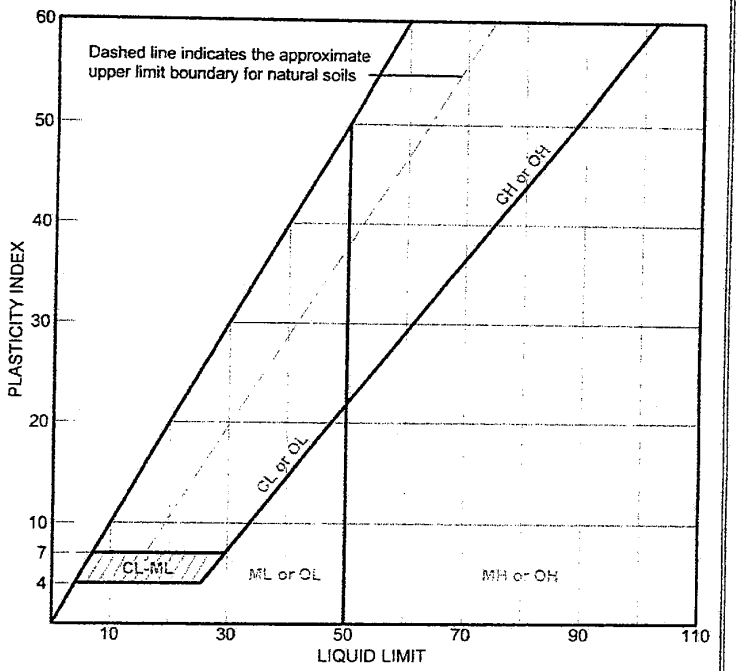
Admitted: 10/12/2011
Rejected:
Withdrawn:
Stricken:
Nuclear Regulatory Commission
Exhibit # - NRC0001AV-MA-CM01
Docket # - 05200027 | 05200028
Identified: 10/12/2011

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
•	B-319	UD-4	38.5 Ft.	9/28/06	N/A		N/A	NV	NP

Client
Project SCE&G COL
Project No. 6234-06-3534S

MACTEC ENGINEERING AND CONSULTING, INC.

• Tested by: JM Reviewed by: HJ

ASTM D 4318-05

11/21/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

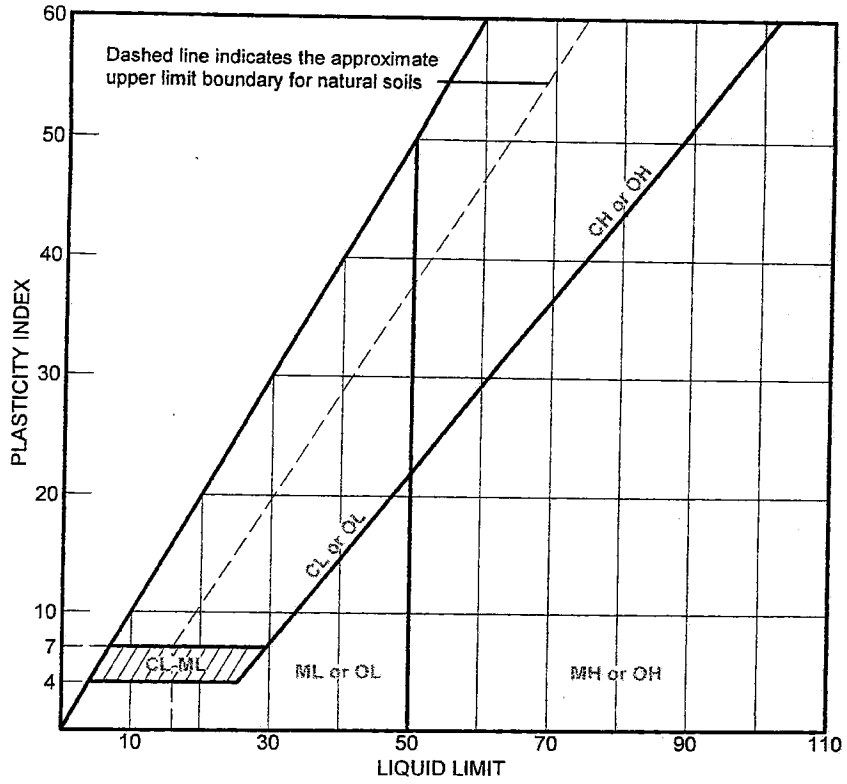
Sample Data

Source: B-319
Sample No.: UD-4
Elev. or Depth: 38.5 Ft. **Sample Length(in./cm.):** 5395
Location: B-319
Description:
Date: 9/28/06 **Natural Moisture:** N/A
USCS Class.: N/A **AASHTO Class.:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= _____
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-320	2	1.5'	9/12/06	ML	SILT Sandy with Clay (ML); Dark Red	23.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS 11-16-06

LIQUID AND PLASTIC LIMIT TEST DATA

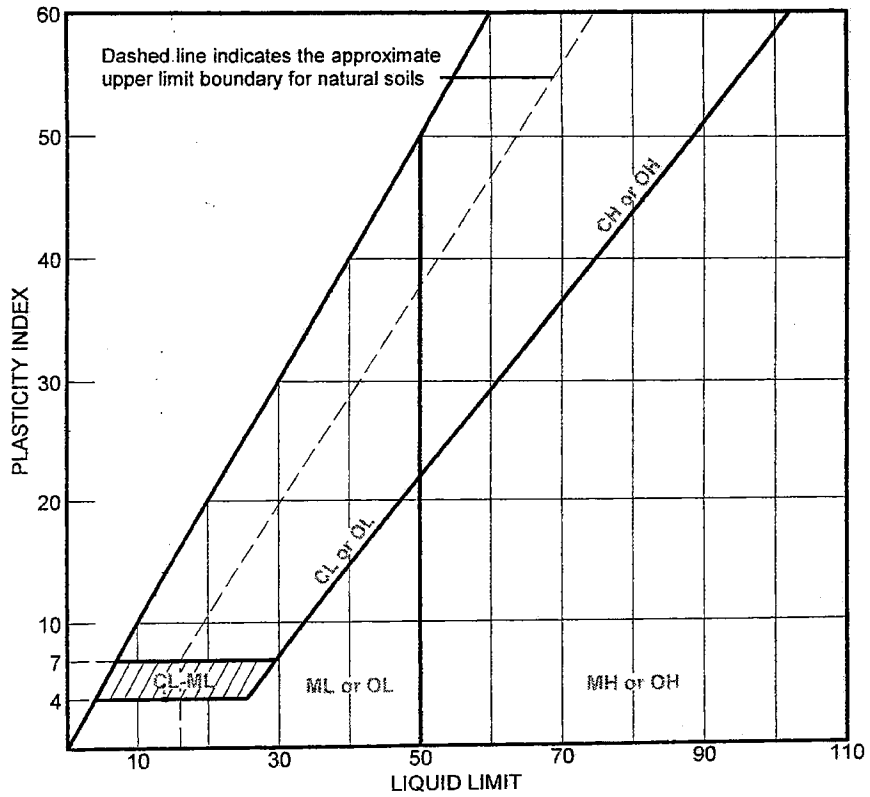
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy with Clay (ML); Dark Red
Date: 9/12/06 **Natural Moisture:** 23.9
USCS Class.: ML **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-320	3	3.5'	9/12/06	SM	SAND Silty (SM); Red, Strong Brown, Micaceous	29.5	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS

ASTM D4318-05

JRS 11-16-06

LIQUID AND PLASTIC LIMIT TEST DATA

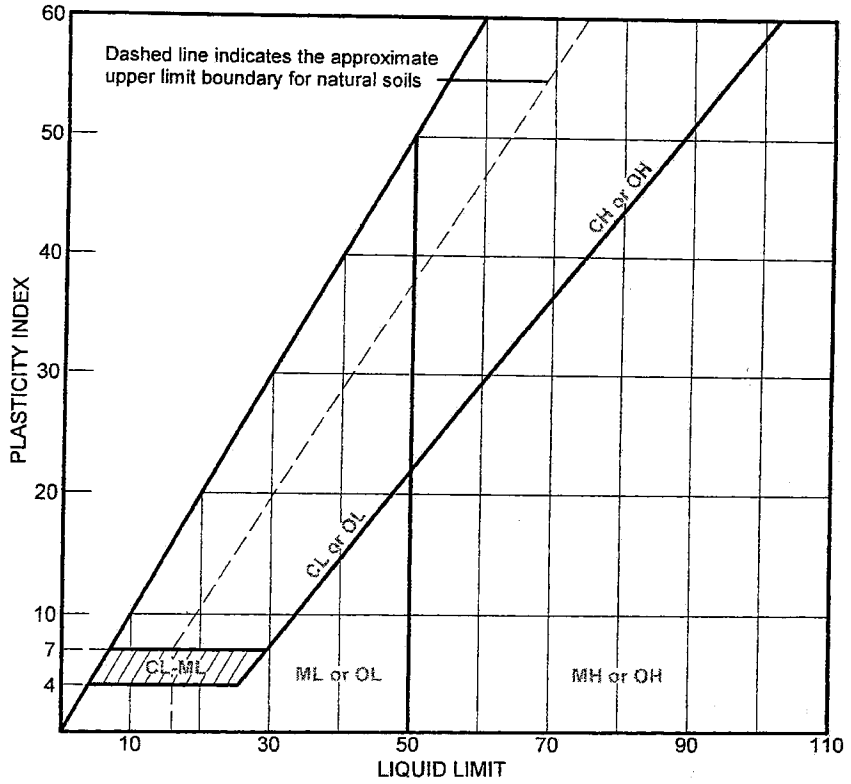
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Strong Brown, Micaceous
Date: 9/12/06 **Natural Moisture:** 29.5
USCS Class.: SM **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-320	13	43.5'	9/12/06	ML	SILT Sandy (ML); Brownish Yellow, White, Black, Yellowish Red, Mottled	44.2	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS 11-16-06

LIQUID AND PLASTIC LIMIT TEST DATA

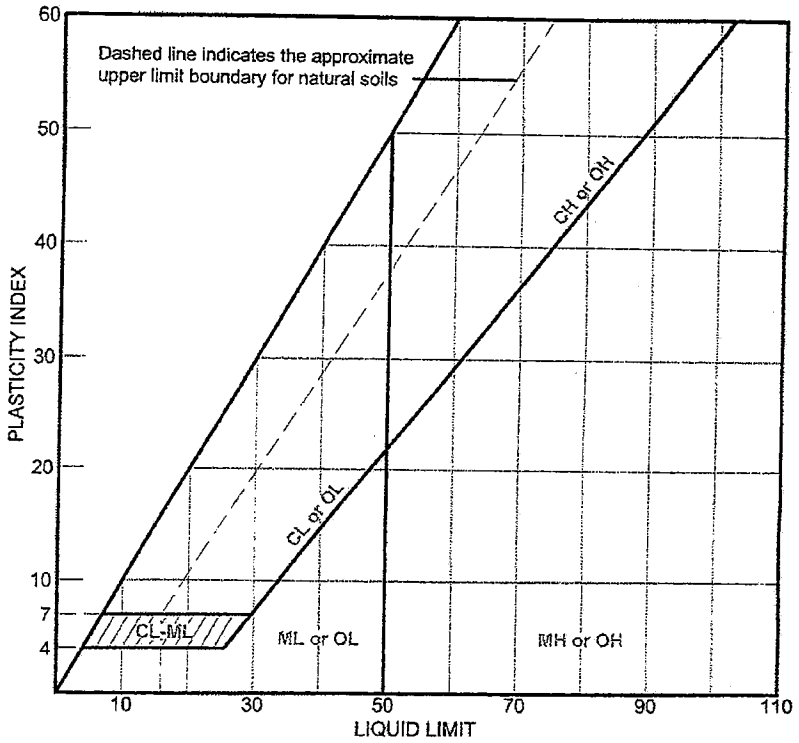
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 13
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Brownish Yellow, White, Black, Yellowish Red, Mottled
Date: 9/12/06 **Natural Moisture:** 44.2
USCS Class.: ML **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
•	B-321	UD-2	18.5 Ft.	11/9/06	SM	Silty sand	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S

MACTEC ENGINEERING AND CONSULTING, INC.

