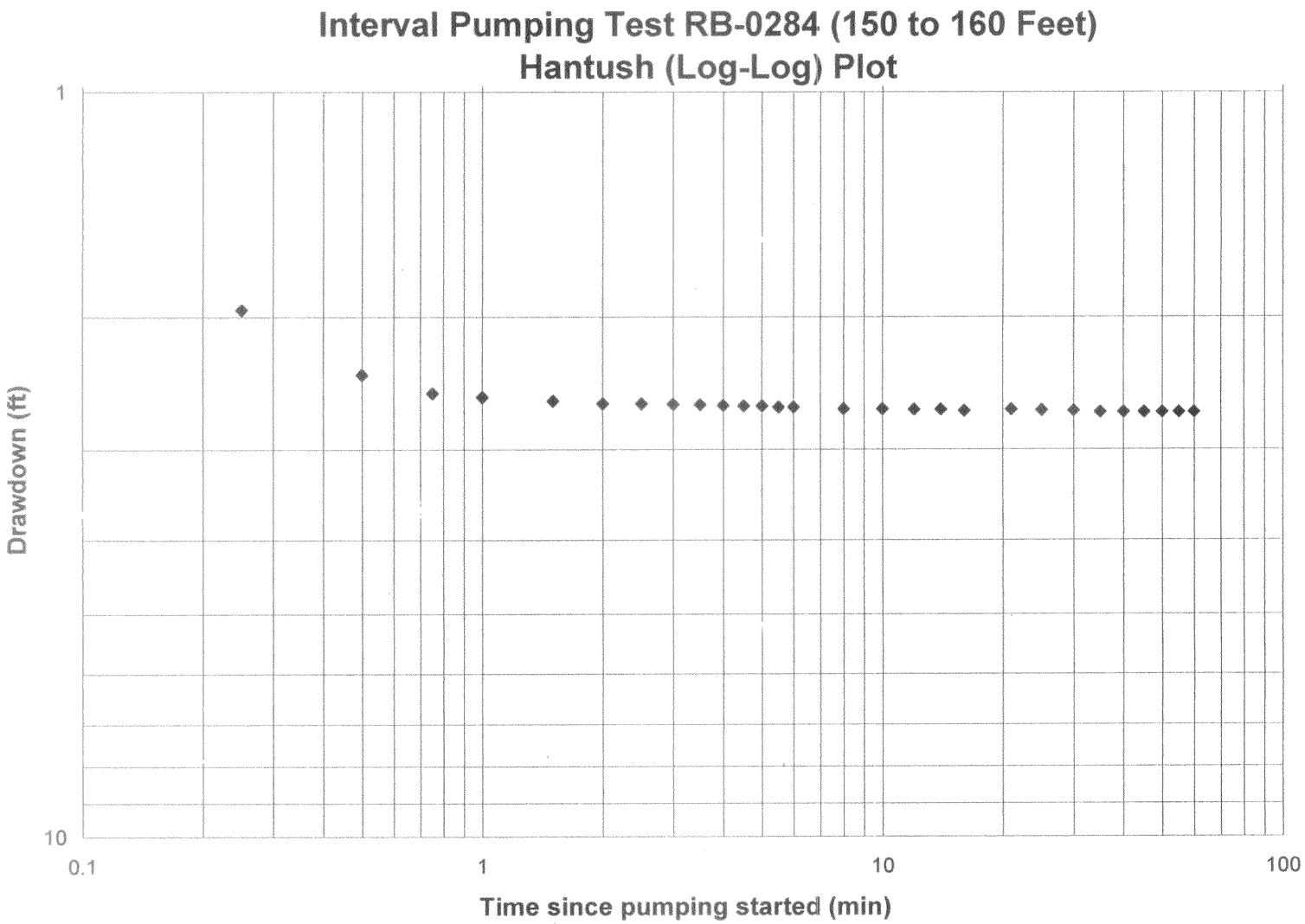
Sheet 2 of 2

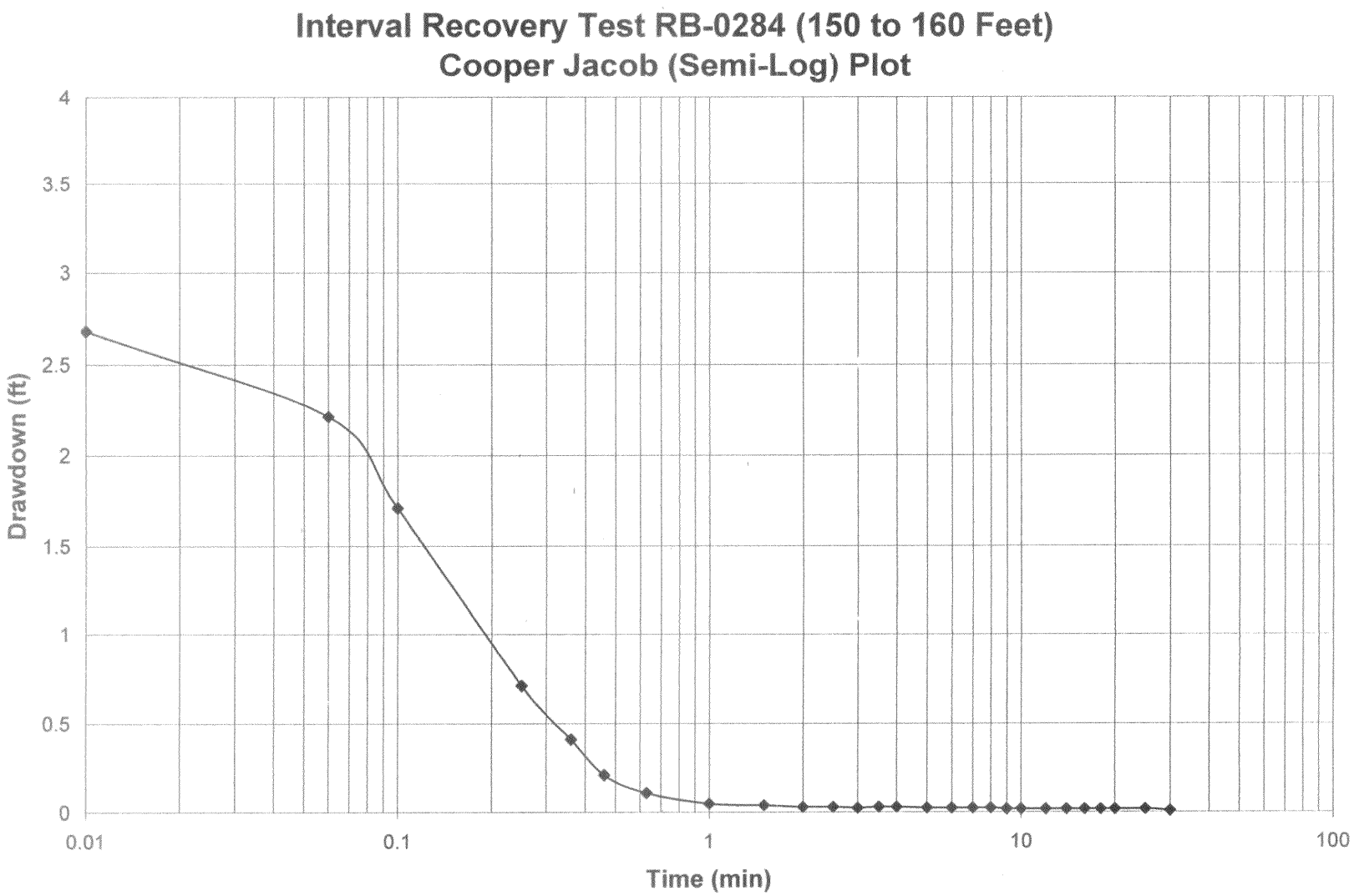
			East	North
Location	Westside, centre	Coordinates	758050	764456

Casing Depth	150		Reference Point	Breakout			
Open Hole Depth	160	After test 159	Height Above Ground Level	4.8			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	18gpm		Volume Tank	Yes
Static Water Level	7.79			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
10/8/2005	12	40	0.00	10.47	2.68		18.5	Last Flow Rate
			0.06	10	2.21			
			0.10	9.5	1.71			
			0.25	8.5	0.71			
			0.36	8.2	0.41			
			0.46	8	0.21			
			0.63	7.9	0.11			
			1.00	7.84	0.05			
			1.50	7.83	0.04			
			2.00	7.82	0.03			
			2.50	7.82	0.03			
			3.00	7.815	0.025			
			3.50	7.82	0.03			
			4.00	7.82	0.03			
			5.00	7.815	0.025			
			6.00	7.815	0.025			
			7.00	7.815	0.025			
			8.00	7.815	0.025			
			9.00	7.81	0.02			
			10.00	7.81	0.02			
			12.00	7.81	0.02			
			14.00	7.81	0.02			
			16.00	7.81	0.02			
			18.00	7.81	0.02			
			20.00	7.81	0.02			
			25.00	7.81	0.02			
	13	10	30.00	7.8	0.01			


Interval Pumping Test RB-0284 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.5
1
1.5
2
2.5
3
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0284 (150 to 160 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0284 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
4
3.5
3
2.5
2
1.5
1
0.5
0
0.01
0.1
1
10
100
Time (min)

EAA-1 Reservoir
Well: RB-0285
250' boring with Interval Testing Rig Floor Measuring Point: 4.70' above ground level.

Water Levels if Feet, measured form the Rig Floor.
Time is minutes

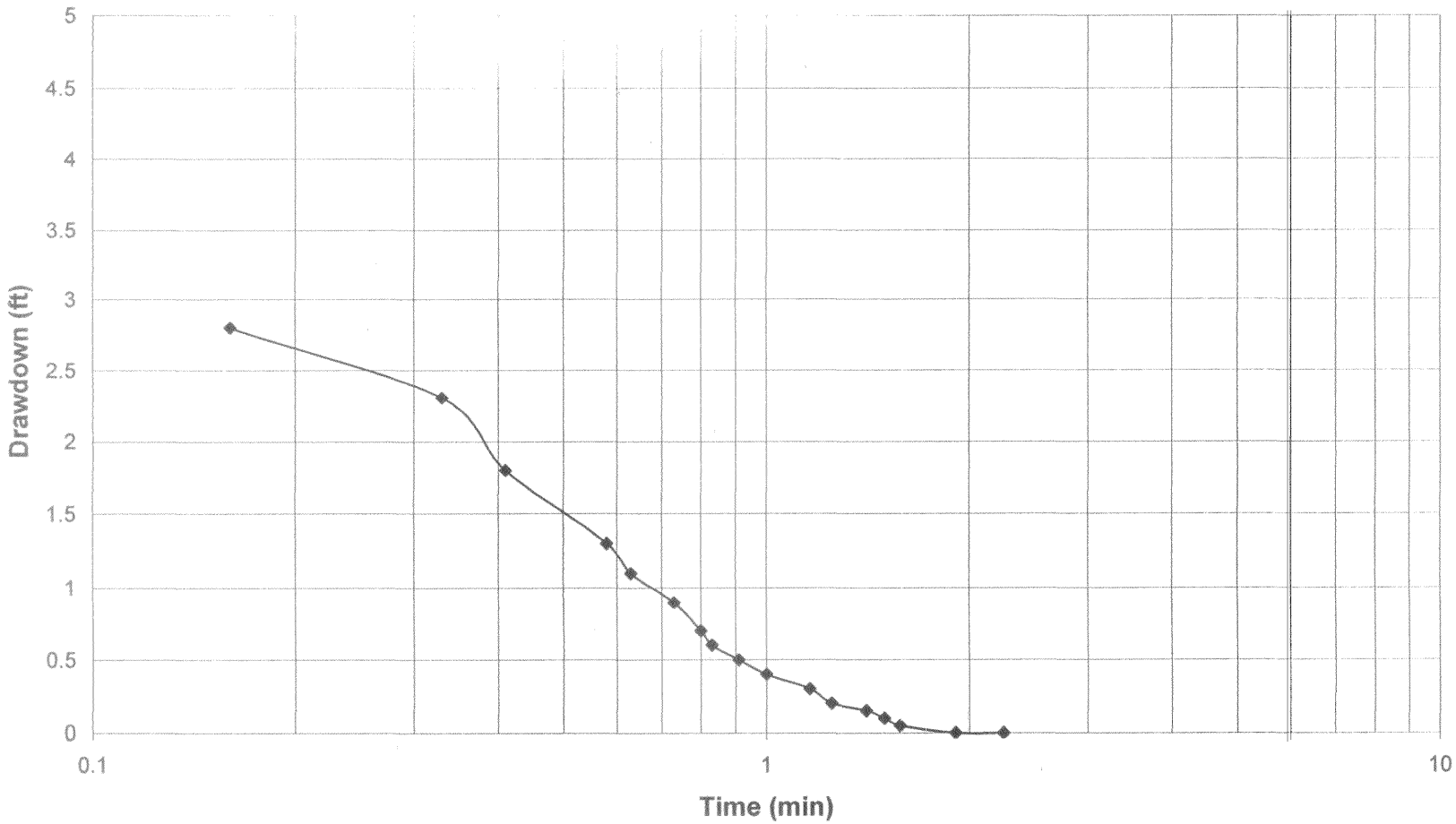
First Interval Test
40' - 50' openhole section

Static Water Level: 11.70

Flow Rate	1st Step 4.8 gpm	Drawdown	2nd Step 9.3 gpm	Drawdown	3rd Step 13.8 gpm	Drawdown	4th Step 16 gpm	Drawdown	Recovery		Recovery
Time (min.)	Water Levels	Feet	Water Levels	Feet	Water Levels	Feet	Water Levels	Feet	Time (min.)	Water Levels	Feet
0.33	13.10	1.40	14.39	2.69	16.00	4.30	16.90	5.20	0.00	17.05	5.35
0.66	13.25	1.55	14.75	3.05	16.27	4.57	16.96	5.26	0.16	14.50	2.80
1.00	13.40	1.70	14.89	3.19	16.40	4.70	17.00	5.30	0.33	14.00	2.30
1.33	13.48	1.78	14.95	3.25	16.48	4.78	17.03	5.33	0.41	13.50	1.80
1.66	13.50	1.80	14.96	3.26	16.50	4.80	17.02	5.32	0.58	13.00	1.30
2.00	13.52	1.82	14.99	3.29	16.52	4.82	17.00	5.30	0.63	12.80	1.10
2.33	13.54	1.84	14.98	3.28	16.62	4.92	17.01	5.31	0.73	12.60	0.90
2.66	13.54	1.84	14.99	3.29	16.66	4.96	17.02	5.32	0.80	12.40	0.70
3.00	13.54	1.84	14.99	3.29	16.70	5.00	17.03	5.33	0.83	12.30	0.60
3.33	13.54	1.84	14.98	3.28	16.76	5.06	17.05	5.35	0.91	12.20	0.50
3.60	13.54	1.84	14.98	3.28	16.80	5.10	17.05	5.35	1.00	12.10	0.40
4.00	13.55	1.85	15.00	3.30	16.82	5.12	17.07	5.37	1.16	12.00	0.30
4.33	13.55	1.85	15.00	3.30	16.79	5.09	17.07	5.37	1.25	11.90	0.20
4.66	13.55	1.85	15.02	3.32	16.75	5.05	17.07	5.37	1.41	11.85	0.15
5.00	13.54	1.84	15.03	3.33	16.70	5.00	17.07	5.37	1.50	11.80	0.10
5.33	13.53	1.83	15.03	3.33	16.66	4.96	17.07	5.37	1.58	11.75	0.05
5.66	13.53	1.83	15.04	3.34	16.64	4.94	17.07	5.37	1.91	11.70	0.00
6.00	13.53	1.83	15.04	3.34	16.63	4.93	17.07	5.37	2.25	11.70	0.00
8.00	13.53	1.83	15.02	3.32	16.60	4.90	17.08	5.38			
10.00	13.53	1.83	14.98	3.28	16.54	4.84	17.08	5.38			
12.00	13.53	1.83	14.99	3.29	16.46	4.76	17.08	5.38			
14.00	13.53	1.83	14.99	3.29	16.44	4.74	17.08	5.38			
15.00	13.53	1.83	15.00	3.30	16.44	4.74	17.08	5.38			
20.00	13.53	1.83	15.00	3.30	16.44	4.74	17.08	5.38			
25.00	13.53	1.83	15.00	3.30	16.44	4.74	17.08	5.38			
30.00	13.53	1.83	14.92	3.22	16.44	4.74	17.04	5.34			
35.00			14.98	3.28	16.44	4.74	17.05	5.35			
40.00			14.99	3.29							
45.00			15.00	3.30							
50.00											
55.00											
60.00											

* Generator out of fuel, at the 30 min. mark, down one minute.

Interval Recovery Test RB-0285 (40 to 50 Feet)
Cooper Jacob (Semi-Log) Plot



EAA-1 Reservoir
Well: RB-0285
250' boring with Interval Testing Rig Floor Measuring Point: 4.70' above ground level.

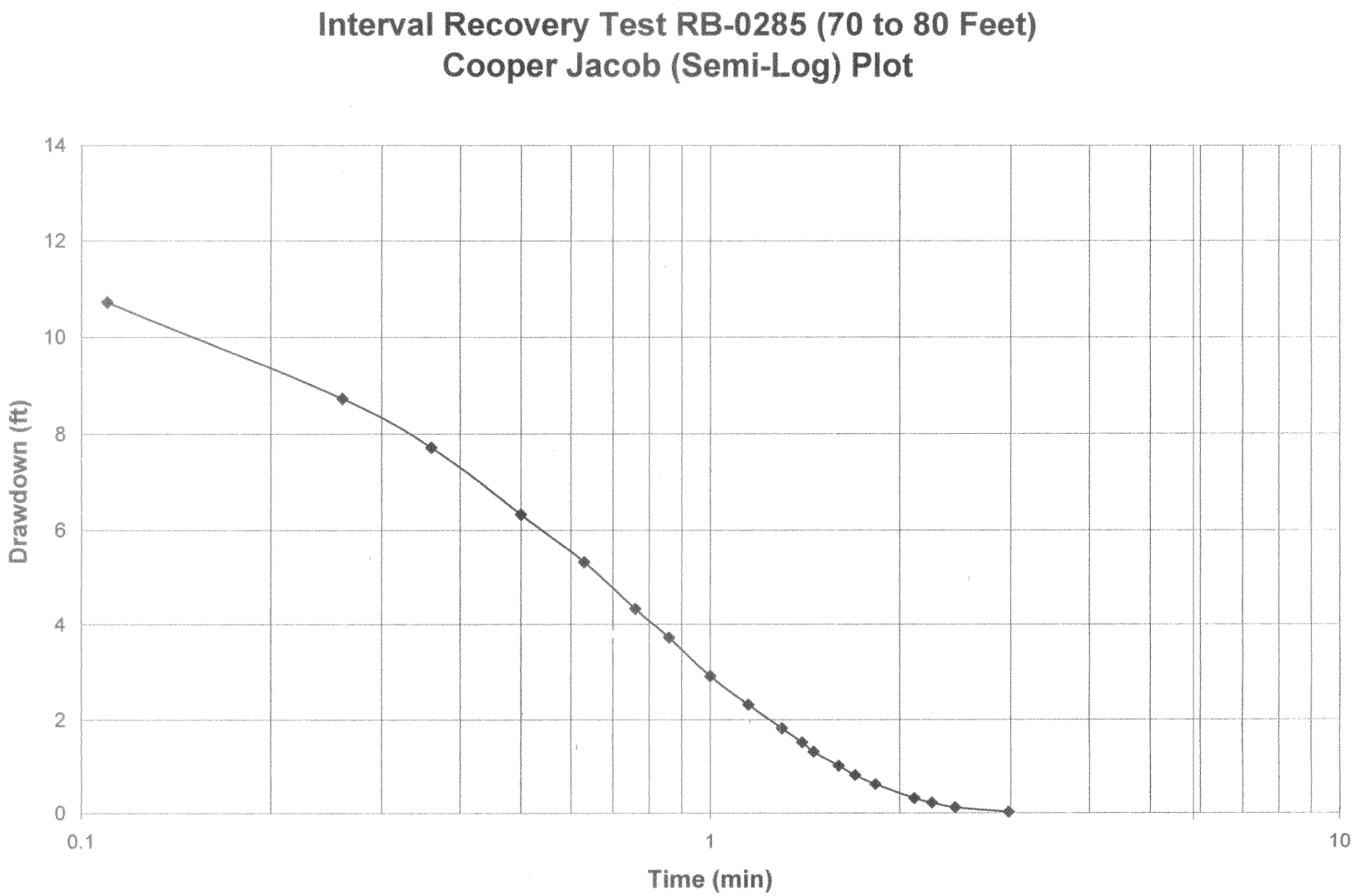
Water Levels if Feet, measured form the Rig Floor.
Time is minutes

Second Interval Test
70' - 80' openhole section

Static Water Level: 11.68

	1st Step		2nd Step		3rd Step		4th Step	
Flow Rate	4.8 gpm	Drawdown	10.2 gpm	Drawdown	12.7 gpm	Drawdown	15.7 gpm	Drawdown
Time (min.)	Vater Level	Feet	Vater Level	Feet	Vater Level	Feet	Vater Level	Feet
0.33	12.35	0.67	13.35	1.67	17.10	5.42	20.10	8.42
0.66	12.40	0.72	13.95	2.27	17.50	5.82	20.65	8.97
1.00	12.43	0.75	14.03	2.35	17.70	6.02	21.00	9.32
1.33	12.43	0.75	14.50	2.82	17.84	6.16	21.28	9.60
1.66	12.43	0.75	14.70	3.02	17.95	6.27	21.50	9.82
2.00	12.43	0.75	14.90	3.22	18.07	6.39	21.70	10.02
2.33	12.44	0.76	15.08	3.40	18.16	6.48	21.84	10.16
2.66	12.44	0.76	15.14	3.46	18.24	6.56	21.95	10.27
3.00	12.44	0.76	15.20	3.52	18.31	6.63	22.09	10.41
3.33	12.44	0.76	15.27	3.59	18.38	6.70	22.18	10.50
3.60	12.44	0.76	15.35	3.67	18.42	6.74	22.24	10.56
4.00	12.44	0.76	15.40	3.72	18.48	6.80	22.32	10.64
4.33	12.44	0.76	15.45	3.77	18.50	6.82	22.35	10.67
4.66	12.44	0.76	15.48	3.80	18.53	6.85	22.42	10.74
5.00	12.45	0.77	15.51	3.83	18.57	6.89	22.47	10.79
5.33	12.45	0.77	15.55	3.87	18.60	6.92	22.53	10.85
5.66	12.45	0.77	15.58	3.90	18.64	6.96	22.58	10.90
6.00	12.45	0.77	15.62	3.94	18.68	7.00	22.61	10.93
8.00	12.45	0.77	15.66	3.98	18.88	7.20	22.82	11.14
10.00	12.45	0.77	15.75	4.07	18.91	7.23	23.05	11.37
12.00	12.45	0.77	15.89	4.21	18.98	7.30	23.14	11.46
14.00	12.45	0.77	15.95	4.27	19.02	7.34	23.22	11.54
15.00	12.45	0.77	16.00	4.32	19.04	7.36	23.30	11.62
20.00	12.45	0.77	16.09	4.41	19.13	7.45	23.54	11.86
25.00	12.45	0.77	16.24	4.56	19.21	7.53	23.72	12.04
30.00			16.28	4.60	19.28	7.60	23.75	12.07
35.00			16.33	4.65	19.30	7.62	23.81	12.13
40.00			16.39	4.71	19.32	7.64	23.74	12.06
45.00							23.86	12.18
50.00							23.95	12.27
55.00							23.96	12.28
60.00							24.04	12.36

Recovery	Recovery
Time (min.) Vater Level	Feet
0.11 22.40	10.72
0.26 20.40	8.72
0.36 19.40	7.72
0.50 18.00	6.32
0.63 17.00	5.32
0.76 16.00	4.32
0.86 15.40	3.72
1.00 14.60	2.92
1.15 14.00	2.32
1.30 13.50	1.82
1.40 13.20	1.52
1.46 13.00	1.32
1.60 12.70	1.02
1.70 12.50	0.82
1.83 12.30	0.62
2.11 12.00	0.32
2.25 11.90	0.22
2.45 11.80	0.12
2.98 11.70	0.02


Interval Recovery Test RB-0285 (70 to 80 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
14
12
10
8
6
4
2
0
0.1
1
10
Time (min)

EAA-1 Resvoir Project

Page 1

Well Number: RB-0285

Date: July 28,2005

Static Water Level 11.40

	From	To
Test Interval	**110**	**120**
Flow Rate	20.2	gpm

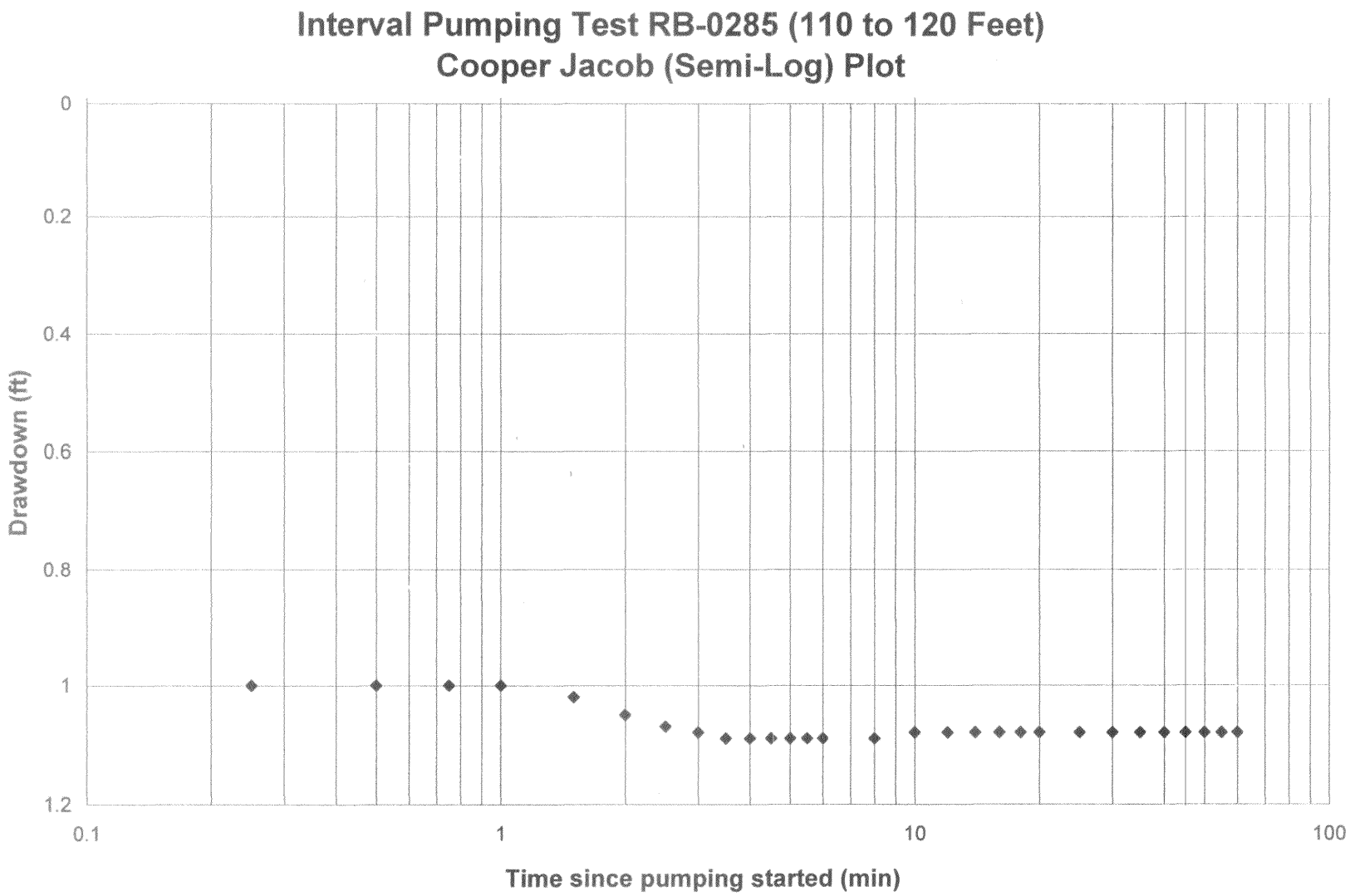
B&V Engineer: Paul Petrey

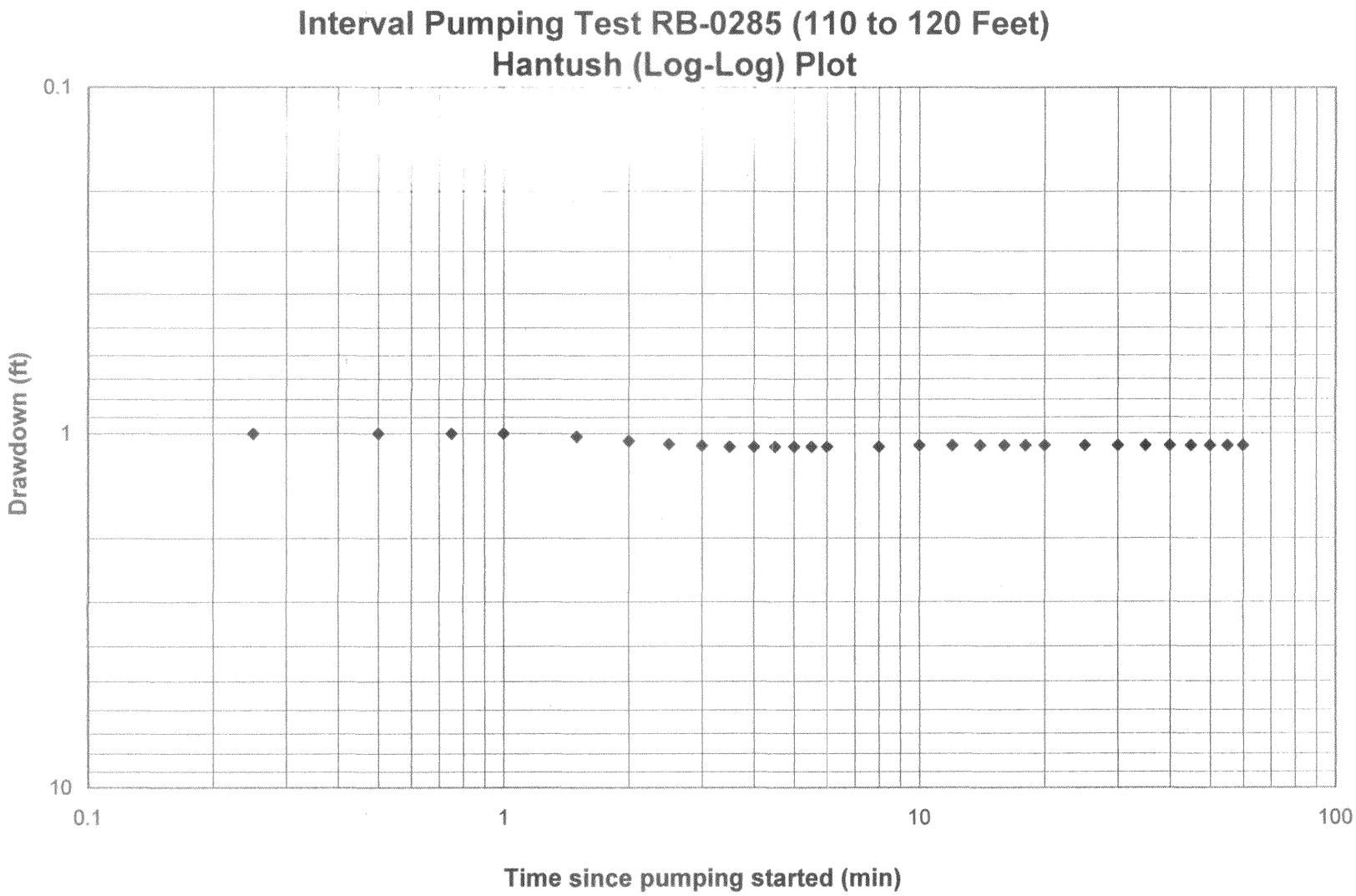
Drawdown Test

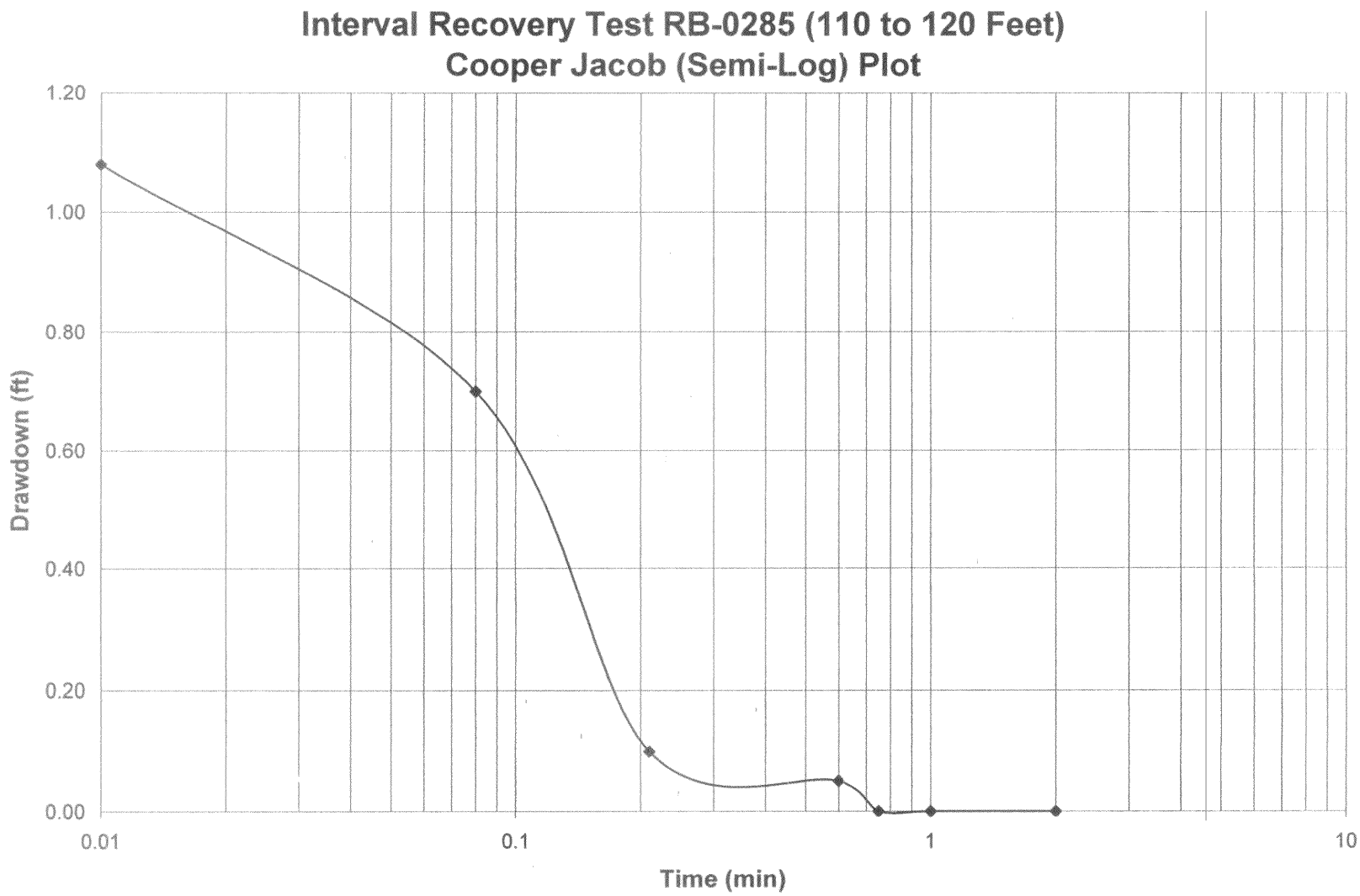
Time Minutes	Water Level Feet	Drawdown Feet
0.00	12.35	
0.25	12.40	1.00
0.50	12.40	1.00
0.75	12.40	1.00
1.00	12.40	1.00
1.50	12.42	1.02
2.00	12.45	1.05
2.50	12.47	1.07
3.00	12.48	1.08
3.50	12.49	1.09
4.00	12.49	1.09
4.50	12.49	1.09
5.00	12.49	1.09
5.50	12.49	1.09
6.00	12.49	1.09
8.00	12.49	1.09
10.00	12.48	1.08
12.00	12.48	1.08
14.00	12.48	1.08
16.00	12.48	1.08
18.00	12.48	1.08
20.00	12.48	1.08
25.00	12.48	1.08
30.00	12.48	1.08
35.00	12.48	1.08
40.00	12.48	1.08
45.00	12.48	1.08
50.00	12.48	1.08
55.00	12.48	1.08
60.00	12.48	1.08
75.00		
90.00		
105.00		
120.00		
135.00		
150.00		
165.00		
180.00		

Recovery Test

Time Minutes	Water Level Feet	Drawdown Feet
0.00	12.48	1.08
0.08	12.10	0.70
0.21	11.50	0.10
0.60	11.45	0.05
0.75	11.40	0.00
1.00	11.40	0.00
2.00	11.40	0.00
3.00	11.40	0.00
4.00	11.40	0.00
5.00	11.40	0.00
6.00	11.40	0.00
7.00	11.40	0.00
8.00	11.40	0.00
9.00	11.40	0.00
10.00	11.40	0.00
12.00	11.40	0.00
14.00	11.40	0.00
16.00		
18.00		
20.00		
22.00		
24.00		
26.00		
28.00		
30.00		


Interval Pumping Test RB-0285 (110 to 120 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.2
0.4
0.6
0.8
1
1.2
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0285 (110 to 120 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
0.1
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0285 (110 to 120 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.01
0.1
1
10
Time (min)

EAA-1 Resvoir Project

Page 1

Well Number: RB-0285

Date: July 28,2005

Static Water Level 11.44

	From	To
Test Interval	**150**	**160**
Flow Rate	22.5	gpm

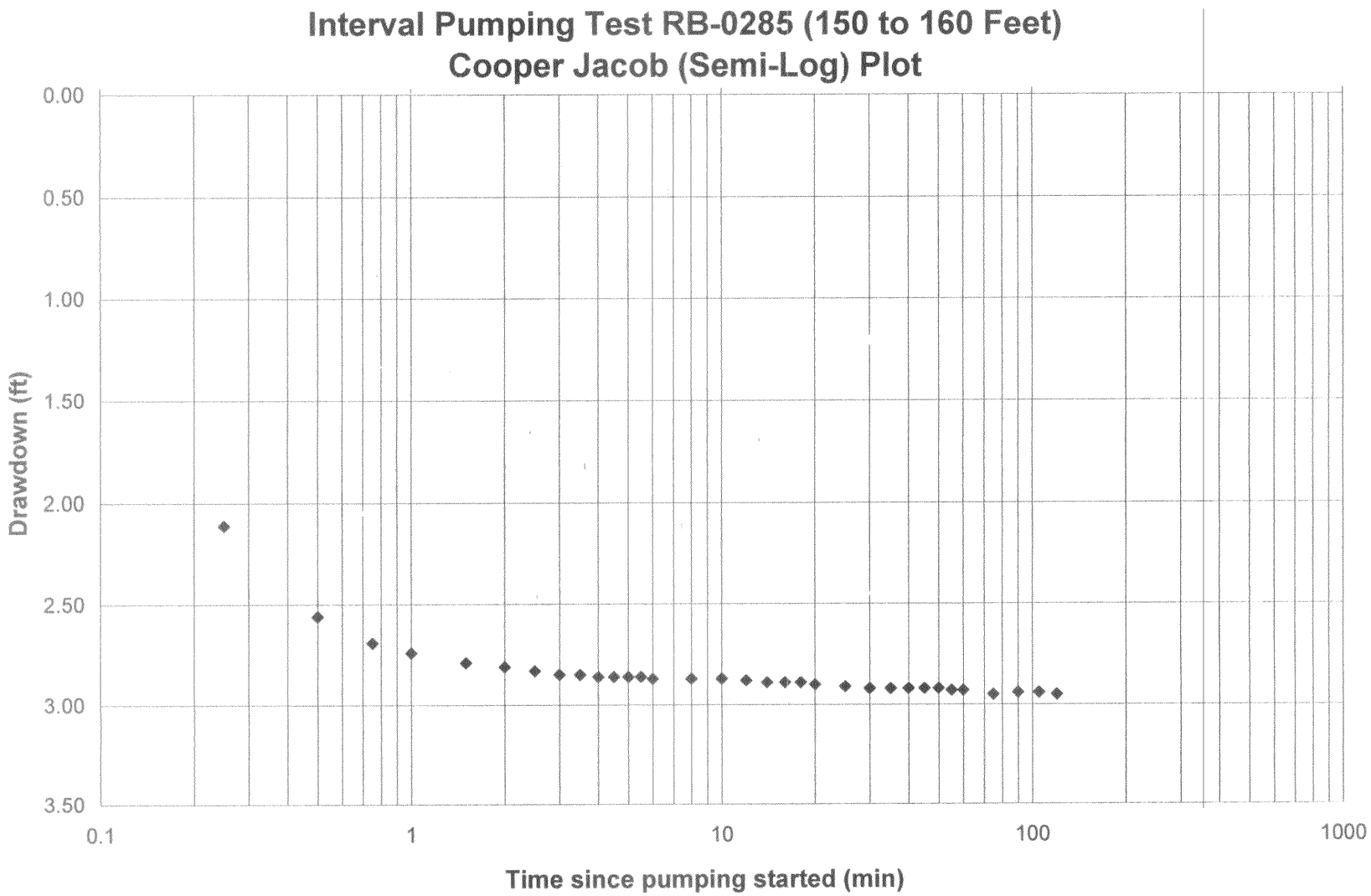
B&V Engineer: Paul Petrey

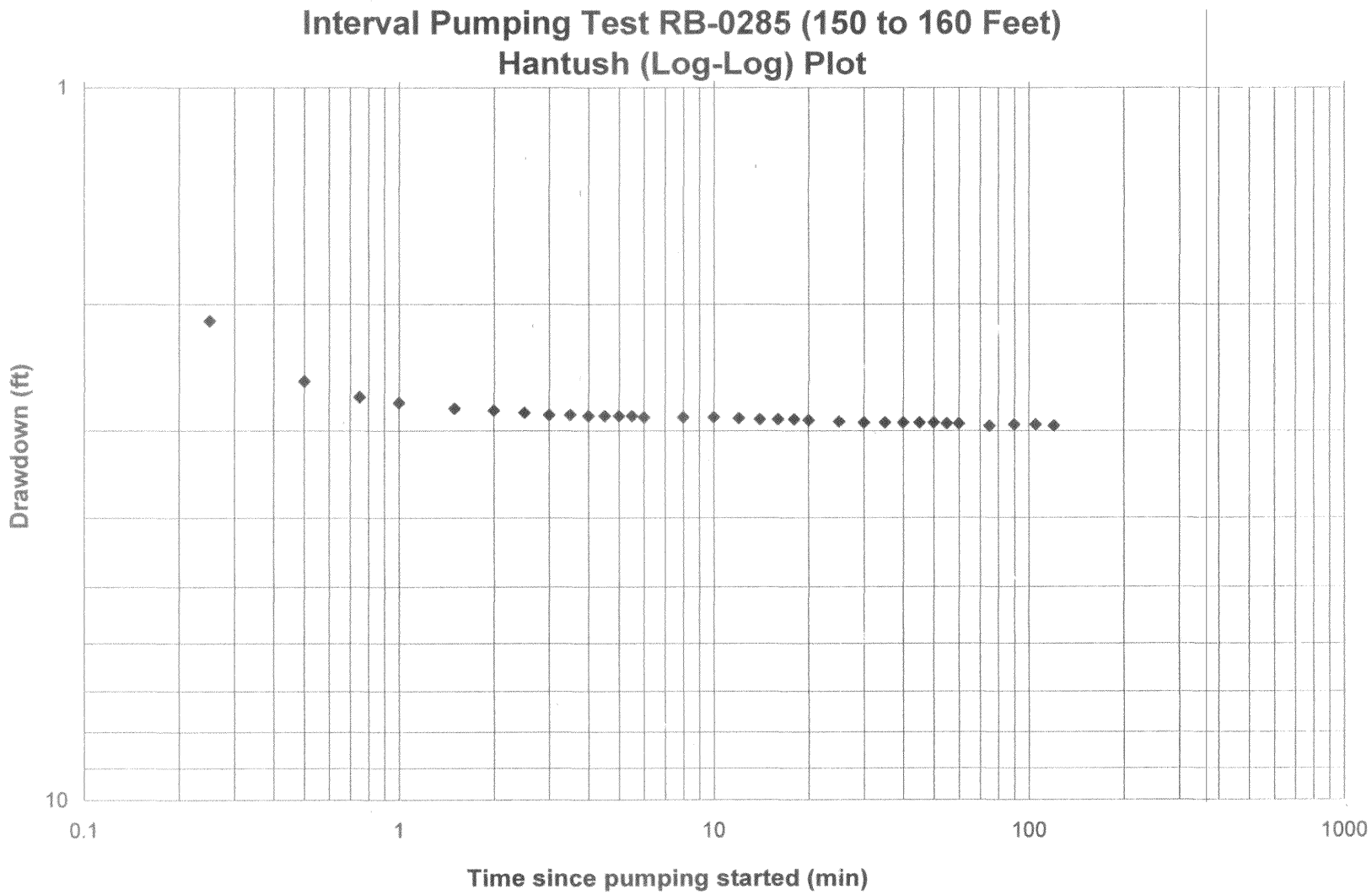
Drawdown Test

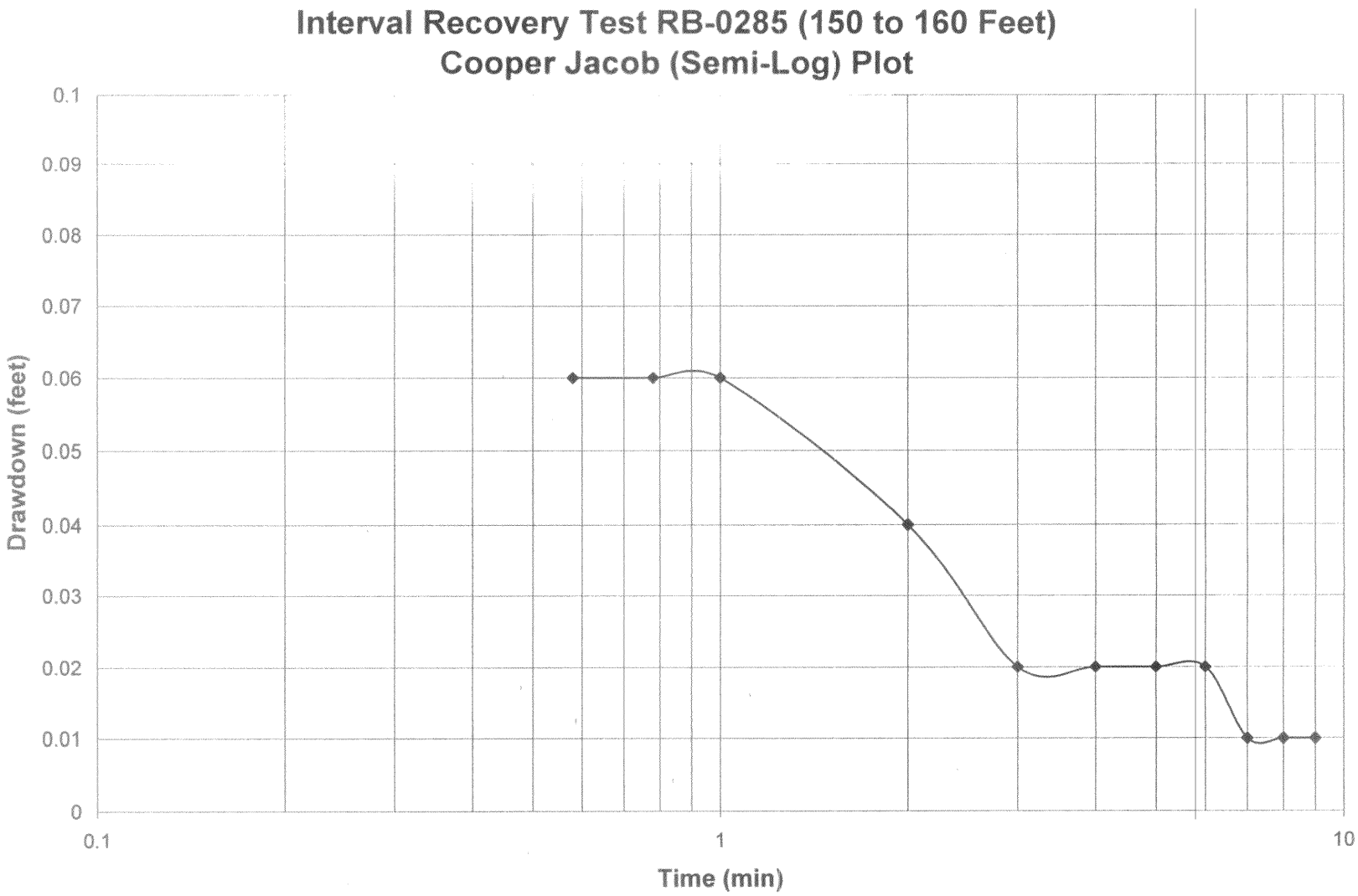
Time Minutes	Water Level Feet	Drawdown Feet
0.00	11.44	
0.25	13.55	2.11
0.50	14.00	2.56
0.75	14.13	2.69
1.00	14.18	2.74
1.50	14.23	2.79
2.00	14.25	2.81
2.50	14.27	2.83
3.00	14.29	2.85
3.50	14.29	2.85
4.00	14.30	2.86
4.50	14.30	2.86
5.00	14.30	2.86
5.50	14.30	2.86
6.00	14.31	2.87
8.00	14.31	2.87
10.00	14.31	2.87
12.00	14.32	2.88
14.00	14.33	2.89
16.00	14.33	2.89
18.00	14.33	2.89
20.00	14.34	2.90
25.00	14.35	2.91
30.00	14.36	2.92
35.00	14.36	2.92
40.00	14.36	2.92
45.00	14.36	2.92
50.00	14.36	2.92
55.00	14.37	2.93
60.00	14.37	2.93
75.00	14.39	2.95
90.00	14.38	2.94
105.00	14.38	2.94
120.00	14.39	2.95
135.00		
150.00		
165.00		
180.00		

Recovery Test

Time Minutes	Water Level Feet	Drawdown Feet
0.00	14.39	2.95
0.60	12.00	0.56
0.26	11.70	0.26
0.58	11.50	0.06
0.78	11.50	0.06
1.00	11.50	0.06
2.00	11.48	0.04
3.00	11.46	0.02
4.00	11.46	0.02
5.00	11.46	0.02
6.00	11.46	0.02
7.00	11.45	0.01
8.00	11.45	0.01
9.00	11.45	0.01
10.00	11.45	0.01
12.00	11.45	0.01
14.00	11.45	0.01
16.00		
18.00		
20.00		
22.00		
24.00		
26.00		
28.00		
30.00		


Interval Pumping Test RB-0285 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
0.1
1
10
100
1000
Time since pumping started (min)


Interval Pumping Test RB-0285 (150 to 160 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
1000
Time since pumping started (min)


Interval Recovery Test RB-0285 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (feet)
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0.1
1
10
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0286**
Project No.	142004		
Client	SFWMD	**Interval Test** From	40
		To	50

Sheet1 of 2

			East	North
Location	Centre of site	**Coordinates**	768550	764359

Casing Depth	40		Reference Point	Breakout			
Open Hole Depth	52	After test 52	Height Above Ground Level	5			
Screen Depth	52						
Pump Setting Depth	30		Pump Details Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	8.2		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
2/8/2005	10	5	0.00		0		0	
			0.33	12	3.8			
			0.56	14.5	6.3			
			0.83	16.5	8.3			
			1.00	17.6	9.4			
			1.50	19.5	11.3			
			2.00	20.8	12.6			
			2.50	21.45	13.25			
			3.00	21.75	13.55			
			3.50	21.95	13.75			
			4.00	22.05	13.85			
			4.50	22.12	13.92			
			5.00	22.16	13.96			
			5.50	22.19	13.99			
			6.00	22.2	14			
			8.00	22.23	14.03		18	2 minutes for 36 gallons
			10.00	22.23	14.03			Check Flow Rate
			12.00	22.23	14.03			
			14.00	22.24	14.04			
			16.00	22.24	14.04			
			18.00	22.25	14.05			
			20.00	22.25	14.05			Check Flow Rate
			25.00	22.26	14.06		18	2 minutes for 36 gallons
			30.00	22.26	14.06			Check Flow Rate
			35.00	22.27	14.07			
			40.00	22.275	14.075		18	2 minutes for 36 gallons
			45.00	22.285	14.085			
			50.00	22.3	14.1			
			55.00	22.305	14.105			
			60.00	22.31	14.11			Check Flow Rate
			75.00	22.31	14.11		18	2 minutes for 36 gallons
			90.00	22.33	14.13			
			105.00	22.34	14.14		18	2 minutes for 36 gallons
	12	5	120.00	22.355	14.155			

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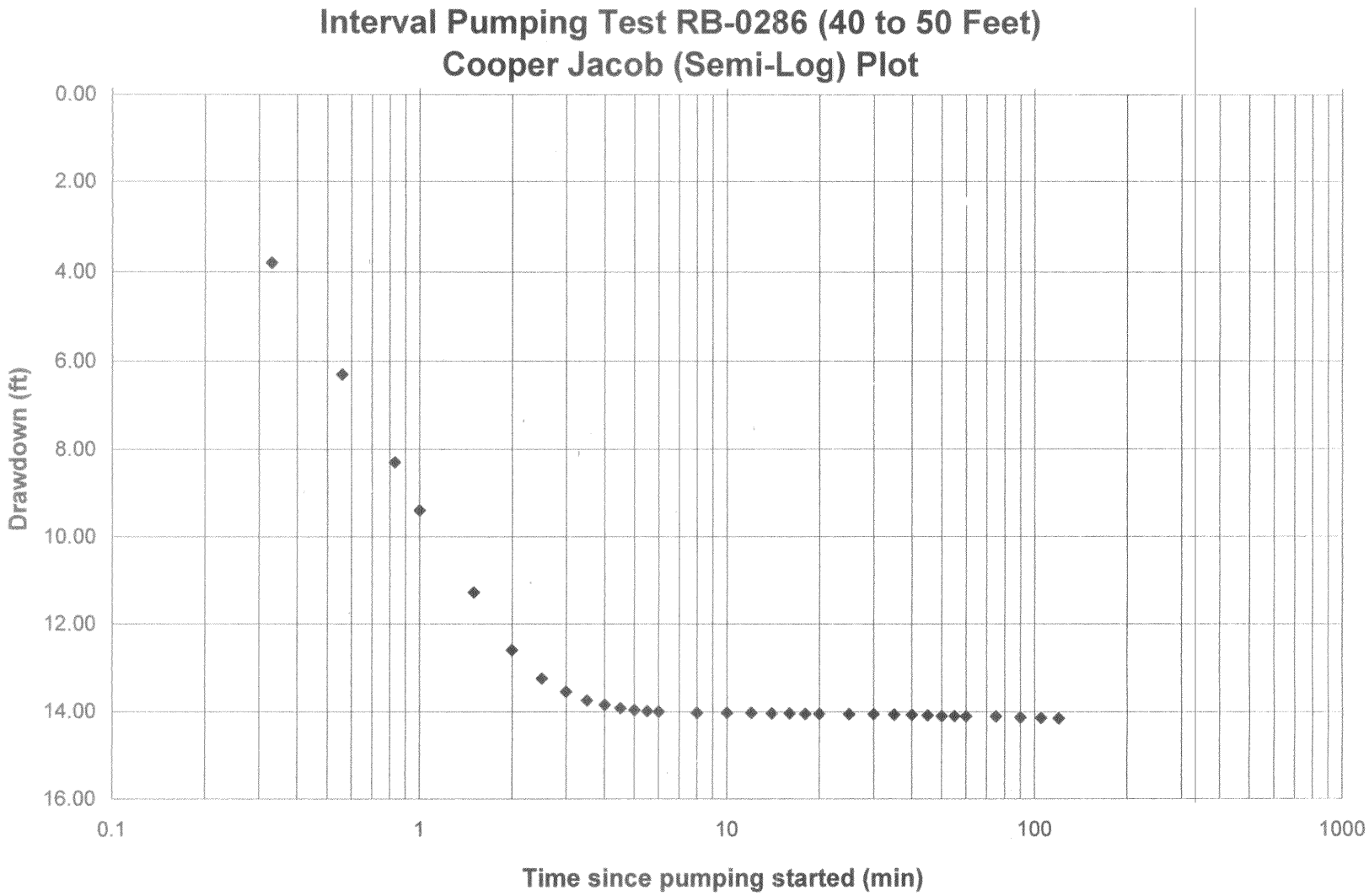
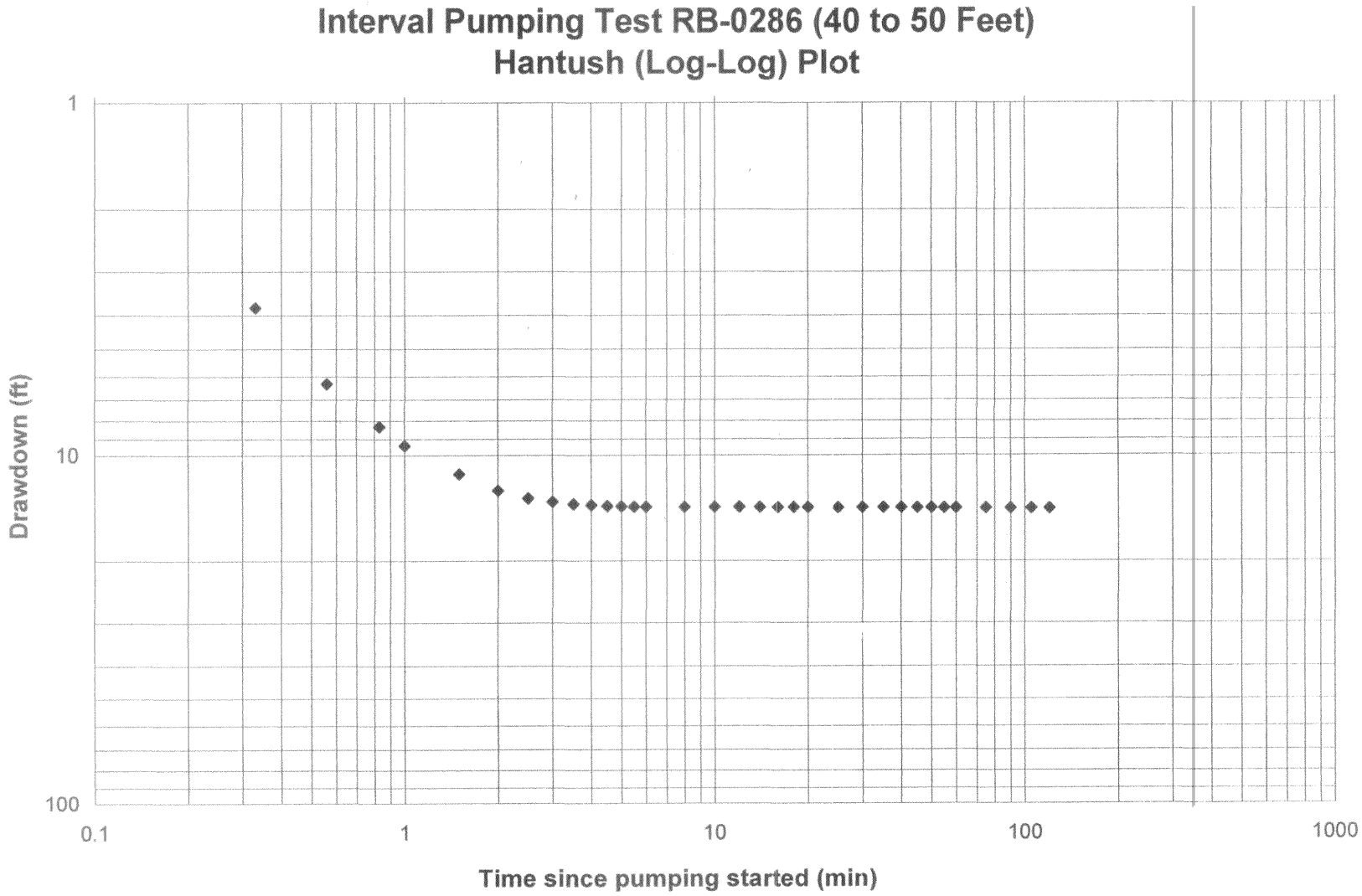
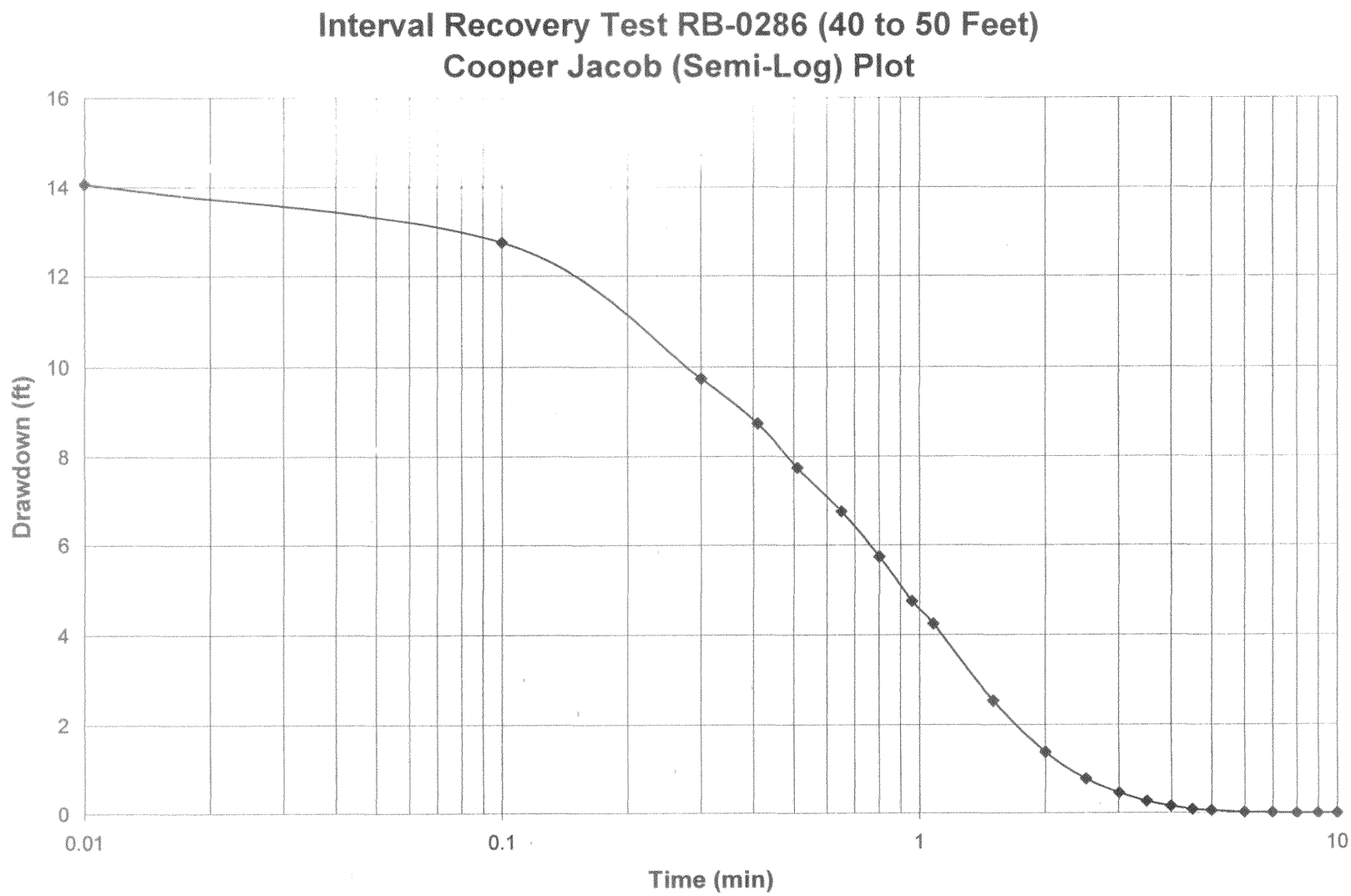
Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0286**
Project No.	142004		
Client	SFWMD	**Interval Test** From	40
		To	50

			East	North	Sheet 2 of 2		
Location	Centre of site	**Coordinates**	768550	764359			
Casing Depth	40		Reference Point	Breakout			
Open Hole Depth	52	After test 52	Height Above Ground Level	5			
Screen Depth	52						
Pump Setting Depth	30	Pump Details	Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	8.2		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
	12	5	0.00	22.325	14.125			Last Flow Rate
			0.10	21	12.8			
			0.30	18	9.8			
			0.41	17	8.8			
			0.51	16	7.8			
			0.65	15	6.8			
			0.80	14	5.8			
			0.96	13	4.8			
			1.08	12.5	4.3			
			1.50	10.8	2.6			
			2.00	9.65	1.45			
			2.50	9.05	0.85			
			3.00	8.73	0.53			
			3.50	8.53	0.33			
			4.00	8.42	0.22			
			4.50	8.35	0.15			
			5.00	8.32	0.12			
			6.00	8.28	0.08			
			7.00	8.27	0.07			
			8.00	8.26	0.06			
			9.00	8.26	0.06			
			10.00	8.26	0.06			
			12.00	8.26	0.06			
			14.00	8.26	0.06			
			16.00	8.26	0.06			
			18.00	8.26	0.06			
			20.00	8.26	0.06			
			25.00	8.26	0.06			
	12	35	30.00	8.26	0.06			


Interval Pumping Test RB-0286 (40 to 50 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.00
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
0.1
1
10
100
1000
Time since pumping started (min)


Interval Pumping Test RB-0286 (40 to 50 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
100
0.1
1
10
100
1000
Time since pumping started (min)


Interval Recovery Test RB-0286 (40 to 50 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
16
14
12
10
8
6
4
2
0
0.01
0.1
1
10
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	RB-0286
Project No.	142004		
Client	SFWMD	**Interval Test** From	70
		To	80

			East	North	Sheet 1 of 2
Location	Centre of site	**Coordinates**	768550	764359	

Casing Depth	70		Reference Point	Breakout			
Open Hole Depth	78.5	After test	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	18gpm		Volume Tank	Yes
Static Water Level	8.3			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
2/8/2005	15.2	20	0.00		0		0	
			0.25	10.15	1.85			
			0.50	10.8	2.5			
			0.75	11	2.7			
			1.00	11.11	2.81			
			1.50	11.22	2.92			
			2.00	11.27	2.97			
			2.50	11.3	3			
			3.00	11.32	3.02			
			3.50	11.34	3.04			
			4.00	11.35	3.05			
			4.50	11.37	3.07			
			5.00	11.37	3.07			
			5.50	11.38	3.08			
			6.00	11.38	3.08			
			8.00	11.38	3.08		18	2 minutes for 38 gallons
			10.00	11.39	3.09			Check Flow Rate
			13.00	11.41	3.11			
			14.00	11.43	3.13			
			16.00	11.46	3.16			
			18.00	11.47	3.17			
			20.00	11.5	3.2			Check Flow Rate
			25.00	11.51	3.21		18	2 minutes for 38 gallons
			30.00	11.52	3.22			Check Flow Rate
			35.00	11.59	3.29		18	2 minutes for 38 gallons
			40.00	11.585	3.285			
			45.00	11.61	3.31			
			50.00	11.66	3.36			
			55.00	11.625	3.325		18	2 minutes for 38 gallons
			60.00	11.65	3.35			Check Flow Rate
			75.00	11.675	3.375			Thunderstorm approaching

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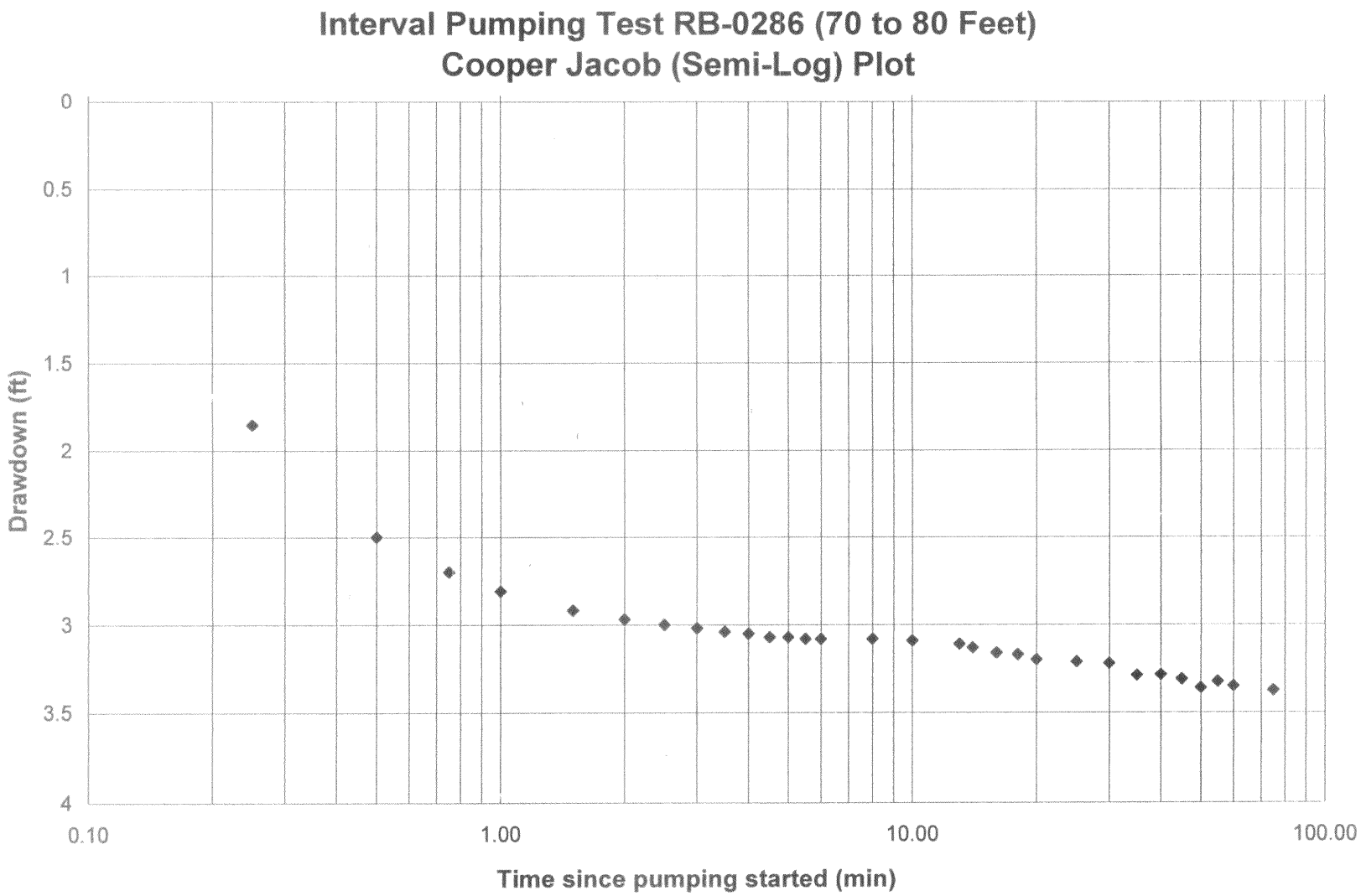
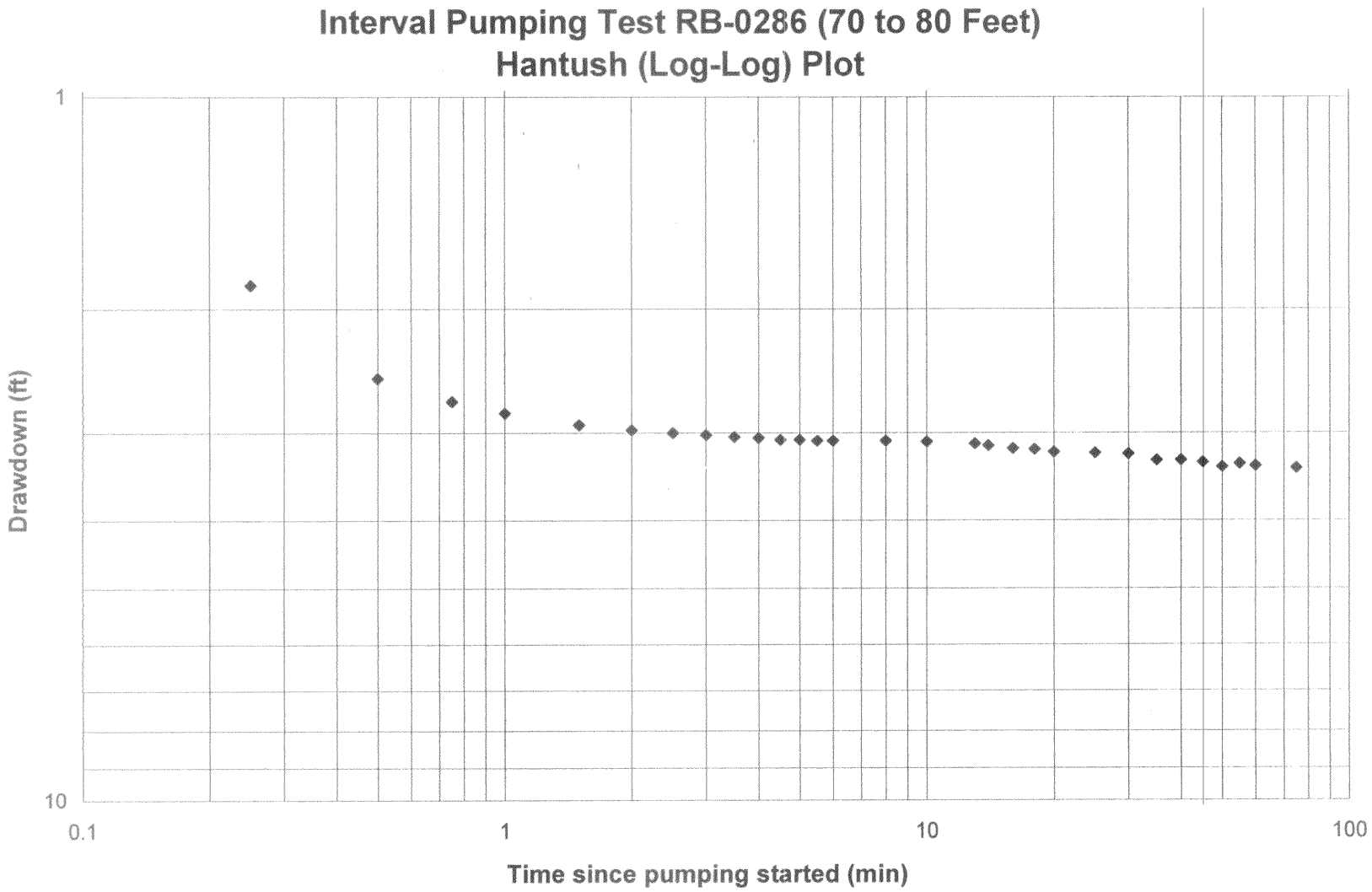
Project		Pumping Test Well	RB-0286
Project No.			
Client		Interval Test From	70
		To	80

