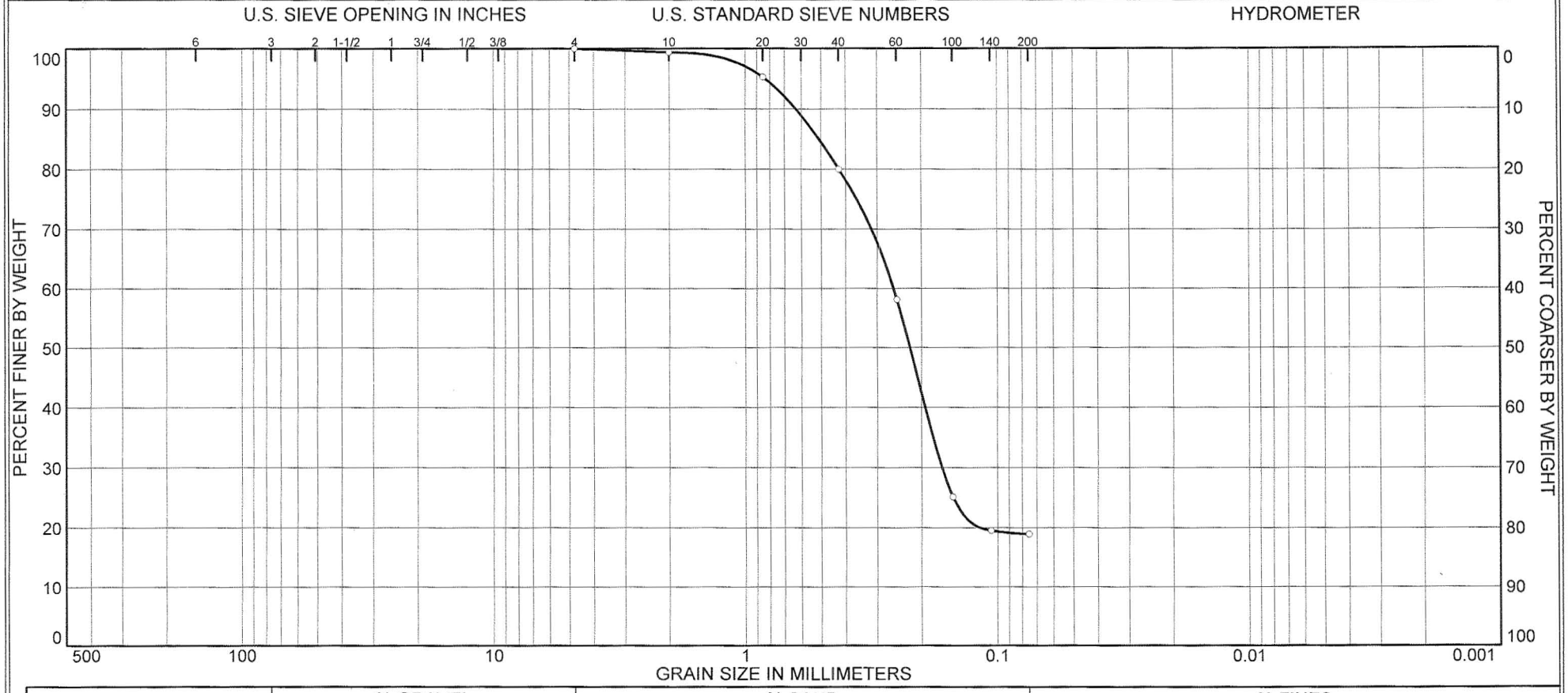
Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.6	19.4	61.1	18.9	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G1	G1-1	225.49'	N/A		Red Silty sand	10.8		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G1
Sample No.: G1-1
Elev. or Depth: 225.49' **Sample Length(in./cm.):** N/A
Location: G1-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 10.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	166.97
Tare =	0.00
Dry sample weight =	166.97

Tare for cumulative weight retained= .00

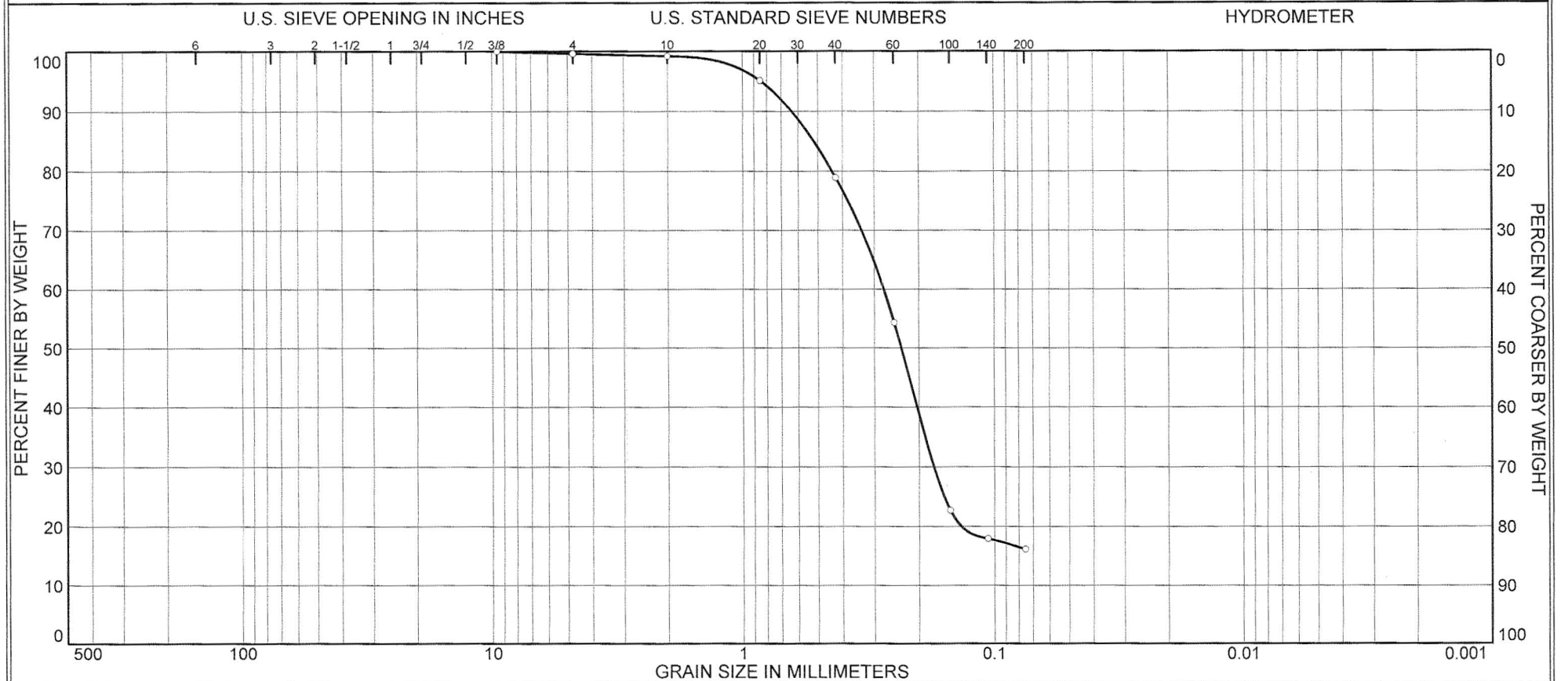
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.97	99.4
# 20	7.78	95.3
# 40	33.35	80.0
# 60	69.93	58.1
# 100	124.99	25.1
# 140	134.46	19.5
# 200	135.46	18.9

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 81.1 (% coarse = 0.6 % medium = 19.4 % fine = 61.1)
% FINES = 18.9

D_{85}= 0.51 D_{60}= 0.26 D_{50}= 0.22
D_{30}= 0.17

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.4	0.4	20.3	62.8	16.1	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G1	G1-2	225.44'	N/A		Red Silty sand	8.1		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: MD/SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G1
Sample No.: G1-2
Elev. or Depth: 225.44' **Sample Length(in./cm.):** N/A
Location: G1-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 8.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: MD/SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	206.37
Tare =	64.34
Dry sample weight =	142.03

Tare for cumulative weight retained= .00

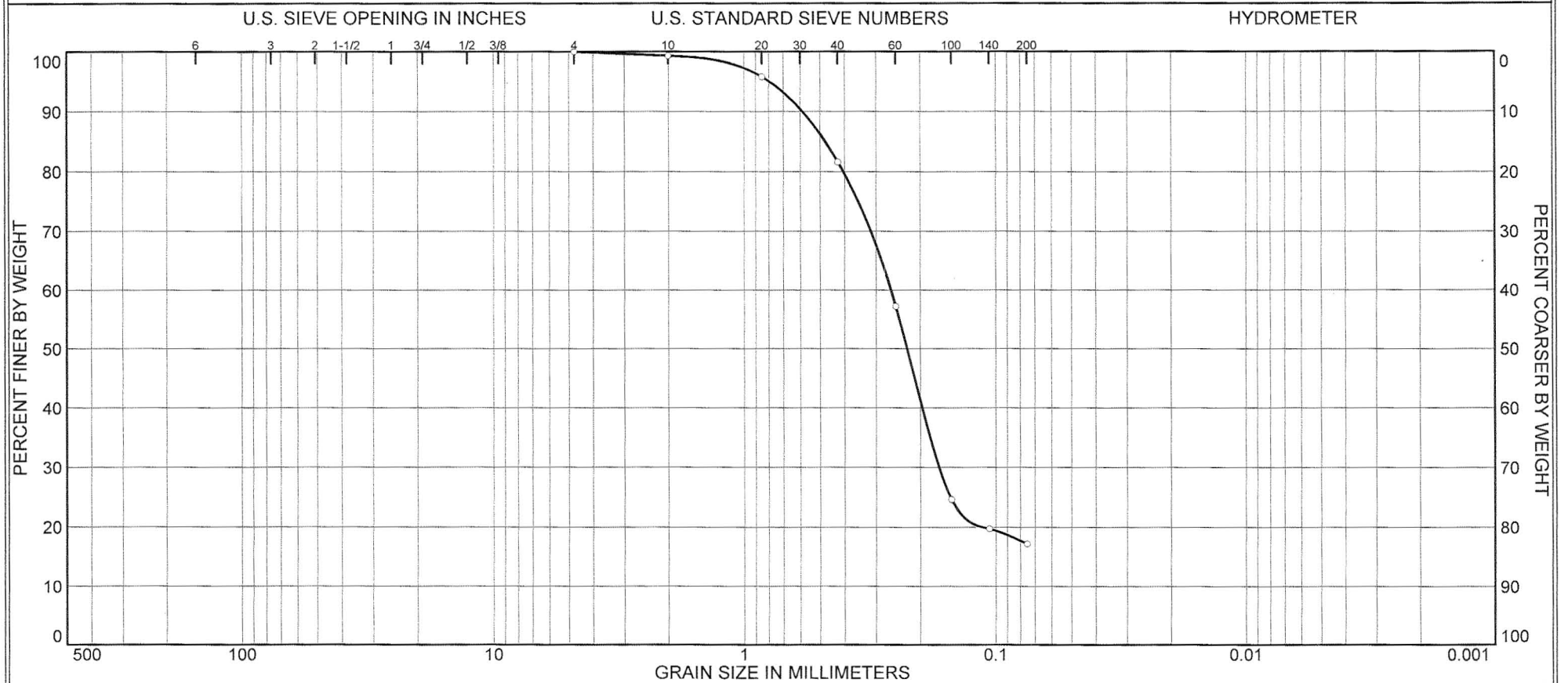
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.63	99.6
# 10	1.07	99.2
# 20	6.97	95.1
# 40	30.03	78.9
# 60	64.89	54.3
# 100	109.76	22.7
# 140	116.64	17.9
# 200	119.15	16.1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.4 (% coarse = % fine = 0.4)
% SAND = 83.5 (% coarse = 0.4 % medium = 20.3 % fine = 62.8)
% FINES = 16.1

D_{85}= 0.52 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.7	17.7	64.5	17.1	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G1	G1-4	225.31'	N/A		Red Silty sand	N/A	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G1
Sample No.: G1-4
Elev. or Depth: 225.31' **Sample Length(in./cm.):** N/A
Location: G1-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** N/A
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:**
Testing Remarks: Tested by: SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	199.45
Tare =	64.38
Dry sample weight =	135.07

Tare for cumulative weight retained= .00

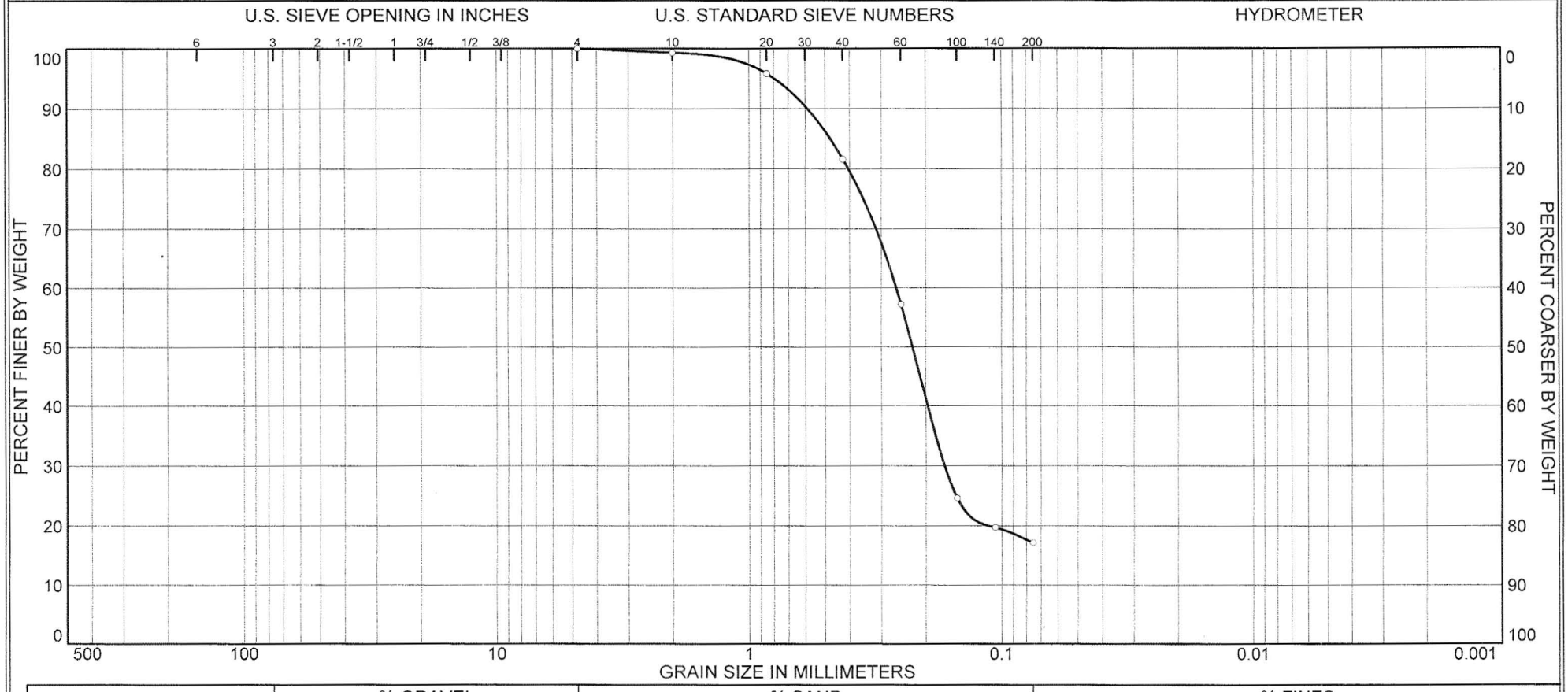
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.88	99.3
# 20	5.68	95.8
# 40	24.92	81.6
# 60	57.85	57.2
# 100	101.83	24.6
# 140	108.43	19.7
# 200	111.91	17.1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 82.9 (% coarse = 0.7 % medium = 17.7 % fine = 64.5)
% FINES = 17.1

D_{85}= 0.48 D_{60}= 0.26 D_{50}= 0.23
D_{30}= 0.17

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.7	17.7	64.5	17.1	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G1	G1-4	225.31'	N/A		Red Silty sand	N/A	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G1
Sample No.: G1-4
Elev. or Depth: 225.31' **Sample Length(in./cm.):** N/A
Location: G1-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** N/A
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:**
Testing Remarks: Tested by: SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	199.45
Tare =	64.38
Dry sample weight =	135.07

Tare for cumulative weight retained= .00

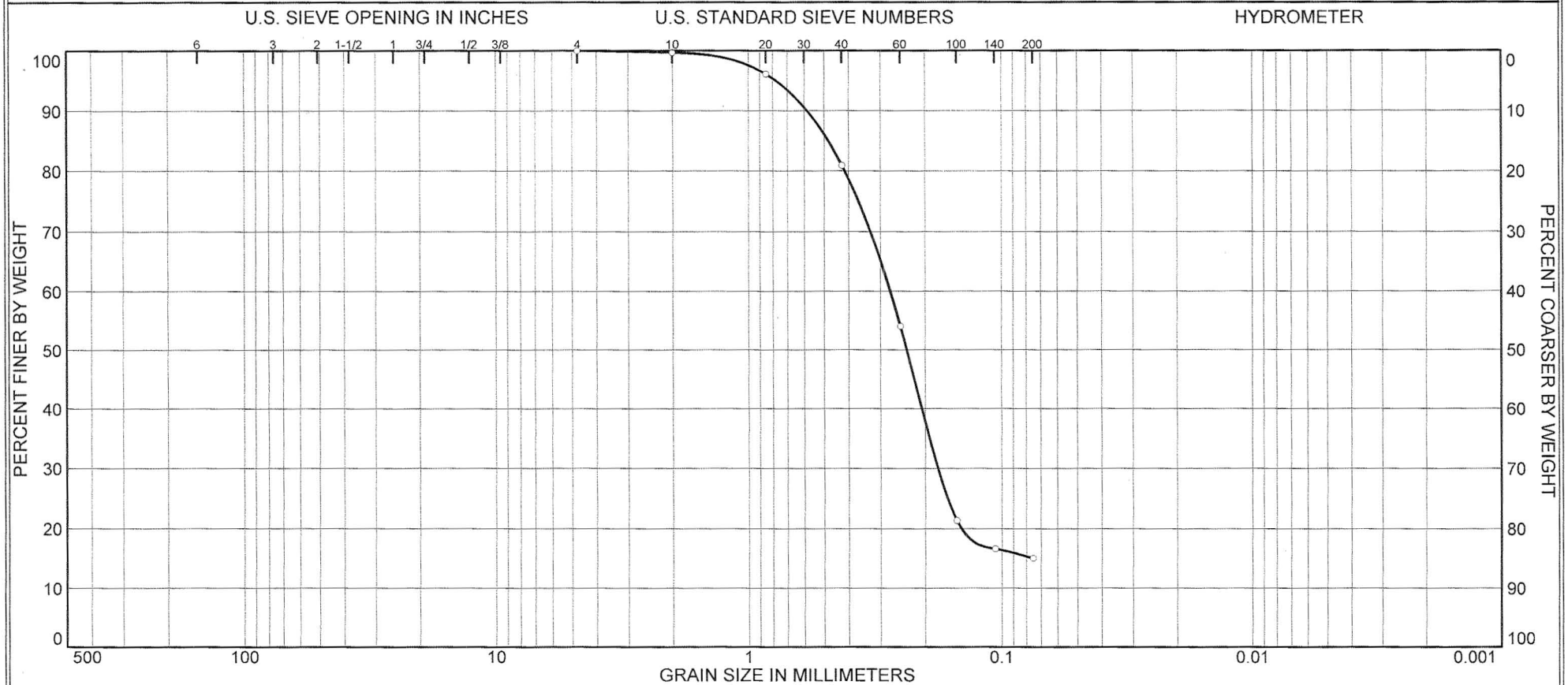
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.88	99.3
# 20	5.68	95.8
# 40	24.92	81.6
# 60	57.85	57.2
# 100	101.83	24.6
# 140	108.43	19.7
# 200	111.91	17.1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 82.9 (% coarse = 0.7 % medium = 17.7 % fine = 64.5)
% FINES = 17.1

D_{85}= 0.48 D_{60}= 0.26 D_{50}= 0.23
D_{30}= 0.17

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	18.8	65.9	15.0	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G2	G2-1	225.98'	N/A		Red Silty sand	5.8		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by:SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G2
Sample No.: G2-1
Elev. or Depth: 225.98' **Sample Length(in./cm.):** N/A
Location: G2-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by:SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	238.74
Tare =	83.72
Dry sample weight =	155.02

Tare for cumulative weight retained= .00

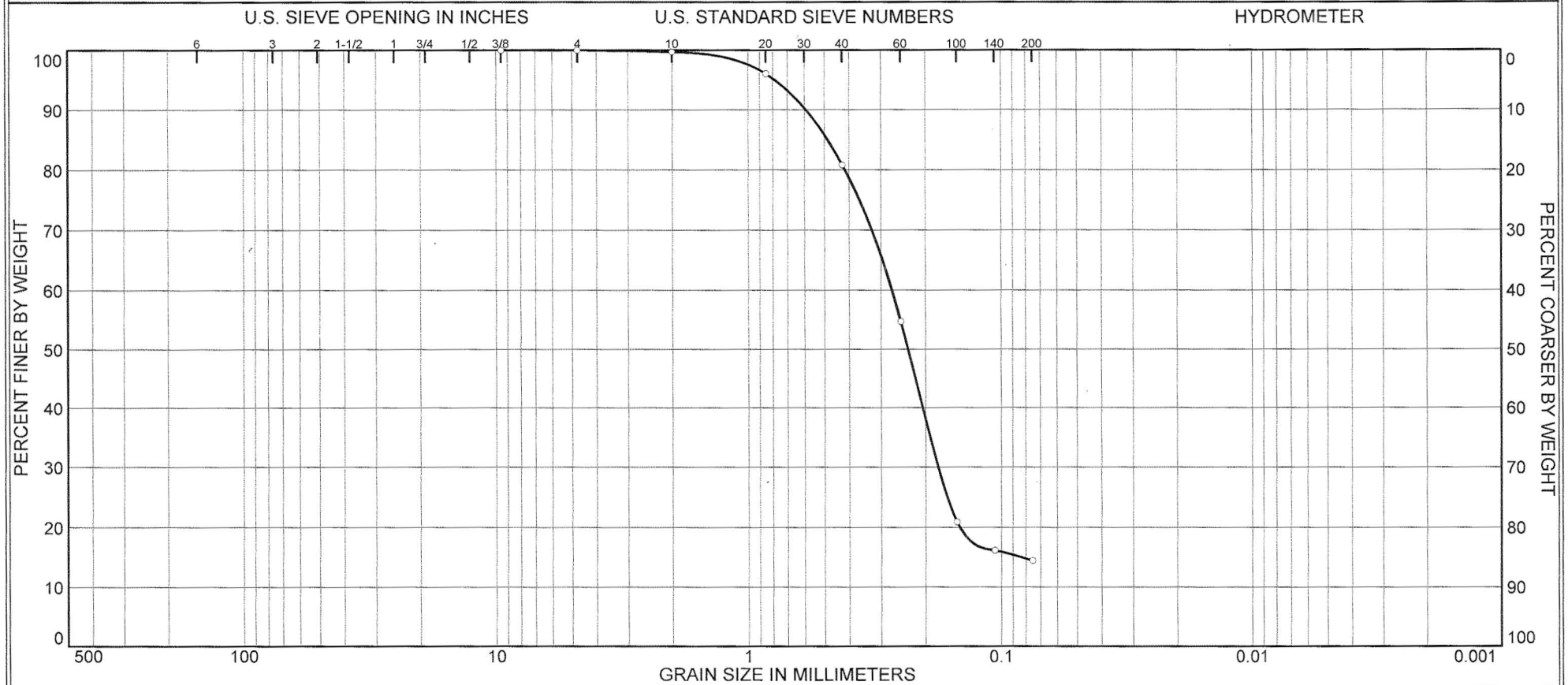
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.40	99.7
# 20	6.02	96.1
# 40	29.65	80.9
# 60	71.30	54.0
# 100	122.04	21.3
# 140	129.26	16.6
# 200	131.74	15.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.0 (% coarse = 0.3 % medium = 18.8 % fine = 65.9)
% FINES = 15.0