• Tested by: JM Reviewed by: HJ

ASTM D 4318-05

11/24/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
roject Number: 6234-06-3534S

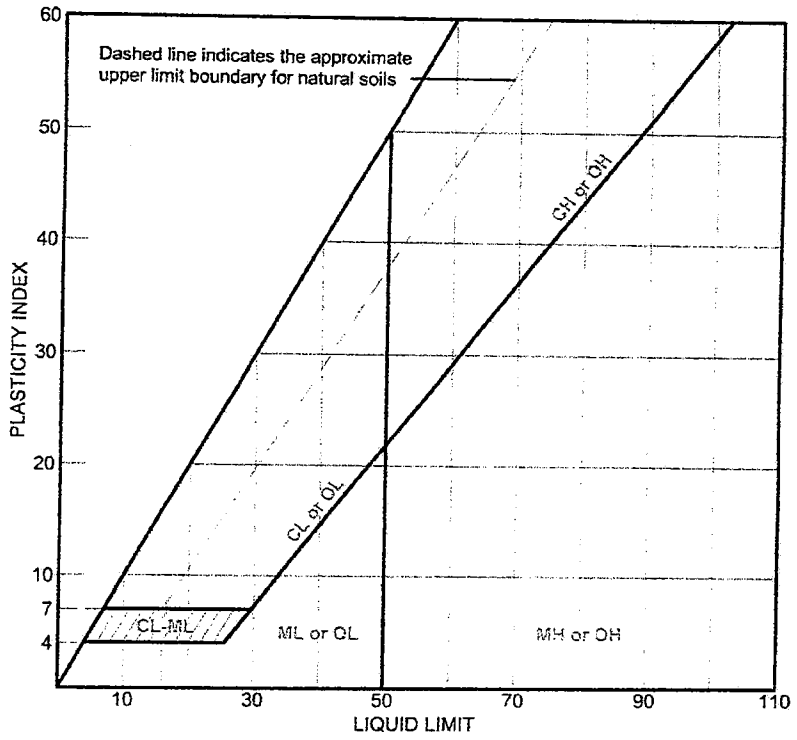
Sample Data

Source: B-321
Sample No.: UD-2
Elev. or Depth: 18.5 Ft. **Sample Length(in./cm.):** 5397
Location: B-321
Description: Silty sand
Date: 11/9/06 **Natural Moisture:** N/A
USCS Class.: SM **AASHTO Class.:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-321	UD-3	28.5 Ft.	10/9/06	N/A		N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

11/24/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

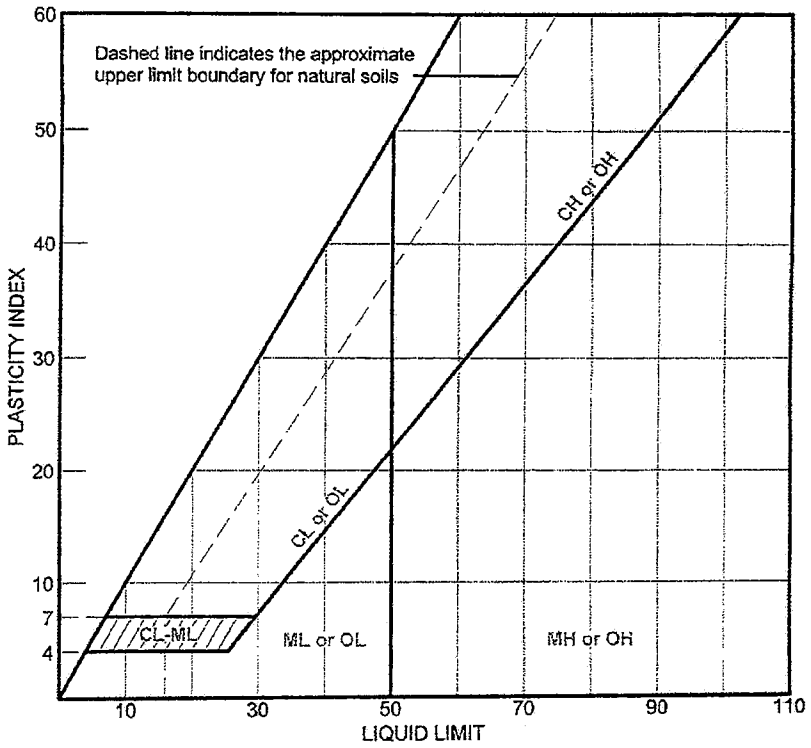
Sample Data

Source: B-321
Sample No.: UD-3
Elev. or Depth: 28.5 Ft. **Sample Length(in./cm.):** 5398
Location: B-321
Description:
Date: 10/9/06 **Natural Moisture:** N/A
USCS Class.: N/A **AASHTO Class.:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= _____
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
•	B-322	UD-2	18.5 Ft.	11/10/6	SM	Silty sand	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S

MACTEC ENGINEERING AND CONSULTING, INC.

• Tested by: JM Reviewed by: HJ

ASTM D 4318-05

4/24/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

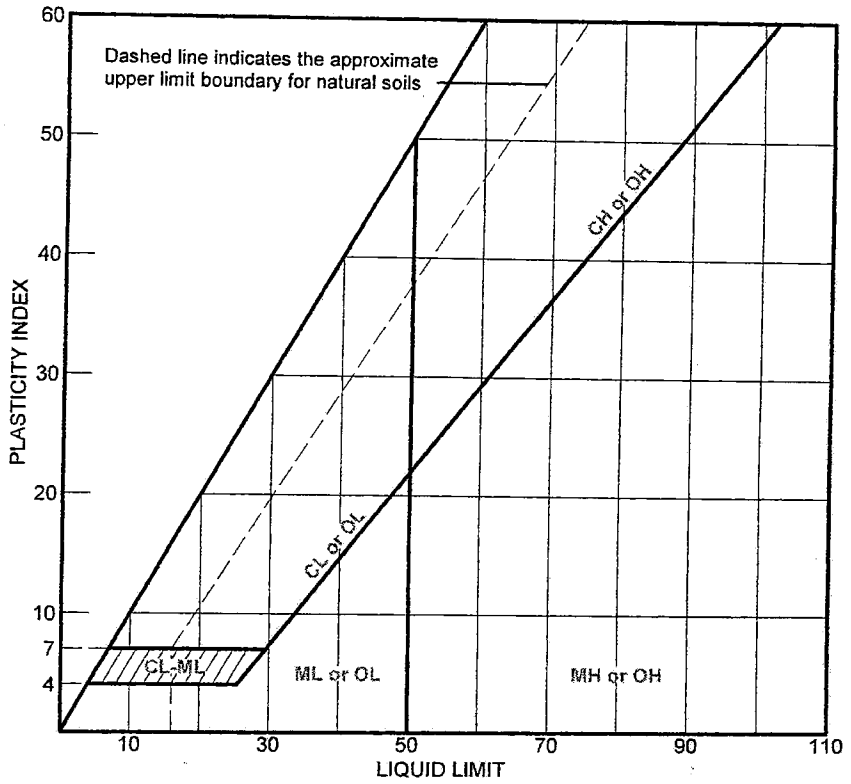
Sample Data

Source: B-322
Sample No.: UD-2
Elev. or Depth: 18.5 Ft. **Sample Length(in./cm.):** 5401
Location: B-322
Description: Silty sand
Date: 11/10/6 **Natural Moisture:** N/A
USCS Class.: SM **AASHTO Class.:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-325	3	6.0'	9/12/06	SM	SAND Silty (SM); Yellowish Red, Red	39.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS 11-16-06

LIQUID AND PLASTIC LIMIT TEST DATA

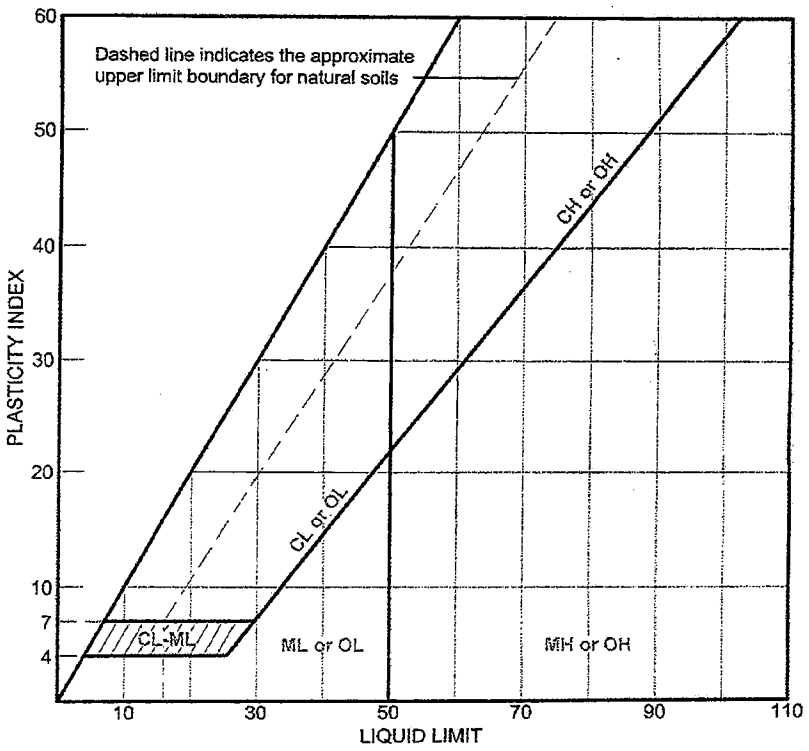
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 3
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Red
Date: 9/12/06 **Natural Moisture:** 39.9
USCS Class.: SM **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-325	UD-3	13.5 Ft.	10/9/06	N/A		N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

4/24/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

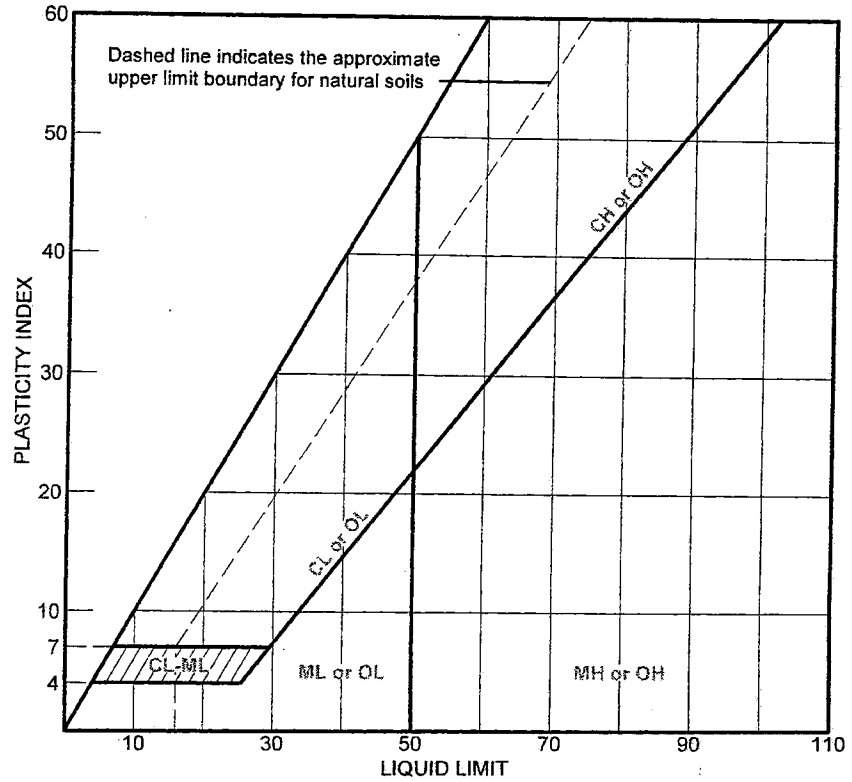
Sample Data

Source: B-325
Sample No.: UD-3
Elev. or Depth: 13.5 Ft. **Sample Length(in./cm.):** 5406
Location: B-325
Description:
Date: 10/9/06 **Natural Moisture:** N/A
USCS Class.: N/A **AASHTO Class.:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= _____
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-325	5	16.0'	9/12/06	SM	SAND Silty (SM); Dark Red, Strong Brown, Micaceous	22.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS

ASTM D4318-05

JRS 11-16-06

LIQUID AND PLASTIC LIMIT TEST DATA

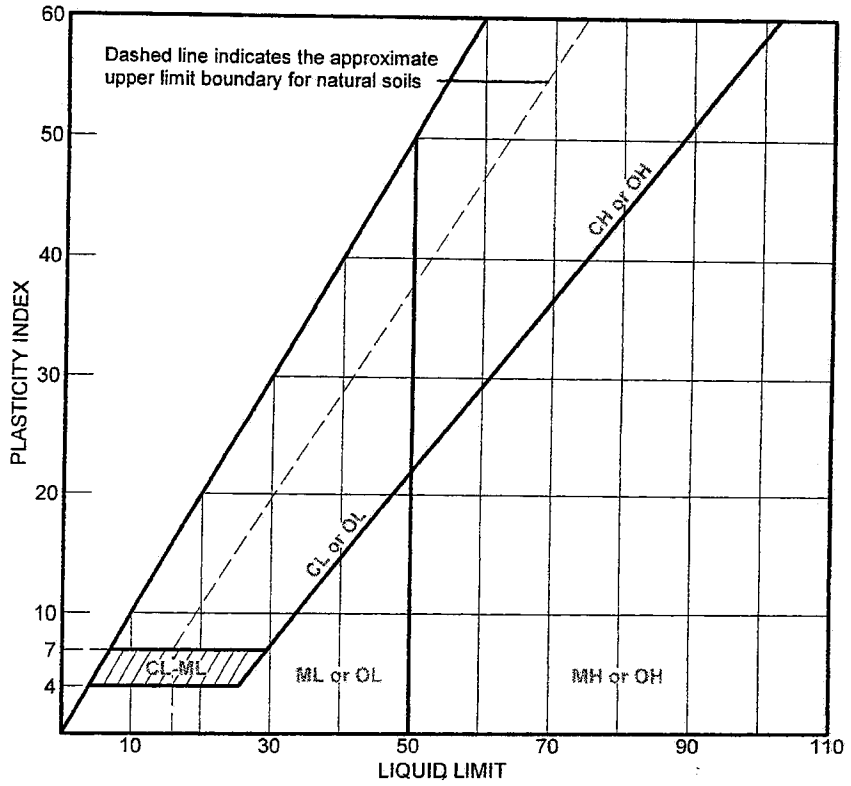
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 5
Elev. or Depth: 16.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Red, Strong Brown, Micaceous
Date: 9/12/06 **Natural Moisture:** 22.3
USCS Class.: SM **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-325	7	26.0'	9/12/06	SM	SAND Silty (SM); Red, Olive Brown, Yellowish Brown, White, Micaceous	16.6	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS. 11-16-06