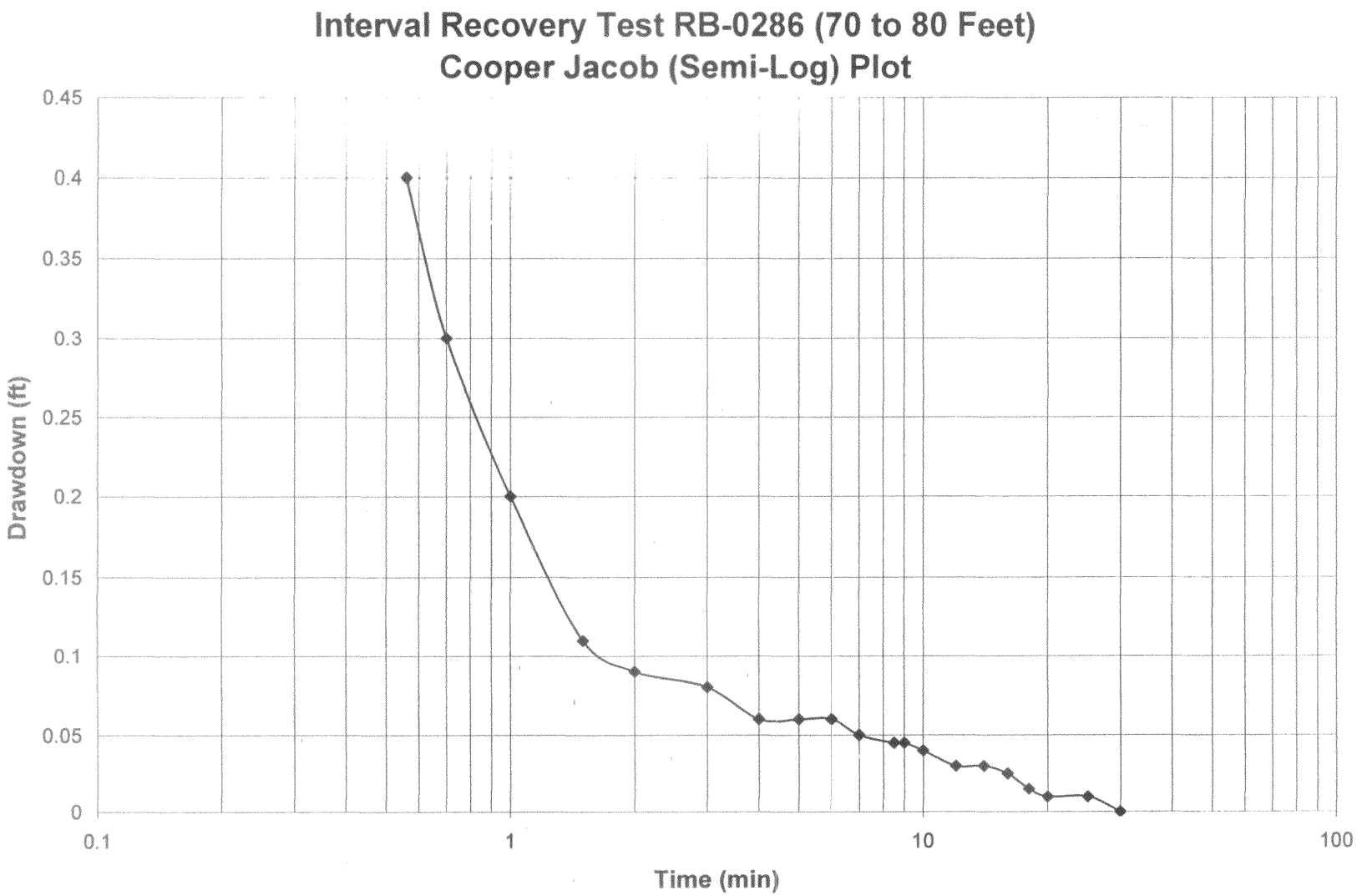
			East	North	Sheet 2 of 2
Location	Centre of site	Coordinates	768550	764359	

Casing Depth	70	Reference Point	Breakout				
Open Hole Depth	78.5 After test	Height Above Ground Level	5				
Screen Depth							
Pump Setting Depth	30	Pump Details	Diameter	3"	Discharge	Flowmeter	No
			Capacity	18gpm		Volume Tank	Yes
Static Water Level	8.3		Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
2/8/2005	16	36	0.00	11.675	3.375			Last Flow Rate
			0.08	11	2.7			
			0.16	10	1.7			
			0.23	9.5	1.2			
			0.38	9	0.7			
			0.50	8.8	0.5			
			0.56	8.7	0.4			
			0.70	8.6	0.3			
			1.00	8.5	0.2			
			1.50	8.41	0.11			
			2.00	8.39	0.09			
			3.00	8.38	0.08			
			4.00	8.36	0.06			
			5.00	8.36	0.06			
			6.00	8.36	0.06			
			7.00	8.35	0.05			
			8.50	8.345	0.045			
			9.00	8.345	0.045			
			10.00	8.34	0.04			
			12.00	8.33	0.03			
			14.00	8.33	0.03			
			16.00	8.325	0.025			
			18.00	8.315	0.015			
			20.00	8.31	0.01			
			25.00	8.31	0.01			
			30.00	8.3	0			


Interval Pumping Test RB-0286 (70 to 80 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.5
1
1.5
2
2.5
3
3.5
4
0.10
1.00
10.00
100.00
Time since pumping started (min)


Interval Pumping Test RB-0286 (70 to 80 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0286 (70 to 80 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0.1
1
10
100
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0286**
Project No.	142004		
Client	SFWMD	**Interval Test**	From 110
			To 120

Location	Centre of site	**Coordinates**	East 768550	North 764359	Sheet 1 of 2

Casing Depth	110		Reference Point	Breakout			
Open Hole Depth	120	After test 120	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	18gpm		Volume Tank	Yes
Static Water Level	8.45			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
3/8/2005	9	7	0.00	8.45	0		0	
			0.33	10.9	2.45			
			0.50	11.9	3.45			
			0.75	12.3	3.85			
			1.00	12.42	3.97			
			1.50	12.5	4.05			
			2.00	12.5	4.05			
			2.50	12.53	4.08			
			3.00	12.54	4.09			
			3.50	12.55	4.1			
			4.00	12.56	4.11			
			4.50	12.56	4.11			
			5.00	12.57	4.12			
			5.50	12.58	4.13			
			6.00	12.58	4.13			
			8.00	12.6	4.15			
			10.00	12.61	4.16			Check Flow Rate
			13.00	12.61	4.16		18.75	2 minutes for 37.5 gallons
			14.00	12.62	4.17			
			16.00	12.65	4.2			
			18.00	12.66	4.21			
			20.00	12.665	4.215			Check Flow Rate
			25.00	12.715	4.265			
			30.00	12.73	4.28			Check Flow Rate
			35.00	12.74	4.29		18.75	2 minutes for 37.5 gallons
			40.00	12.75	4.3			
			45.00	12.755	4.305			
			50.00	12.76	4.31			
			55.00	12.76	4.31			
			60.00	12.76	4.31			Check Flow Rate
			75.00	12.76	4.31		18.75	2 minutes for 37.5 gallons
			90.00					
			105.00					
			120.00					

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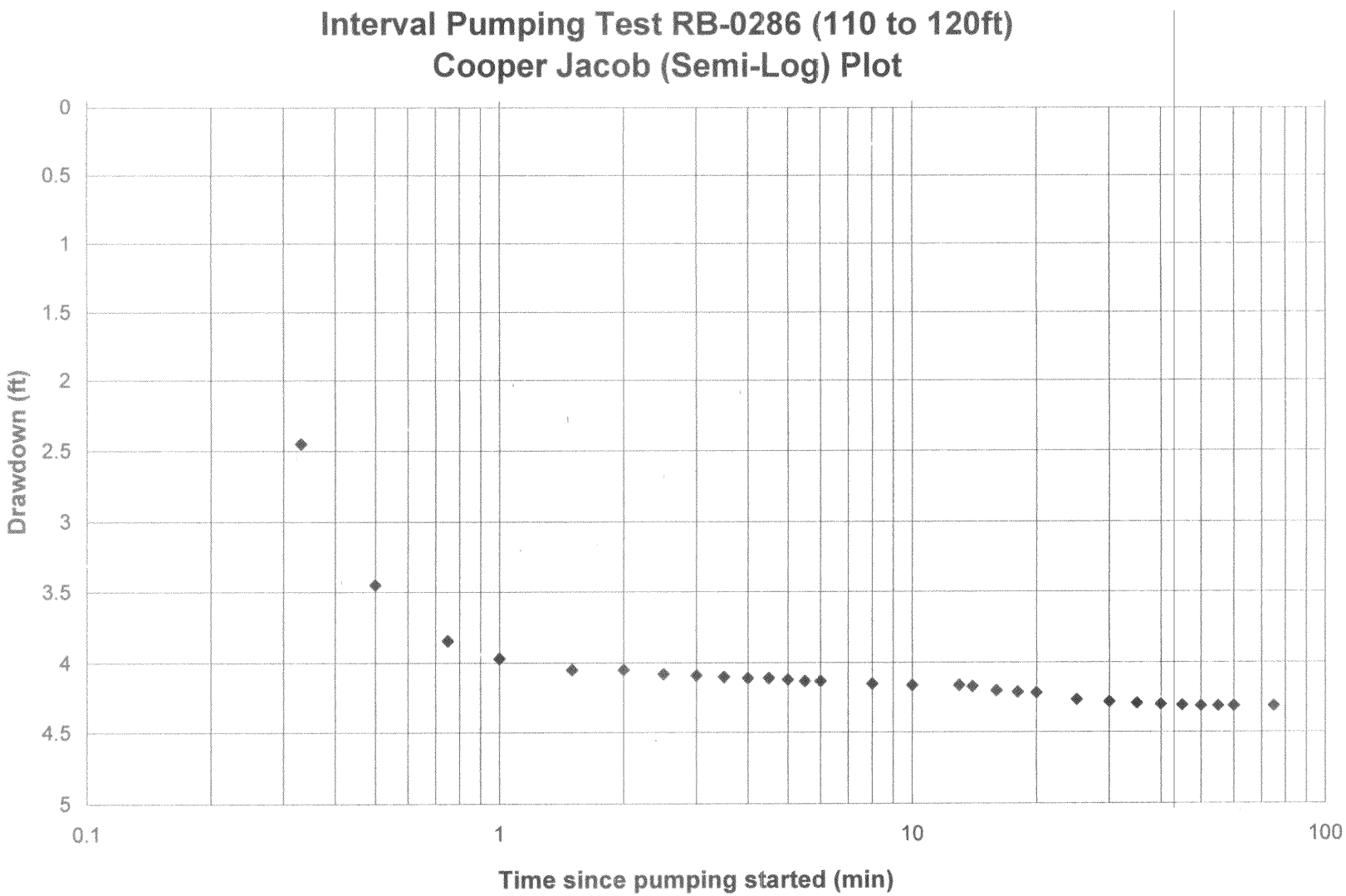
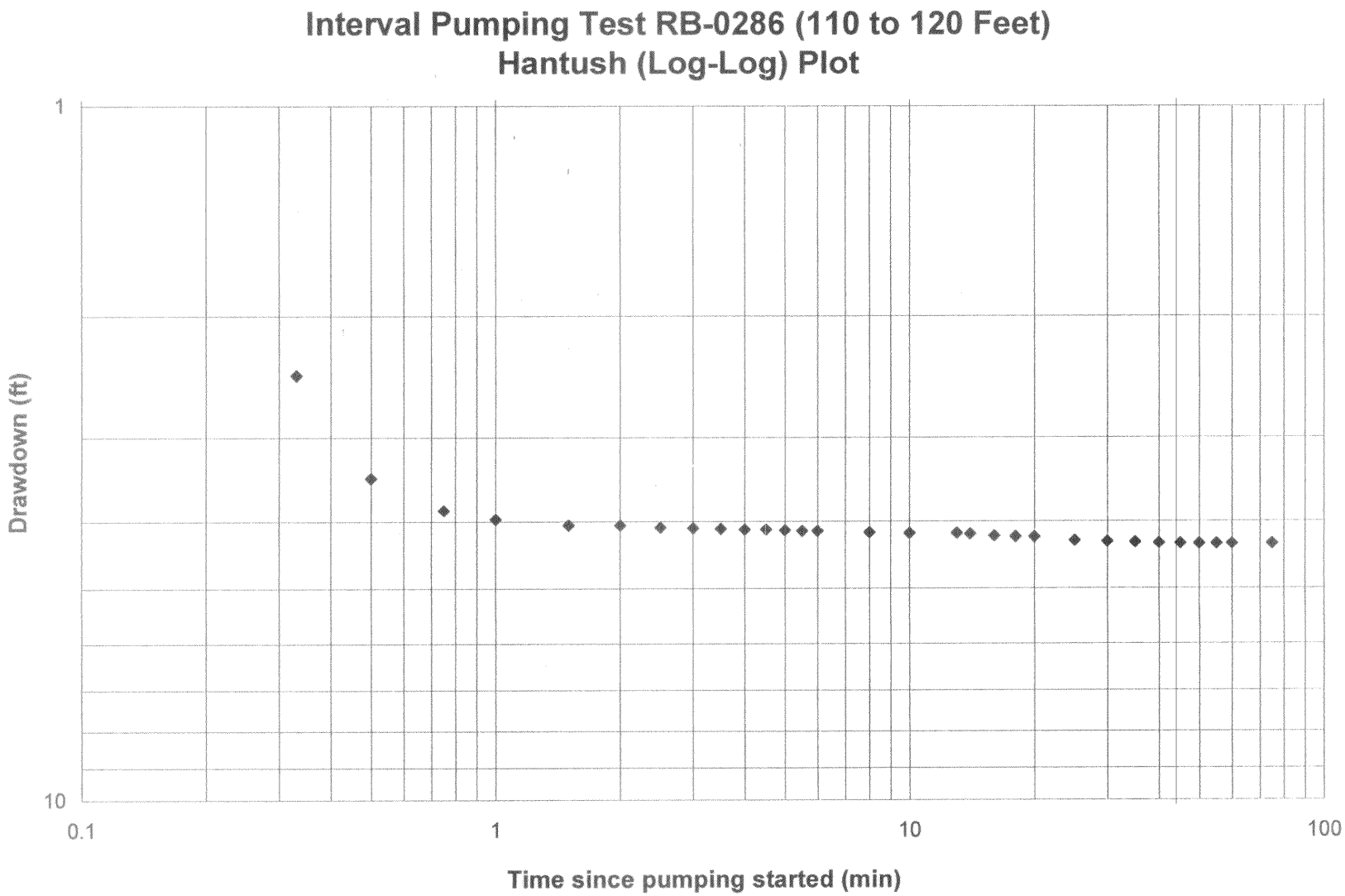
Project		Pumping Test Well	RB-0286
Project No.			
Client		Interval Test	From 110
			To 120

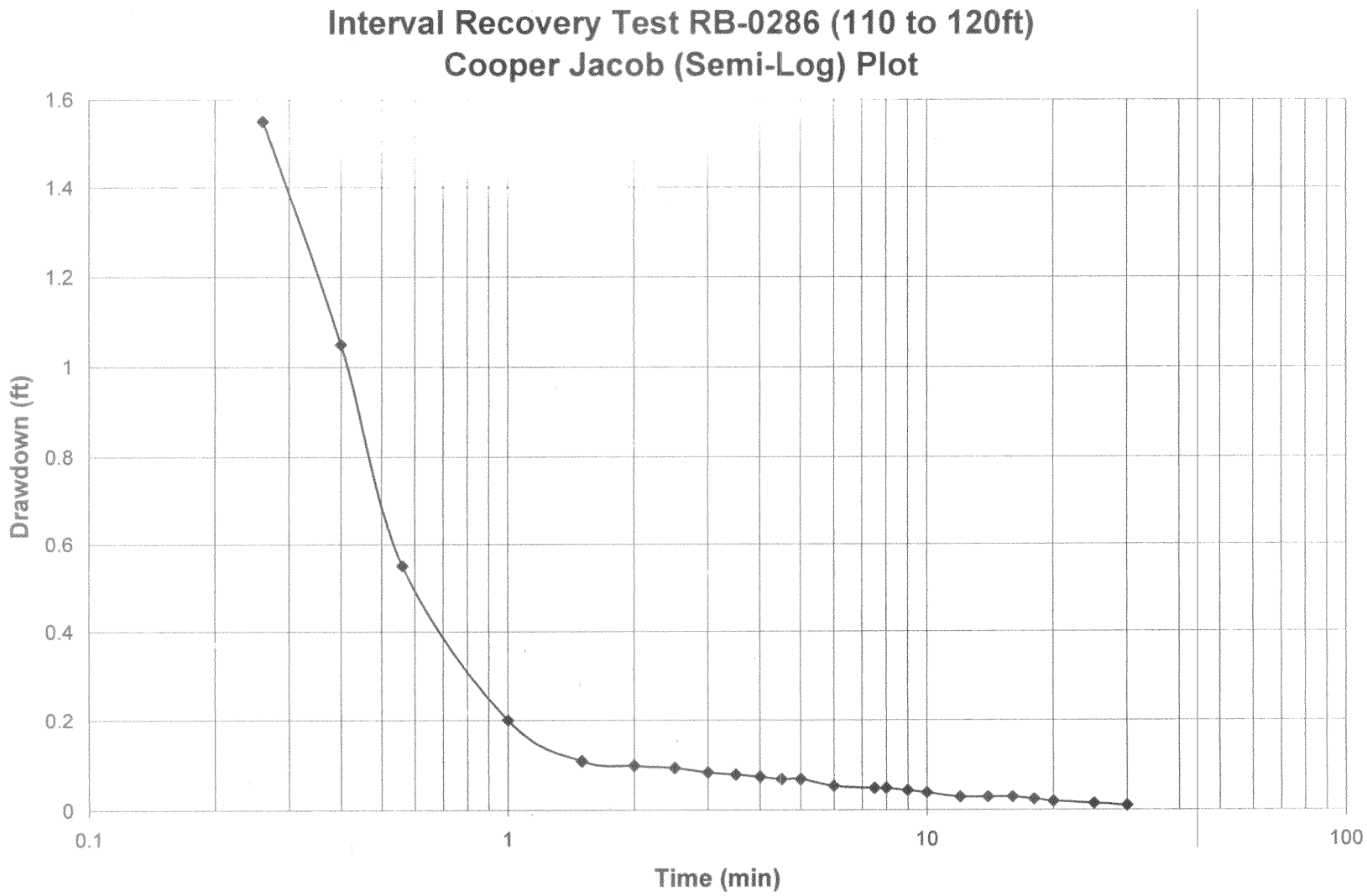
Location	Centre of site	Coordinates	East 768550	North 764359	Sheet 2 of 2

Casing Depth	110		Reference Point	Breakout			
Open Hole Depth	120	After test 120	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	18gpm		Volume Tank	Yes
Static Water Level	8.45			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
2/8/2005	16	36	0.00	12.76	4.31		18.75	Last Flow Rate
			0.26	10	1.55			
			0.40	9.5	1.05			
			0.56	9	0.55			
			1.00	8.65	0.2			
			1.50	8.56	0.11			
			2.00	8.55	0.1			
			2.50	8.545	0.095			
			3.00	8.535	0.085			
			3.50	8.53	0.08			
			4.00	8.525	0.075			
			4.50	8.52	0.07			
			5.00	8.52	0.07			
			6.00	8.505	0.055			
			7.50	8.5	0.05			
			8.00	8.5	0.05			
			9.00	8.495	0.045			
			10.00	8.49	0.04			
			12.00	8.48	0.03			
			14.00	8.48	0.03			
			16.00	8.48	0.03			
			18.00	8.475	0.025			
			20.00	8.47	0.02			
			25.00	8.465	0.015			
			30.00	8.46	0.01			


Interval Pumping Test RB-0286 (110 to 120ft)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0286 (110 to 120 Feet)
Hantush (Log-Log) Plot
Drawdown (ft)
1
10
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0286 (110 to 120ft)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.1
1
10
100
Time (min)

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Project	Everglades AA Reservoir A-1	**Pumping Test Well**	**RB-0286**
Project No.	142004		
Client	SFWMD	**Interval Test** From	150
		To	160

			East	North	Sheet 1 of 2
Location	Centre of site	**Coordinates**	768550	764359	

Casing Depth	150		Reference Point	Breakout			
Open Hole Depth	160	After test 160	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	18gpm		Volume Tank	Yes
Static Water Level	8.53			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping started					
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Drawdown Feet	Flow Meter Reading	Discharge	Notes
3/8/2005	12	36	0.00	8.53	0		0	
			0.25	9.3	0.77			
			0.50	9.3	0.77			
			0.75	9.32	0.79			
			1.00	9.33	0.8			
			1.50	9.33	0.8			
			2.00	9.345	0.815			
			2.50	9.35	0.82			
			3.00	9.355	0.825			
			3.50	9.36	0.83			
			4.00	9.36	0.83			
			4.50	9.365	0.835			
			5.00	9.37	0.84			
			5.50	9.37	0.84			
			6.00	9.375	0.845			
			8.00	9.38	0.85			
			10.00	9.39	0.86			Check Flow Rate
			12.00	9.39	0.86		18	2 minutes for 36 gallons
			14.00	9.4	0.87			
			17.00	9.405	0.875			
			18.00	9.405	0.875			
			20.00	9.41	0.88			Check Flow Rate
			25.00	9.41	0.88		18.5	2 minutes for 37 gallons
			30.00	9.415	0.885			Check Flow Rate
			35.00	9.425	0.895			
			40.00	9.425	0.895			
			45.00	9.43	0.9		18	2 minutes for 36 gallons
			50.00	9.43	0.9			
			55.00	9.43	0.9			
			60.00	9.43	0.9			Check Flow Rate
			75.00	9.44	0.91		18	2 minutes for 36 gallons

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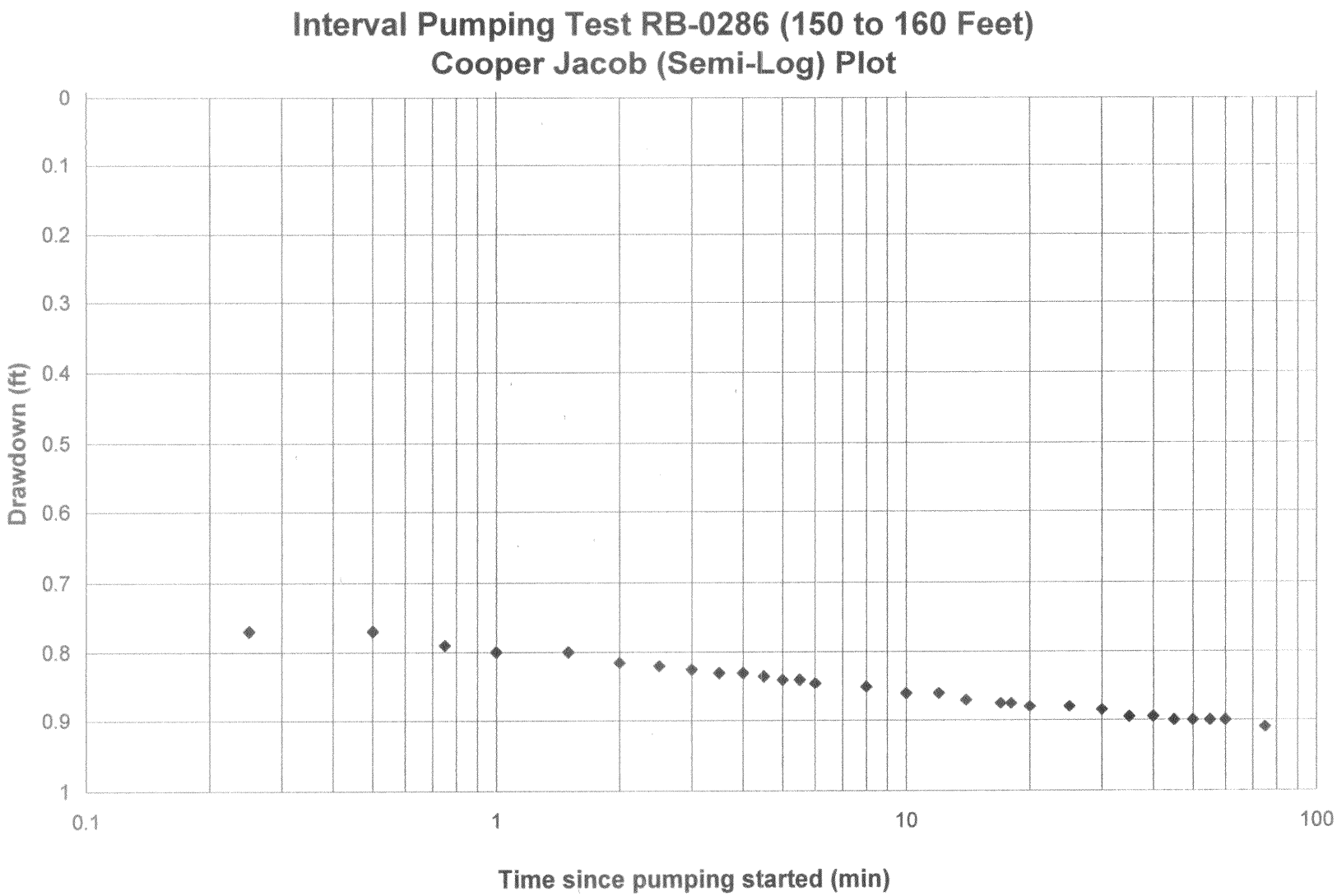
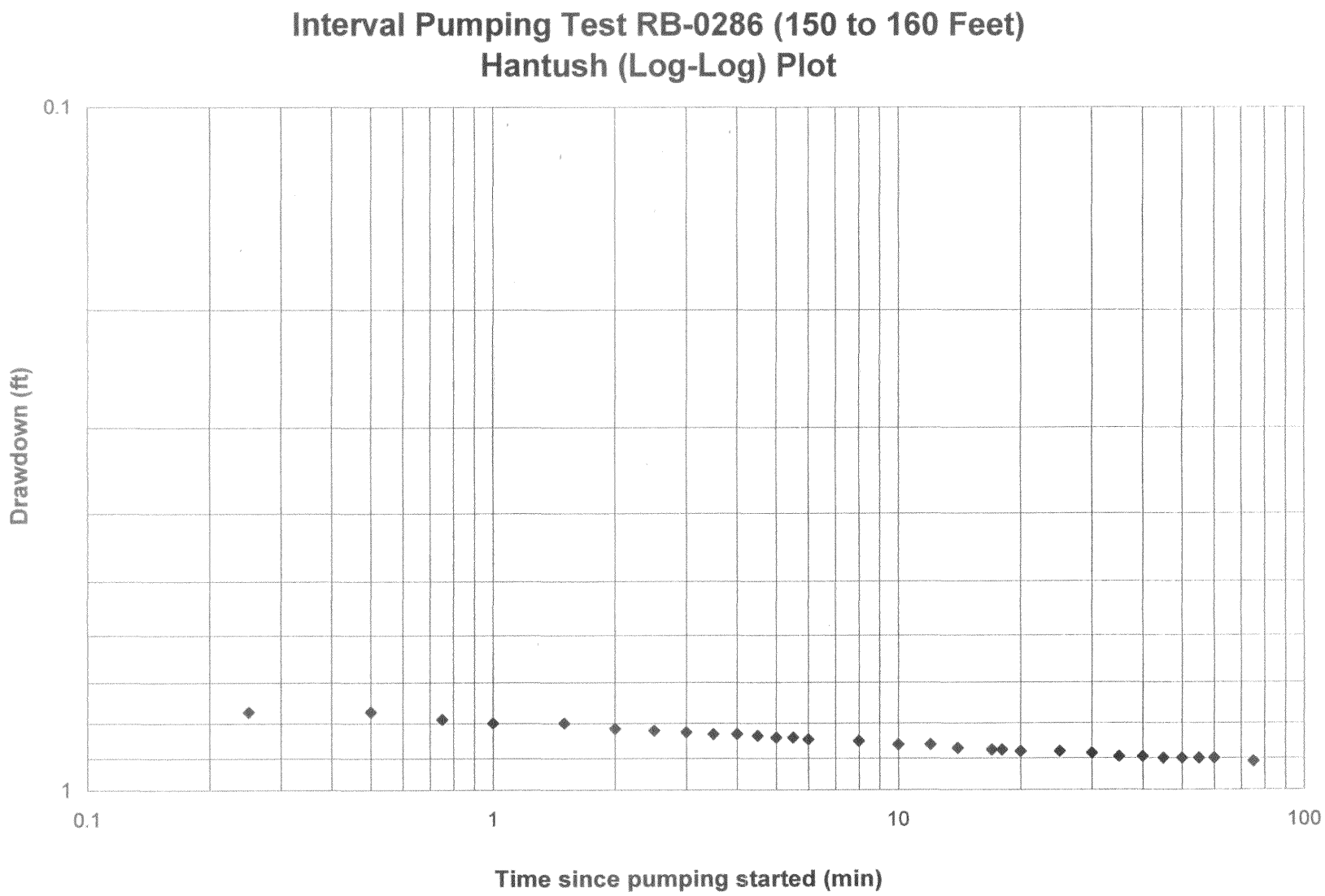
Project		Pumping Test Well	RB-0286
Project No.			
Client		Interval Test	From 150
			To 160

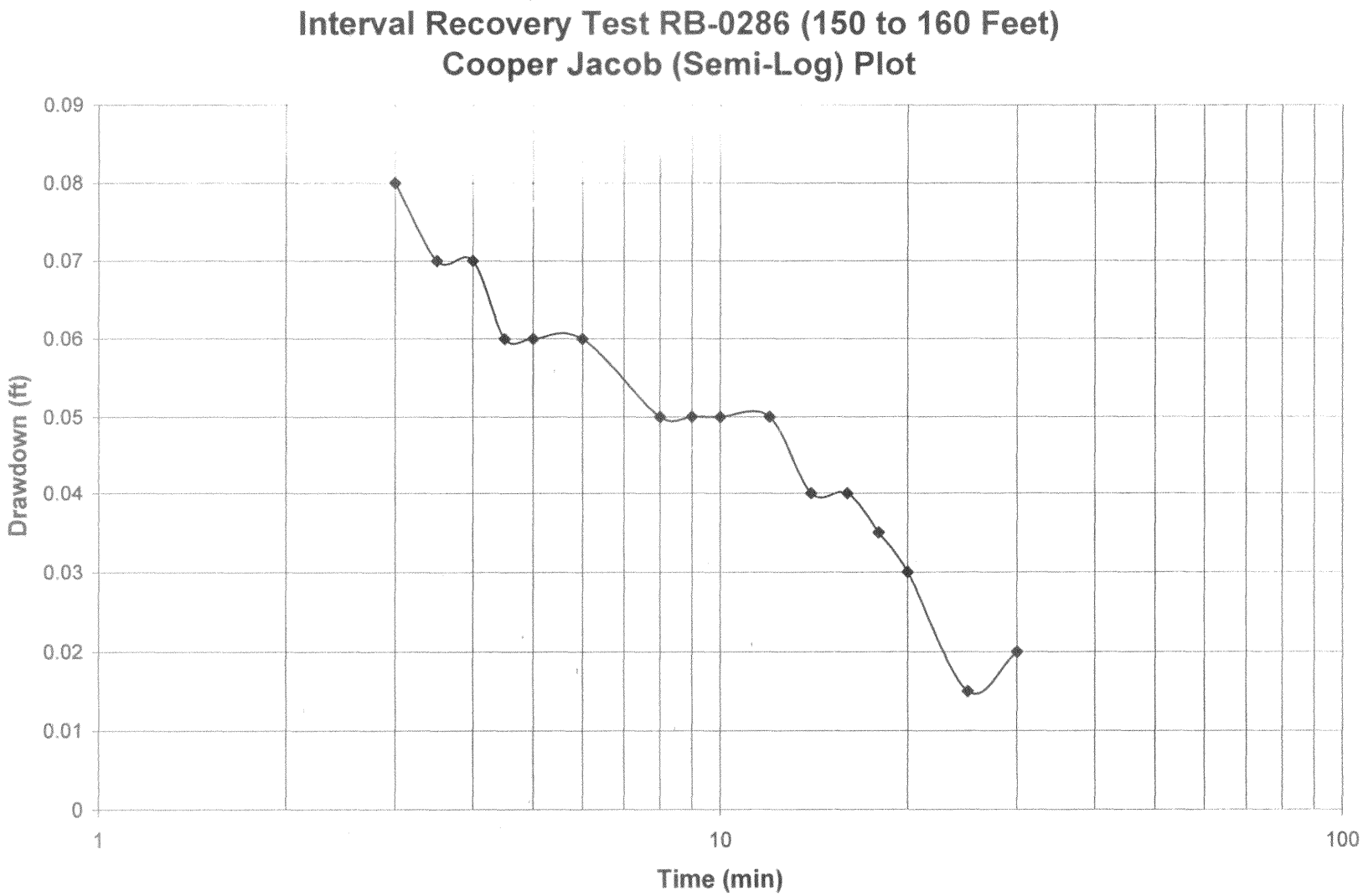
Location	Centre of site	Coordinates	East 768550	North 764359	Sheet 2 of 2

Casing Depth	150		Reference Point	Breakout			
Open Hole Depth	160	After test 160	Height Above Ground Level	5			
Screen Depth							
Pump Setting Depth	30		Pump Details	Diameter	3"	Discharge	Flowmeter	No
				Capacity	18gpm		Volume Tank	Yes
Static Water Level	8.53			Generator		Water Level	Transducer	No

Reference Clock Time			Data from when the pumping stopped.			Not Applicable		
Date	Time Hrs.	Time Min.	Elapsed Time Minutes	Water Level Feet	Recovery Feet	Flow Meter Reading	Discharge	Notes
2/8/2005	16	36	0.00	9.44	0.91		18	Last Flow Rate
			0.41	8.65	0.12			
			0.80	8.6	0.07			
			1.00	8.63	0.1			
			1.50	8.62	0.09			
			2.00	8.61	0.08			
			3.00	8.61	0.08			
			3.50	8.6	0.07			
			4.00	8.6	0.07			
			4.50	8.59	0.06			
			5.00	8.59	0.06			
			6.00	8.59	0.06			
			7.00					
			8.00	8.58	0.05			
			9.00	8.58	0.05			
			10.00	8.58	0.05			
			12.00	8.58	0.05			
			14.00	8.57	0.04			
			16.00	8.57	0.04			
			18.00	8.565	0.035			
			20.00	8.56	0.03			
			25.00	8.545	0.015			
			30.00	8.55	0.02			


Interval Pumping Test RB-0286 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0.1
1
10
100
Time since pumping started (min)


Interval Pumping Test RB-0286 (150 to 160 Feet)
Hantush (Log-Log) Plot
0.1
1
Drawdown (ft)
0.1
1
10
100
Time since pumping started (min)


Interval Recovery Test RB-0286 (150 to 160 Feet)
Cooper Jacob (Semi-Log) Plot
Drawdown (ft)
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
1
10
100
Time (min)

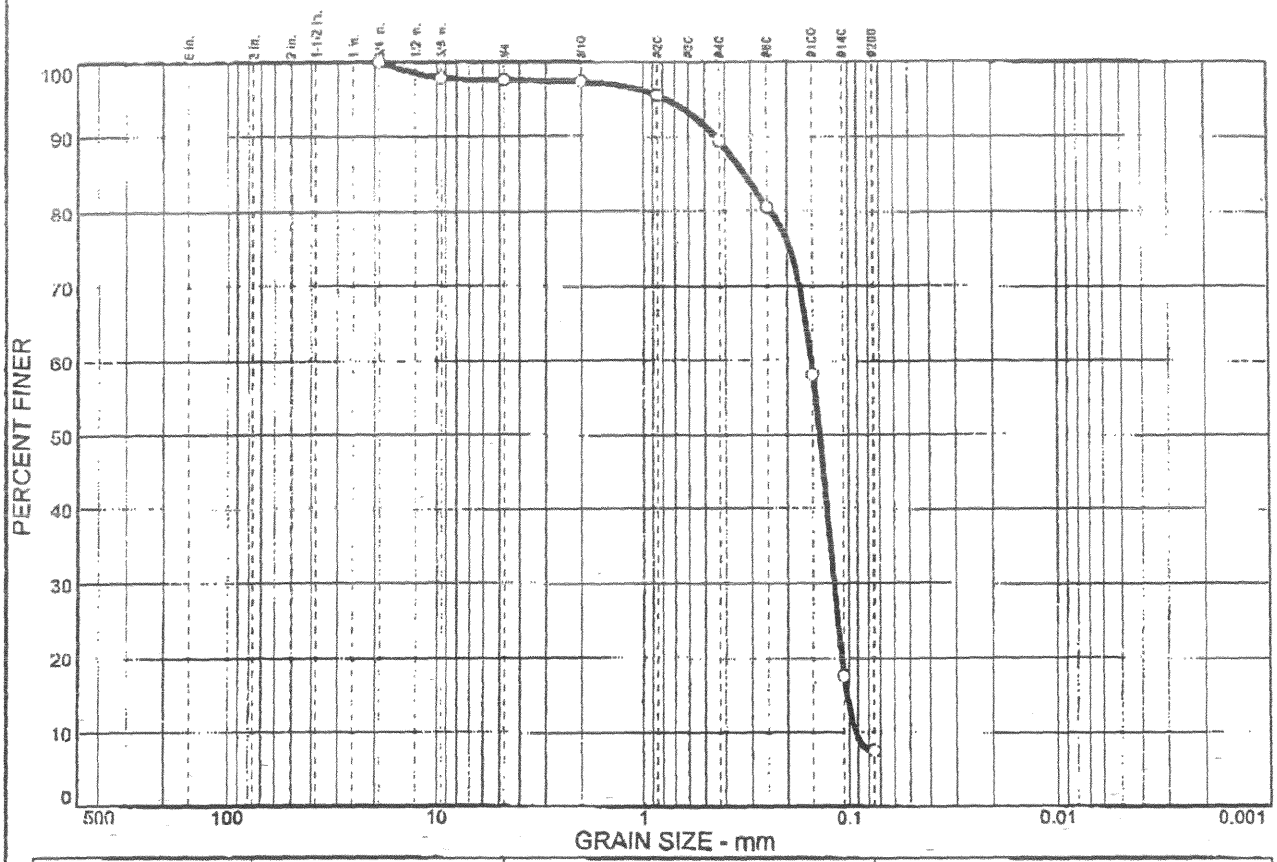
APPENDIX 5

APPENDIX 5
LABORATORY TEST RESULTS
GRAIN SIZE ANALYSIS

Note: The borings at the Test Cell Site and the supplemental borings were assigned temporary identification numbers prior to drilling. These temporary boring numbers are referred to as old boring numbers in the report text. After completion of the test cell and supplemental borings, a block of new boring numbers was received from the USACE Jacksonville District office. Software used for the test results from the summer 2005 borings did not permit the old boring number to be altered. Therefore, the test results for the supplemental borings contain both the old boring number and its corresponding new number. The new boring number was inserted in the remarks column of the test results for the supplemental borings. The laboratory test results for the Test Cell borings contain only the old boring numbers. For ease of reference, the table below shows the old boring numbers for the Test Cell boring and the corresponding new boring number.

Test Cell Borings	
Old Boring Number	New Boring Number
BA-01	CP05-EAARS-CB-0168
BA-02	CP05-EAARS-CB-0169
BA-03	CP05-EAARS-CB-0170
BA-04	CP05-EAARS-CB-0171
BA-05	CP05-EAARS-CB-0172
BA-06	CP05-EAARS-CB-0173
BA-07	CP05-EAARS-CB-0174
BA-08	CP05-EAARS-CB-0175
BA-09	CP05-EAARS-CB-0176
BA-10	CP05-EAARS-CB-0177
TC-01	CP05-EAARS-CB-0178
TC-02	CP05-EAARS-CB-0179
TC-03	CP05-EAARS-CB-0180
TC-04	CP05-EAARS-CB-0181
TC-05	CP05-EAARS-CB-0182
TC-06	CP05-EAARS-CB-0183
TC-07	CP05-EAARS-CB-0184
TC-08	CP05-EAARS-CB-0185
TC-09	CP05-EAARS-CB-0186
TC-10	CP05-EAARS-CB-0187
TC1-E	CP05-EAARS-CB-0188
TC1-N	CP05-EAARS-CB-0189
TC1-W	CP05-EAARS-CB-0190
TC1-S	CP05-EAARS-CB-0191
TC2-E	CP05-EAARS-CB-0192
TC2-N	CP05-EAARS-CB-0193
TC2-W	CP05-EAARS-CB-0194
TC2-S	CP05-EAARS-CB-0195

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	2.4	0.2	8.0	81.9	7.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	97.9		
#4	97.6		
#10	97.4		
#20	95.5		
#40	89.4		
#60	80.6		
#100	58.1		
#140	17.5		
#200	7.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.324 D_{60}= 0.153 D_{50}= 0.140
D_{30}= 0.119 D_{15}= 0.103 D_{10}= 0.0926
C_u= 1.65 C_c= 1.01

Classification

USCS= AASHTO=

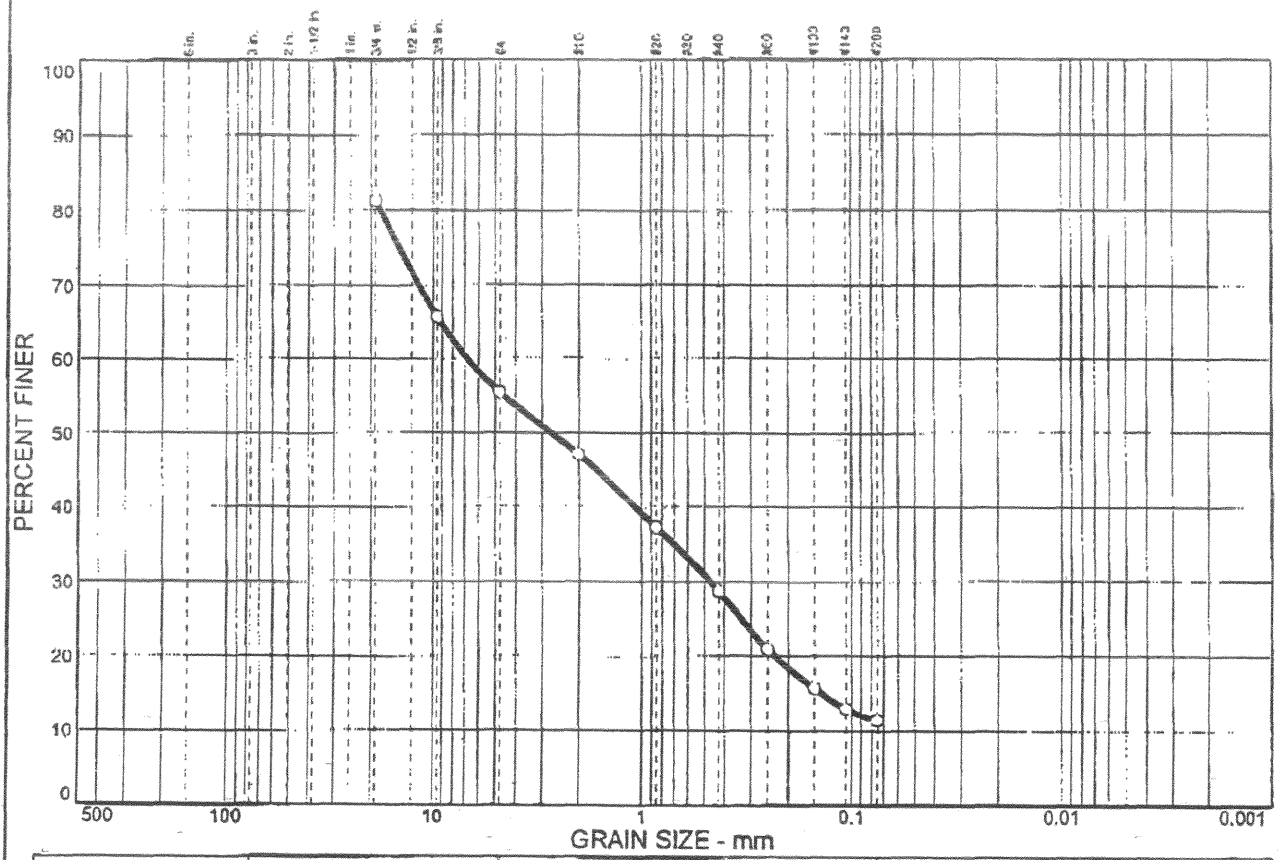
Remarks

Sample No.: B234 Source of Sample: Date:
Location: BA-01 Elev./Depth: 48.5-50.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
		25.9	8.3	18.4	17.3	11.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	81.3		
3/8 in.	65.6		
#4	55.4		
#10	47.1		
#20	37.3		
#40	28.7		
#60	20.9		
#100	15.7		
#140	12.9		
#200	11.4		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= D_{60}= 6.82 D_{50}= 2.72
D_{30}= 0.466 D_{15}= 0.139 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

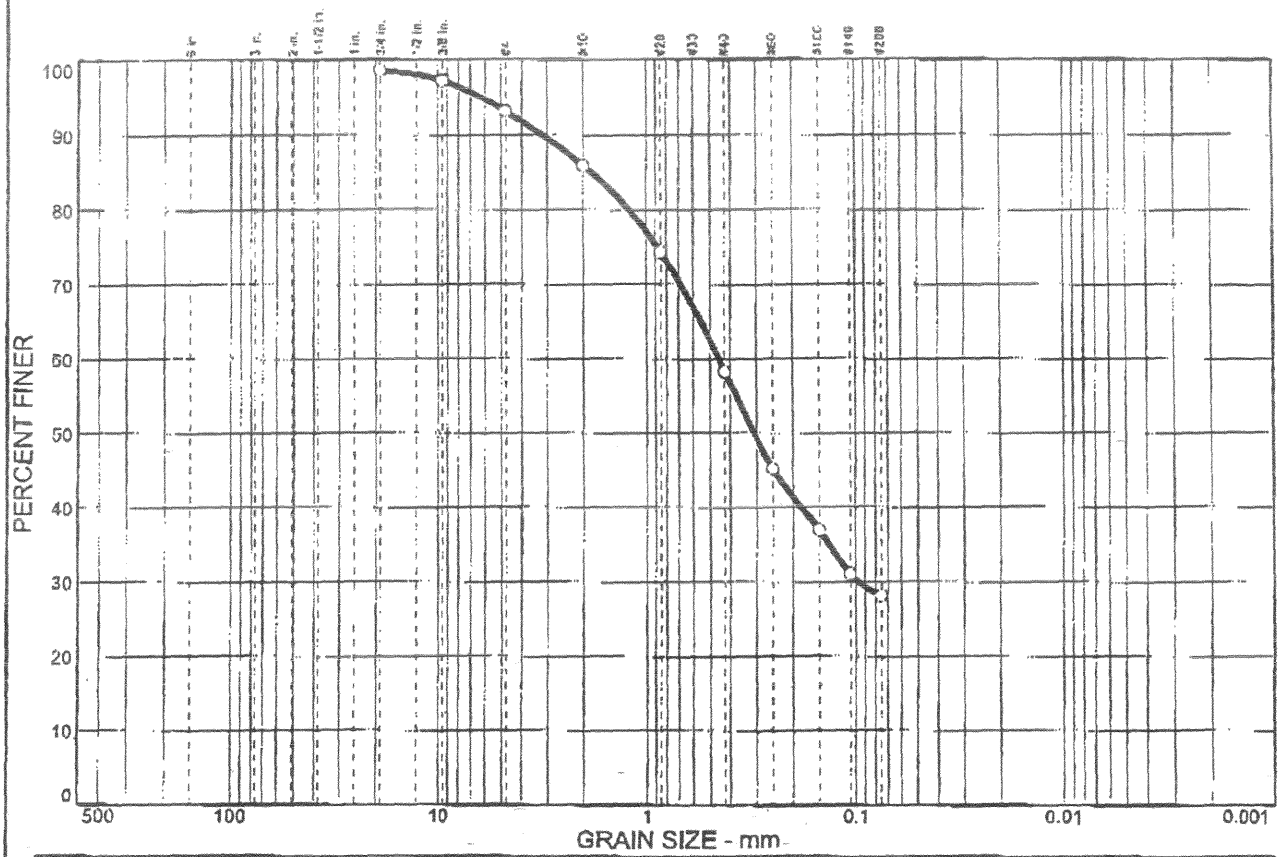
Remarks

Sample No.: B801 Source of Sample: Date:
Location: BA-02 Elev./Depth: 18.5-20.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
		5.5	7.2	27.6	30.2	28.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	98.6		
3/8 in.	97.2		
#4	93.1		
#10	85.9		
#20	74.3		
#40	58.3		
#60	45.2		
#100	36.9		
#140	31.0		
#200	28.1		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.83 D_{60}= 0.454 D_{50}= 0.309
D_{30}= 0.0972 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

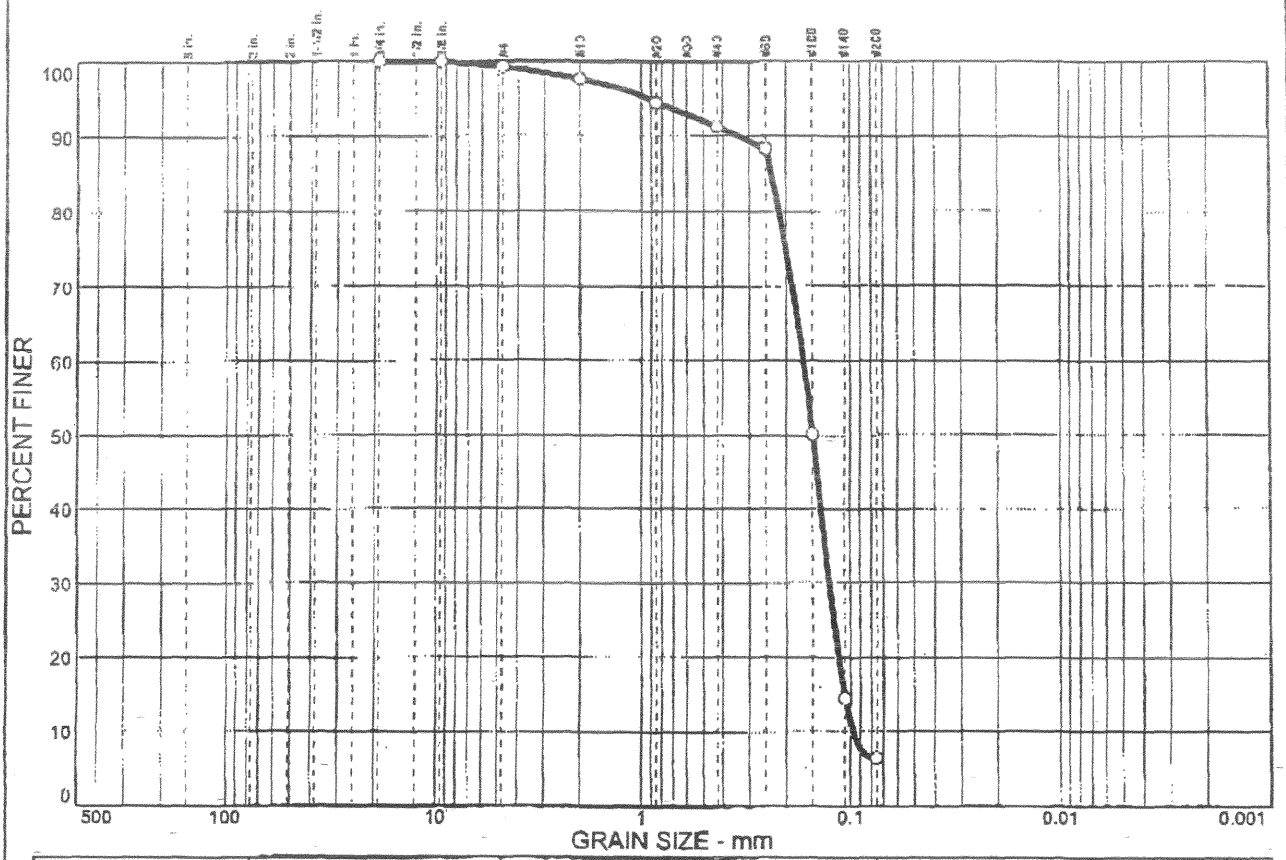
Remarks

Sample No.: B280 Source of Sample: Date:
Location: BA-03 Elev./Depth: 13.5-15.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.7	1.6	6.4	84.9	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	100.0		
#4	99.3		
#10	97.7		
#20	94.5		
#40	91.3		
#60	88.3		
#100	50.1		
#140	14.5		
#200	6.4		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.237 D_{60}= 0.166 D_{50}= 0.150
D_{30}= 0.125 D_{15}= 0.107 D_{10}= 0.0973
C_u= 1.71 C_c= 0.97

Classification

USCS= AASHTO=

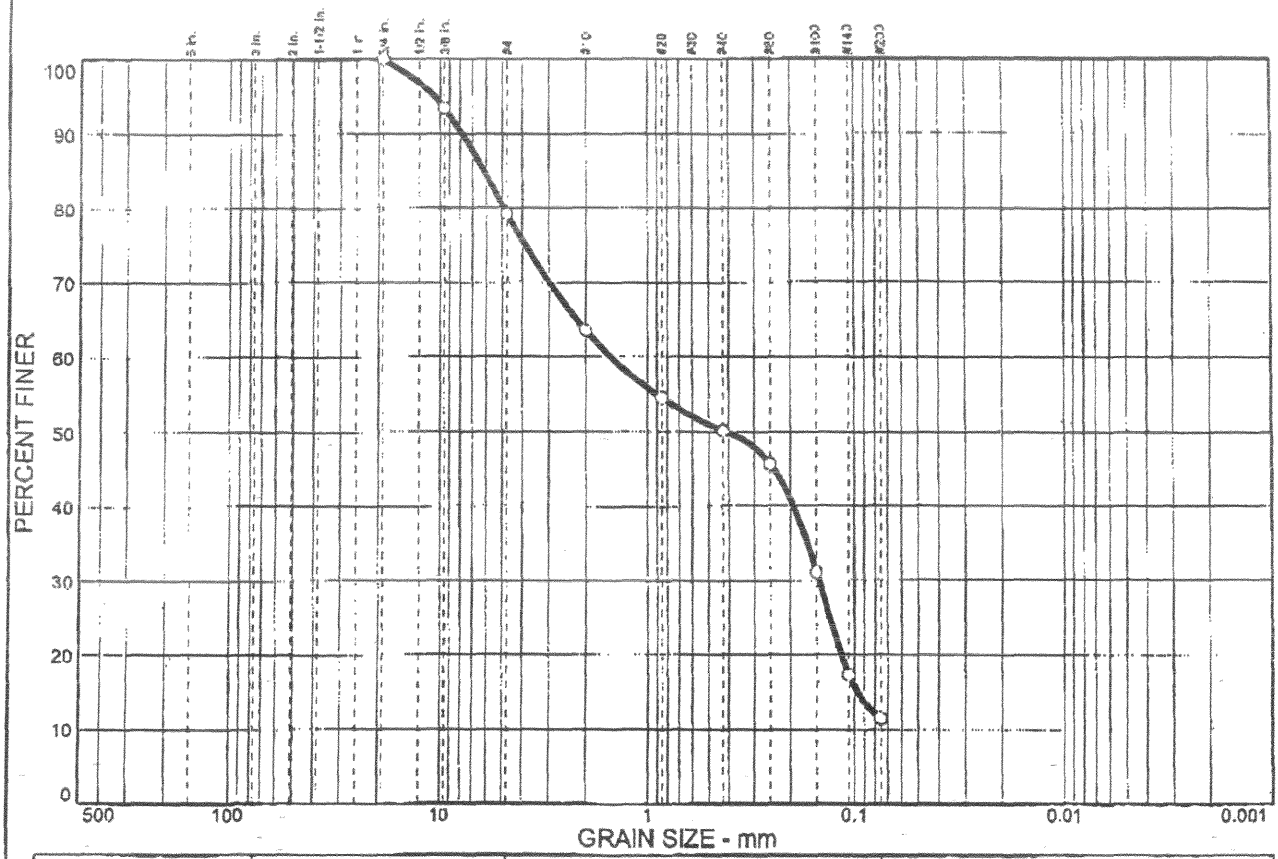
Remarks

Sample No.: B262 Source of Sample: Date:
Location: BA-04 Elev./Depth: 48.5-50.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	20.8	15.7	13.3	38.8	11.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	93.4		
#4	79.2		
#10	63.5		
#20	54.6		
#40	50.2		
#60	45.7		
#100	31.1		
#140	17.2		
#200	11.4		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 6.18 D_{60}= 1.52 D_{50}= 0.408
D_{30}= 0.146 D_{15}= 0.0972 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

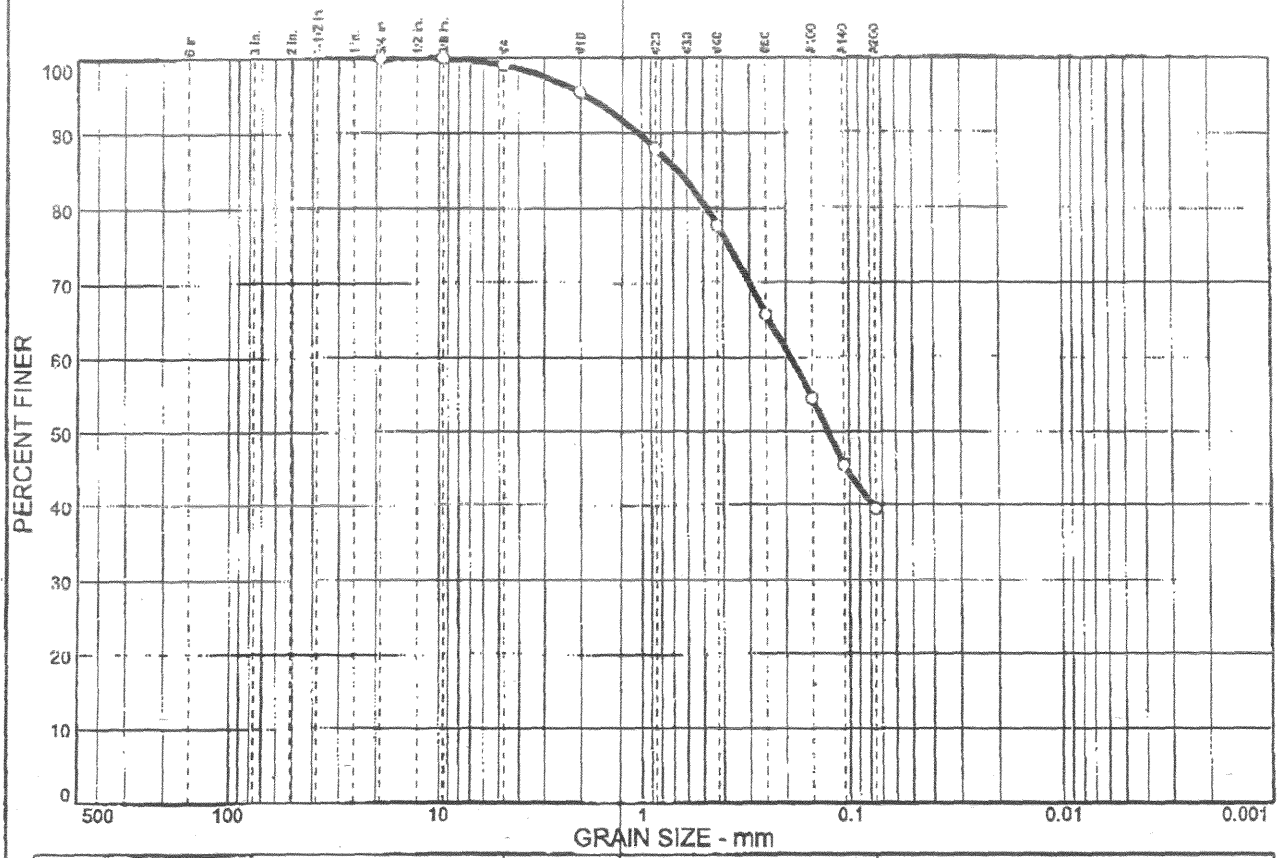
Remarks

Sample No.: BCBR Source of Sample: Date:
Location: BA-05 Elev./Depth: 28.5-30.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.9	3.7	17.8	38.1	39.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	100.0		
#4	99.1		
#10	95.4		
#20	87.9		
#40	77.6		
#60	65.7		
#100	54.4		
#140	45.4		
#200	39.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.669 D_{60}= 0.191 D_{50}= 0.127
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

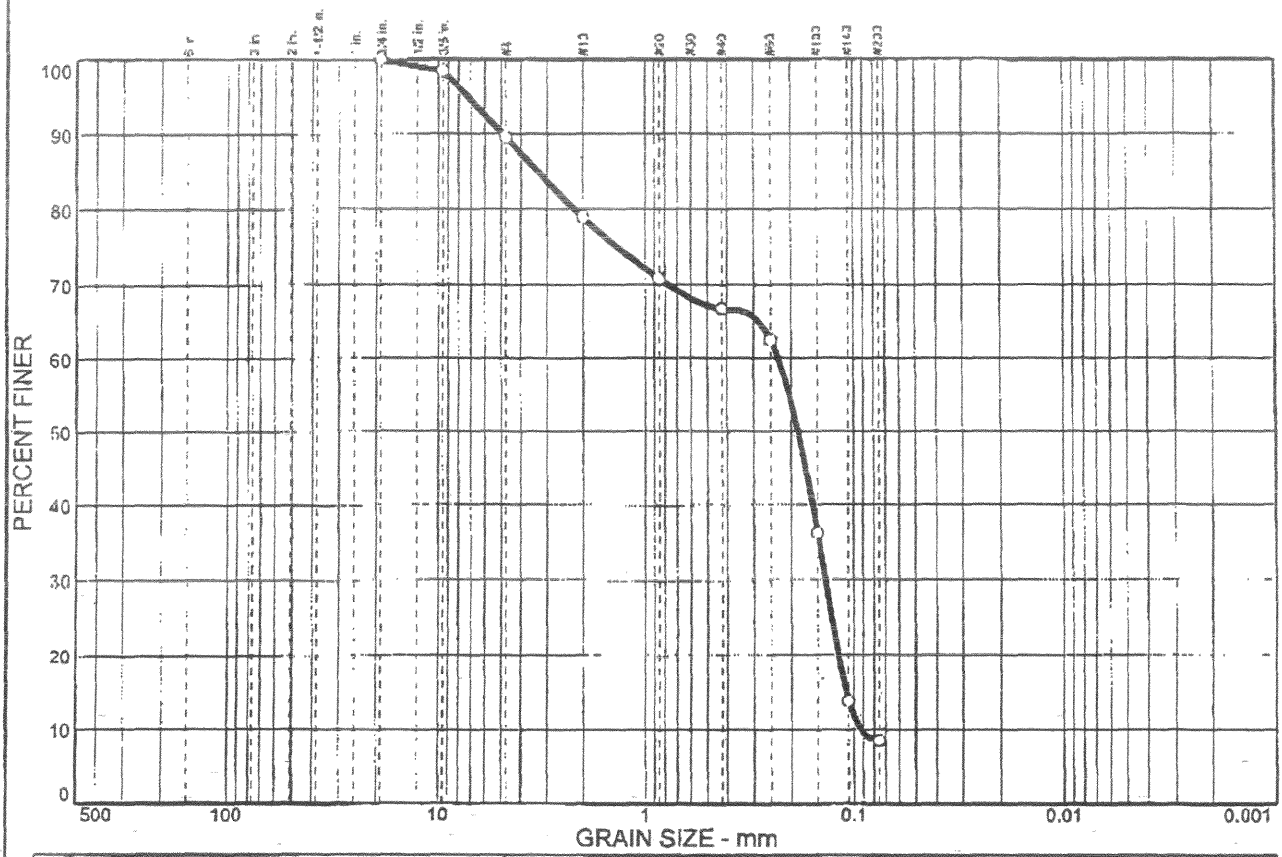
Remarks

Sample No.: B237 Source of Sample: Date:
Location: BA-06 Elev./Depth: 13.5-15.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	10.4	10.7	12.2	58.3	8.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	98.5		
#4	89.6		
#10	78.9		
#20	70.8		
#40	66.7		
#60	62.4		
#100	36.3		
#140	13.8		
#200	8.4		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 3.32 D_{60}= 0.231 D_{50}= 0.186
D_{30}= 0.138 D_{15}= 0.109 D_{10}= 0.0929
C_u= 2.49 C_c= 0.88

Classification

USCS= AASHTO=

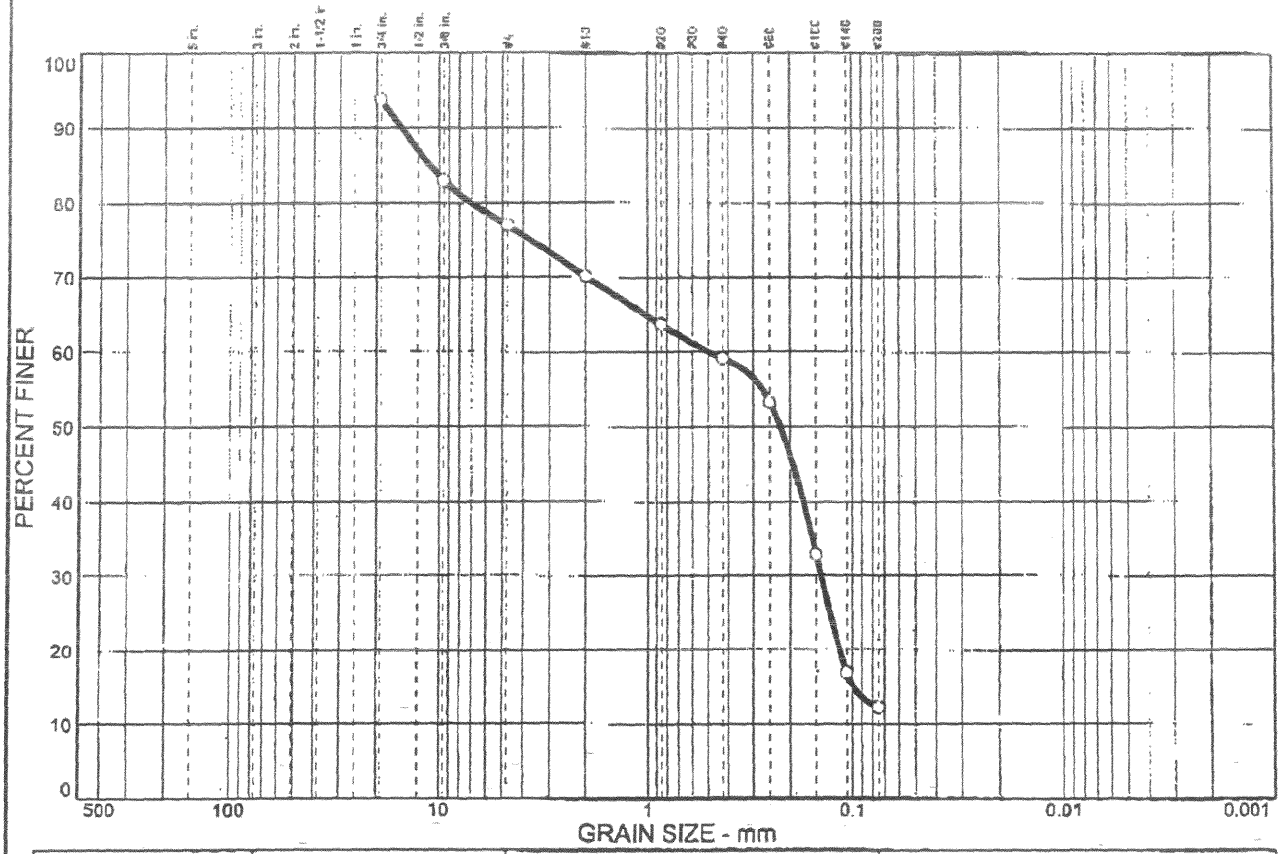
Remarks

Sample No.: B259 Source of Sample: Date:
Location: BA-07 Elev./Depth: 43.5-45.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
		16.9	6.9	11.0	46.9	12.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	93.9		
3/8 in.	83.0		
#4	77.0		
#10	70.1		
#20	63.6		
#40	59.1		
#60	53.2		
#100	32.9		
#140	16.9		
#200	12.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 11.1 D_{60}= 0.499 D_{50}= 0.223
D_{30}= 0.142 D_{15}= 0.0984 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

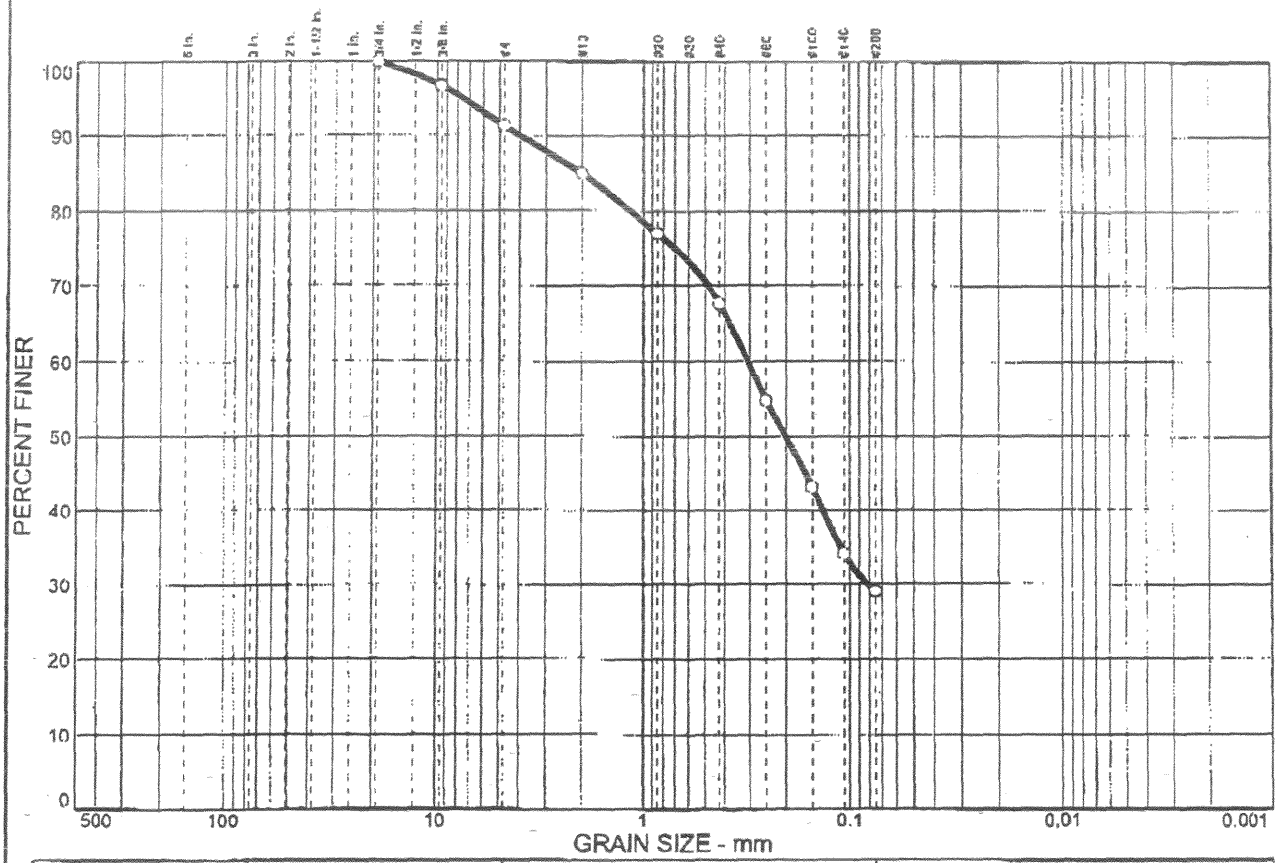
Remarks

Sample No.: B300 Source of Sample: Date:
Location: BA-08 Elev./Depth: 28.5-30.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	8.7	6.4	17.3	38.6	29.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	96.7		
#4	91.3		
#10	84.9		
#20	76.9		
#40	67.6		
#60	54.8		
#100	43.1		
#140	34.1		
#200	29.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 2.02 D_{60}= 0.308 D_{50}= 0.202
D_{30}= 0.0817 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

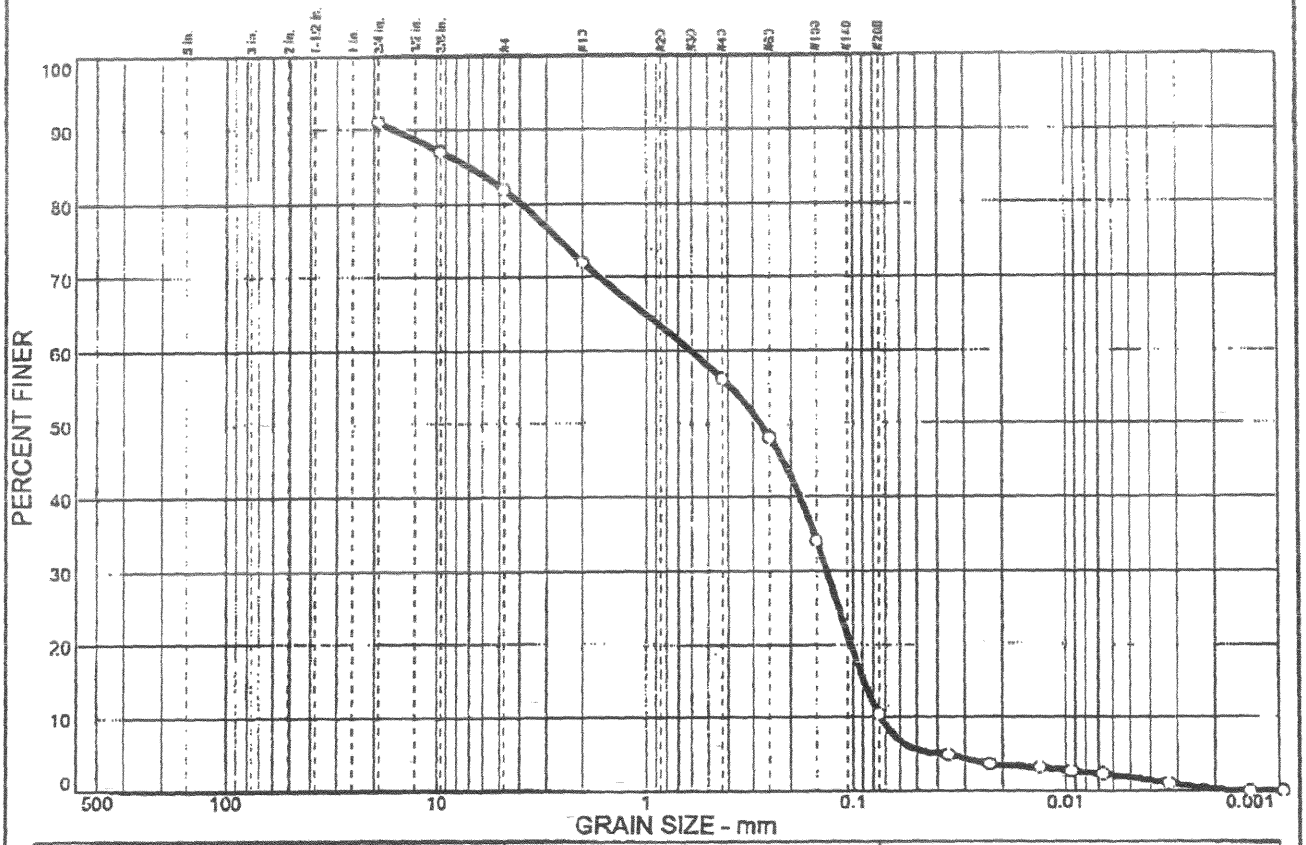
Remarks

Sample No.: B305 Source of Sample: Date:
Location: BA-09 Elev./Depth: 13.5-15.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
		9.2	9.9	15.9	45.7	8.5	1.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	91.1		
3/8 in.	87.0		
#4	81.9		
#10	72.0		
#40	56.1		
#60	48.1		
#100	34.1		
#200	10.4		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 6.97 D_{60}= 0.607 D_{50}= 0.276
D_{30}= 0.134 D_{15}= 0.0888 D_{10}= 0.0736
C_u= 8.24 C_c= 0.40