D_{85}= 0.48 D_{60}= 0.27 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	18.9	66.4	14.4	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G2	G2-2	225.77'	N/A		Red Silty sand	5.6		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G2
Sample No.: G2-2
Elev. or Depth: 225.77' **Sample Length(in./cm.):** N/A
Location: G2-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	199.75
Tare =	64.35
Dry sample weight =	135.40

Tare for cumulative weight retained= .00

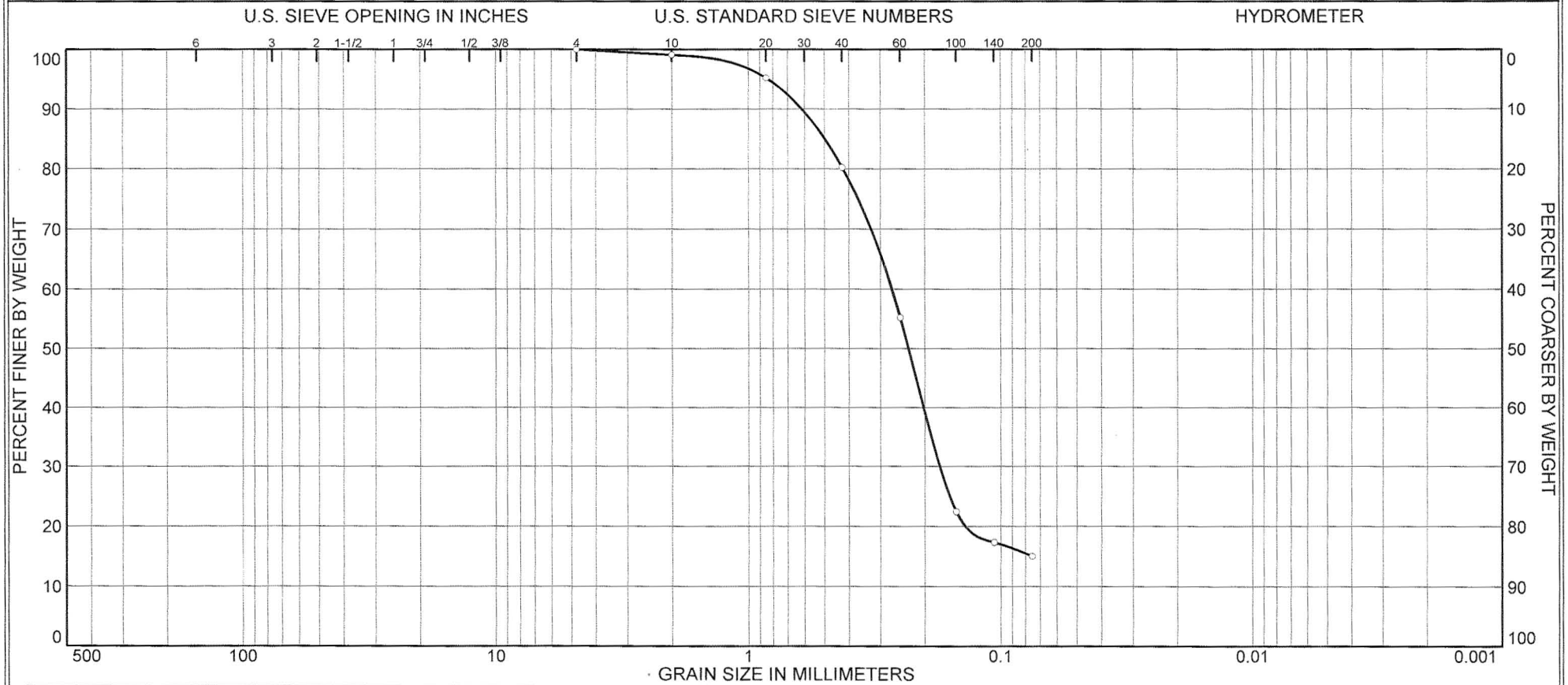
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.46	99.7
# 20	5.46	96.0
# 40	25.94	80.8
# 60	61.33	54.7
# 100	107.11	20.9
# 140	113.58	16.1
# 200	115.87	14.4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.6 (% coarse = 0.3 % medium = 18.9 % fine = 66.4)
% FINES = 14.4

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.9	18.9	65.2	15.0	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G2	G2-3	225.94'	N/A	SM	Red Silty sand	4.3	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G2
Sample No.: G2-3
Elev. or Depth: 225.94' **Sample Length(in./cm.):** N/A
Location: G2-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 4.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.81
Tare =	64.14
Dry sample weight =	136.67

Tare for cumulative weight retained= .00

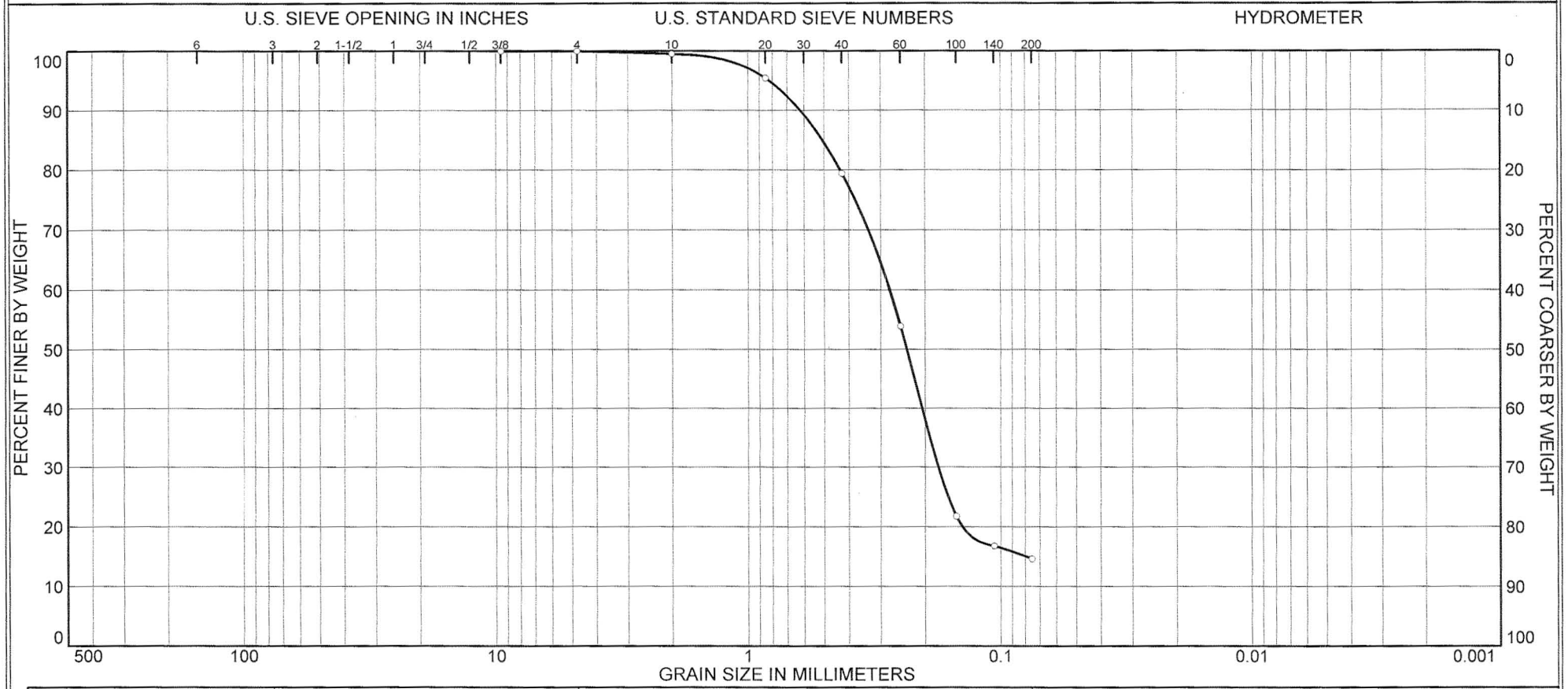
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	1.24	99.1
# 20	6.53	95.2
# 40	27.12	80.2
# 60	61.28	55.2
# 100	106.03	22.4
# 140	113.09	17.3
# 200	116.21	15.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.0 (% coarse = 0.9 % medium = 18.9 % fine = 65.2)
% FINES = 15.0

D_{85}= 0.50 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0.0	0.0	0.0	0.5	20.1	64.8	14.6	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	Test Pad Backfill G2	G2-4	225.98'	N/A		Red Silty sand	5.9		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G2
Sample No.: G2-4
Elev. or Depth: 225.98' **Sample Length(in./cm.):** N/A
Location: G2-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	204.90
Tare =	70.17
Dry sample weight =	134.73

Tare for cumulative weight retained= .00

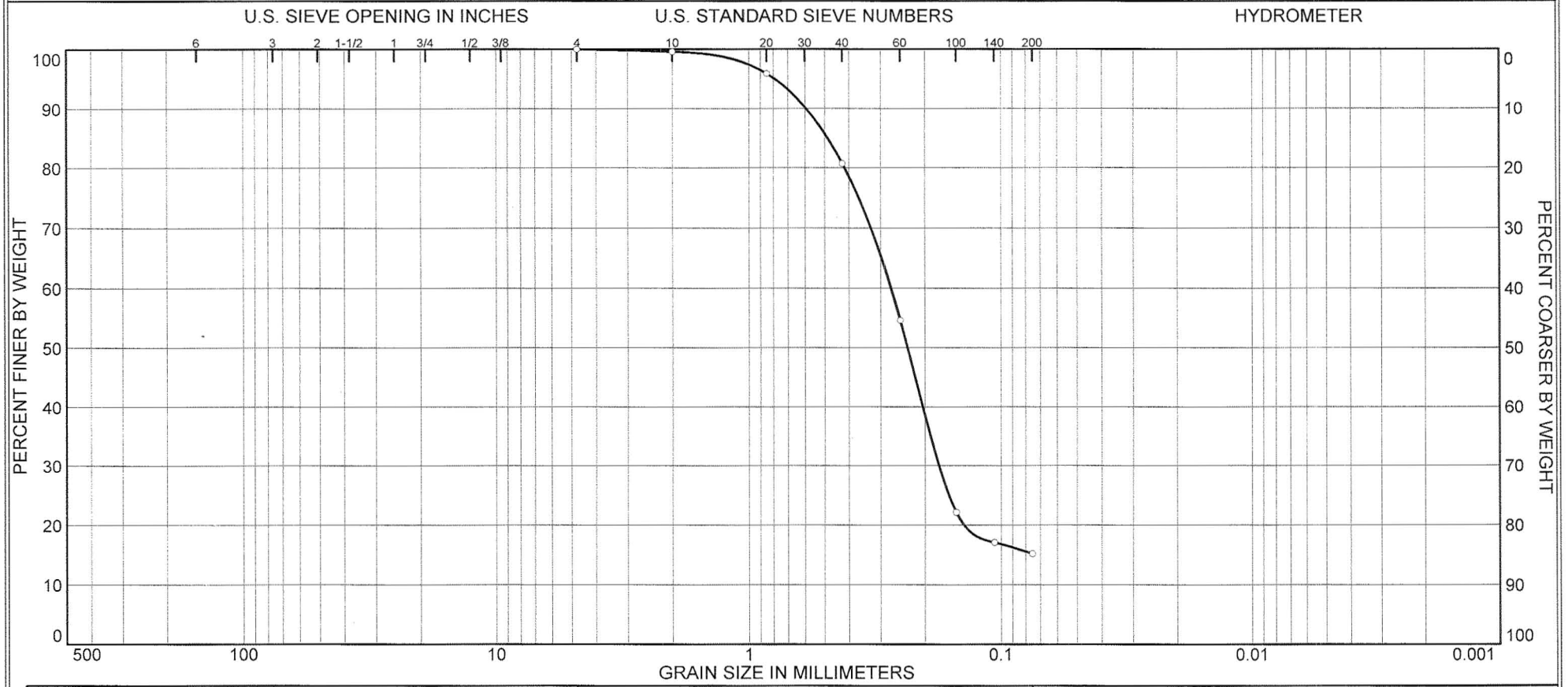
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.62	99.5
# 20	6.15	95.4
# 40	27.69	79.4
# 60	62.10	53.9
# 100	105.55	21.7
# 140	112.28	16.7
# 200	115.11	14.6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.4 (% coarse = 0.5 % medium = 20.1 % fine = 64.8)
% FINES = 14.6

D_{85}= 0.51 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	18.9	65.6	15.1	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G3	G3-1	226.32'	N/A		Red Silty sand	4.4		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G3
Sample No.: G3-1
Elev. or Depth: 226.32' **Sample Length(in./cm.):** N/A
Location: G3-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 4.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	199.20
Tare =	64.38
Dry sample weight =	134.82

Tare for cumulative weight retained= .00

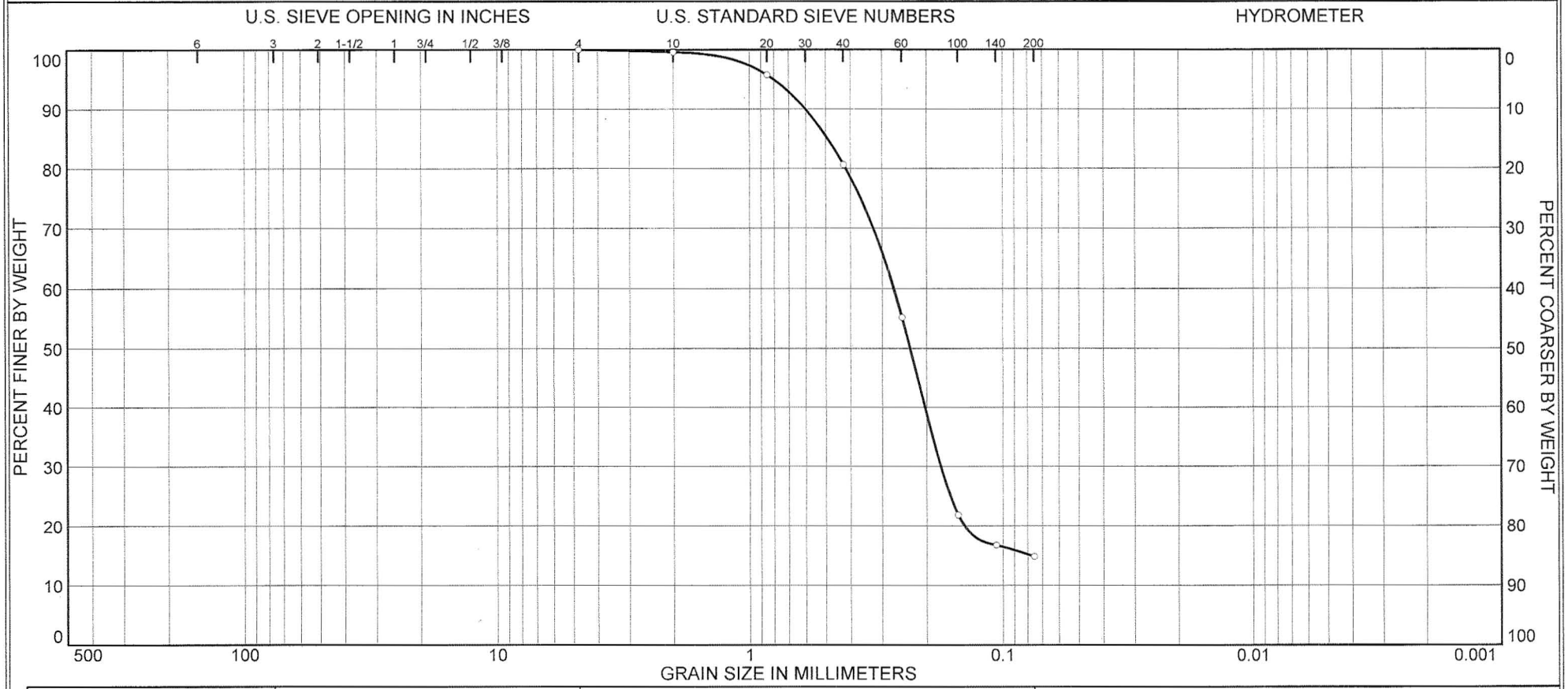
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.57	99.6
# 20	5.53	95.9
# 40	26.01	80.7
# 60	61.16	54.6
# 100	105.07	22.1
# 140	111.91	17.0
# 200	114.42	15.1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 84.9 (% coarse = 0.4 % medium = 18.9 % fine = 65.6)
% FINES = 15.1

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.18

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	19.0	65.8	14.8	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G3	G3-2	226.34'	N/A		Red Silty sand	5.1		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: MD/SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G3
Sample No.: G3-2
Elev. or Depth: 226.34' **Sample Length(in./cm.):** N/A
Location: G3-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: MD/SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	198.49
Tare =	64.18
Dry sample weight =	134.31

Tare for cumulative weight retained= .00

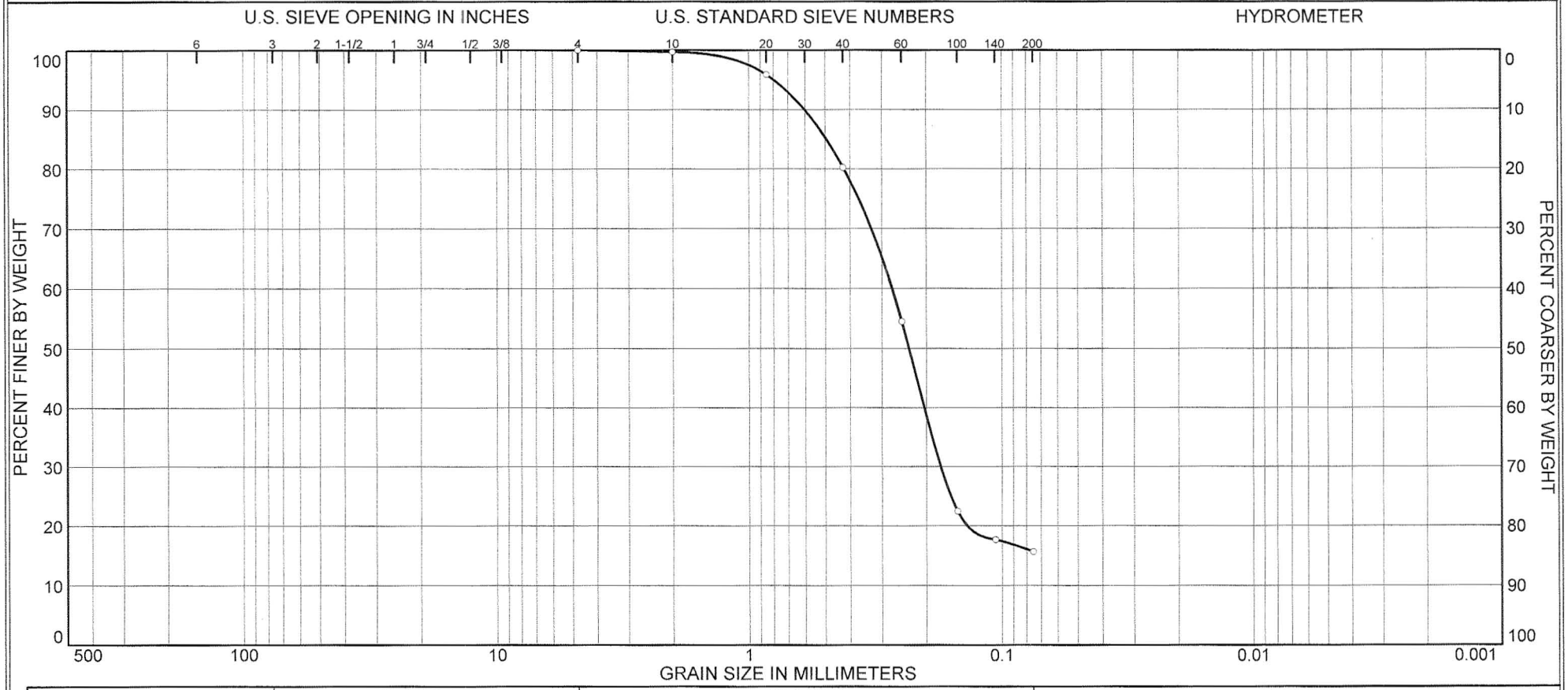
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.52	99.6
# 20	5.67	95.8
# 40	26.08	80.6
# 60	60.23	55.2
# 100	105.06	21.8
# 140	111.85	16.7
# 200	114.45	14.8

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.2 (% coarse = 0.4 % medium = 19.0 % fine = 65.8)
% FINES = 14.8

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	19.5	64.6	15.6	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G3	G3-3	226.36'	N/A	SM	Red Silty sand	5.8	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G3
Sample No.: G3-3
Elev. or Depth: 226.36' **Sample Length(in./cm.):** N/A
Location: G3-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.8
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	206.13
Tare =	70.17
Dry sample weight =	135.96