LIQUID AND PLASTIC LIMIT TEST DATA

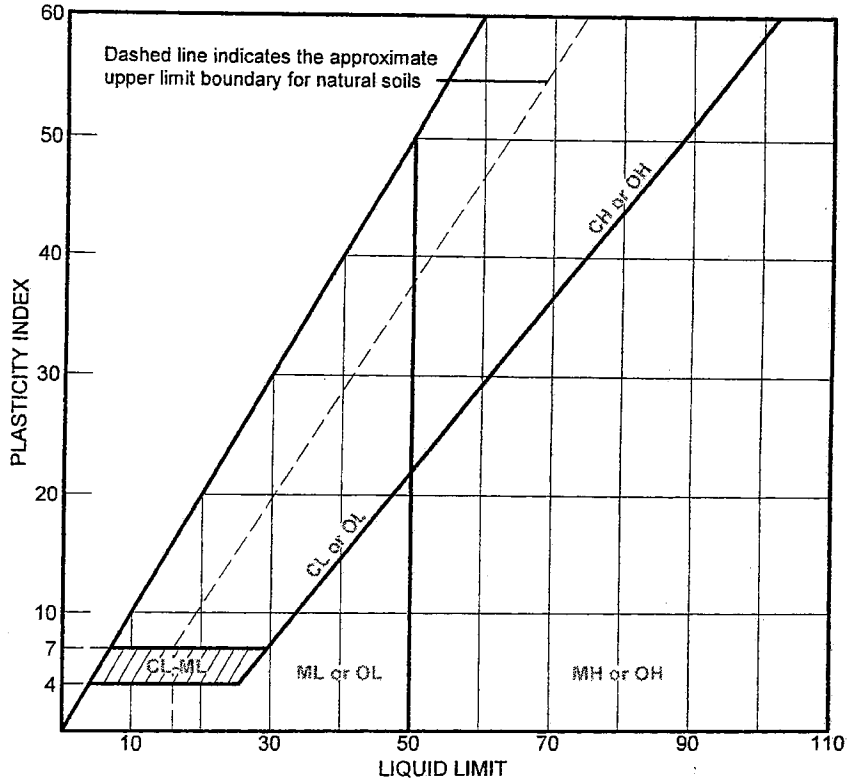
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 7
Elev. or Depth: 26.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Olive Brown, Yellowish Brown, White, Micaceous
Date: 9/12/06 **Natural Moisture:** 16.6
USCS Class.: SM **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-325	9	36.0'	9/12/06	SM	SAND Silty (SM); Strong Brown, Black, Dark Olive Gray, White, Micaceous	16.4	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS. 11-16-06

LIQUID AND PLASTIC LIMIT TEST DATA

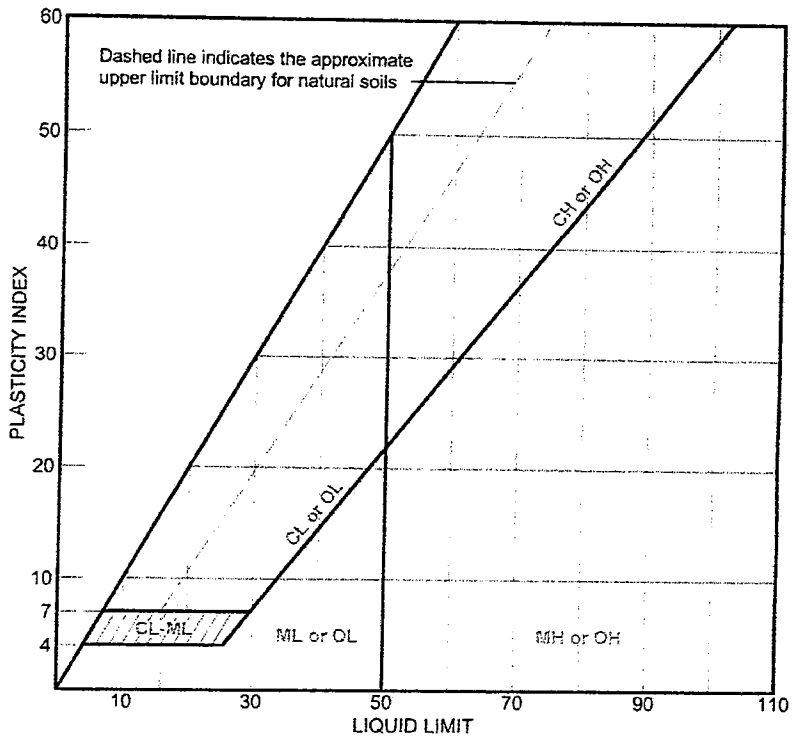
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 9
Elev. or Depth: 36.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Black, Dark Olive Gray, White, Micaceous
Date: 9/12/06 **Natural Moisture:** 16.4
USCS Class.: SM **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-325	UD-8	38.5 Ft.	9/28/06	N/A		N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

JH Luhr 9/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

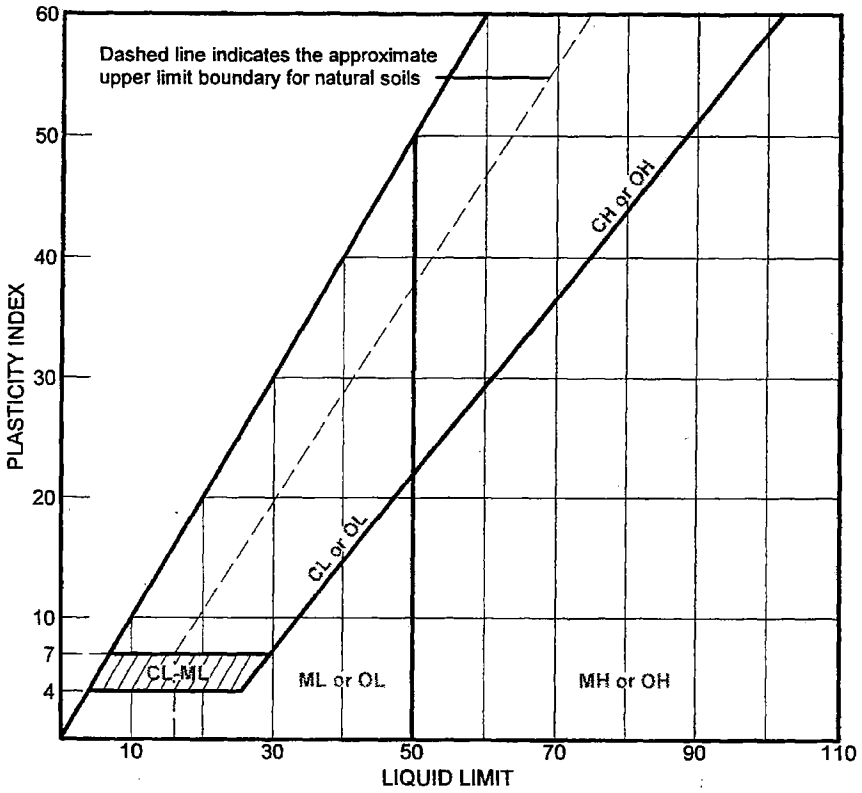
Sample Data

Source: B-325
Sample No.: UD-8
Elev. or Depth: 38.5 Ft. **Sample Length(in./cm.):** 5411
Location: B-325
Description:
Date: 9/28/06 **Natural Moisture:** N/A
USCS Class.: N/A **AASHTO Class.:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= _____
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	TP-201	Bucket 2	1' - 6'	9-26-06	SM	SAND, Silty (SM), Red, Micaceous	23.4	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS 11-29-06

LIQUID AND PLASTIC LIMIT TEST DATA

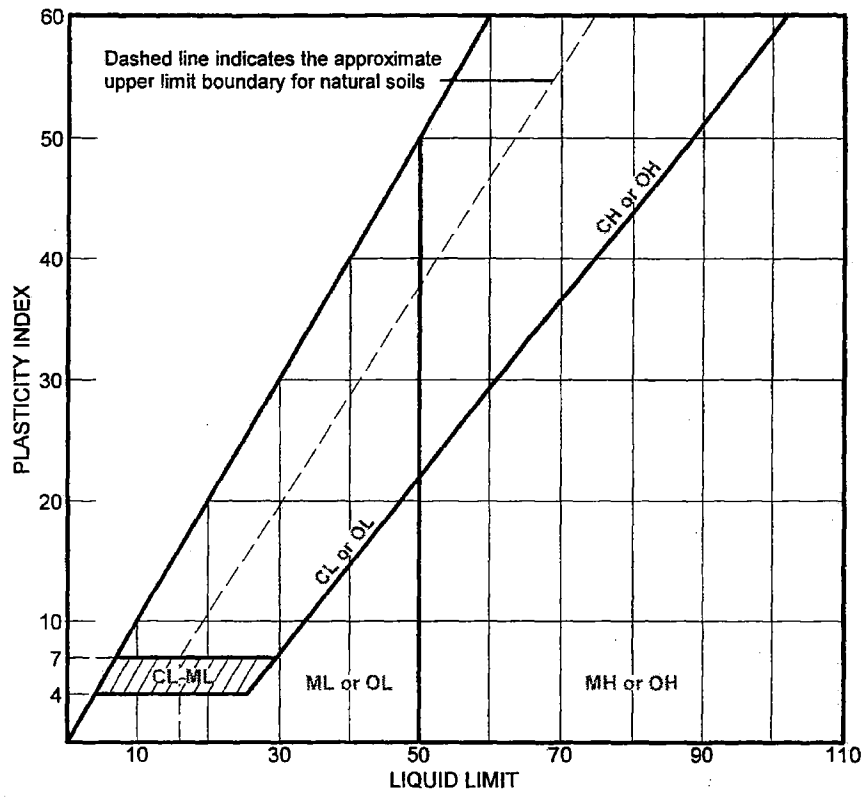
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-201
Sample No.: Bucket 2
Elev. or Depth: 1' - 6' **Sample Length(in./cm.):**
Location: TP-201
Description: SAND, Silty (SM), Red, Micaceous
Date: 9-26-06 **Natural Moisture:** 23.4
USCS Class.: SM **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	TP-227	Bucket 2	3' - 5'	9-26-06	ML	SILT, Sandy (ML), Red, Micaceous	27.8	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS. 11-29-06

LIQUID AND PLASTIC LIMIT TEST DATA

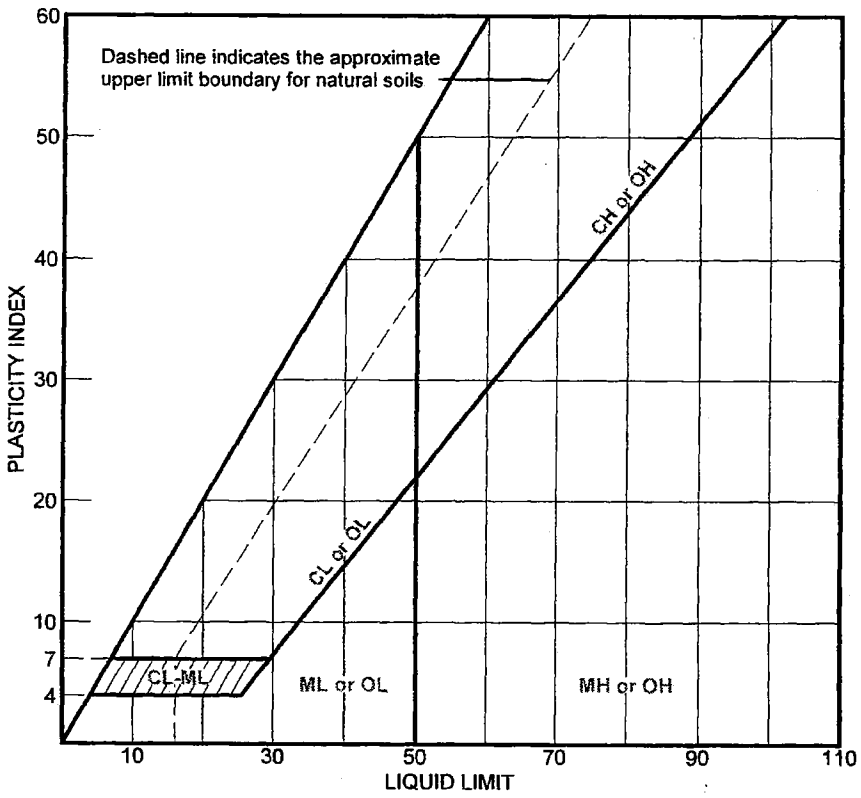
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-227
Sample No.: Bucket 2
Elev. or Depth: 3' - 5' **Sample Length(in./cm.):**
Location: TP-227
Description: SILT, Sandy (ML), Red, Micaceous
Date: 9-26-06 **Natural Moisture:** 27.8
USCS Class.: ML **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	TP-301	Bucket 1	0' - 3'	9-26-06	SM	SAND, Silty (SM), Yellowish Brown, Micaceous	21.1	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS. 11-29-06

LIQUID AND PLASTIC LIMIT TEST DATA

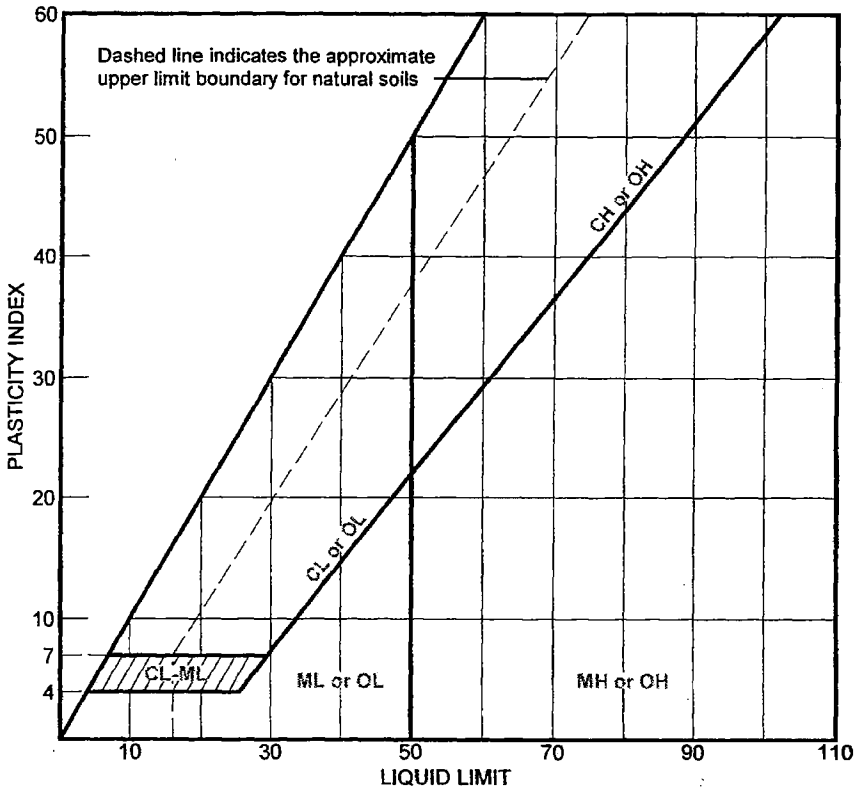
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-301
Sample No.: Bucket 1
Elev. or Depth: 0' - 3' **Sample Length(in./cm.):**
Location: TP-301
Description: SAND, Silty (SM), Yellowish Brown, Micaceous
Date: 9-26-06 **Natural Moisture:** 21.1
USCS Class.: SM **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	TP-405		0' - 4'	9-26-06	SM	SAND, Silty (SM), Dark Yellowish Brown, Micaceous	27.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