Classification

USCS= AASHTO=

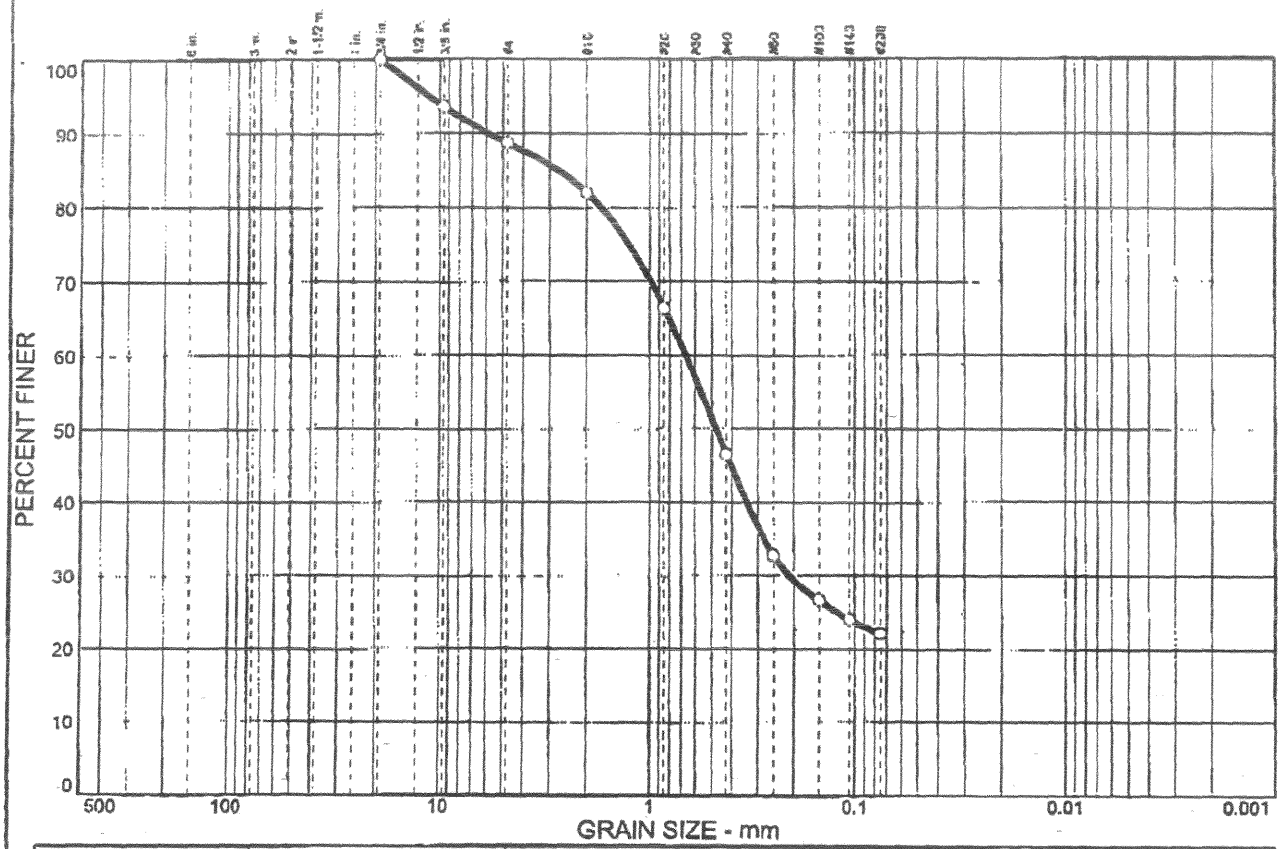
Remarks

Sample No.: T Source of Sample: Date:
Location: TC-1-11 Elev./Depth: 48.5'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	11.3	6.7	35.5	24.4	22.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	93.6		
#4	88.7		
#10	82.0		
#20	66.4		
#40	46.5		
#60	32.8		
#100	26.7		
#140	24.0		
#200	22.1		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 2.72 D_{60}= 0.670 D_{50}= 0.478
D_{30}= 0.209 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

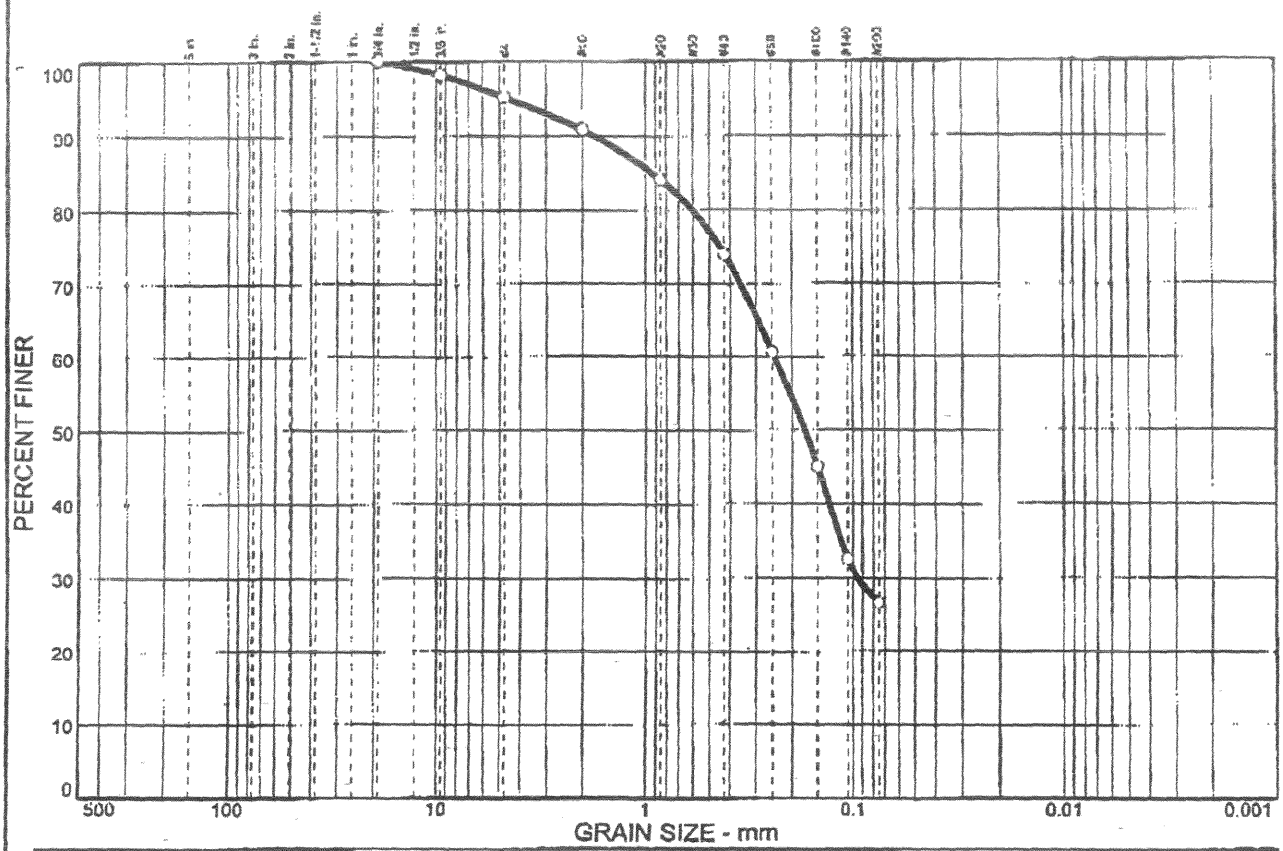
Remarks

Sample No.: 999 Source of Sample: Date:
Location: TC-2-2 Elev./Depth: 8.3'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	4.8	4.4	16.8	47.4	26.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	98.2		
#4	95.2		
#10	90.8		
#20	84.1		
#40	74.0		
#60	60.6		
#100	45.1		
#140	32.6		
#200	26.6		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.931 D_{60}= 0.245 D_{50}= 0.173
D_{30}= 0.0948 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

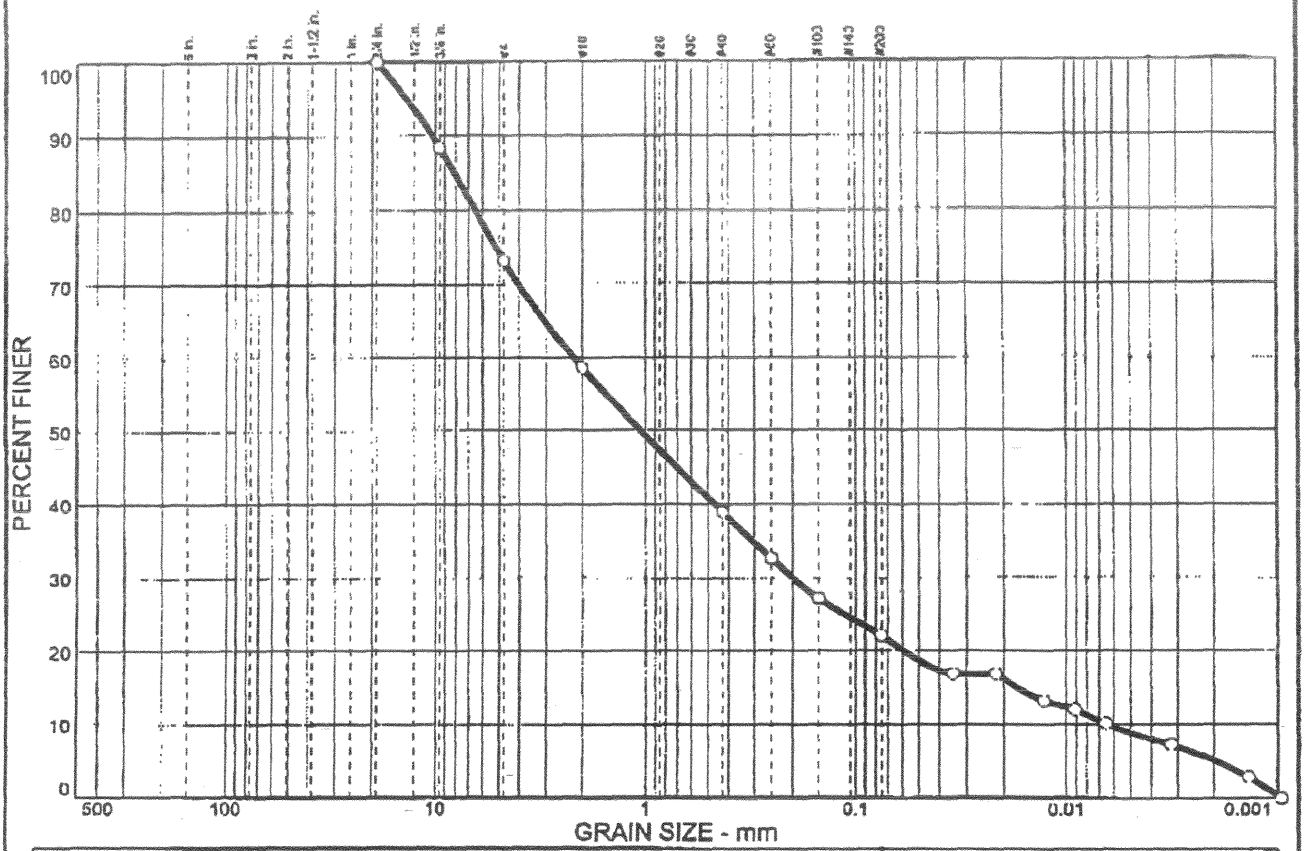
Remarks

Sample No.: 211 Source of Sample: Date:
Location: TC-3-3 Elev./Depth: 13.5'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	26.8	14.6	19.7	16.8	13.3	8.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	88.4		
#4	73.2		
#10	58.6		
#40	38.9		
#60	32.6		
#100	27.2		
#200	22.1		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 8.10 D_{60}= 2.20 D_{50}= 1.05
D_{30}= 0.199 D_{15}= 0.0171 D_{10}= 0.0064
C_u= 346.52 C_c= 2.82

Classification

USCS= AASHTO=

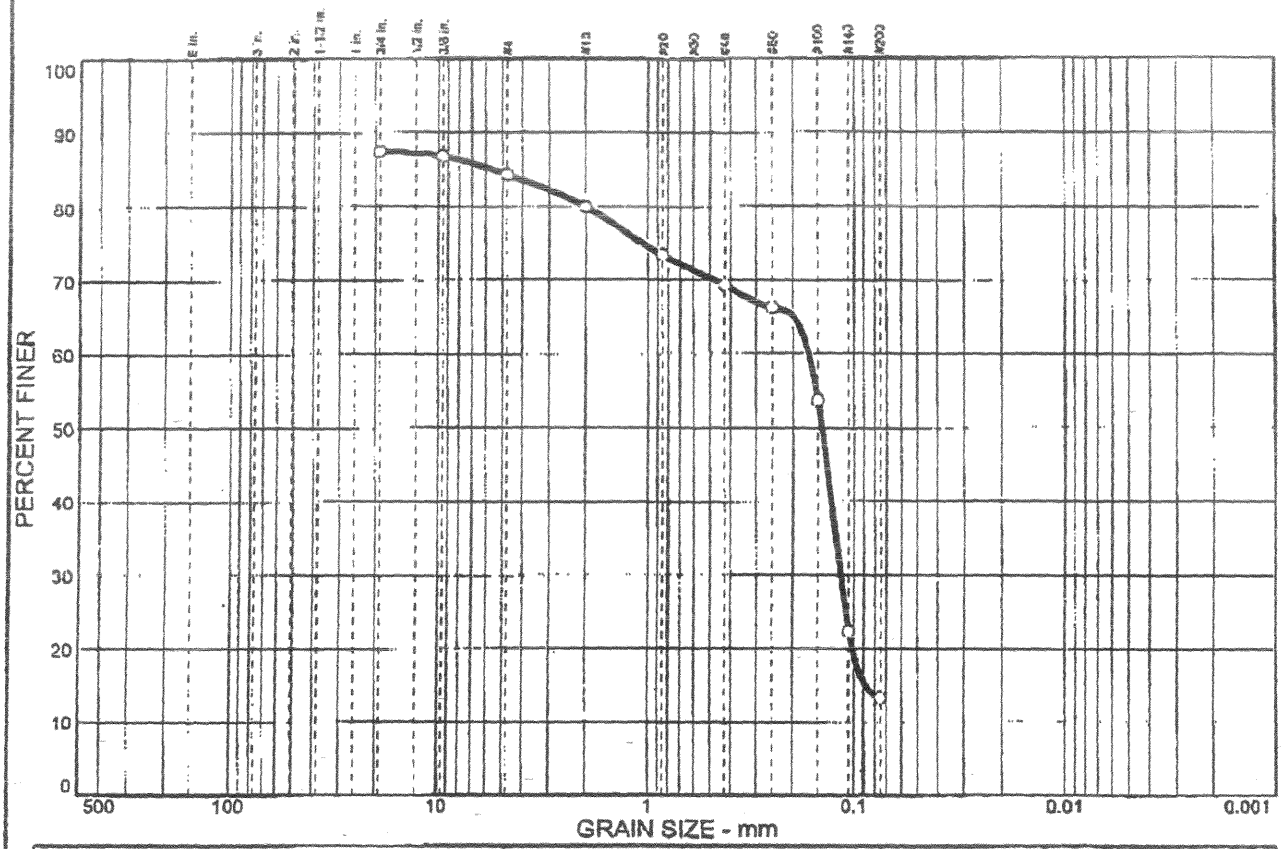
Remarks

Sample No.: A Source of Sample: Date:
Location: TC-4-2 Elev./Depth: 7.4'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
		3.1	4.4	10.6	56.1	13.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	87.4		
3/8 in.	86.8		
#4	84.3		
#10	79.9		
#20	73.4		
#40	69.3		
#60	66.3		
#100	53.7		
#140	22.3		
#200	13.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 5.61 D_{60}= 0.167 D_{50}= 0.143
D_{30}= 0.117 D_{15}= 0.0888 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

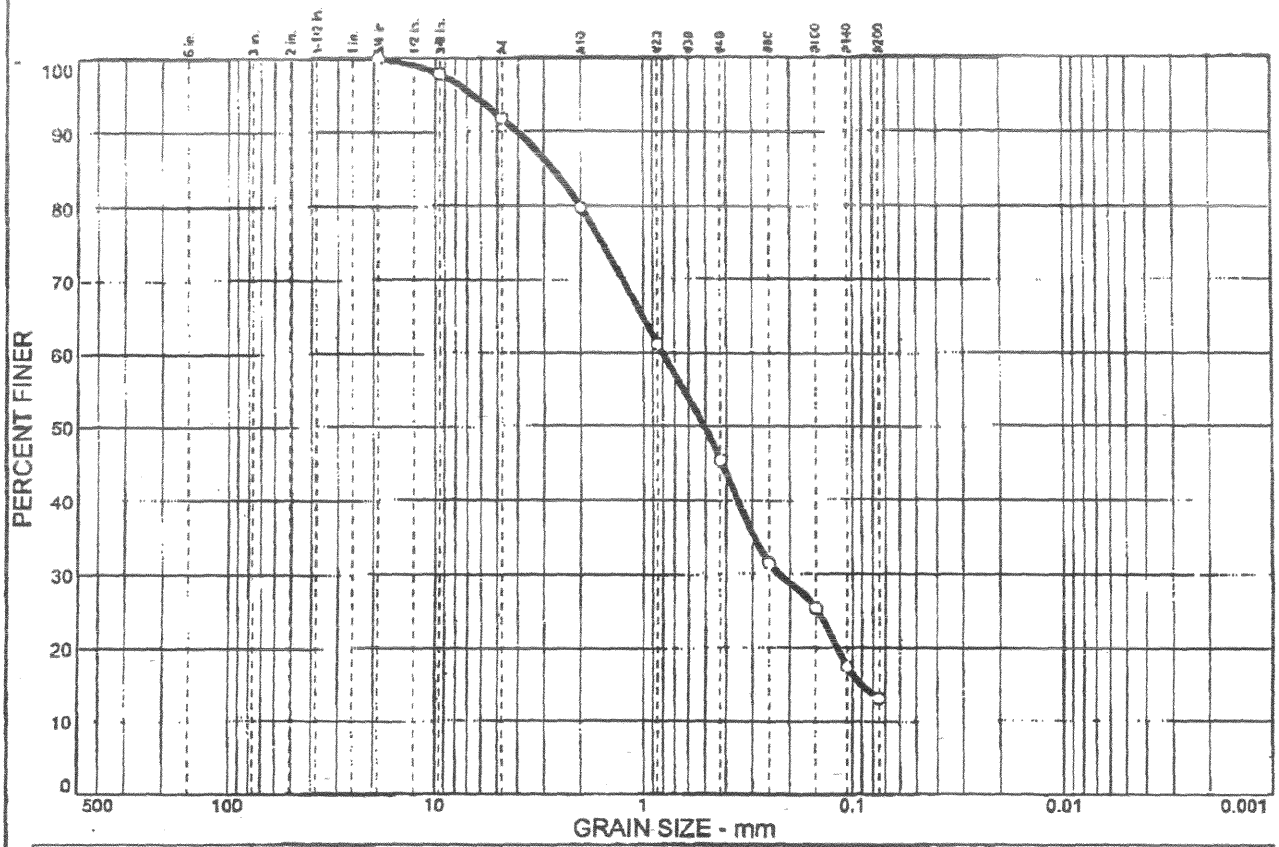
Remarks

Sample No.: 269 Source of Sample: Date:
Location: TC-5-10 Elev./Depth: 48.5'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	8.2	12.0	34.4	32.3	13.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	97.8		
#4	91.8		
#10	79.8		
#20	61.2		
#40	45.4		
#60	31.5		
#100	25.4		
#140	17.4		
#200	13.1		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 2.74 D_{60}= 0.804 D_{50}= 0.509
D_{30}= 0.225 D_{15}= 0.0909 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

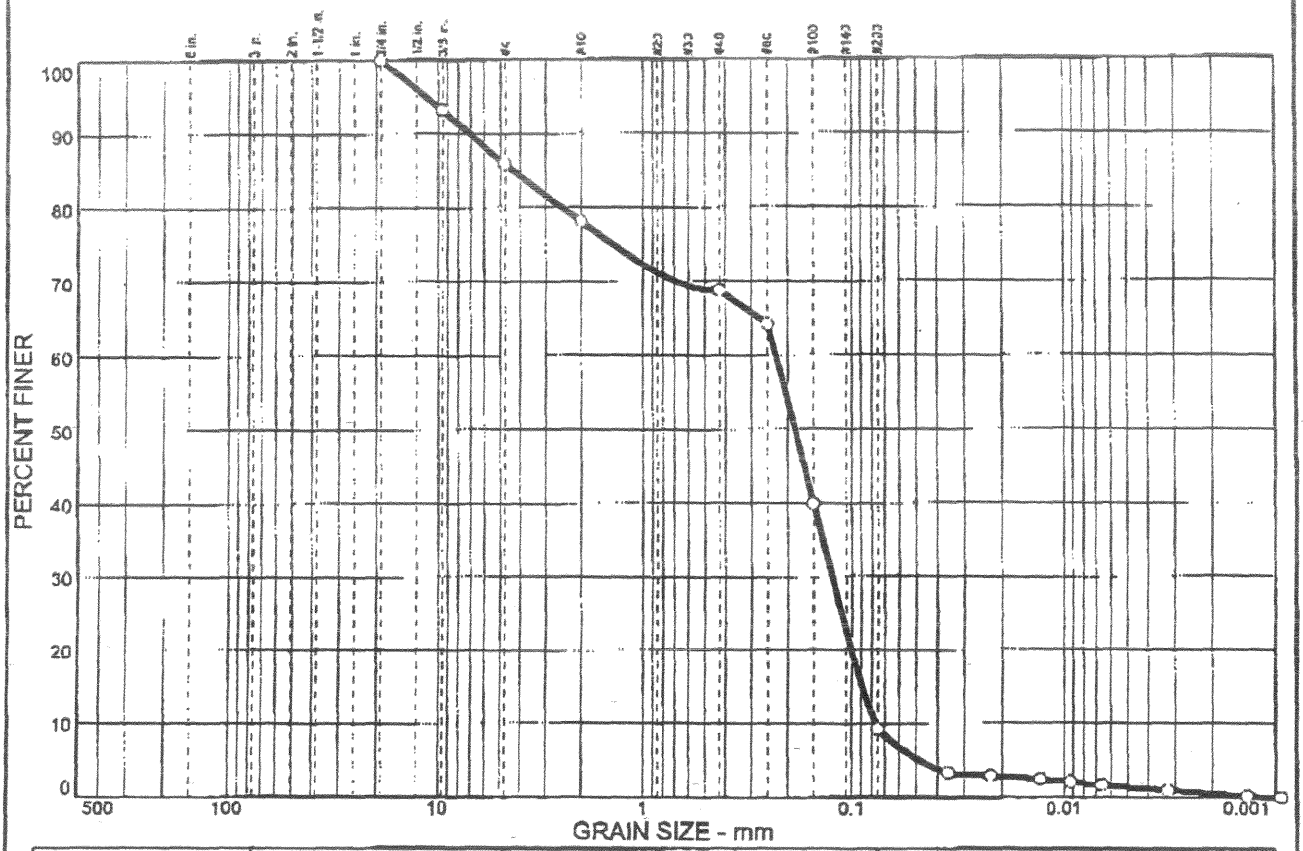
Remarks

Sample No.: 307 Source of Sample: Date:
Location: TC-6-4 Elev./Depth: 18.5'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	14.1	7.8	9.4	59.5	7.8	1.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	93.2		
#4	85.9		
#10	78.1		
#40	68.7		
#60	64.2		
#100	39.9		
#200	9.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 4.33 D_{60}= 0.228 D_{50}= 0.184
D_{30}= 0.123 D_{15}= 0.0892 D_{10}= 0.0772
C_u= 2.96 C_c= 0.87

Classification

USCS= AASHTO=

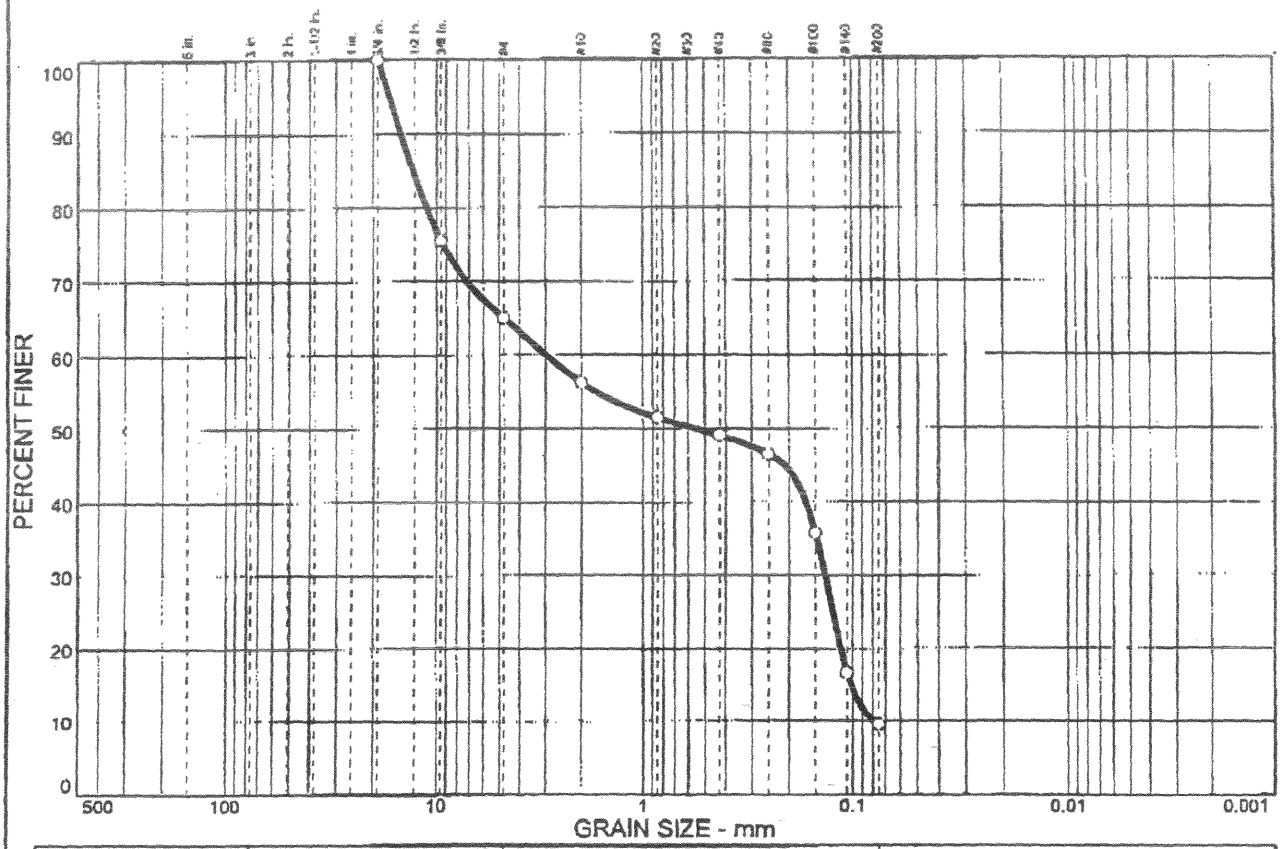
Remarks

Sample No.: AS Source of Sample: Date:
Location: TC-6-6 Elev./Depth: 28.5'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	35.0	8.8	7.2	39.5	9.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	75.5		
#4	65.0		
#10	56.2		
#20	51.5		
#40	49.0		
#60	46.5		
#100	35.8		
#140	16.6		
#200	9.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 13.0 D_{60}= 2.99 D_{50}= 0.561
D_{30}= 0.135 D_{15}= 0.102 D_{10}= 0.0789
C_u= 37.83 C_c= 0.08

Classification

USCS= AASHTO=

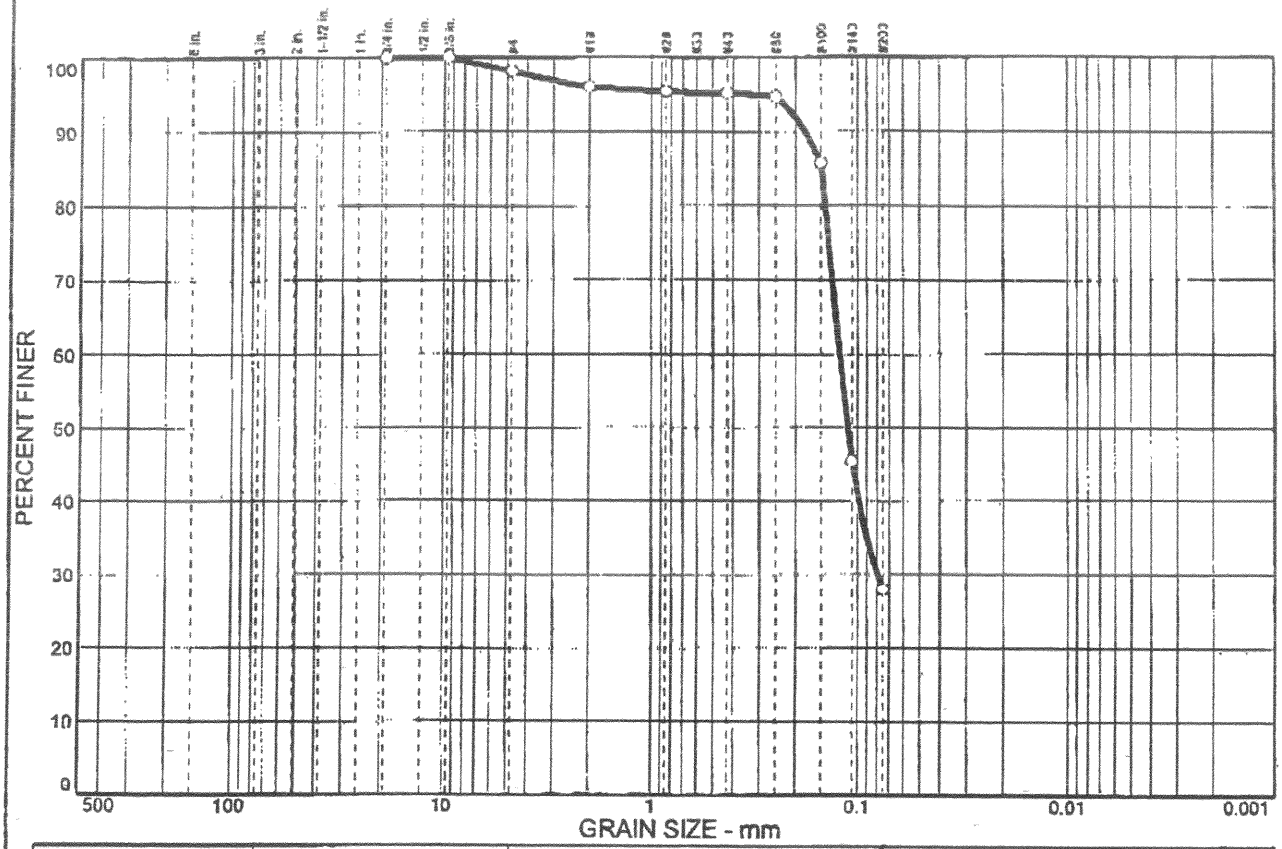
Remarks

Sample No.: 254 Source of Sample: Date:
Location: TC-7-6 Elev./Depth: 28.5'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	1.8	2.2	0.8	67.2	28.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	100.0		
#4	98.2		
#10	96.0		
#20	95.4		
#40	95.2		
#60	94.7		
#100	85.8		
#140	45.4		
#200	28.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.149 D_{60}= 0.122 D_{50}= 0.111
D_{30}= 0.0796 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

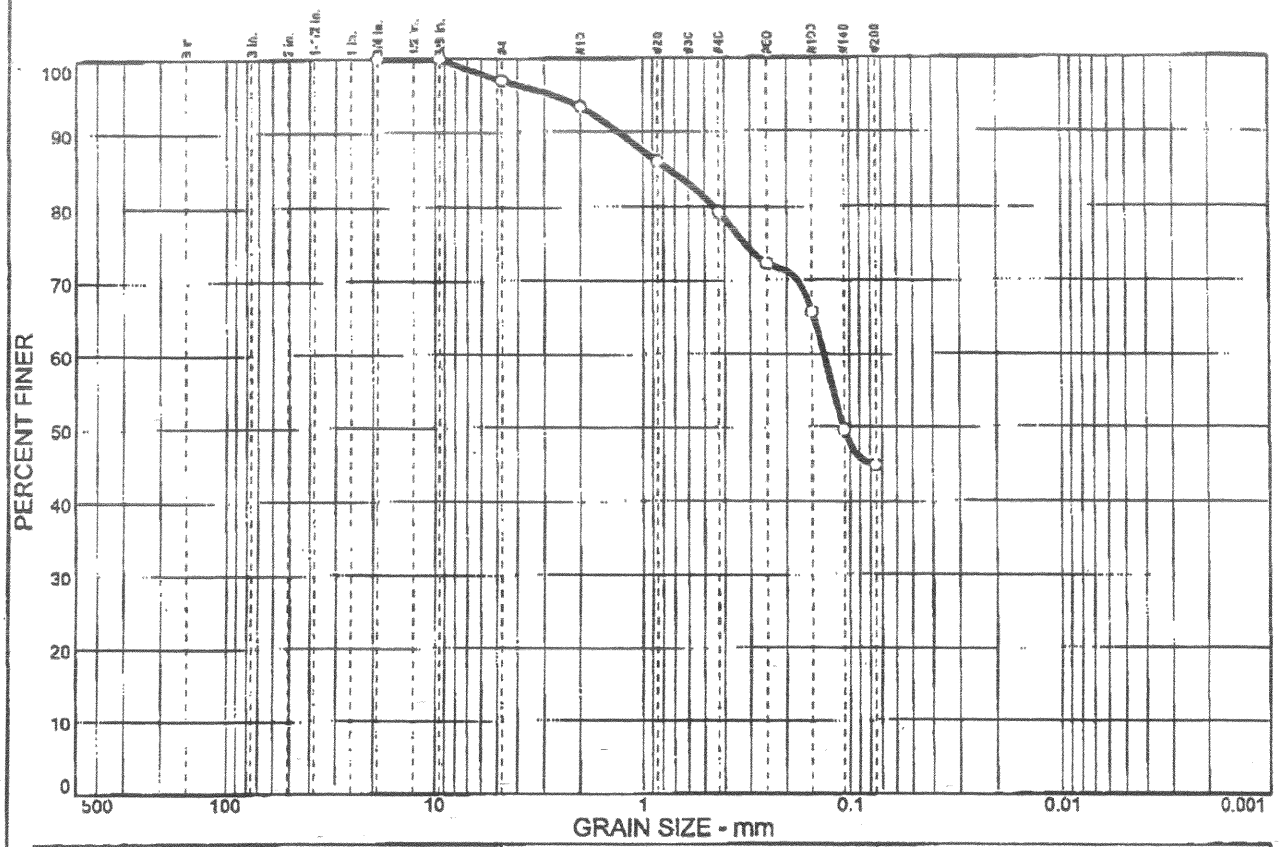
Remarks

Sample No.: 203 Source of Sample: Date:
Location: TC-8-9 Elev./Depth: 43.5-45.0'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	3.0	3.6	14.2	34.3	44.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	100.0		
#4	97.0		
#10	93.4		
#20	86.0		
#40	79.2		
#60	72.3		
#100	65.8		
#140	49.6		
#200	44.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.755 D_{60}= 0.132 D_{50}= 0.107
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 249 Source of Sample: Date:
Location: TC-10-4 Elev./Depth: 18.5'

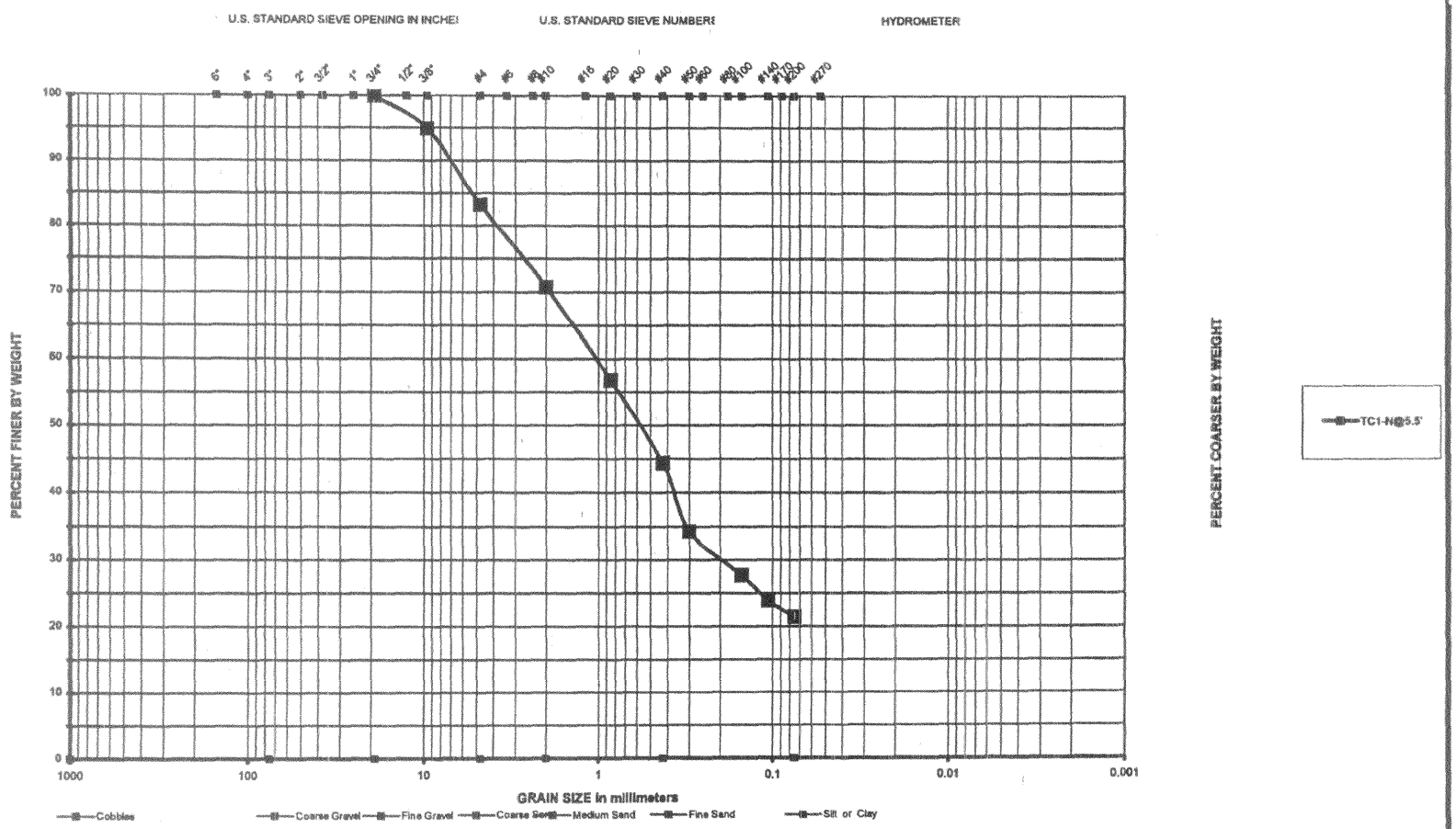
NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

LABORATORY TEST RESULTS FOR
EAA RESERVOIR
PROJECT No: 05-05-0013-101.
N&A

Boring Number	Approximate Sample Depth (feet)	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		Classification	Stratum Number
		10	40	60	100	200			LL	PI		
TC1-N	5.5'	71	44	34	28	22	15	-	-	-		
TC1-N	33.5'	96	85	73	31	6	26	-	-	-		
TC1-N	53.5'	53	35	27	20	13	15	-	-	-		
TC1-N	68.5'	55	29	22	16	11	18	-	-	-		
TC1-N	73.5'	63	30	20	11	8	24	-	-	-		
TC1-N	88.5'	76	50	37	21	17	25	-	-	-		
TC1-E	13.5'	69	53	44	35	25	21	-	-	-		
TC1-E	53.5'	50	28	22	18	14	17	-	-	-		
TC1-E	58.5'	79	43	30	20	15	25	-	-	-		
TC1-E	83.5'	60	34	23	13	10	22	-	-	-		
TC1-E	88.5'	82	49	29	14	12	21	-	-	-		
TC1-E	98.5'	73	35	25	16	12	15	-	-	-		
TC1-W	13.5'	69	55	46	36	23	26	-	-	-		
TC1-W	48.5'	88	79	75	53	15	26	-	-	-		

Boring Number	Approximate Sample Depth (feet)	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		Classification	Stratum Number
		10	40	60	100	200			LL	PI		
TC1-W	68.5'	56	29	22	15	12	19	-	-	-		
TC1-W	78.5'	69	37	25	15	12	22	-	-	-		
TC1-W	93.5'	84	39	23	17	14	22	-	-	-		
TC1-S	13.5'	84	68	57	43	25	21	-	-	-		
TC1-S	33.5'	82	53	34	19	6	20	-	-	-		
TC1-S	68.5'	63	33	25	17	13	20	-	-	-		
TC1-S	93.5'	82	39	22	14	12	23	-	-	-		



GRADATION CURVES

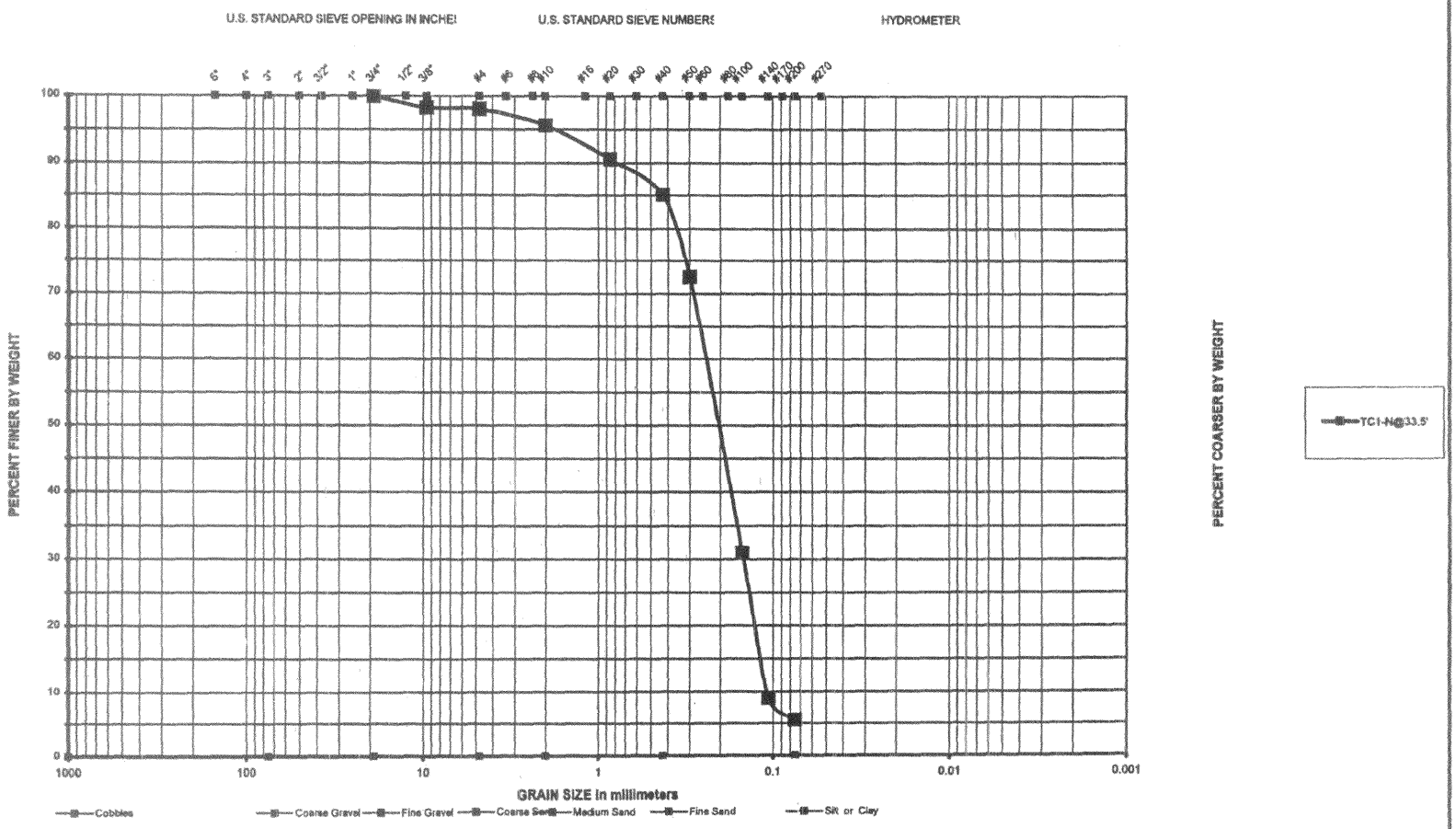
Project: EAA Reservoirs

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-N@5.5'		15	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

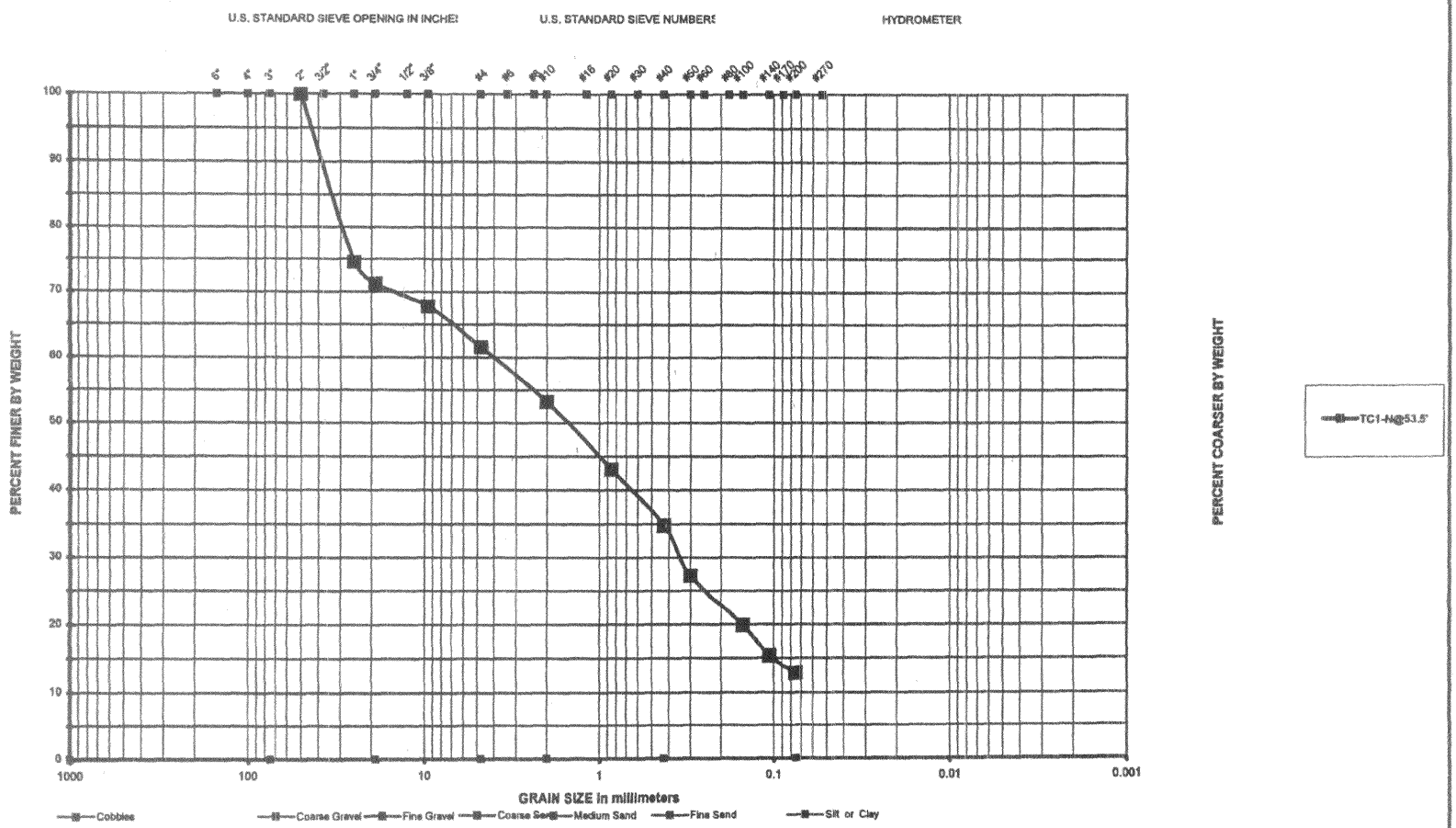
Project: EAA Reservoirs

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-N@33.5'		26	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

Project: EAA Reservoirs

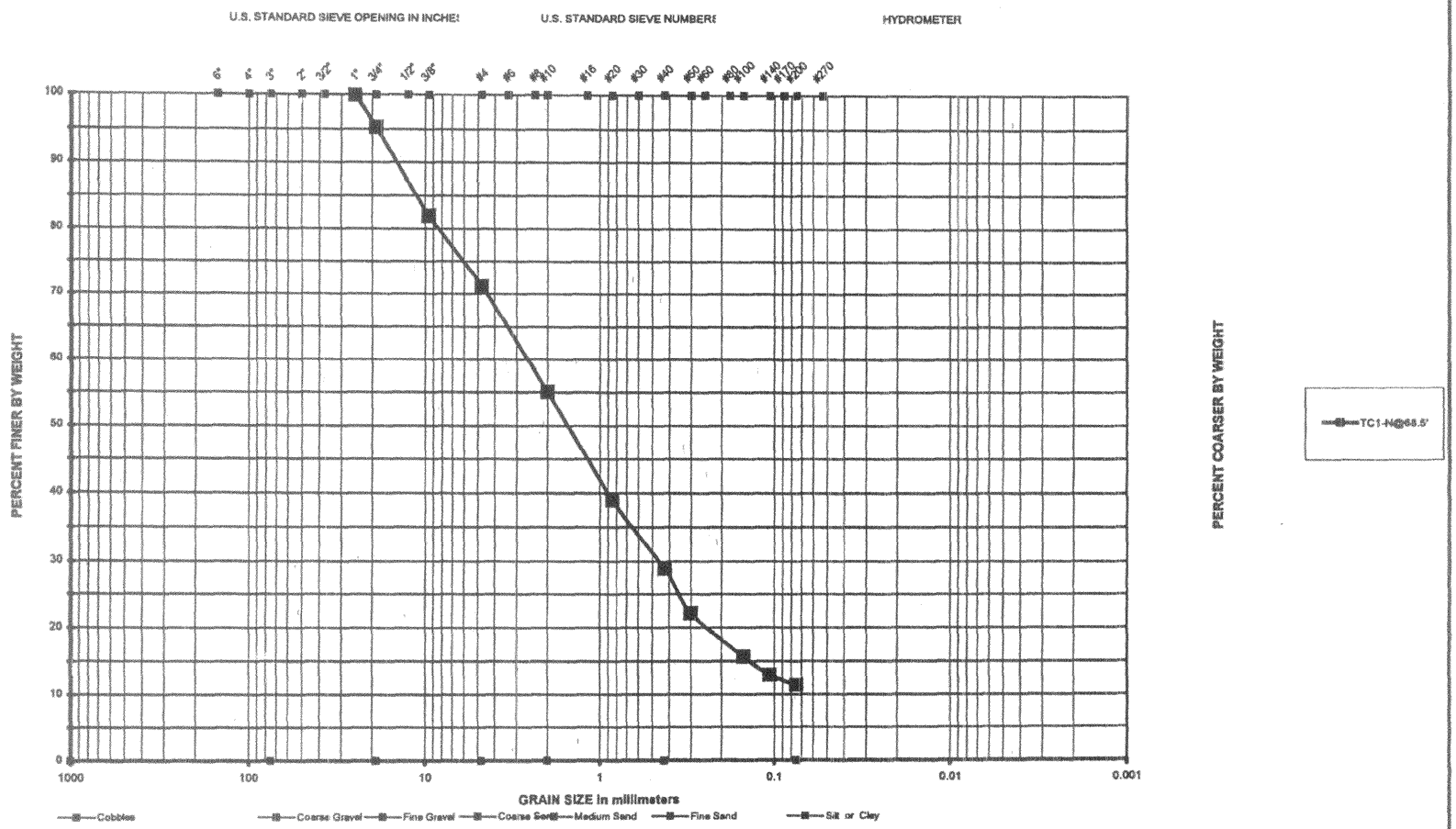
1/0/1900

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-N@53.5'		15	-	-	-

NODARSE & ASSOCIATES, INC.

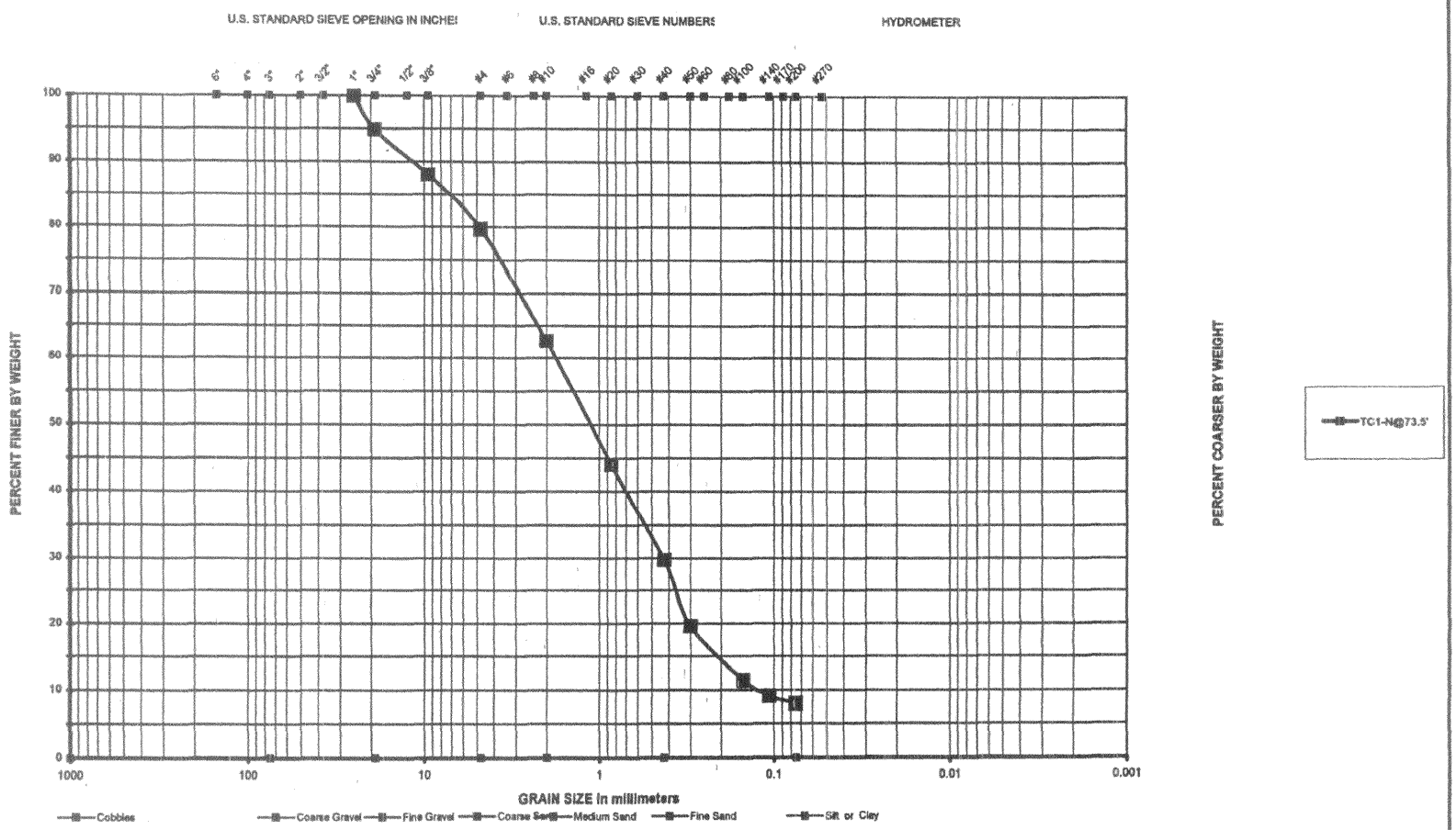


GRADATION CURVES

Project: EAA Reservoirs
1/0/1900
Date: 4/13/2005 N&A Project No. 05-05-0013-1
Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-N@68.5'		18	-	-	-

NODARSE & ASSOCIATES, INC.

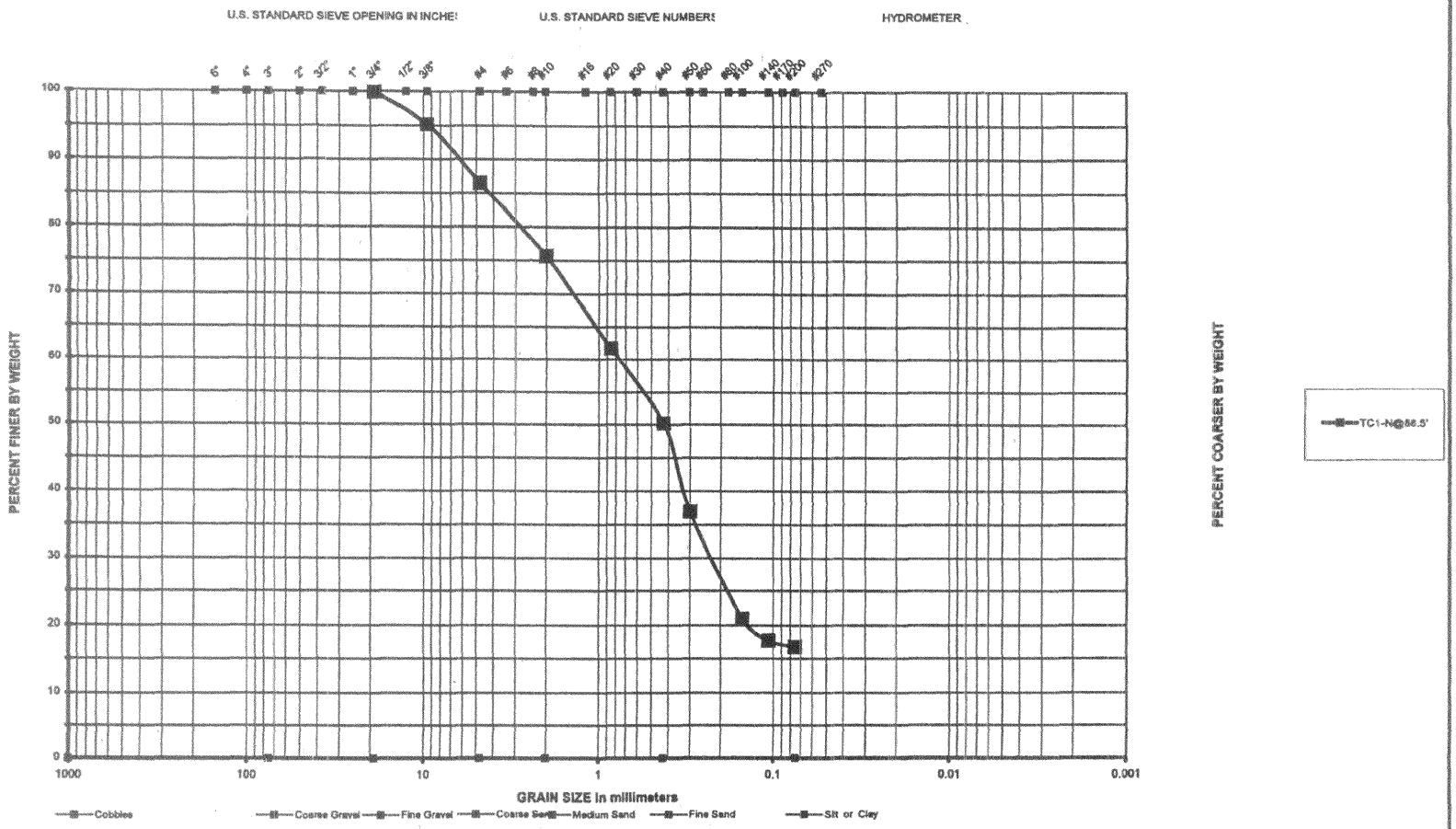


GRADATION CURVES

Project: EAA Reservoirs
1/0/1900
Date: 4/13/2005 N&A Project No. 05-05-0013-1
Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-N@73.5'		24	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

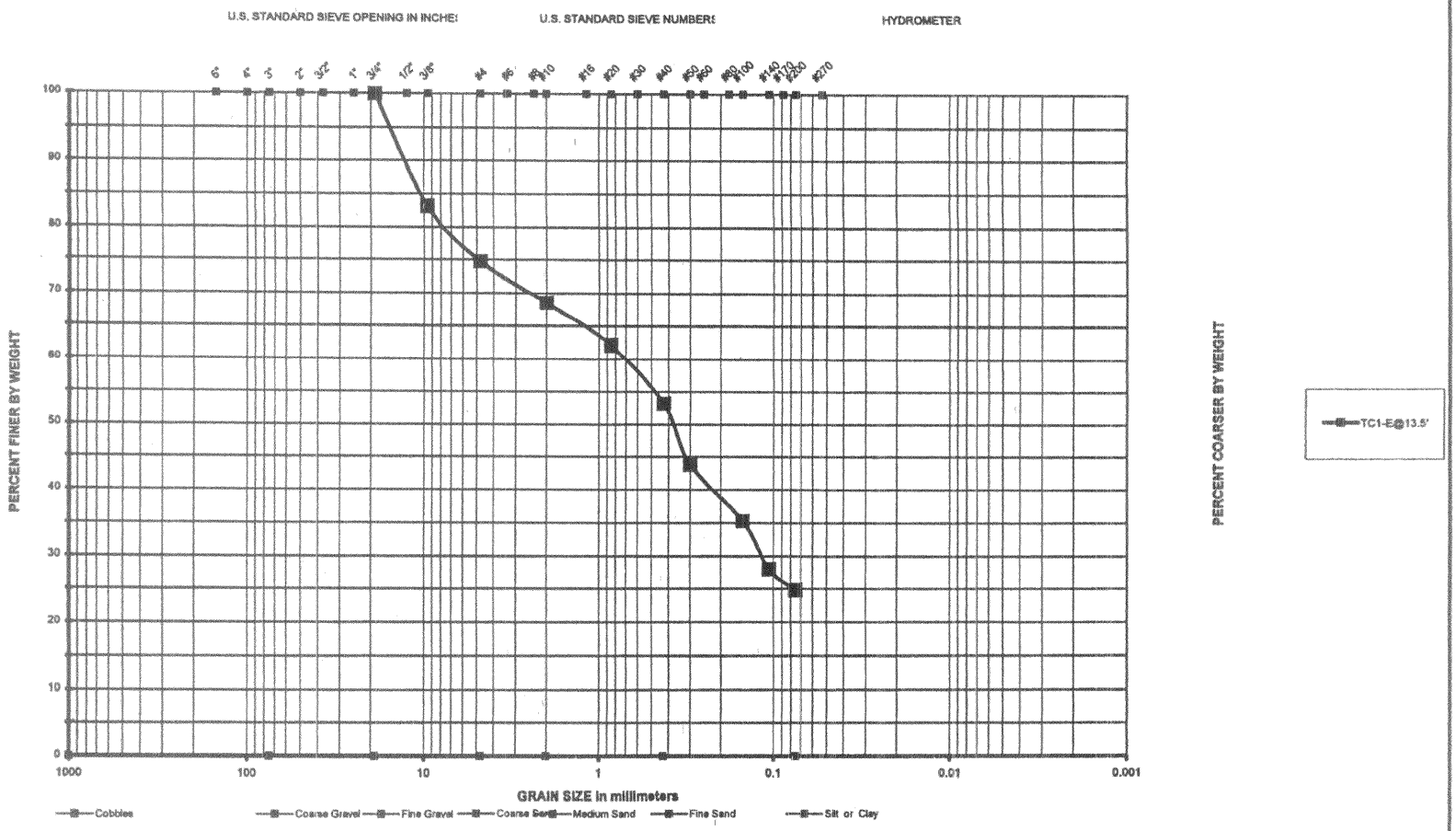
Project: EAA Reservoirs

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-N@88.5'		25	-	-	-

NODARSE & ASSOCIATES, INC.

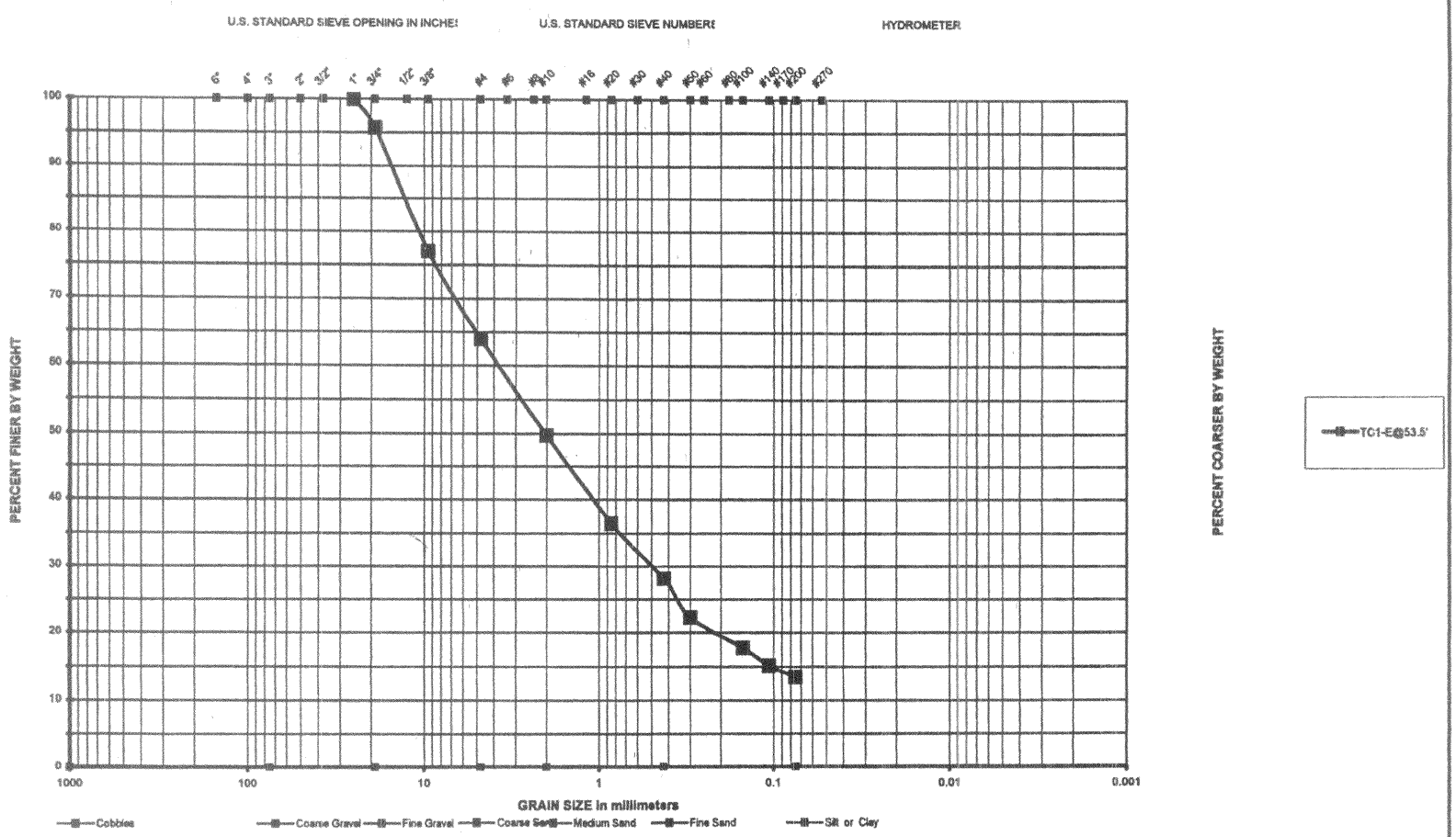


GRADATION CURVES

Project: EAA Reservoirs
1/0/1900
Date: 4/13/2005 N&A Project No. 05-05-0013-1
Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-E@13.5'		21	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

Project: EAA Reservoirs

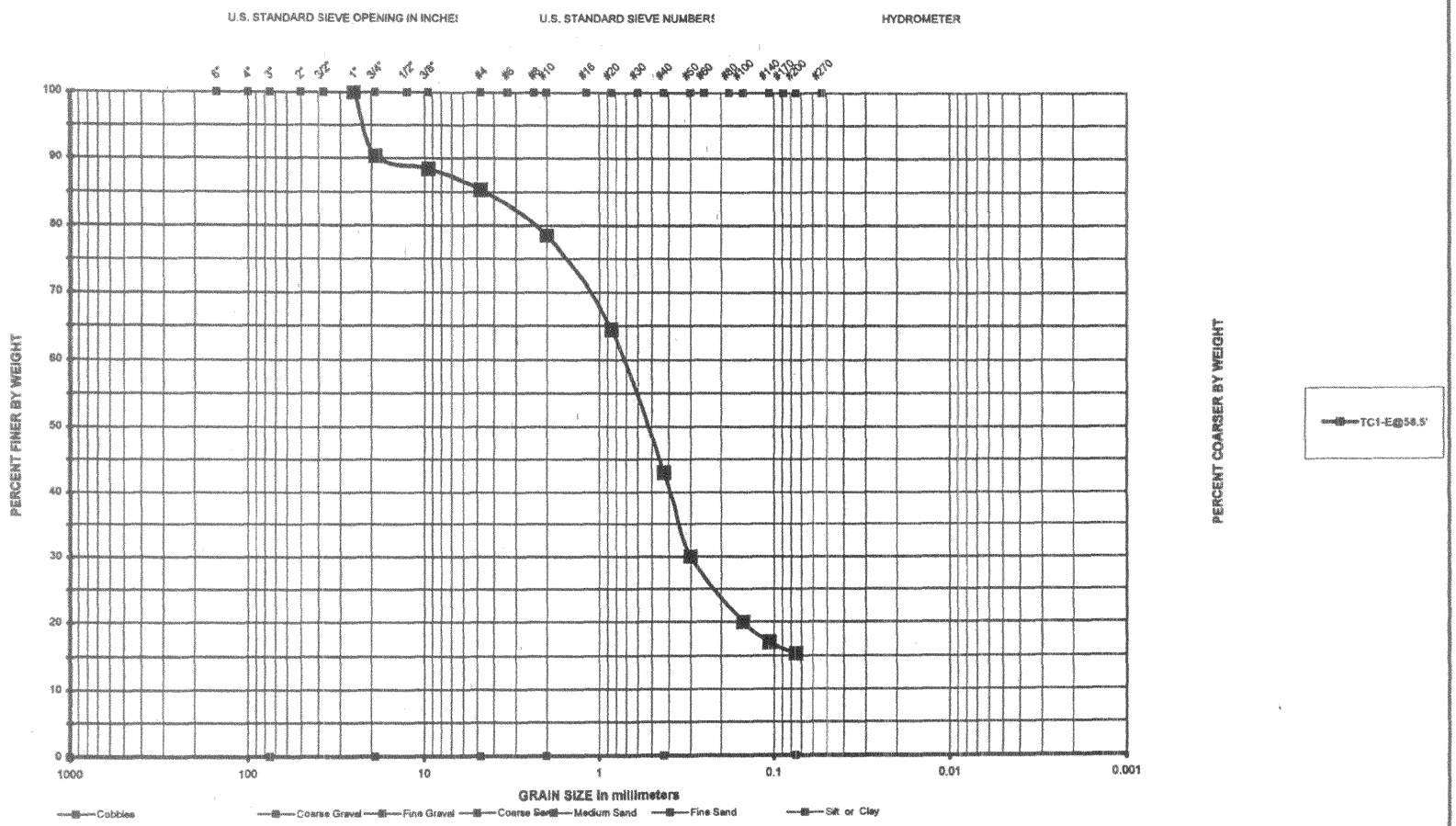
1/0/1900

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-E@53.5'		17	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

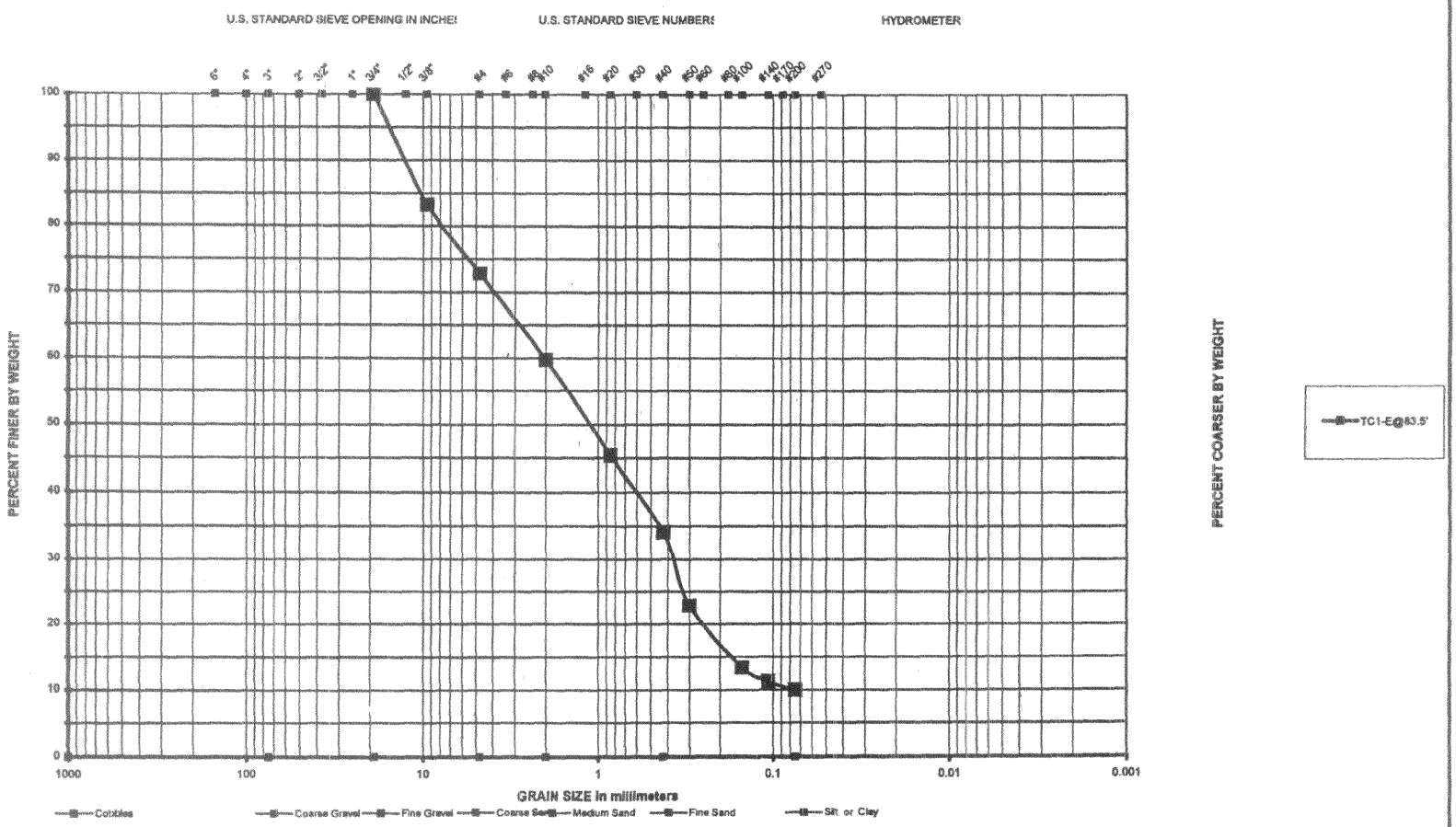
Project: EAA Reservoirs

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-E@58.5'		25	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

Project: EAA Reservoirs

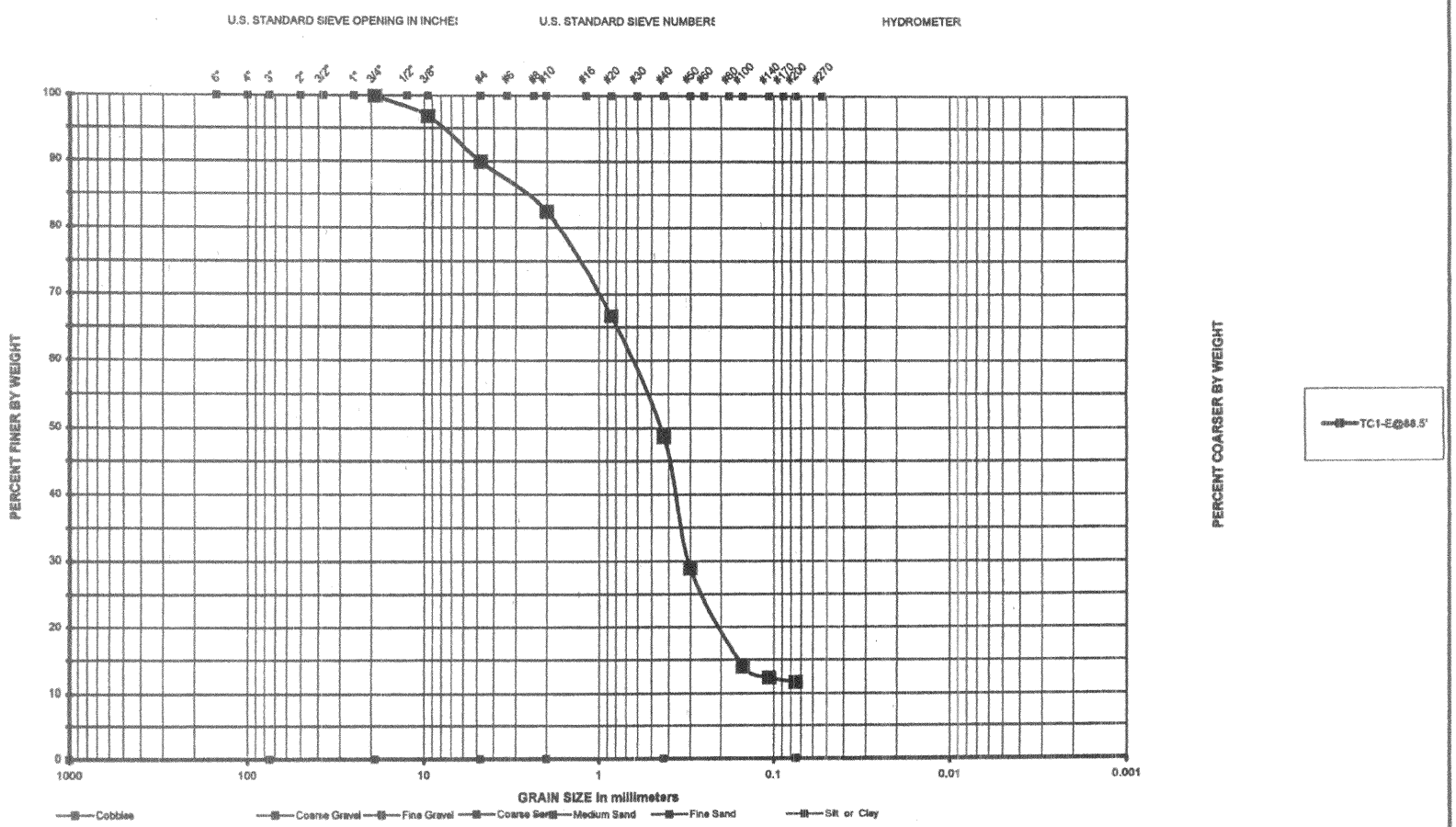
1/0/1900

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-E@83.5'		22	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

Project: EAA Reservoirs

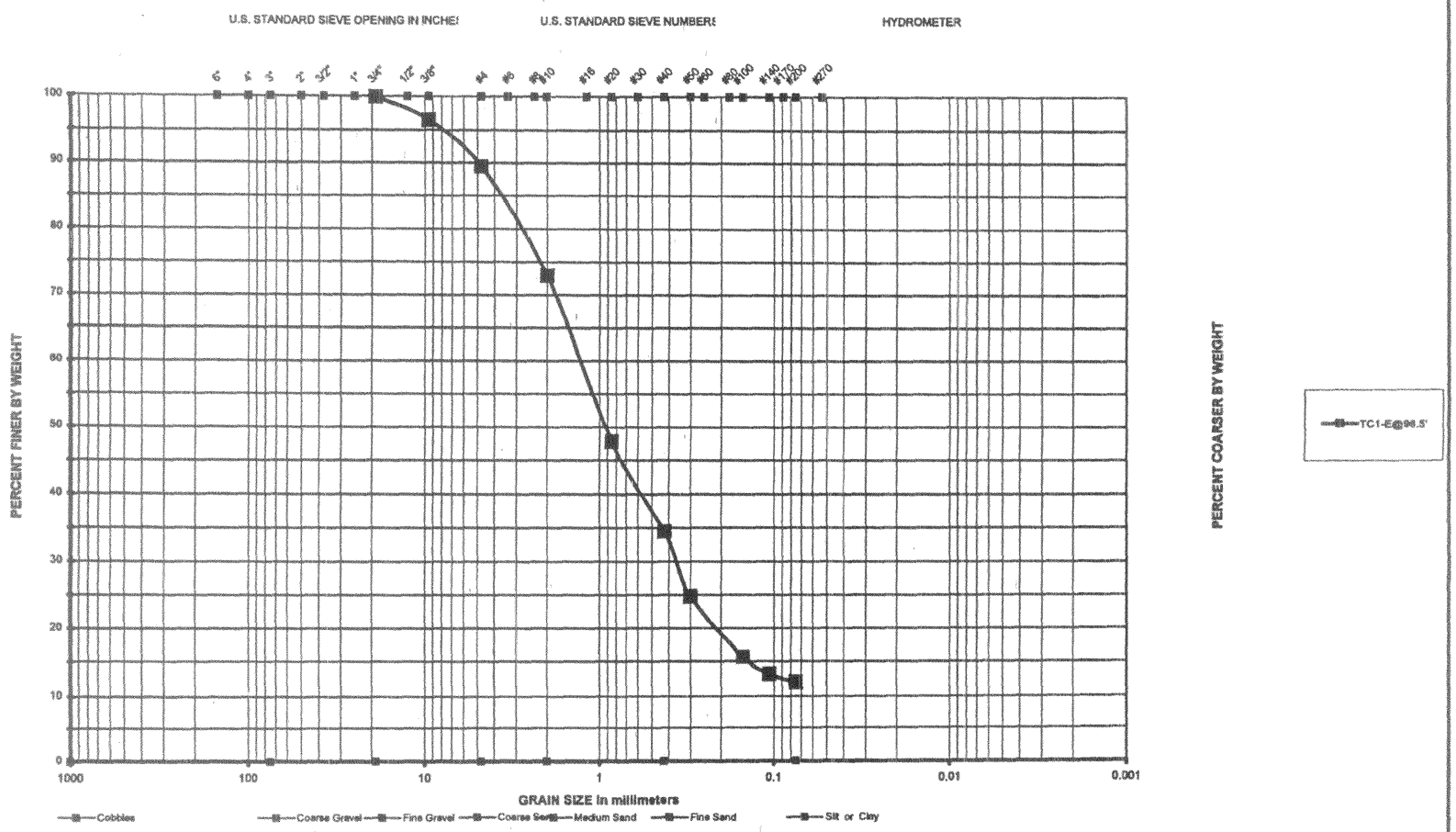
1/0/1900

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-E@88.5'		21	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

Project: EAA Reservoirs

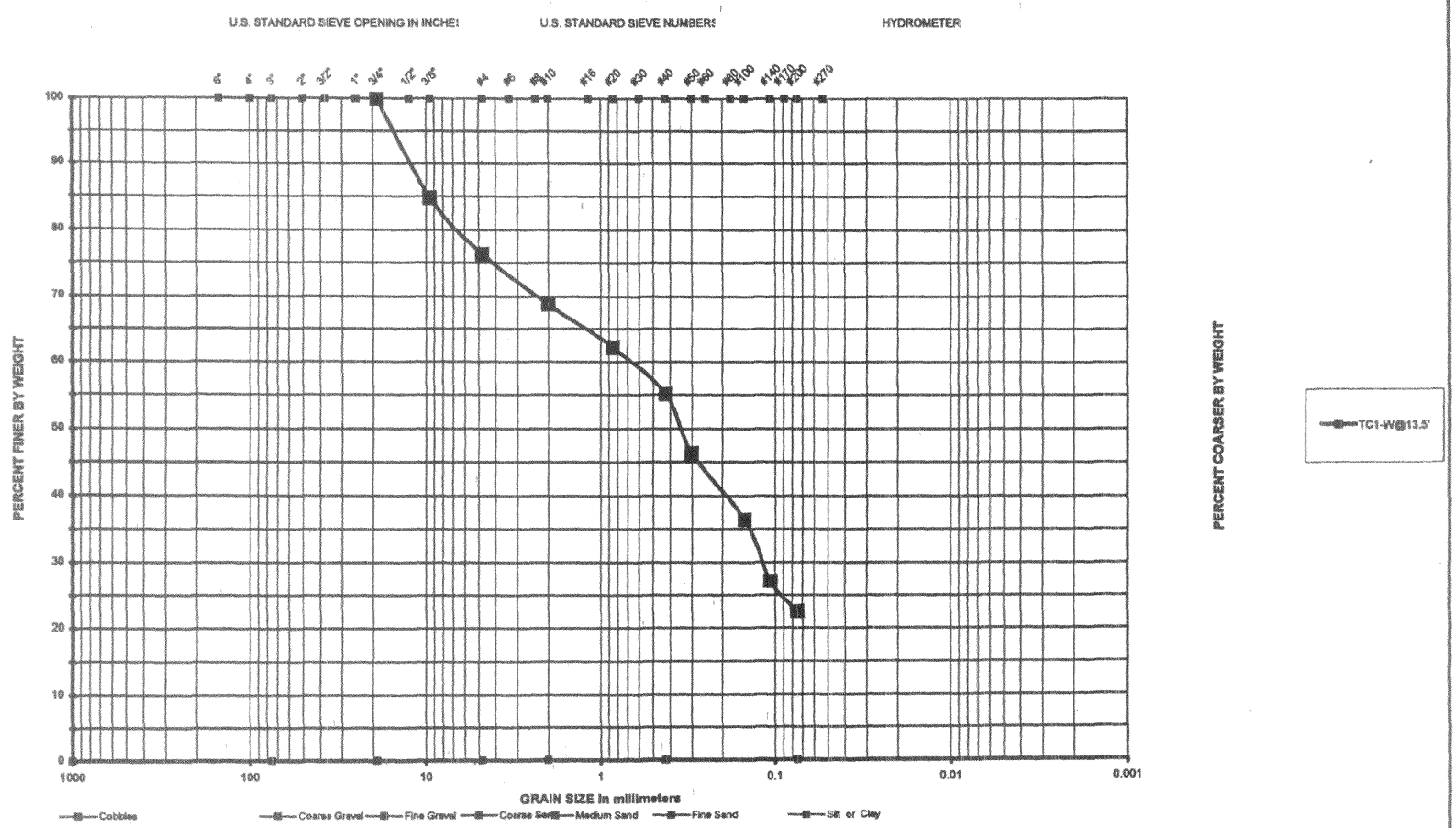
1/0/1900

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-E@98.5'		15	-	-	-

NODARSE & ASSOCIATES, INC.