Tare for cumulative weight retained= .00

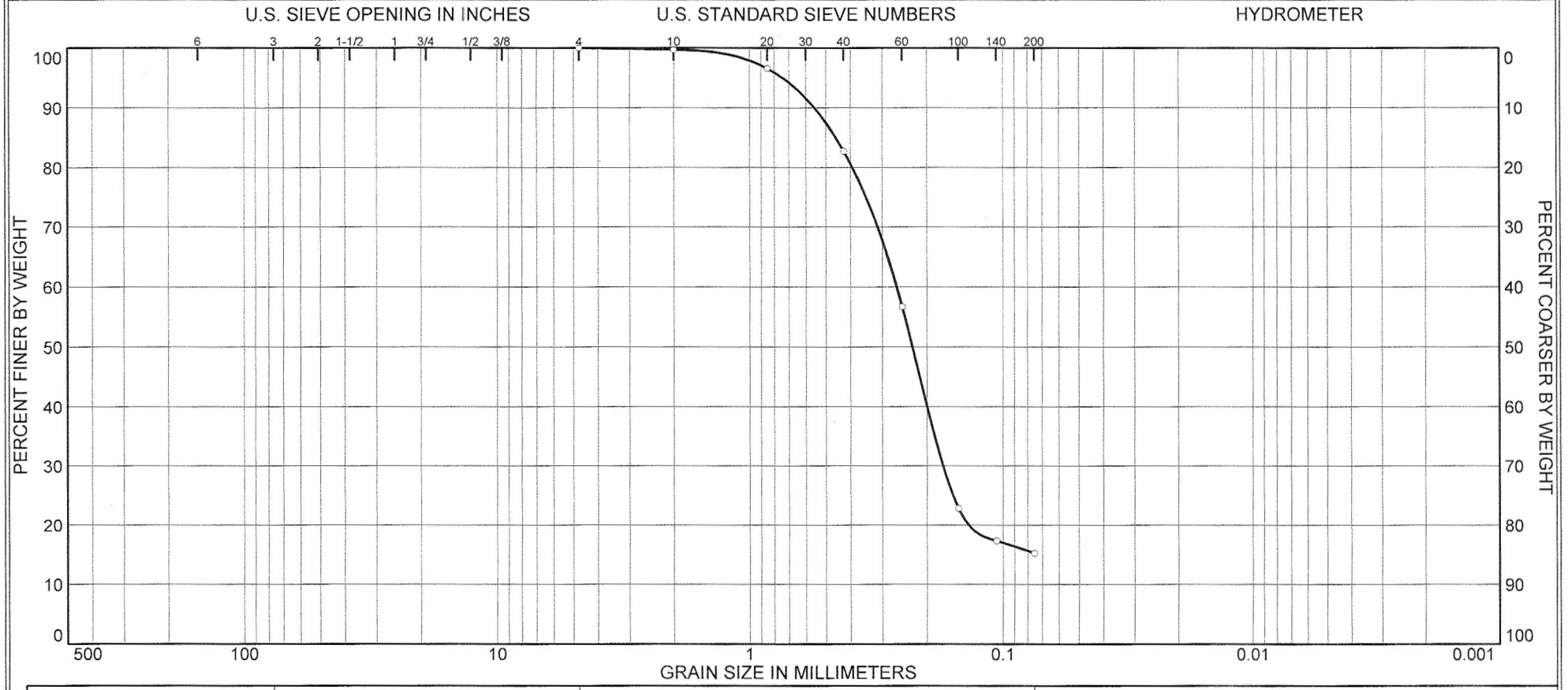
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.36	99.7
# 20	5.60	95.9
# 40	26.95	80.2
# 60	61.89	54.5
# 100	105.45	22.4
# 140	111.99	17.6
# 200	114.74	15.6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 84.4 (% coarse = 0.3 % medium = 19.5 % fine = 64.6)
% FINES = 15.6

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.18

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	17.0	67.5	15.2	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G3	G3-4	226.42'	N/A		Red Silty sand	5.4		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G3
Sample No.: G3-4
Elev. or Depth: 226.42' **Sample Length(in./cm.):** N/A
Location: G3-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.65
Tare =	64.30
Dry sample weight =	136.35

Tare for cumulative weight retained= .00

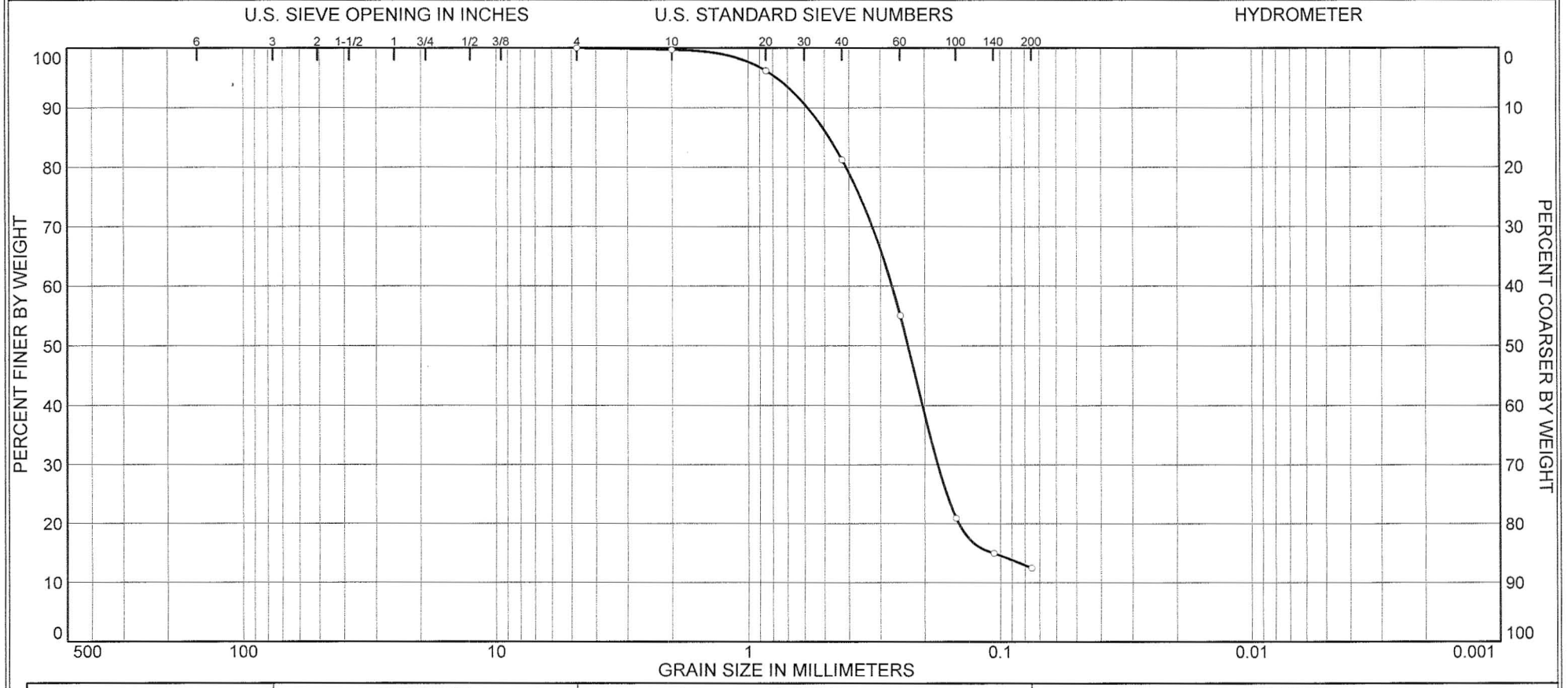
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.41	99.7
# 20	4.59	96.6
# 40	23.53	82.7
# 60	59.10	56.7
# 100	105.24	22.8
# 140	112.80	17.3
# 200	115.58	15.2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 84.8 (% coarse = 0.3 % medium = 17.0 % fine = 67.5)
% FINES = 15.2

D_{85}= 0.46 D_{60}= 0.26 D_{50}= 0.23
D_{30}= 0.17

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	18.5	68.8	12.4	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G4	G4-1	226.86'	N/A		Red Silty sand	5.3		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by; SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G4
Sample No.: G4-1
Elev. or Depth: 226.86' **Sample Length(in./cm.):** N/A
Location: G4-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by; SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	198.92
Tare =	64.34
Dry sample weight =	134.58

Tare for cumulative weight retained= .00

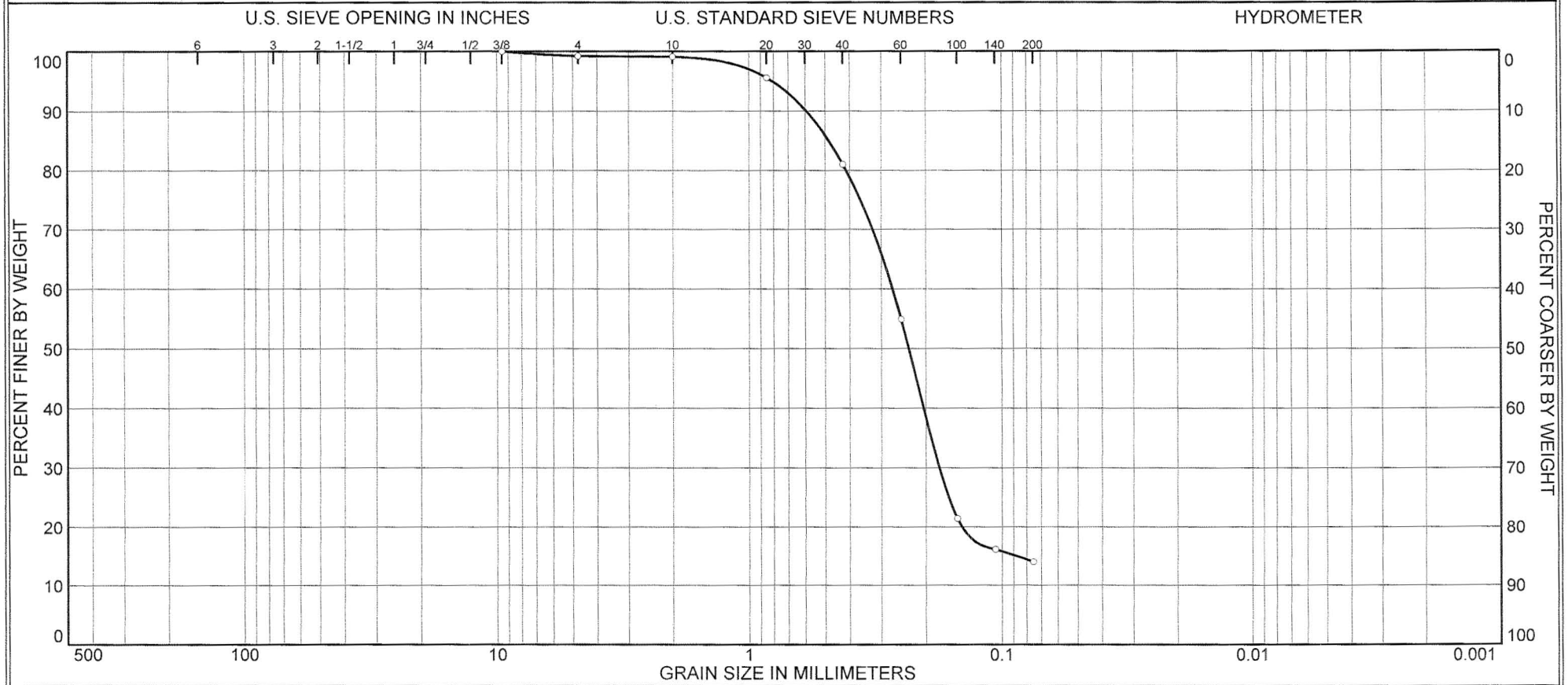
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.41	99.7
# 20	5.08	96.2
# 40	25.28	81.2
# 60	60.61	55.0
# 100	106.48	20.9
# 140	114.50	14.9
# 200	117.88	12.4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 87.6 **(% coarse =** 0.3 **% medium =** 18.5 **% fine =** 68.8**)**
% FINES = 12.4

D_{85}= 0.48 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.18 D_{15}= 0.11

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.8	0.1	18.1	67.0	14.0	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G4	G4-2	226.86'	N/A	SM	Red Silty sand	6.4	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G4
Sample No.: G4-2
Elev. or Depth: 226.86' **Sample Length(in./cm.):** N/A
Location: G4-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 6.4
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	202.49
Tare =	64.16
Dry sample weight =	138.33

Tare for cumulative weight retained= .00

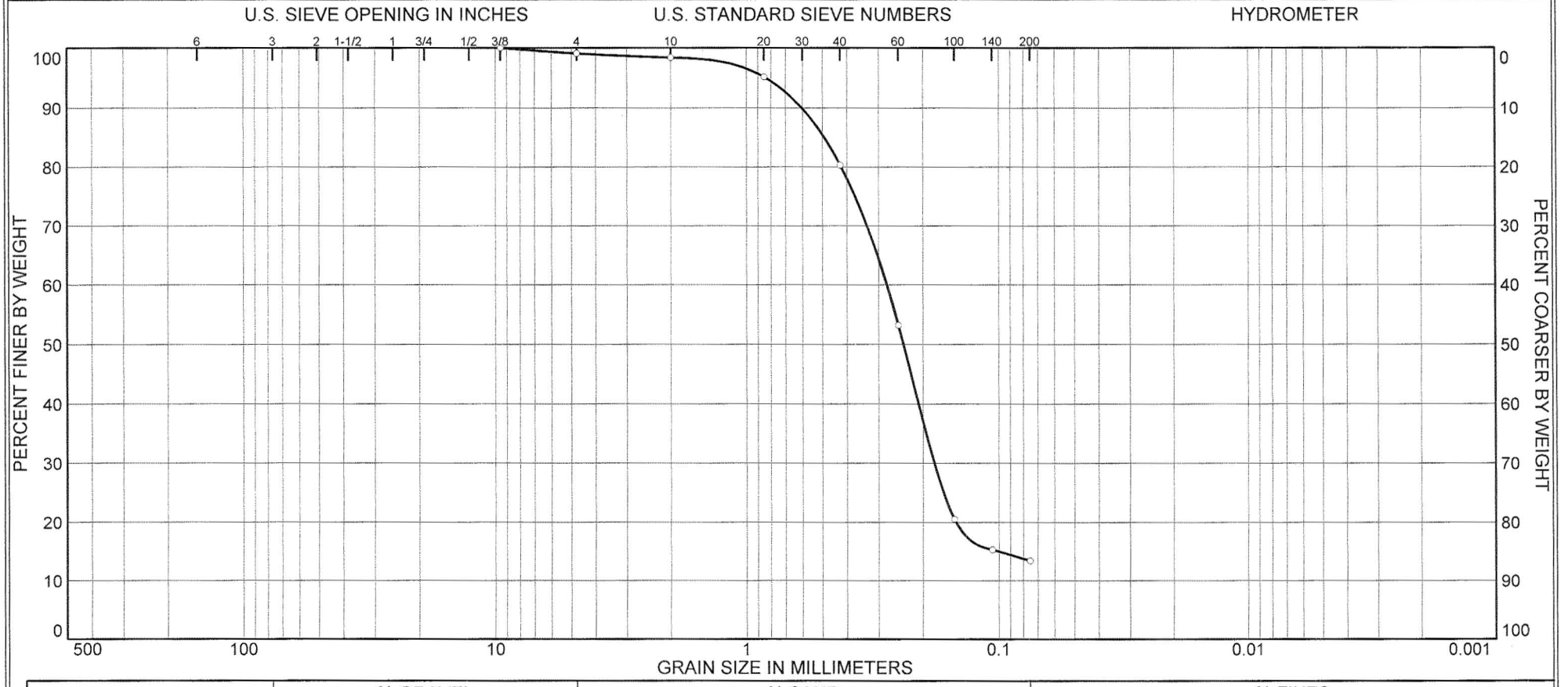
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.05	99.2
# 10	1.27	99.1
# 20	6.09	95.6
# 40	26.31	81.0
# 60	62.36	54.9
# 100	108.71	21.4
# 140	115.99	16.1
# 200	118.92	14.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 0.8 **(% coarse =** **% fine =** 0.8)
% SAND = 85.2 **(% coarse =** 0.1 **% medium =** 18.1 **% fine =** 67.0)
% FINES = 14.0

D_{85}= 0.48 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.18 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.9	0.7	18.1	66.9	13.4	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G4	G4-3	227.09'	N/A		Red Silty sand	5.9		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G4
Sample No.: G4-3
Elev. or Depth: 227.09' **Sample Length(in./cm.):** N/A
Location: G4-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.25
Tare =	70.18
Dry sample weight =	130.07

Tare for cumulative weight retained= .00

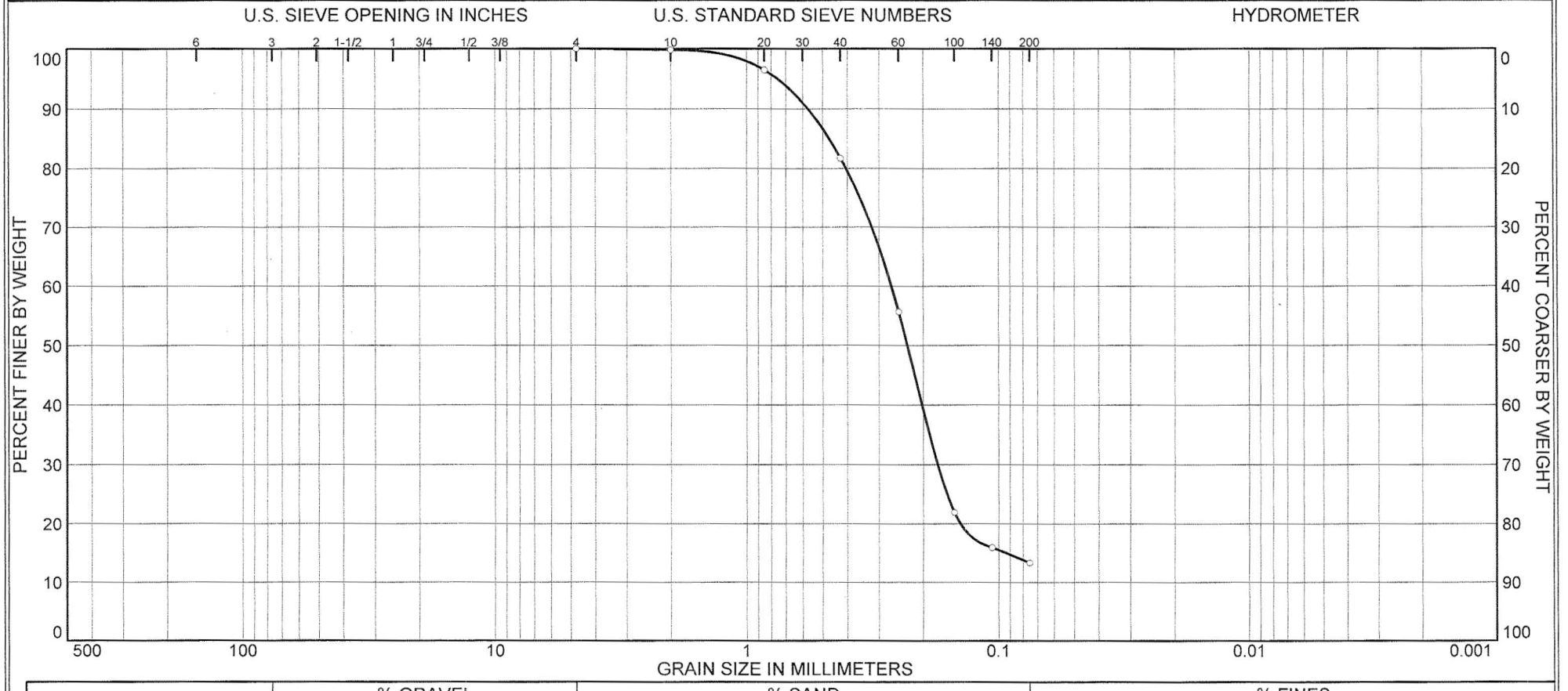
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.18	99.1
# 10	2.04	98.4
# 20	6.27	95.2
# 40	25.56	80.3
# 60	60.86	53.2
# 100	103.37	20.5
# 140	110.22	15.3
# 200	112.70	13.4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.9 (% coarse = % fine = 0.9)
% SAND = 85.7 (% coarse = 0.7 % medium = 18.1 % fine = 66.9)
% FINES = 13.4

D_{85}= 0.49 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.10

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.2	18.1	68.4	13.3	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G4	G4-4	227.02'	N/A		Red Silty sand	5.6		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G4
Sample No.: G4-4
Elev. or Depth: 227.02' **Sample Length(in./cm.):** N/A
Location: G4-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 5.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	201.50
Tare =	64.32
Dry sample weight =	137.18

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.22	99.8
# 20	4.83	96.5
# 40	25.16	81.7
# 60	60.97	55.6
# 100	107.14	21.9
# 140	115.41	15.9
# 200	118.94	13.3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 86.7 (% coarse = 0.2 % medium = 18.1 % fine = 68.4)
% FINES = 13.3

D_{85}= 0.47 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.09

Particle Size Distribution Report

% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	21.2	63.9	14.6	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G5	G5-1	227.44'	N/A	SM	Red Silty sand	7.9	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by:SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G5
Sample No.: G5-1
Elev. or Depth: 227.44' **Sample Length(in./cm.):** N/A
Location: G5-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by:SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	216.74
Tare =	83.00
Dry sample weight =	133.74

Tare for cumulative weight retained= .00

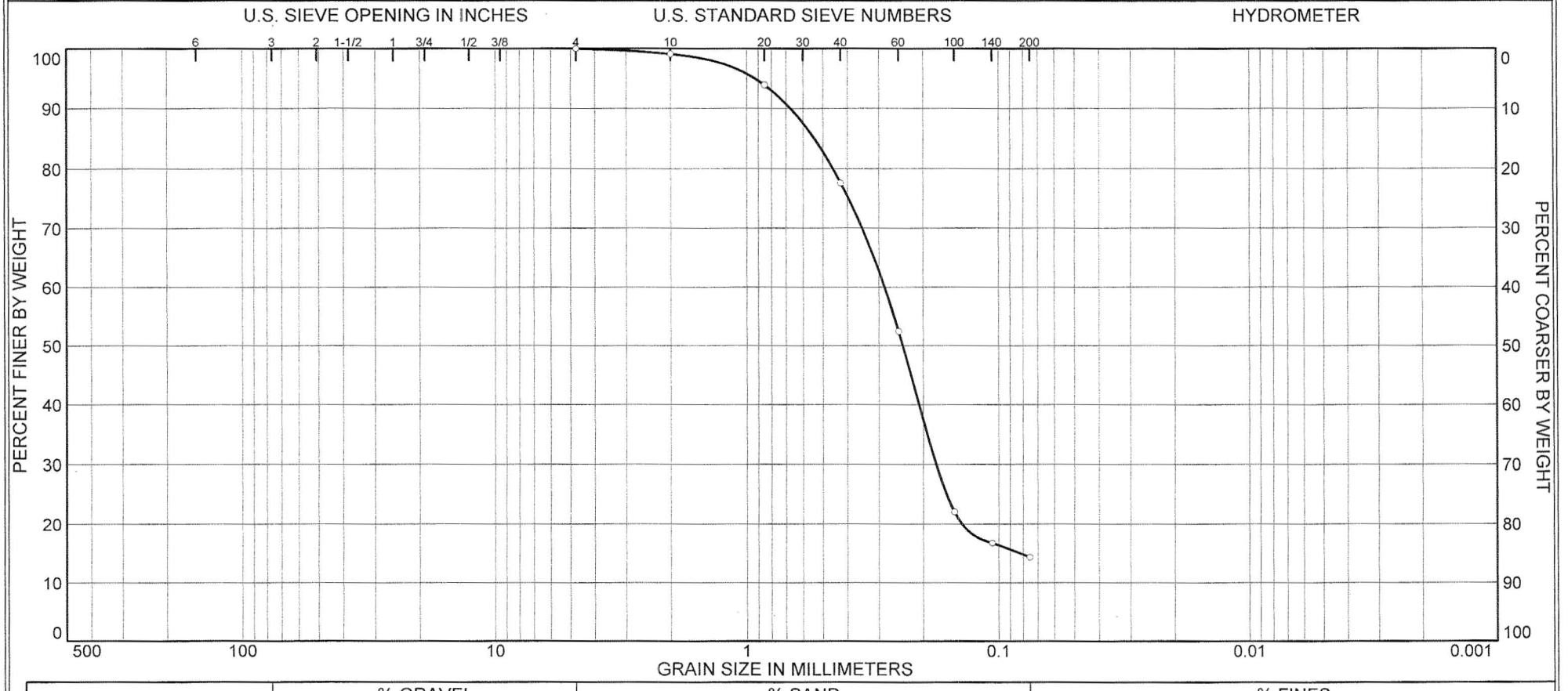
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.38	99.7
# 20	6.58	95.1
# 40	28.76	78.5
# 60	63.95	52.2
# 100	104.27	22.0
# 140	111.51	16.6
# 200	114.25	14.6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.4 (% coarse = 0.3 % medium = 21.2 % fine = 63.9)
% FINES = 14.6