● Tested by: FHM Reviewed by: JRS
ASTM D4318-05

JRS. 11-29-06

LIQUID AND PLASTIC LIMIT TEST DATA

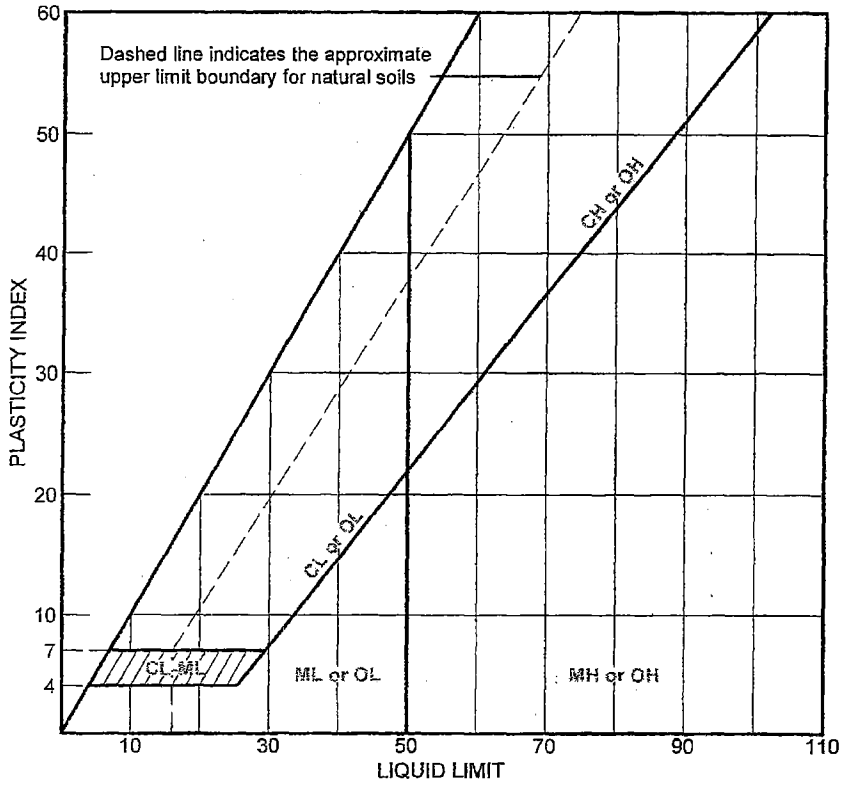
Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-405
Sample No.:
Elev. or Depth: 0' - 4' **Sample Length(in./cm.):**
Location: TP-405
Description: SAND, Silty (SM), Dark Yellowish Brown, Micaceous
Date: 9-26-06 **Natural Moisture:** 27.3
USCS Class.: SM **AASHTO Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-215	UD-1	8.5 Ft.	10/10/6		Silty Sand (SM)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

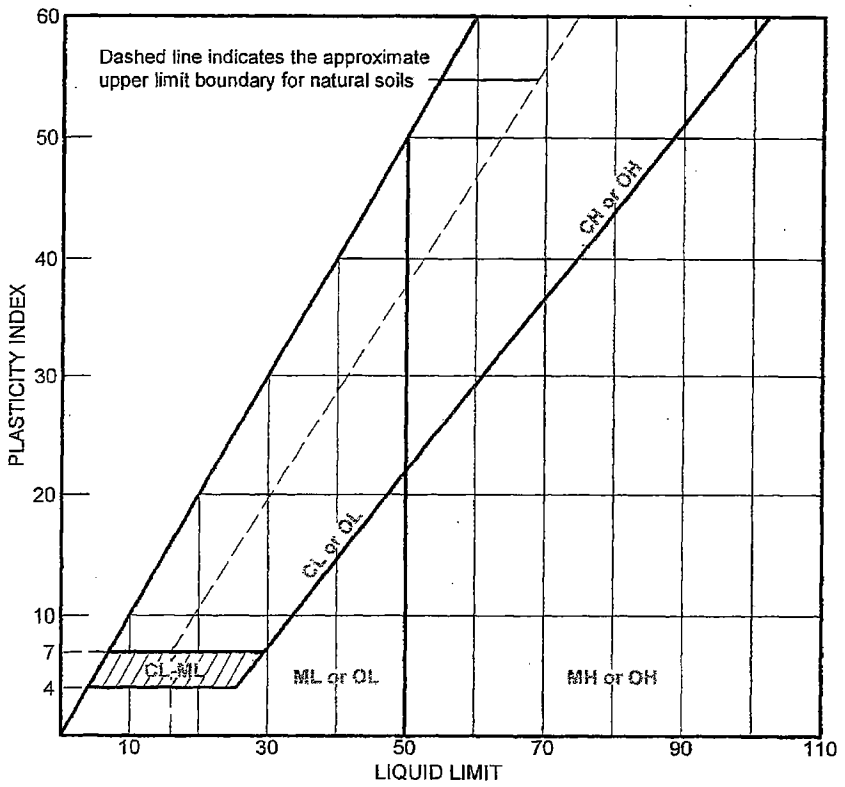
Sample Data

Source: B-215
Sample No.: UD-1
Elev. or Depth: 8.5 Ft.
Sample Length(in./cm.): 5373
Location: B-215
Description: Silty Sand (SM)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-215	UD-2	18.5 Ft.	10/10/6		Silty Sand (SM)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

12/22/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

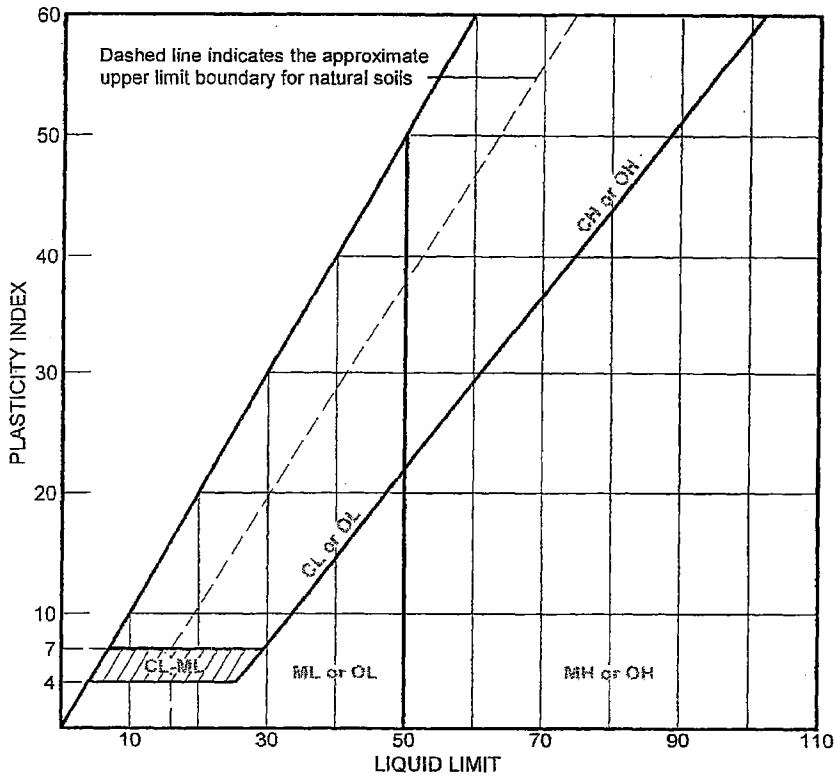
Sample Data

Source: B-215
Sample No.: UD-2
Elev. or Depth: 18.5 Ft. **Sample Length(in./cm.):** 5374
Location: B-215
Description: Silty Sand (SM)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-222	UD-1	8.5 Ft	10/9/06		Sandy Silt (ML)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

12/22/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

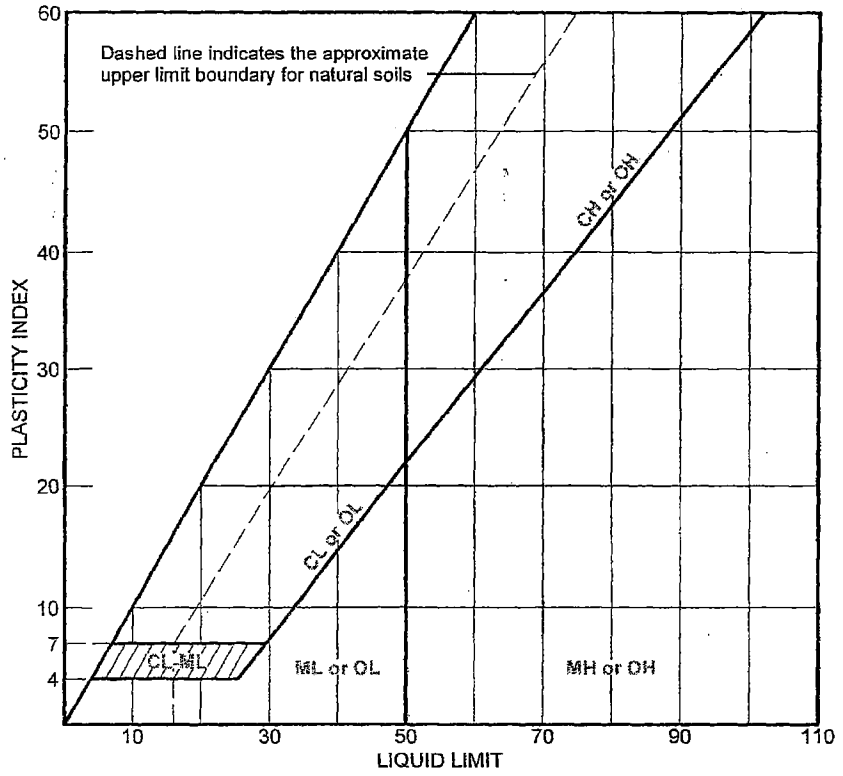
Sample Data

Source: B-222
Sample No.: UD-1
Elev. or Depth: 8.5 Ft
Sample Length(in./cm.): 5384
Location: B-222
Description: Sandy Silt (ML)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-222	UD-2	18.5 Ft.	10/3/06		Sandy Silt (ML)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

12/22/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

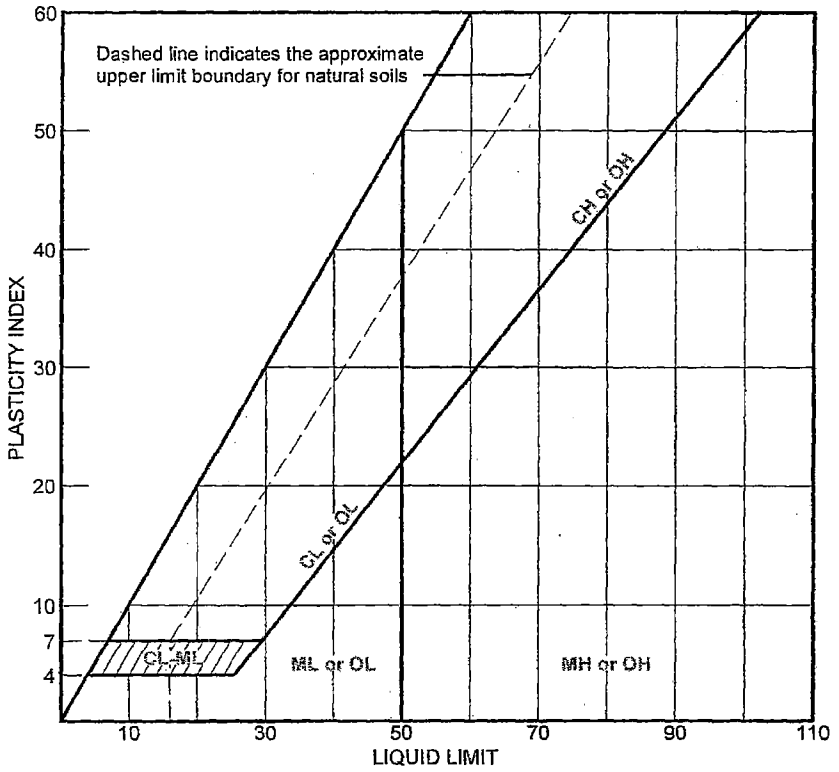
Sample Data

Source: B-222
Sample No.: UD-2
Elev. or Depth: 18.5 Ft.
Sample Length(in./cm.): 5385
Location: B-222
Description: Sandy Silt (ML)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-319	UD-3	28.5 Ft.	10/9/06		Sandy Silt (ML)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