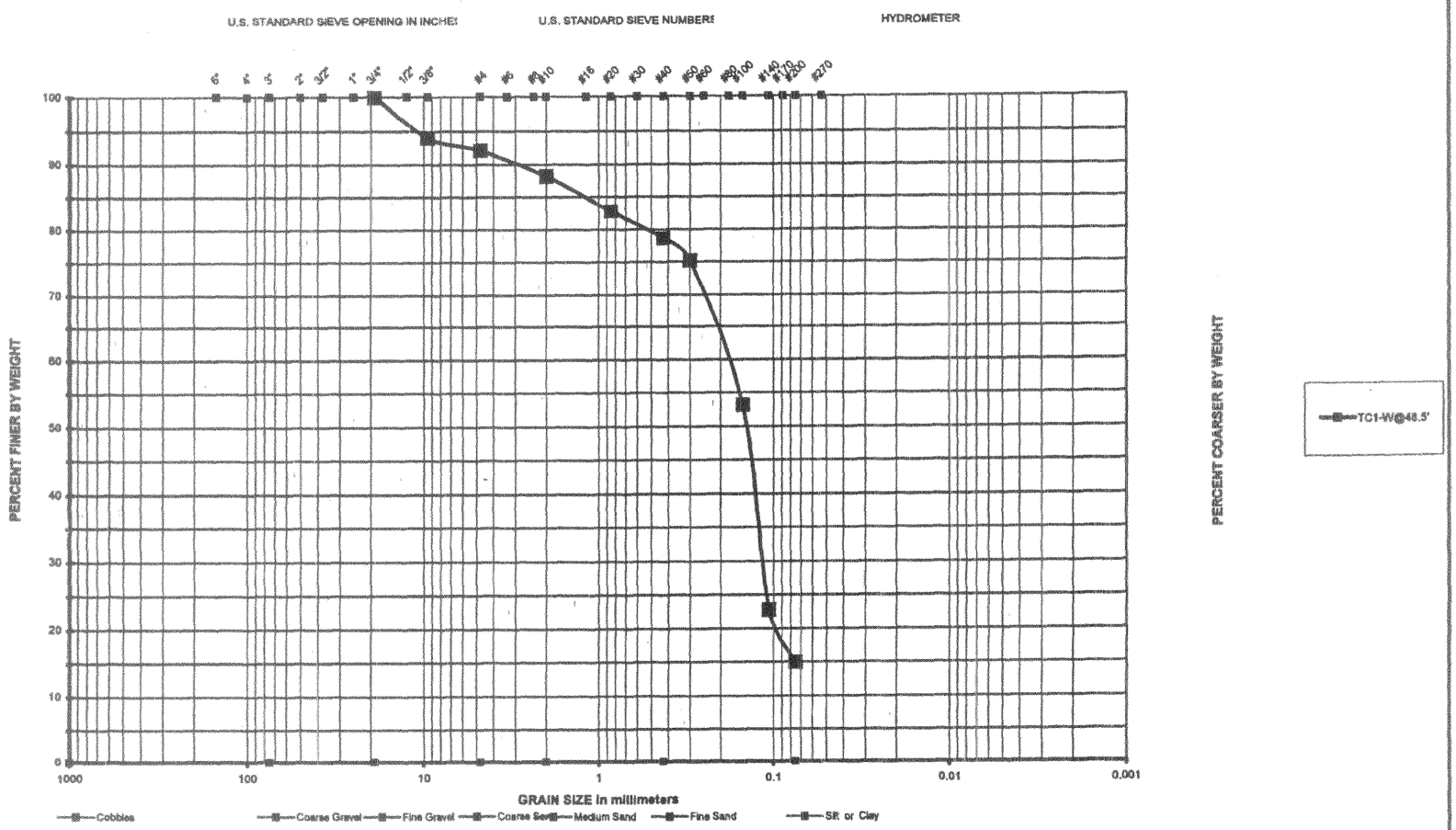


GRADATION CURVES

Project: EAA Reservoirs
1/0/1900
Date: 4/13/2005 N&A Project No. 05-05-0013-1
Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-W@13.5'		26	-	-	-

NODARSE & ASSOCIATES, INC.

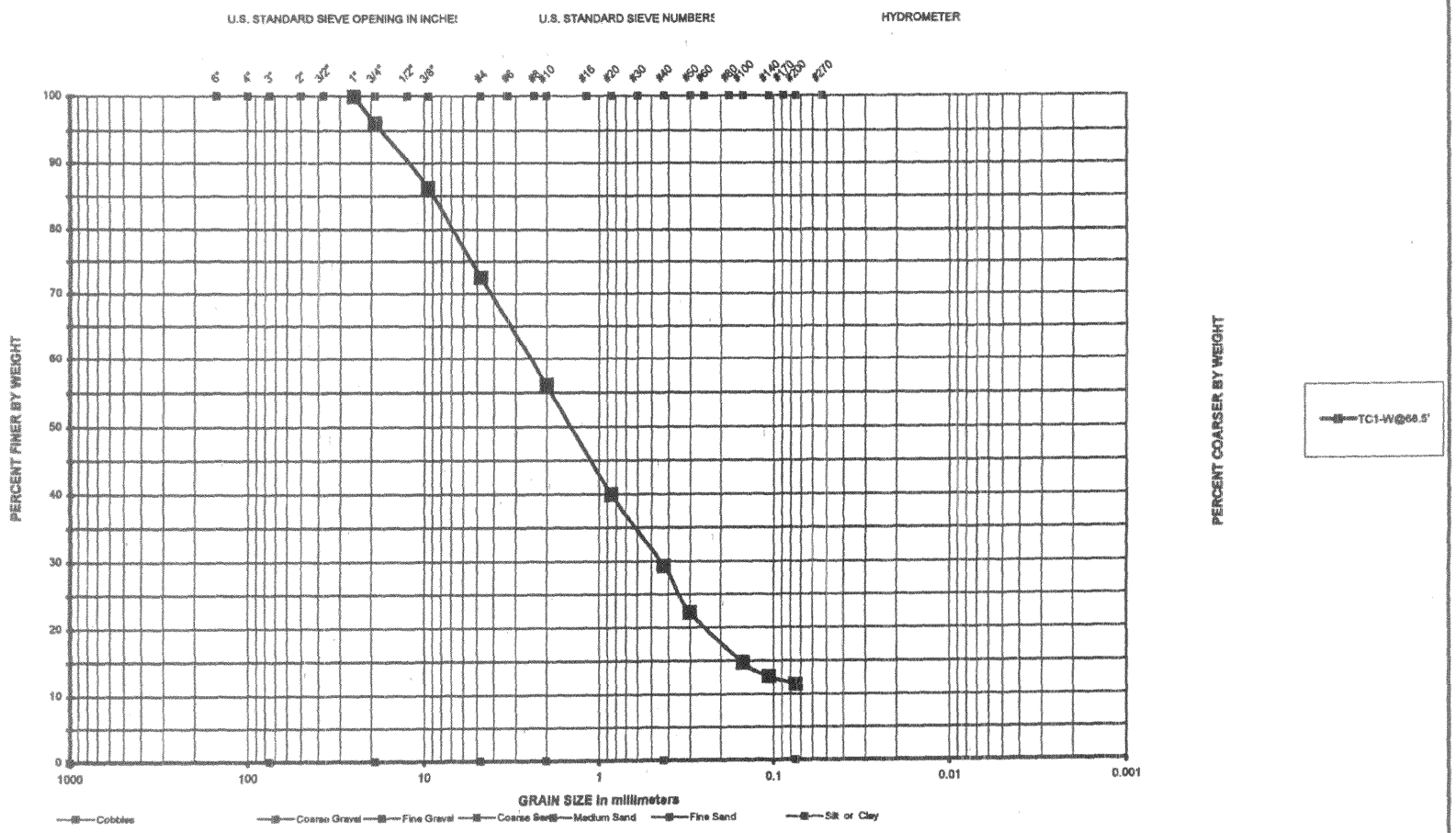


GRADATION CURVES

Project: EAA Reservoirs
1/0/1900
Date: 4/13/2005 N&A Project No. 05-05-0013-1
Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-W@48.5'		26	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

Project: EAA Reservoirs

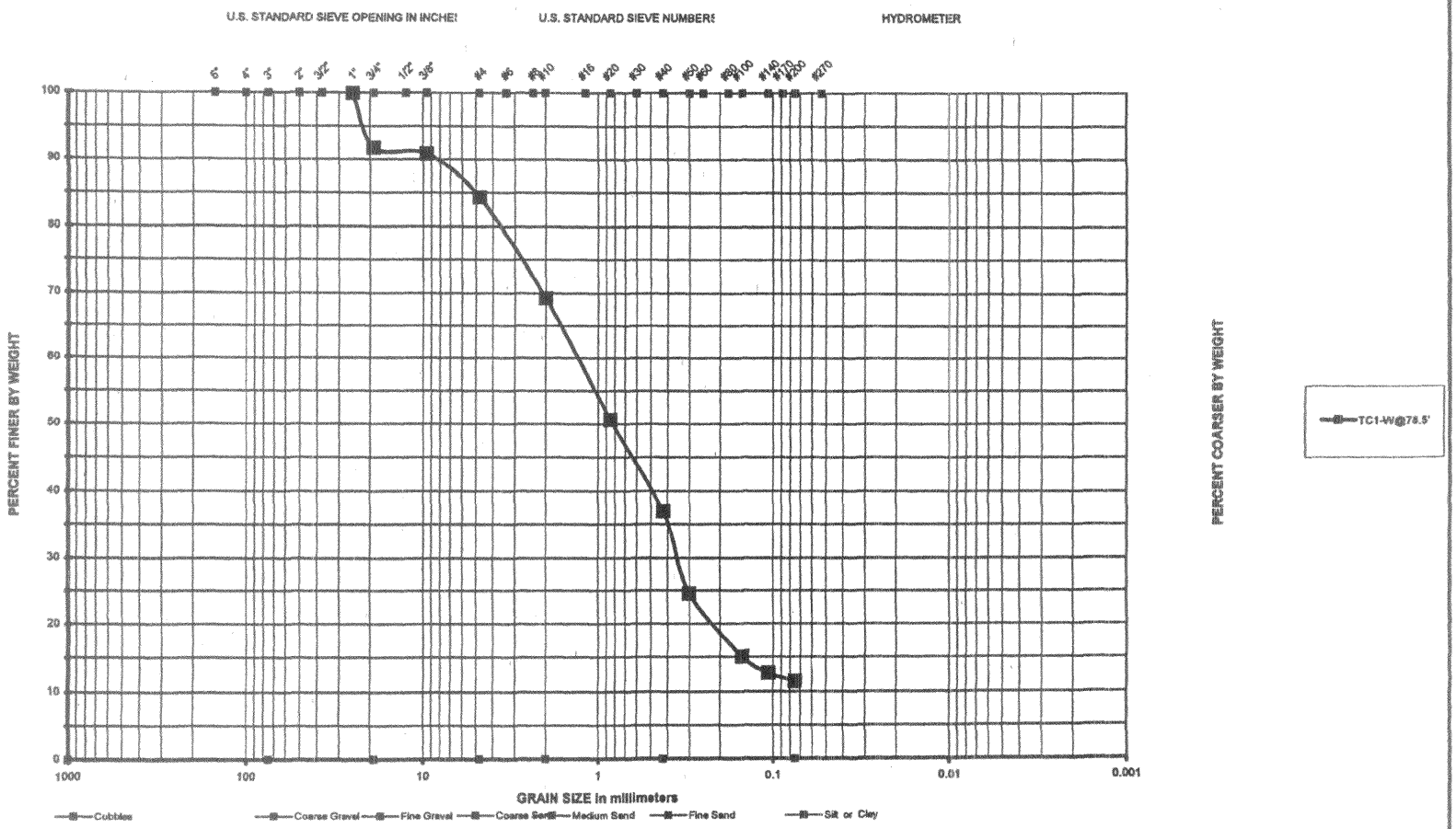
1/0/1900

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-W@68.5'		19	-	-	-

NODARSE & ASSOCIATES, INC.

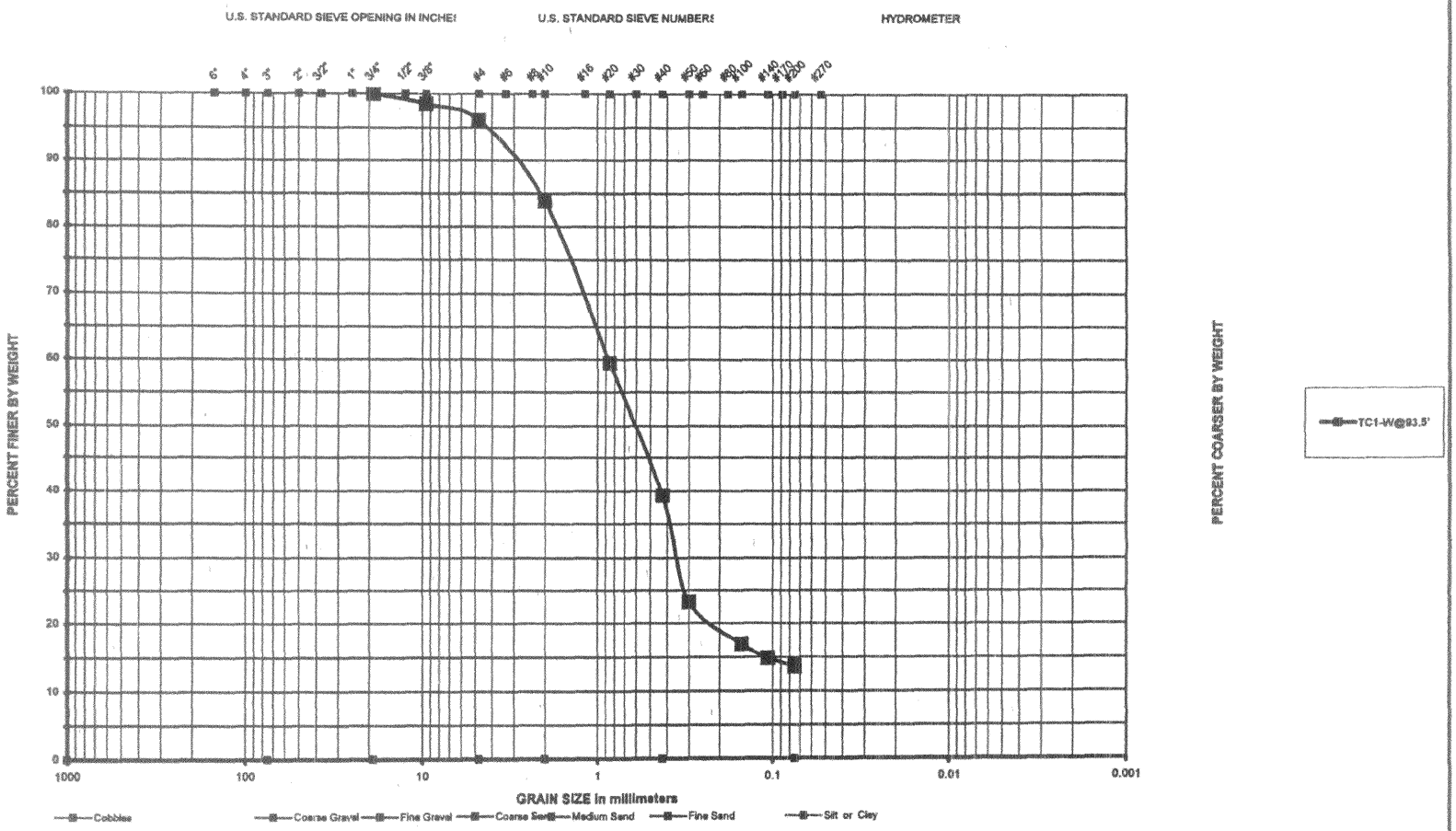


GRADATION CURVES

Project: EAA Reservoirs
1/0/1900
Date: 4/13/2005 N&A Project No. 05-05-0013-1
Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-W@78.5'		22	-	-	-

NODARSE & ASSOCIATES, INC.

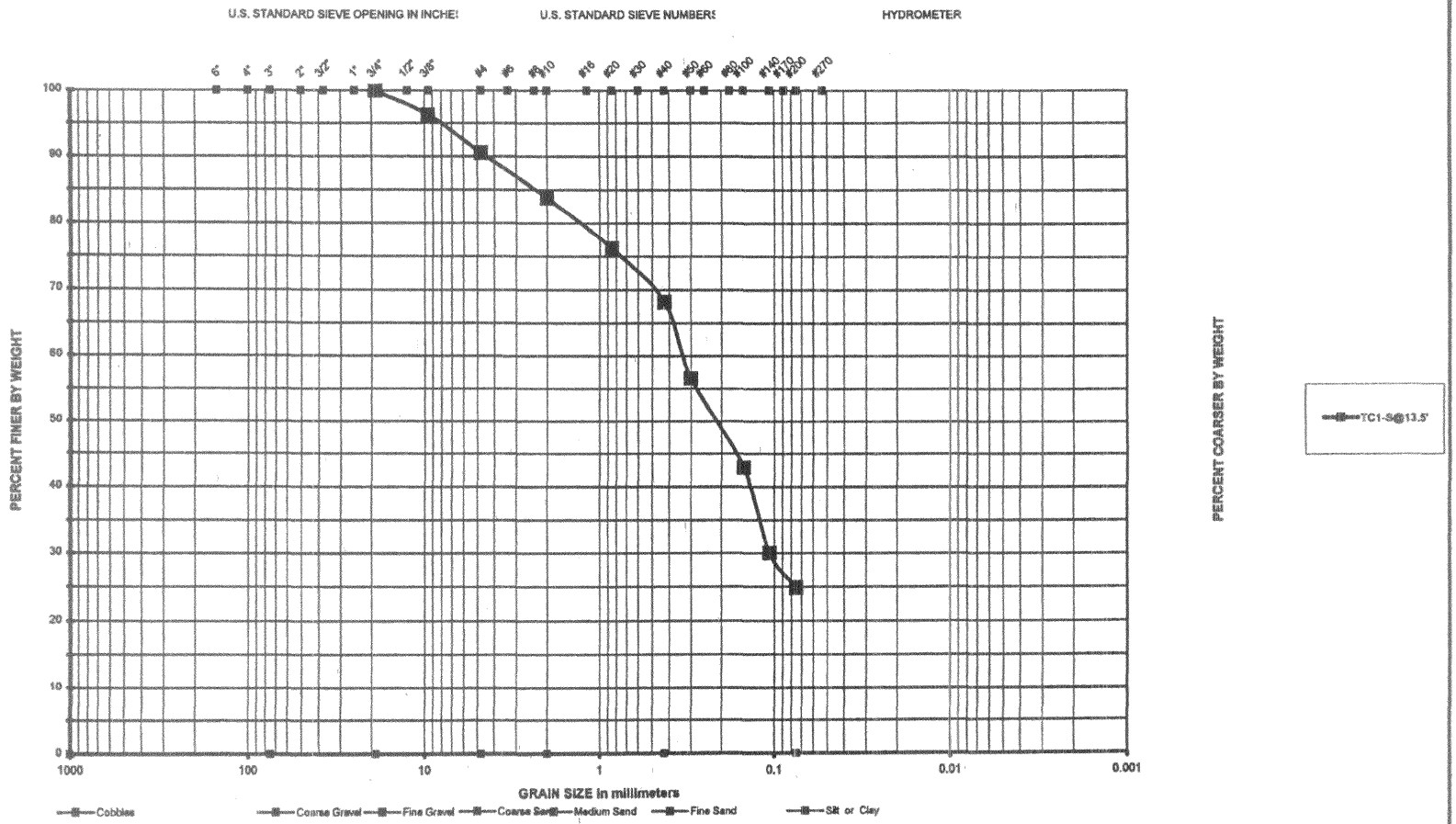


GRADATION CURVES

Project: EAA Reservoirs
1/0/1900
Date: 4/13/2005 N&A Project No. 05-05-0013-1
Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-W@93.5'		22	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

Project: EAA Reservoirs

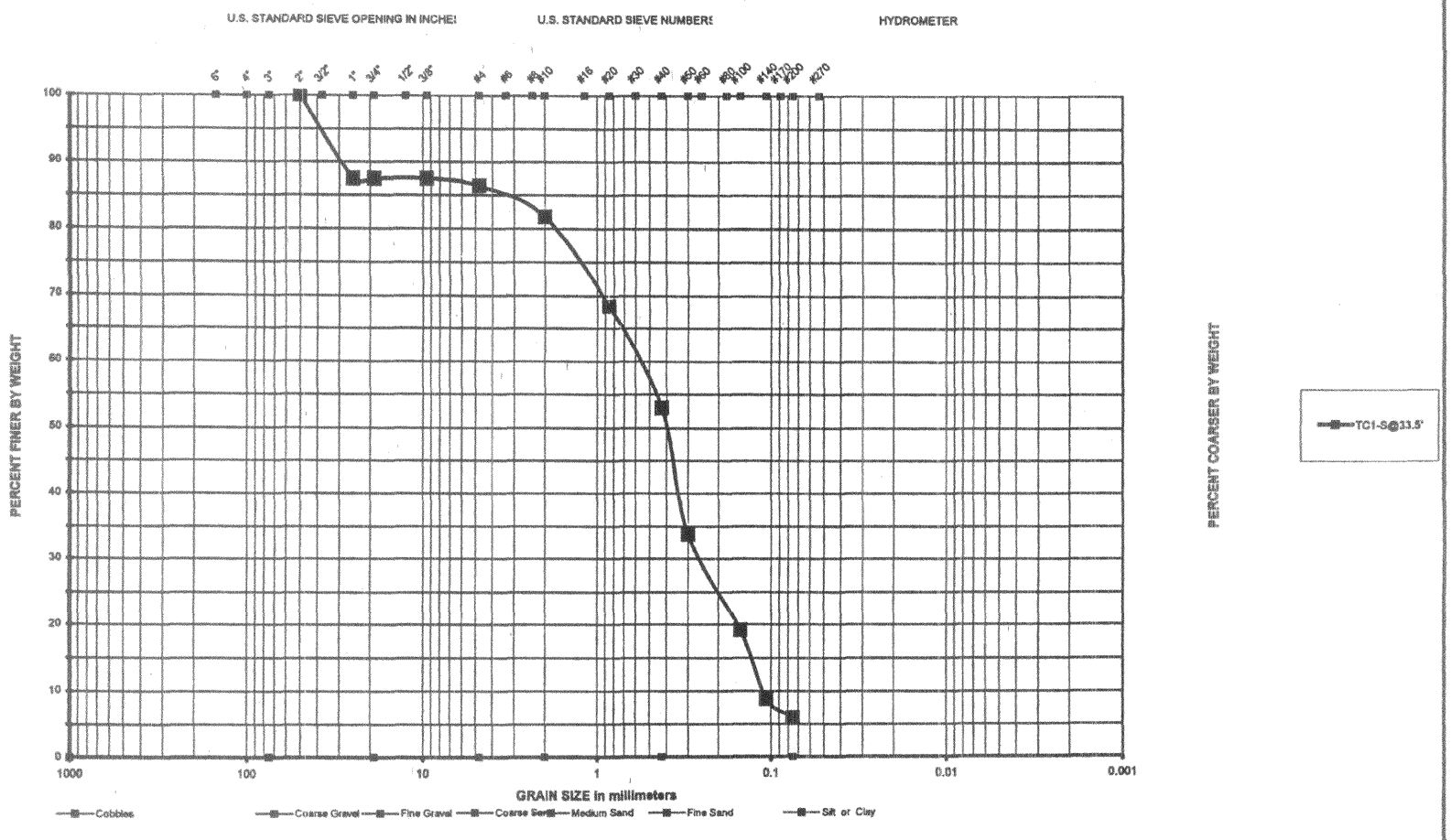
1/0/1900

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-S@13.5'		21	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

Project: EAA Reservoirs

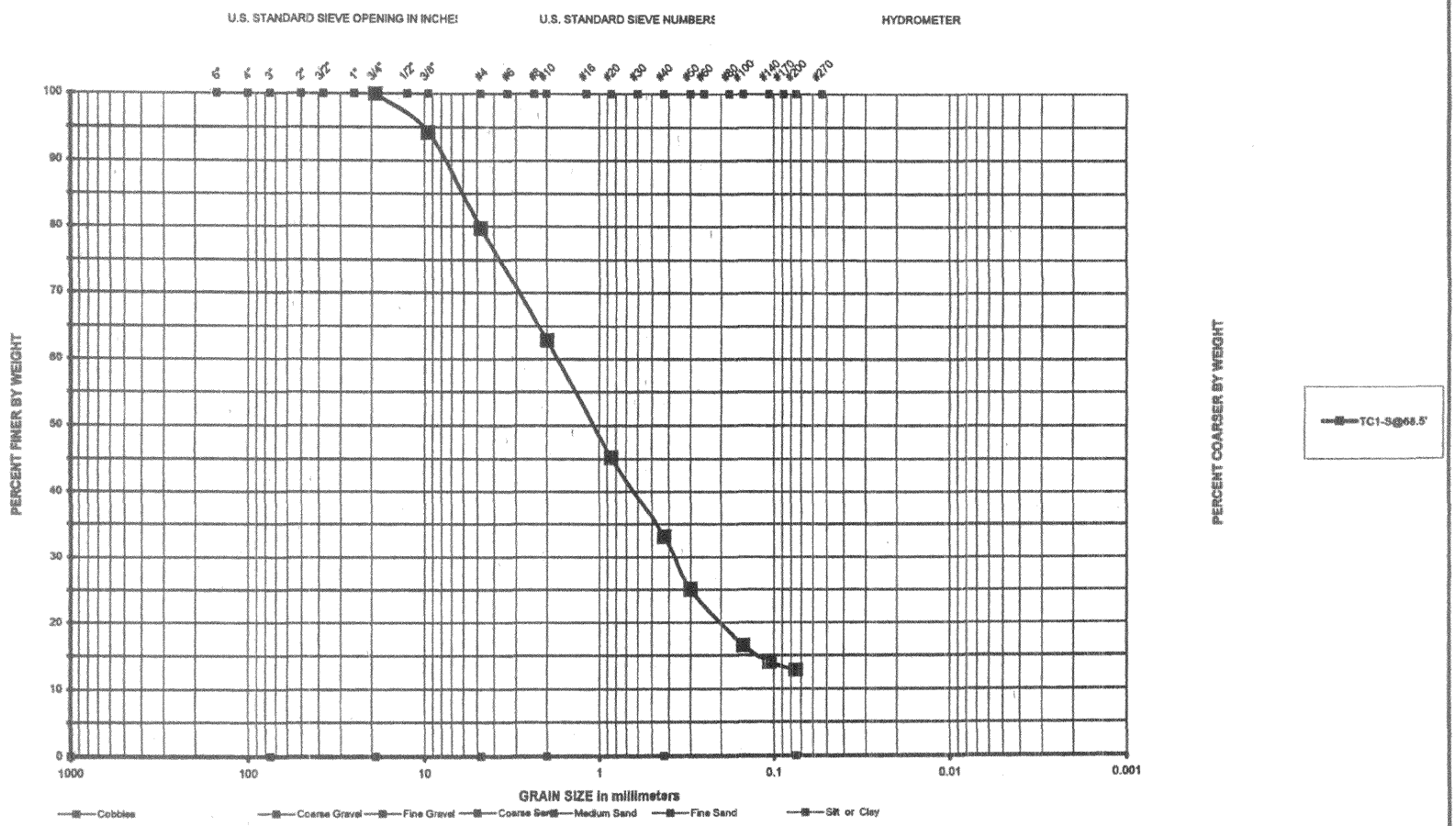
1/0/1900

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-S@33.5'		20	-	-	-

NODARSE & ASSOCIATES, INC.



GRADATION CURVES

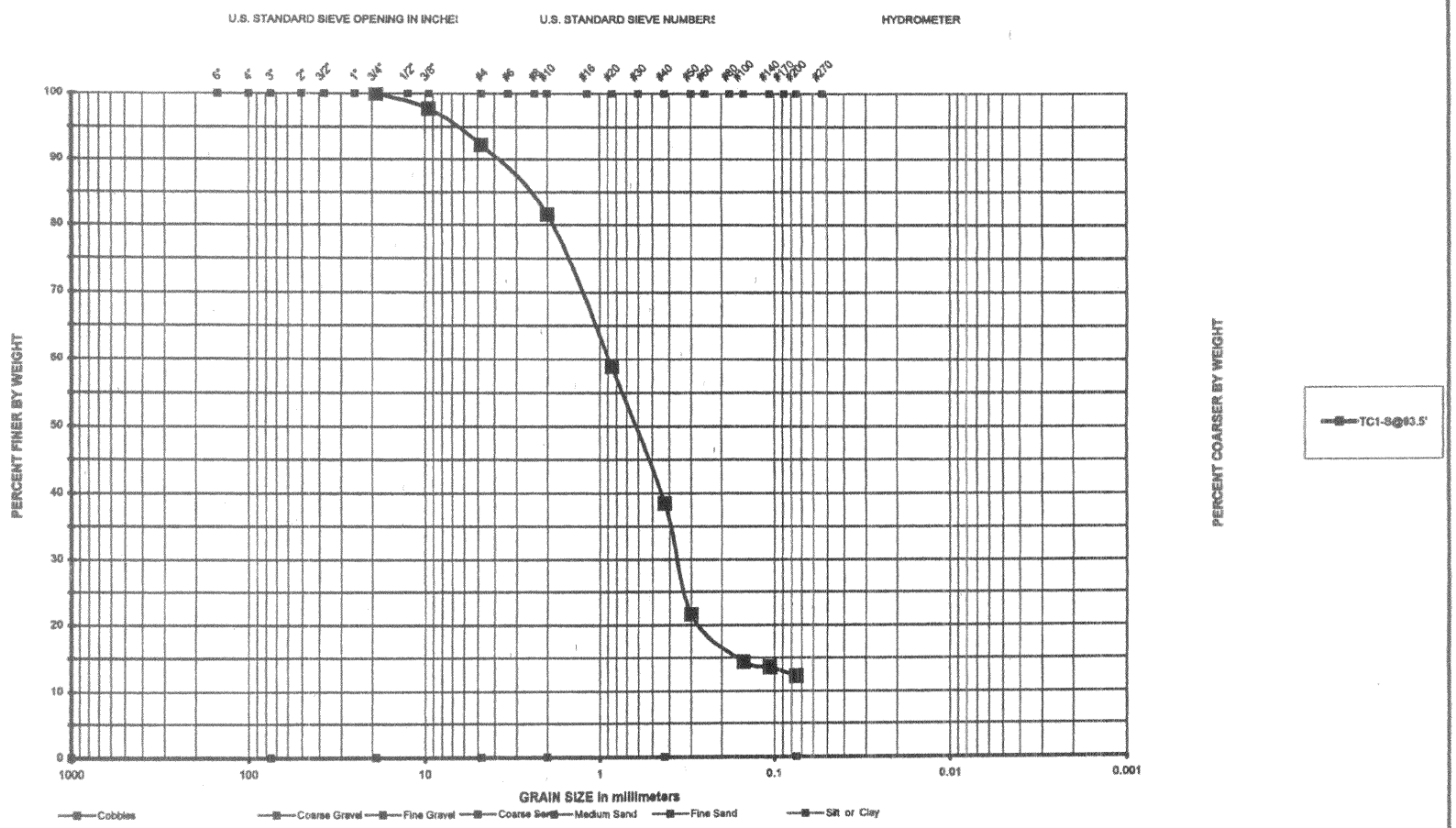
Project: EAA Reservoirs

Date: 4/13/2005 N&A Project No. 05-05-0013-1

Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-S@68.5'		21	-	-	-

NODARSE & ASSOCIATES, INC.



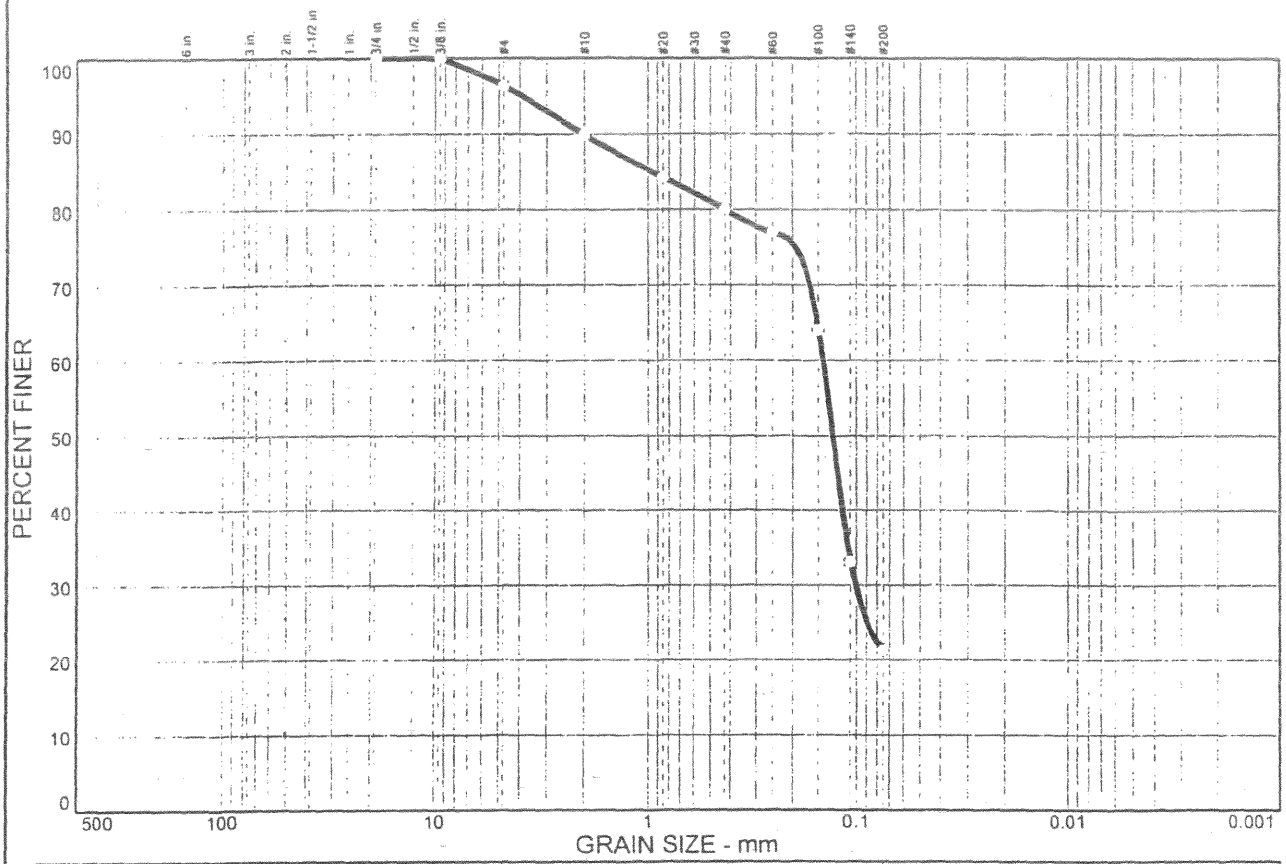
GRADATION CURVES

Project: EAA Reservoirs
1/0/1900
Date: 4/13/2005 N&A Project No. 05-05-0013-1
Figure No.

No.	Sample Location	Classification	w %	LL	PL	PI
1	TC1-S@13.5'		21	-	-	-

NODARSE & ASSOCIATES, INC.

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	3.6	6.5	9.9	58.8	21.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
3/8 in.	100.0		
#4	96.4		
#10	89.9		
#20	84.3		
#40	80.0		
#60	77.0		
#100	64.0		
#140	33.1		
#200	21.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.954 D_{60}= 0.143 D_{50}= 0.128
D_{30}= 0.101 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 282 Source of Sample: Date:
Location: TC1S-10 Elev./Depth: 48.5'

NODARSE & ASSOCIATES, INC.

Client:
Project: EAA
Project No: W04-G-487 Plate

LABORATORY TEST RESULTS FOR
EAA RESERVOIR - WO#2
PROJECT No: 05-05-0013-101
N&A

Boring Number	Approximate Sample Depth (feet)	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		Classification	Stratum Number
		10	20	60	100	200			LL	PI		
CB-157 CP05-EAARS-CB-0255	9.0'	74	44	35	29	24	33	-	-	-	SM	Silty sand with gravel
CB-157 CP05-EAARS-CB-0255	13.5'	81	66	57	47	32	27	-	-	-	SM	Silty sand with gravel
CB-157 CP05-EAARS-CB-0255	18.5'	54	35	27	20	11	19	-	-	-	SW-SM	Well graded sand with silt+gravel
CB-158 CP05-EAARS-CB-0256	50.5'	75	46	32	17	10	19	-	-	-	SW-SM	Well graded sand with silt+gravel
CB-158 CP05-EAARS-CB-0256	55.0'	97	61	39	17	8	23	-	-	-	SP-SM	Poorly graded sand with silt
CB-158 CP05-EAARS-CB-0256	65.5'	74	49	34	21	14	21	-	-	-	SW-SM	Well graded sand with gravel
CB-158 CP05-EAARS-CB-0256	70.0'	93	83	67	35	13	28	-	-	-	SP-SM	Poorly graded sand with silt
CB-158 CP05-EAARS-CB-0256	38.5'	86	81	79	59	22	28	-	-	-	SM	Silty sand
CB-158 CP05-EAARS-CB-0256	44.5'	99	97	92	27	8	29	-	-	-	SP-SM	Poorly graded sand with silt

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Boring Number	Approximate Sample Depth (feet)	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		Classification	Stratum Number
		10	20	60	100	200			LL	PI		
CB-158 CP05-EAARS-CB-0256	23.5'	72	43	33	26	19	29	-	-	-	SM	Silty sand with gravel
CB-158 CP05-EAARS-CB-0256	21.5'	65	41	34	30	23	21	-	-	-	SM	Silty sand with gravel
CB-158 CP05-EAARS-CB-0256	76.0'	54	29	21	16	11	28	-	-	-	SP-SM	Poorly graded sand with gravel
CB-158 CP05-EAARS-CB-0256	80.5'	55	26	18	12	10	26	-	-	-	SP-SM	Poorly graded sand with silt
CB-158 CP05-EAARS-CB-0256	85.0'	55	26	18	12	10	26	-	-	-	SW-SM	Well graded sand with silt+gravel
CB-158 CP05-EAARS-CB-0256	89.5'	53	27	14	11	9	22	-	-	-	SW-SM	Well graded sand with silt+gravel
CB-158 CP05-EAARS-CB-0256	91.0'	57	43	38	23	17	21	-	-	-	SM	Silty sand with gravel
CB-158 CP05-EAARS-CB-0256	98.5'	71	61	56	34	20	22	-	-	-	SM	Silty sand with gravel

LABORATORY TEST RESULTS FOR
EAA RESERVOIR - WO#4
PROJECT No: 05-05-0013-101
N&A

Boring Number	Approximate Sample Depth (feet)	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		Classification	Stratum Number
		10	20	60	100	200			LL	PI		
CB-0168 CP05-EAARS -CB0265	4.5-9.5'	32	20	6	5	1	-	-	-	-	Well graded gravel with sand.	(GW)

LABORATORY TEST RESULTS FOR
EAA RESERVOIR - WO#3
PROJECT No: 05-05-0013-101
N&A

Boring Number	Approximate Sample Depth (feet)	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		Classification	Stratum Number
		10	20	60	100	200			LL	PI		
CB-0169 CP05-EAARS-CB-0266	5.5'	37	25	14	11	8	13	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	11.5'	72	59	39	33	28	24	-	-	-	Silty sand with gravel.	(SM)
CB-0169 CP05-EAARS-CB-0266	14.5'	48	36	22	18	14	34	-	-	-	Well graded sand with silt and gravel.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	16'	81	65	41	32	25	36	-	-	-	Silty sand.	(SM)
CB-0169 CP05-EAARS-CB-0266	20.5'	87	76	54	42	27	28	-	-	-	Silty sand.	(SM)
CB-0169 CP05-EAARS-CB-0266	26.5'	87	72	48	35	13	22	-	-	-	Well graded sand with silt.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	31.0'	81	71	53	41	25	22	-	-	-	Silty sand.	(SM)
CB-0169 CP05-EAARS-CB-0266	37.0'	75	60	39	27	9	27	-	-	-	Well graded sand with silt.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	44.5'	99	94	22	8	3	25	-	-	-	Poorly graded sand.	(SP)
CB-0169 CP05-EAARS-CB-0266	49.0'	57	47	20	13	7	21	-	-	-	Well graded sand with silt and gravel.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	55.0'	86	81	75	59	22	30	-	-	-	Silty sand.	(SM)
CB-0169 CP05-EAARS-CB-0266	61.0'	44	36	23	17	11	30	-	-	-	Well graded sand with silt+gravel.	(SW-SM)

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CB-0169 CP05-EAARS-CB-0266	65.5'	94	81	35	18	9	22	-	-	-	Well graded sand with silt.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	68.5'	62	50	26	18	8	22	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	73.0'	64	56	38	19	10	21	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	76.0'	56	48	29	17	11	18	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0169 CP05-EAARS-CB-0266	85.0'	33	25	12	8	6	14	-	-	-	Well graded gravel with silt and sand.	(GW-GM)
CB-0169 CP05-EAARS-CB-0266	89.5'	52	39	13	10	8	14	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0171 CP05-EAARS-CB-0268	13.5'	84	71	46	37	27	30	-	-	-	Silty sand.	(SM)
CB-0171 CP05-EAARS-CB-0268	18.5'	42	38	25	18	9	22	-	-	-	Poorly graded gravel with silt and sand.	(GP-GM)
CB-0171 CP05-EAARS-CB-0268	33.5'	76	66	47	30	9	18	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0172 CP05-EAARS-CB-0269	0.0'	76	72	35	21	14	137	-	-	-	Silty sand with gravel.	(SM)
CB-0172 CP05-EAARS-CB-0269	8.5'	57	39	21	16	12	24	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0172 CP05-EAARS-CB-0269	13.5'	78	71	49	38	25	32	-	-	-	Silty sand with gravel.	(SM)
CB-0172 CP05-EAARS-CB-0269	18.5'	85	68	40	27	10	23	-	-	-	Well graded sand with silt.	(SW-SM)
CB-0172 CP05-EAARS-CB-0269	33.5'	56	51	40	28	3	16	-	-	-	Poorly graded sand with gravel.	(SP)
CB-0172 CP05-EAARS-CB-0269	38.5'	74	65	52	22	6	21	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0173 CP05-EAARS-CB-0270	1.5'	45	31	15	10	7	158	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0173 CP05-EAARS-CB-0270	3.5'	26	22	18	16	14	27	-	-	-	Silty gravel with sand	(GM)

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CB-0173 CP05-EAARS-CB-0270	13.5'	77	65	47	41	35	36	-	-	-	Silty sand.	(SM)
CB-0173 CP05-EAARS-CB-0270	18.5'	46	37	24	18	11	26	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0175 CP05-EAARS-CB-0271	0.0'	58	47	33	28	22	12	-	-	-	Silty sand with gravel.	(SM)
CB-0175 CP05-EAARS-CB-0271	2.0'	60	50	36	29	22	20	-	-	-	Silty sand with gravel.	(SM)
CB-0175 CP05-EAARS-CB-0271	10.5'	46	37	26	21	18	24	-	-	-	Silty sand with gravel.	(SM)
CB-0175 CP05-EAARS-CB-0271	18.5'	82	73	51	37	25	25	-	-	-	Silty sand.	(SM)
CB-0175 CP05-EAARS-CB-0271	23.5'	67	59	39	26	12	22	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0175 CP05-EAARS-CB-0271	38.5'	82	77	55	25	10	24	-	-	-	Poorly graded sand with silt and gravel.	(SP-SM)
CB-0176 CP05-EAARS-CB-0272	5.1'	45	33	21	18	15	19	-	-	-	Silty sand with gravel.	(SM)
CB-0176 CP05-EAARS-CB-0272	10.0'	79	69	55	39	24	29	-	-	-	Silty sand with gravel.	(SM)
CB-0176 CP05-EAARS-CB-0272	18.5'	52	46	36	22	9	11	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0176 CP05-EAARS-CB-0272	23.5'	47	42	37	22	7	15	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0176 CP05-EAARS-CB-0272	28.5'	98	97	94	38	5	29	-	-	-	Poorly graded sand.	(SP)
CB-0176 CP05-EAARS-CB-0272	33.5'	53	48	27	16	5	16	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0179 CP05-EAARS-CB-0275	5.5'	41	30	17	13	10	24	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0179 CP05-EAARS-CB-0275	7.5'	58	46	27	21	17	25	-	-	-	Silty sand with gravel.	(SM)
CB-0179 CP05-EAARS-CB-0275	13.5'	50	40	26	23	19	18	-	-	-	Silty sand with gravel.	(SM)

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CB-0179 CP05-EAARS-CB-0275	23.5'	38	29	22	14	5	14	-	-	-	Well graded sand with gravel.	(SW)
CB-0179 CP05-EAARS-CB-0275	28.5'	52	48	39	21	7	15	-	-	-	Poorly graded sand with silt.	(SP-SM)
CB-0179 CP05-EAARS-CB-0275	33.5'	91	91	86	27	7	25	-	-	-	Poorly graded sand with silt.	(SP-SM)
CB-0179 CP05-EAARS-CB-0275	38.5'	72	71	49	15	4	21	-	-	-	Poorly graded sand with gravel.	(SP)
CB-0179 CP05-EAARS-CB-0275	48.5'	83	83	75	17	6	21	-	-	-	Poorly graded sand with silt+gravel.	(SP-SM)
CB-0179 CP05-EAARS-CB-0275	58.5'	61	53	35	20	9	23	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0179 CP05-EAARS-CB-0275	63.5'	57	48	33	16	7	28	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0179 CP05-EAARS-CB-0275	73.5'	99	96	70	15	10	22	-	-	-	Poorly graded sand with silt.	(SP-SM)
CB-0179 CP05-EAARS-CB-0275	83.5'	57	38	20	14	11	20	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0179 CP05-EAARS-CB-0275	93.5'	64	42	21	16	12	18	-	-	-	Well graded sand with silt.	(SW-SM)
CB-0180 CP05-EAARS-CB-0276	8.0'	43	32	21	17	12	17	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0180 CP05-EAARS-CB-0276	13.5'	54	43	27	21	13	25	-	-	-	Well graded sand with silt+gravel.	(SW-SM)
CB-0180 CP05-EAARS-CB-0276	18.5'	88	84	76	29	9	26	-	-	-	Poorly graded sand with silt.	(SP-SM)
CB-0180 CP05-EAARS-CB-0276	23.5'	87	81	58	19	4	25	-	-	-	Poorly graded sand.	(SP)
CB-0180 CP05-EAARS-CB-0276	28.5'	99	97	82	22	6	27	-	-	-	Poorly graded sand with silt.	(SP-SM)
CB-0180 CP05-EAARS-CB-0276	33.5'	96	95	92	44	9	27	-	-	-	Poorly graded sand with silt.	(SP-SM)
CB-0181 CP05-EAARS-CB-0277	23.5'	82	74	63	44	16	25	-	-	-	Silty sand.	(SM)

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CB-0181 CP05-EAARS-CB-0277	28.5'	83	82	80	59	13	24	-	-	-	Poorly graded sand with silt and gravel.	(SP-SM)
CB-0181 CP05-EAARS-CB-0277	33.5'	93	84	71	50	16	30	-	-	-	Silty sand.	(SM)
CB-0183 CP05-EAARS-CB-0278	18.5'	57	43	25	19	14	21				Well graded sand with silt+gravel.	(SW-SM)
CB-0183 CP05-EAARS-CB-0278	23.5'	81	64	40	29	19	24				Silty sand with gravel.	(SM)
CB-0183 CP05-EAARS-CB-0278	28.5'	52	45	37	24	9	12				Well graded sand with silt+gravel.	(SW-SM)
CB-0183 CP05-EAARS-CB-0278	33.5'	93	93	91	26	6	24				Poorly graded sand with silt.	(SP-SM)

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LABORATORY TEST RESULTS FOR
EAA RESERVOIR - WO#5
PROJECT No: 05-05-0013-101
N&A

Boring Number	Approximate Sample Depth (feet)	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		Classification	Stratum Number
		10	20	60	100	200			LL	PI		
CB-0174 CP05-EAARS-VB-0283	5-10'	71	63	50	45	39	10	-	-	-	Sandy silty clay with gravel.	(CL-ML)
CB-0174 CP05-EAARS-VB-0283	10-15'	69	61	50	46	41	23	-	-	-	Sandy silty clay with gravel.	(CL-ML)
CB-0174 CP05-EAARS-VB-0283	100-105'	85	49	13	11	9	11	-	-	-	Poorly graded sand with silt.	(SP-SM)
CB-0174 CP05-EAARS-VB-0283	110-115'	81	52	22	17	14	18	-	-	-	Silty sand with gravel.	(SM)
CB-0174 CP05-EAARS-VB-0283	115-120'	66	46	20	15	12	16	-	-	-	Well graded sand with silt and gravel.	(SW-SM)
CB-0174 CP05-EAARS-VB-0283	125-130'	41	28	15	10	7	13	-	-	-	Well graded sand with silt and gravel.	(SW-SM)
CB-0174 CP05-EAARS-VB-0283	140-145'	76	63	45	15	10	19	-	-	-	Poorly graded sand with silt and gravel.	(SP-SM)
CB-0174 CP05-EAARS-VB-0283	150-155'	53	37	22	12	8	13	-	-	-	Well graded sand with silt and gravel.	(SW-SM)
CB-0174 CP05-EAARS-VB-0283	160-165'	50	35	21	15	9	14	-	-	-	Well graded sand with silt and gravel.	(SW-SM)

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CB-0174 CP05-EAARS-VB-0283	165-170'	92	87	78	40	23	20	-	-	-	Silty sand.	(SM)
CB-0174 CP05-EAARS-VB-0283	180-185'	92	92	88	55	29	20	-	-	-	Silty sand.	(SM)
CB-0174 CP05-EAARS-VB-0283	185-190'	90	85	82	66	41	20	-	-	-	Silty sandy with gravel.	(SM)
CB-0174 CP05-EAARS-VB-0283	195-200'	89	86	81	70	27	17	-	-	-	Silty sand with gravel.	(SM)
CB-0174 CP05-EAARS-VB-0283	200-205'	-	-	100	100	22	25	-	-	-	Silty sand.	(SM)
CB-0174 CP05-EAARS-VB-0283	205-210'	-	-	100	100	25	26	-	-	-	Silty sand.	(SM)

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LABORATORY TEST RESULTS FOR
PROJECT NAME: EAA RESERVOIR (BLACK AND VEATCH) Work Order No. 6
PROJECT No: 05-05-0013-101
PALM BEACH COUNTY, FLORIDA
N&A

Boring No	Approximate Sample Depth (feet0	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		AASHTO or U.S.C.S. Classification
		10	40	60	100	200			LL	PI	
CB-164 CP05-EAARS-VB-0282	5.0-10.0	37	24	20	17	14	6	-	-	-	GM
CB-164 CP05-EAARS-VB-0282	10.0-15.0	70	46	38	33	27	21	-	-	-	SM
CB-164 CP05-EAARS-VB-0282	30.0-35.0	50	39	34	26	17	8	-	-	-	SM
CB-164 CP05-EAARS-VB-0282	45.0-50.0	78	21	9	5	2	14	-	-	-	SP
CB-164 CP05-EAARS-VB-0282	55.0-60.0	51	30	20	15	8	10	-	-	-	SP-SM
CB-164 CP05-EAARS-VB-0282	70.0-75.0	31	22	17	12	7	7	-	-	-	GP-GM
CB-164 CP05-EAARS-VB-0282	95.0-100.0	78	36	17	8	6	22	-	-	-	SP-SM
CB-164 CP05-EAARS-VB-0282	115.0-120.0	67	56	53	42	27	20	-	-	-	SM
CB-164 CP05-EAARS-VB-0282	120.0-125.0	77	67	64	46	26	22	-	-	-	SM
CB-164 CP05-EAARS-VB-0282	130.0-135.0	89	84	83	40	25	21	-	-	-	SM
CB-164 CP05-EAARS-VB-0282	135.0-140.0	64	51	49	30	21	21	-	-	-	SM
CB-164 CP05-EAARS-VB-0282	145.0-150.0	60	43	39	18	11	13	-	-	-	SP-SM
CB-164 CP05-EAARS-VB-0282	165.0-170.0	37	21	18	12	7	14	-	-	-	GP-GM
CB-164 CP05-EAARS-VB-0282	180.0-185.0	81	68	65	51	20	20	-	-	-	SM
CB-164 CP05-EAARS-VB-0282	200.0-205.0	99	98	97	72	34	20	-	-	-	SM

CB-164 CP05-EAARS-VB-0282	215.0-220.0	100	100	100	100	29	28	-	-	-	SM
CB-164 CP05-EAARS-VB-0282	225.0-230.0	100	100	99	98	75	36	-	-	-	ML
CB-170 CP05-EAARS-CB-0267	88.5-90.0	96	85	75	46	29	21	-	-	-	SM
CB-171 CP05-EAARS-CB-0268	78.5-80.0	99	92	86	65	39	26	-	-	-	SM
CB-174 CP05-EAARS-VB-0283	40.0-45.0	88	82	79	43	6	17	-	-	-	SP-SM
CB-174 CP05-EAARS-VB-0283	60.0-65.0	46	34	26	15	8	8	-	-	-	SP-SM
CB-176 CP05-EAARS-CB-0272	58.5-60.0	64	40	31	18	5	21	-	-	-	SP-SM
CB-182 CP05-EAARS-VB-0284	10.0-15.0	63	52	46	39	26	18	-	-	-	SM
CB-182 CP05-EAARS-VB-0284	20.0-25.0	97	95	91	31	4	26	-	-	-	SP
CB-182 CP05-EAARS-VB-0284	40.0-45.0	31	20	13	8	4	2	-	-	-	GP
CB-182 CP05-EAARS-VB-0284	55.0-60.0	50	39	31	18	9	16	-	-	-	SP-SM
CB-182 CP05-EAARS-VB-0284	70.0-75.0	53	20	14	10	7	9	-	-	-	SP-SM
CB-182 CP05-EAARS-VB-0284	90.0-95.0	65	25	15	9	7	15	-	-	-	SP-SM
CB-182 CP05-EAARS-VB-0284	100.0-105.0	49	17	11	8	6	11	-	-	-	GP-GM
CB-182 CP05-EAARS-VB-0284	120.0-125.0	53	30	25	19	13	13	-	-	-	SM
CB-182 CP05-EAARS-VB-0284	125.0-130.0	40	19	14	11	8	10	-	-	-	SP-SM
CB-182 CP05-EAARS-VB-0284	140.0-145.0	54	29	10	8	7	9	-	-	-	SP-SM
CB-182 CP05-EAARS-VB-0284	155.0-160.0	63	50	46	19	11	12	-	-	-	SP-SM
CB-182 CP05-EAARS-VB-0284	175.0-180.0	78	66	63	52	22	17	-	-	-	SM
CB-182 CP05-EAARS-VB-0284	185.0-190.0	93	83	82	75	35	15	-	-	-	SM
CB-182 CP05-EAARS-VB-0284	205.0-210.0	100	100	100	100	45	23	-	-	-	ML
CB-182 CP05-EAARS-VB-0284	210.0-215.0	100	100	100	99	43	26	-	-	-	ML

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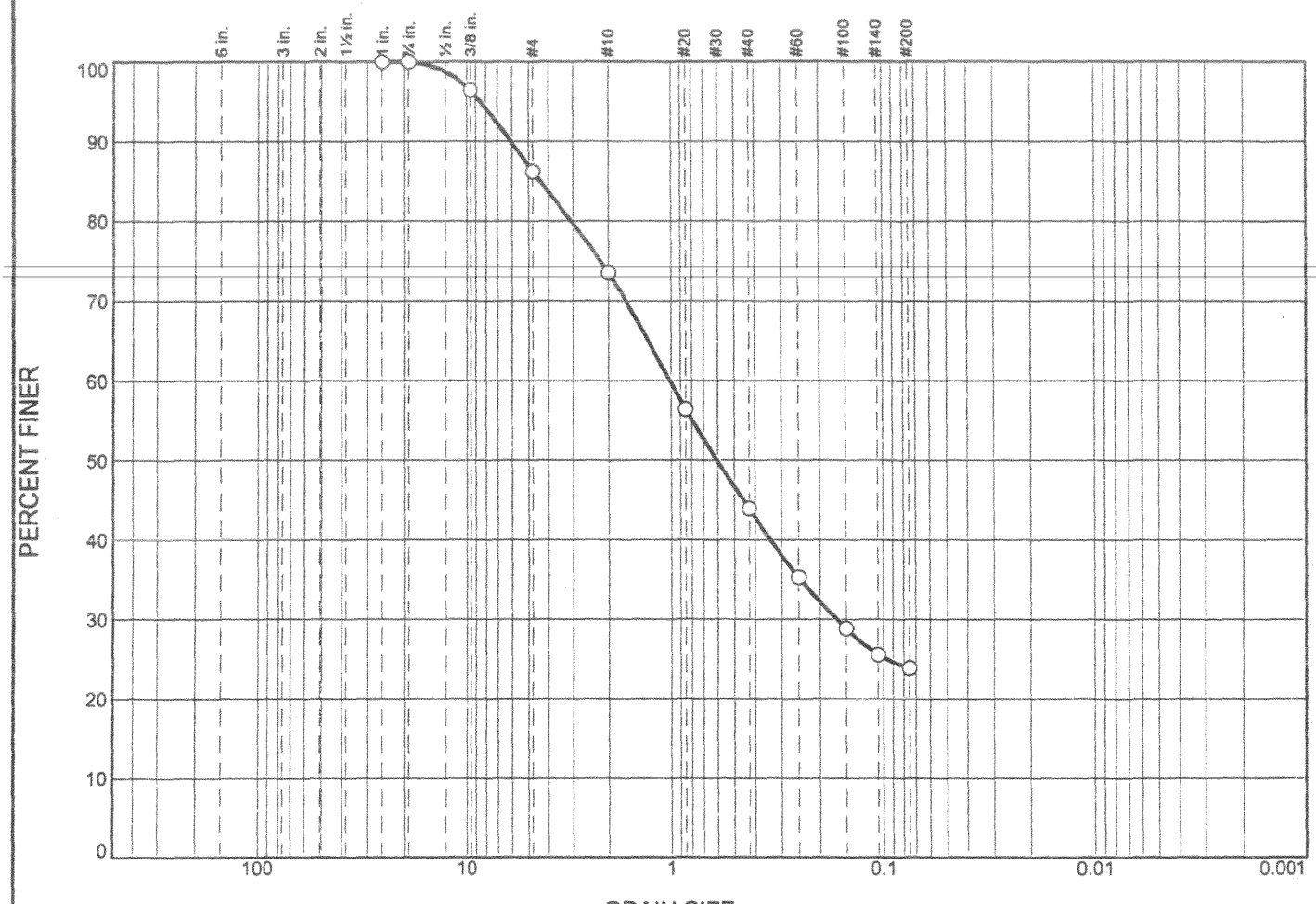
CB-182 CP05-EAARS-VB-0284	225.0-230.0	100	100	100	99	99	75	-	-	-	ML
CB-190 CP05-EAARS-VB-0285	215.0-220.0	100	97	95	91	71	43	-	-	-	CL
CB-190 CP05-EAARS-VB-0285	220.0-225.0	100	90	80	71	62	88	-	-	-	CL
CB-190 CP05-EAARS-VB-0285	225.0-230.0	100	95	92	89	86	148	-	127	66	CH
CB-205 CP05-EAARS-VB-0286	5.0-10.0	52	31	25	21	16	14	-	-	-	SM
CB-205 CP05-EAARS-VB-0286	15.0-20.0	67	49	40	31	20	18	-	-	-	SM
CB-205 CP05-EAARS-VB-0286	30.0-35.0	77	56	43	25	6	16	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	35.0-40.0	100	97	93	46	5	24	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	60.0-65.0	49	31	23	16	11	14	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	65.0-70.0	91	79	71	45	16	21	-	-	-	SM
CB-205 CP05-EAARS-VB-0286	75.0-80.0	52	33	24	16	13	13	-	-	-	SM
CB-205 CP05-EAARS-VB-0286	80.0-85.0	40	21	15	8	7	12	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	95.0-100.0	87	48	24	11	8	17	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	105.0-110.0	52	16	12	9	7	14	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	110.0-115.0	62	46	43	37	30	20	-	-	-	SM
CB-205 CP05-EAARS-VB-0286	125.0-130.0	50	25	20	16	12	17	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	140.0-145.0	58	38	32	13	7	15	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	160.0-165.0	58	39	35	24	12	20	-	-	-	SP-SM
CB-205 CP05-EAARS-VB-0286	175.0-180.0	77	67	66	56	19	18	-	-	-	SM
CB-205 CP05-EAARS-VB-0286	180.0-185.0	96	91	90	82	37	21	-	-	-	SM
CB-205 CP05-EAARS-VB-0286	195.0-200.0	95	90	89	74	31	19	-	-	-	SM
CB-205 CP05-EAARS-VB-0286	215.0-200.0	100	100	100	100	53	25	-	-	-	ML

CB-219 CP05-EAARS-CB-0317	14.0-15.5	94	77	70	64	52	23	-	-	-	ML
CB-219 CP05-EAARS-CB-0317	34.0-35.5	95	77	47	25	12	25	-	-	-	SP-SM
CB-228 CP05-EAARS-CB-0326	4.0-5.5	23	11	8	6	4	5	-	-	-	GP
CB-228 CP05-EAARS-CB-0326	14.0-15.5	74	44	32	24	11	23	-	-	-	SP-SM
CB-231 CP05-EAARS-CB-0329	8.5-10.0	61	32	25	20	14	17	-	-	-	SM
CB-231 CP05-EAARS-CB-0329	13.5-15.0	88	60	50	38	14	22	-	-	-	SM
CB-231 CP05-EAARS-CB-0329	18.5-20.0	54	38	32	22	12	13	-	-	-	SP-SM
CB-231 CP05-EAARS-CB-0329	23.5-25.0	87	69	54	18	6	26	-	-	-	SP-SM
CB-231 CP05-EAARS-CB-0329	33.5-35.0	65	60	58	40	8	16	-	-	-	SP-SM
CB-235 CP05-EAARS-CB-0333	8.5-10.0	63	38	32	29	24	24	-	-	-	SM
CB-248 CP05-EAARS-CB-0346	10.0-11.5	55	29	20	14	9	10	-	-	-	SP-SM
CB-260 CP05-EAARS-CB-0358	13.0-14.5	70	40	31	26	20	21	-	-	-	SM
CB-262 CP05-EAARS-CB-0360	8.5-10.0	38	21	15	11	8	26	-	-	-	GP-GM
CB-262 CP05-EAARS-CB-0360	13.5-15.0	82	59	53	49	46	31	-	-	-	SM
CB-262 CP05-EAARS-CB-0360	18.5-20.0	89	67	55	45	32	24	-	-	-	SM
CB-262 CP05-EAARS-CB-0360	23.5-25.0	69	46	38	29	15	22	-	-	-	SM
CB-268 CP05-EAARS-CB-0365	0.0-1.5	72	48	38	31	24	10	-	-	-	SM
CB-268 CP05-EAARS-CB-0365	1.5-3.0	60	41	35	30	24	13	-	-	-	SM
CB-268 CP05-EAARS-CB-0365	3.5-5.0	68	33	22	15	9	88	-	-	-	SP-SM
CB-268 CP05-EAARS-CB-0365	5.0-6.5	37	17	13	10	7	13	-	-	-	SP-SM
CB-268 CP05-EAARS-CB-0365	11.5-13.0	75	48	39	29	19	29	-	-	-	SM
CB-268 CP05-EAARS-CB-0365	18.5-20.0	96	82	71	59	41	23	-	-	-	SM

CB-268 CP05-EAARS-CB-0365	23.5-25.0	90	68	57	48	36	23	-	-	-	SM
CB-268 CP05-EAARS-CB-0365	28.5-30.0	86	63	55	46	31	21	-	-	-	SM
CB-268 CP05-EAARS-CB-0365	33.5-35.0	53	30	26	20	11	13	-	-	-	SP-SM
CB-276 CP05-EAARS-CB-0372	14.5-16.0	93	75	68	62	53	19	-	-	-	ML
CB-277 CP05-EAARS-CB-0373	19.0-20.5	83	67	56	41	21	25	-	-	-	SM
CB-277 CP05-EAARS-CB-0373	29.0-30.5	66	49	40	28	19	22	-	-	-	SM
CB-277 CP05-EAARS-CB-0373	34.0-35.5	100	98	95	37	5	26	-	-	-	SP
CB-281 CP05-EAARS-CB-0377	15.5-17.0	79	42	32	26	19	18	-	-	-	SM
CB-281 CP05-EAARS-CB-0377	19.0-20.5	92	68	54	40	25	26	-	-	-	SM
CB-281 CP05-EAARS-CB-0377	24.0-25.5	67	43	35	28	18	19	-	-	-	SM
CB-281 CP05-EAARS-CB-0377	29.0-30.5	72	49	41	31	17	15	-	-	-	SM
CB-310 CP05-EAARS-CB-0406	23.5-25.0	85	64	52	41	28	26	-	-	-	SM
CB-310 CP05-EAARS-CB-0406	33.5-35.0	53	34	30	21	9	13	-	-	-	SP-SM

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	14	12	30	20	24	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			4.3800	1.0135	0.6025	0.1656				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-157 **Depth:** 9.0' **Sample Number:** 4

Date: ○

Remarks:

○ Moisture Content % 32.6 CP05-EAARS-CB-0255 @ 9.0'