D_{85}= 0.52 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.9	21.5	63.3	14.3	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G5	G5-2	227.32'	N/A		Red Silty sand	8.2		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G5
Sample No.: G5-2
Elev. or Depth: 227.32' **Sample Length(in./cm.):** N/A
Location: G5-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 8.2
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	204.06
Tare =	70.19
Dry sample weight =	133.87

Tare for cumulative weight retained= .00

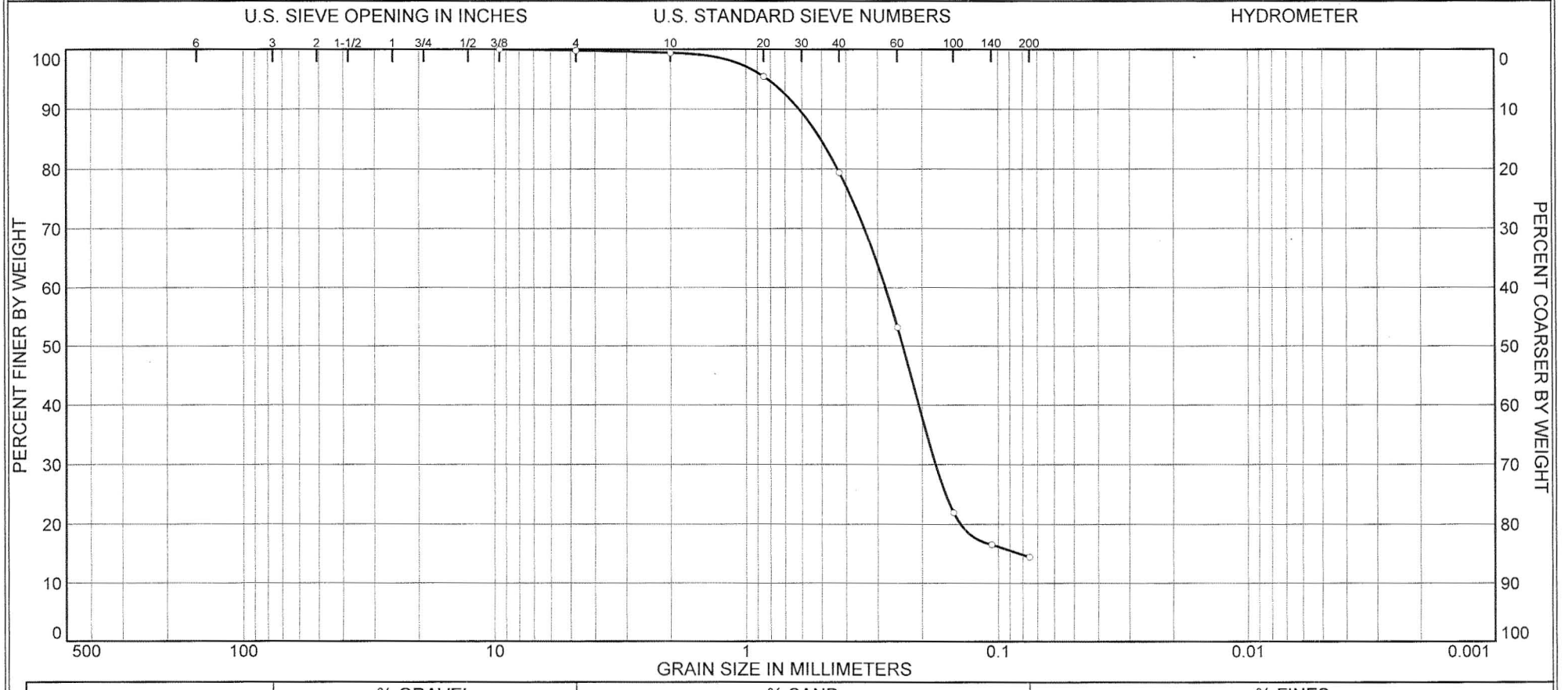
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	1.21	99.1
# 20	8.22	93.9
# 40	30.03	77.6
# 60	63.77	52.4
# 100	104.43	22.0
# 140	111.58	16.7
# 200	114.72	14.3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.7 (% coarse = 0.9 % medium = 21.5 % fine = 63.3)
% FINES = 14.3

D_{85}= 0.54 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.2	0.4	20.0	65.0	14.4	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G5	G5-3	227.44'	N/A		Red Silty sand	6.5		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G5
Sample No.: G5-3
Elev. or Depth: 227.44' **Sample Length(in./cm.):** N/A
Location: G5-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 6.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	201.82
Tare =	64.32
Dry sample weight =	137.50

Tare for cumulative weight retained= .00

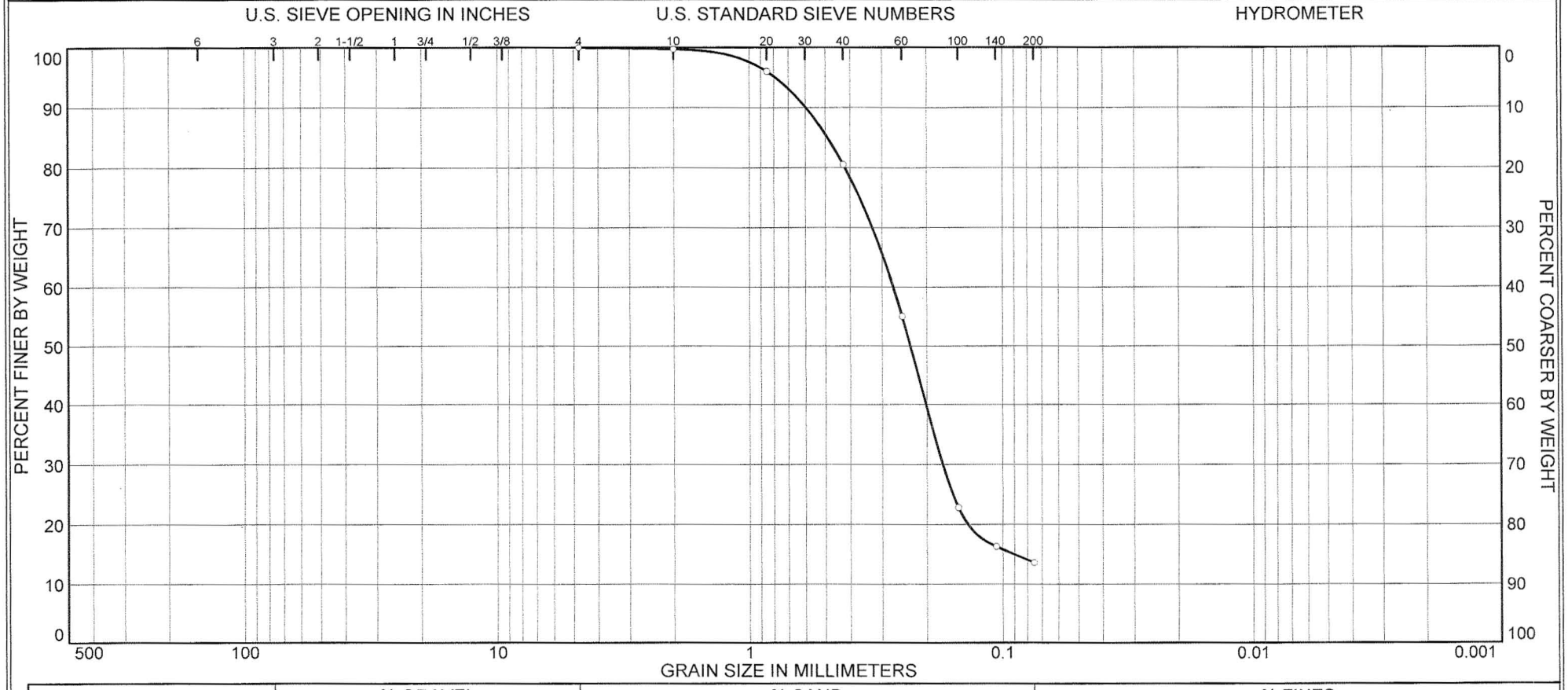
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.29	99.8
# 10	0.78	99.4
# 20	6.22	95.5
# 40	28.36	79.4
# 60	64.29	53.2
# 100	107.40	21.9
# 140	114.82	16.5
# 200	117.68	14.4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 0.2 **(% coarse =** **% fine =** 0.2)
% SAND = 85.4 **(% coarse =** 0.4 **% medium =** 20.0 **% fine =** 65.0)
% FINES = 14.4

D_{85}= 0.50 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	19.2	66.9	13.6	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G5	G5-4	227.05'	N/A		Red Silty sand	6.7		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G5
Sample No.: G5-4
Elev. or Depth: 227.05' **Sample Length(in./cm.):** N/A
Location: G5-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 6.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	218.63
Tare =	83.01
Dry sample weight =	135.62

Tare for cumulative weight retained= .00

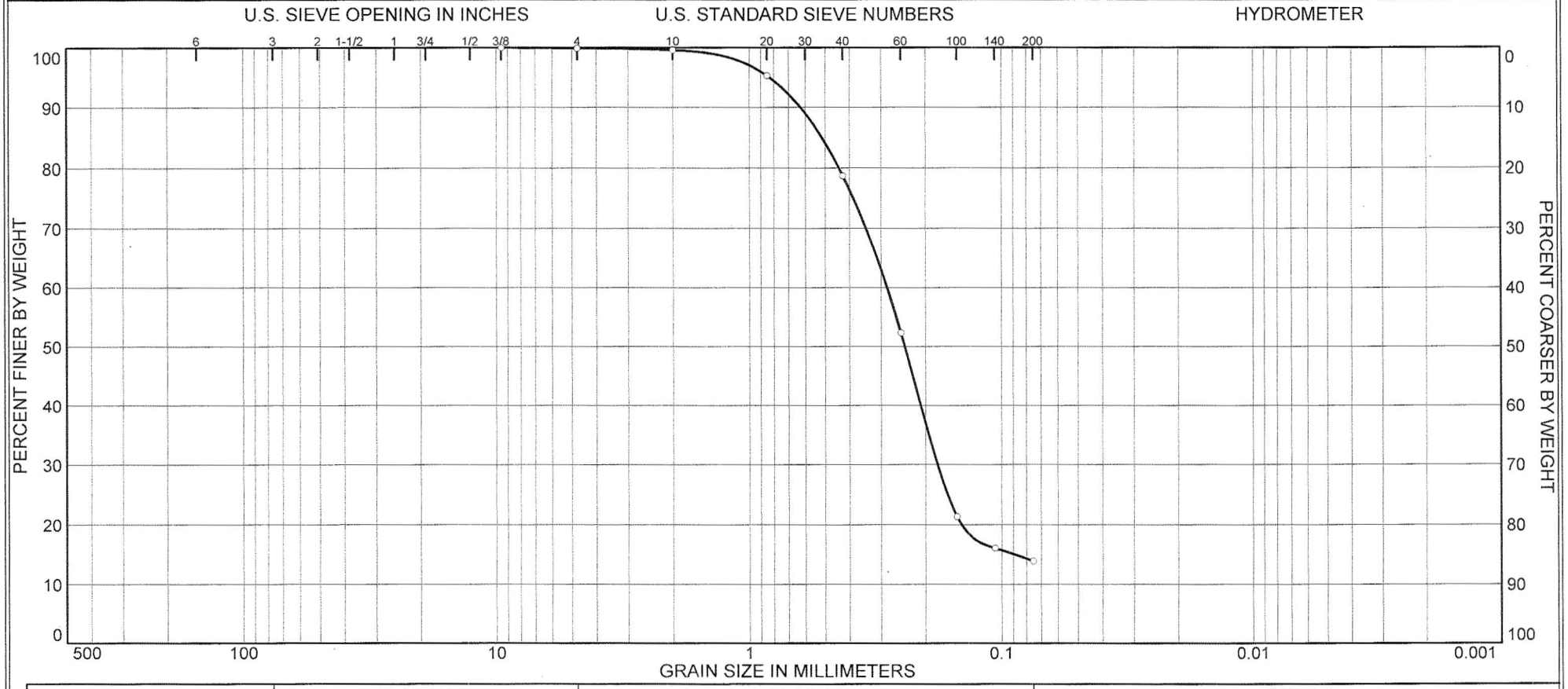
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.47	99.7
# 20	5.43	96.0
# 40	26.41	80.5
# 60	61.03	55.0
# 100	104.72	22.8
# 140	113.48	16.3
# 200	117.21	13.6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 86.4 (% coarse = 0.3 % medium = 19.2 % fine = 66.9)
% FINES = 13.6

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.1	0.3	20.9	64.8	13.9	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G6	G6-1	228.04'	N/A		Red Silty sand	7.7		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G6
Sample No.: G6-1
Elev. or Depth: 228.04' **Sample Length(in./cm.):** N/A
Location: G6-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	198.93
Tare =	64.39
Dry sample weight =	134.54

Tare for cumulative weight retained= .00

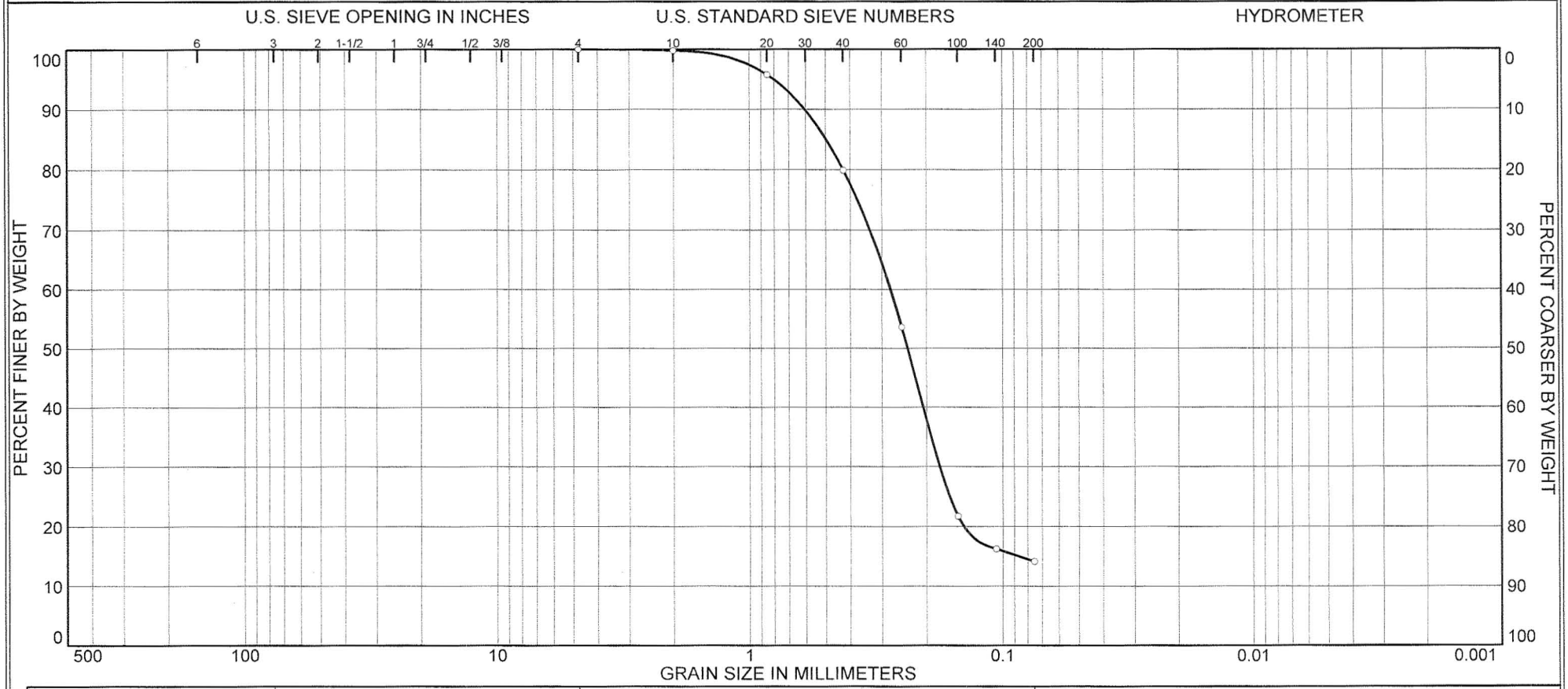
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.19	99.9
# 10	0.54	99.6
# 20	6.31	95.3
# 40	28.71	78.7
# 60	64.21	52.3
# 100	105.82	21.3
# 140	113.06	16.0
# 200	115.89	13.9

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 0.1 **(% coarse =** **% fine =** 0.1)
% SAND = 86.0 **(% coarse =** 0.3 **% medium =** 20.9 **% fine =** 64.8)
% FINES = 13.9

D_{85}= 0.51 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.2	19.9	65.8	14.1	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G6	G6-2	228.08'	N/A		Red Silty sand	7.4		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G6
Sample No.: G6-2
Elev. or Depth: 228.08' **Sample Length(in./cm.):** N/A
Location: G6-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	201.05
Tare =	64.20
Dry sample weight =	136.85

Tare for cumulative weight retained= .00

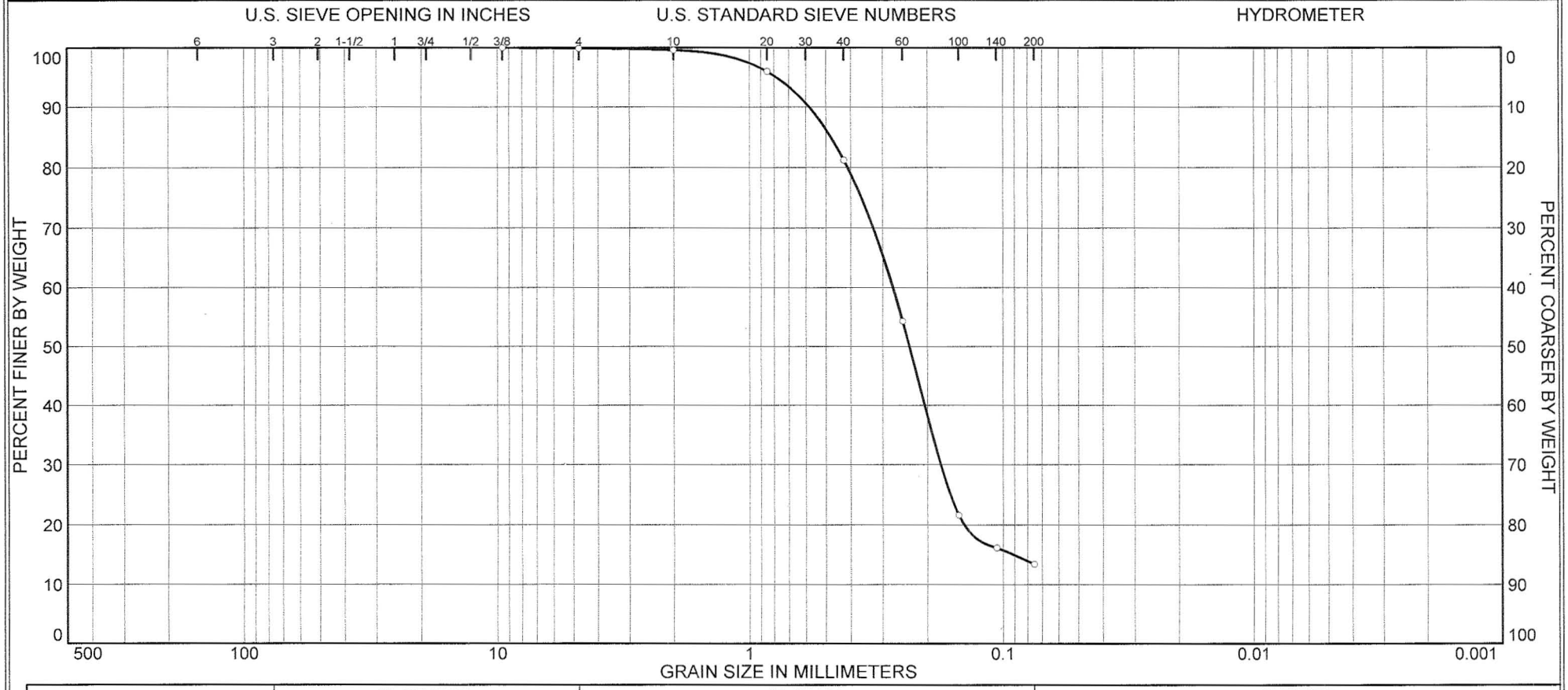
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.31	99.8
# 20	5.69	95.8
# 40	27.47	79.9
# 60	63.51	53.6
# 100	107.17	21.7
# 140	114.67	16.2
# 200	117.56	14.1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.9 (% coarse = 0.2 % medium = 19.9 % fine = 65.8)
% FINES = 14.1

D_{85}= 0.50 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.1	0.3	18.4	67.8	13.4	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G6	G6-3	228.12'	N/A		Red Silty sand	7.1		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G6
Sample No.: G6-3
Elev. or Depth: 228.12' **Sample Length(in./cm.):** N/A
Location: G6-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	209.60
Tare =	70.20
Dry sample weight =	139.40

Tare for cumulative weight retained= .00

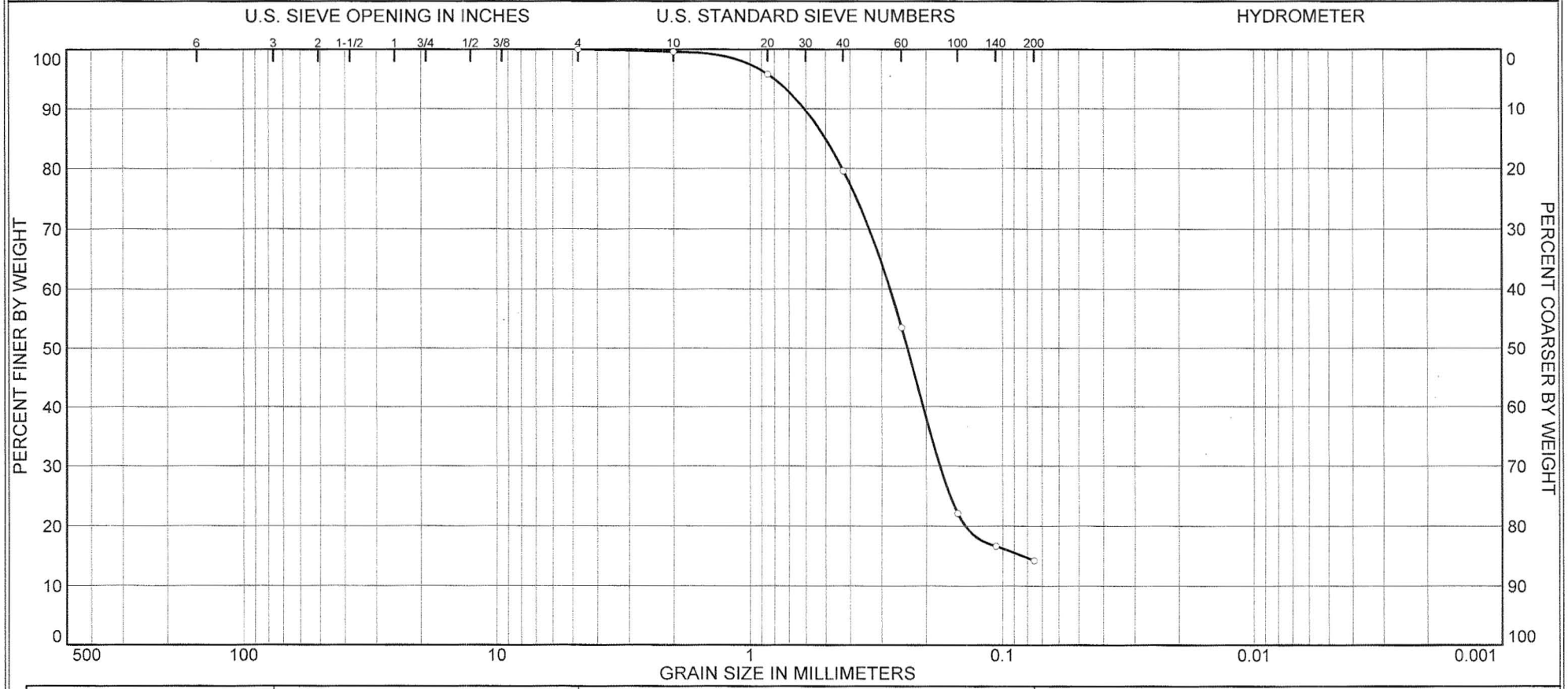
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.17	99.9
# 10	0.50	99.6
# 20	5.57	96.0
# 40	26.26	81.2
# 60	63.70	54.3
# 100	109.29	21.6
# 140	117.01	16.1
# 200	120.69	13.4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.1 (% coarse = % fine = 0.1)
% SAND = 86.5 (% coarse = 0.3 % medium = 18.4 % fine = 67.8)
% FINES = 13.4