12/22/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

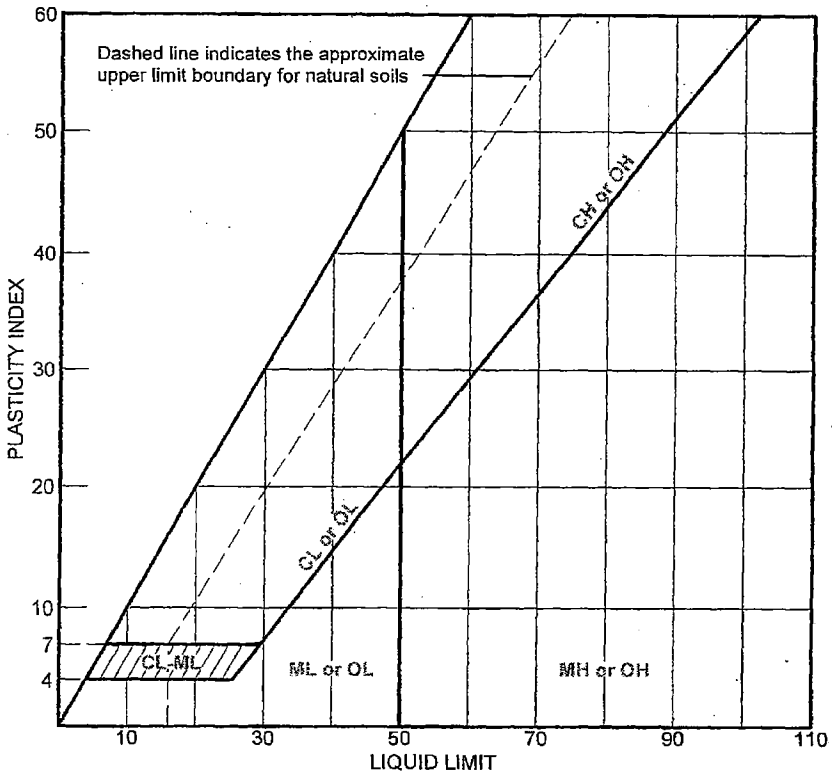
Sample Data

Source: B-319
Sample No.: UD-3
Elev. or Depth: 28.5 Ft. **Sample Length(in./cm.):** 5394
Location: B-319
Description: Sandy Silt (ML)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-319	UD-4	38.5 Ft.	9/28/06		Sandy Silt (ML)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

10/22/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

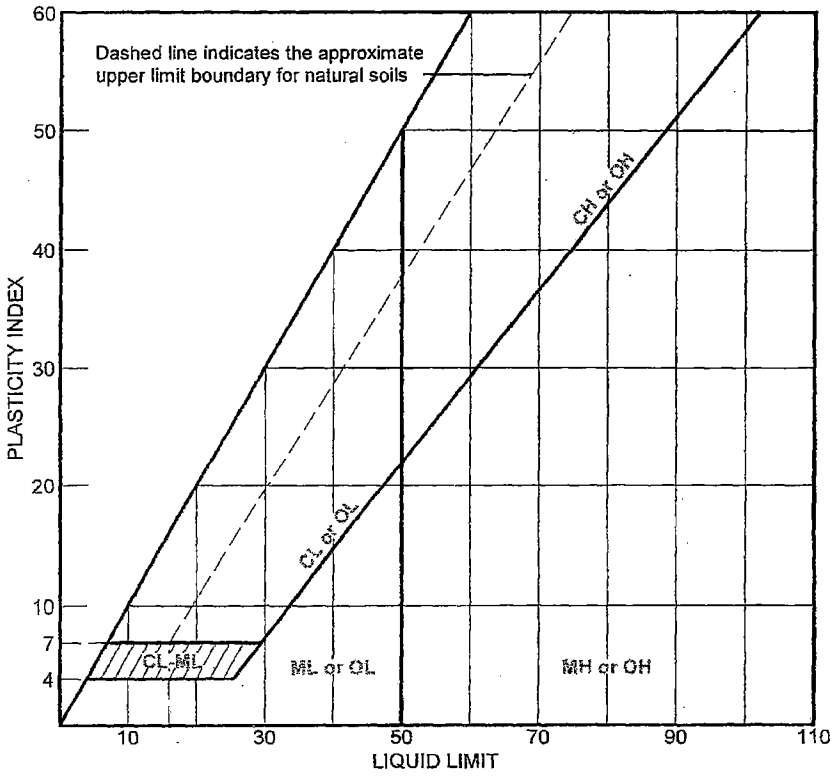
Sample Data

Source: B-319
Sample No.: UD-4
Elev. or Depth: 38.5 Ft.
Sample Length(in./cm.): 5395
Location: B-319
Description: Sandy Silt (ML)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-321	UD-3	28.5 Ft.	10/9/06		Silty Sand (SM)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

12/22/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

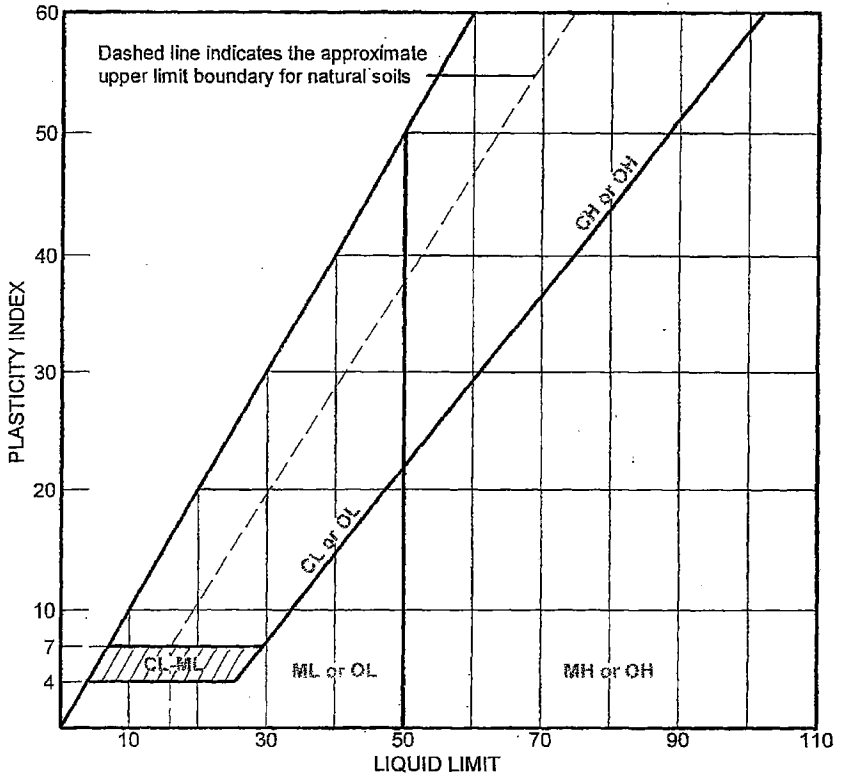
Sample Data

Source: B-321
Sample No.: UD-3
Elev. or Depth: 28.5 Ft. **Sample Length(in./cm.):** 5398
Location: B-321
Description: Silty Sand (SM)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-325	UD-3	13.5 Ft.	10/9/06		Silty Sand (SM)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

11/22/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

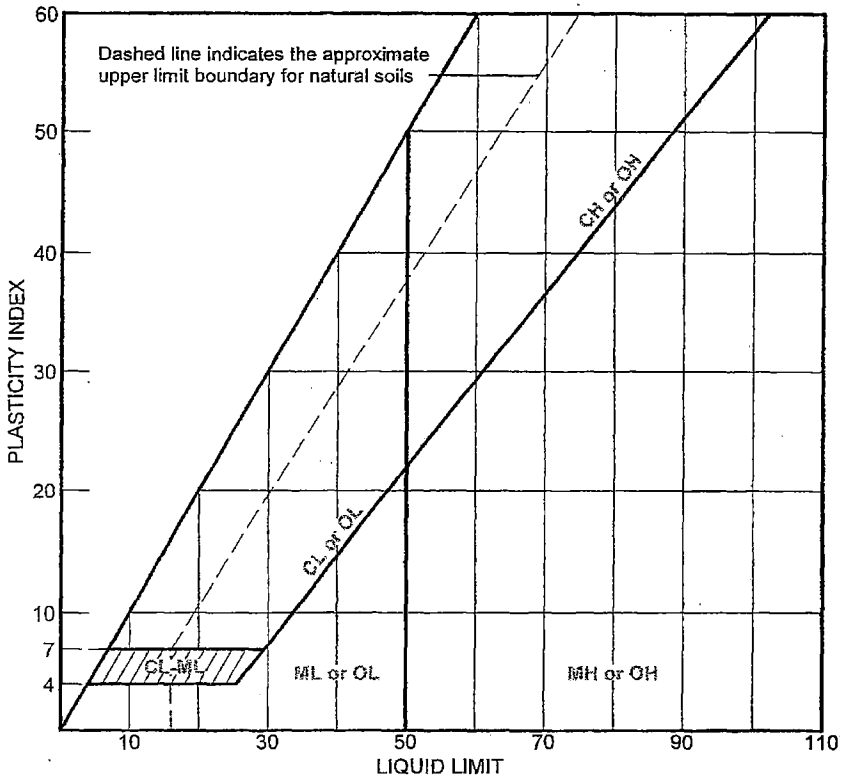
Sample Data

Source: B-325
Sample No.: UD-3
Elev. or Depth: 13.5 Ft.
Sample Length(in./cm.): 5406
Location: B-325
Description: Silty Sand (SM)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D 4318-05



	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PI
●	B-325	UD-8	38.5 Ft.	9/28/06		Silty Sand (SM)	N/A	NV	NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Lab

MACTEC ENGINEERING AND CONSULTING, INC.

● Tested by: JM Reviewed by: HJ

ASTM D 4318-05

12/22/06

LIQUID AND PLASTIC LIMIT TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

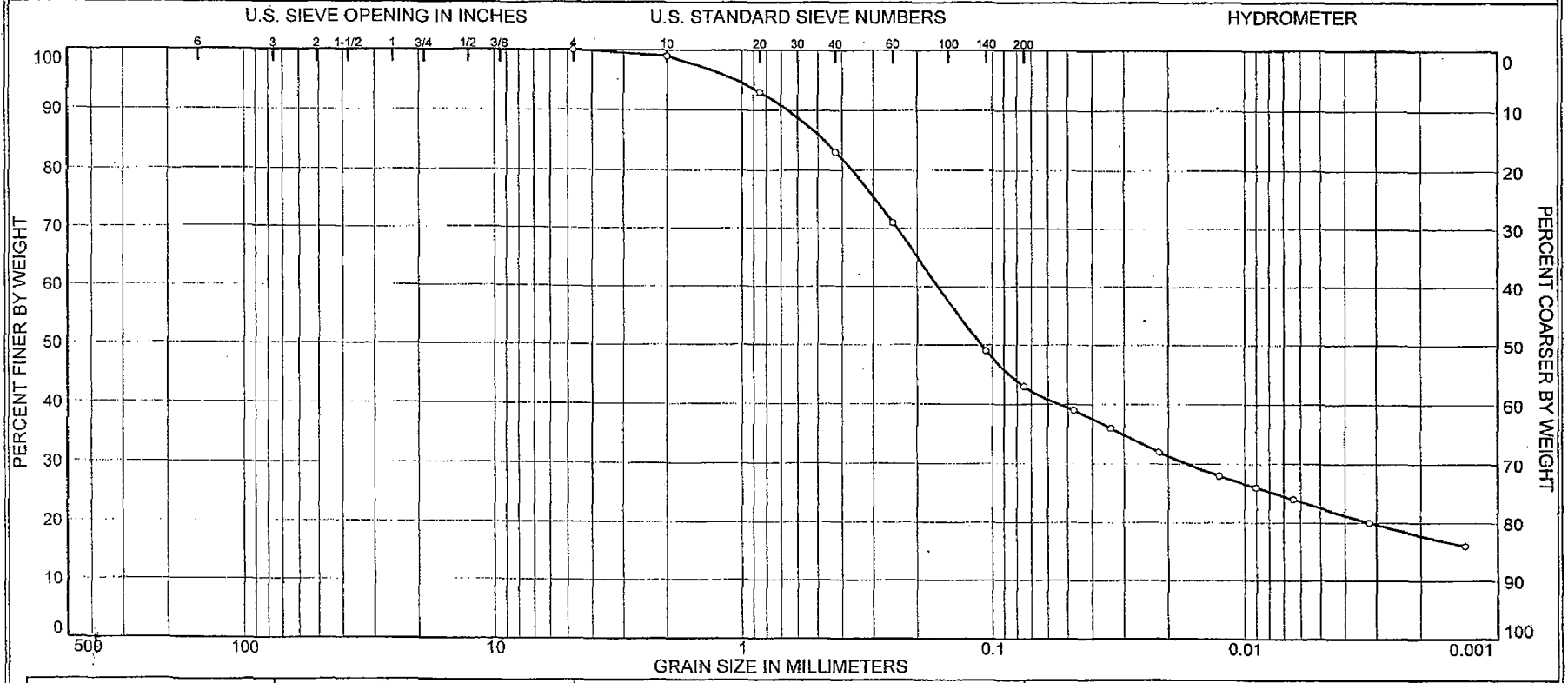
Sample Data

Source: B-325
Sample No.: UD-8
Elev. or Depth: 38.5 Ft.
Sample Length(in./cm.): 5411
Location: B-325
Description: Silty Sand (SM)
%<#40: **%<#200:** **USCS:** **AASHTO:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 4318-05

Liquid Limit= NV
Plastic Limit= NP
Plasticity Index= NP

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	1	16	40	20	23

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-201	2	1.5'	8/4/06	SM	SAND Silty (SM); Red, Micaceous	19.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

Tested by: JA Reviewed by: JRS

ASTM D-422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Micaceous
Date: 8/4/06 **Natural Moisture:** 19.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D-422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	160.01
Tare =	0.00
Dry sample weight =	160.01

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.90 Tare = .00 Sample weight = 50.90
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.17	99
# 20	3.29	93
# 40	7.99	83
# 60	14.16	71
# 140	25.77	49
# 200	28.94	43