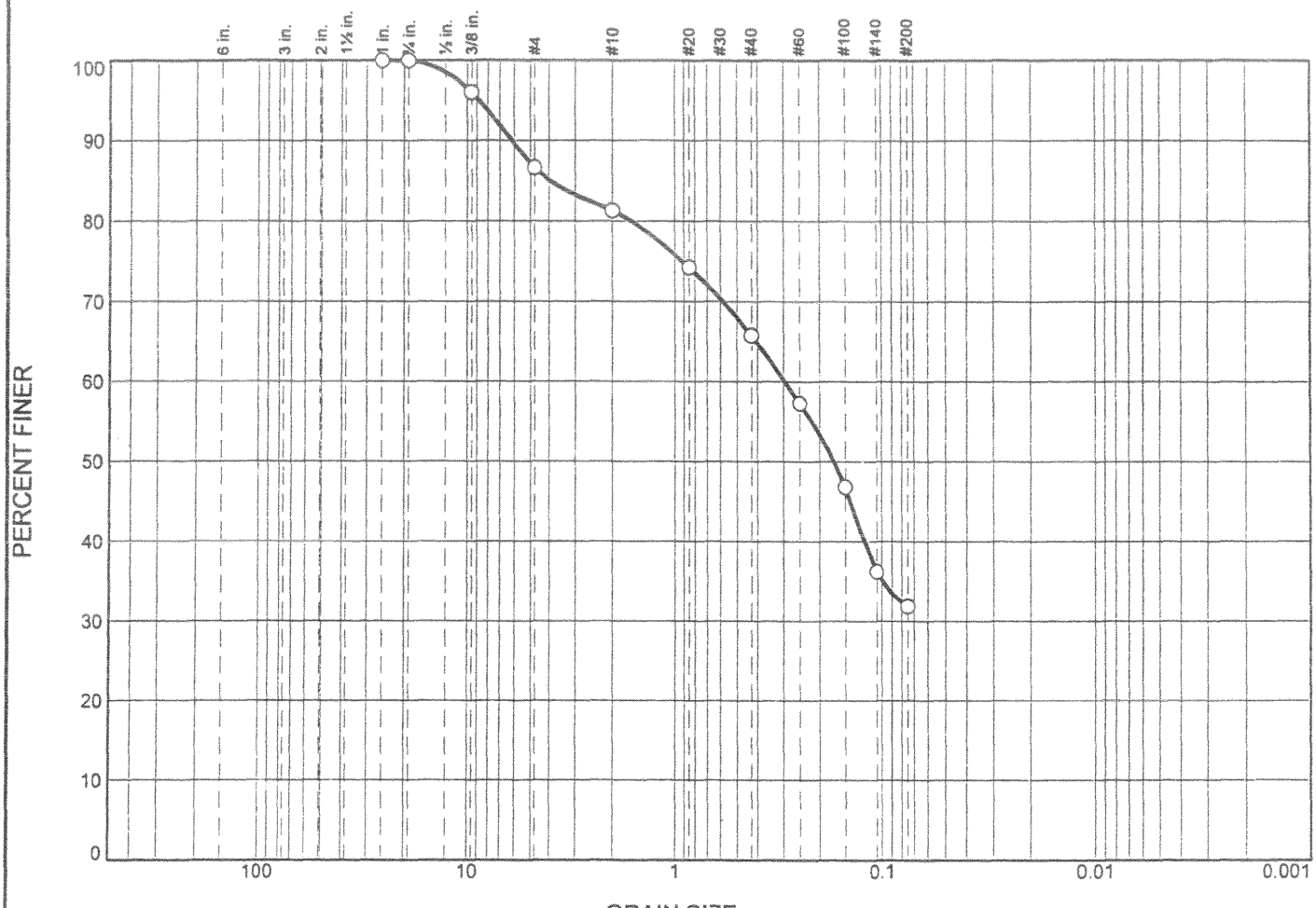
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	13	6	15	34	32	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			3.9736	0.2950	0.1690					

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-157 **Depth:** 13.5' **Sample Number:** 5

Date: ○

Remarks:

○ Moisture Content % 27.1 CP05-EAARS-CB-0255 @ 13.5'

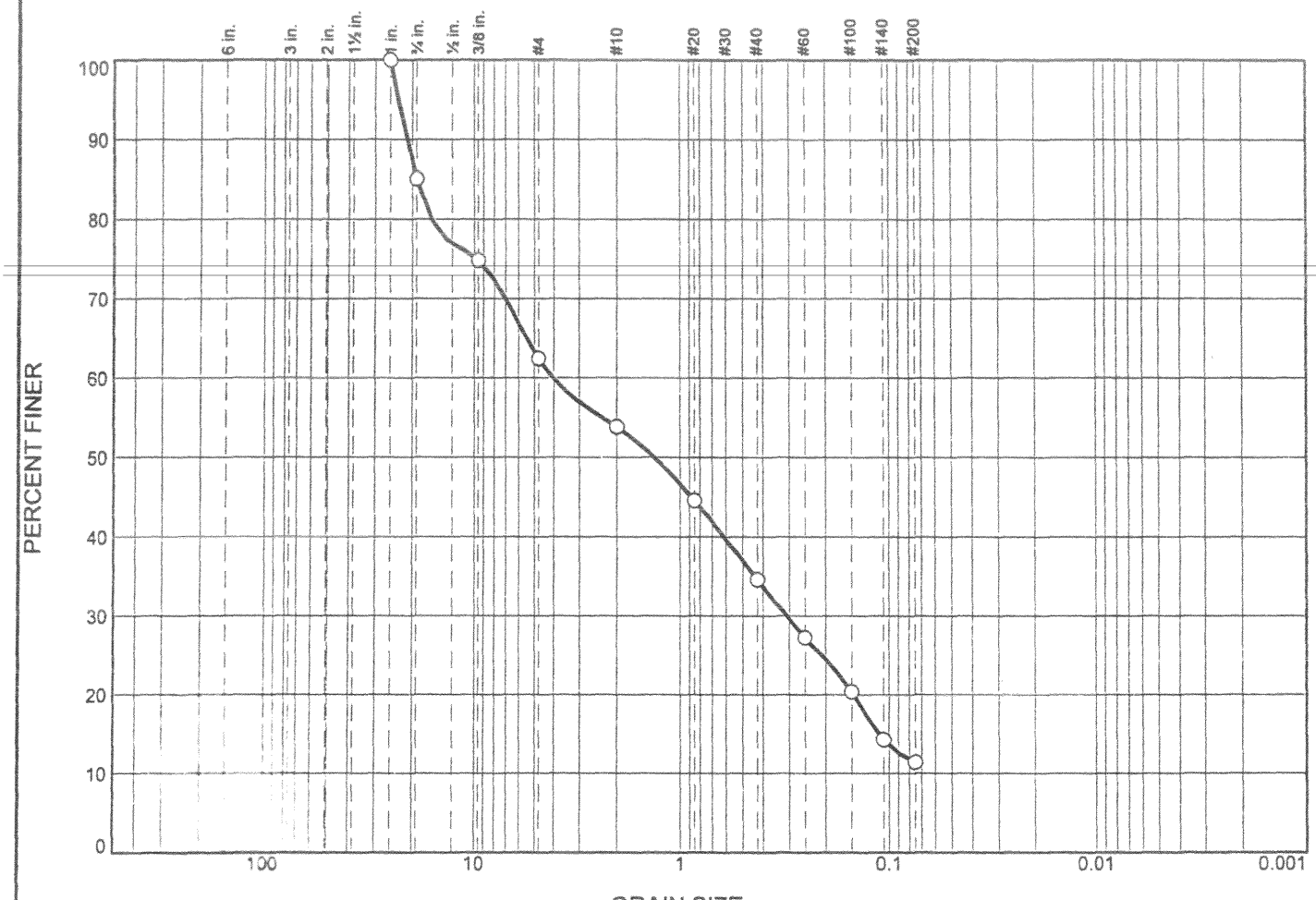
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	15	23	8	19	24	11	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			19.0162	4.0228	1.3320	0.3078	0.1113			

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-157 **Depth:** 18.5' **Sample Number:** 6

Date: ○

Remarks:

○ Moisture Content % 19.3 CP05-EAARS-CB-0255 @ 18.5'

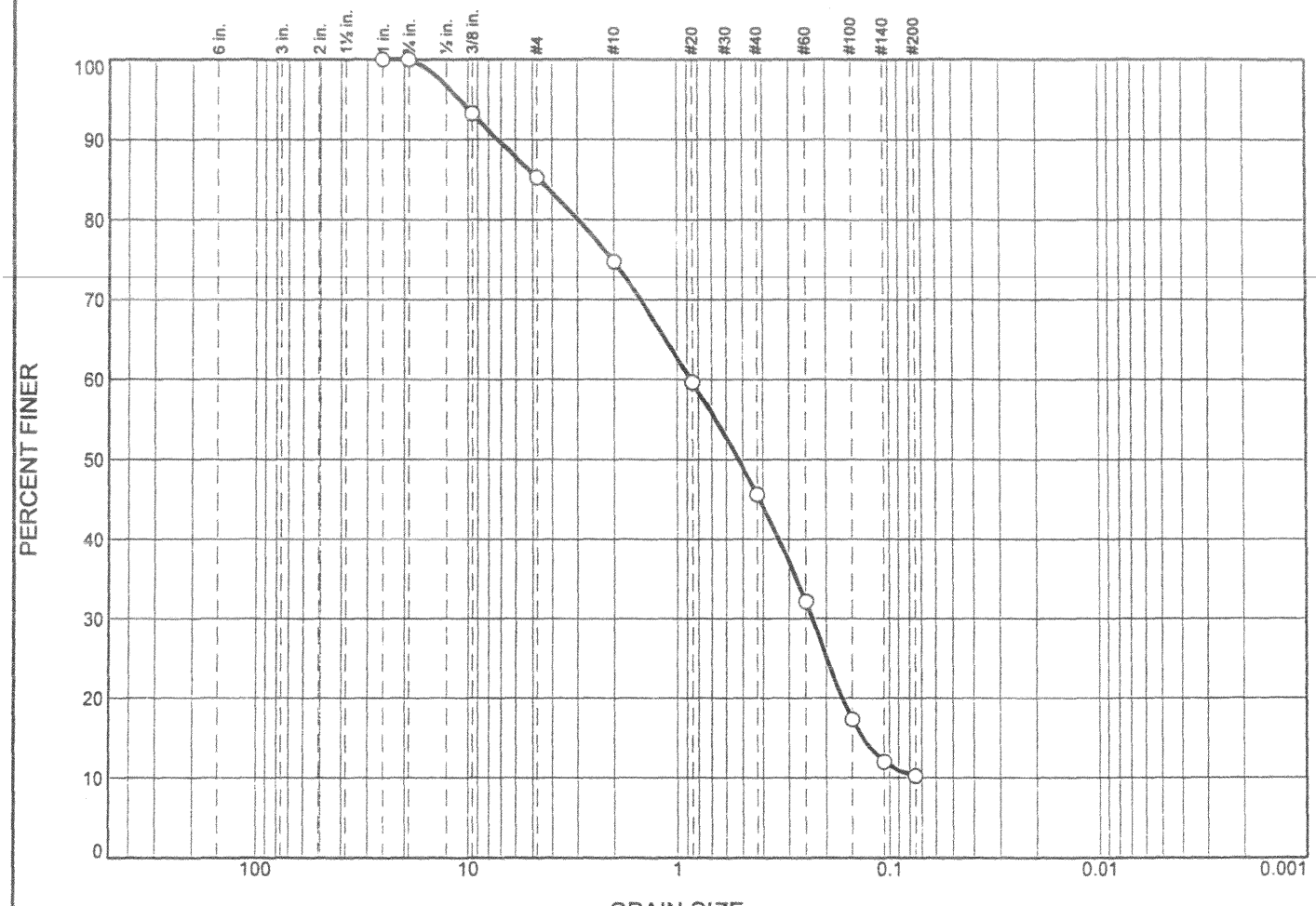
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	15	10	29	36	10	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			4.6208	0.8654	0.5214	0.2327	0.1338			

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 50.5' **Sample Number:** 32

Date: ○

Remarks:

○ Moisture Content % 18.6 CP05-EAARS-CB-0256 @ 50.5'

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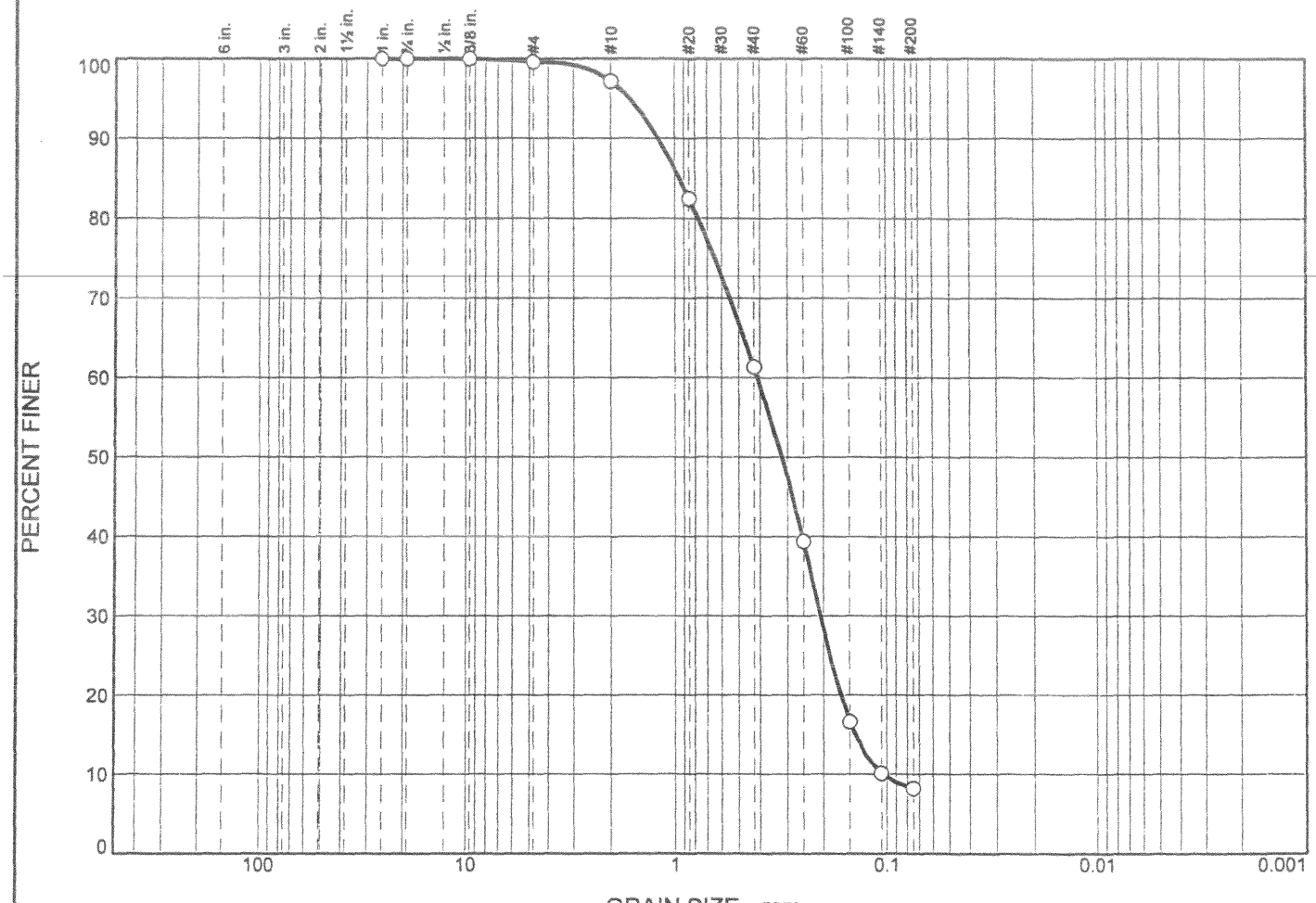
Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	3	36	53	8	

☒	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.9438	0.4093	0.3169	0.2063	0.1419	0.1048	0.99	3.91

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 55.0' **Sample Number:** 35

Date: ○

Remarks:

○ Moisture Content % 23.1 CP05-EAARS-CB-0256 @ 55.0'

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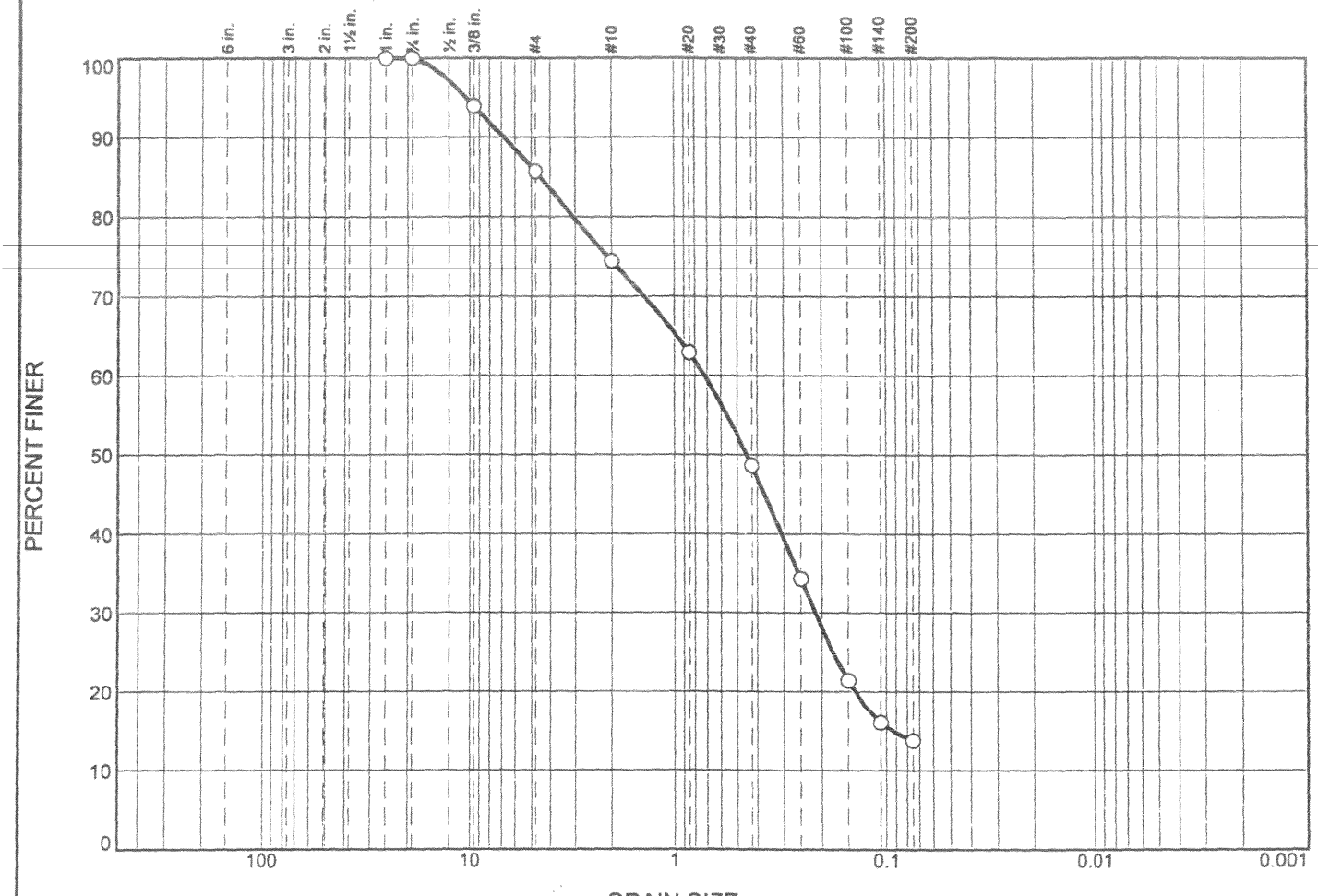
Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	14	12	25	35	14	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			4.4869	0.7184	0.4491	0.2138	0.0931			

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 65.5' **Sample Number:** 42

Date: ○

Remarks:

○ Moisture Content % 21.2 CP05-EAARS-CB-0256 @ 65.5'

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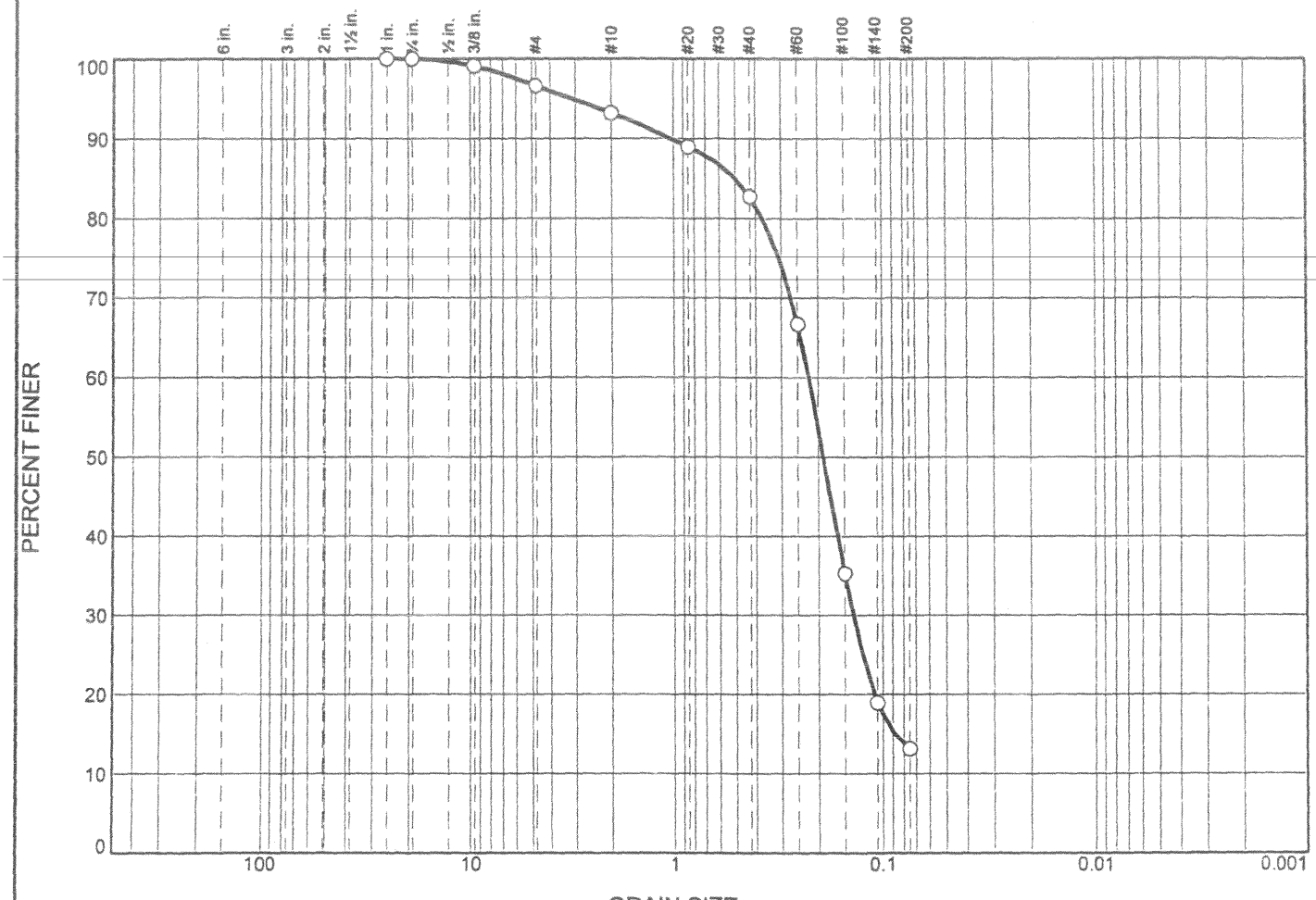
Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	3	4	10	70	13	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.5005	0.2212	0.1887	0.1368	0.0883			

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 70.0' **Sample Number:** 45

Date: ○

Remarks:

○ Moisture Content % 27.6 CP05-EAARS-CB-0256 @ 70.0'

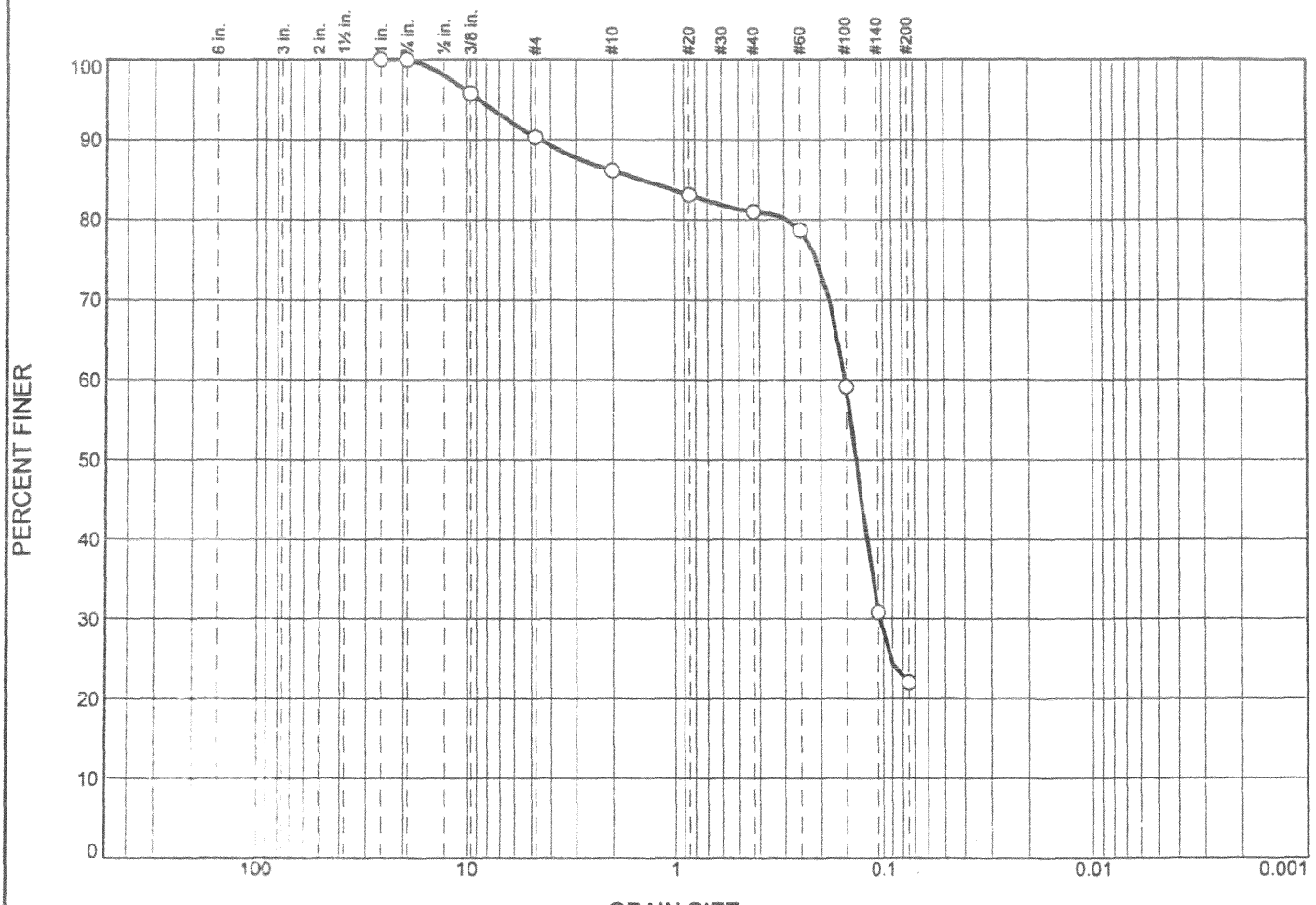
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	10	4	5	59	22	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			1.4588	0.1516	0.1344	0.1044				

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 38.5' **Sample Number:** 24

Date: ○

Remarks:

○ Moisture Content % 27.7 CP05-EAARS-CB-0256 @ 38.5'

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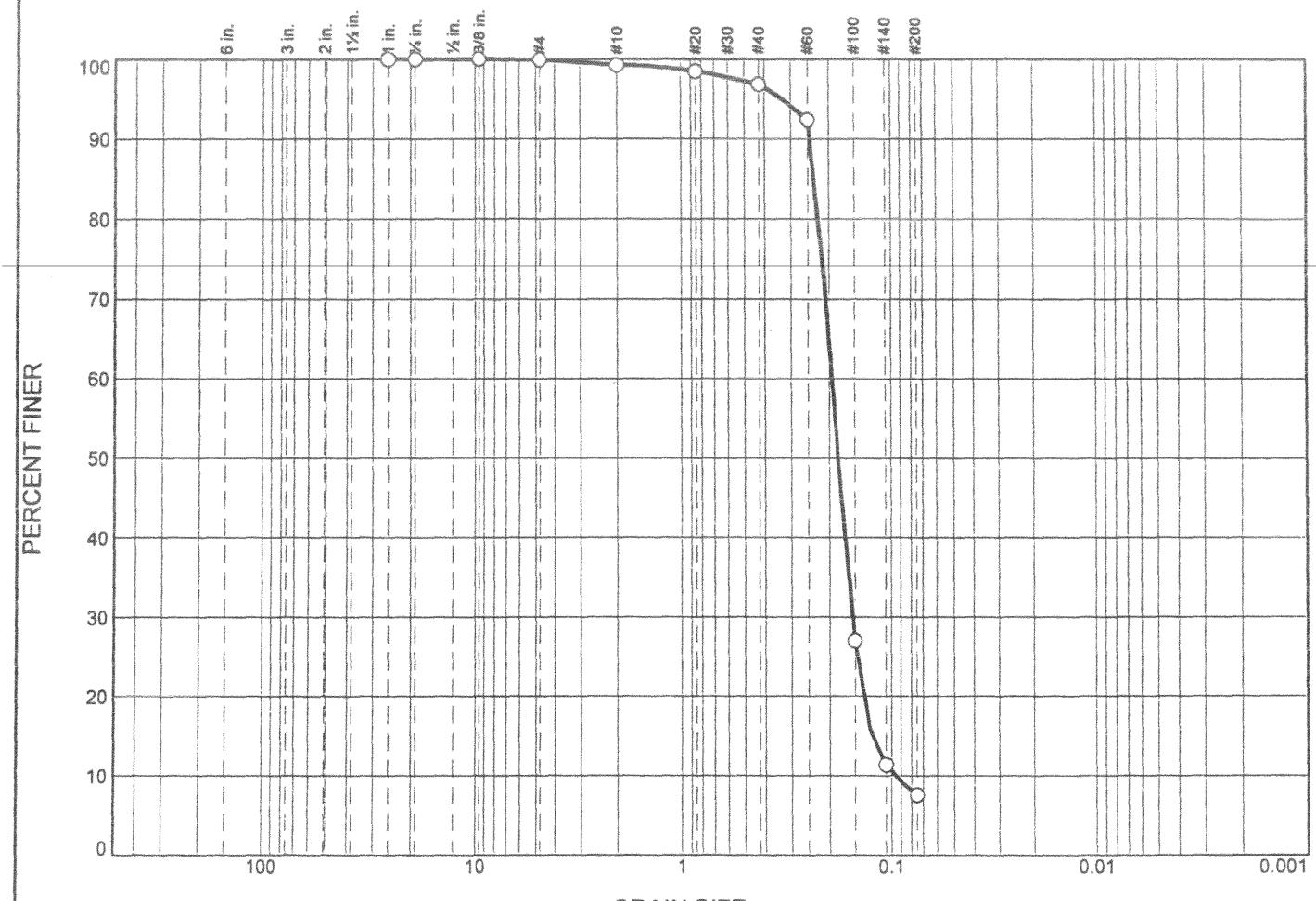
Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	1	2	89	8	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2321	0.1930	0.1802	0.1544	0.1237	0.0959	1.29	2.01

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-158 **Depth:** 44.5' **Sample Number:** 28

Date: ○

Remarks:
○ Moisture Content % 31.2 CP05-EAARS-CB-0256 @ 44.5'

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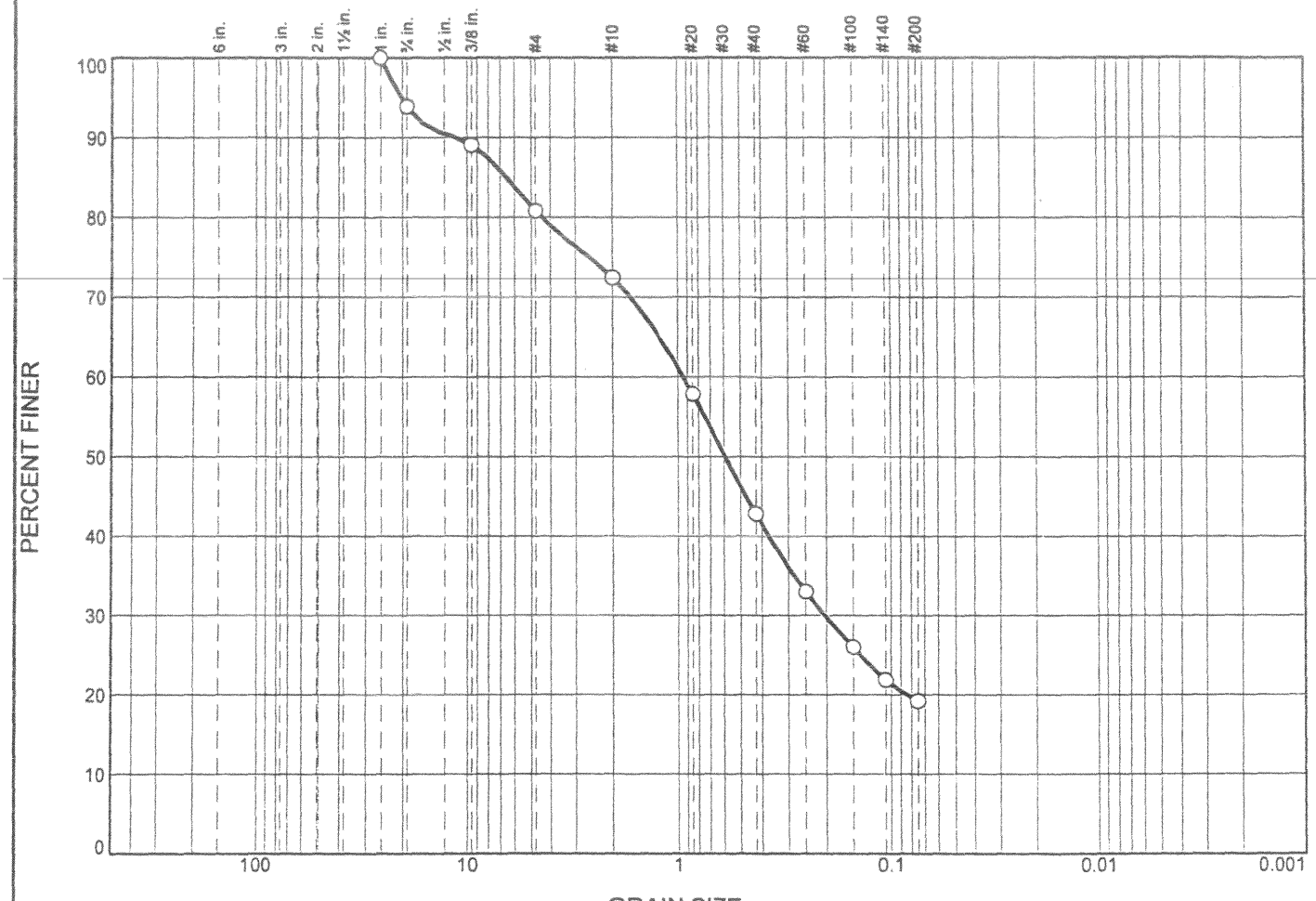
Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	6	13	9	29	24	19	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			6.5563	0.9411	0.5912	0.2037				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 23.5' **Sample Number:** 14

Date: ○

Remarks:

○ Moisture Content % 29.3 CP05-EAARS-CB-0256 @ 23.5'

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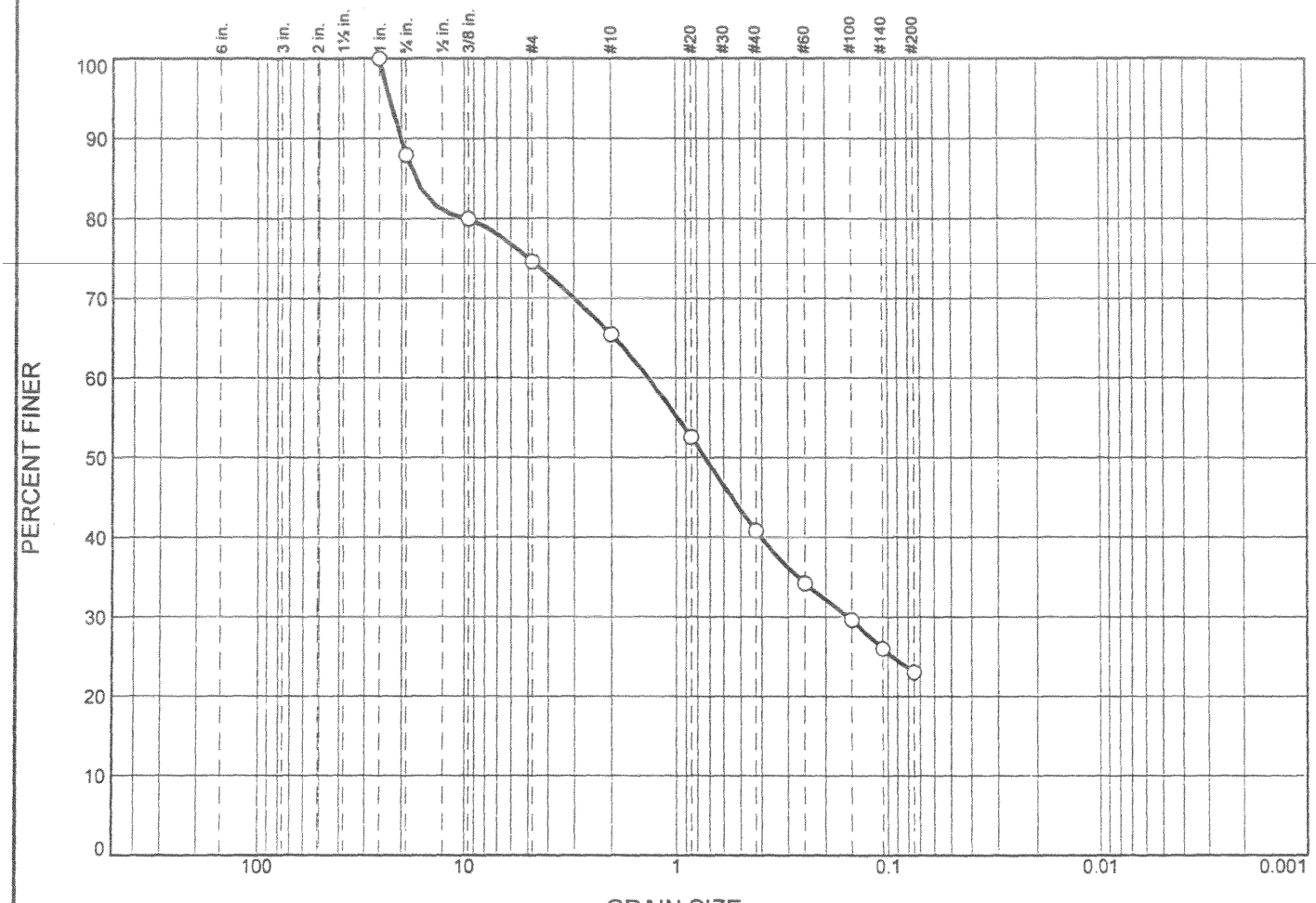
Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	12	13	10	24	18	23	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			17.0853	1.3499	0.7341	0.1557				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 21.5' **Sample Number:** 16

Date: ○

Remarks:

○ Moisture Content % 21.4 CP05-EAARS-CB-0256 @ 21.5'

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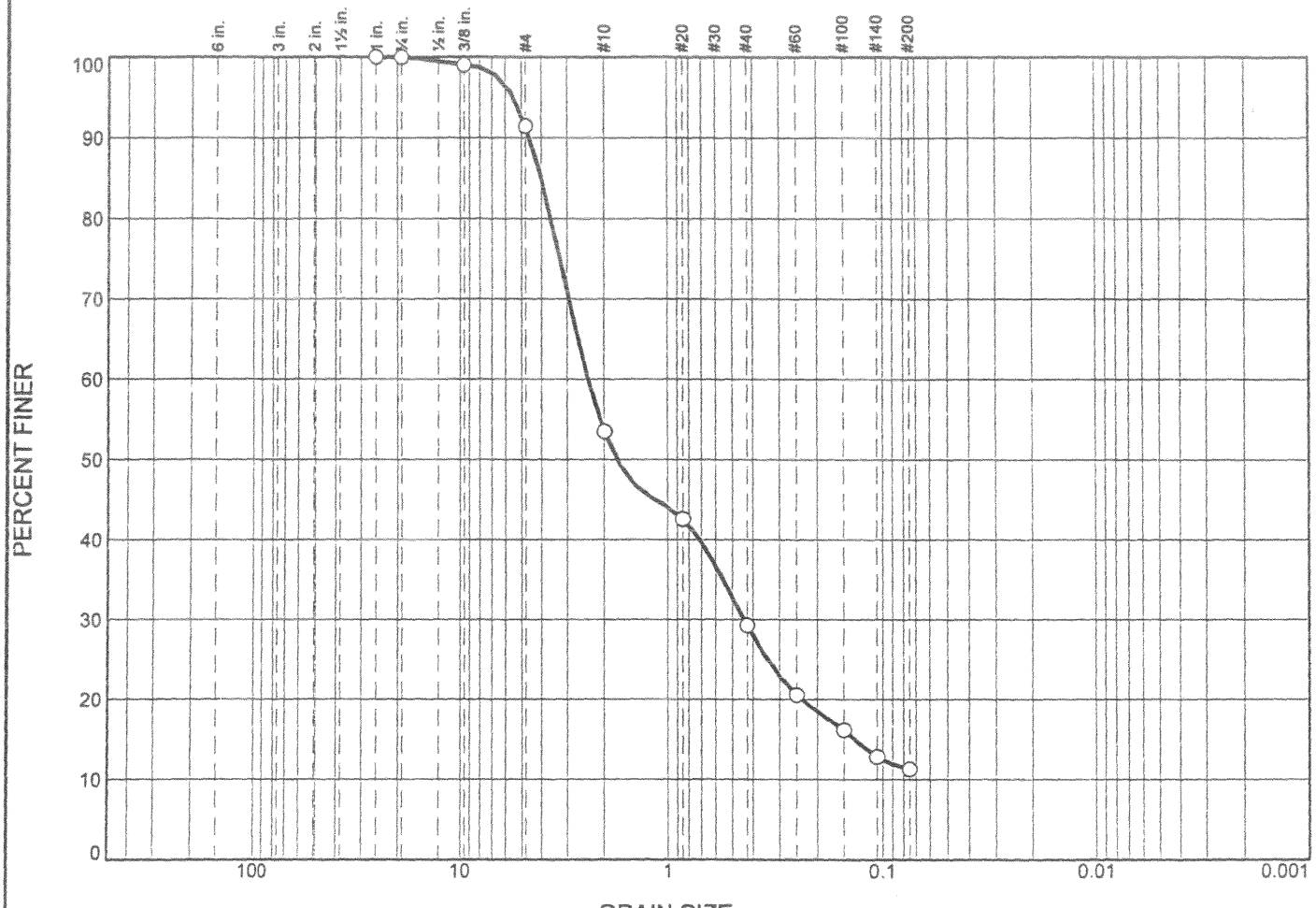
Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	9	38	24	18	11	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			3.9995	2.3726	1.7525	0.4401	0.1335			

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 76.0' **Sample Number:** 49

Date: ○

Remarks:

○ Moisture Content % 27.5 CP05-EAARS-CB-0256 @ 76.0'

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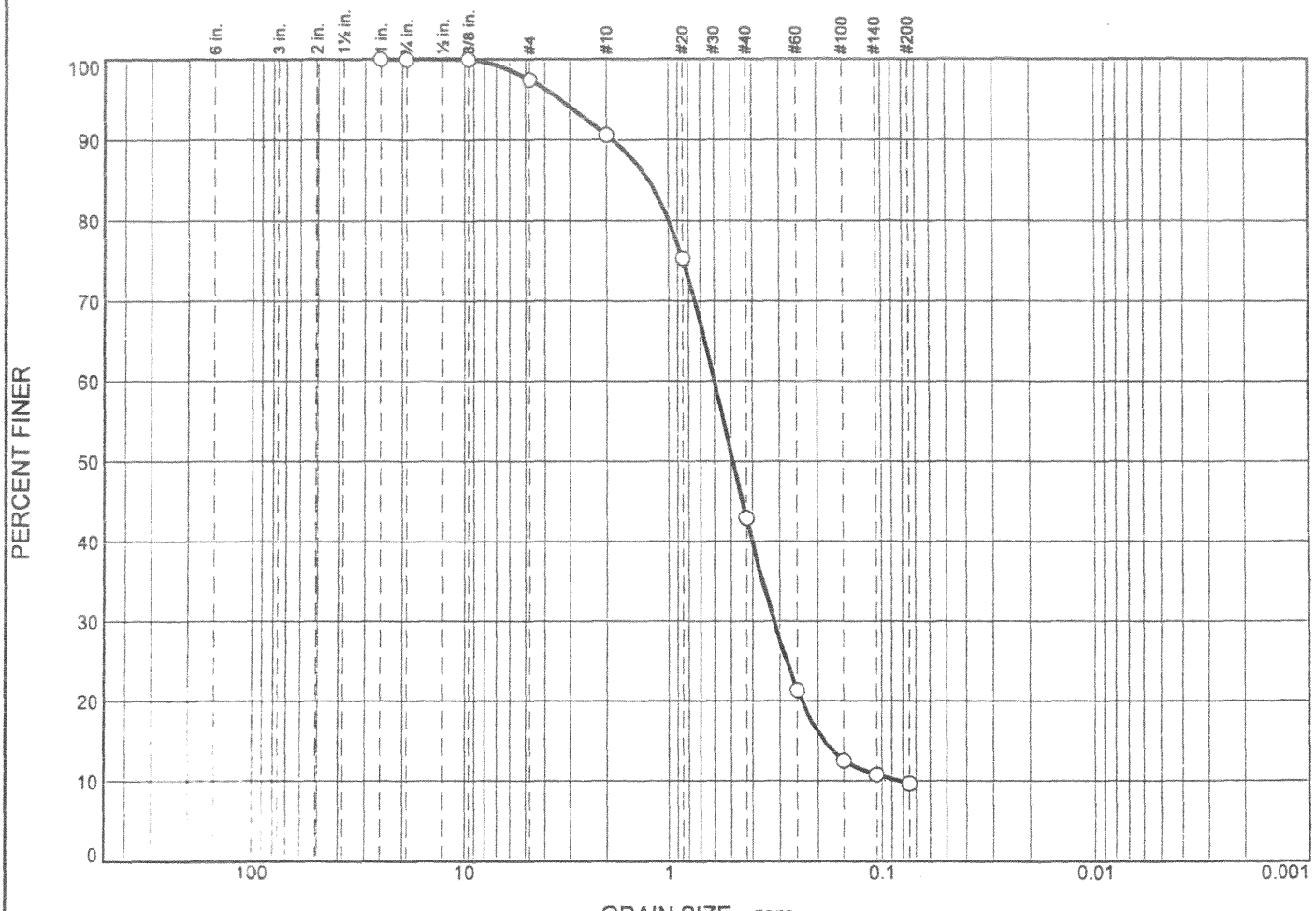
Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	3	6	48	33	10	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			1.2481	0.5969	0.4892	0.3196	0.1861	0.0836	2.05	7.14

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 80.5' **Sample Number:** 52

Date: ○

Remarks:

○ Moisture Content % 19.9 CP05-EAARS-CB-0256 @ 80.5'

Nodarse & Associates, Inc.

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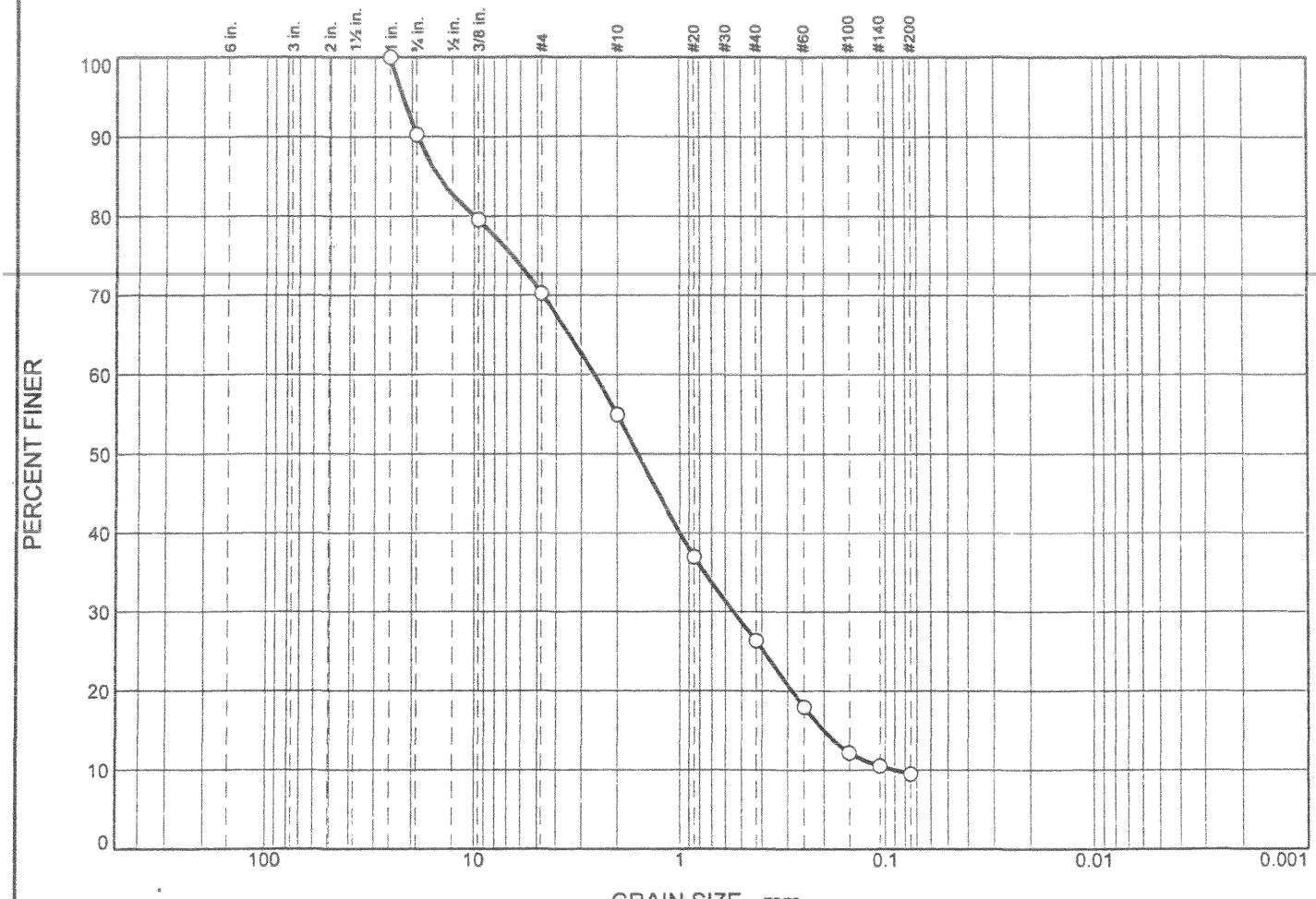
Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	10	20	15	29	17	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			14.9592	2.5838	1.5875	0.5455	0.2004	0.0896	1.29	28.85

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 85.0' **Sample Number:** 55

Date: ○

Remarks:

○ Moisture Content % 26.2 CP05-EAARS-CB-0256 @ 85.0'

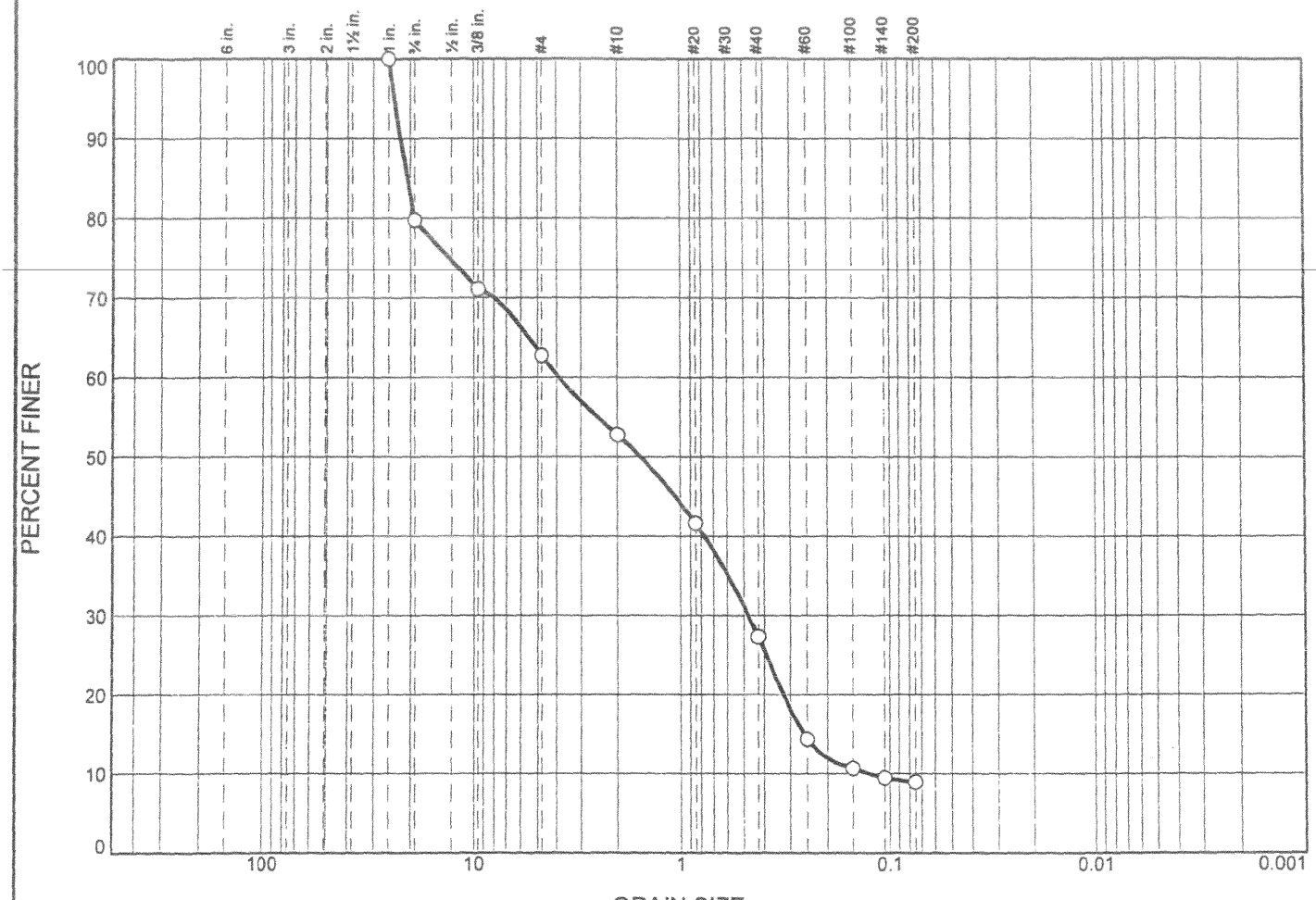
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	20	17	10	26	18	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			20.8086	3.8827	1.5585	0.4729	0.2594	0.1252	0.46	31.01

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 89.5' **Sample Number:** 58

Date: ○

Remarks:

○ Moisture Content % 26.2 CP05-EAARS-CB-0256 @ 85.0'

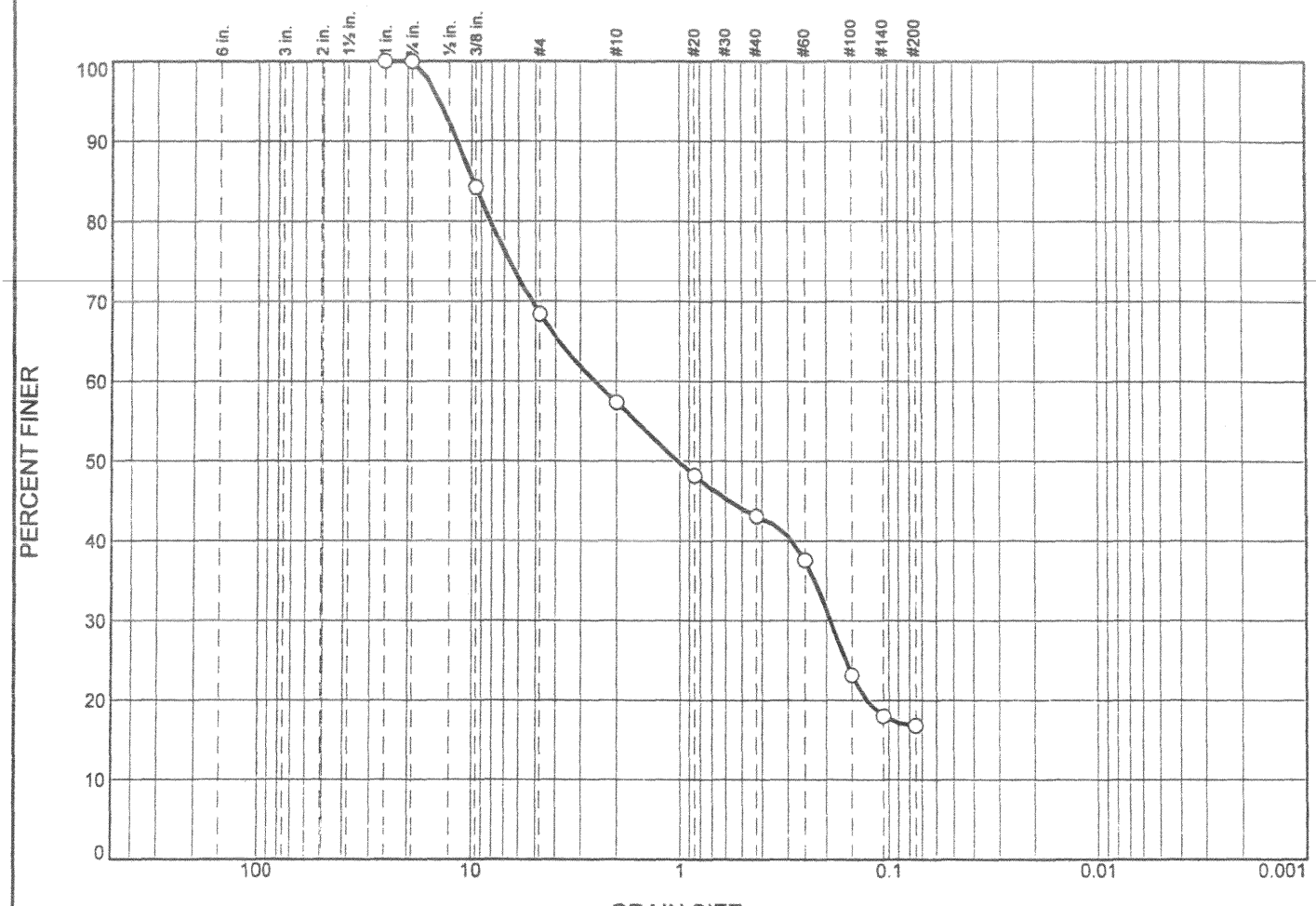
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	32	11	14	26	17	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			9.7706	2.5428	1.0211	0.1905				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 91.0' **Sample Number:** 59

Date: ○

Remarks:

○ Moisture Content % 21.1 CP05-EAARS-CB-0256 @ 91.0'

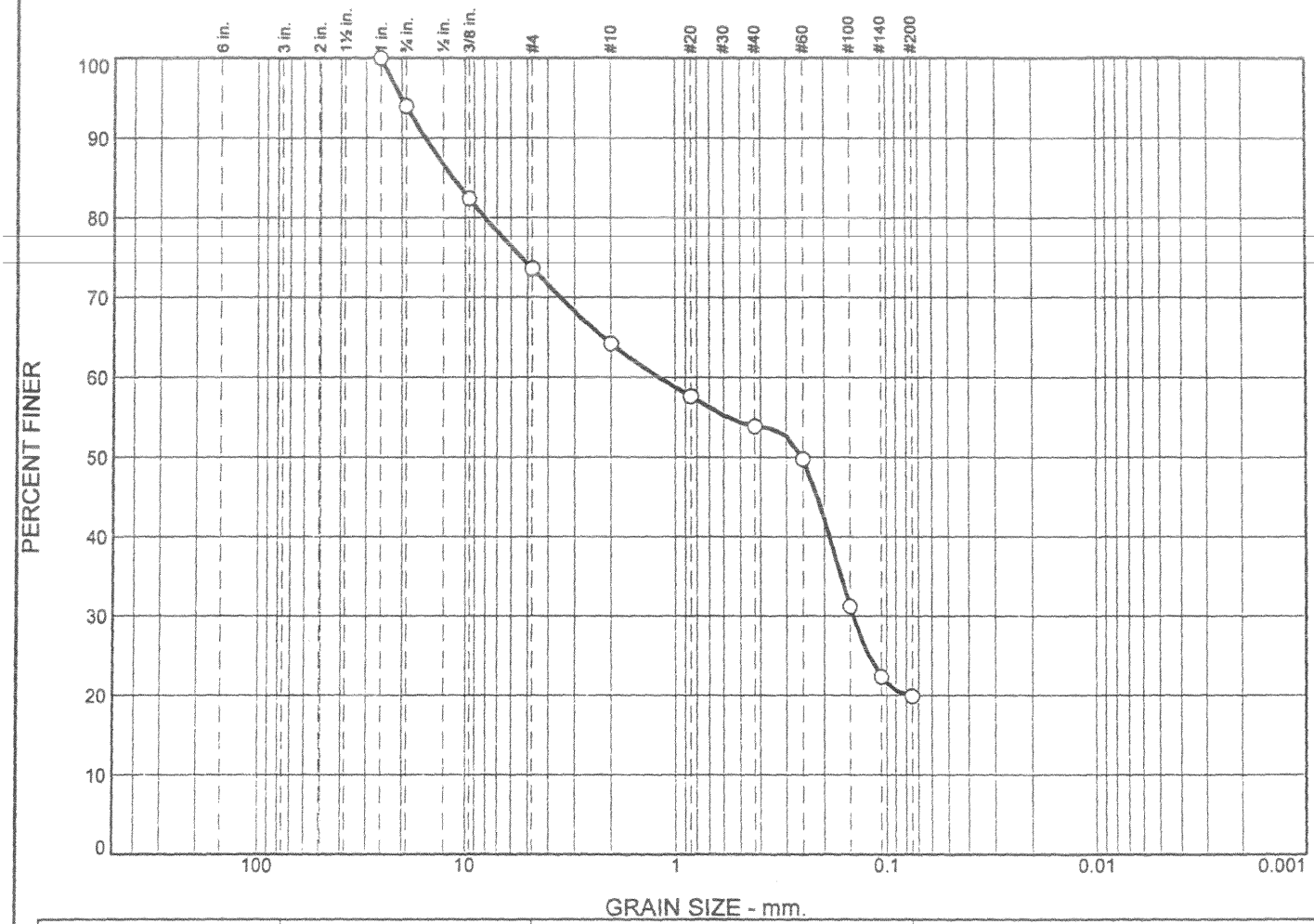
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	6	20	10	10	34	20	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			11.3755	1.1886	0.2525	0.1450				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 95.5' **Sample Number:** 62

Date: ○

Remarks:

○ Moisture Content % 19.3 CP05-EAARS-CB-0256 @ 95.5'

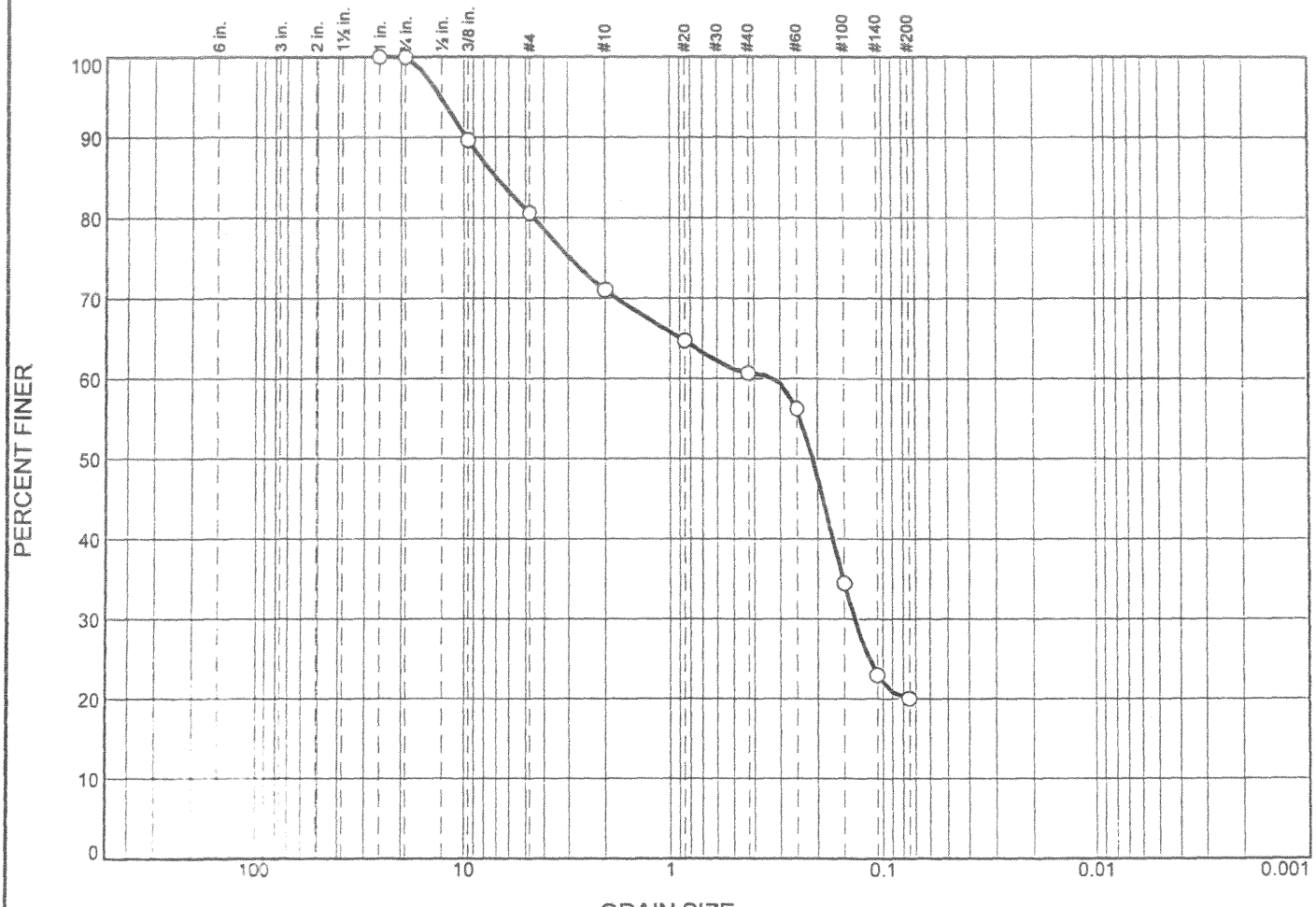
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	19	10	10	41	20	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			6.9231	0.3181	0.2097	0.1346				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 98.5' **Sample Number:** 69

Date: ○

Remarks:

○ Moisture Content % 21.6 CP05-EAARS-CB-0256 @ 98.5'

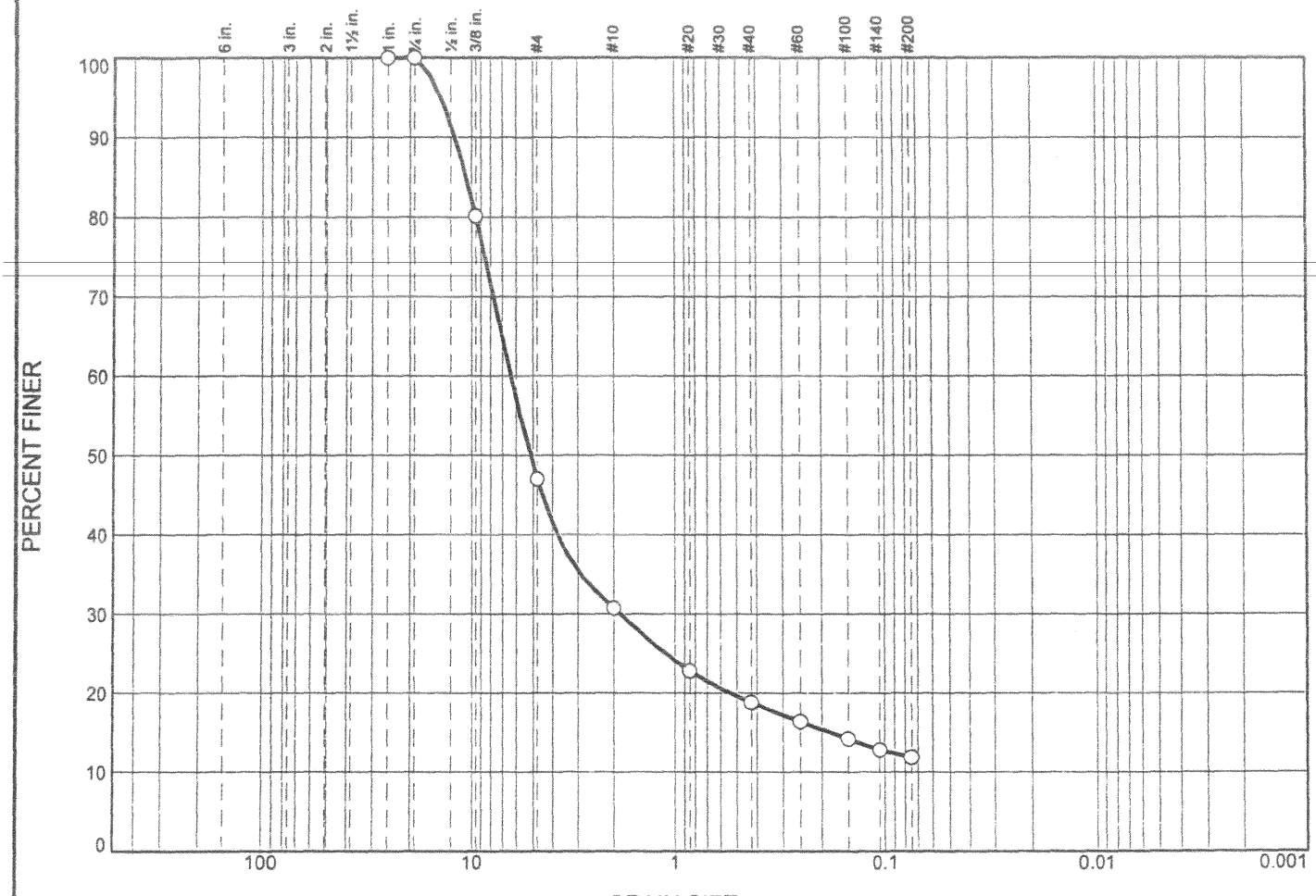
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	53	16	12	7	12	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			10.6373	6.3584	5.1205	1.8548	0.1816			

Material Description	USCS	AASHTO
○ Poorly graded gravel with silt and sand	GP-GM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-158 **Depth:** 14.5' **Sample Number:** 8

Date: ○

Remarks:

○ Moisture Content % 62.9 CP05-EAARS-CB-0256 @ 14.5'

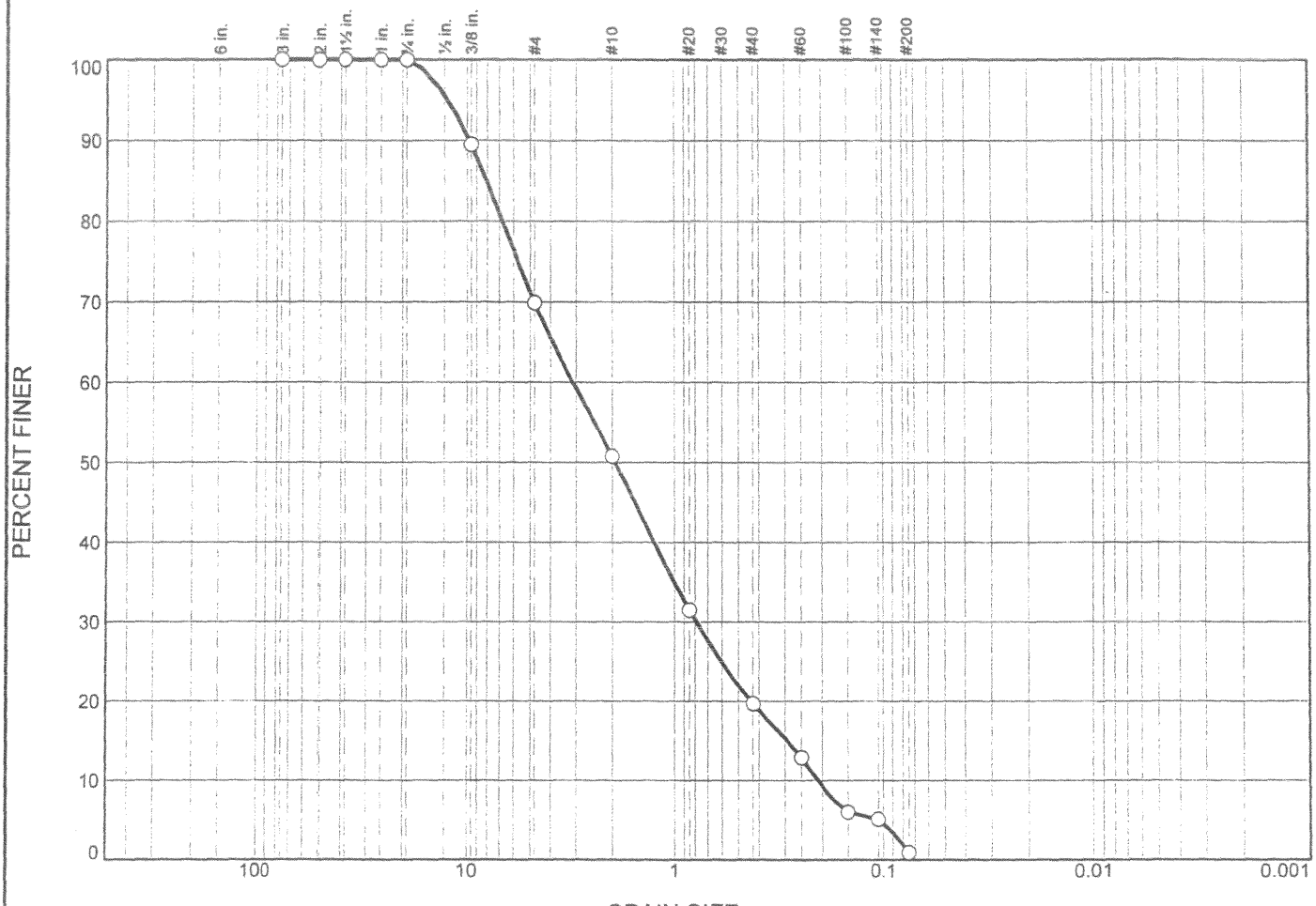
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	30.1	19.1	31.1	18.8	0.9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			8.0475	3.1055	1.9281	0.7896	0.2908	0.2084	0.96	14.90

Material Description	USCS	AASHTO
○ WELL GRADED SAND WITH GRAVEL	SW	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A(Reservoir) W/O #4

○ **Depth:** 4.5-9.5' **Sample Number:** CB-0168

Remarks:
○ Moisture Content % 13 CP05-EAARS-CB-0256 @ 4.5'-9.5'