D_{85}= 0.48 D_{60}= 0.27 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	20.0	65.4	14.2	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G6	G6-4	228.09'	N/A	SM	Red Silty sand	6.9	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G6
Sample No.: G6-4
Elev. or Depth: 228.09' **Sample Length(in./cm.):** N/A
Location: G6-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 6.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.46
Tare =	64.32
Dry sample weight =	136.14

Tare for cumulative weight retained= .00

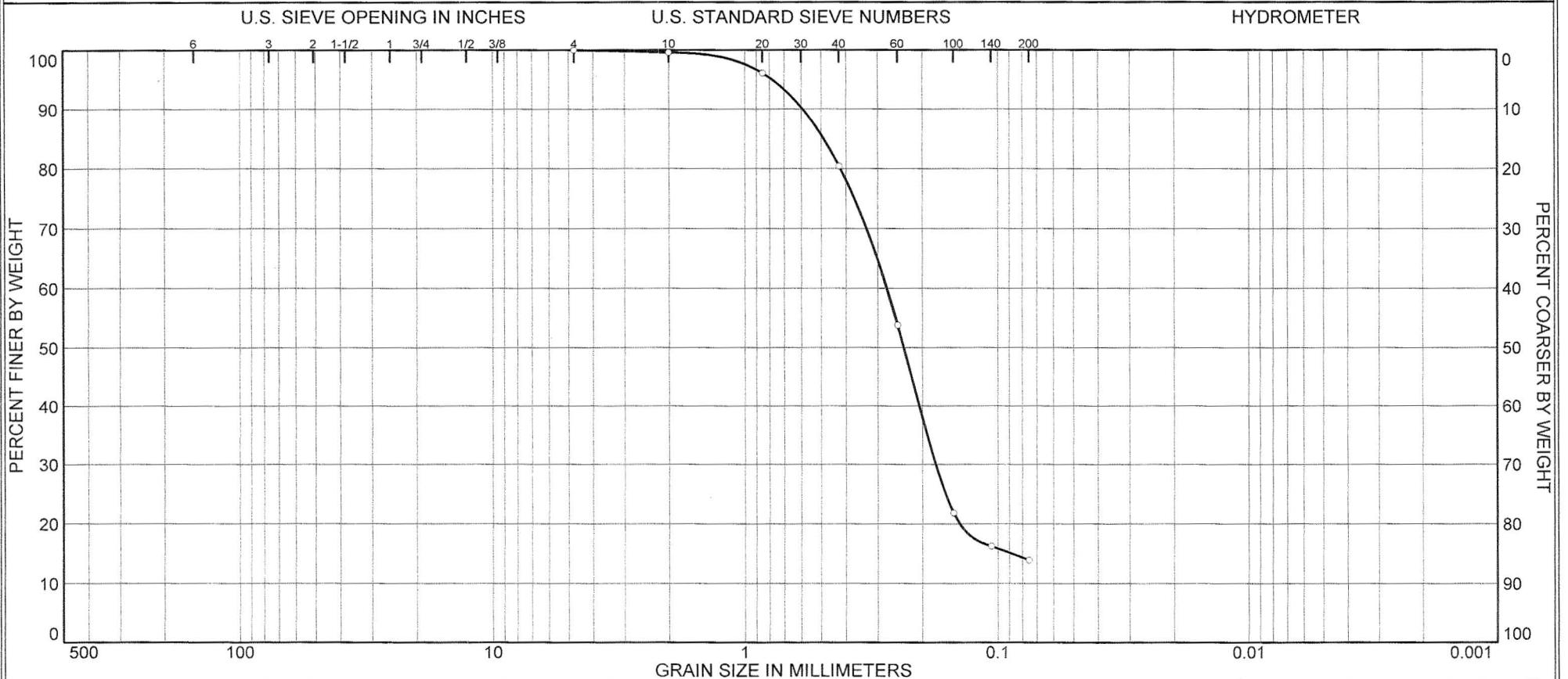
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.56	99.6
# 20	5.68	95.8
# 40	27.82	79.6
# 60	63.28	53.5
# 100	106.10	22.1
# 140	113.53	16.6
# 200	116.87	14.2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.8 (% coarse = 0.4 % medium = 20.0 % fine = 65.4)
% FINES = 14.2

D_{85}= 0.50 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	19.2	66.5	13.9	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G7	G7-1	228.41'	N/A		Red Silty sand	6.1		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G7
Sample No.: G7-1
Elev. or Depth: 228.41' **Sample Length(in./cm.):** N/A
Location: G7-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 6.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	199.97
Tare =	64.43
Dry sample weight =	135.54

Tare for cumulative weight retained= .00

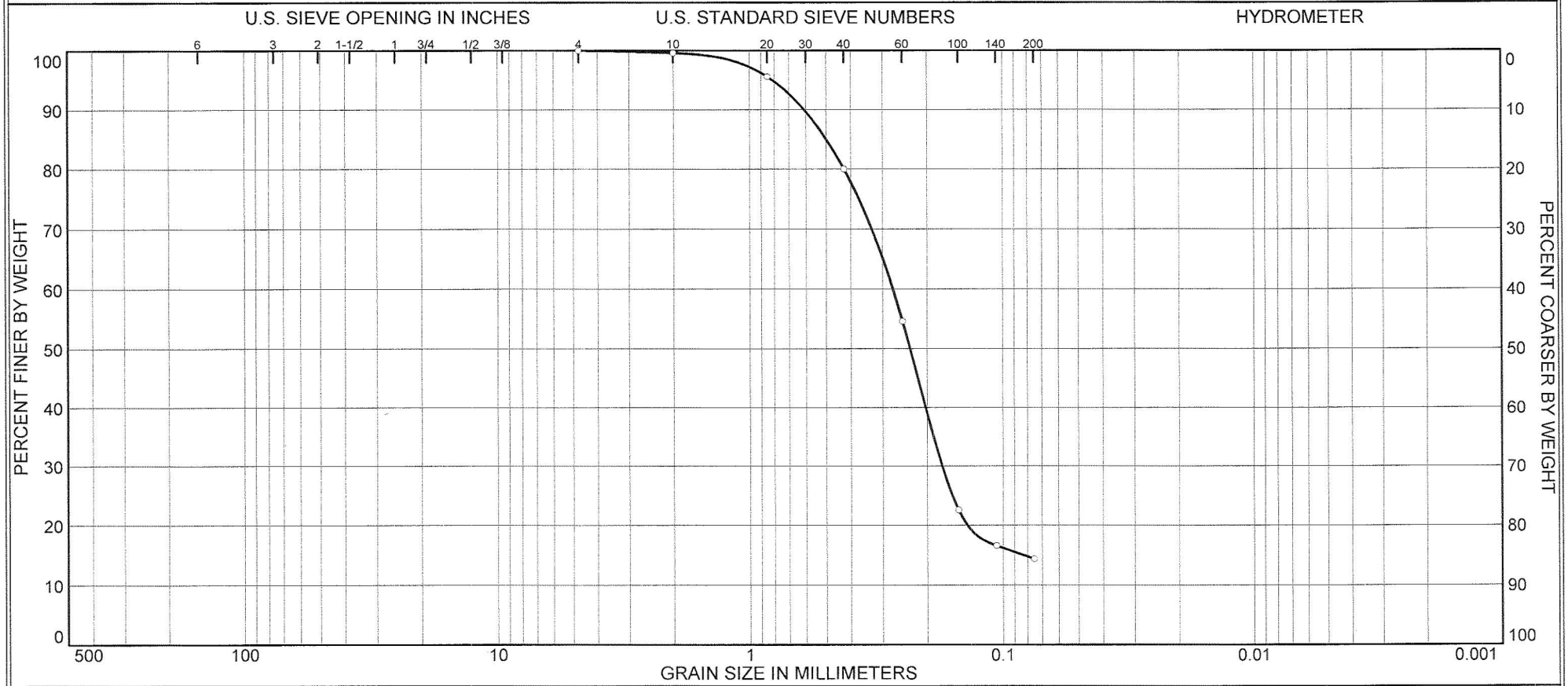
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.52	99.6
# 20	5.33	96.1
# 40	26.63	80.4
# 60	62.68	53.8
# 100	105.96	21.8
# 140	113.65	16.2
# 200	116.65	13.9

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 86.1 (% coarse = 0.4 % medium = 19.2 % fine = 66.5)
% FINES = 13.9

D_{85}= 0.49 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	19.6	65.7	14.3	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G7	G7-2	228.37'	N/A	SM	Red Silty sand	7.6	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G7
Sample No.: G7-2
Elev. or Depth: 228.37' **Sample Length(in./cm.):** N/A
Location: G7-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.62
Tare =	64.30
Dry sample weight =	136.32

Tare for cumulative weight retained= .00

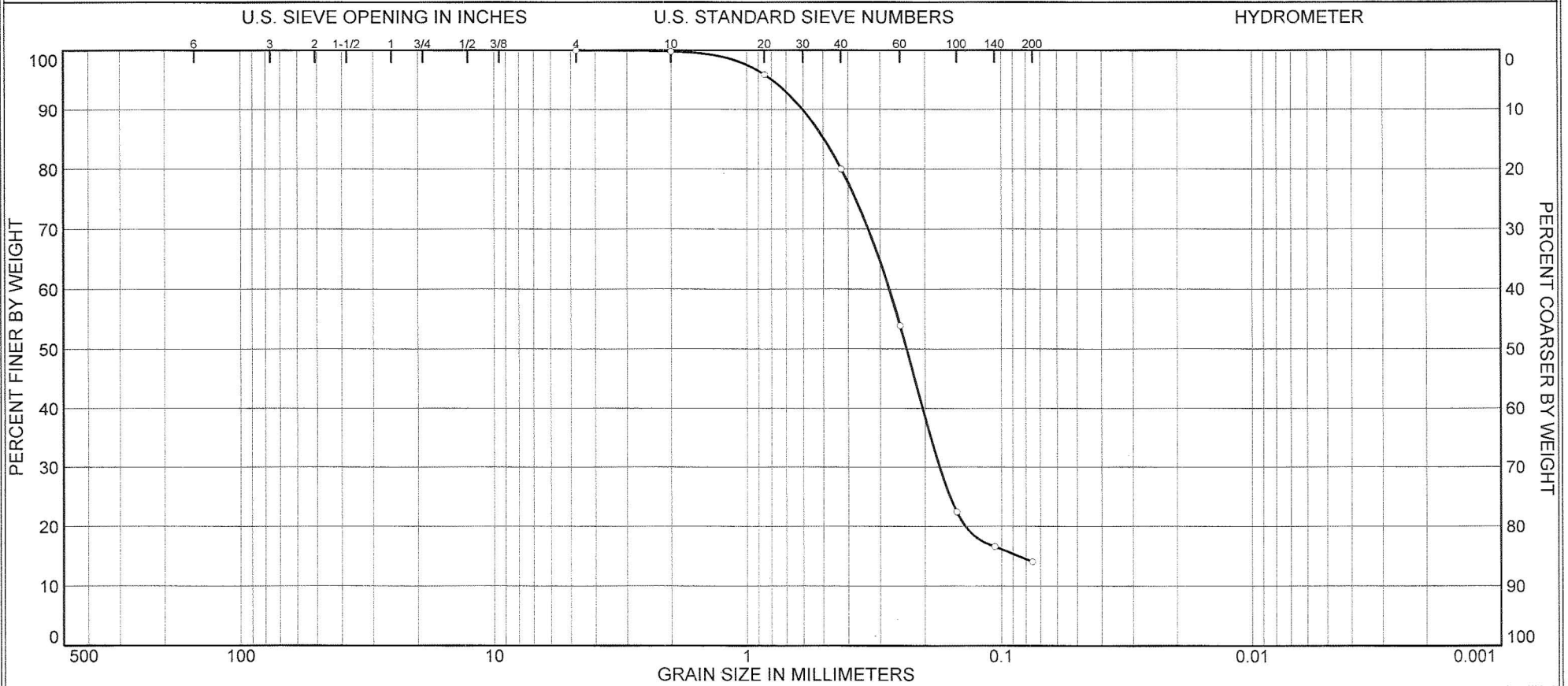
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.52	99.6
# 20	5.99	95.6
# 40	27.24	80.0
# 60	61.89	54.6
# 100	105.63	22.5
# 140	113.78	16.5
# 200	116.79	14.3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.7 (% coarse = 0.4 % medium = 19.6 % fine = 65.7)
% FINES = 14.3

D_{85}= 0.50 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.2	19.8	66.0	14.0	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G7	G7-3	228.50'	N/A		Red Silty sand	9.7		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: MD/SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G7
Sample No.: G7-3
Elev. or Depth: 228.50' **Sample Length(in./cm.):** N/A
Location: G7-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 9.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: MD/SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	209.06
Tare =	70.33
Dry sample weight =	138.73

Tare for cumulative weight retained= .00

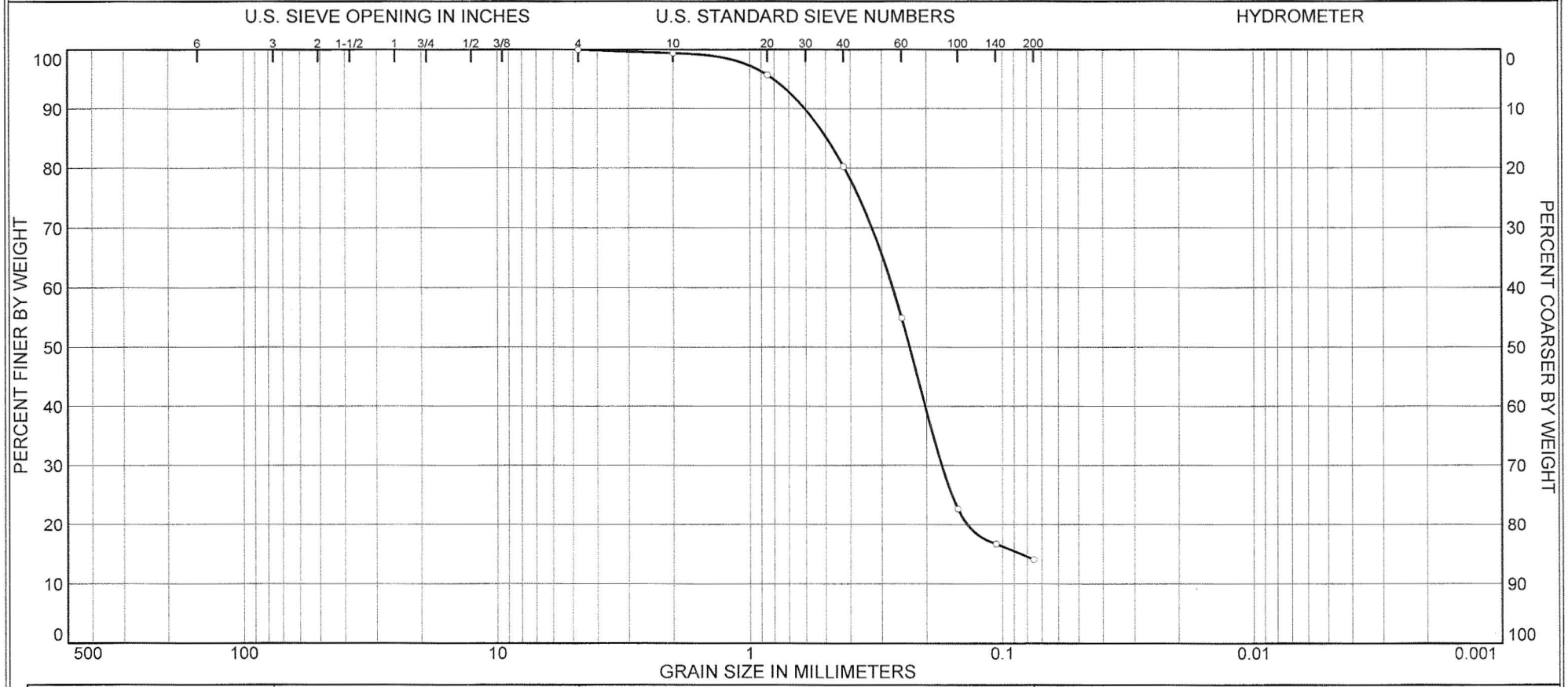
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.30	99.8
# 20	5.71	95.9
# 40	27.80	80.0
# 60	63.90	53.9
# 100	107.70	22.4
# 140	115.90	16.5
# 200	119.37	14.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 86.0 (% coarse = 0.2 % medium = 19.8 % fine = 66.0)
% FINES = 14.0

D_{85}= 0.50 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.6	19.2	66.2	14.0	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G7	G7-4	228.41'	N/A		Red Silty sand	6.3		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: MD/SW Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G7
Sample No.: G7-4
Elev. or Depth: 228.41' **Sample Length(in./cm.):** N/A
Location: G7-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 6.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: MD/SW Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.18
Tare =	64.38
Dry sample weight =	135.80

Tare for cumulative weight retained= .00

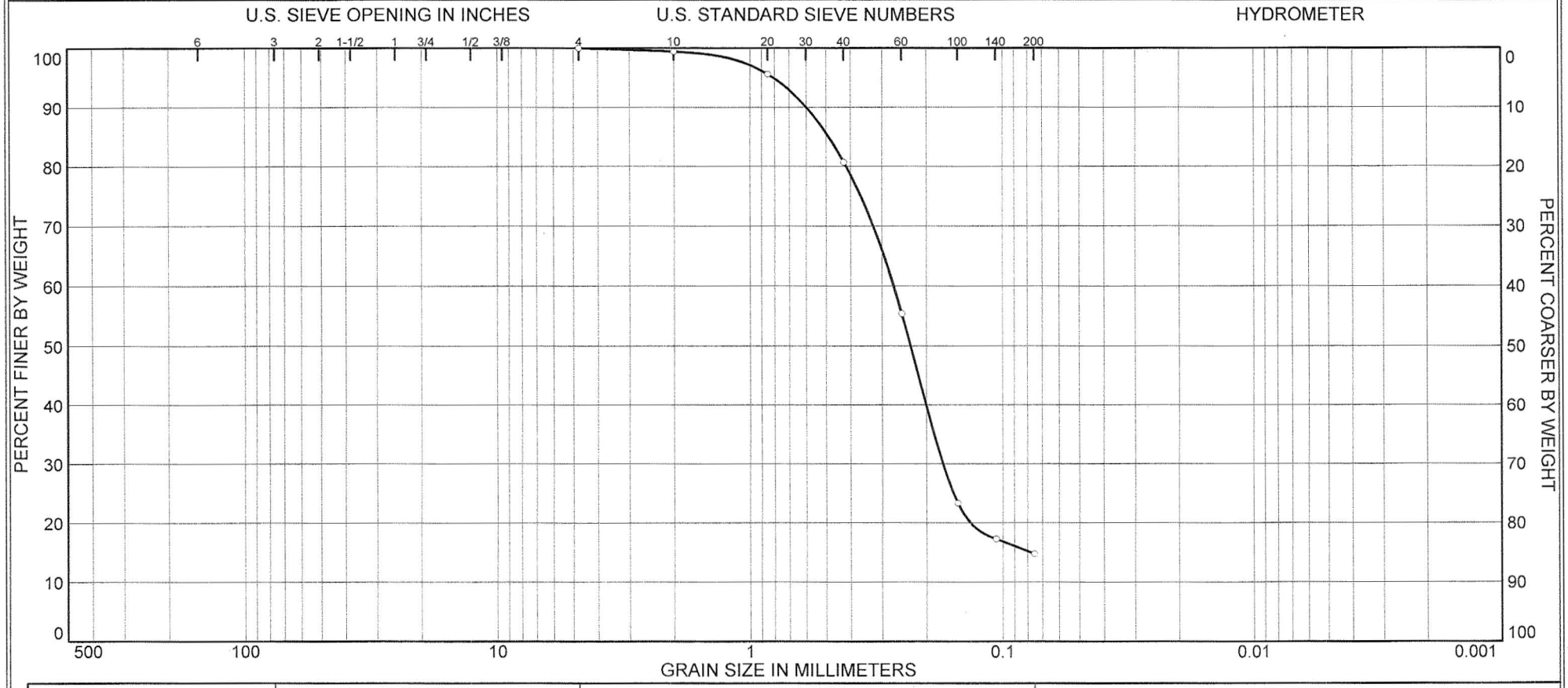
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.78	99.4
# 20	5.86	95.7
# 40	26.91	80.2
# 60	61.20	54.9
# 100	105.06	22.6
# 140	113.32	16.6
# 200	116.79	14.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 86.0 **(% coarse =** 0.6 **% medium =** 19.2 **% fine =** 66.2**)**
% FINES = 14.0

D_{85}= 0.50 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.6	18.7	66.0	14.7	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G8	G8-1	228.82'	N/A	SM	Red Silty sand	7.9	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G8
Sample No.: G8-1
Elev. or Depth: 228.82' **Sample Length(in./cm.):** N/A
Location: G8-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.90
Tare =	64.38
Dry sample weight =	136.52