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 51.41
Hygroscopic moisture correction:
Moist weight & tare = 39.52
Dry weight & tare = 39.23
Tare = 10.71
Hygroscopic moisture= 1 %
Calculated biased weight= 51.41
Table of composite correction values:

Temp, deg C:	40.2	23.1	10.7
Comp. corr:	-1.0	-5.0	-8.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

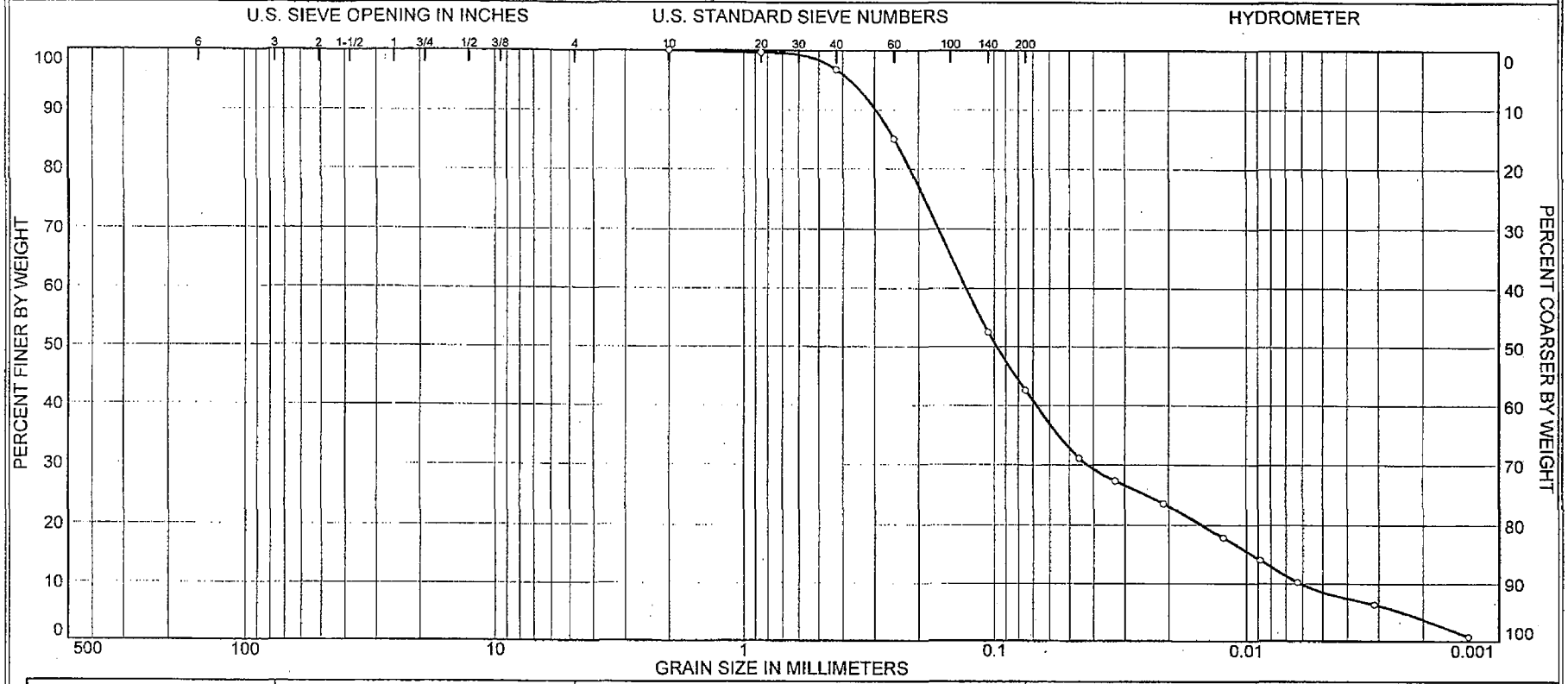
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.2	25.5	19.8	0.0136	25.5	12.1	0.0474	39
2.00	20.2	24.0	18.3	0.0136	24.0	12.4	0.0338	36
5.00	20.2	22.0	16.3	0.0136	22.0	12.7	0.0217	32
15.00	20.2	20.0	14.3	0.0136	20.0	13.0	0.0127	28
30.00	20.2	19.0	13.3	0.0136	19.0	13.2	0.0090	26
60.00	20.2	18.0	12.3	0.0136	18.0	13.3	0.0064	24
250.00	20.2	16.0	10.3	0.0136	16.0	13.7	0.0032	20
1440.00	20.2	14.0	8.3	0.0136	14.0	14.0	0.0013	16

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 57 (% coarse = 1 % medium = 16 % fine = 40)
% SILT = 20 % CLAY = 23

D_{85}= 0.47 D_{60}= 0.17 D_{50}= 0.11
D_{30}= 0.02

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	3	54	34	8

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-201	4	6.0'	7/26/06	SM	SAND Silty (SM); Red, Micaceous	18.4	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11.17.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Micaceous
Date: 7/26/06 **Natural Moisture:** 18.4
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	141.55
Tare =	0.00
Dry sample weight =	141.55

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.47 Tare = .00 Sample weight = 50.47
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.20	100
# 40	1.62	97
# 60	7.55	85
# 140	23.99	53
# 200	28.99	43

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.23
Hygroscopic moisture correction:
Moist weight & tare = 36.63
Dry weight & tare = 36.24
Tare = 10.91
Hygroscopic moisture= 2 %
Calculated biased weight= 50.45
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.85
Specific gravity correction factor= 0.959
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

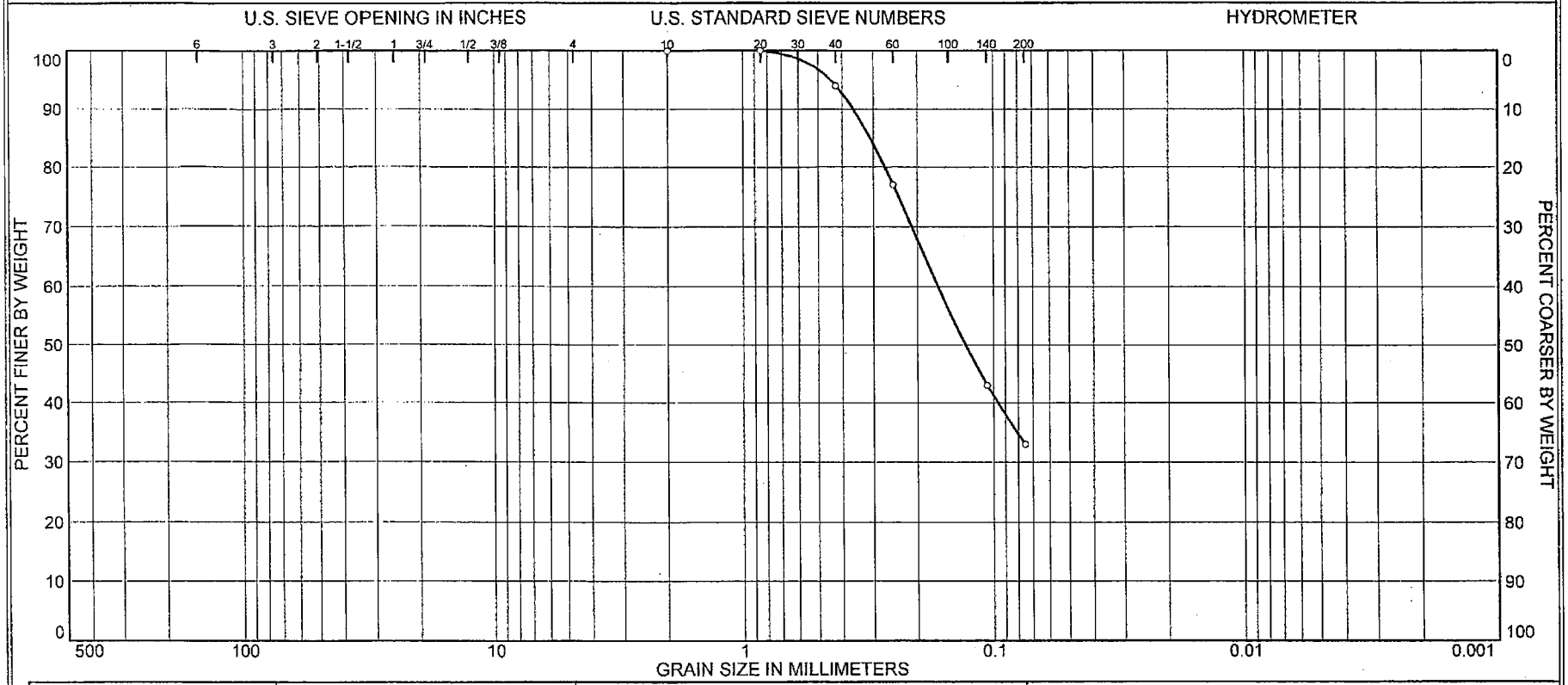
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.4	22.0	16.3	0.0128	22.0	12.7	0.0457	31
2.00	20.4	20.0	14.3	0.0128	20.0	13.0	0.0327	27
5.00	20.4	18.0	12.3	0.0128	18.0	13.3	0.0209	24
15.00	20.4	15.0	9.3	0.0128	15.0	13.8	0.0123	18
30.00	20.4	13.0	7.3	0.0128	13.0	14.2	0.0088	14
60.00	20.4	11.0	5.3	0.0128	11.0	14.5	0.0063	10
250.00	20.4	9.0	3.3	0.0128	9.0	14.8	0.0031	6
1440.00	20.4	6.0	0.3	0.0128	6.0	15.3	0.0013	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 57 **(% coarse =** **% medium =** 3 **% fine =** 54)
% SILT = 34 **% CLAY =** 8

D_{85}= 0.25 D_{60}= 0.13 D_{50}= 0.10
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 2.235 C_u= 21.1719

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	6	61	33	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-201	6	11.0'	7/31/06		SAND Silty (SM); Yellowish Red, Micaceous	18.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11.17.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Micaceous
Date: 7/31/06 **Natural Moisture:** 18.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	444.05
Tare =	191.09
Dry sample weight =	252.96

Tare for cumulative weight retained= .00

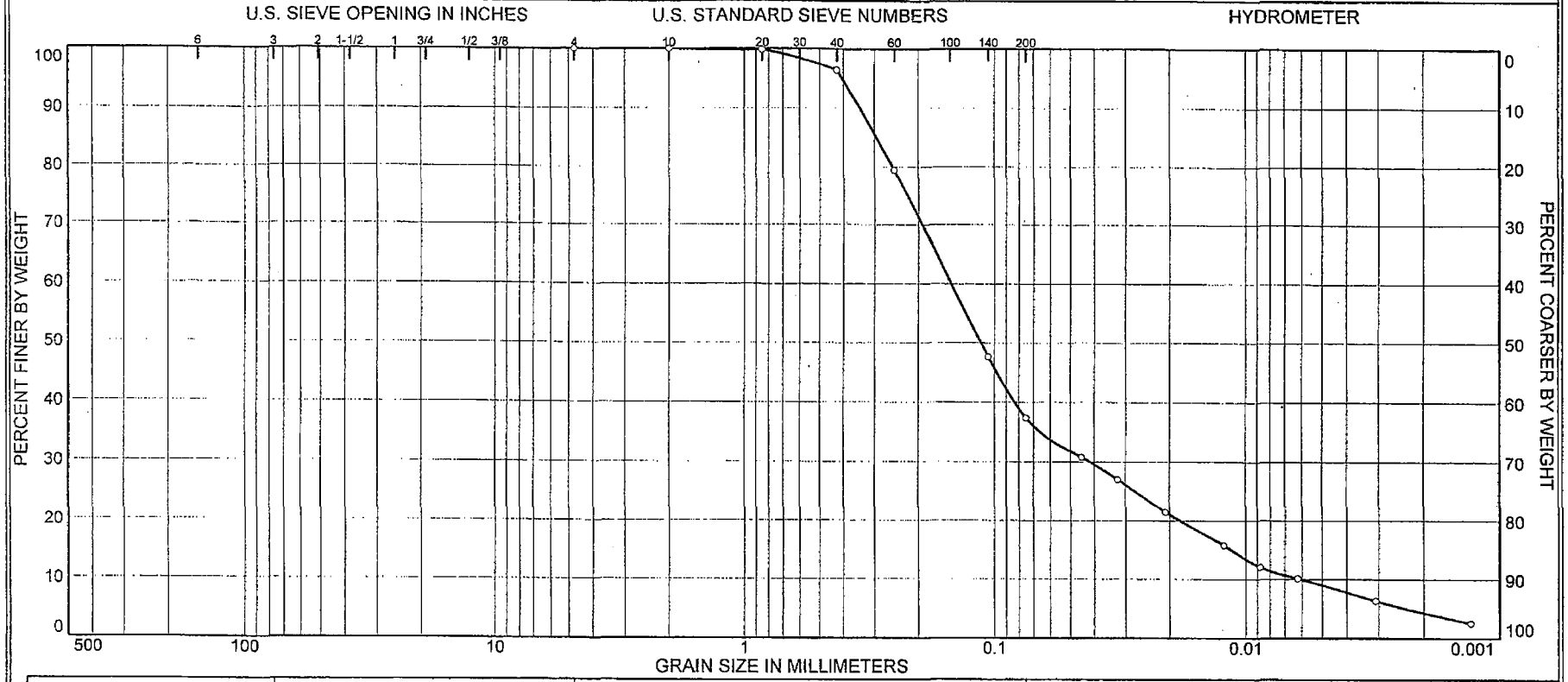
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	1.15	100
# 40	16.02	94
# 60	57.93	77
# 140	144.67	43
# 200	168.81	33

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 67 (% coarse = % medium = 6 % fine = 61)
% FINES = 33

D_{85}= 0.31 D_{60}= 0.17 D_{50}= 0.13

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	4	59	28	9

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-201	7	13.5'	7/26/06	SM	SAND Silty (SM); Yellowish Red, Micaceous	20.1	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Micaceous
Date: 7/26/06 **Natural Moisture:** 20.1
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	144.07
Tare =	0.00
Dry sample weight =	144.07