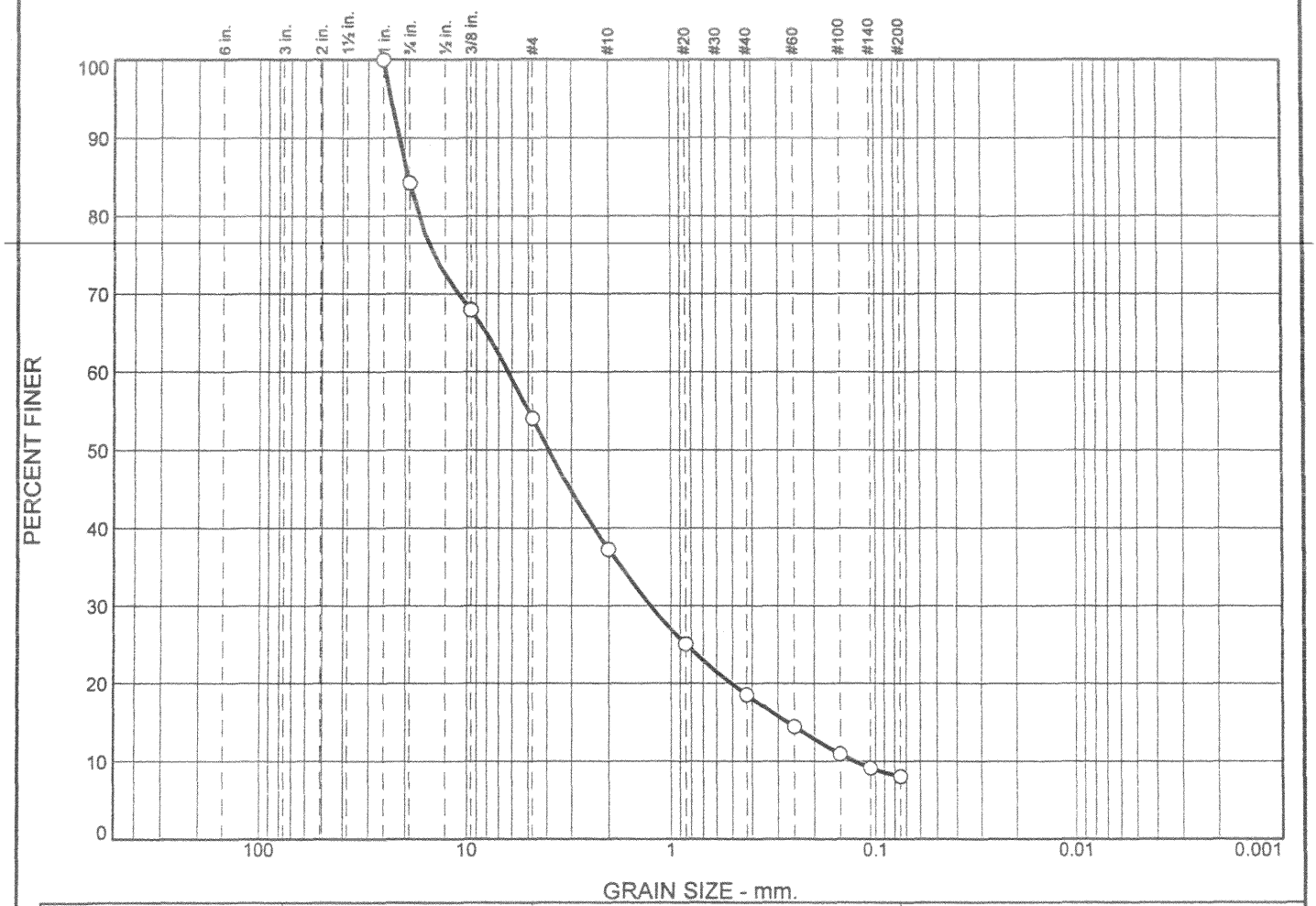
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Camaraza **Checked By:** M Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	16	30	17	18	11	8	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			19.3721	6.2672	3.9118	1.2546	0.2694	0.1274	1.97	49.20

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 5.5' **Sample Number:** 3

Date: ○

Remarks:

○ Moisture Content % 13.4

CP05-EAARS-CB-0266

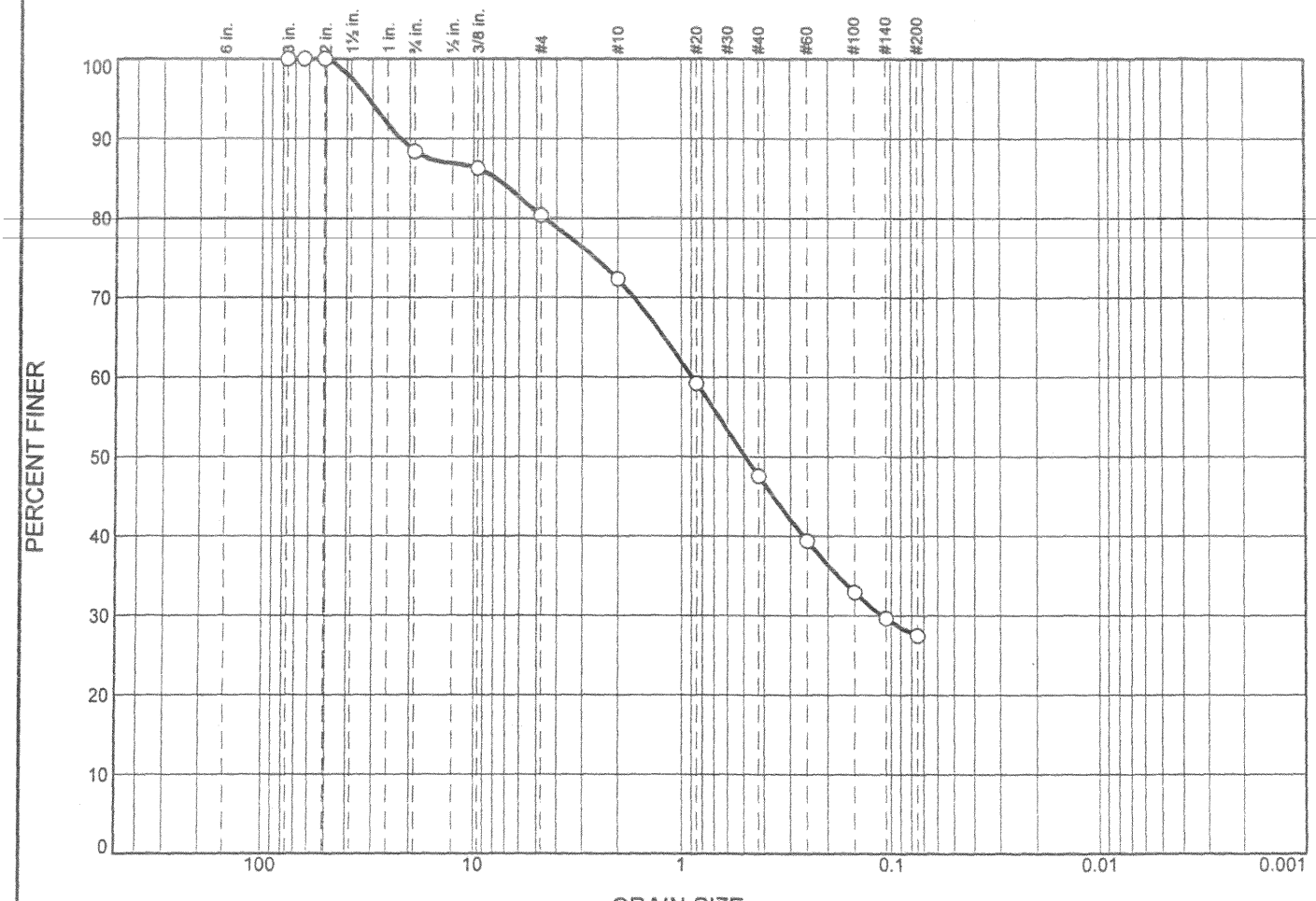
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	12	8	8	24	21	27	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			7.7404	0.8895	0.4916	0.1110				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0169 **Depth:** 11.5' **Sample Number:** 7

Date: ○

Remarks:
○ Moisture Content % 24.0
CP05-EAARS-CB-0266

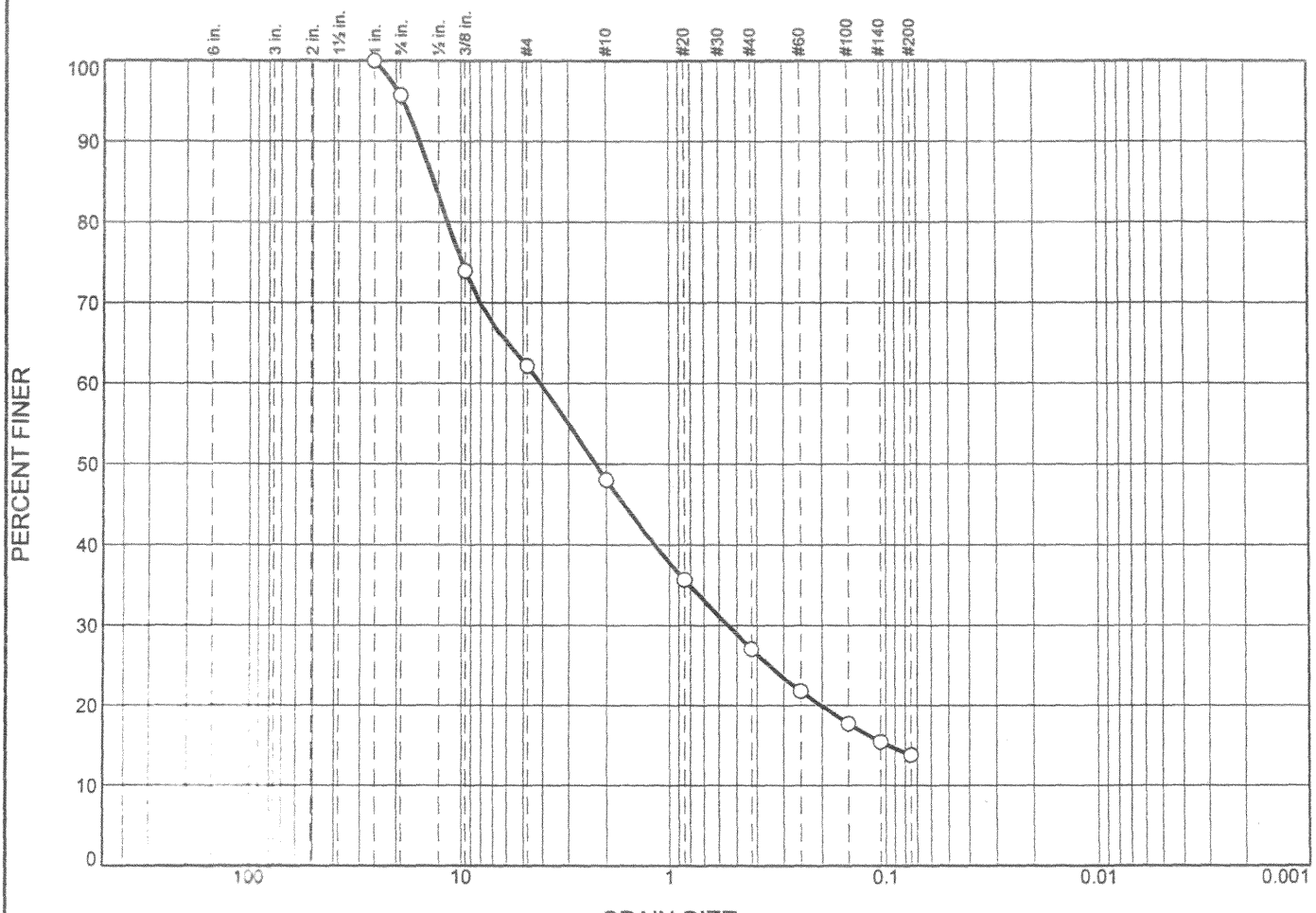
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	4	34	14	21	13	14	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			13.3363	4.0871	2.2470	0.5460	0.0976			

Material Description	USCS	AASHTO
○ Well graded sand with silt gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 14.5' **Sample Number:** 9

Date: ○

Remarks:

○ Moisture Content % 34.3 CP05-EAARS-CB-0266

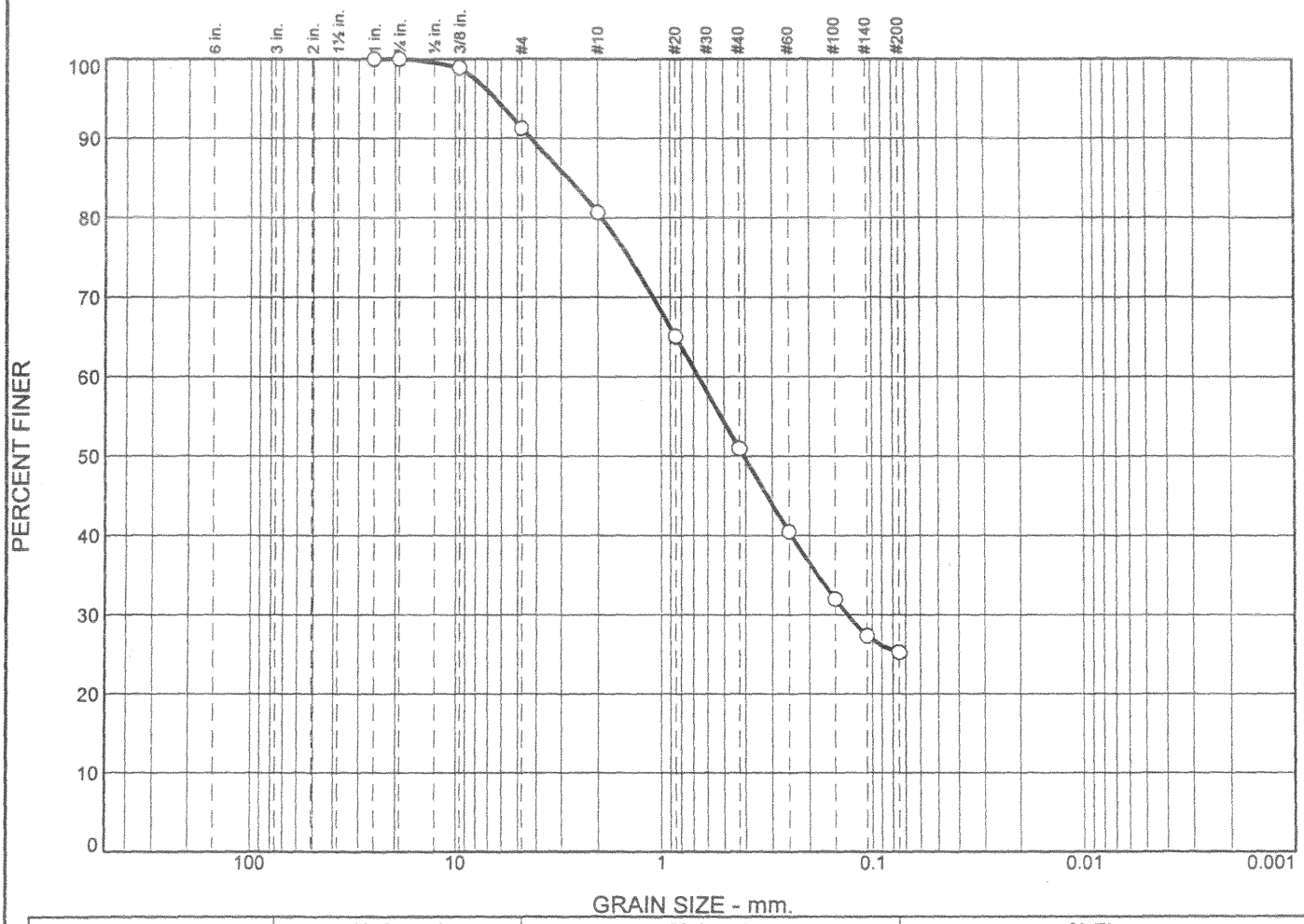
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	9	10	30	26	25	

X	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			2.7798	0.6608	0.4050	0.1312				

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 16.0' **Sample Number:** 10

Date: ○

Remarks:

○ Moisture Content % 36.2

CP05-EAARS-CB-0266

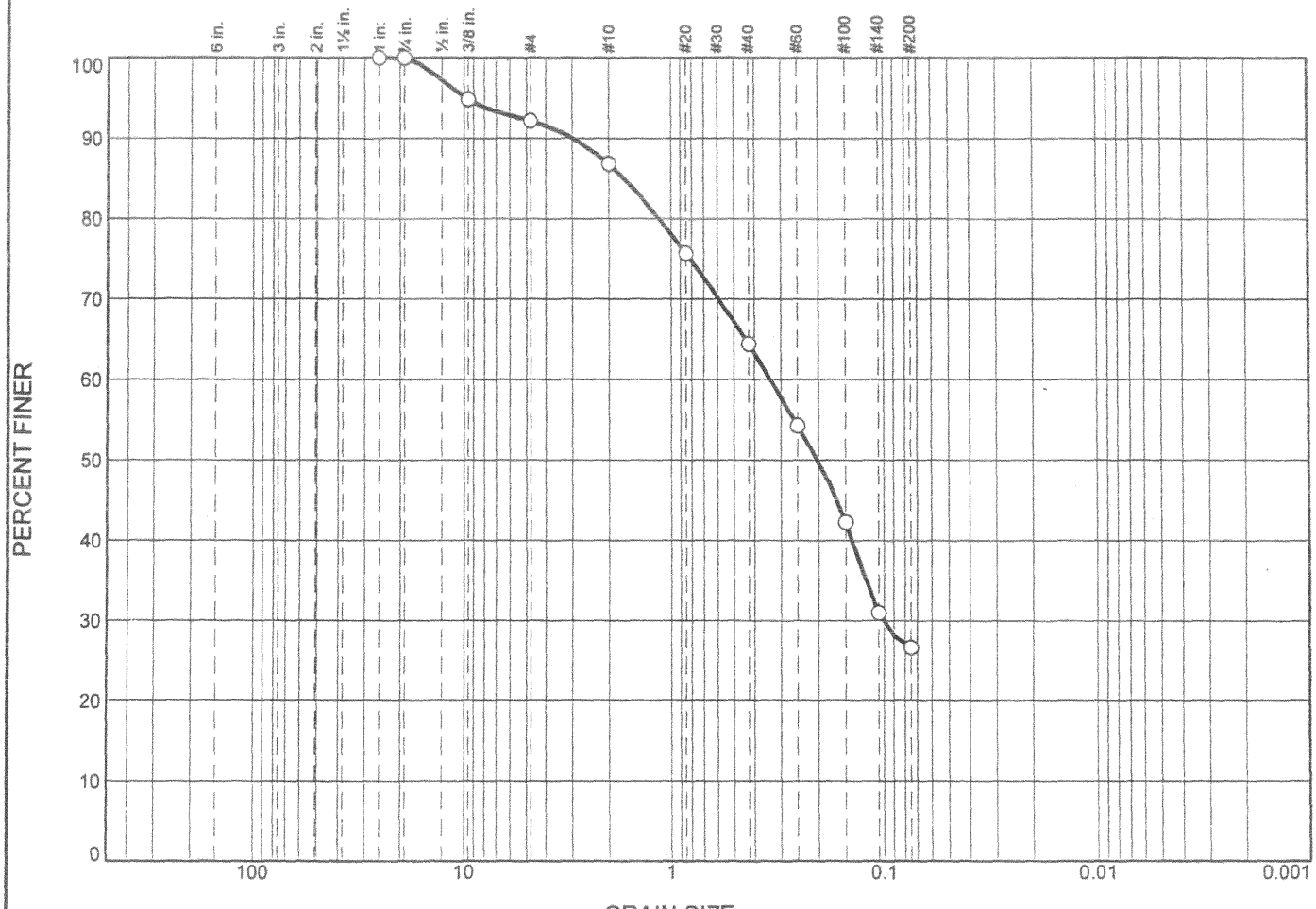
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	8	5	23	37	27	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			1.6852	0.3360	0.2016	0.1011				

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0169 **Depth:** 20.5' **Sample Number:** 13

Date: ○

Remarks:
○ Moisture Content % 27.5
CP05-EAARS-CB-0266

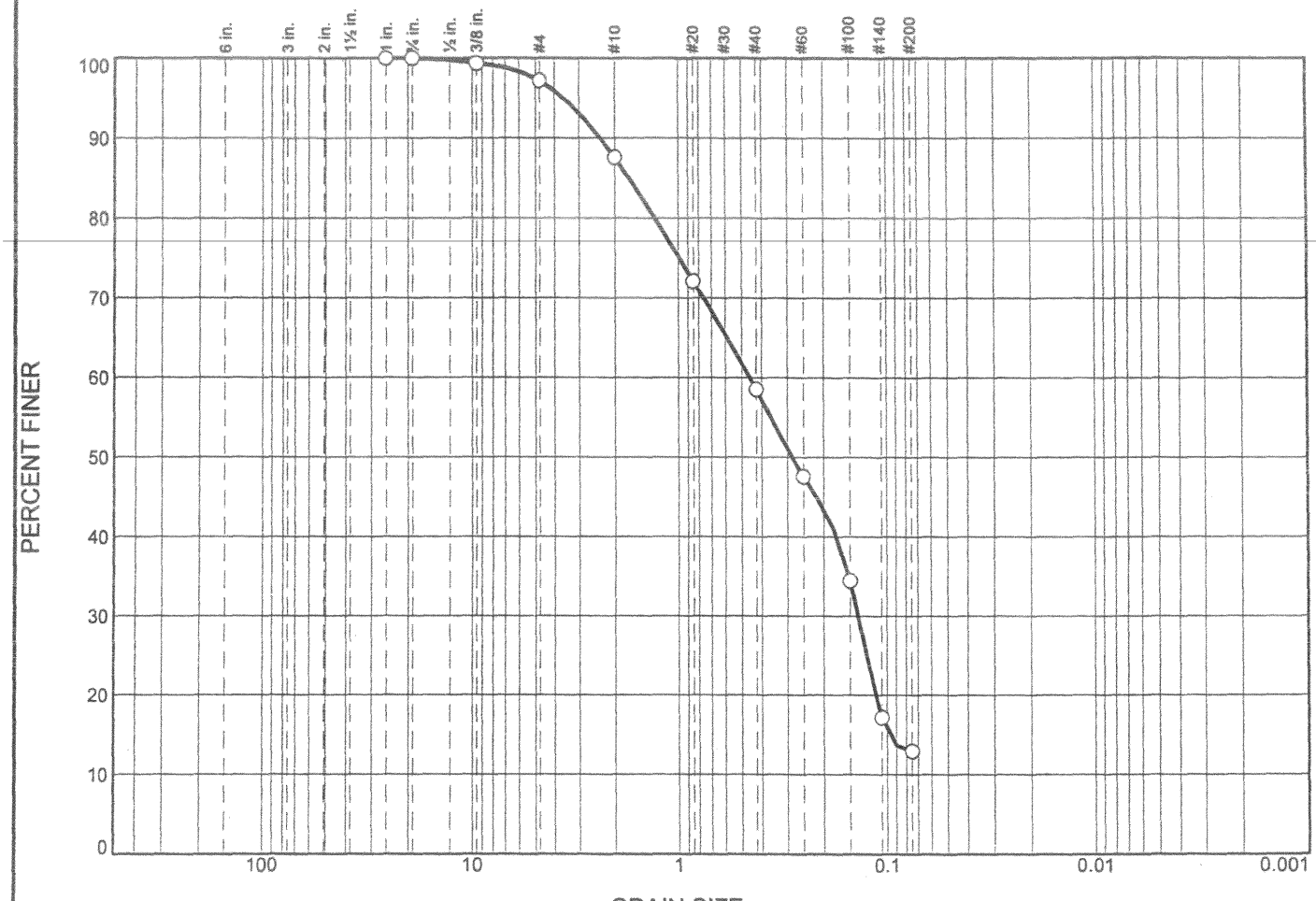
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	3	9	29	46	13	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			1.7068	0.4558	0.2839	0.1373	0.0979			

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0169 **Depth:** 26.5' **Sample Number:** 17

Date: ○

Remarks:
○ Moisture Content % 22.0 CP05-EAARS-CB-0266

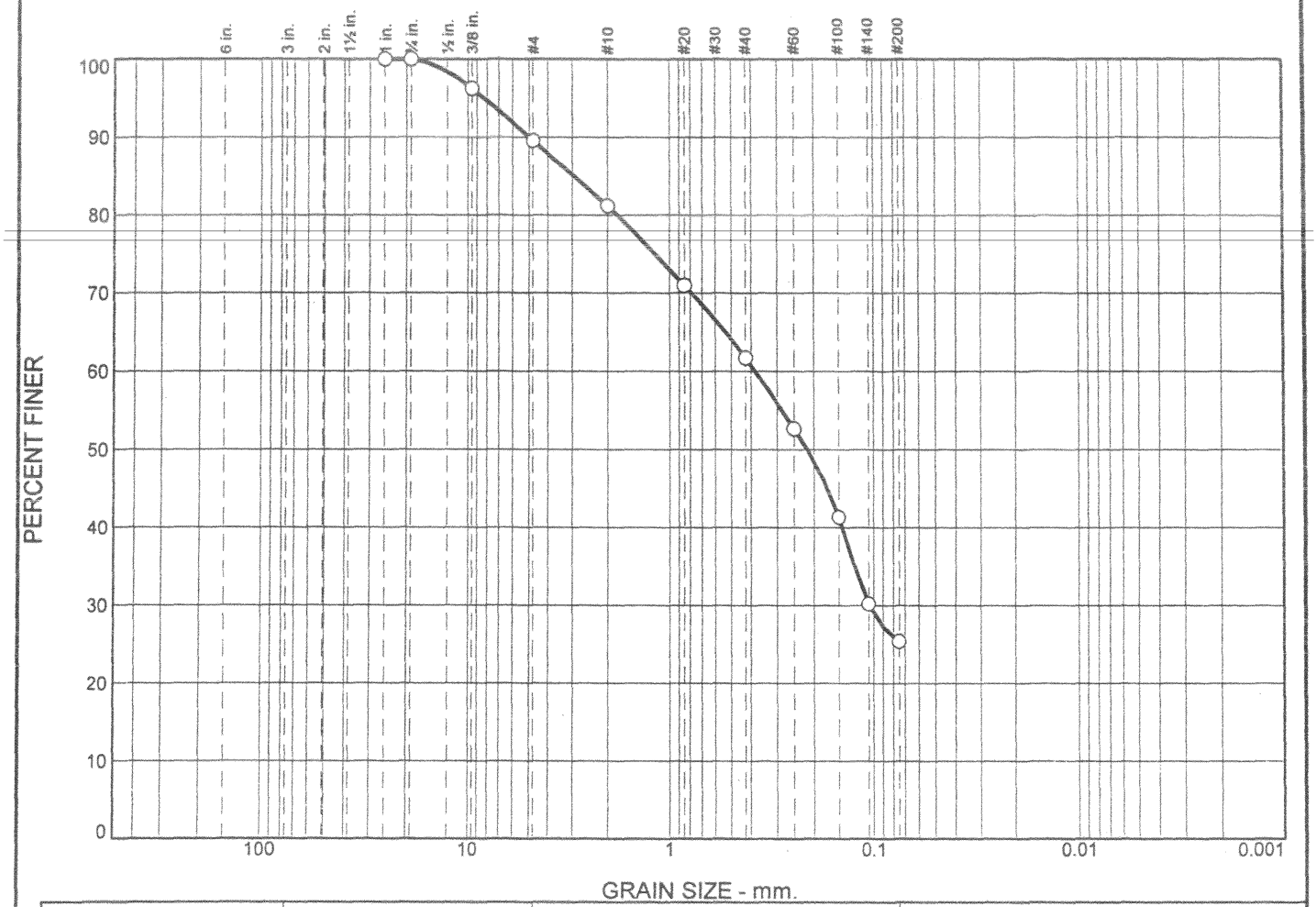
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	10	9	19	37	25	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			2.9309	0.3809	0.2156	0.1050				

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0169 **Depth:** 31.0' **Sample Number:** 20

Date: ○

Remarks:
○Moisture Content % 22.0 CP05-EAARS-CB-0266

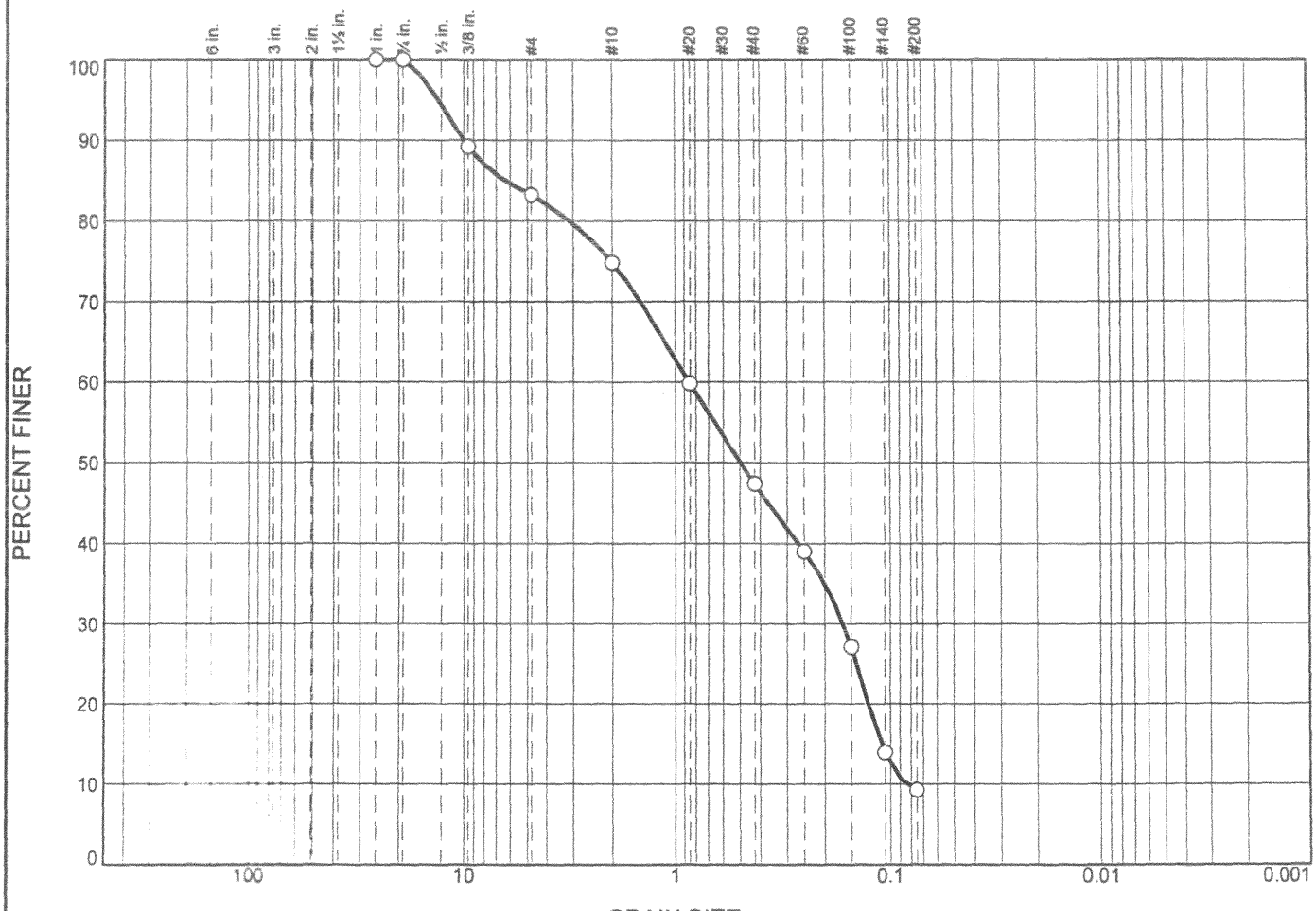
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	17	8	28	38	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			6.3126	0.8590	0.4962	0.1634	0.1098	0.0835	0.37	10.28

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0169 **Depth:** 37.0' **Sample Number:** 24

Date: ○

Remarks:
○ Moisture Content % 26.6
CP05-EAARS-CB-0266

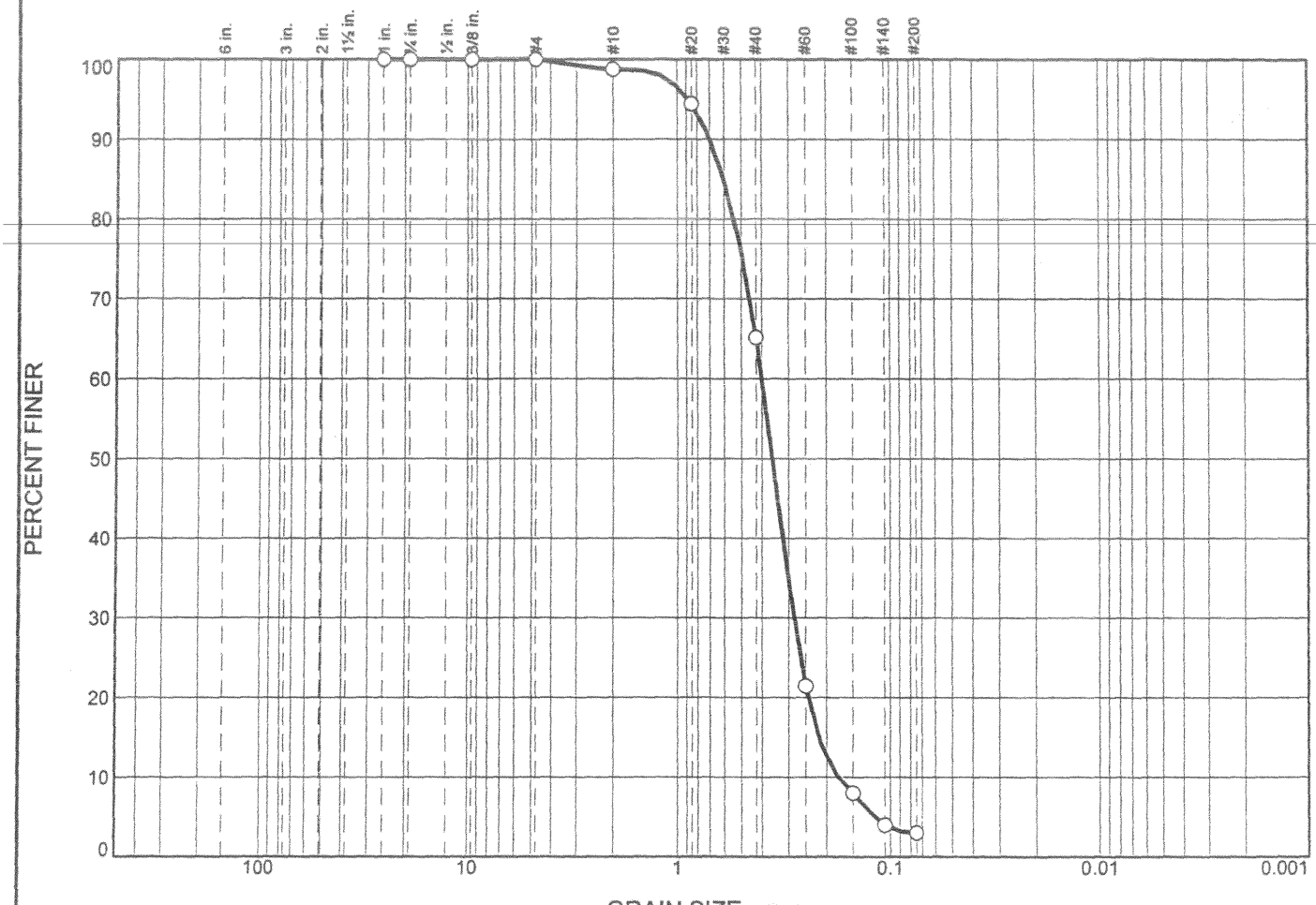
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	1	34	62	3	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.6013	0.3988	0.3559	0.2827	0.2173	0.1756	1.14	2.27

Material Description	USCS	AASHTO
○ Poorly graded sand	SP	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 44.5' **Sample Number:** 29

Date: ○

Remarks:

○ Moisture Content % 24.9

CP05-EAARS-CB-0266

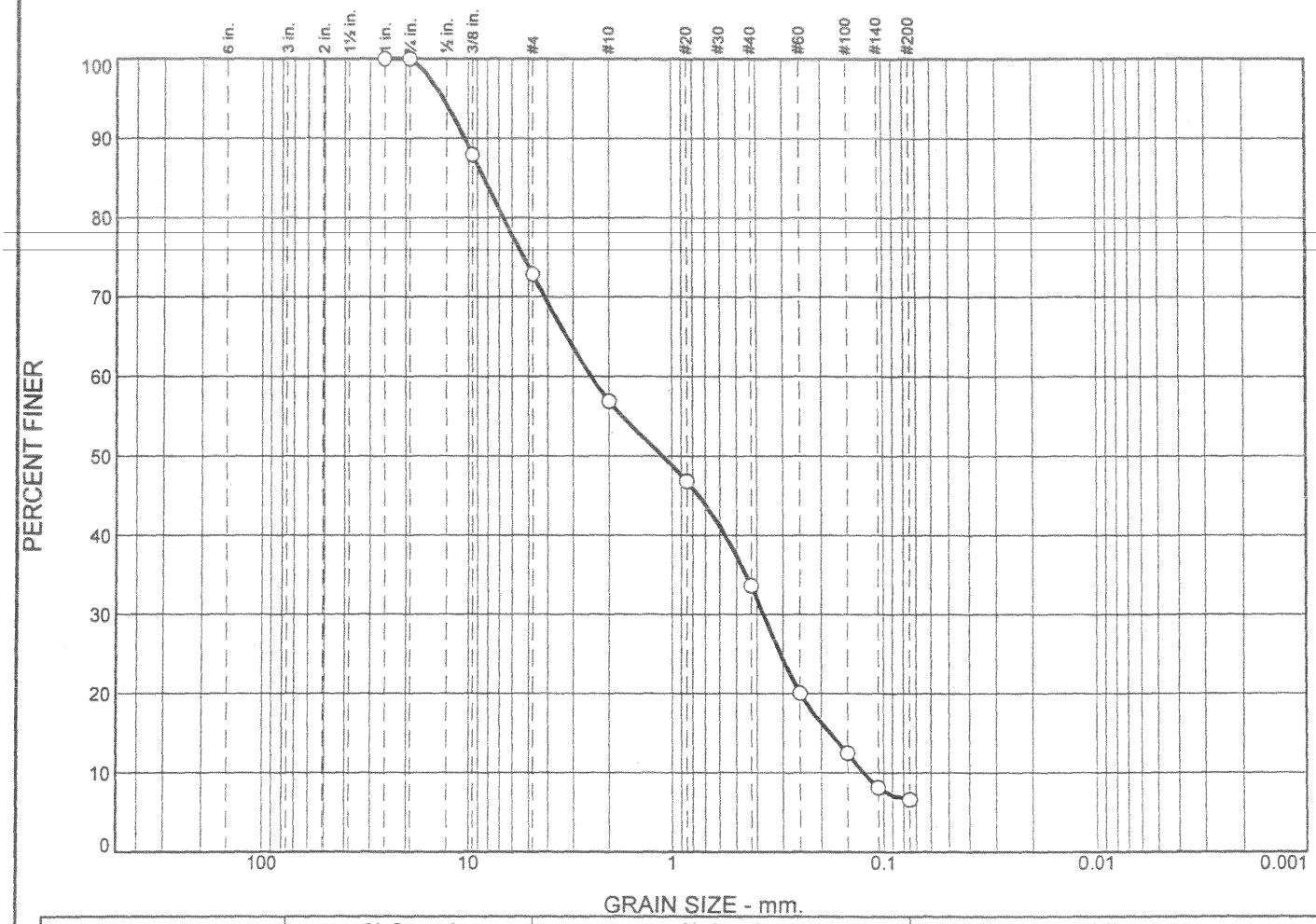
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	27	16	23	27	7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			8.3569	2.4481	1.1035	0.3709	0.1820	0.1251	0.45	19.58

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 49.0' **Sample Number:** 32

Date: ○

Remarks:

○ Moisture Content % 20.9

CP05-EAARS-CB-0266

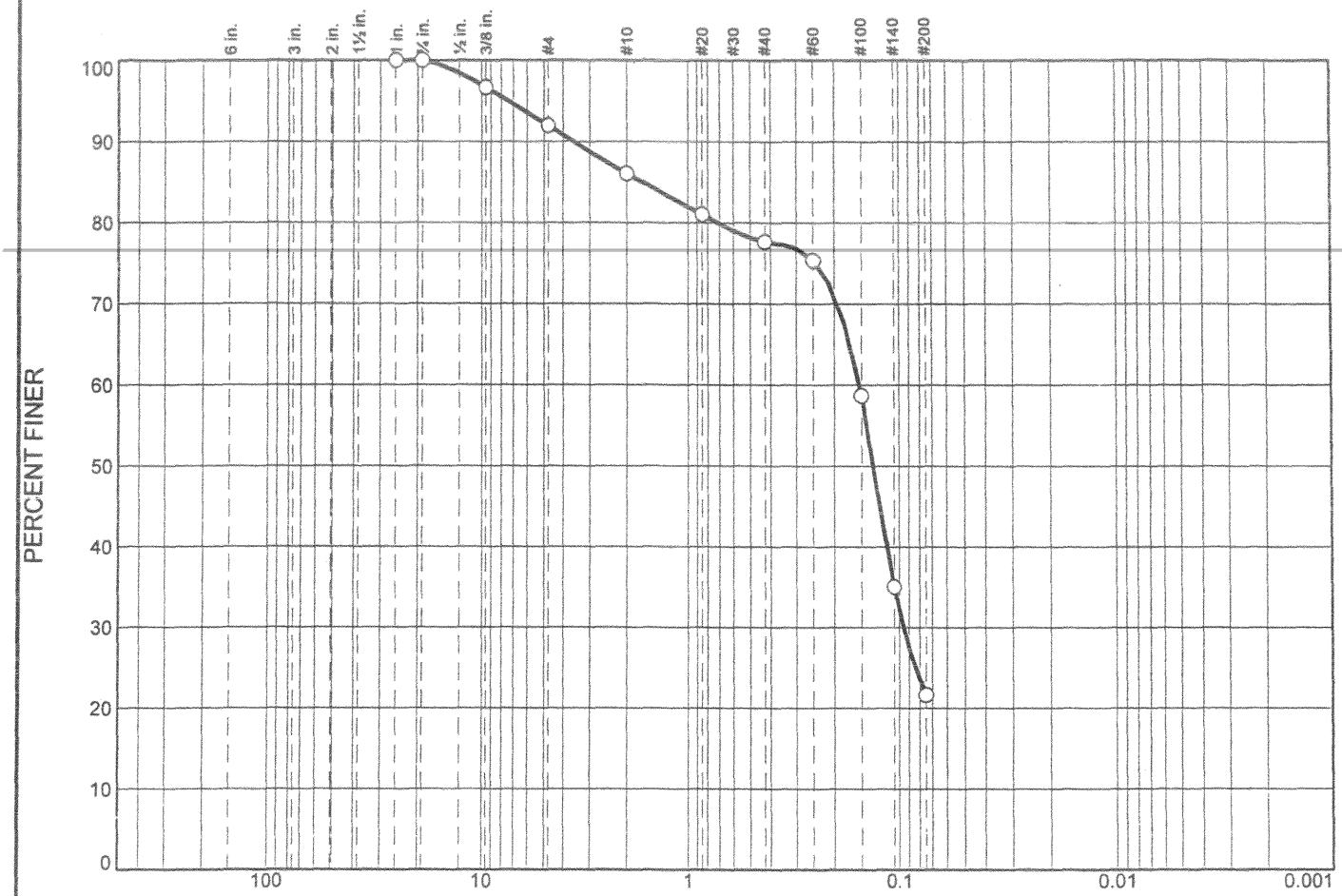
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	8	6	8	56	22	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			1.6787	0.1533	0.1319	0.0959				

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0169 **Depth:** 55.0' **Sample Number:** 36

Date: ○

Remarks:
○ Moisture Content % 30.4
CP05-EAARS-CB-0266

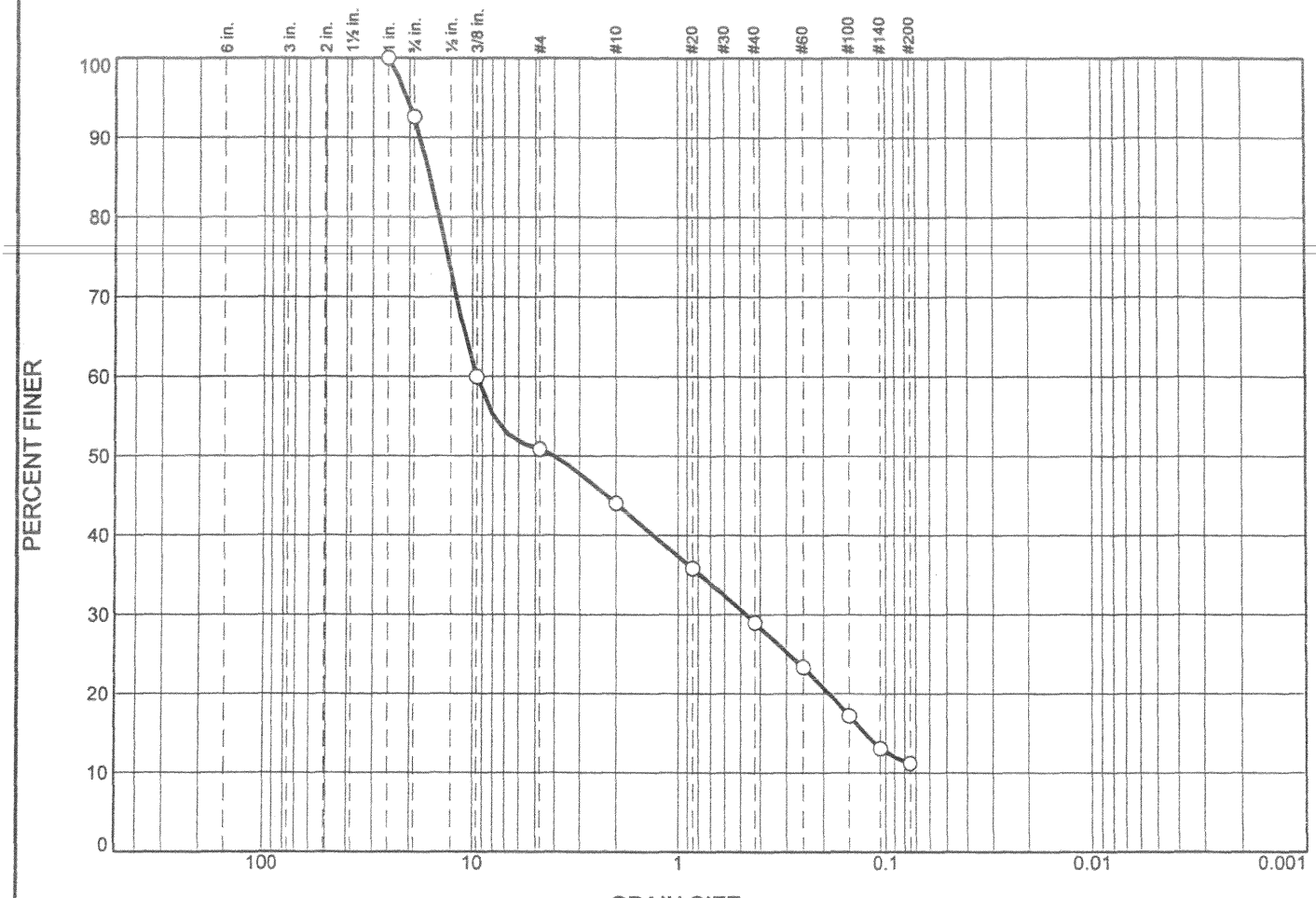
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	7	42	7	15	18	11	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			15.9470	9.5331	4.0274	0.4704	0.1263			

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 61.0' **Sample Number:** 40

Date: ○

Remarks:

○ Moisture Content % 29.9

CP05-EAARS-CB-0266

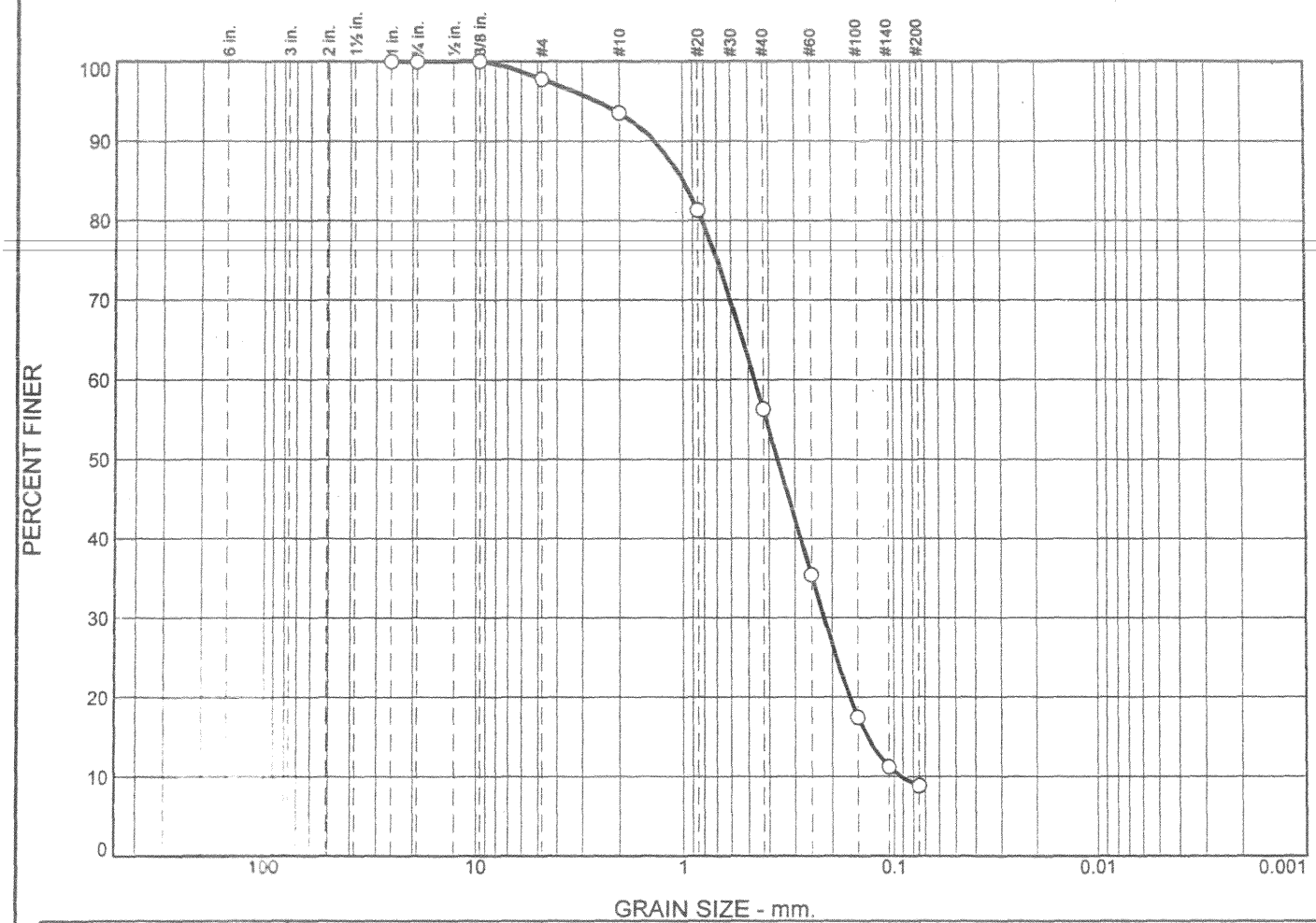
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	2	4	38	47	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.9915	0.4660	0.3624	0.2177	0.1352	0.0926	1.10	5.03

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 65.5' **Sample Number:** 43

Date: ○

Remarks:

○ Moisture Content % 21.6

CP05-EAARS-CB-0266

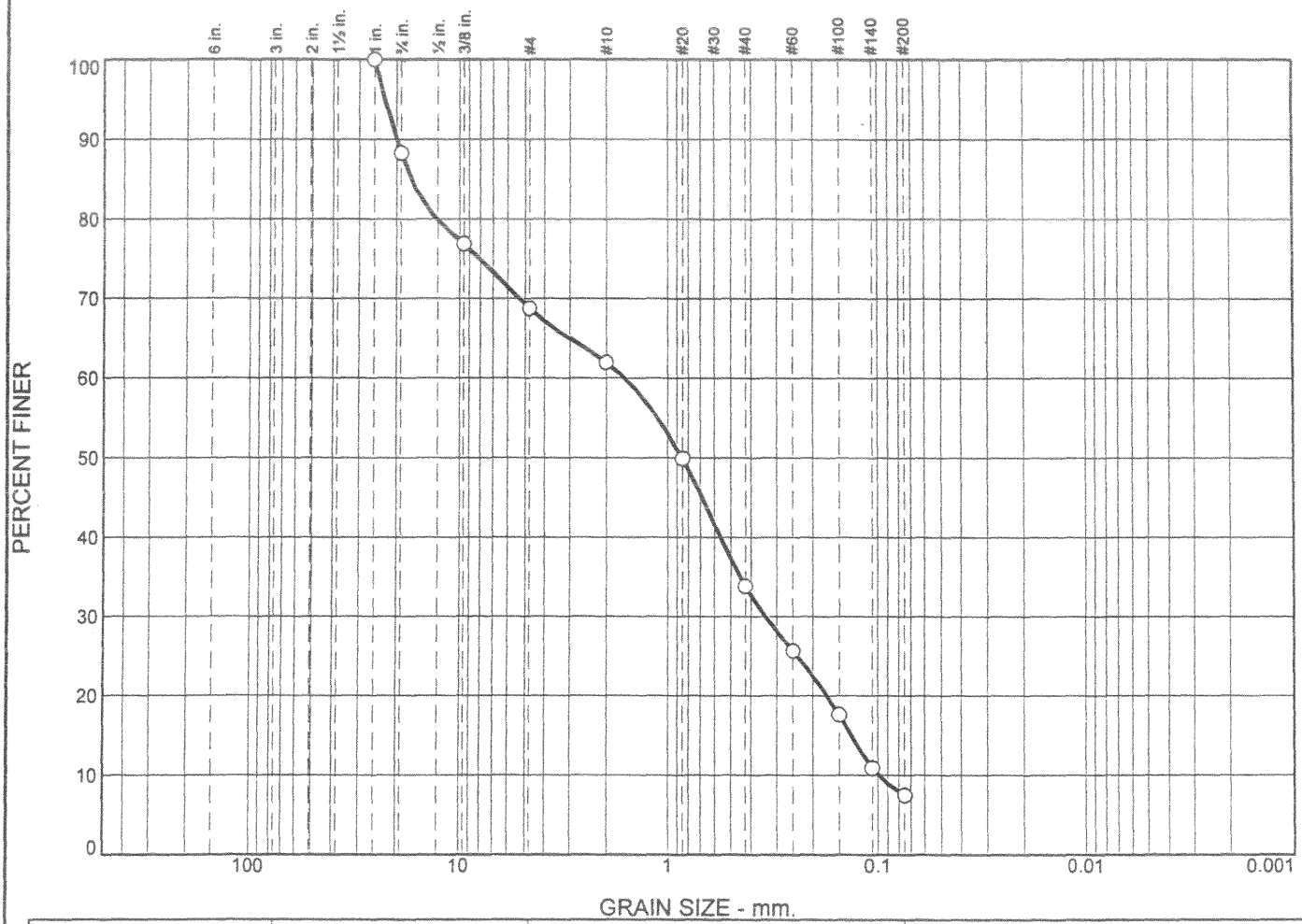
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	12	19	7	28	27	7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			16.9881	1.6324	0.8528	0.3402	0.1320	0.0994	0.71	16.43

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 68.5' **Sample Number:** 45

Date: ○

Remarks:

○ Moisture Content % 22.3

CP05-EAARS-CB-0266

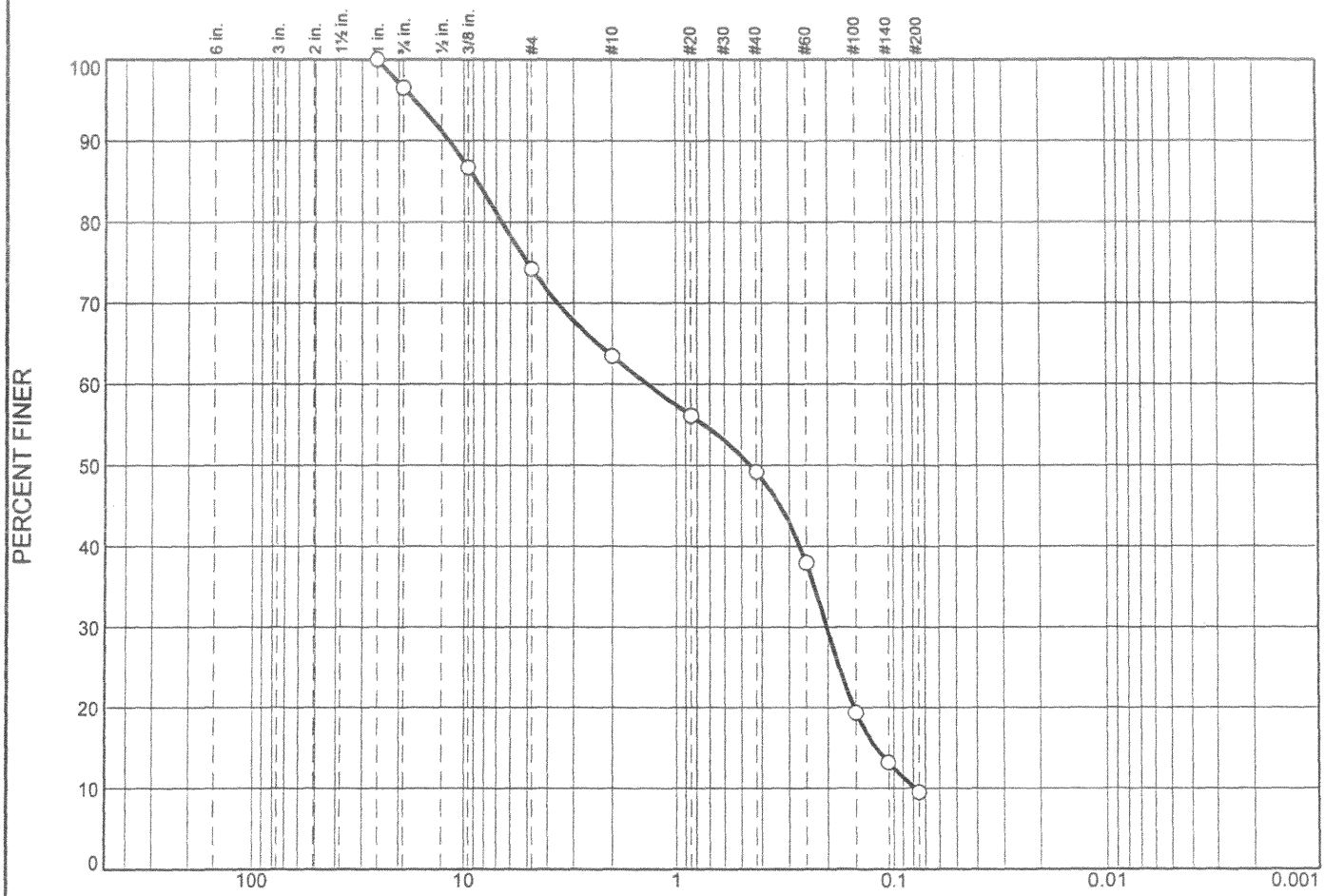
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	3	23	11	14	40	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			8.6203	1.3627	0.4514	0.2021	0.1215	0.0788	0.38	17.29

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0169 **Depth:** 73.0' **Sample Number:** 48

Date: ○

Remarks:
○ Moisture Content % 21.3
CP05-EAARS-CB-0266

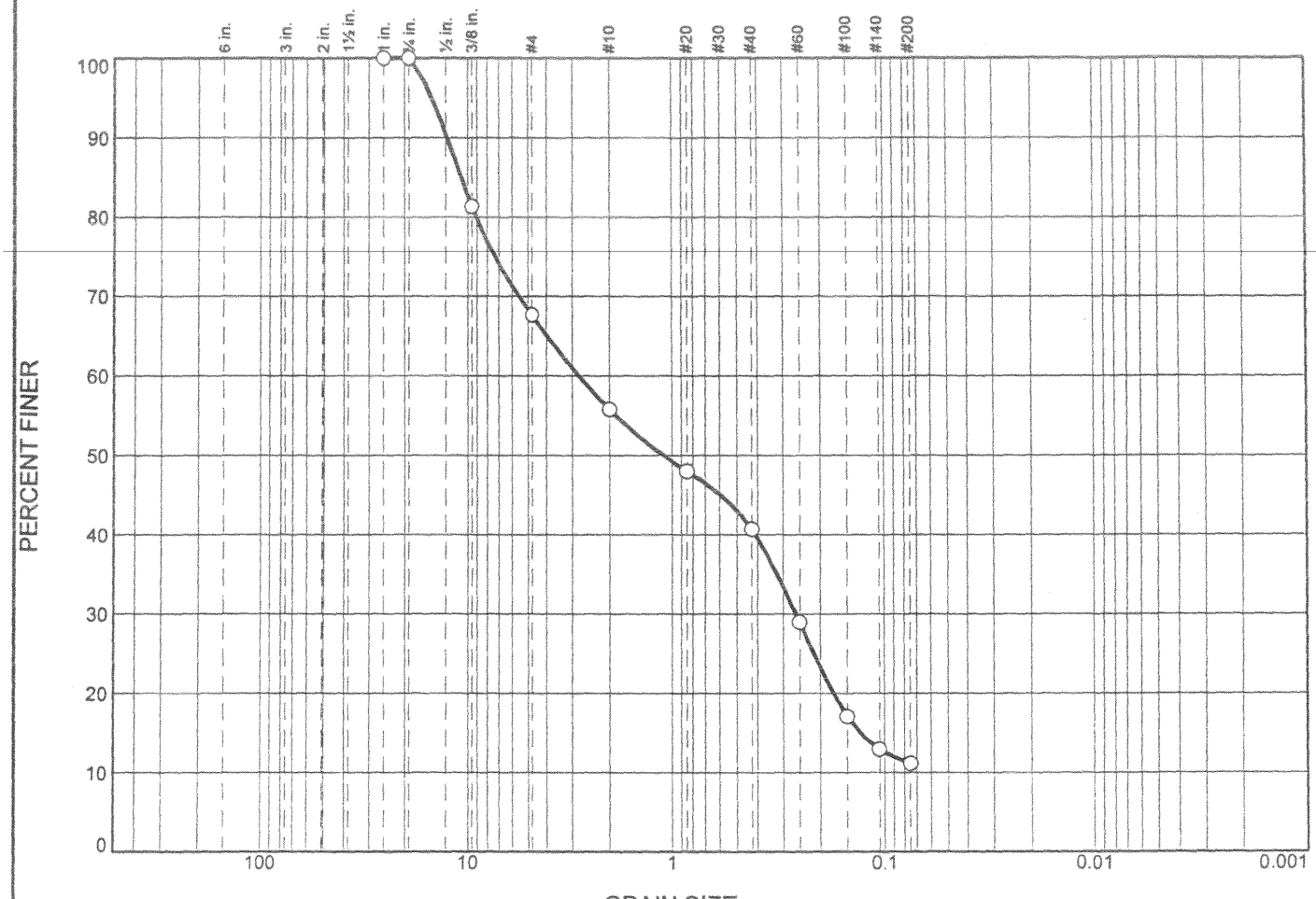
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	32	12	15	30	11	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			10.7289	2.7914	1.0931	0.2603	0.1303			

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 76.0' **Sample Number:** 50

Date: ○

Remarks:

○ Moisture Content % 18.3 CP05-EAARS-CB-0266

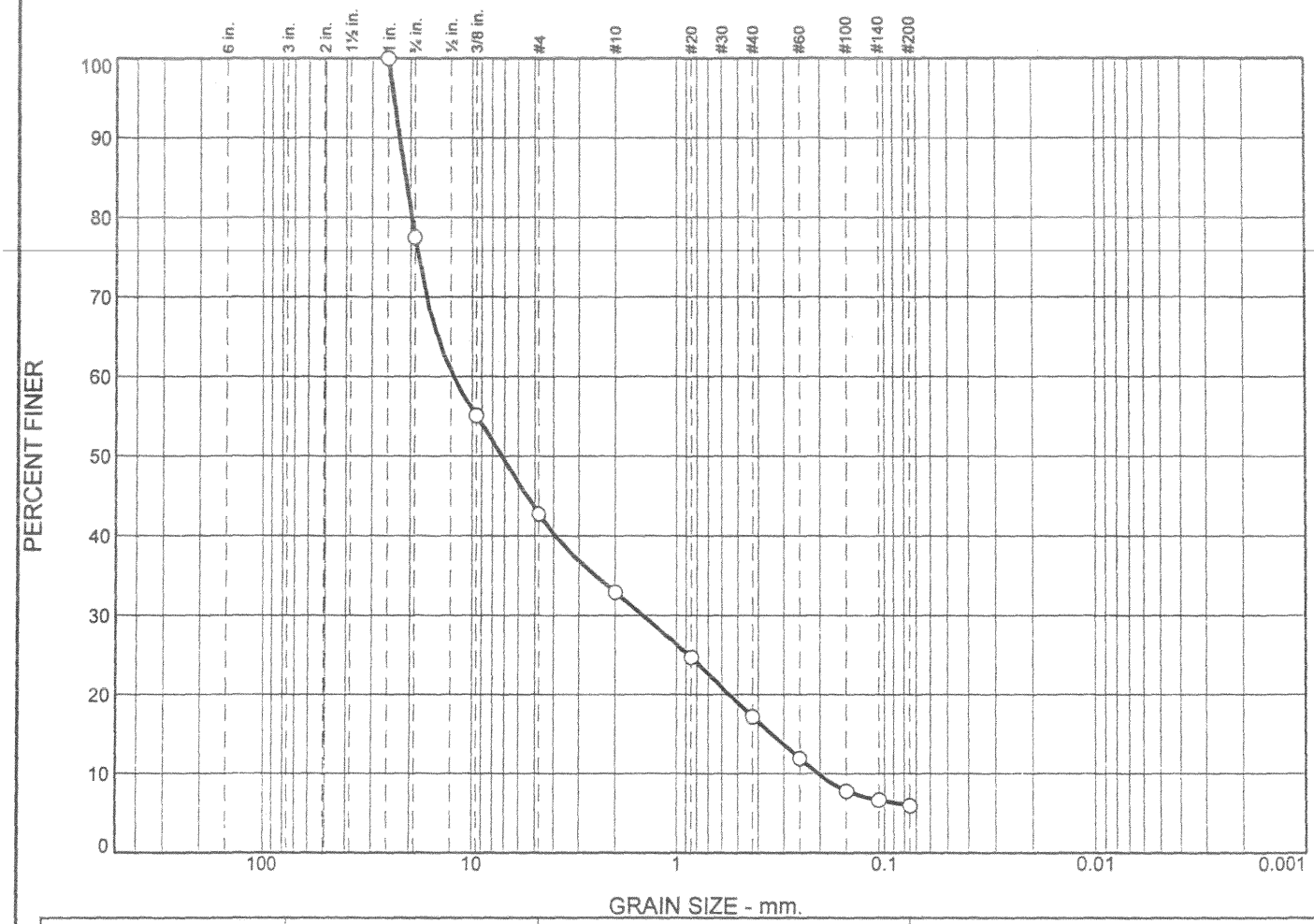
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	23	34	10	16	11	6	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			21.1728	12.3387	7.2008	1.4580	0.3425	0.2034	0.85	60.65

Material Description	USCS	AASHTO
○ Well graded gravel with silt and sand	GW-GM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 85.0' **Sample Number:** 56

Date: ○

Remarks:

○ Moisture Content % 18.4 CP05-EAARS-CB-0266

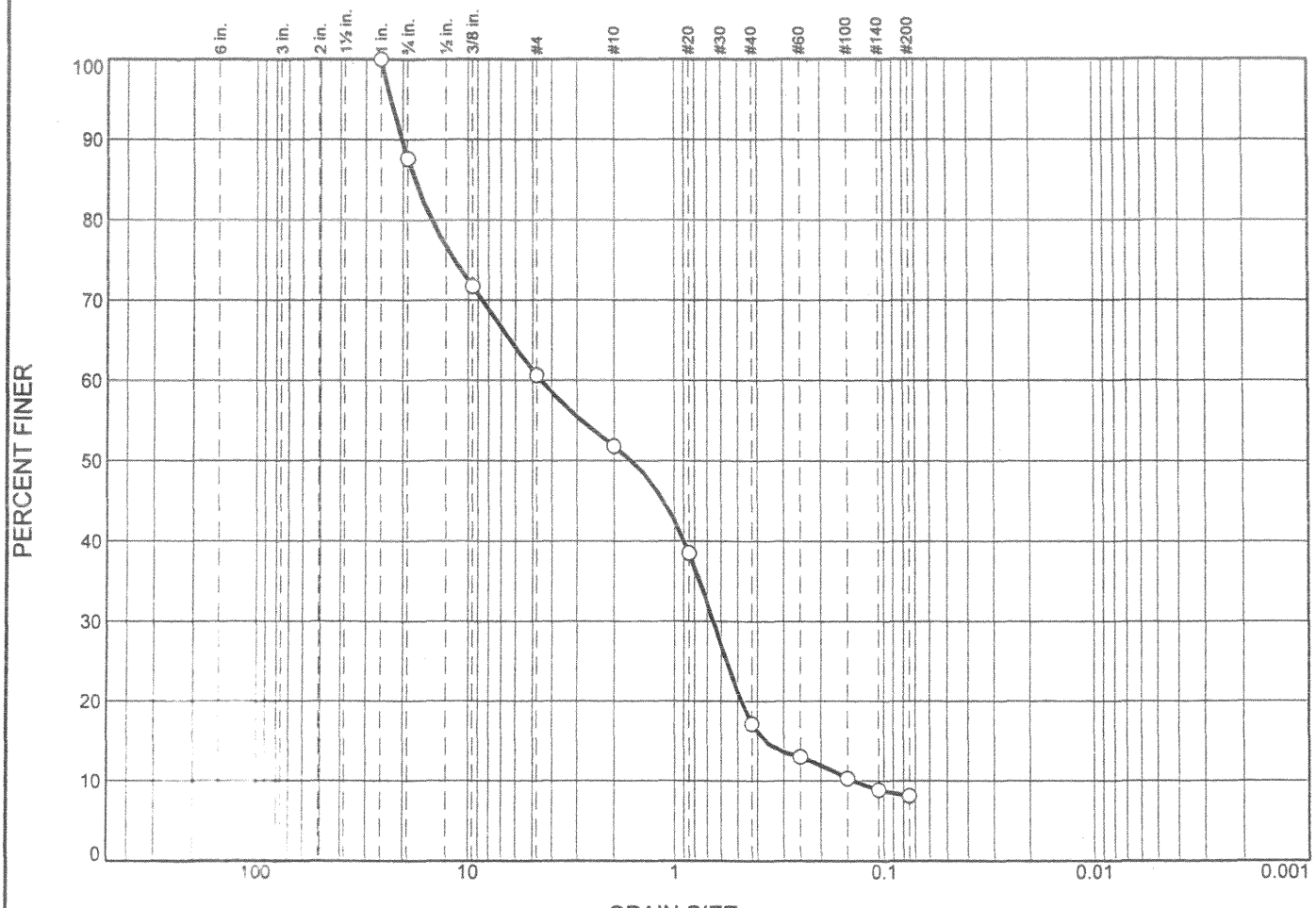
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	12	27	9	35	9	8	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			17.6613	4.5220	1.6420	0.6544	0.3675	0.1408	0.67	32.11

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0169 **Depth:** 89.5' **Sample Number:** 59

Date: ○

Remarks:

○ Moisture Content % 14.2

CP05-EAARS-CB-0266

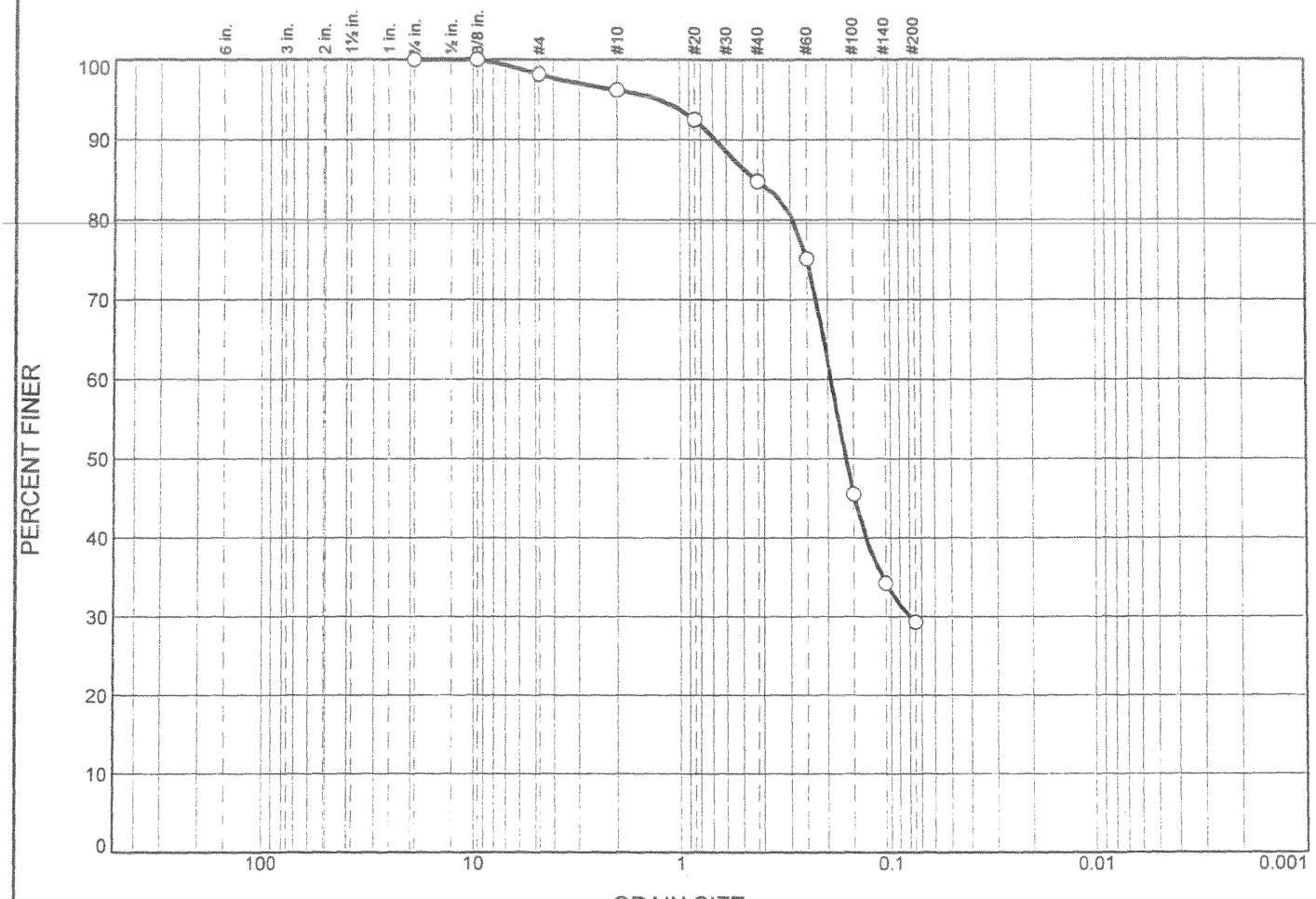
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	1.9	1.9	11.4	55.5	29.3	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4344	0.1915	0.1630	0.0796				

Material Description	USCS	AASHTO
○ Silty Sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)W/O#6

○ **Source of Sample:** CB170 **Depth:** 88.5'-90.0' **Sample Number:** CB170

Remarks:

○ Moisture Content % 21.4 CP05-EAARS-CB-0267

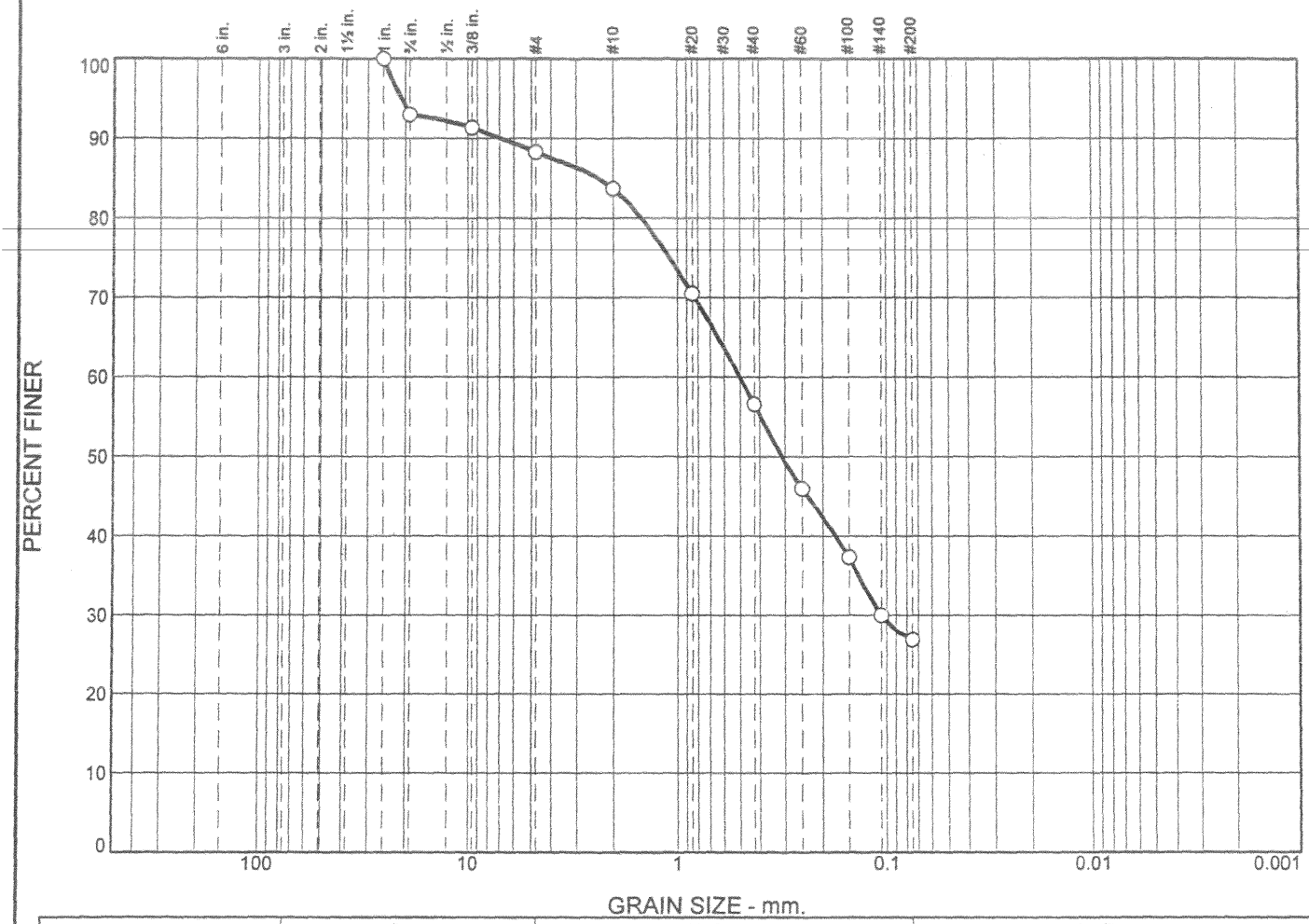
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Bolooki **Checked By:** K Leung

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	7	5	4	27	30	27	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			2.3383	0.5011	0.3099	0.1060				

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0171 **Depth:** 13.5' **Sample Number:** 4

Date: ○

Remarks:
○ Moisture Content % 30.2 CP05-EAARS-CB-0268

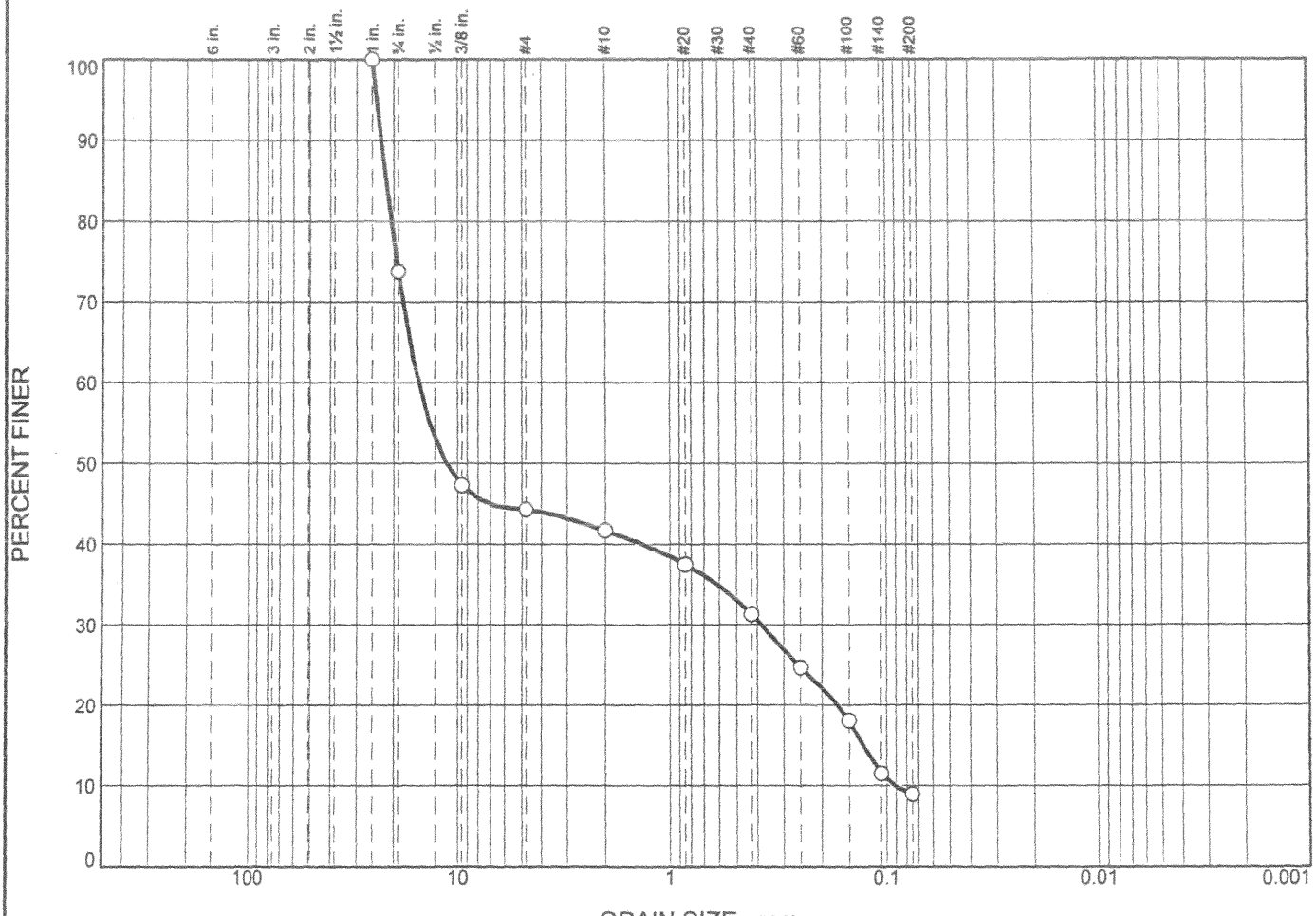
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	26	30	2	11	22	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			21.7308	15.2316	11.2605	0.3823	0.1285	0.0919	0.10	165.72

Material Description	USCS	AASHTO
○ Poorly graded gravel with silt and sand	GP-GM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0171 **Depth:** 18.5' **Sample Number:** 5

Date: ○

Remarks:

○ Moisture Content % 21.5 CP05-EAARS-CB-0268

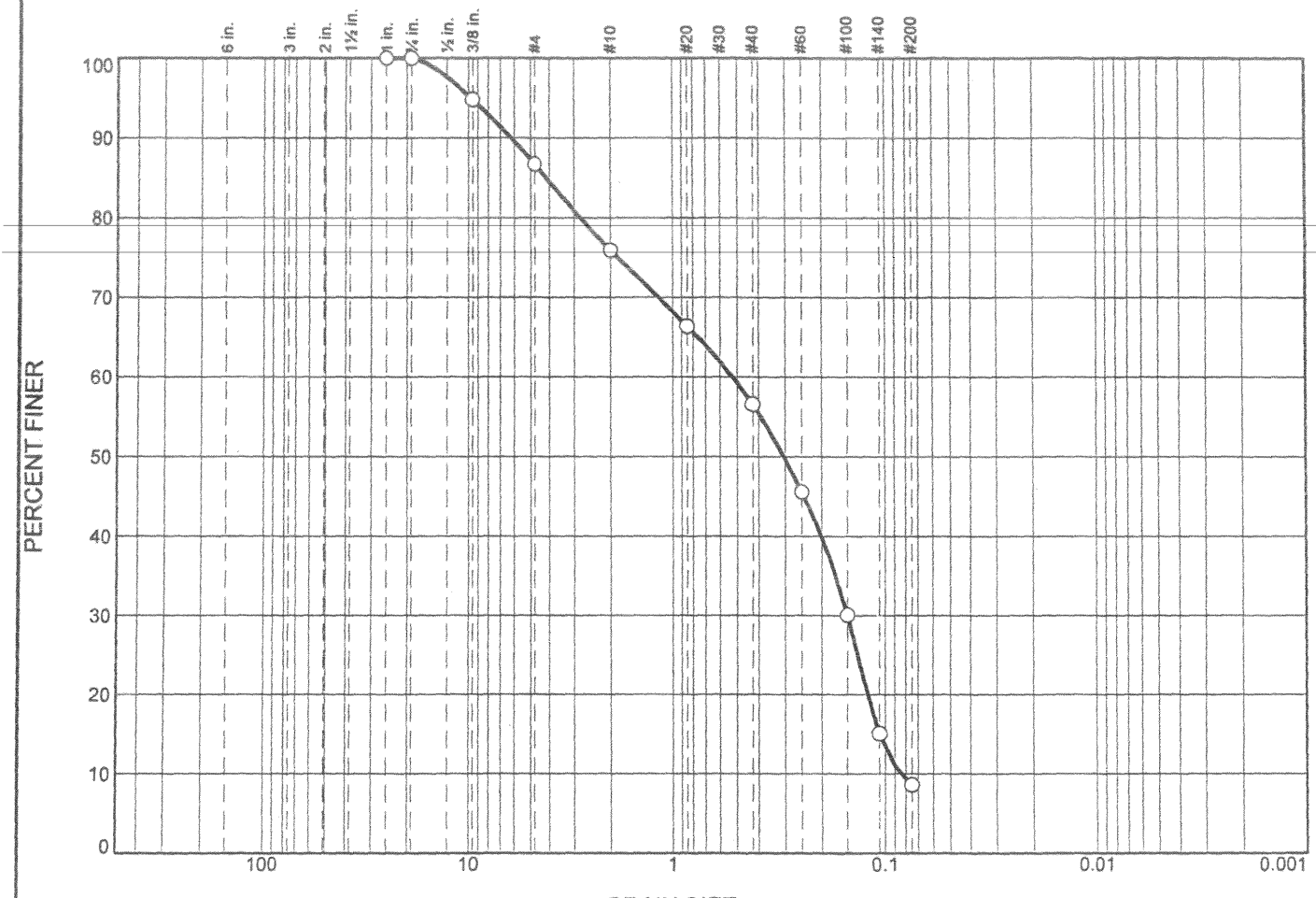
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	13	11	19	48	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			4.1445	0.5239	0.3043	0.1497	0.1058	0.0839	0.51	6.24

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0171 **Depth:** 33.5' **Sample Number:** 8

Date: ○

Remarks:

○ Moisture Content % 17.7 CP05-EAARS-CB-0268

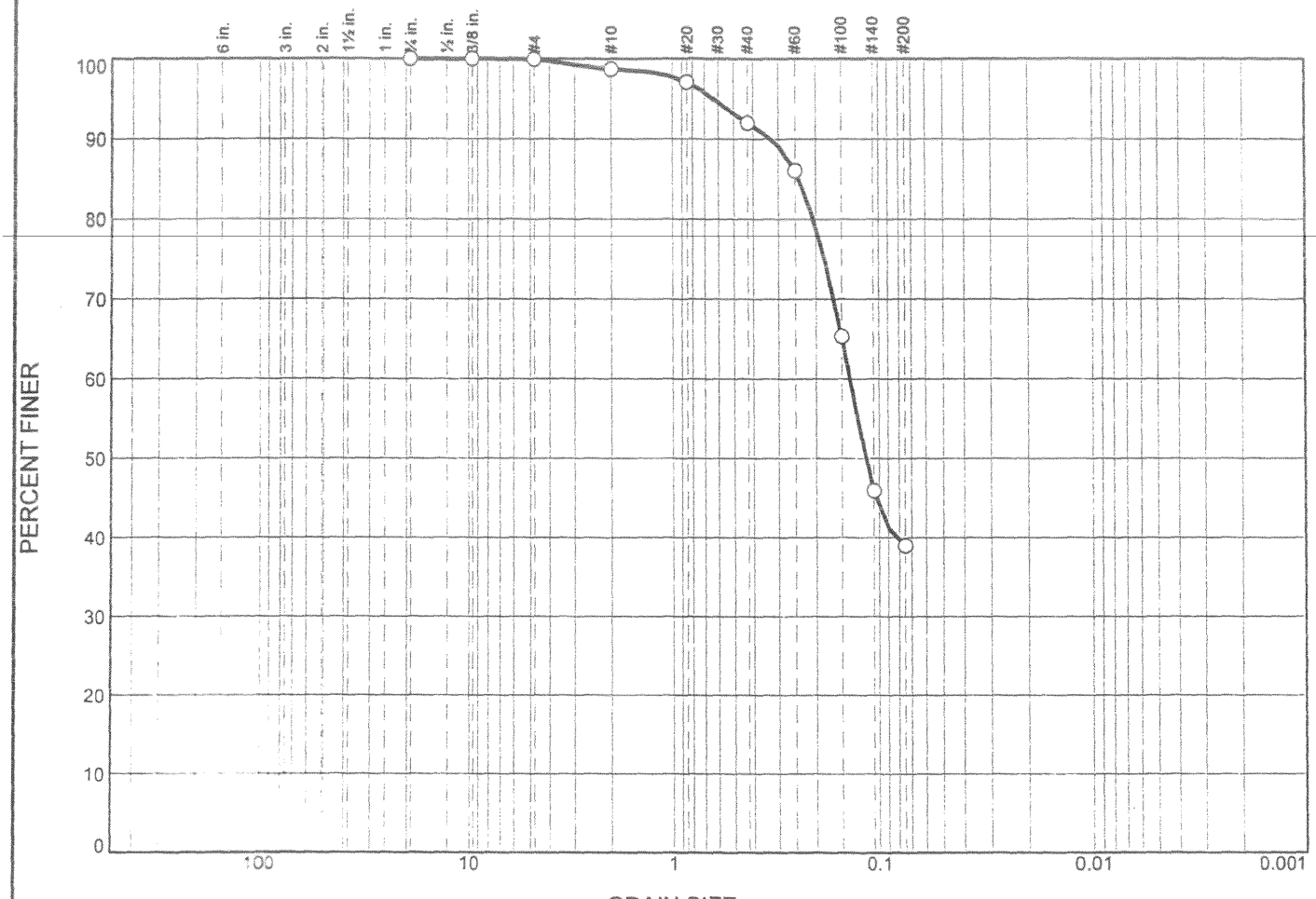
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.1	1.2	6.7	53.0	39.0	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2395	0.1373	0.1157					

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)W/O#6

○ **Source of Sample:** CB171 **Depth:** 78.5'-80.0 **Sample Number:** CB171

Remarks:

○ Moisture Content % 26.4 CP05-EAARS-CB-0268

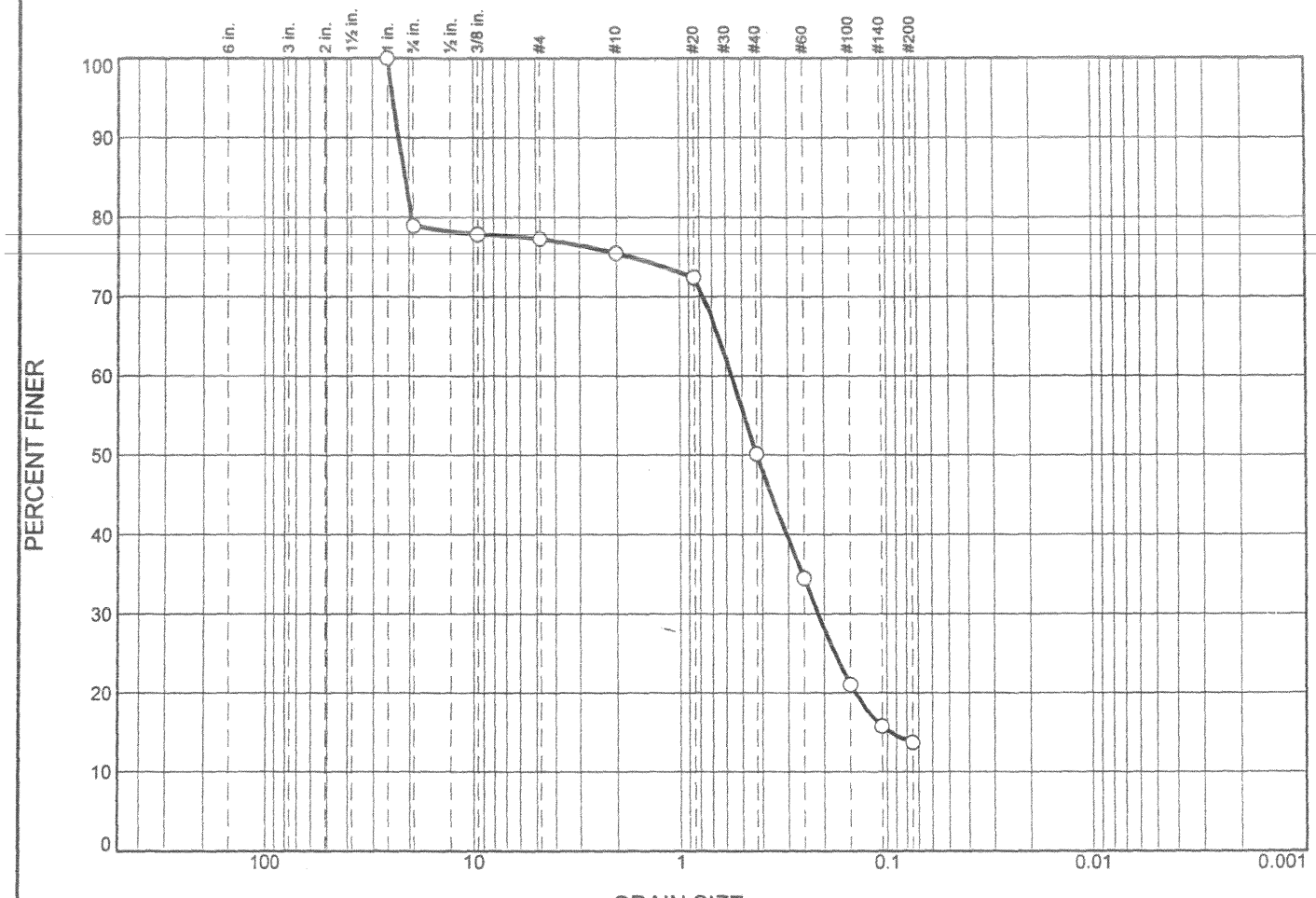
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Bolooki **Checked By:** K Leung

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	21	2	2	25	36	14	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			21.0463	0.5610	0.4232	0.2134	0.0963			

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0172 **Depth:** 0.0' **Sample Number:** 1

Date: ○

Remarks:
○ Moisture Content % 136.8 CP05-EAARS-CB-0269

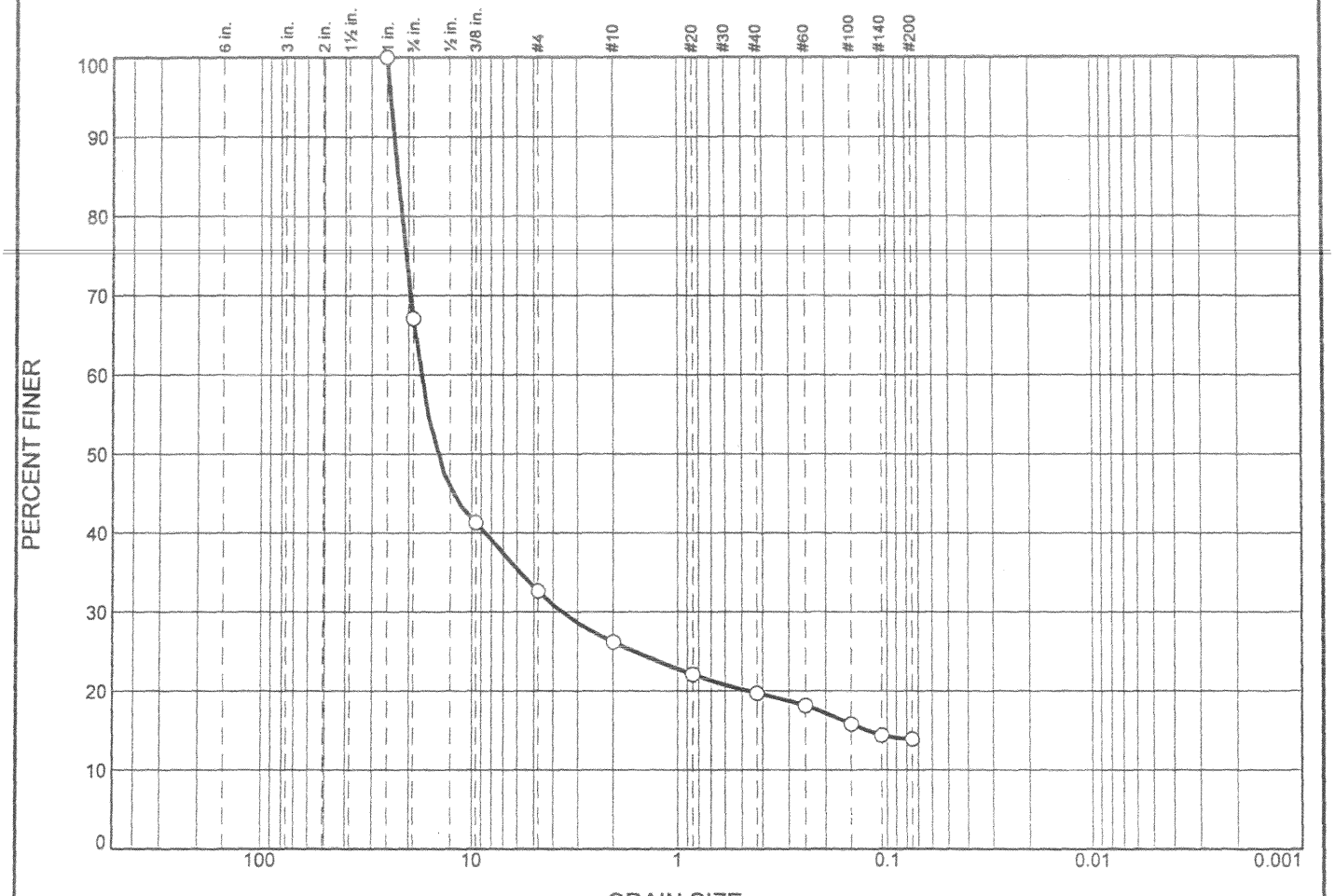
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	33	34	7	6	6	14	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			22.5022	17.4618	14.5600	3.5945	0.1253			

Material Description	USCS	AASHTO
○ Silty gravel with sand	GM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0173 **Depth:** 3.5' **Sample Number:** 3

Date: ○

Remarks:
○ Moisture Content % 27 CP05-EAARS-CB-0269

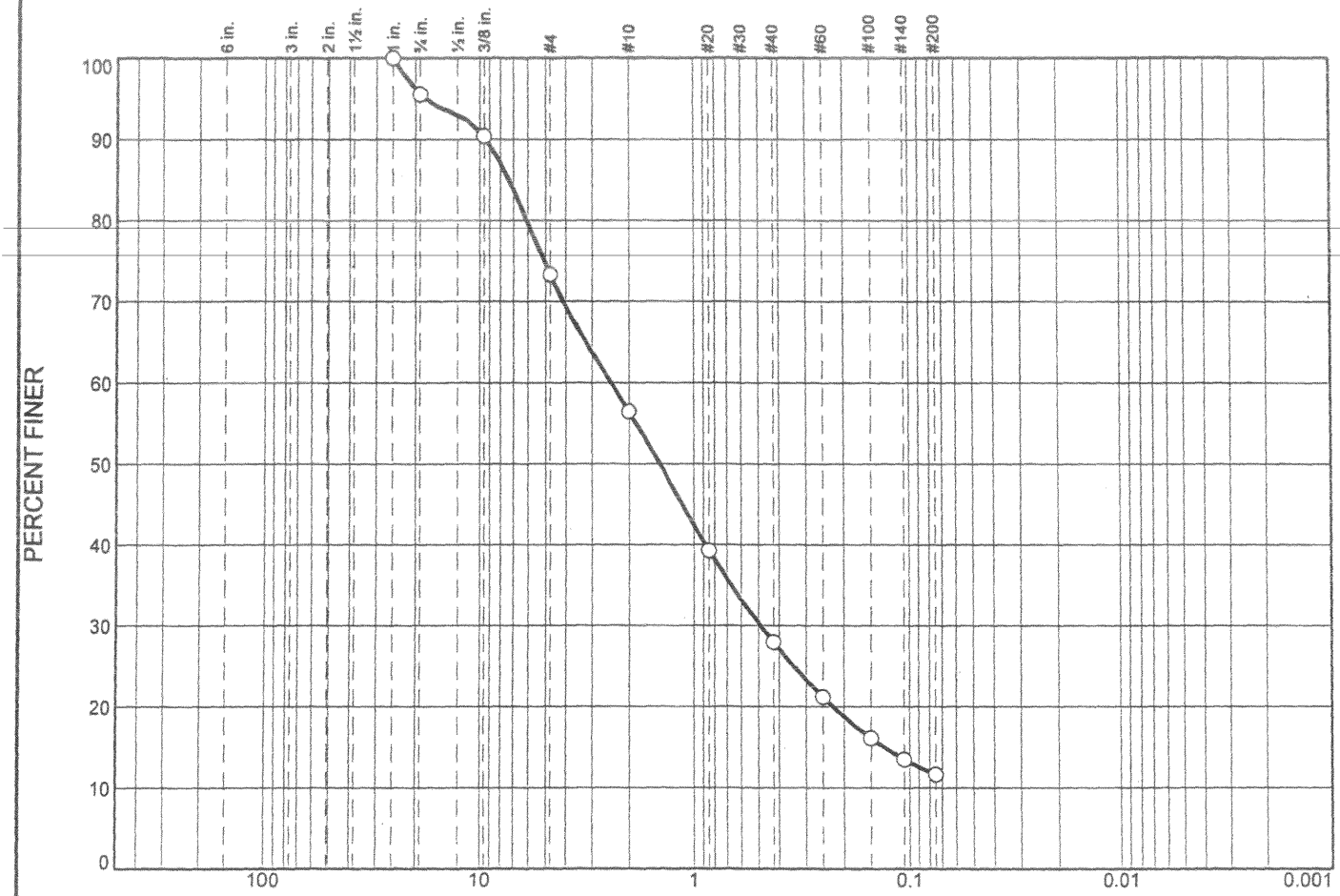
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	4	23	17	28	16	12	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			7.3316	2.4333	1.4431	0.4882	0.1307			

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0172 **Depth:** 8.5' **Sample Number:** 3

Date: ○

Remarks:

○ Moisture Content % 23.8 CP05-EAARS-CB-0269

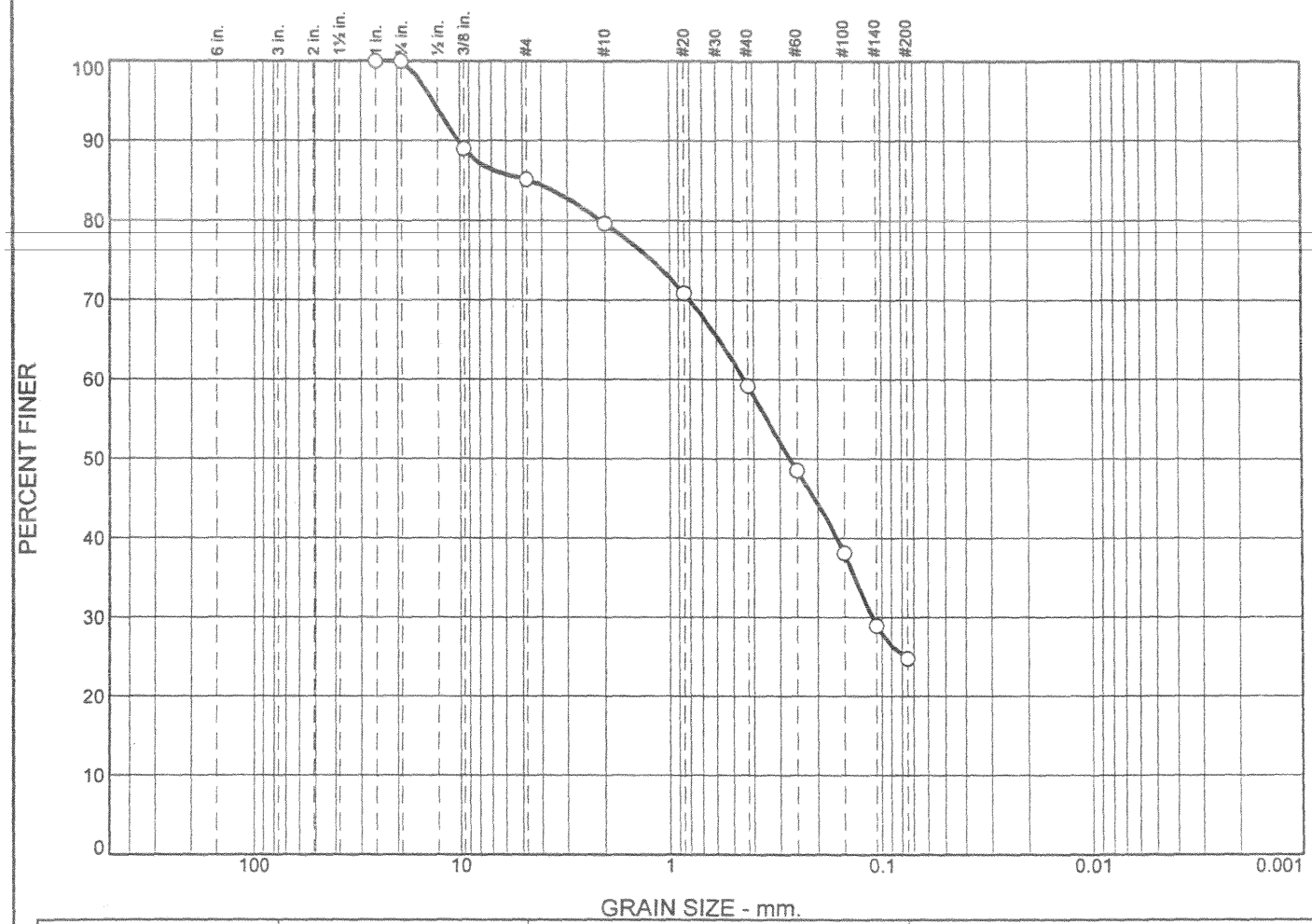
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	15	5	21	34	25	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			4.5605	0.4425	0.2697	0.1114				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0172 **Depth:** 13.5' **Sample Number:** 4

Date: ○

Remarks:
○ Moisture Content % 31.9 CP05-EAARS-CB-0269

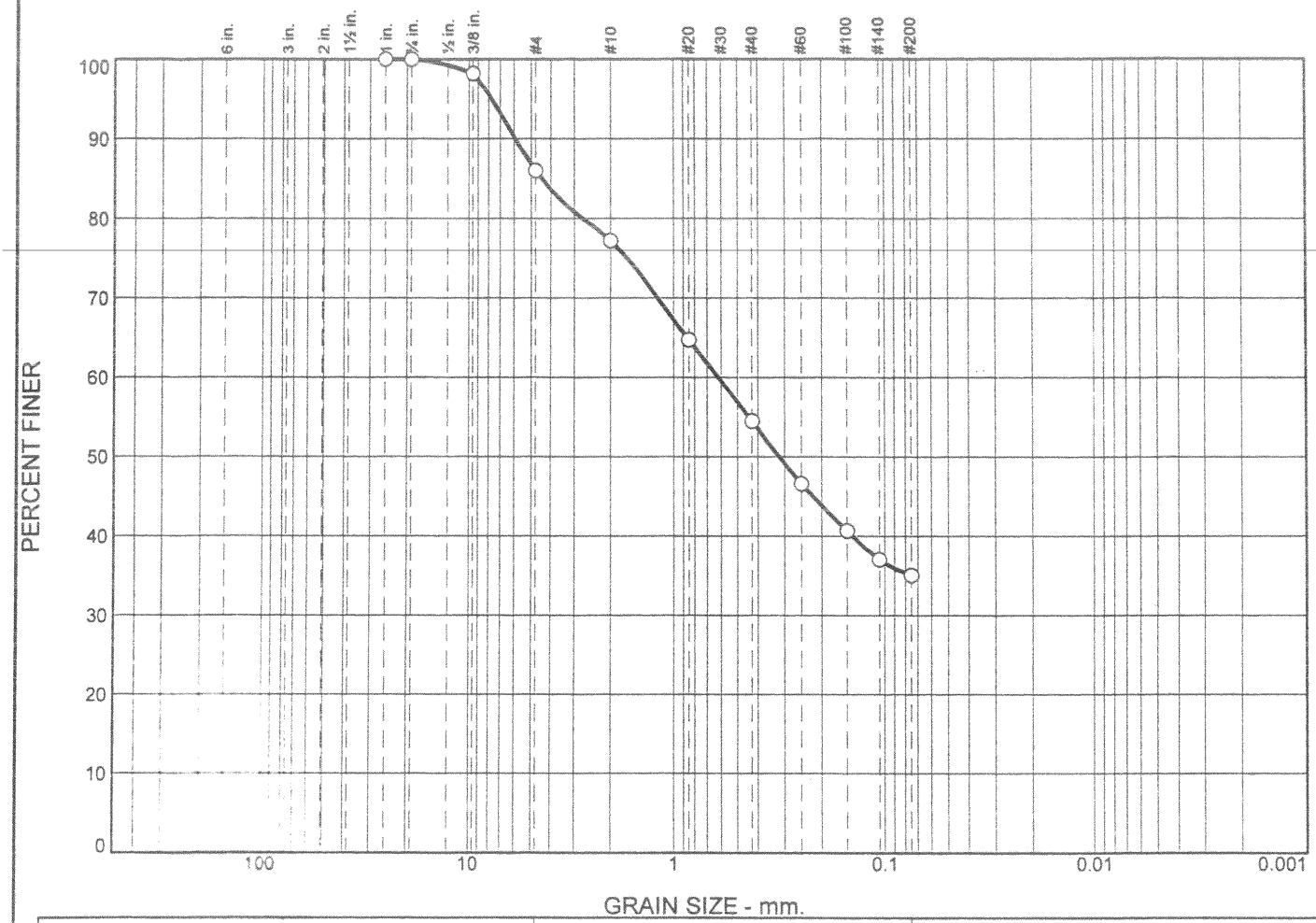
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	14	9	23	19	35	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			4.4426	0.6188	0.3170					

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0173 **Depth:** 13.5' **Sample Number:** 5

Date: ○

Remarks:
○ Moisture Content % 36.4 CP05-EAARS-CB-0269

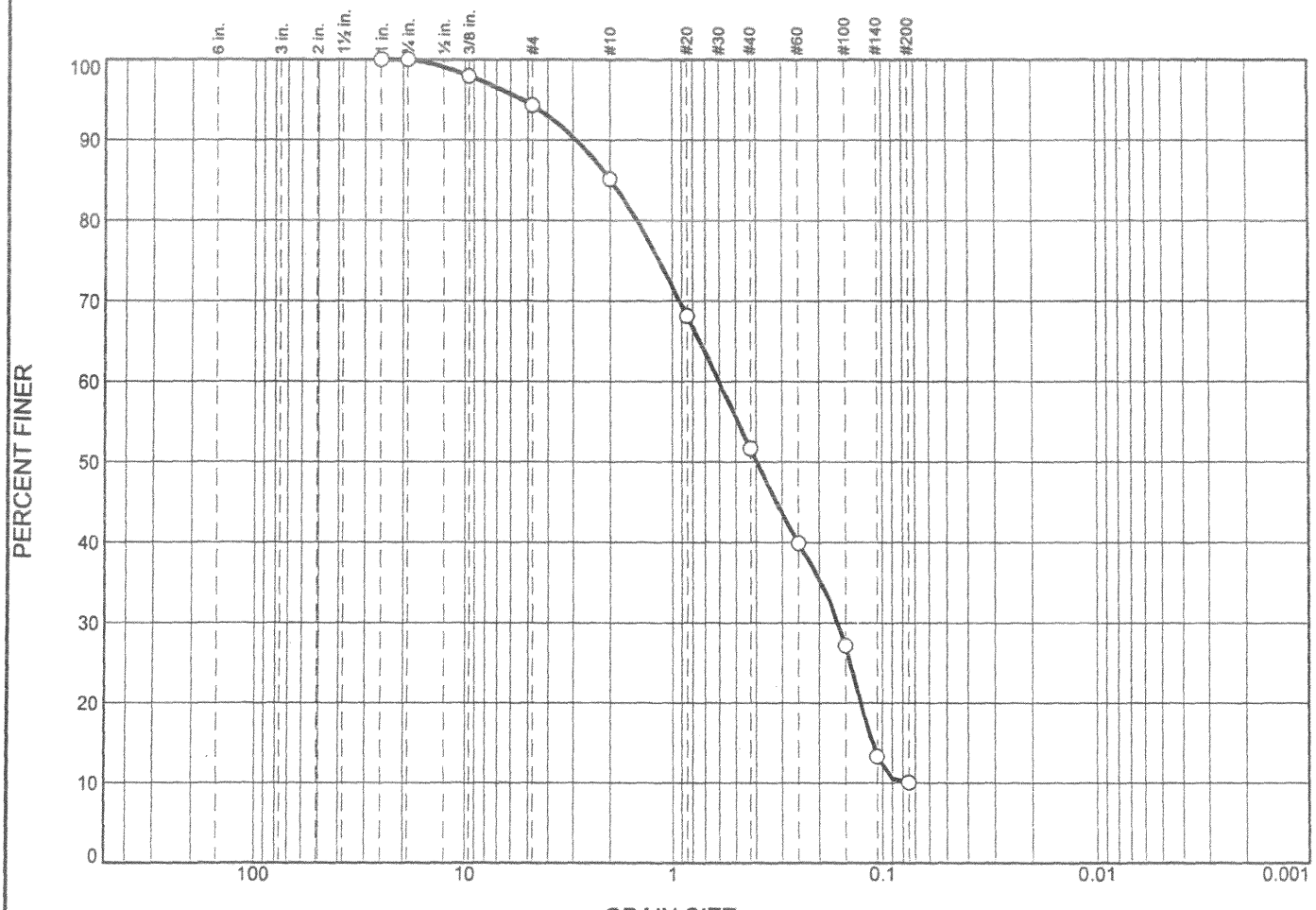
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	6	9	33	42	10	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			1.9799	0.6016	0.3958	0.1623	0.1119			

Material Description	USCS	AASHTO
○ Well graded sand with silt	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0172 **Depth:** 18.5' **Sample Number:** 5

Date: ○

Remarks:
○ Moisture Content % 22.7 CP05-EAARS-CB-0269

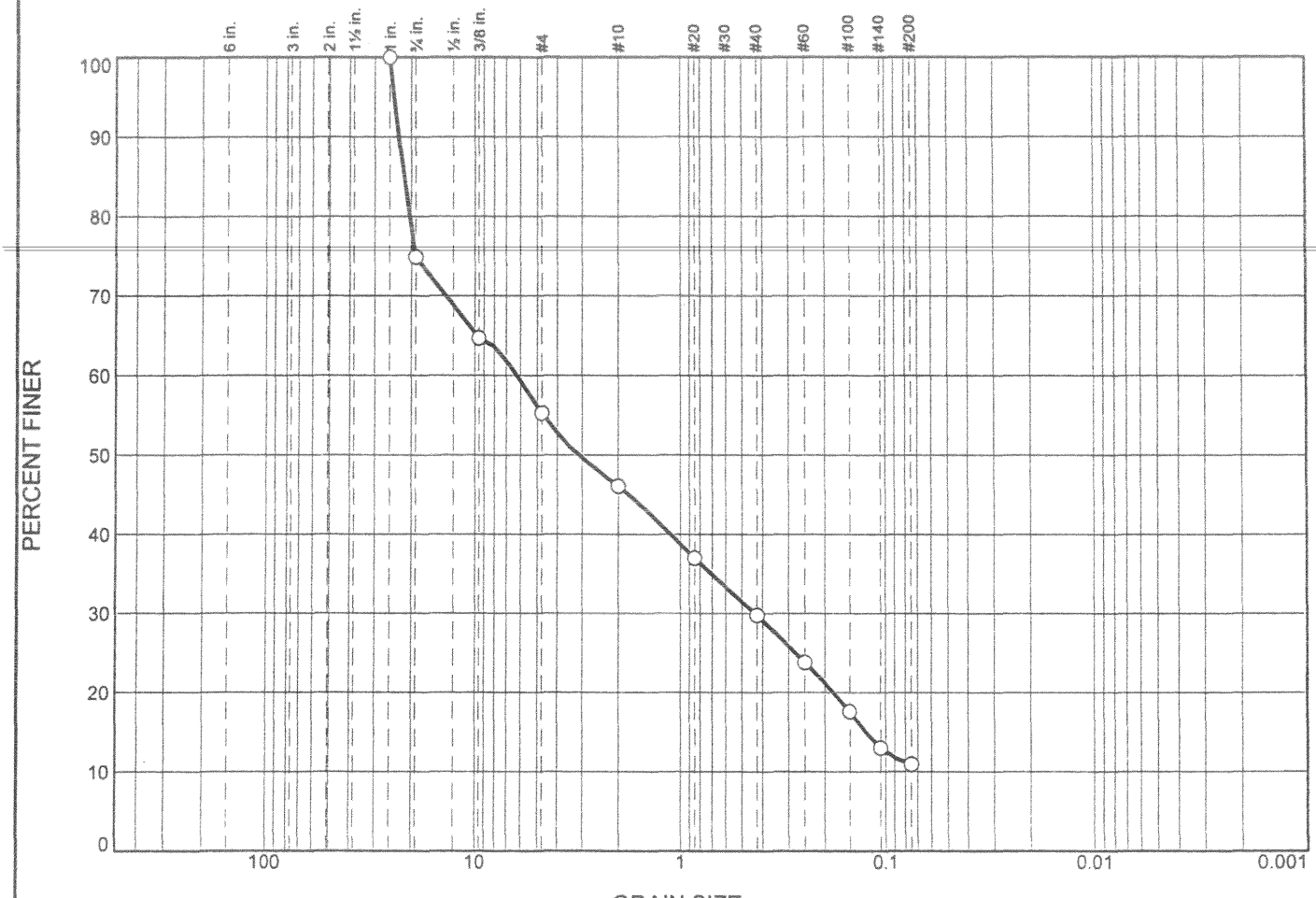
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	25	20	9	16	19	11	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			21.7109	6.2377	3.1064	0.4346	0.1251			

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0173 **Depth:** 18.5' **Sample Number:** 6

Date: ○

Remarks:

○ Moisture Content % 26.0 CP05-EAARS-CB-0269

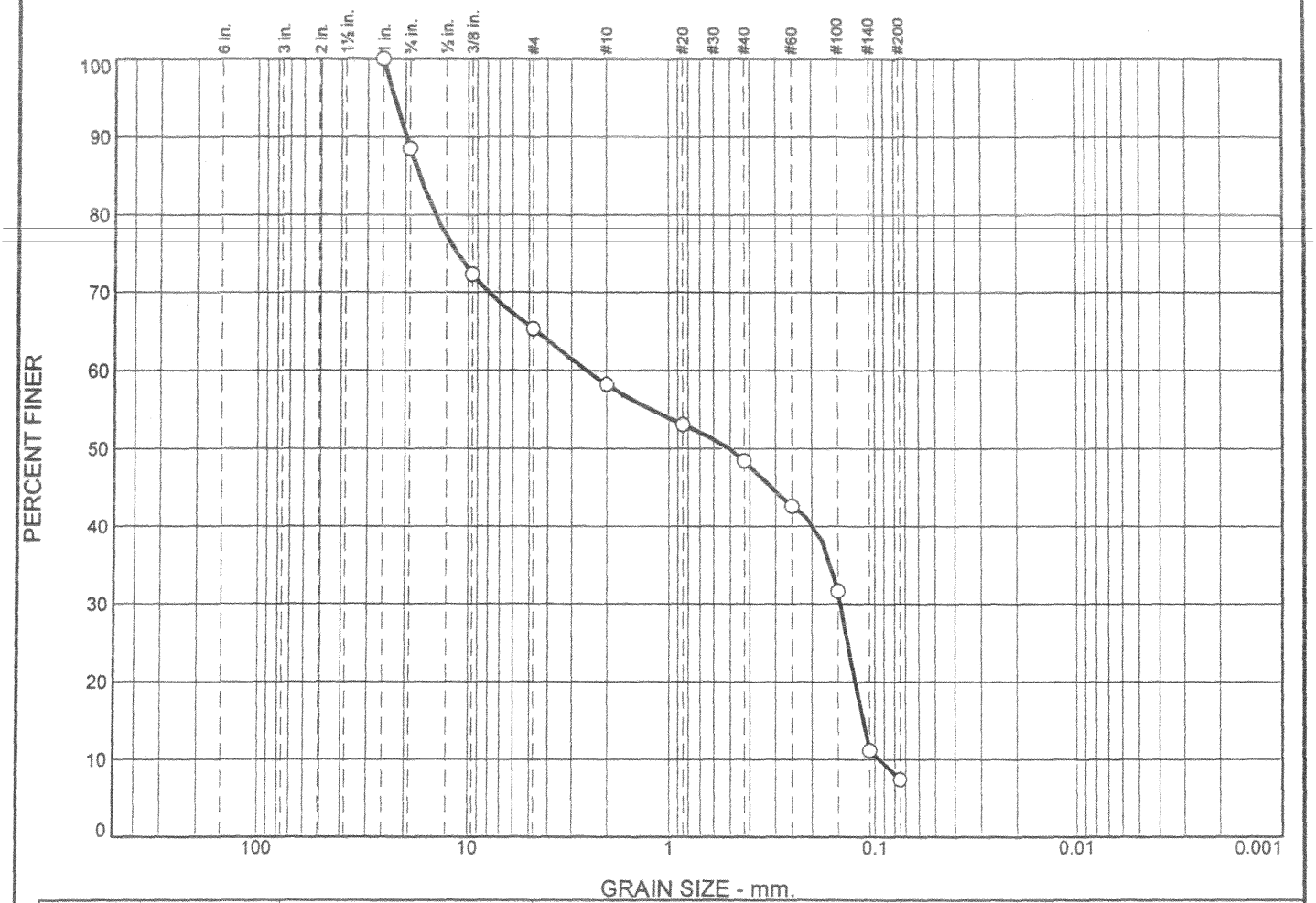
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	11	24	7	10	41	7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			17.1489	2.5176	0.5043	0.1455	0.1146	0.0952	0.09	26.45

Material Description	USCS	AASHTO
○ Poorly graded sand with gravel	SP	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0172 **Depth:** 33.5' **Sample Number:** 8

Date: ○

Remarks:
○ Moisture Content % 16.4 CP05-EAARS-CB-0269

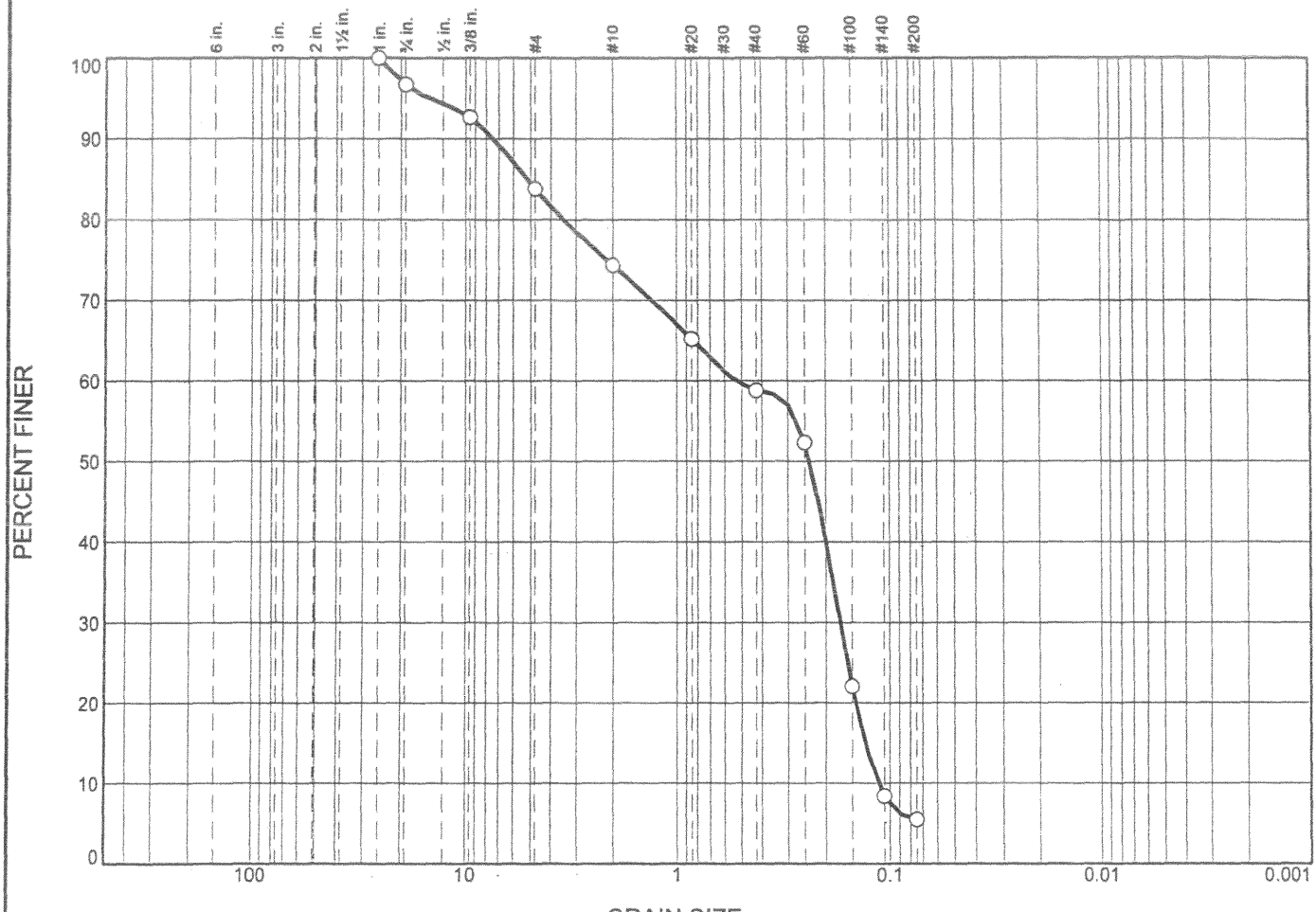
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	3	13	10	15	54	5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			5.1746	0.5272	0.2369	0.1706	0.1302	0.1130	0.49	4.66

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0172 **Depth:** 38.5' **Sample Number:** 9

Date: ○

Remarks:

○ Moisture Content % 20.9 CP05-EAARS-CB-0269

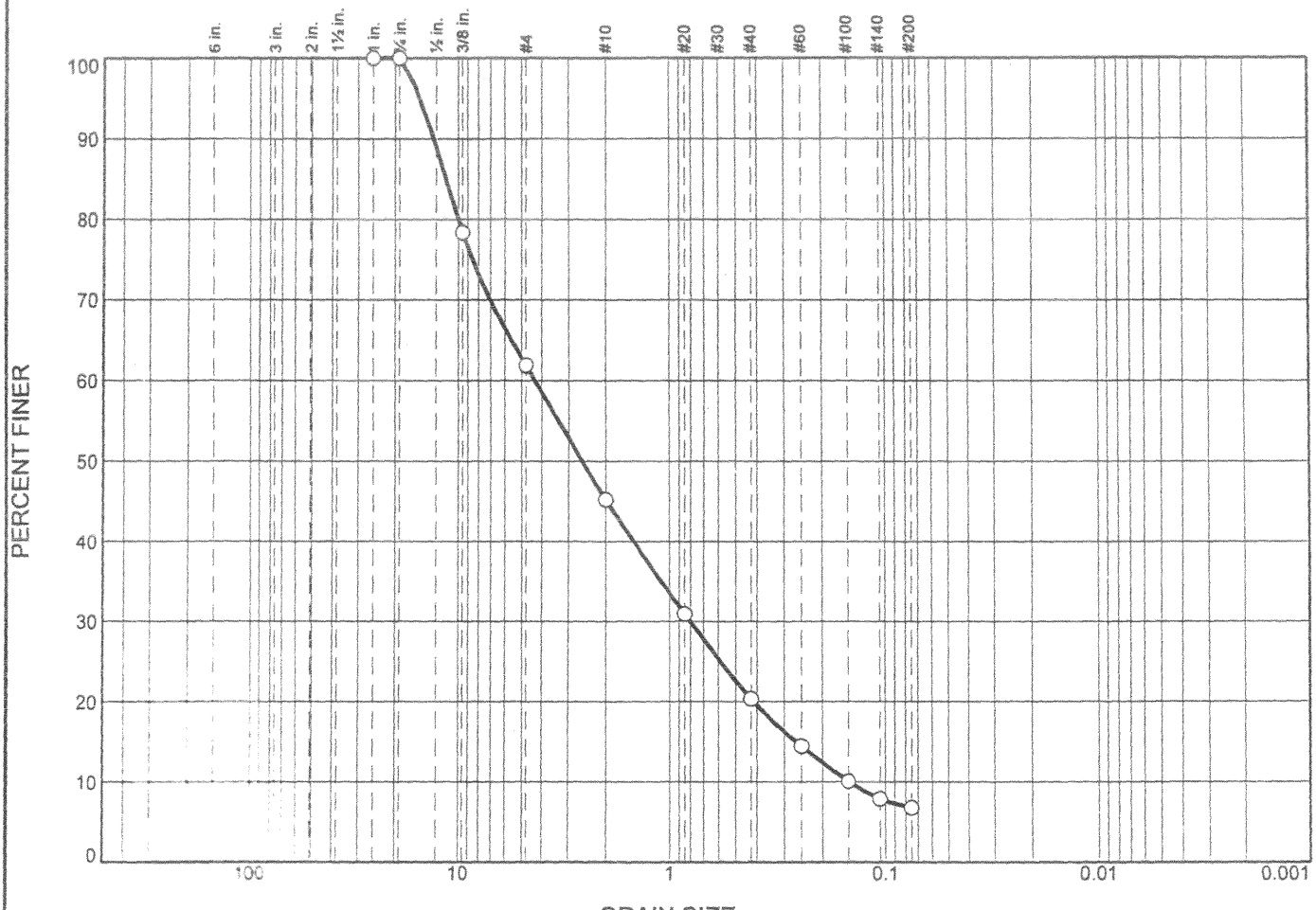
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	38	17	25	13	7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			11.4156	4.3044	2.5799	0.8016	0.2641	0.1486	1.00	28.98

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0173 **Depth:** 1.5' **Sample Number:** 2

Date: ○

Remarks:

○ Moisture Content % 157.6 CP05-EAARS-CB-0270

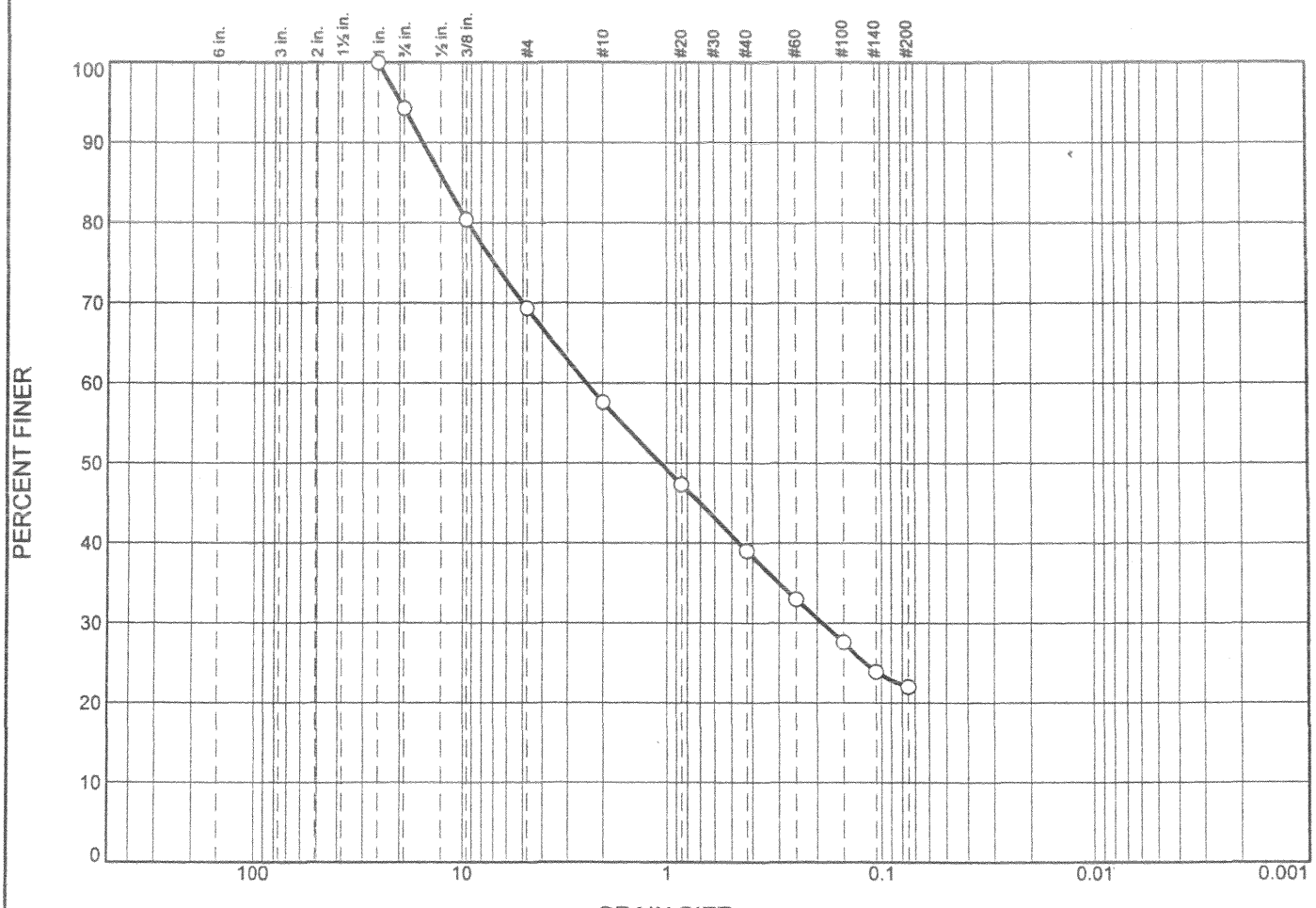
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	6	25	11	19	17	22	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			12.0906	2.4134	1.0653	0.1880				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0175 **Depth:** 0.0' **Sample Number:** 1

Date: ○

Remarks:
○ Moisture Content % 12.3 CP05-EAARS-CB-0271

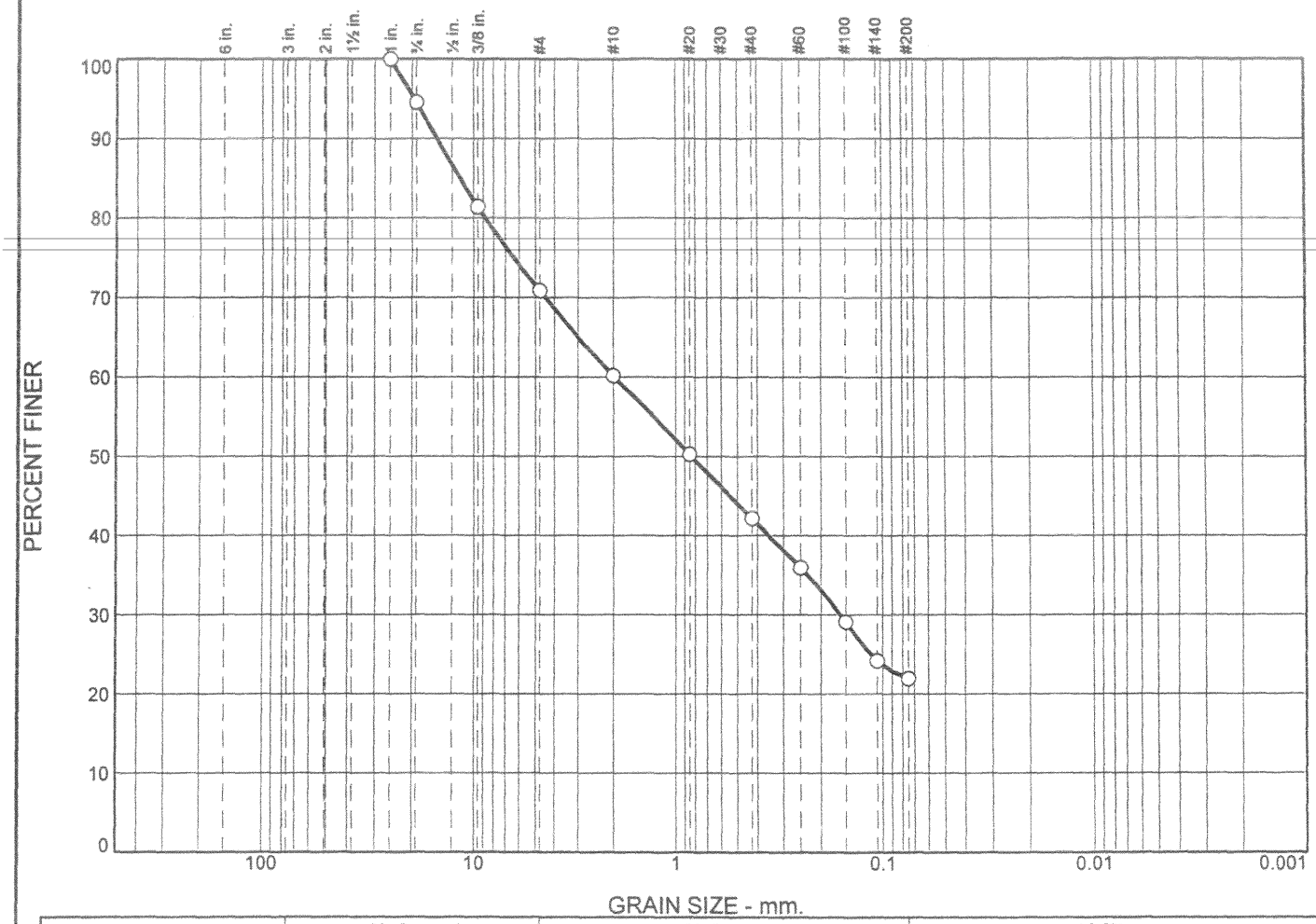
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	5	24	11	18	20	22	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			11.6299	1.9706	0.8308	0.1595				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0175 **Depth:** 2.0' **Sample Number:** 2

Date: ○

Remarks:
○ Moisture Content % 20.4 CP05-EAARS-CB-0271

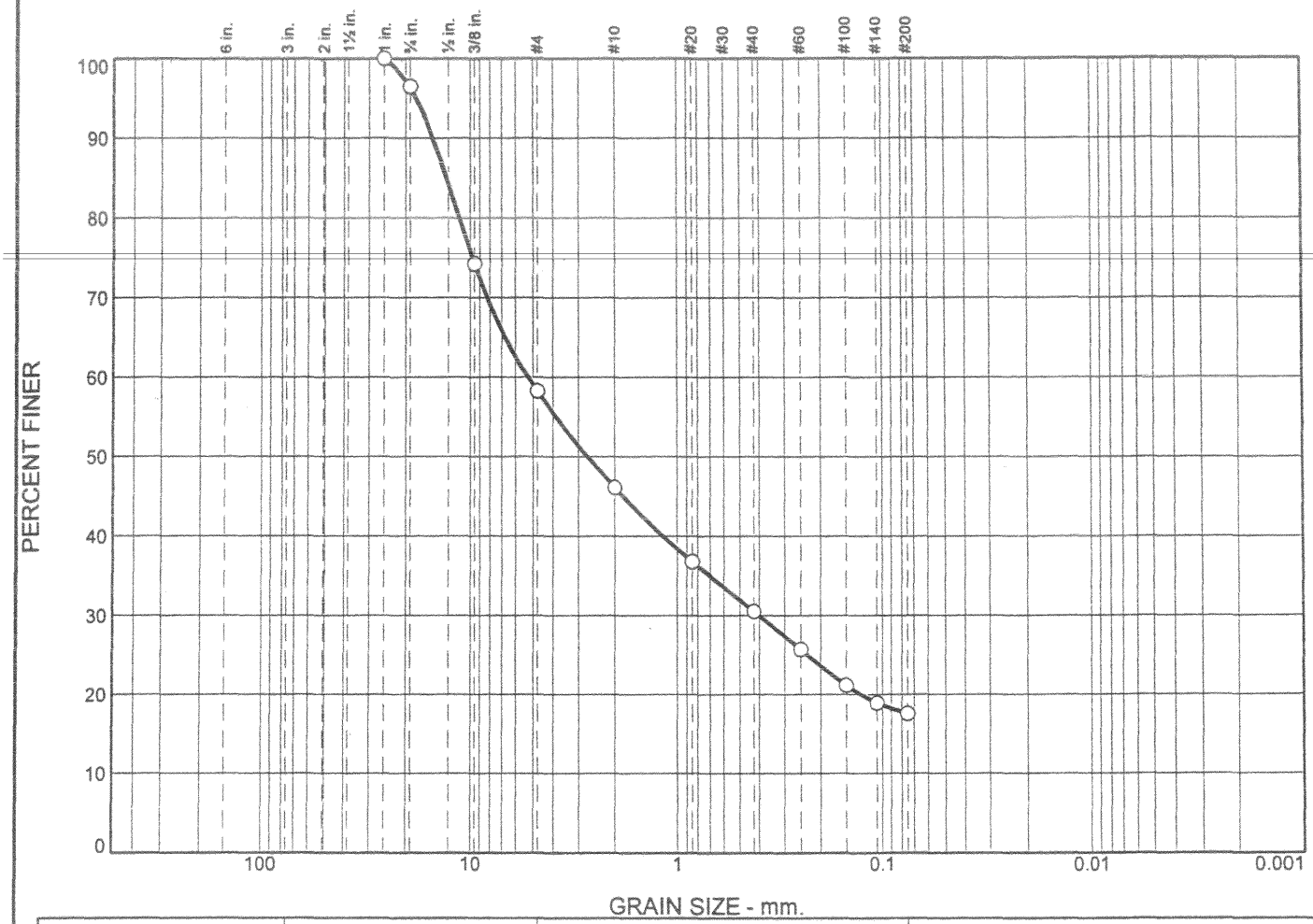
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	4	38	12	15	13	18	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			12.9138	5.2460	2.7193	0.4005				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0175 **Depth:** 10.5' **Sample Number:** 4

Date: ○

Remarks:

○ Moisture Content % 24.0 CP05-EAARS-CB-0271

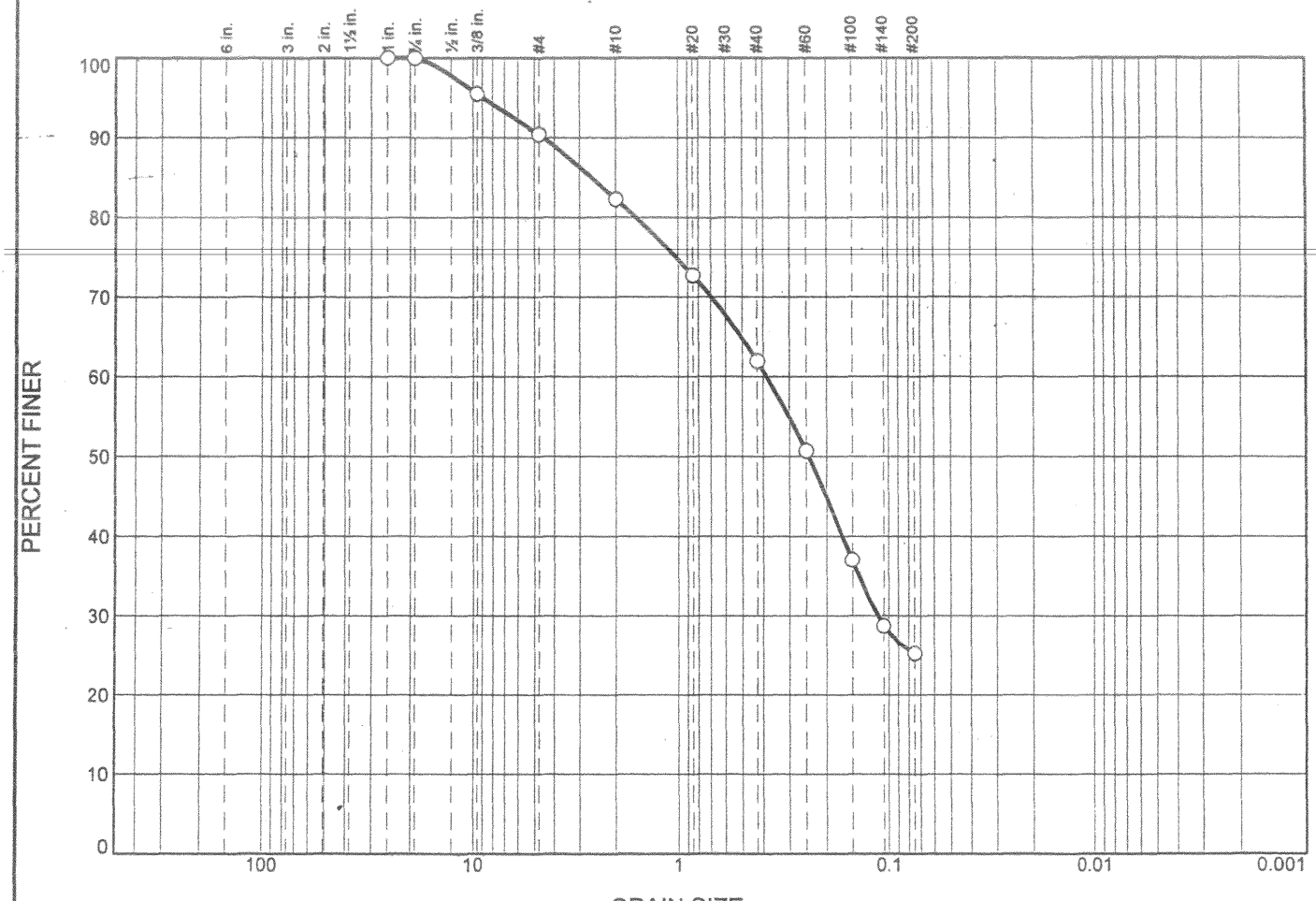
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	10	8	20	37	25	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			2.6123	0.3832	0.2430	0.1135				

Material Description	USCS	AASHTO
○ Silty sand	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0175 **Depth:** 18.5' **Sample Number:** 6

Date: ○

Remarks:

○ Moisture Content % 25.3 CP05-EAARS-CB-0271

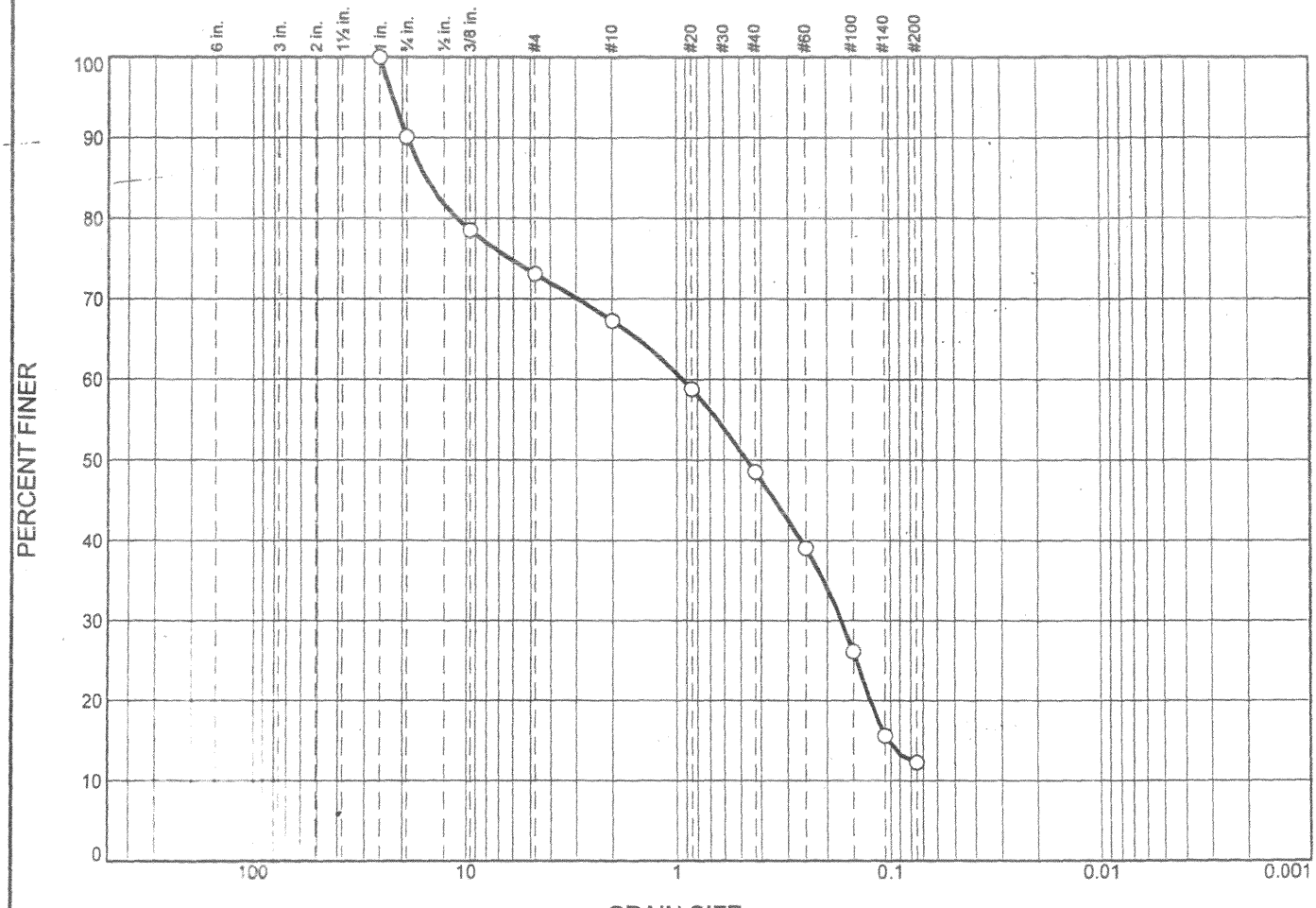
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	10	17	6	18	37	12	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			15.4527	0.9369	0.4658	0.1706	0.1028			

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0175 **Depth:** 23.5' **Sample Number:** 7

Date: ○

Remarks:

○ Moisture Content % 21.5 CP05-EAARS-CB-0271

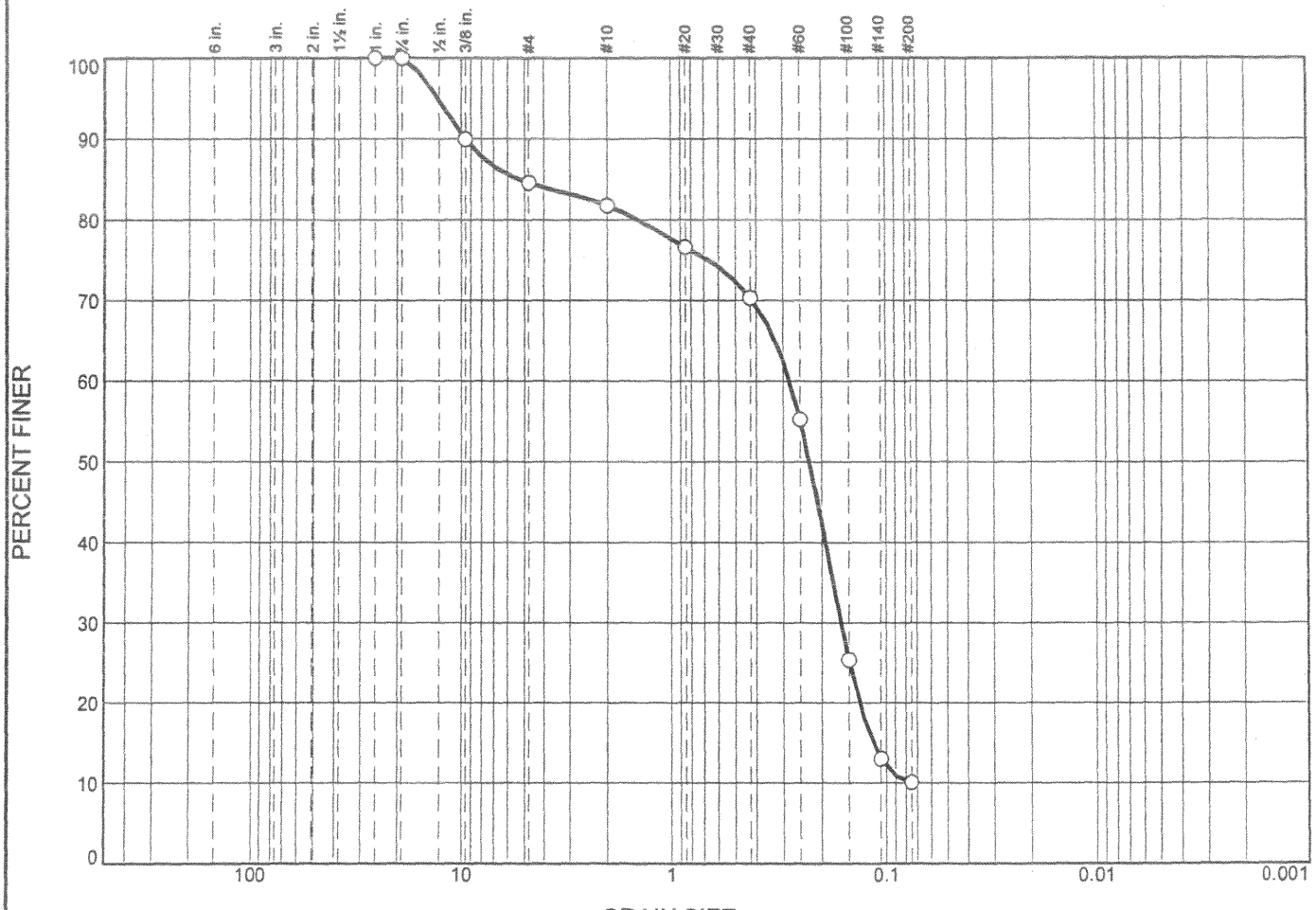
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	15	3	12	60	10	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			5.2820	0.2788	0.2265	0.1632	0.1154			

Material Description	USCS	AASHTO
○ Poorly graded sand with silt and gravel	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0175 **Depth:** 38.5' **Sample Number:** 10

Date: ○

Remarks:

○ Moisture Content % 24.3 CP05-EAARS-CB-0271

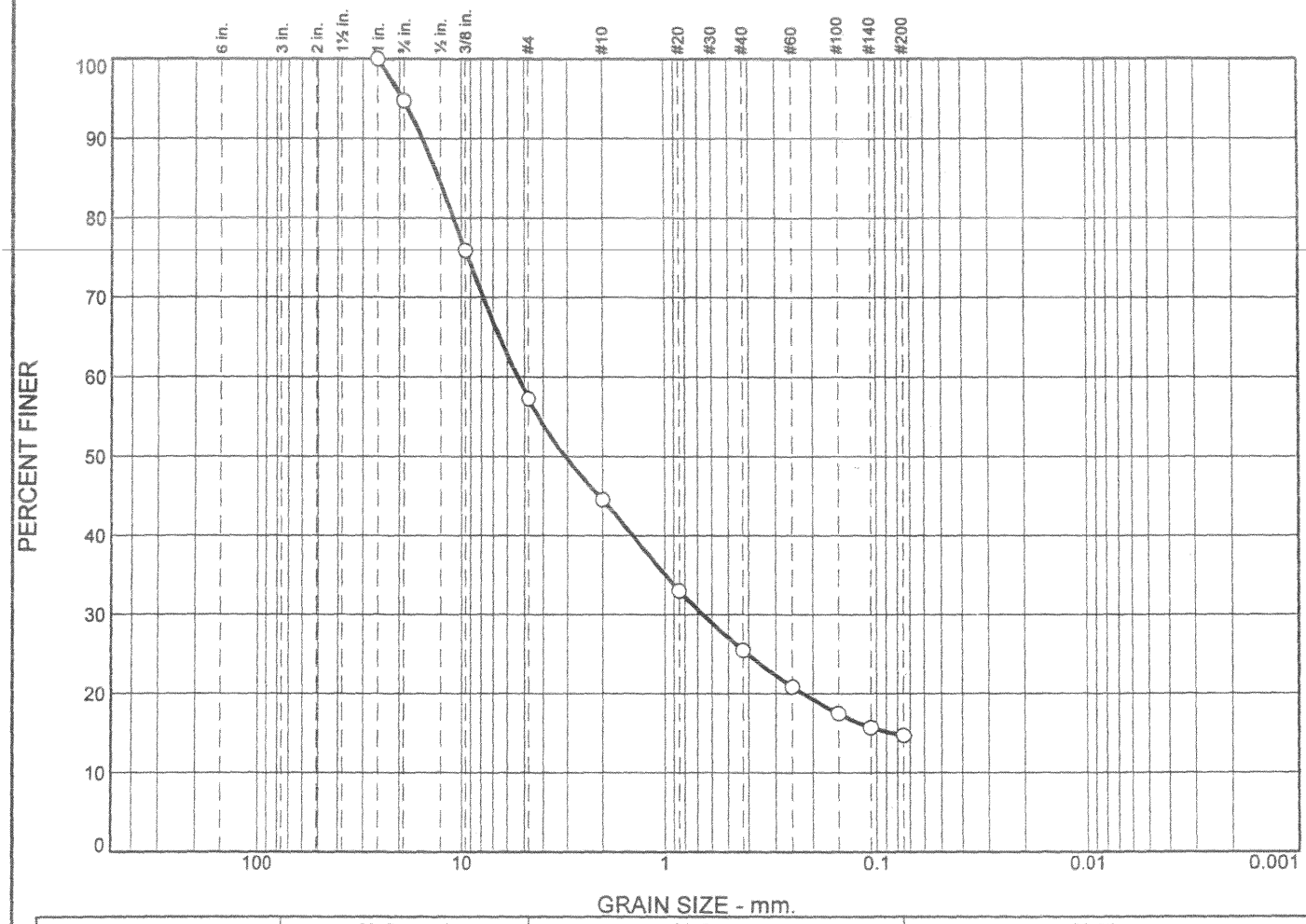
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	5	38	12	20	10	15	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			12.9561	5.3701	3.0774	0.6588	0.0847			

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0176 **Depth:** 5.1' **Sample Number:** 2

Date: ○

Remarks:
○ Moisture Content % 19.0 CP05-EAARS-CB-0272

Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report

	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	8	7	6	18	37	24	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			4.8044	0.4006	0.2281	0.1135				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0176 **Depth:** 10.0' **Sample Number:** 4

Date: ○

Remarks:
○ Moisture Content % 29.1
CP05-EAARS-CB-0272

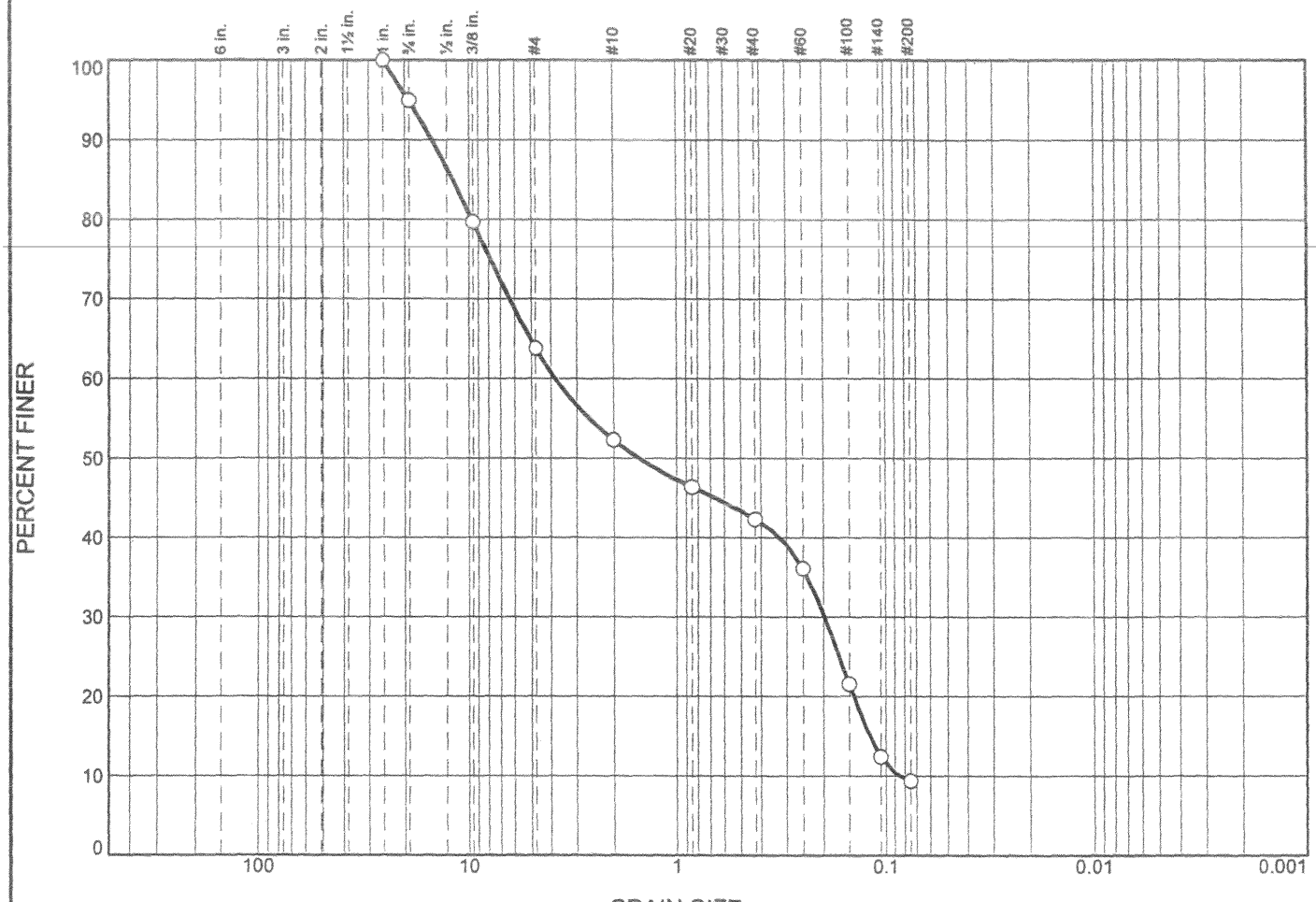
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	5	31	12	10	33	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			11.9080	3.8204	1.5043	0.1970	0.1197	0.0851	0.12	44.89

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0176 **Depth:** 18.5' **Sample Number:** 6

Date: ○

Remarks:
○ Moisture Content % 10.6
CP05-EAARS-CB-0272

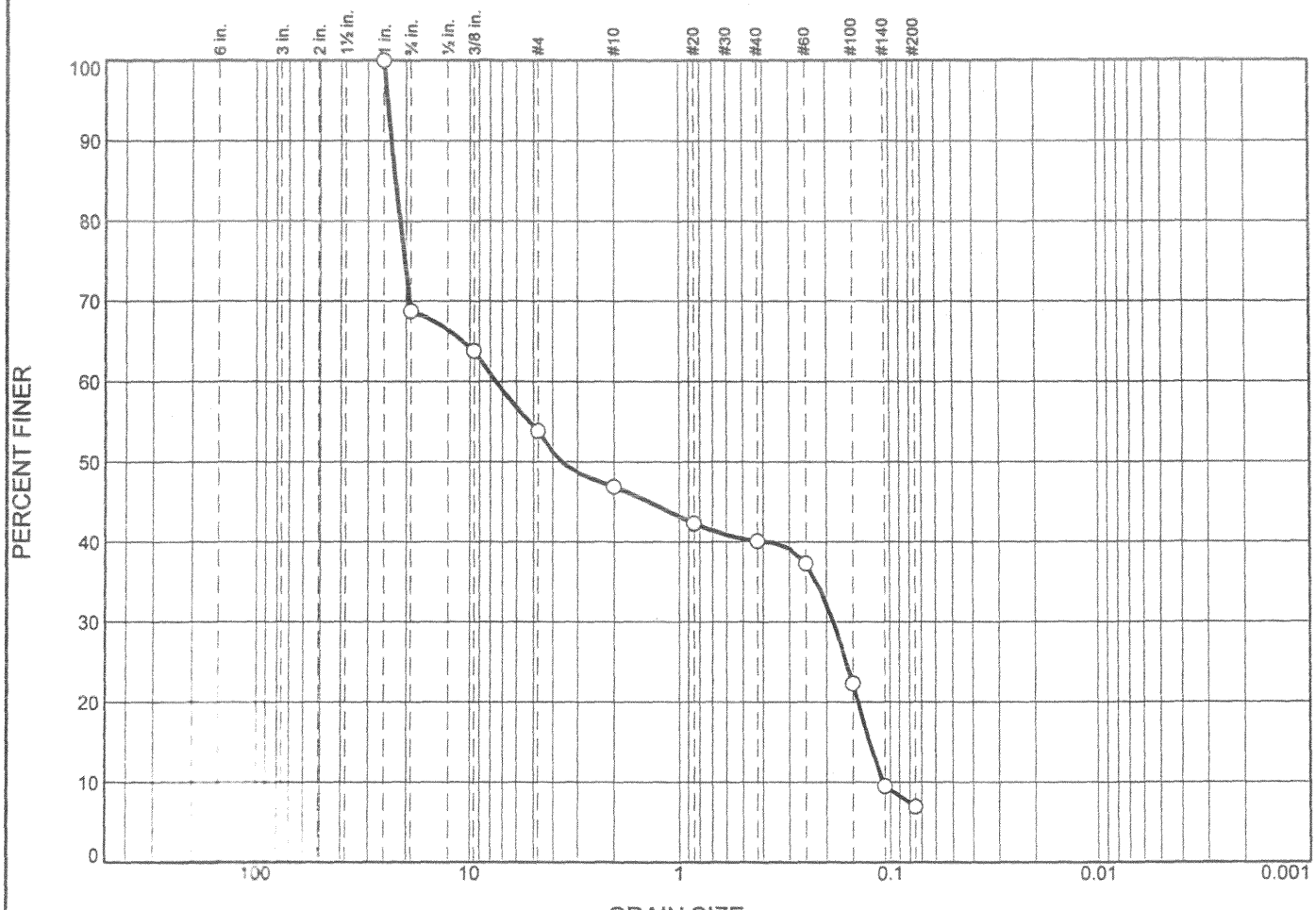
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	31	15	7	7	33	7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			22.4677	7.5320	3.5705	0.1851	0.1256	0.1081	0.04	69.67

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0176 **Depth:** 23.5' **Sample Number:** 7

Date: ○

Remarks:

○ Moisture Content % 14.5

CP05-EAARS-CB-0272

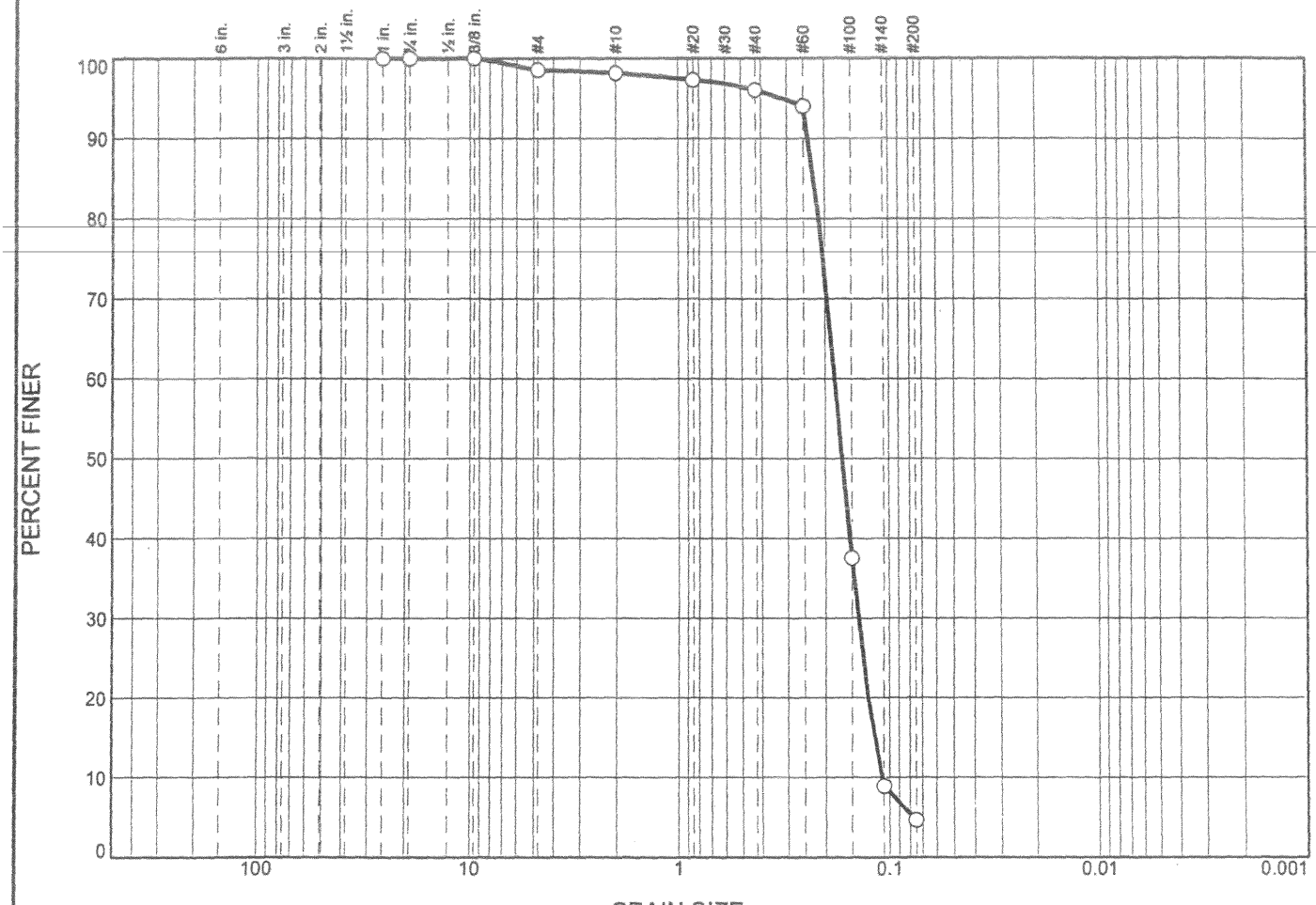
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	1	1	2	91	5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2233	0.1798	0.1661	0.1400	0.1180	0.1085	1.01	1.66

Material Description	USCS	AASHTO
○ Poorly graded sand	SP	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0176 **Depth:** 28.5' **Sample Number:** 8

Date: ○

Remarks:

○ Moisture Content % 29.2

CP05-EAARS-CB-0272

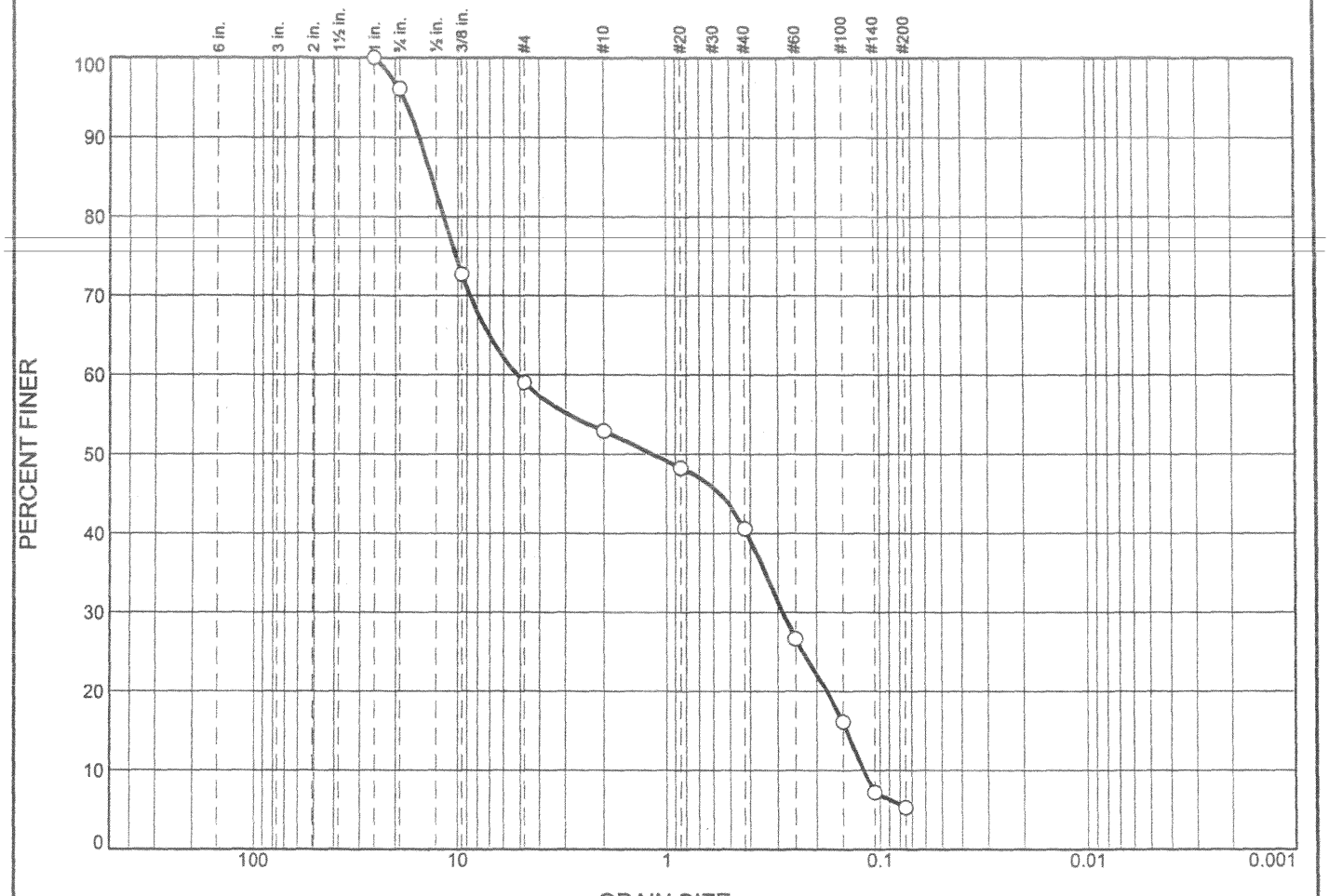
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	4	37	6	12	36	5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			13.3245	5.1638	1.1584	0.2854	0.1436	0.1202	0.13	42.96

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0176 **Depth:** 33.5' **Sample Number:** 9

Date: ○

Remarks:
○ Moisture Content % 15.6 CP05-EAARS-CB-0272

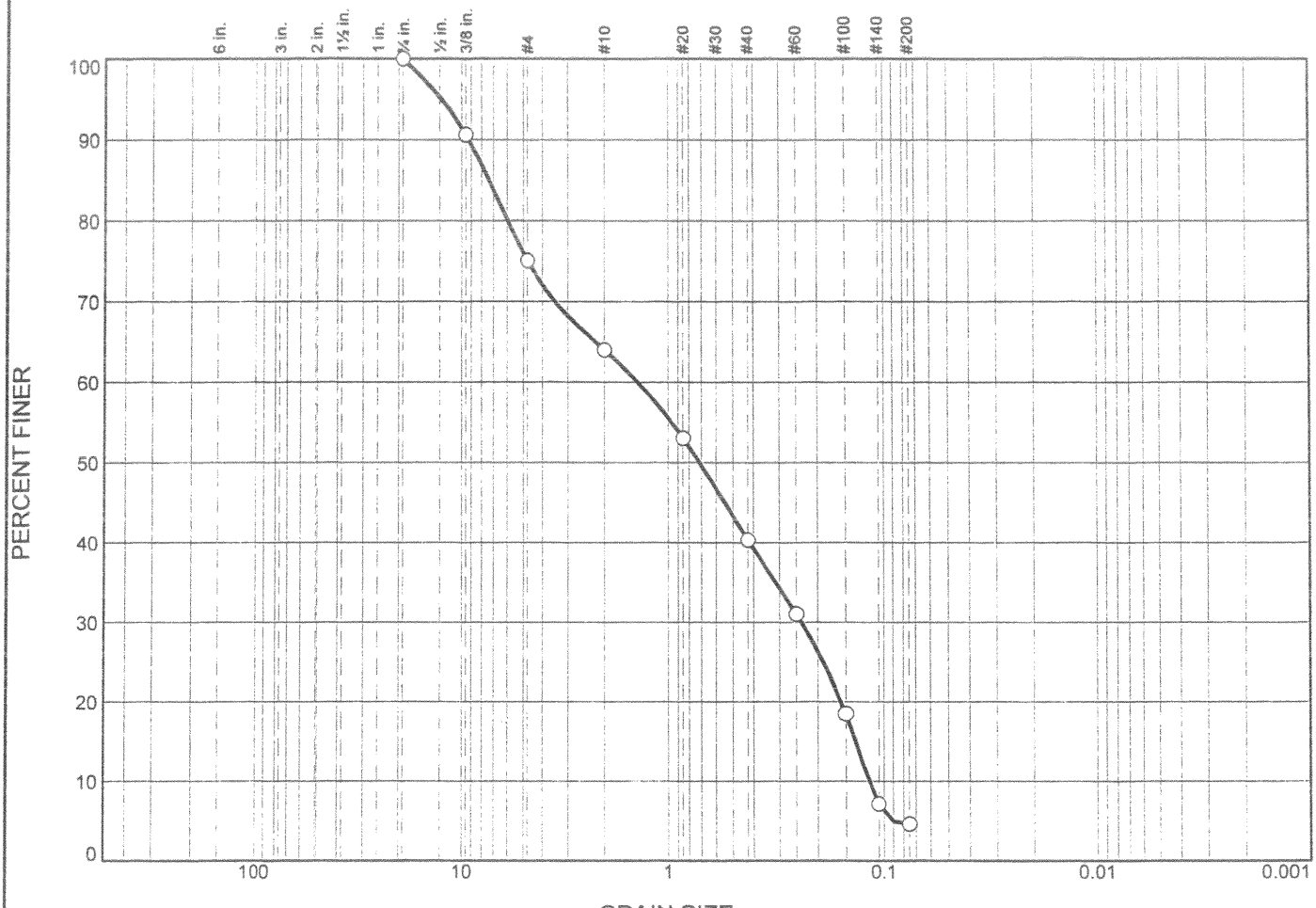
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	24.9	11.1	23.6	35.8	4.6	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			7.3567	1.3892	0.7137	0.2365	0.1360	0.1179	0.34	11.78

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)W/O#6

○ **Source of Sample:** CB176 **Depth:** 58.5'-60.0 **Sample Number:** CB176

Remarks:

○ Moisture Content % 21.4 CP05-EAARS-CB-0272

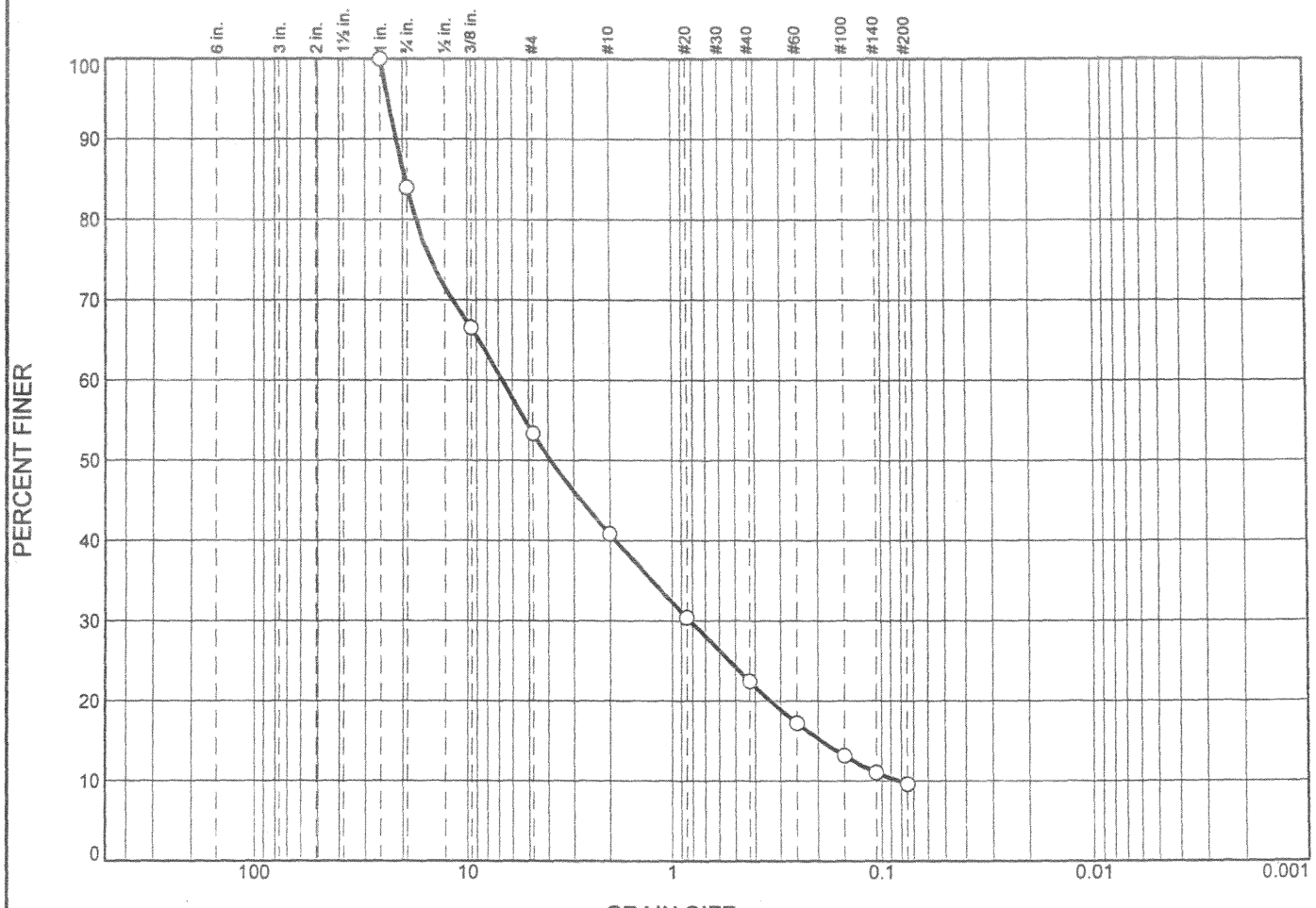
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: M Mazo **Checked By:** M Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	16	31	12	19	12	10	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			19.4681	6.7137	3.8994	0.8206	0.1921	0.0831	1.21	80.82

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0179 **Depth:** 5.5' **Sample Number:** 5

Date: ○

Remarks:
○ Moisture Content % 24.3 CP05-EAARS-CB-0275

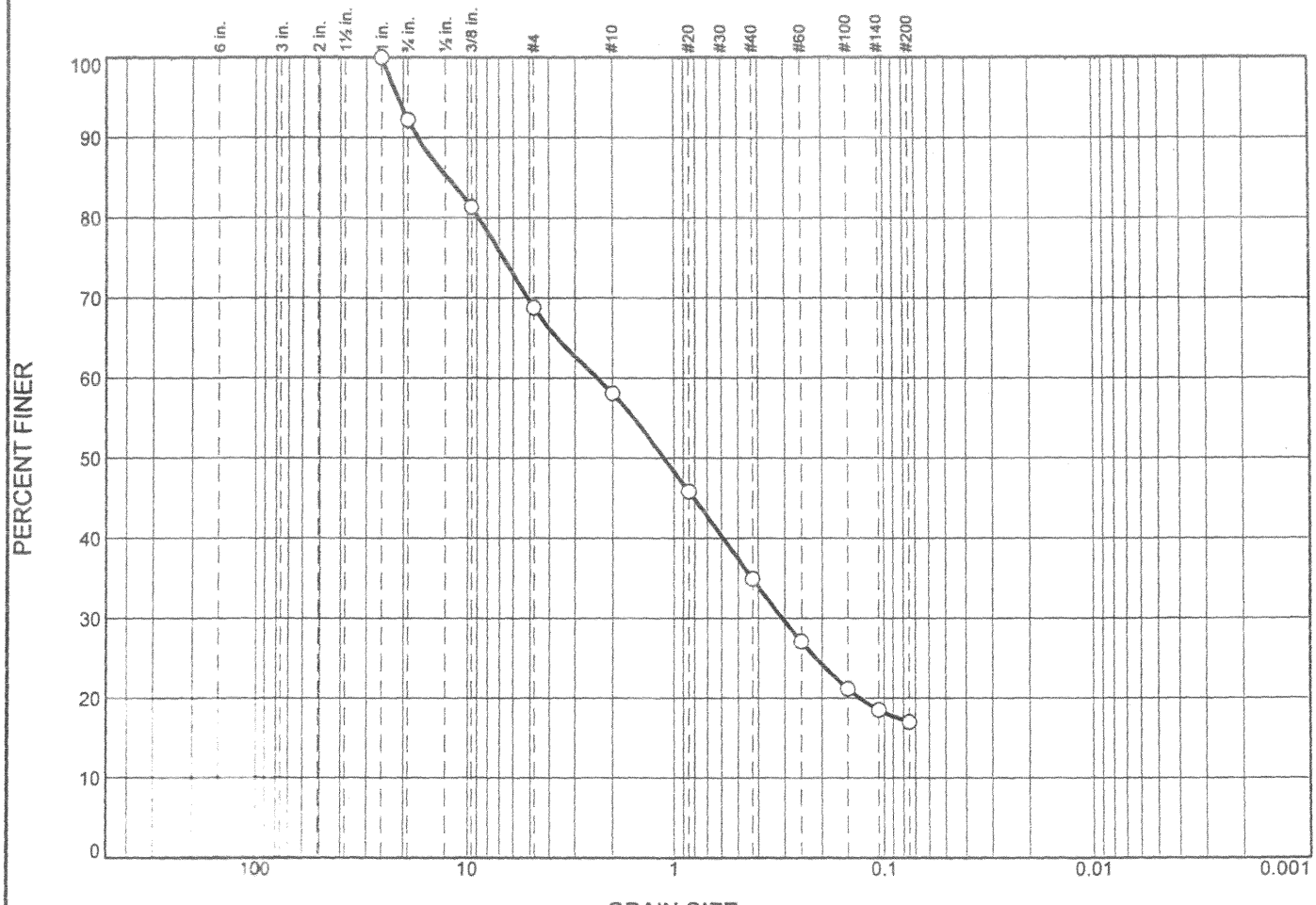
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	8	23	11	23	18	17	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			12.3808	2.3590	1.1147	0.3071				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0179 **Depth:** 7.5' **Sample Number:** 3

Date: ○

Remarks:

○ Moisture Content % 25.0 CP05-EAARS-CB-0275

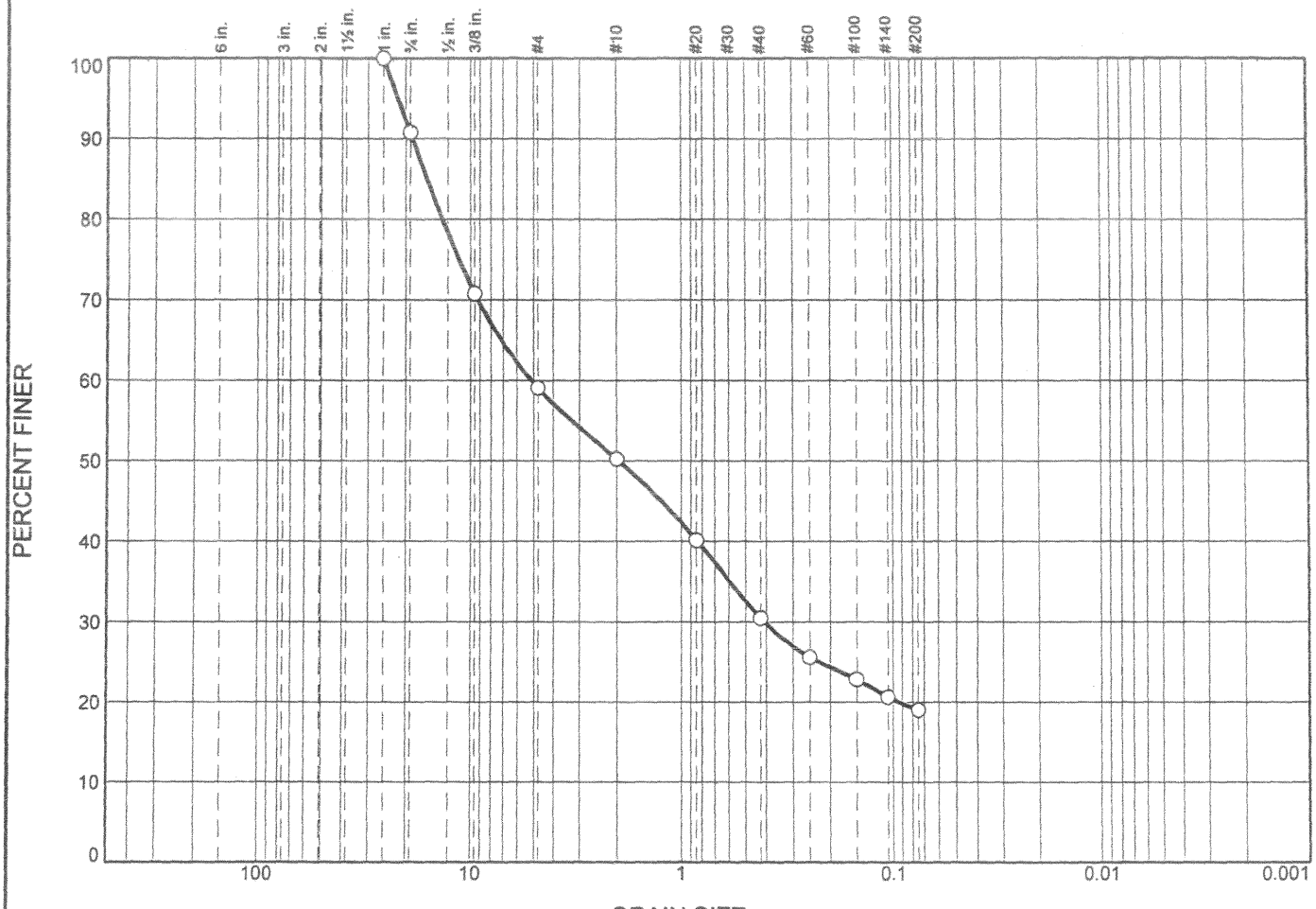
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	9	32	9	20	11	19	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			15.8645	5.1109	1.9488	0.4078				

Material Description	USCS	AASHTO
○ Silty sand with gravel	SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0179 **Depth:** 13.5' **Sample Number:** 4

Date: ○

Remarks:
○ Moisture Content % 17.7 CP05-EAARS-CB-0275

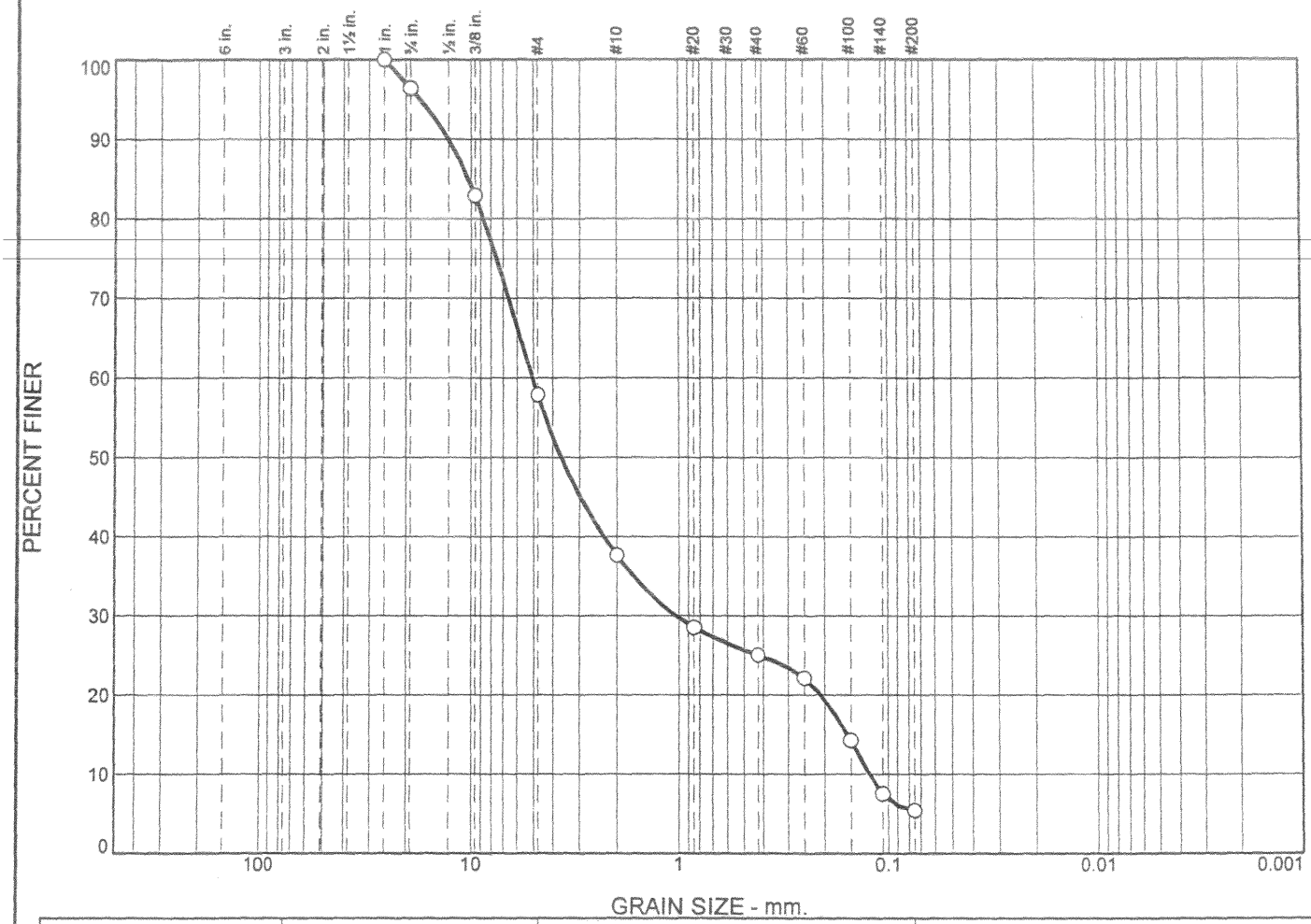
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	4	38	20	13	20	5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			10.2470	5.0457	3.6562	1.0304	0.1554	0.1226	1.72	41.14

Material Description	USCS	AASHTO
○ Well graded sand with gravel	SW	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0179 **Depth:** 23.5' **Sample Number:** 6

Date: ○

Remarks:

○ Moisture Content % 14.2 CP05-EAARS-CB-0275

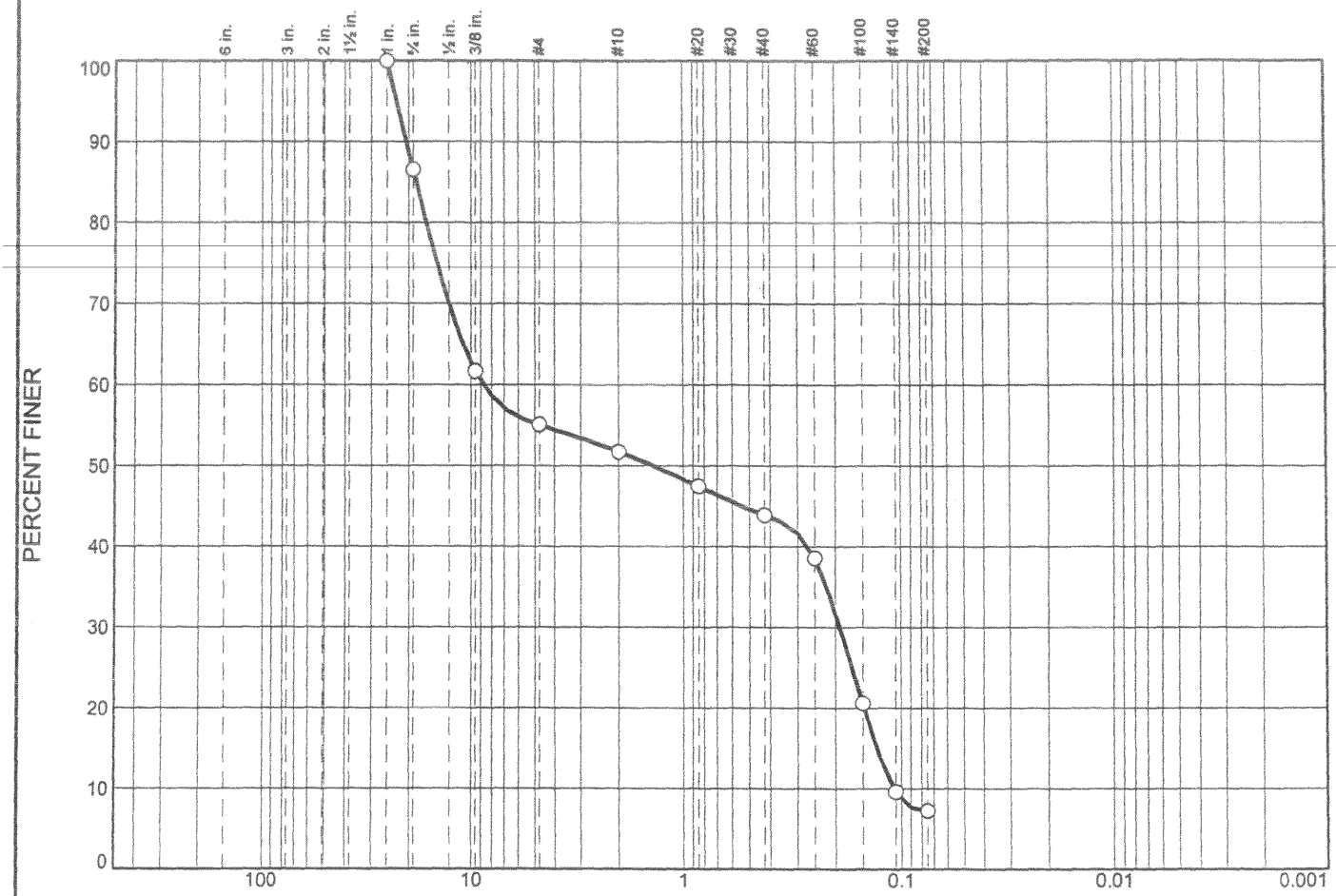
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	13	32	3	8	37	7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			18.4152	8.7349	1.3774	0.1906	0.1291	0.1081	0.04	80.82

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0179 **Depth:** 28.5' **Sample Number:** 7

Date: ○

Remarks:

○ Moisture Content % 15.1 CP05-EAARS-CB-0275

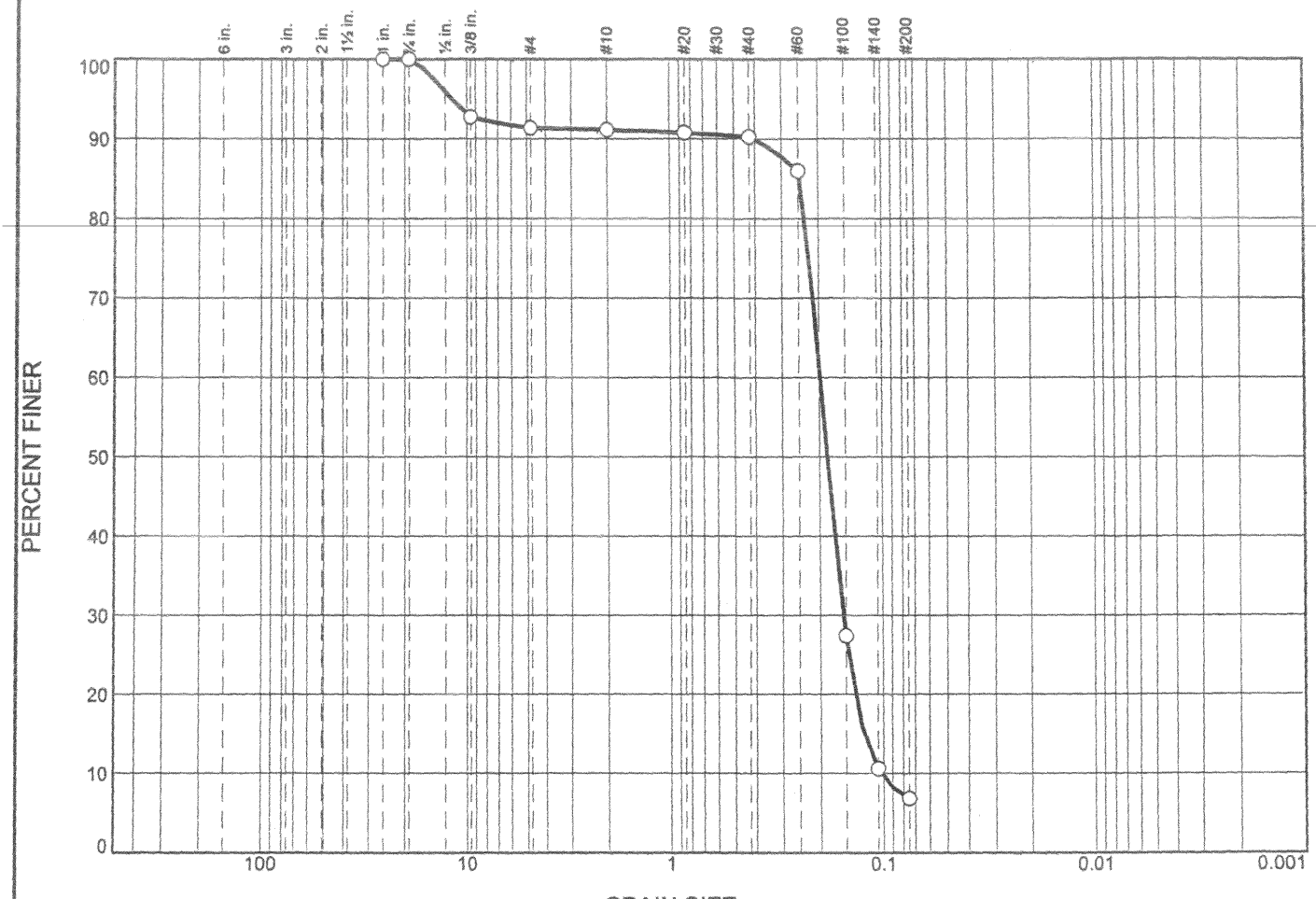
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	9	0	1	83	7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2469	0.1969	0.1824	0.1541	0.1236	0.1027	1.17	1.92

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0179 **Depth:** 33.5' **Sample Number:** 8

Date: ○

Remarks:

○ Moisture Content % 25.2 CP05-EAARS-CB-0275

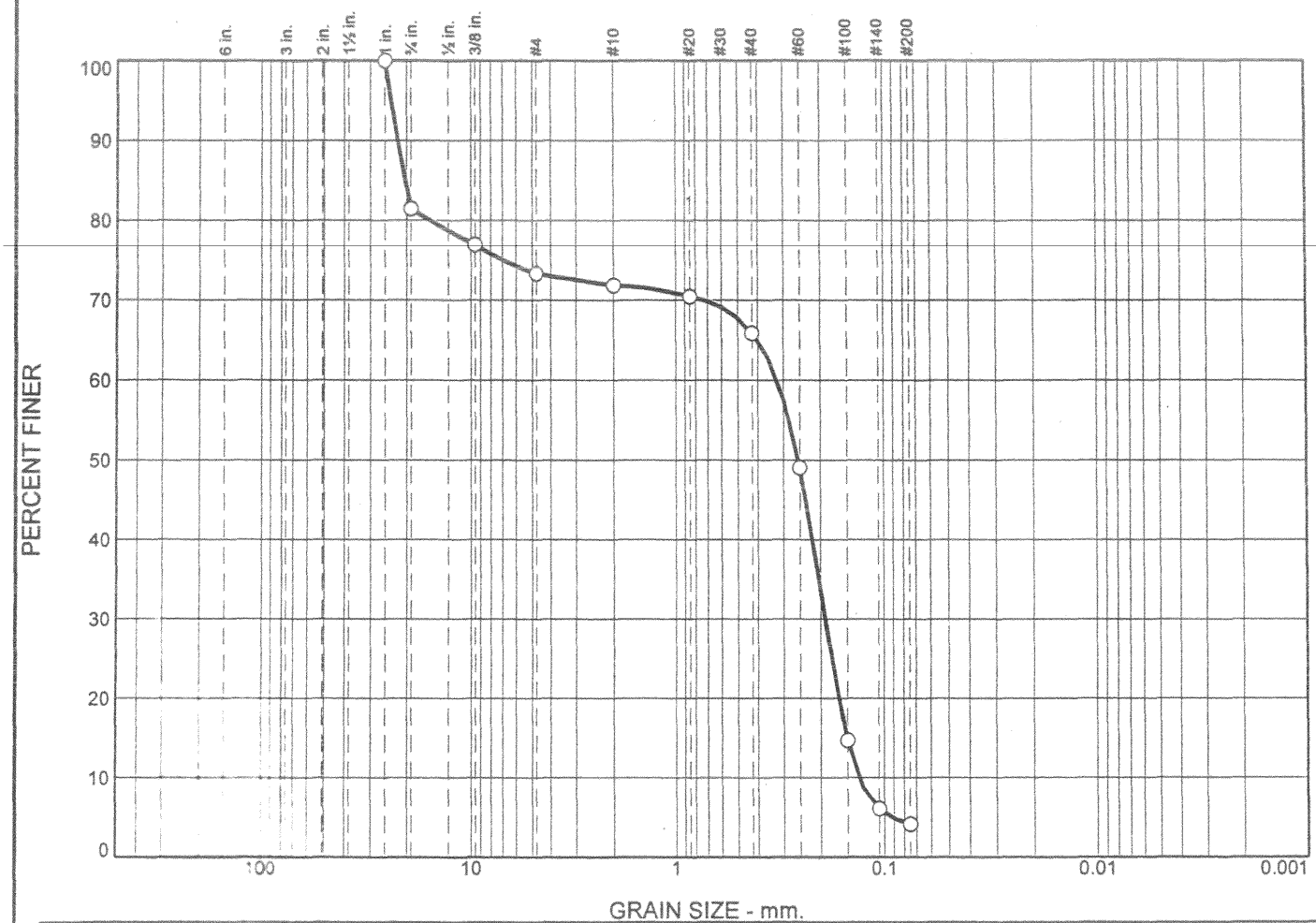
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	19	8	1	6	62	4	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			20.3903	0.3211	0.2542	0.1906	0.1509	0.1325	0.85	2.42

Material Description	USCS	AASHTO
○ Poorly graded sand with gravel	SP	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0179 **Depth:** 38.5' **Sample Number:** 9

Date: ○

Remarks:

○ Moisture Content % 20.9 CP05-EAARS-CB-0275

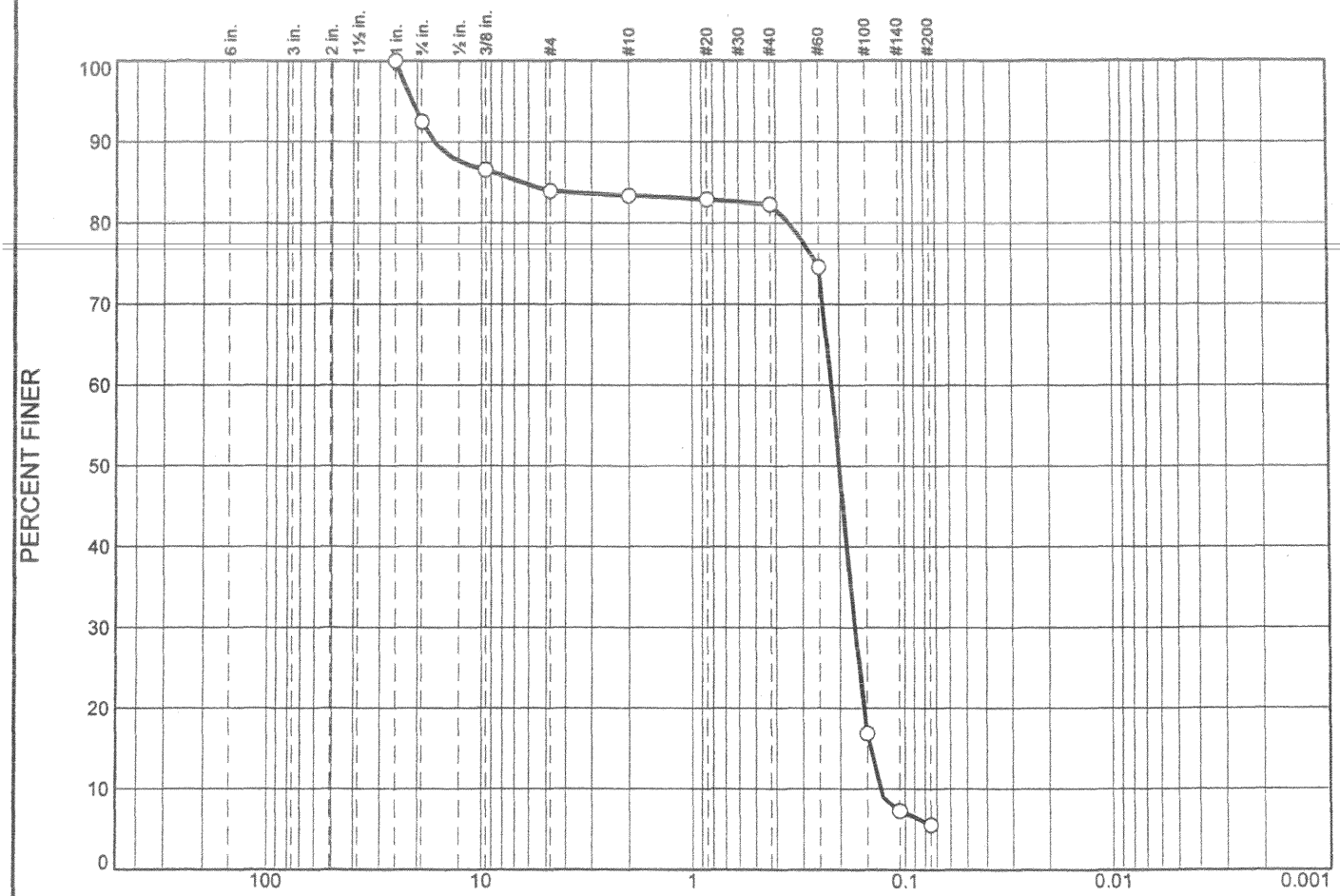
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	8	8	1	1	76	6	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			6.4523	0.2171	0.2006	0.1713	0.1460	0.1312	1.03	1.65

Material Description	USCS	AASHTO
○ Poorly graded sand with silt and gravel	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0179 **Depth:** 48.5' **Sample Number:** 11

Date: ○

Remarks:
○Moisture Content % 20.7 CP05-EAARS-CB-0275

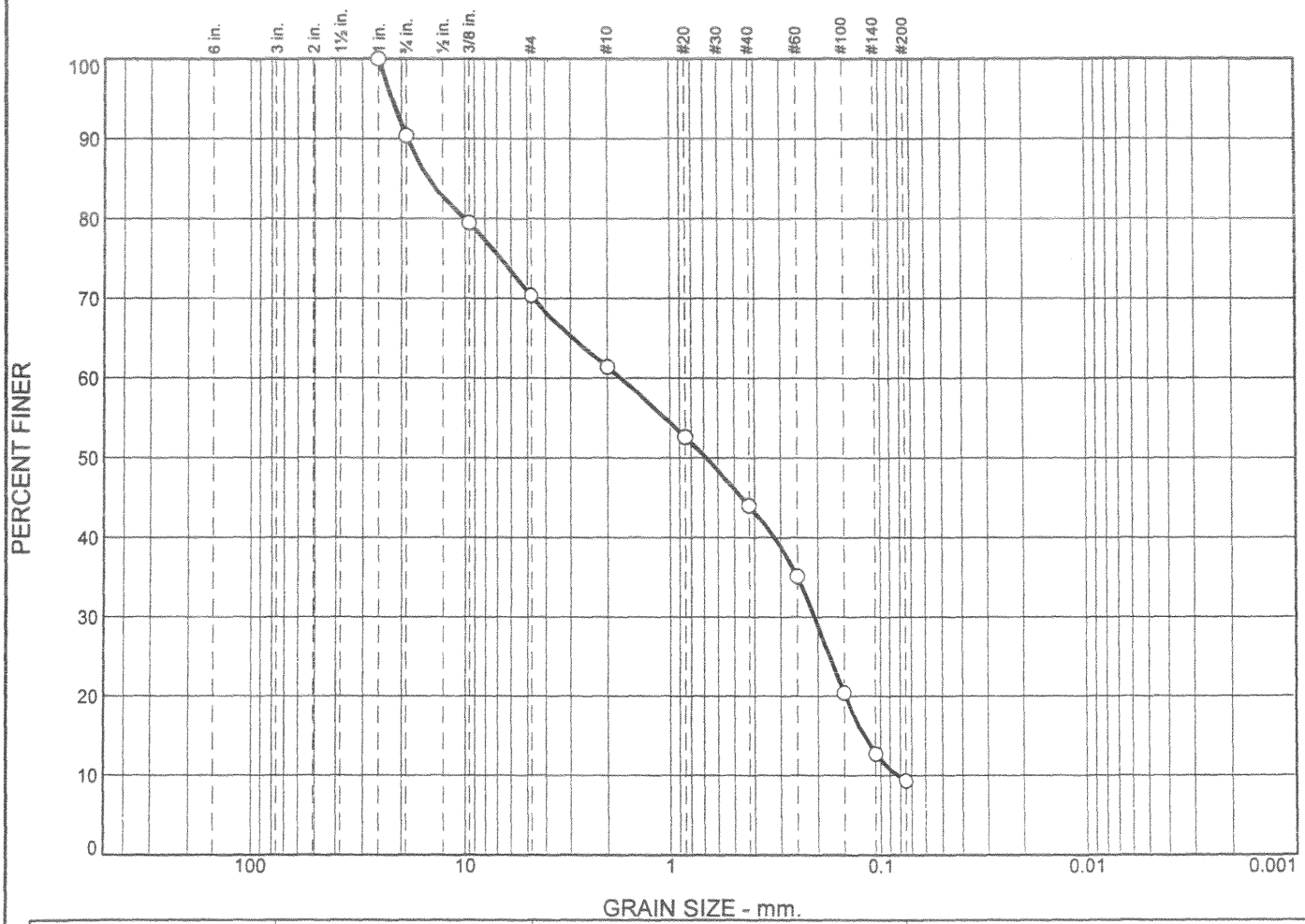
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	10	20	9	17	35	9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			14.8821	1.7256	0.6803	0.2069	0.1204	0.0825	0.30	20.91

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch
Project: E.A.A (Reservoir)
○ **Source of Sample:** CB-0179 **Depth:** 58.5' **Sample Number:** 13

Date: ○

Remarks:
○ Moisture Content % 22.7 CP05-EAARS-CB-0275

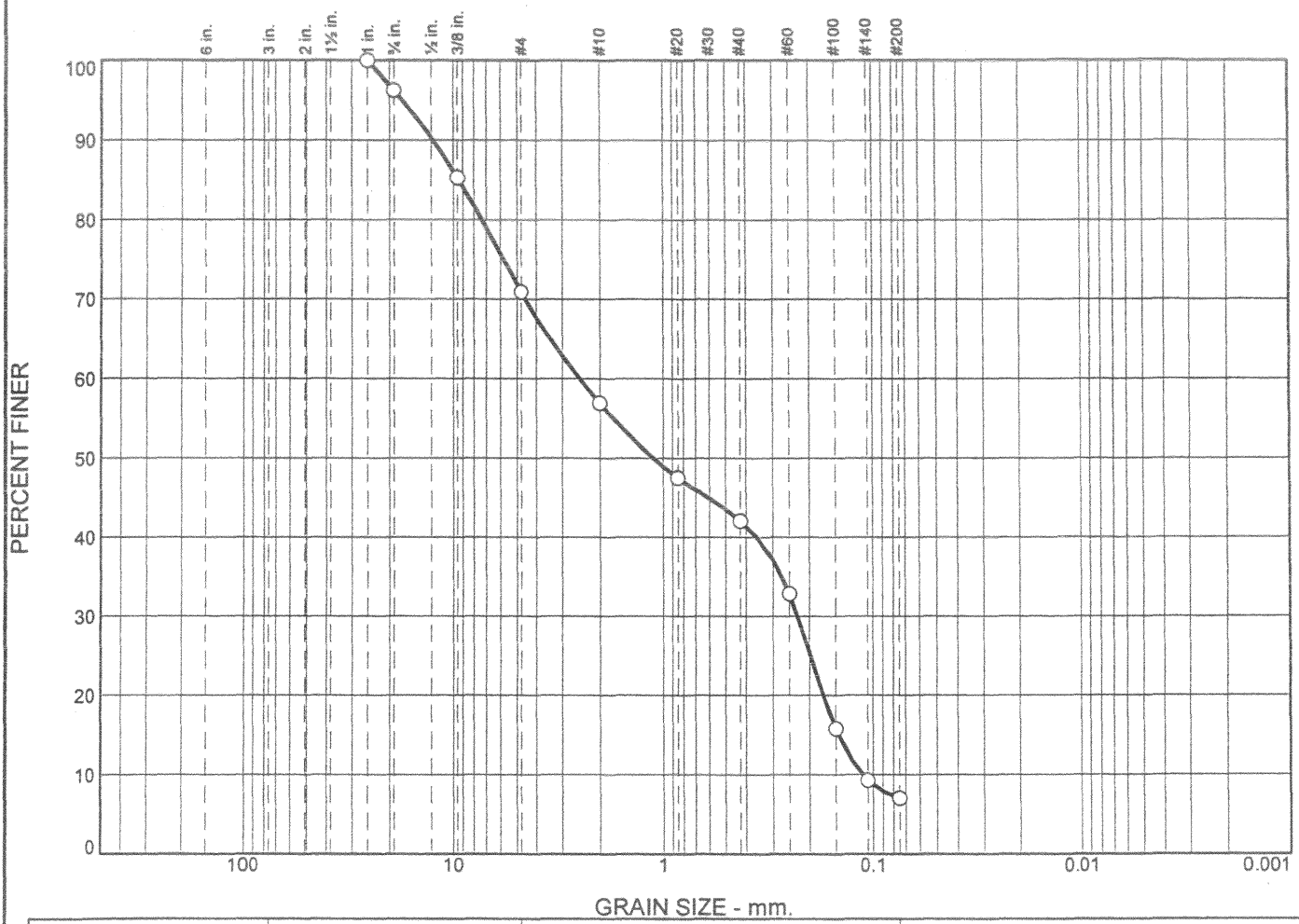
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	4	25	14	15	35	7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			9.3797	2.4919	1.1159	0.2280	0.1457	0.1125	0.19	22.16

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0179 **Depth:** 63.5' **Sample Number:** 14

Date: ○

Remarks:

○ Moisture Content % 28.1 CP05-EAARS-CB-0275

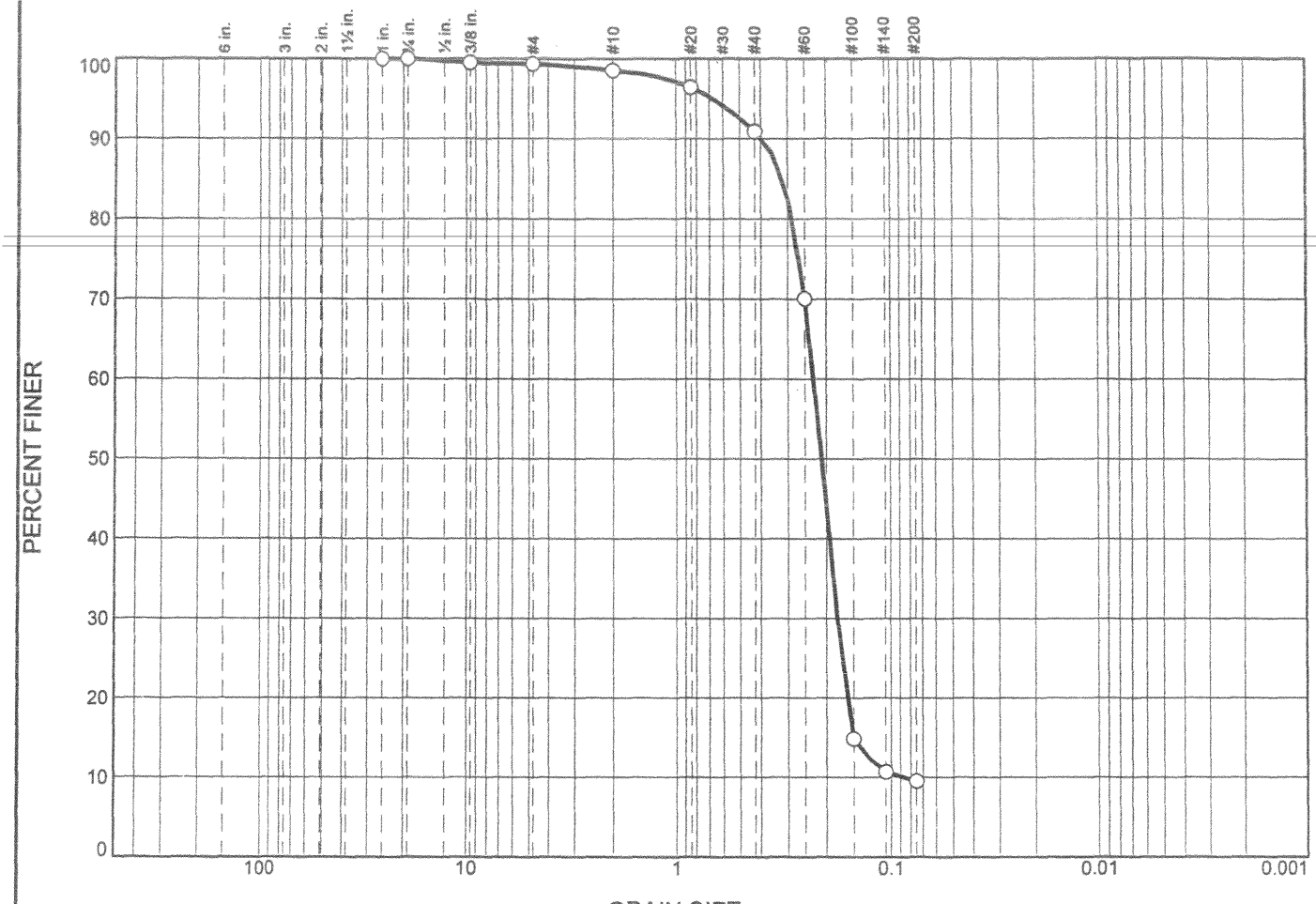
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	1	0	8	81	10	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3171	0.2274	0.2094	0.1777	0.1504	0.0868	1.60	2.62

Material Description	USCS	AASHTO
○ Poorly graded sand with silt	SP-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0179 **Depth:** 73.5' **Sample Number:** 16

Date: ○

Remarks:

○ Moisture Content % 22.3 CP05-EAARS-CB-0275

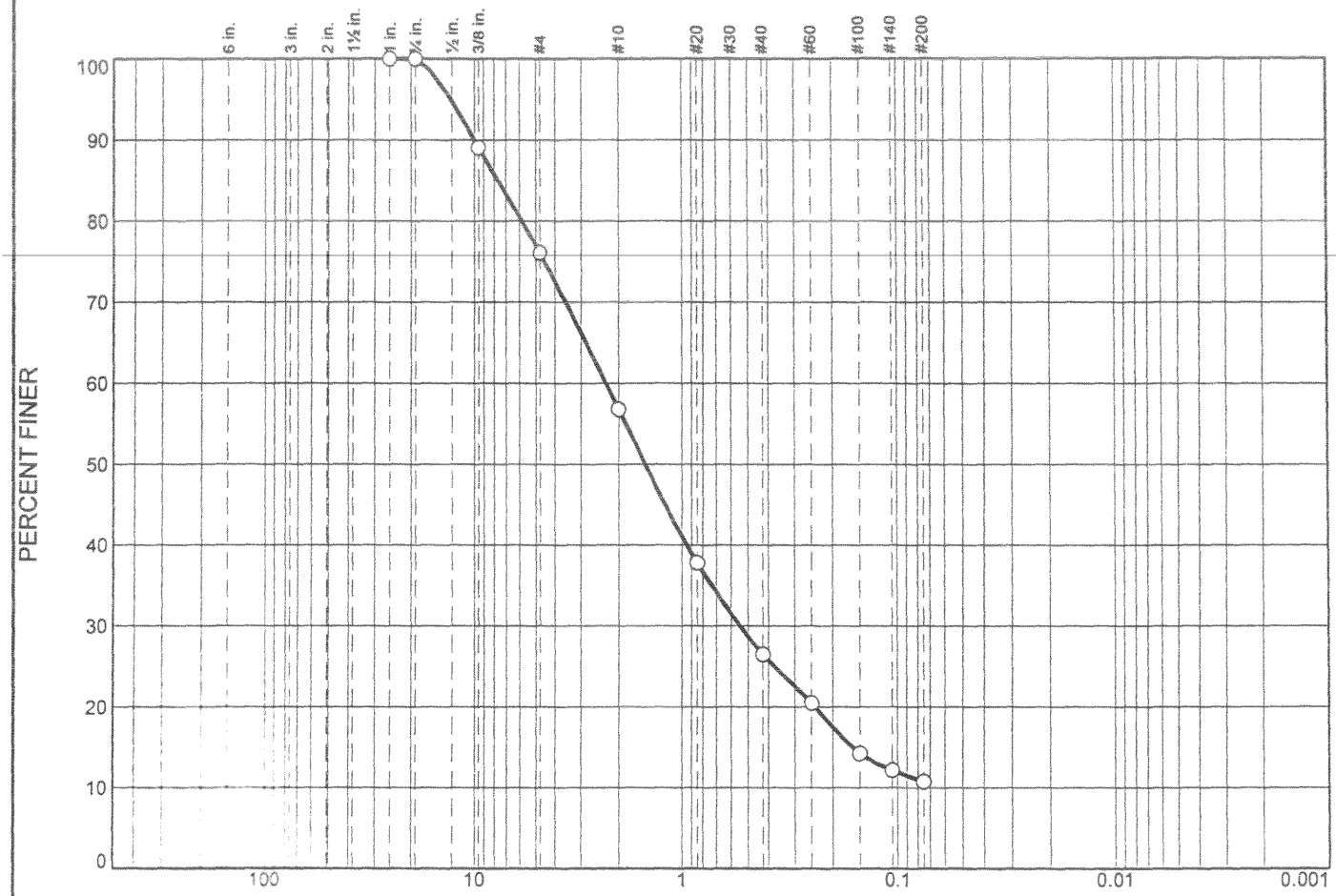
Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	24	19	30	16	11	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			7.6741	2.2908	1.4926	0.5453	0.1619			

Material Description	USCS	AASHTO
○ Well graded sand with silt and gravel	SW-SM	

Project No. 05-05-0013- **Client:** Black & Veatch

Project: E.A.A (Reservoir)

○ **Source of Sample:** CB-0179 **Depth:** 83.5' **Sample Number:** 18

Date: ○

Remarks:

○ Moisture Content % 20.0 CP05-EAARS-CB-0275

Nodarse & Associates, Inc.

Miami Lakes, FL

Figure

Tested By: Pedro Camaraza **Checked By:** Michael Brown