Tare for cumulative weight retained= .00

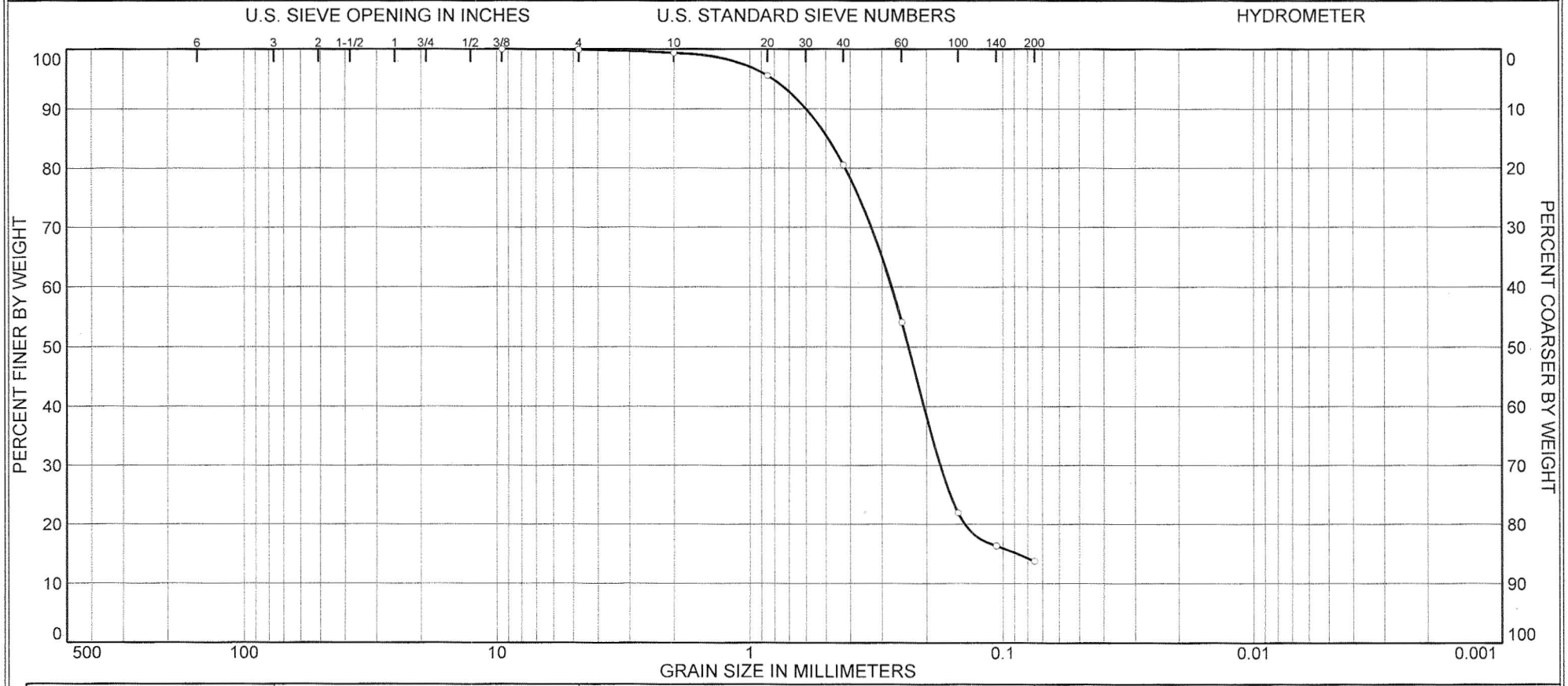
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.76	99.4
# 20	6.00	95.6
# 40	26.40	80.7
# 60	60.90	55.4
# 100	104.66	23.3
# 140	113.05	17.2
# 200	116.49	14.7

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 85.3 **(% coarse =** 0.6 **% medium =** 18.7 **% fine =** 66.0**)**
% FINES = 14.7

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.1	0.5	18.9	66.8	13.7	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G8	G8-2	228.95'	N/A		Red Silty sand	8.5		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G8
Sample No.: G8-2
Elev. or Depth: 228.95' **Sample Length(in./cm.):** N/A
Location: G8-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 8.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	198.68
Tare =	64.18
Dry sample weight =	134.50

Tare for cumulative weight retained= .00

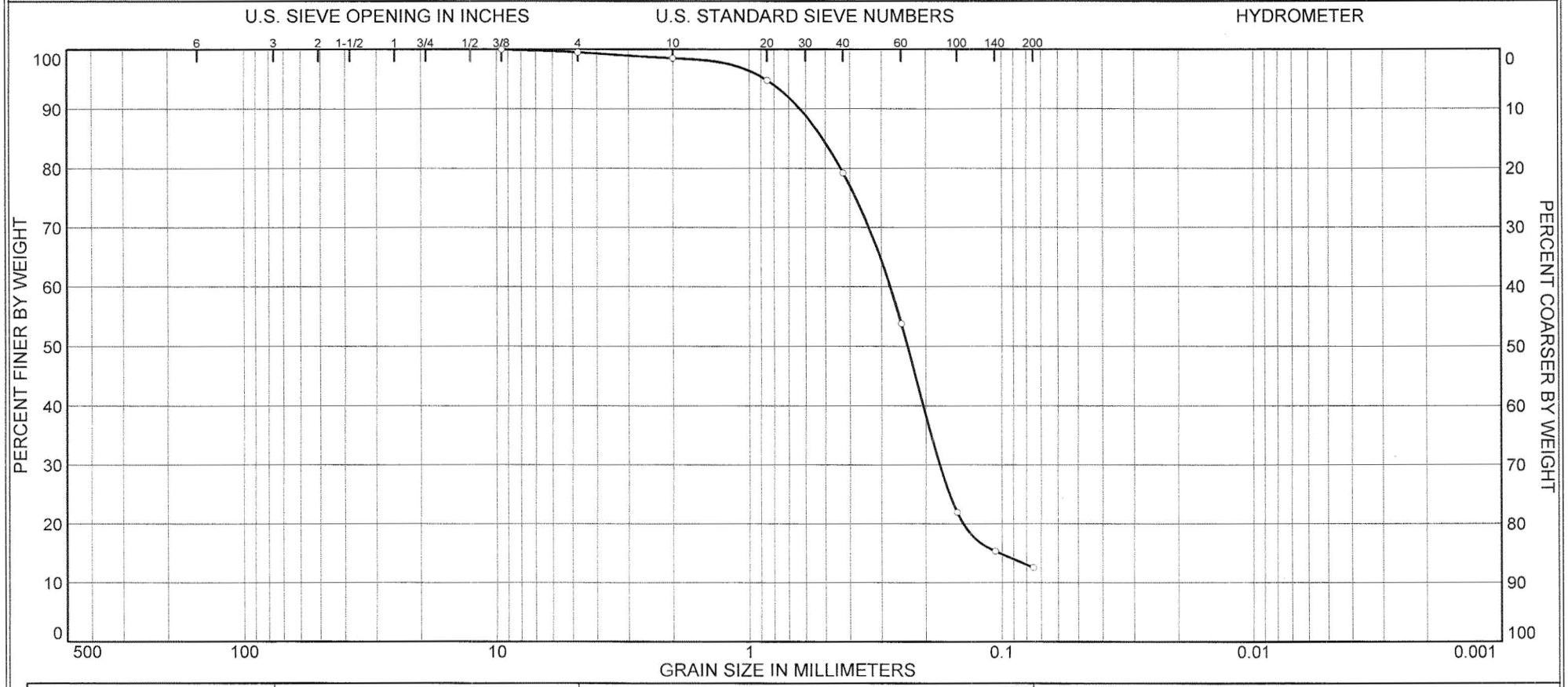
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.20	99.9
# 10	0.75	99.4
# 20	5.95	95.6
# 40	26.26	80.5
# 60	61.74	54.1
# 100	105.05	21.9
# 140	112.63	16.3
# 200	116.01	13.7

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.1 (% coarse = % fine = 0.1)
% SAND = 86.2 (% coarse = 0.5 % medium = 18.9 % fine = 66.8)
% FINES = 13.7

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.5	1.0	19.3	66.7	12.5	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G8	G8-3	228.85'	N/A		Red Silty sand	8.4		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G8
Sample No.: G8-3
Elev. or Depth: 228.85' **Sample Length(in./cm.):** N/A
Location: G8-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 8.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	206.44
Tare =	70.72
Dry sample weight =	135.72

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.70	99.5
# 10	2.08	98.5
# 20	7.04	94.8
# 40	28.25	79.2
# 60	62.77	53.8
# 100	105.98	21.9
# 140	115.00	15.3
# 200	118.78	12.5

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.5 (% coarse = % fine = 0.5)
% SAND = 87.0 (% coarse = 1.0 % medium = 19.3 % fine = 66.7)
% FINES = 12.5

D_{85}= 0.51 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.10

Particle Size Distribution Report

% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	1.7	0.8	18.9	65.2	13.4	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G8	G8-4	228.78'	N/A		Red Silty sand	9.0		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by:SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G8
Sample No.: G8-4
Elev. or Depth: 228.78' **Sample Length(in./cm.):** N/A
Location: G8-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 9.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by:SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.86
Tare =	64.33
Dry sample weight =	136.53

Tare for cumulative weight retained= .00

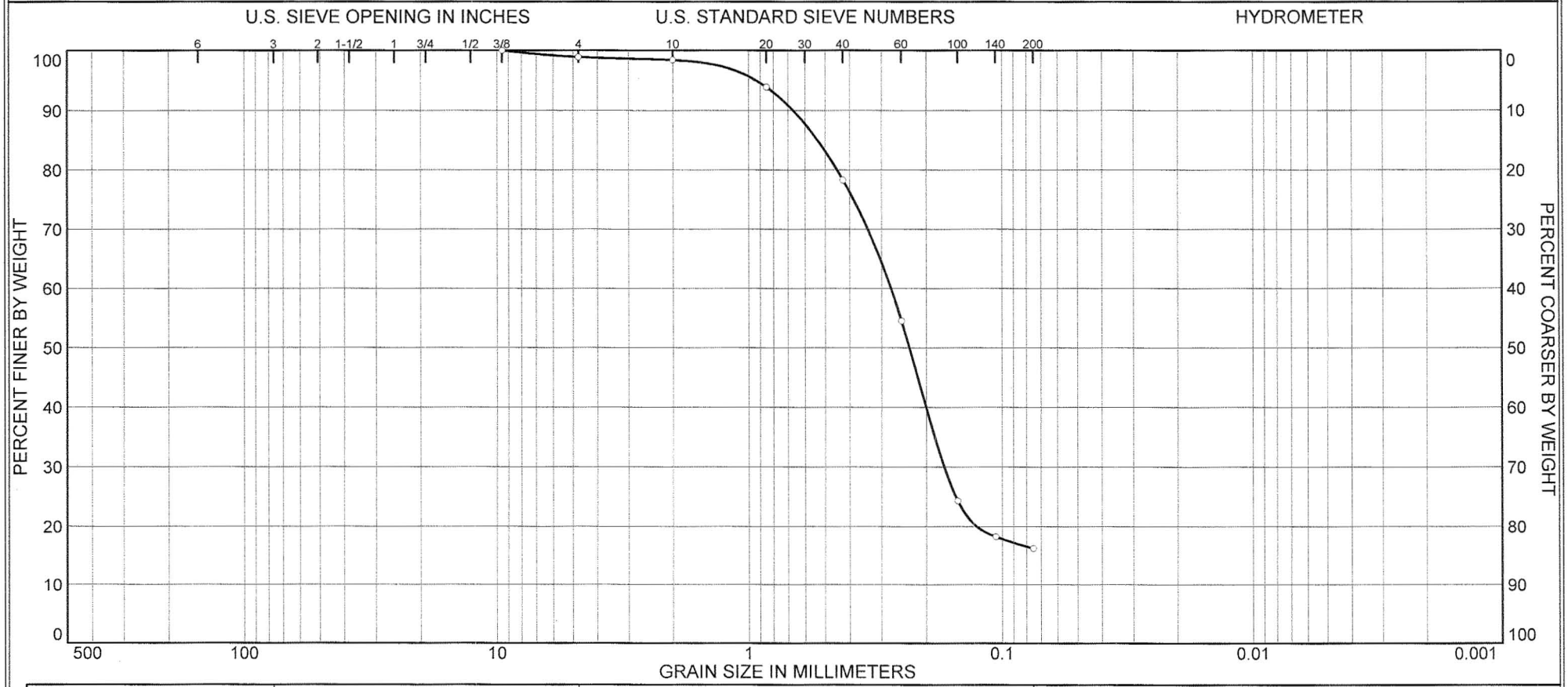
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	2.30	98.3
# 10	3.48	97.5
# 20	8.58	93.7
# 40	29.17	78.6
# 60	64.90	52.5
# 100	108.15	20.8
# 140	115.64	15.3
# 200	118.27	13.4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 1.7 (% coarse = % fine = 1.7)
% SAND = 84.9 (% coarse = 0.8 % medium = 18.9 % fine = 65.2)
% FINES = 13.4

D_{85}= 0.52 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.10

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	1.1	0.5	20.1	62.1	16.2	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G9-1	G9-1	229.63'	N/A	SM	Red Silty sand	6.6	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54 | 8115

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: EH Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G9-1
Sample No.: G9-1
Elev. or Depth: 229.63' **Sample Length(in./cm.):** 8115
Location: G9-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 6.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: EH Reviewed by: HJ

Mechanical Analysis Data

	Initial
Dry sample and tare=	98.27
Tare =	16.46
Dry sample weight =	81.81

Tare for cumulative weight retained= .00

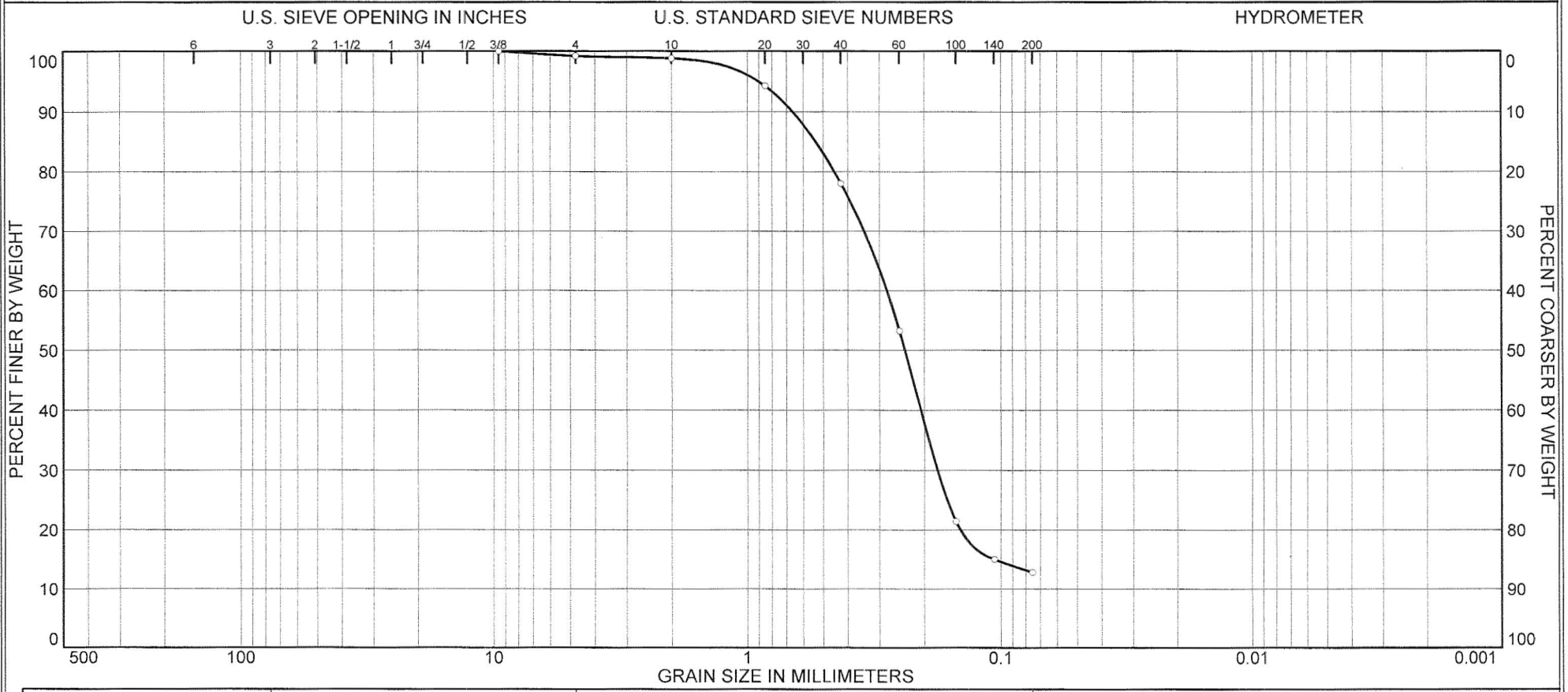
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.93	98.9
# 10	1.29	98.4
# 20	4.96	93.9
# 40	17.75	78.3
# 60	37.24	54.5
# 100	61.95	24.3
# 140	66.95	18.2
# 200	68.55	16.2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 1.1 (% coarse = % fine = 1.1)
% SAND = 82.7 (% coarse = 0.5 % medium = 20.1 % fine = 62.1)
% FINES = 16.2

D_{85}= 0.53 D_{60}= 0.28 D_{50}= 0.23
D_{30}= 0.17

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.8	0.4	20.8	65.2	12.8	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G9-2	G9-2	229.57'	N/A		Red Silty sand	7.2		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54 | 8116

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: EH Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G9-2
Sample No.: G9-2
Elev. or Depth: 229.57' **Sample Length(in./cm.):** 8116
Location: G9-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.2
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: EH Reviewed by: HJ

Mechanical Analysis Data

	Initial
Dry sample and tare=	213.71
Tare =	109.66
Dry sample weight =	104.05

Tare for cumulative weight retained= .00

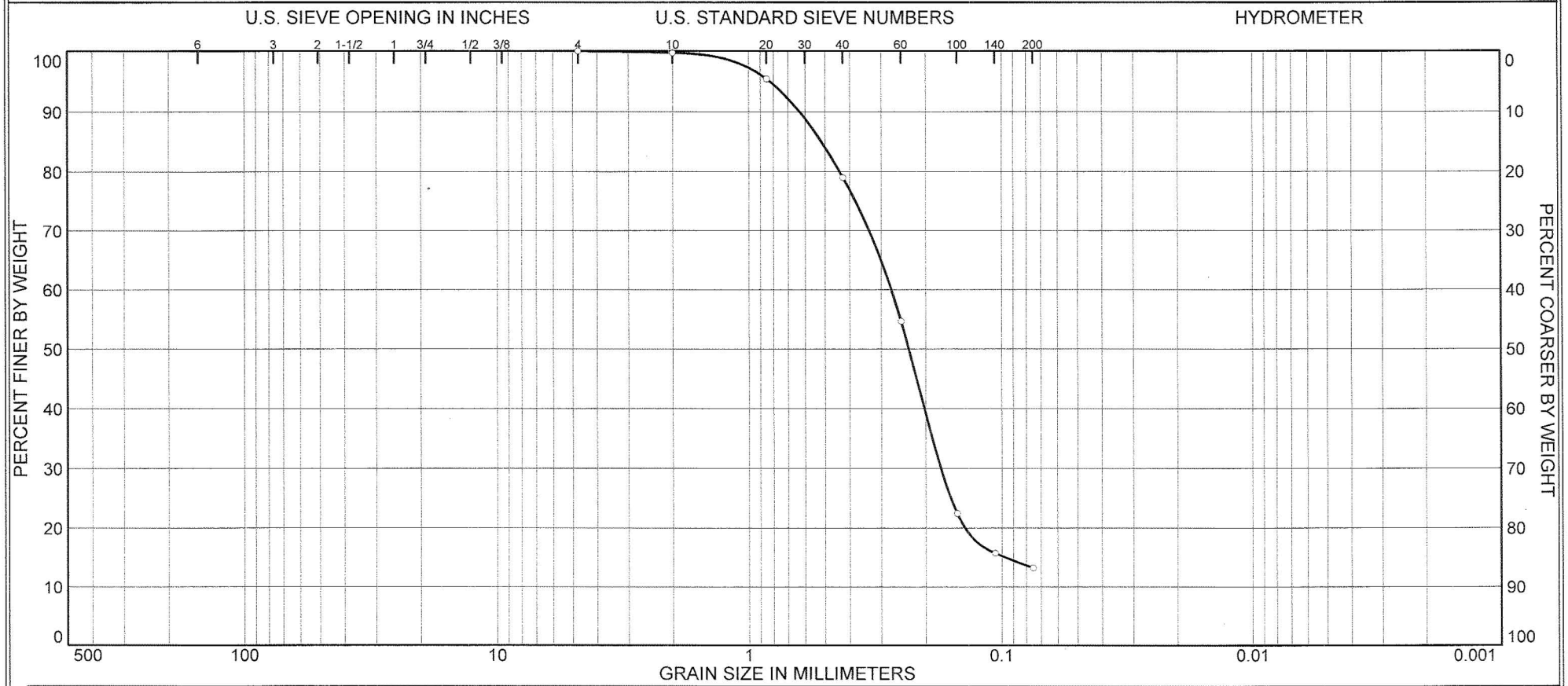
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.79	99.2
# 10	1.20	98.8
# 20	5.94	94.3
# 40	22.90	78.0
# 60	48.74	53.2
# 100	81.83	21.4
# 140	88.48	15.0
# 200	90.73	12.8

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.8 (% coarse = % fine = 0.8)
% SAND = 86.4 (% coarse = 0.4 % medium = 20.8 % fine = 65.2)
% FINES = 12.8

D_{85}= 0.53 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.11

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	20.7	65.8	13.2	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G9-3	G9-3	229.82'	N/A	SM	Red Silty sand	7.0	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54 | 8117

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: EH Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G9-3
Sample No.: G9-3
Elev. or Depth: 229.82' **Sample Length(in./cm.):** 8117
Location: G9-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.0
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: EH Reviewed by: HJ

Mechanical Analysis Data

	Initial
Dry sample and tare=	217.94
Tare =	110.90
Dry sample weight =	107.04

Tare for cumulative weight retained= .00

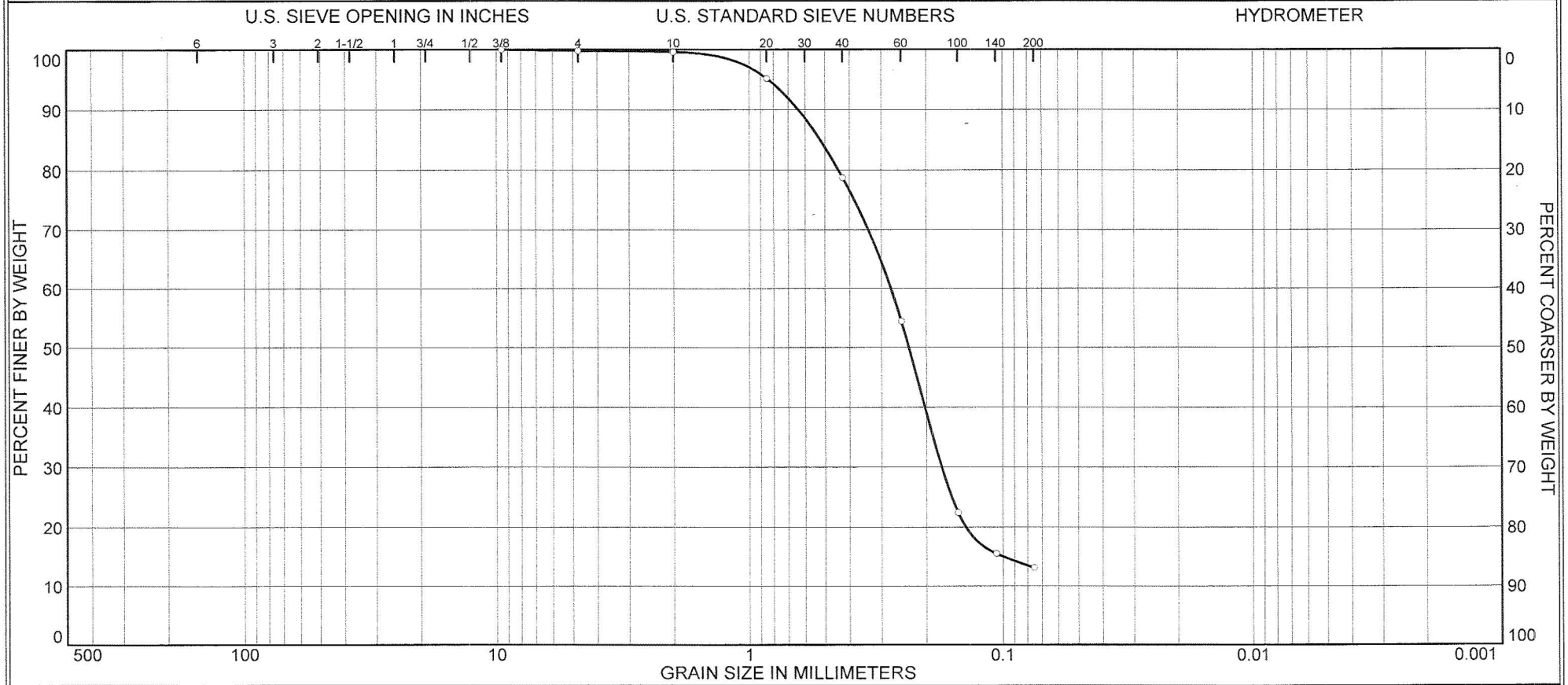
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.27	99.7
# 20	4.97	95.4
# 40	22.50	79.0
# 60	48.55	54.6
# 100	83.10	22.4
# 140	90.24	15.7
# 200	92.90	13.2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 86.8 (% coarse = 0.3 % medium = 20.7 % fine = 65.8)
% FINES = 13.2