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.39 Tare = .00 Sample weight = 50.39
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.02	100
# 20	0.09	100
# 40	1.81	96
# 60	10.37	79
# 140	26.40	48
# 200	31.53	37

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.25
Hygroscopic moisture correction:
Moist weight & tare = 37.37
Dry weight & tare = 36.94
Tare = 10.96
Hygroscopic moisture= 2 %
Calculated biased weight= 50.42
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.90
Specific gravity correction factor= 0.950
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

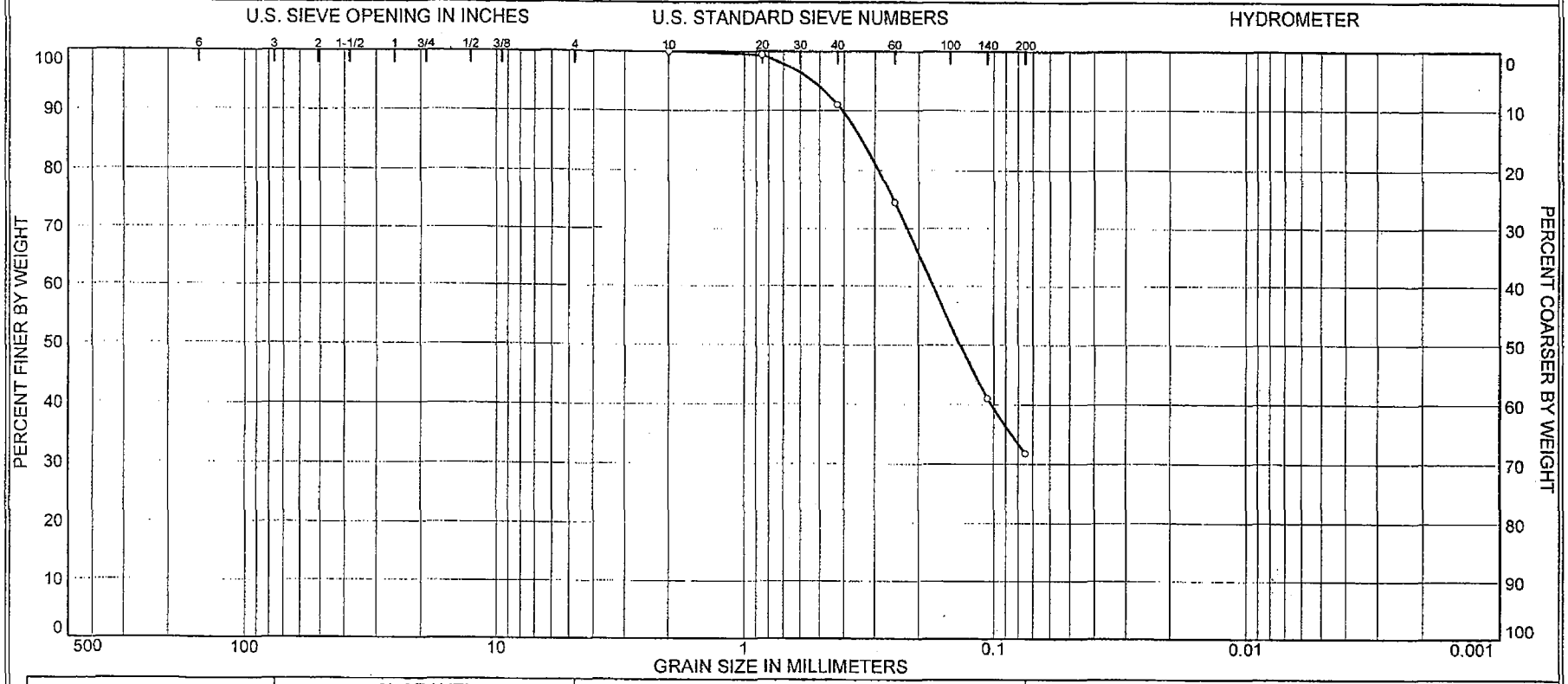
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.4	22.0	16.3	0.0127	22.0	12.7	0.0451	31
2.00	20.4	20.0	14.3	0.0127	20.0	13.0	0.0323	27
5.00	20.4	17.0	11.3	0.0127	17.0	13.5	0.0208	21
15.00	20.4	14.0	8.3	0.0127	14.0	14.0	0.0122	16
30.00	20.4	12.0	6.3	0.0127	12.0	14.3	0.0087	12
60.00	20.4	11.0	5.3	0.0127	11.0	14.5	0.0062	10
250.00	20.4	9.0	3.3	0.0127	9.0	14.8	0.0031	6
1440.00	20.4	7.0	1.3	0.0127	7.0	15.1	0.0013	3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 63 (% coarse = 0 % medium = 4 % fine = 59)
% SILT = 28 % CLAY = 9

D_{85}= 0.29 D_{60}= 0.15 D_{50}= 0.11
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_C= 1.9209 C_u= 24.4351

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	9	59	32	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-201	8	18.5'	7/31/06		SAND Silty (SM); Strong Brown, Micaceous	24.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 7/31/06 **Natural Moisture:** 24.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	437.96
Tare =	190.33
Dry sample weight =	247.63

Tare for cumulative weight retained= .00

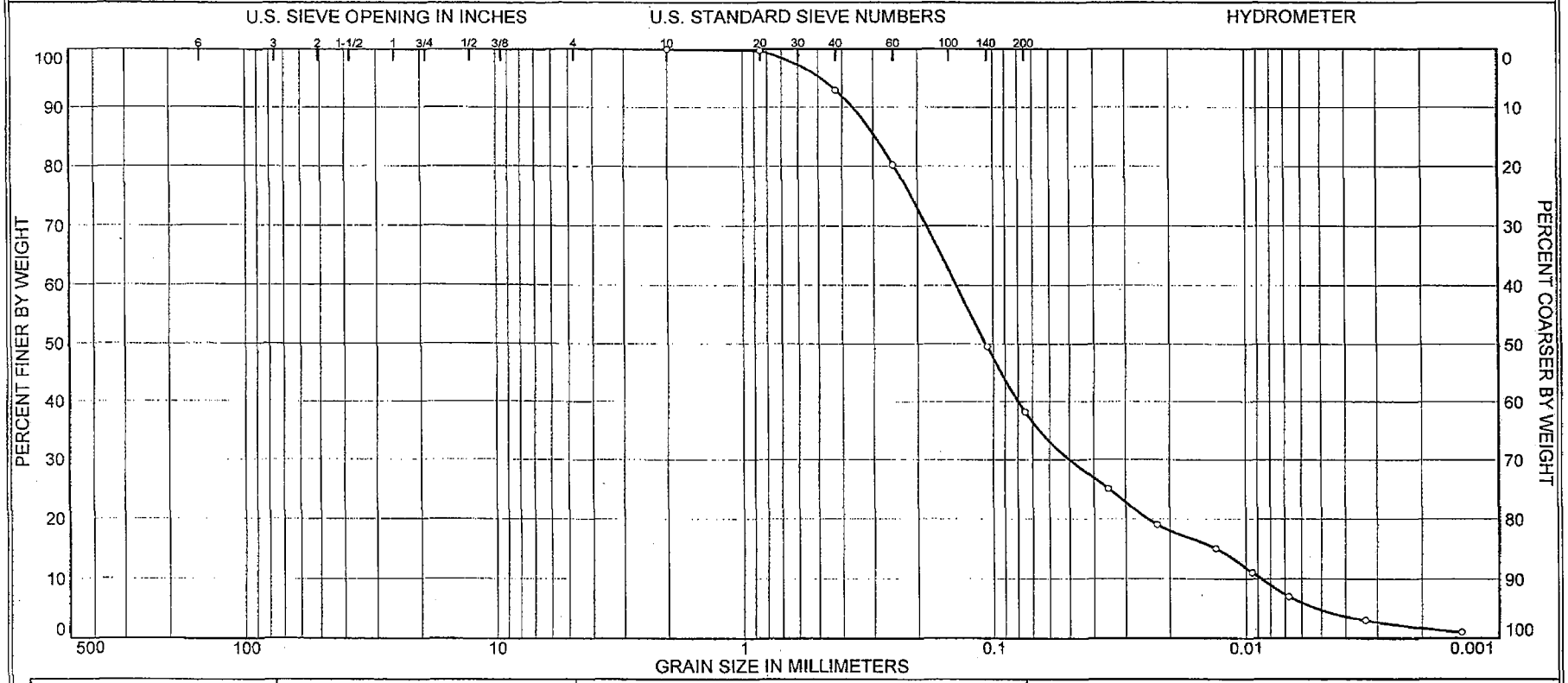
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	1.41	99
40	22.26	91
# 60	63.04	75
# 140	146.09	41
# 200	168.76	32

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 68 (% coarse = % medium = 9 % fine = 59)
% FINES = 32

D_{85}= 0.34 D_{60}= 0.18 D_{50}= 0.14

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	7	55	34	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-201	10	28.5'	8/3/06	SM	SAND Silty (SM); Strong Brown, Micaceous	28.6	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 8/3/06 **Natural Moisture:** 28.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	142.04
Tare =	0.00
Dry sample weight =	142.04

Sample split on number 10 sieve
Split sample data:
Sample and tare = 49.78 Tare = .00 Sample weight = 49.78
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.17	100
# 40	3.54	93
# 60	9.84	80
# 140	25.12	50
# 200	30.75	38

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.47
Hygroscopic moisture correction:
Moist weight & tare = 36.93
Dry weight & tare = 36.09
Tare = 11.40
Hygroscopic moisture= 3 %
Calculated biased weight= 49.78
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

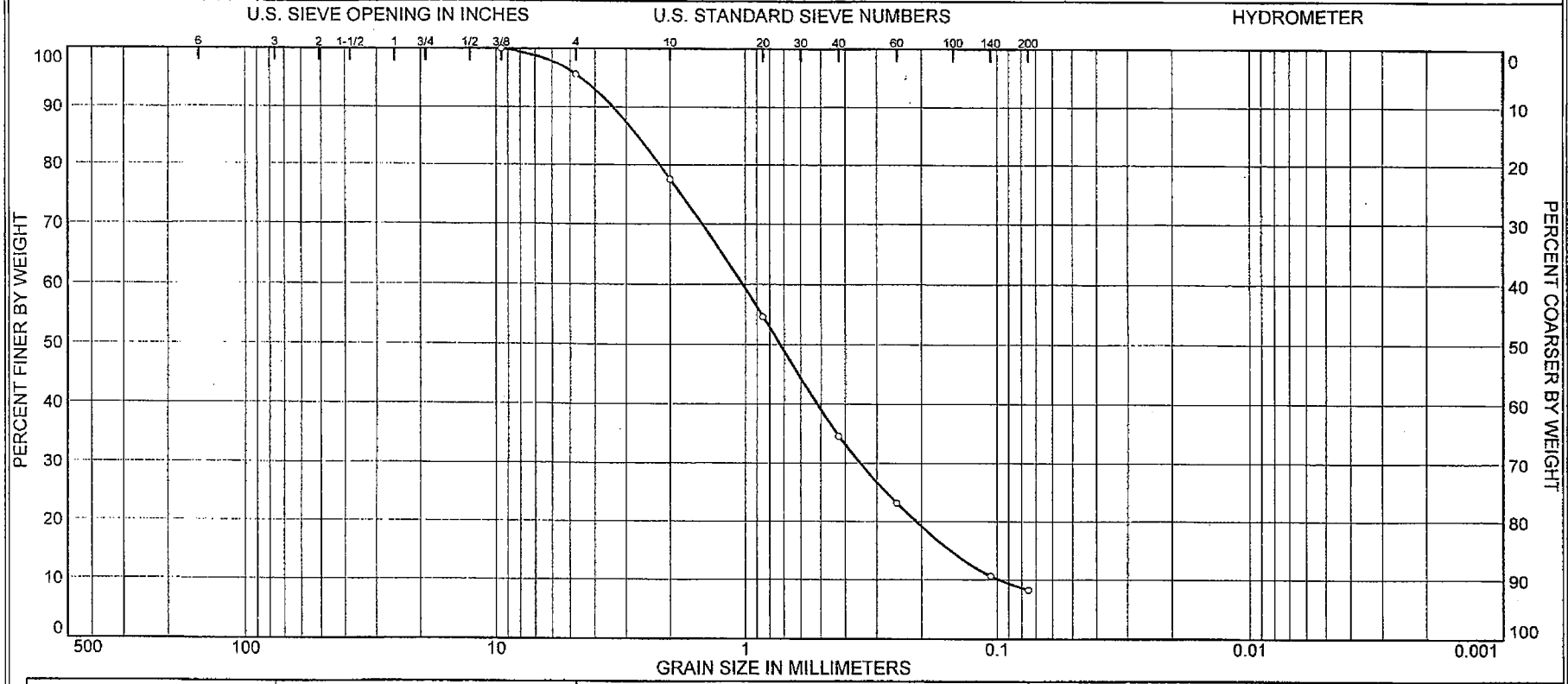
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.4	18.0	12.3	0.0136	18.0	13.3	0.0351	25
5.00	20.4	15.0	9.3	0.0136	15.0	13.8	0.0226	19
15.00	20.4	13.0	7.3	0.0136	13.0	14.2	0.0132	15
30.00	20.4	11.0	5.3	0.0136	11.0	14.5	0.0094	11
60.00	20.4	9.0	3.3	0.0136	9.0	14.8	0.0067	7
250.00	20.4	7.0	1.3	0.0136	7.0	15.1	0.0033	3
1440.00	20.4	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 62 (**% coarse =** **% medium =** 7 **% fine =** 55)
% SILT = 34 **% CLAY =** 5