D_{85}= 0.52 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.10

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.2	0.2	20.9	65.6	13.1	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G9-4	G9-4	229.66'	N/A		Red Silty sand	7.5		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54 8118

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: EH Reviewed by; HJ

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G9-4
Sample No.: G9-4
Elev. or Depth: 229.66' **Sample Length(in./cm.):** 8118
Location: G9-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: EH Reviewed by; HJ

Mechanical Analysis Data

	Initial
Dry sample and tare=	206.85
Tare =	113.35
Dry sample weight =	93.50

Tare for cumulative weight retained= .00

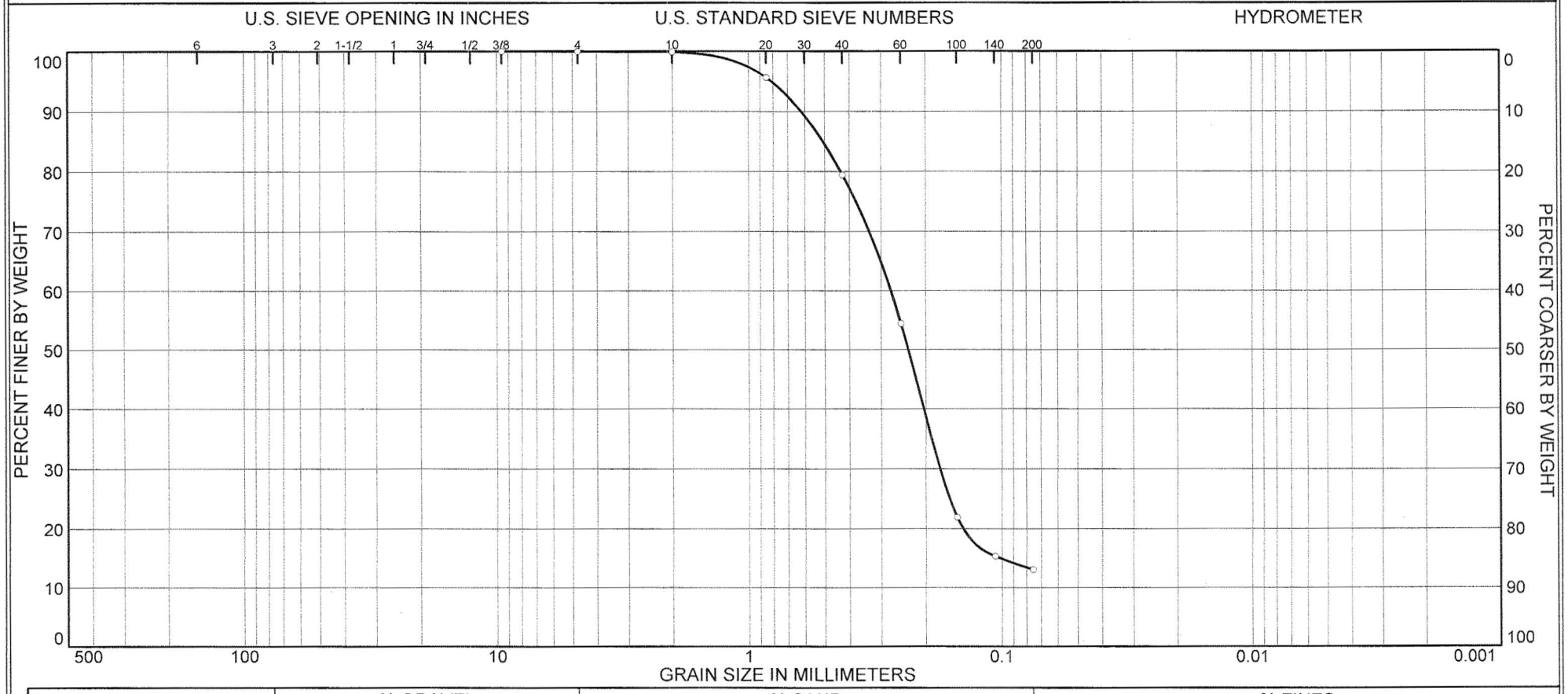
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.22	99.8
# 10	0.40	99.6
# 20	4.53	95.2
# 40	19.92	78.7
# 60	42.66	54.4
# 100	72.51	22.4
# 140	79.01	15.5
# 200	81.26	13.1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 0.2 **(% coarse =** **% fine =** 0.2)
% SAND = 86.7 **(% coarse =** 0.2 **% medium =** 20.9 **% fine =** 65.6)
% FINES = 13.1

D_{85}= 0.52 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.10

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	20.5	66.4	13.0	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G10-1	G10-1	230.22'	N/A		Red Silty sand	7.3		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54 | 8119

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: EH Reviewed by; HJ

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G10-1
Sample No.: G10-1
Elev. or Depth: 230.22' **Sample Length(in./cm.):** 8119
Location: G10-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 7.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: EH Reviewed by; HJ

Mechanical Analysis Data

	Initial
Dry sample and tare=	211.87
Tare =	109.13
Dry sample weight =	102.74

Tare for cumulative weight retained= .00

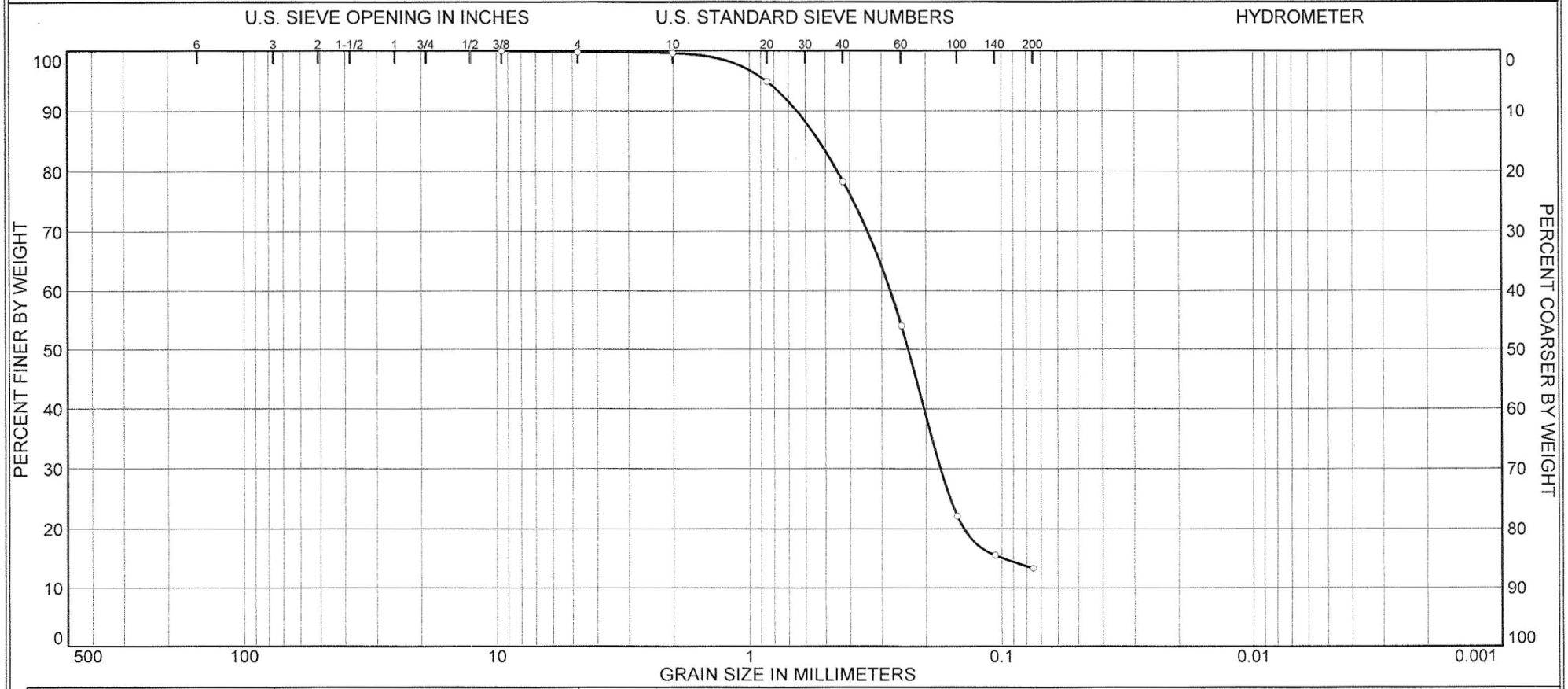
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.12	99.9
# 20	4.48	95.6
# 40	21.19	79.4
# 60	46.87	54.4
# 100	80.24	21.9
# 140	87.02	15.3
# 200	89.37	13.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 87.0 (% coarse = 0.1 % medium = 20.5 % fine = 66.4)
% FINES = 13.0

D_{85}= 0.51 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.18 D_{15}= 0.10

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.2	0.2	21.3	65.0	13.3	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G10-2	G10-2	230.36'	N/A	SM	Red Silty sand	8.5	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54 | 8120

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: EH Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G10-2
Sample No.: G10-2
Elev. or Depth: 230.36' **Sample Length(in./cm.):** 8120
Location: G10-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 8.5
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: EH Reviewed by: HJ

Mechanical Analysis Data

	Initial
Dry sample and tare=	204.59
Tare =	112.65
Dry sample weight =	91.94

Tare for cumulative weight retained= .00

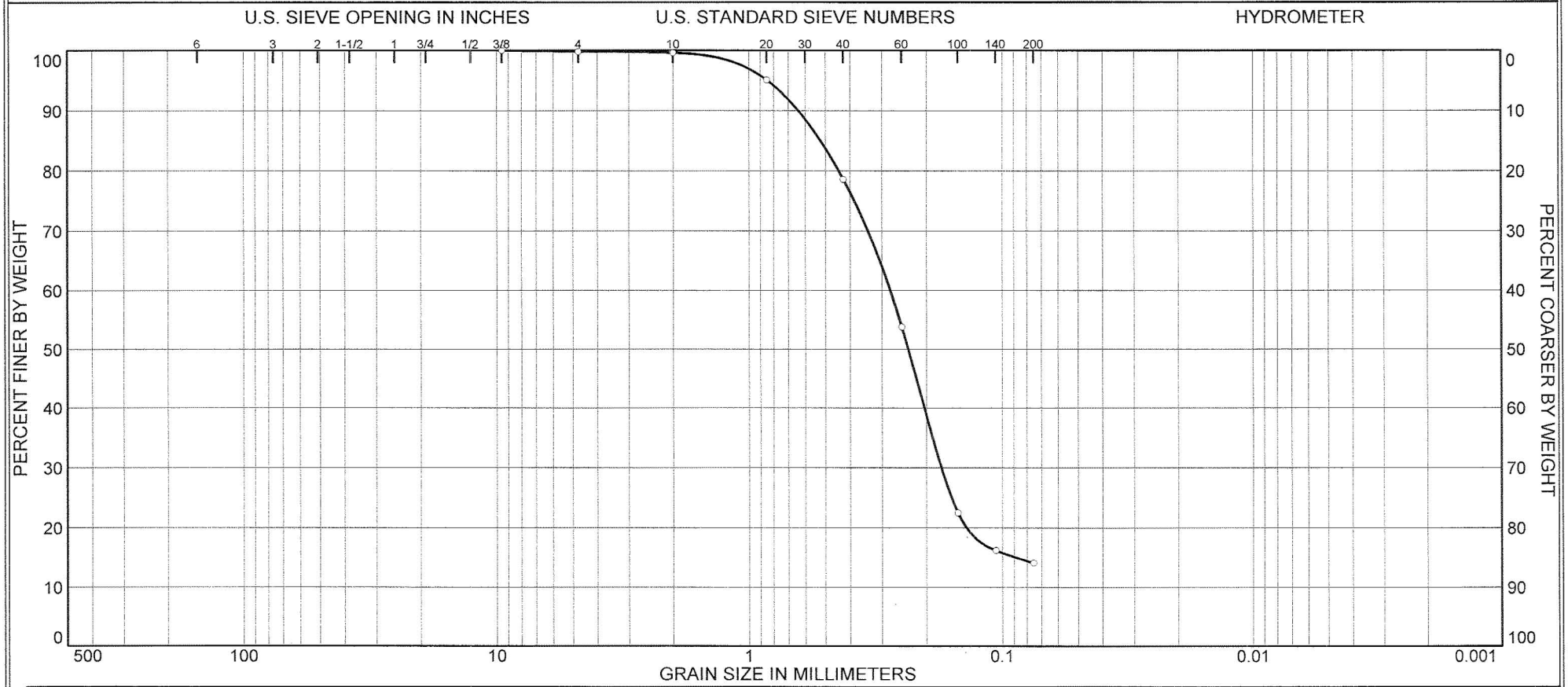
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.15	99.8
# 10	0.39	99.6
# 20	4.65	94.9
# 40	19.96	78.3
# 60	42.26	54.0
# 100	71.63	22.1
# 140	77.66	15.5
# 200	79.71	13.3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.2 (% coarse = % fine = 0.2)
% SAND = 86.5 (% coarse = 0.2 % medium = 21.3 % fine = 65.0)
% FINES = 13.3

D_{85}= 0.53 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.17 D_{15}= 0.10

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.2	0.2	21.0	64.5	14.1	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G10-3	G10-3	230.26'	N/A		Red Silty sand	9.9		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54 | 8121

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: EH Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G10-3
Sample No.: G10-3
Elev. or Depth: 230.26' **Sample Length(in./cm.):** 8121
Location: G10-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 9.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: EH Reviewed by: HJ

Mechanical Analysis Data

	Initial
Dry sample and tare=	228.72
Tare =	110.12
Dry sample weight =	118.60

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.22	99.8
# 10	0.48	99.6
# 20	5.81	95.1
# 40	25.37	78.6
# 60	54.75	53.8
# 100	91.88	22.5
# 140	99.37	16.2
# 200	101.92	14.1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.2 (% coarse = % fine = 0.2)
% SAND = 85.7 (% coarse = 0.2 % medium = 21.0 % fine = 64.5)
% FINES = 14.1

D_{85}= 0.52 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.17 D_{15}= 0.09

Particle Size Distribution Report

% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	20.6	65.5	13.6	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G10-4	G10-4	230.25'	N/A	SM	Red Silty sand	8.0	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54 | 8122

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: EH Reviewed by: HJ

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G10-4
Sample No.: G10-4
Elev. or Depth: 230.25' **Sample Length(in./cm.):** 8122
Location: G10-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 8.0
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: EH Reviewed by: HJ

Mechanical Analysis Data

	Initial
Dry sample and tare=	216.68
Tare =	110.59
Dry sample weight =	106.09

Tare for cumulative weight retained= .00

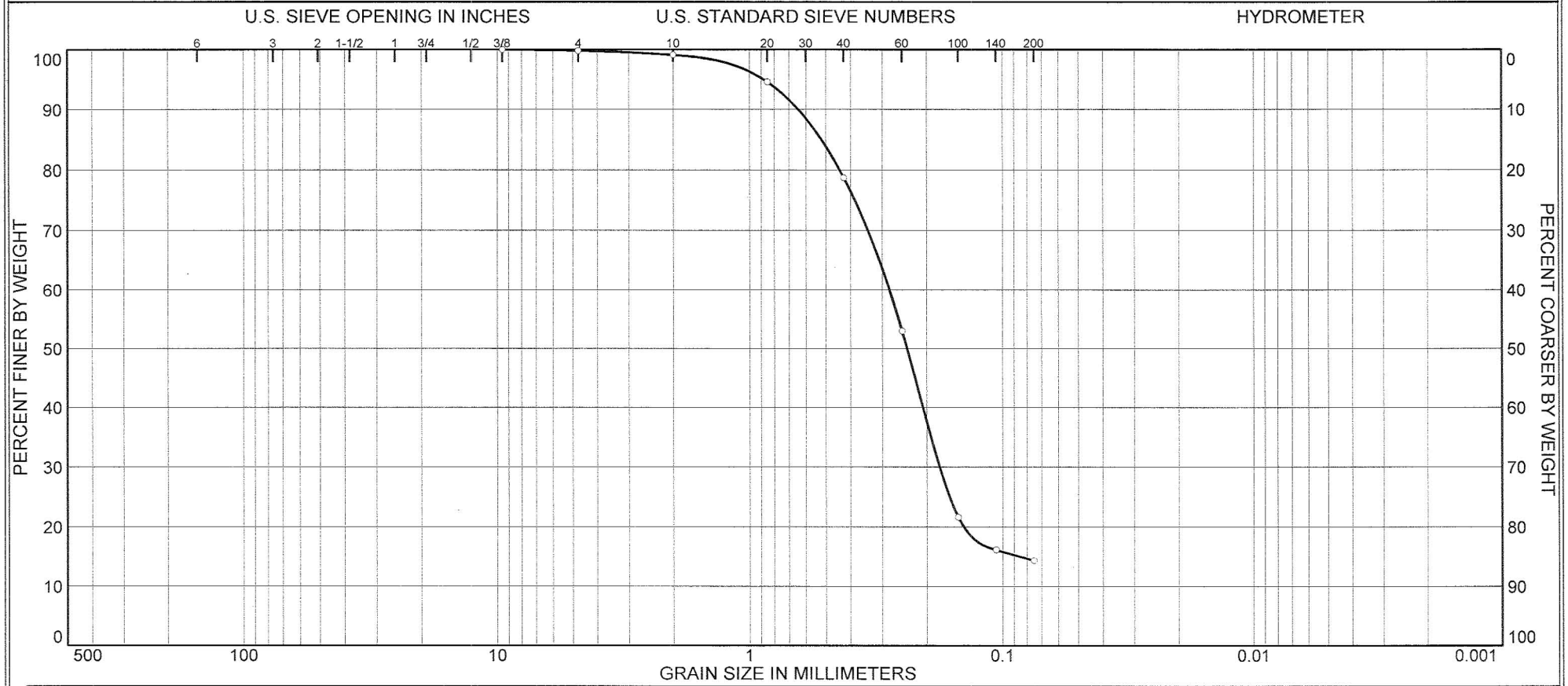
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.31	99.7
# 20	4.86	95.4
# 40	22.18	79.1
# 60	48.02	54.7
# 100	82.10	22.6
# 140	89.18	15.9
# 200	91.70	13.6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 86.4 (% coarse = 0.3 % medium = 20.6 % fine = 65.5)
% FINES = 13.6

D_{85}= 0.51 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.2	0.7	20.4	64.4	14.3	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G11	G11-1	230.49'	N/A		Red Silty sand	9.9		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G11
Sample No.: G11-1
Elev. or Depth: 230.49' **Sample Length(in./cm.):** N/A
Location: G11-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 9.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	201.15
Tare =	64.33
Dry sample weight =	136.82

Tare for cumulative weight retained= .00

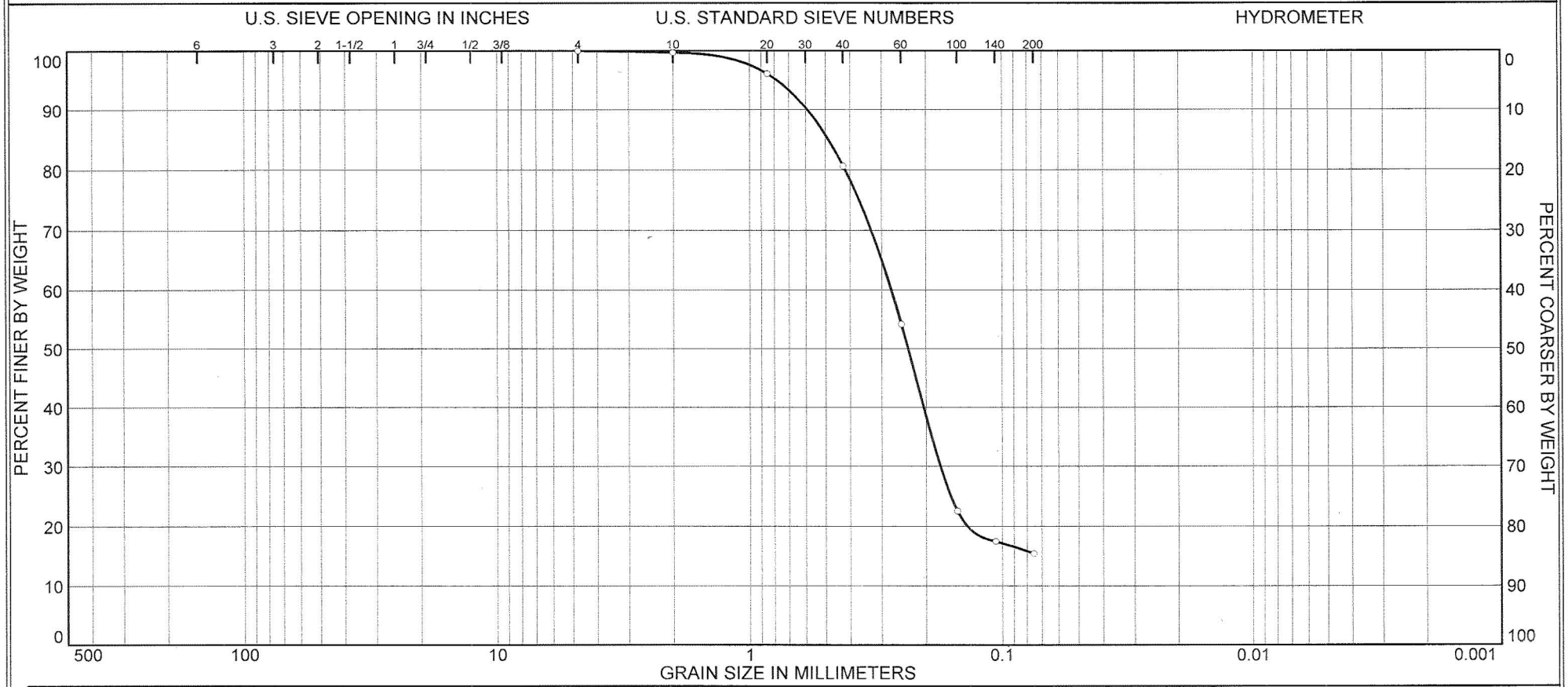
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.29	99.8
# 10	1.27	99.1
# 20	7.39	94.6
# 40	29.19	78.7
# 60	64.37	53.0
# 100	107.21	21.6
# 140	114.79	16.1
# 200	117.23	14.3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.2 (% coarse = % fine = 0.2)
% SAND = 85.5 (% coarse = 0.7 % medium = 20.4 % fine = 64.4)
% FINES = 14.3

D_{85}= 0.52 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	19.1	65.2	15.4	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G11	G11-2	230.60'	N/A	SM	Red Silty sand	10.3	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G11
Sample No.: G11-2
Elev. or Depth: 230.60' **Sample Length(in./cm.):** N/A
Location: G11-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 10.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	201.06
Tare =	64.16
Dry sample weight =	136.90

Tare for cumulative weight retained= .00

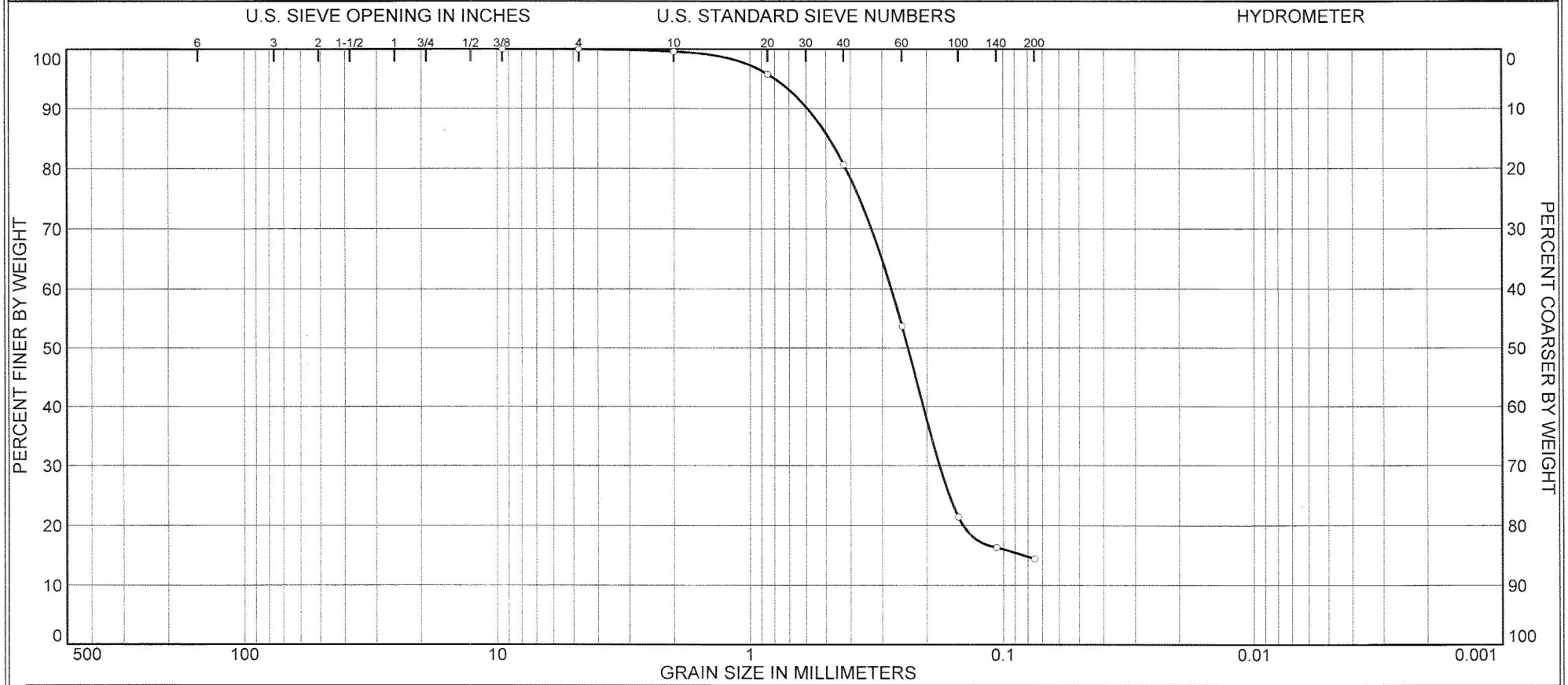
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.37	99.7
# 20	5.29	96.1
# 40	26.53	80.6
# 60	62.73	54.2
# 100	106.07	22.5
# 140	113.06	17.4
# 200	115.83	15.4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 84.6 (% coarse = 0.3 % medium = 19.1 % fine = 65.2)
% FINES = 15.4

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.24
D_{30}= 0.18

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.4	19.0	66.2	14.4	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G11	G11-3	230.61'	N/A		Red Silty sand	9.7		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G11
Sample No.: G11-3
Elev. or Depth: 230.61' **Sample Length(in./cm.):** N/A
Location: G11-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 9.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	204.03
Tare =	70.20
Dry sample weight =	133.83

Tare for cumulative weight retained= .00

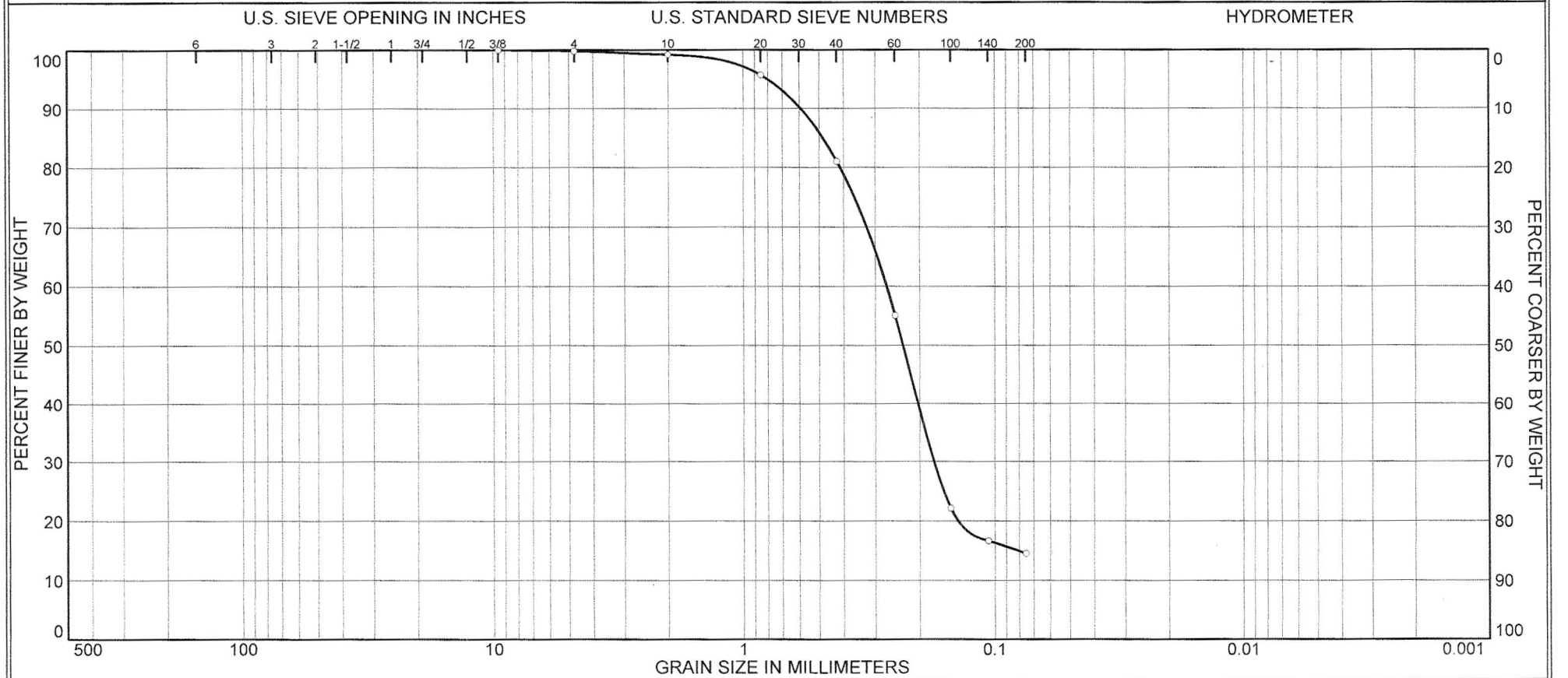
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.51	99.6
# 20	5.62	95.8
# 40	26.00	80.6
# 60	62.00	53.7
# 100	105.23	21.4
# 140	112.07	16.3
# 200	114.59	14.4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 85.6 (% coarse = 0.4 % medium = 19.0 % fine = 66.2)
% FINES = 14.4

D_{85}= 0.49 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.2	0.6	18.2	66.5	14.5	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G11	G11-4	230.50'	N/A		Red Silty sand	8.4		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G11
Sample No.: G11-4
Elev. or Depth: 230.50' **Sample Length(in./cm.):** N/A
Location: G11-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 8.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	207.31
Tare =	64.31
Dry sample weight =	143.00

Tare for cumulative weight retained= .00

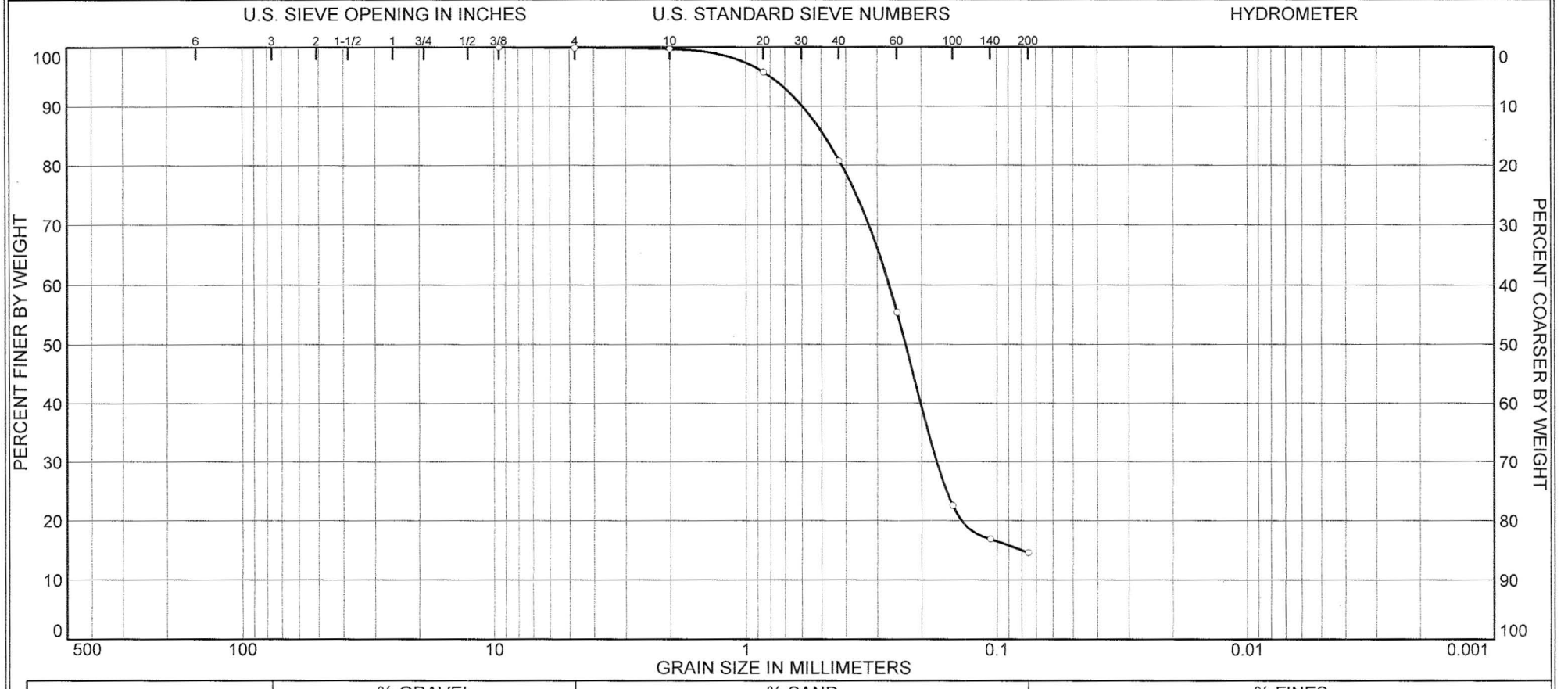
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.32	99.8
# 10	1.11	99.2
# 20	6.13	95.7
# 40	27.17	81.0
# 60	64.22	55.1
# 100	111.43	22.1
# 140	119.22	16.6
# 200	122.26	14.5

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.2 (% coarse = % fine = 0.2)
% SAND = 85.3 (% coarse = 0.6 % medium = 18.2 % fine = 66.5)
% FINES = 14.5

D_{85}= 0.48 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.18 D_{15}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0.0	0.0	0.1	0.2	18.9	66.3	14.5	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	Test Pad Backfill G12	G12-1	230.95'	N/A		Red Silty sand	10.3		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G12
Sample No.: G12-1
Elev. or Depth: 230.95' **Sample Length(in./cm.):** N/A
Location: G12-1
Description: Red Silty sand
Date: N/A **Natural Moisture:** 10.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	201.51
Tare =	64.36
Dry sample weight =	137.15

Tare for cumulative weight retained= .00

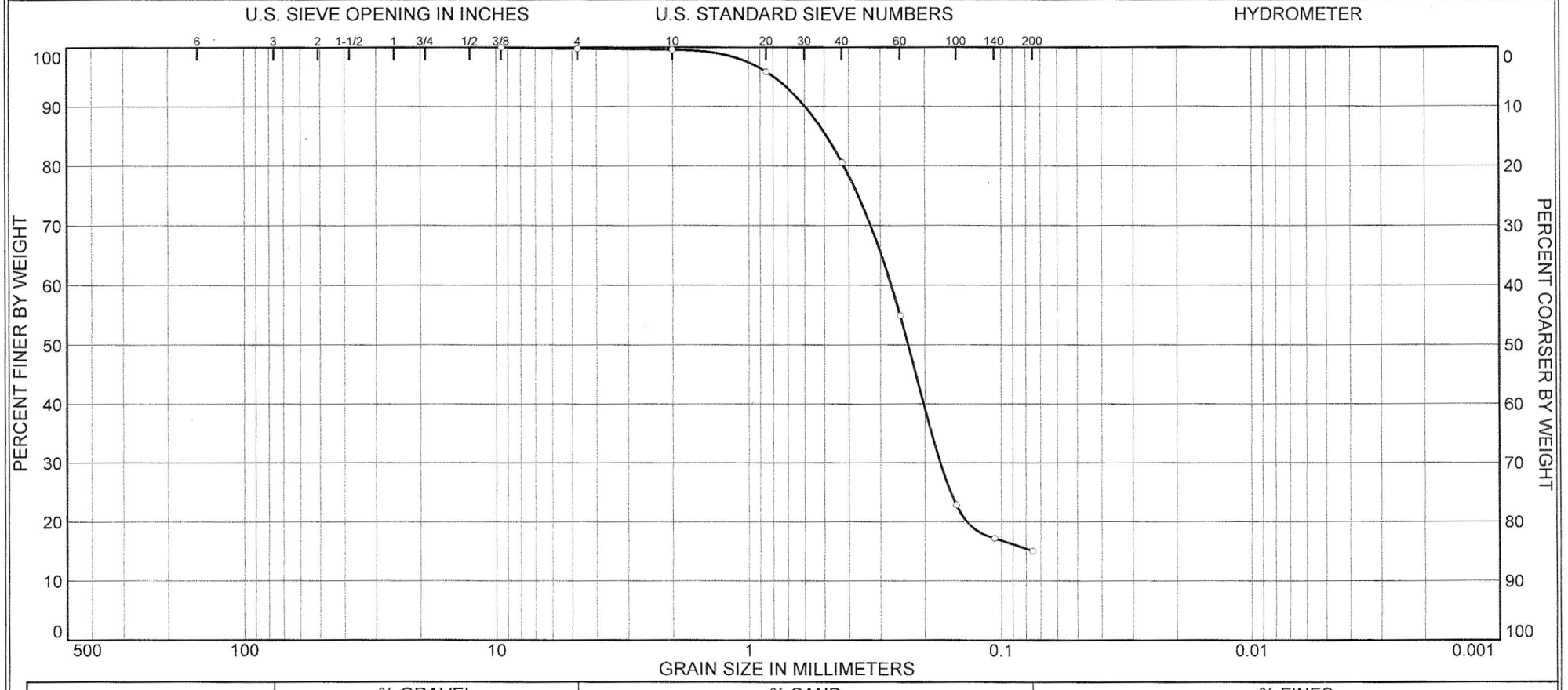
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.18	99.9
# 10	0.40	99.7
# 20	5.79	95.8
# 40	26.29	80.8
# 60	61.11	55.4
# 100	106.25	22.5
# 140	114.15	16.8
# 200	117.24	14.5

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.1 (% coarse = % fine = 0.1)
% SAND = 85.4 (% coarse = 0.2 % medium = 18.9 % fine = 66.3)
% FINES = 14.5

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.2	0.2	19.1	65.5	15.0	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G12	G12-2	230.89'	N/A		Red Silty sand	10.2		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G12
Sample No.: G12-2
Elev. or Depth: 230.89' **Sample Length(in./cm.):** N/A
Location: G12-2
Description: Red Silty sand
Date: N/A **Natural Moisture:** 10.2
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	202.28
Tare =	64.23
Dry sample weight =	138.05

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.33	99.8
# 10	0.59	99.6
# 20	5.63	95.9
# 40	26.92	80.5
# 60	62.28	54.9
# 100	106.51	22.8
# 140	114.46	17.1
# 200	117.40	15.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.2 (% coarse = % fine = 0.2)
% SAND = 84.8 (% coarse = 0.2 % medium = 19.1 % fine = 65.5)
% FINES = 15.0

D_{85}= 0.49 D_{60}= 0.27 D_{50}= 0.23
D_{30}= 0.17 D_{15}= 0.08

Particle Size Distribution Report

% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.3	20.3	64.3	15.1	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G12	G12-3	231.01'	N/A	SM	Red Silty sand	12.2	NV	NP

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G12
Sample No.: G12-3
Elev. or Depth: 231.01' **Sample Length(in./cm.):** N/A
Location: G12-3
Description: Red Silty sand
Date: N/A **Natural Moisture:** 12.2
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	203.95
Tare =	70.22
Dry sample weight =	133.73

Tare for cumulative weight retained= .00

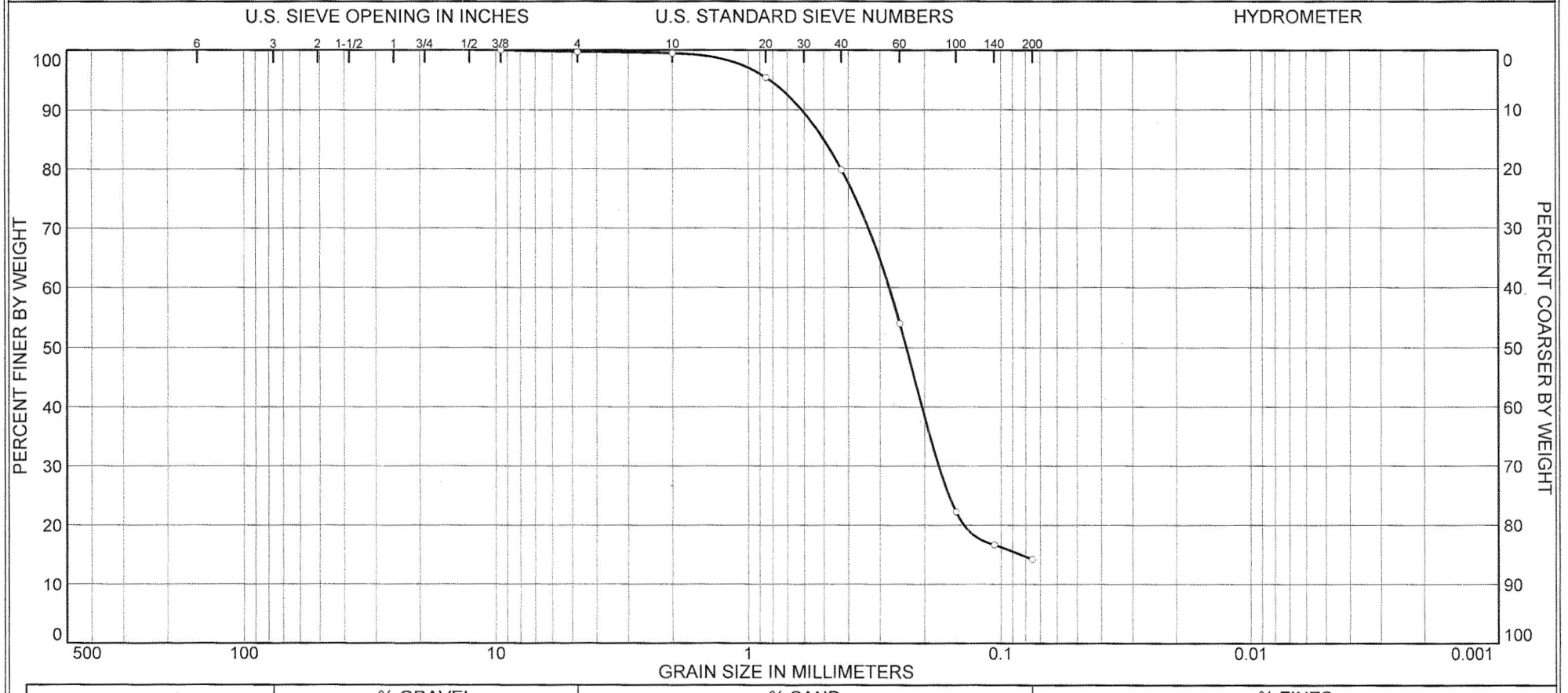
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.35	99.7
# 20	5.84	95.6
# 40	27.52	79.4
# 60	62.13	53.5
# 100	103.41	22.7
# 140	110.83	17.1
# 200	113.60	15.1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 84.9 (% coarse = 0.3 % medium = 20.3 % fine = 64.3)
% FINES = 15.1

D_{85}= 0.51 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.17

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.3	0.2	19.7	65.6	14.2	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
Test Pad Backfill G12	G12-4	230.93'	N/A		Red Silty sand	10.2		

Client GPC c/o SNOC

Project Vogtle Units 3 & 4 Test Pad Project

Project No. 6141-06-0286.54

MACTEC ENGINEERING AND CONSULTING, INC.

Tested by: SW/MD Reviewed by: MC

GRAIN SIZE DISTRIBUTION TEST DATA

Client: GPC c/o SNOC
Project: Vogtle Units 3 & 4 Test Pad Project
Project Number: 6141-06-0286.54

Sample Data

Source: Test Pad Backfill G12
Sample No.: G12-4
Elev. or Depth: 230.93' **Sample Length(in./cm.):** N/A
Location: G12-4
Description: Red Silty sand
Date: N/A **Natural Moisture:** 10.2
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: SW/MD Reviewed by: MC

Mechanical Analysis Data

	Initial
Dry sample and tare=	201.10
Tare =	64.38
Dry sample weight =	136.72

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.43	99.7
# 10	0.70	99.5
# 20	6.31	95.4
# 40	27.61	79.8
# 60	62.85	54.0
# 100	106.40	22.2
# 140	114.06	16.6
# 200	117.35	14.2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0.3 (% coarse = % fine = 0.3)
% SAND = 85.5 (% coarse = 0.2 % medium = 19.7 % fine = 65.6)
% FINES = 14.2

D_{85}= 0.50 D_{60}= 0.28 D_{50}= 0.24
D_{30}= 0.18 D_{15}= 0.08