D_{85}= 0.30 D_{60}= 0.14 D_{50}= 0.11
D_{30}= 0.05 D_{15}= 0.01 D_{10}= 0.01
C_c= 2.0383 C_u= 16.0976

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	4	18	43	26	8	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-201	11	33.5'	7/31/06		SAND with Silt (SW-SM); White, Strong Brown, Gray, Micaceous	9.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND with Silt (SW-SM); White, Strong Brown, Gray, Micaceous
Date: 7/31/06 **Natural Moisture:** 9.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	357.22
Tare =	194.53
Dry sample weight =	162.69

Tare for cumulative weight retained= .00

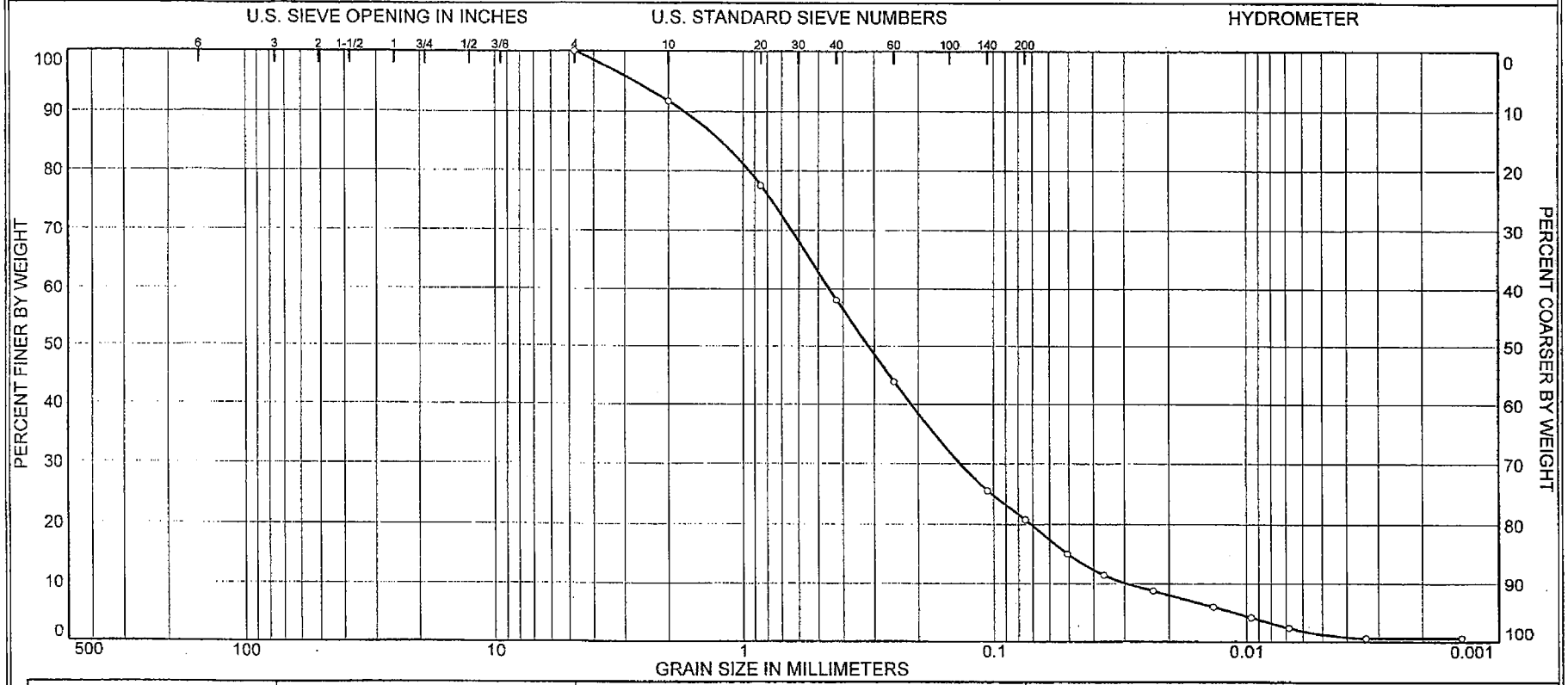
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	7.17	96
10	36.65	78
20	73.89	55
# 40	106.42	35
# 60	125.12	23
# 140	145.41	11
# 200	149.42	8

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 4 **(% coarse =** **% fine =** 4)
% SAND = 87 **(% coarse =** 18 **% medium =** 43 **% fine =** 26)
% FINES = 8

D_{85}= 2.71 D_{60}= 1.03 D_{50}= 0.73
D_{30}= 0.35 D_{15}= 0.15 D_{10}= 0.10
C_c= 1.2128 C_u= 10.4203

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	8	34	37	19	1

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-201	13	43.5'	8/8/06		SAND Silty (SM), White, Strong Brown, Gray, Black	15.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 13
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM), White, Strong Brown, Gray, Black
Date: 8/8/06 **Natural Moisture:** 15.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	106.97
Tare =	0.00
Dry sample weight =	106.97

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.04 Tare = .00 Sample weight = 51.04
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	8.88	92
# 20	7.89	78
# 40	18.75	58
# 60	26.65	44
# 140	36.84	26
# 200	39.54	21

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 92
Weight of hydrometer sample: 51.70
Hygroscopic moisture correction:
Moist weight & tare = 36.90
Dry weight & tare = 36.56
Tare = 10.85
Hygroscopic moisture= 1 %
Calculated biased weight= 55.64
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Discus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

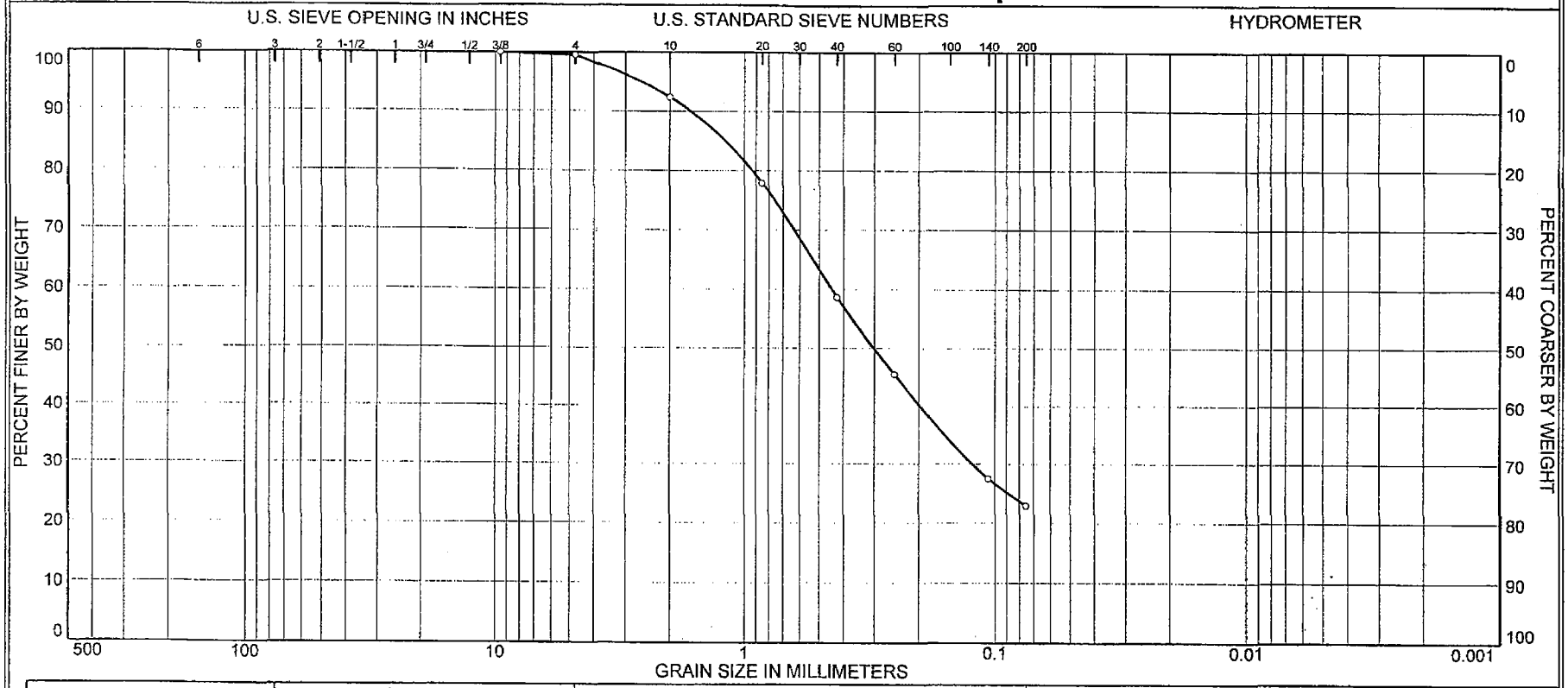
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.4	14.0	8.3	0.0136	14.0	14.0	0.0508	15
2.00	20.4	12.0	6.3	0.0136	12.0	14.3	0.0363	11
5.00	20.4	10.5	4.8	0.0136	10.5	14.6	0.0232	9
15.00	20.4	9.0	3.3	0.0136	9.0	14.8	0.0135	6
30.00	20.4	8.0	2.3	0.0136	8.0	15.0	0.0096	4
60.00	20.4	7.0	1.3	0.0136	7.0	15.1	0.0068	2
250.00	20.4	6.0	0.3	0.0136	6.0	15.3	0.0034	1
1440.00	20.4	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 79 (% coarse = 8 % medium = 34 % fine = 37)
% SILT = 19 % CLAY = 1

D_{85}= 1.23 D_{60}= 0.46 D_{50}= 0.32
D_{30}= 0.14 D_{15}= 0.05 D_{10}= 0.03
C_C= 1.386 C_u= 15.329

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	1	7	34	36	23	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-201	14	48.5'	7/31/06		SAND Silty (SM), White, Strong Brown, Gray, Black	16.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-201
Sample No.: 14
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM), White, Strong Brown, Gray, Black
Date: 7/31/06 **Natural Moisture:** 16.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	482.12
Tare =	189.55
Dry sample weight =	292.57

Tare for cumulative weight retained= .00

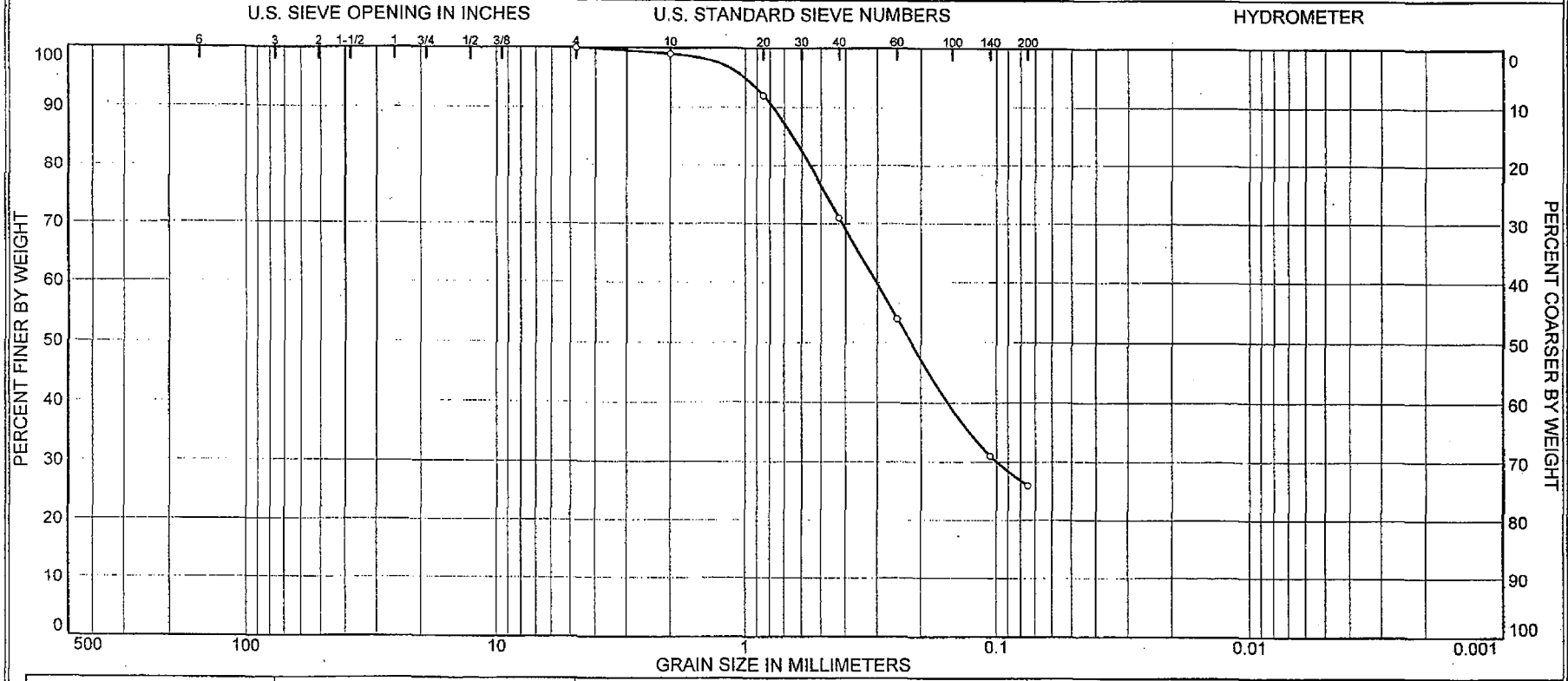
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	1.36	100
10	22.66	92
# 20	64.90	78
# 40	120.86	59
# 60	159.63	45
# 140	212.22	28
# 200	225.50	23

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 1 **(% coarse =** **% fine =** 1)
% SAND = 77 **(% coarse =** 7 **% medium =** 34 **% fine =** 36)
% FINES = 23

D_{85}= 1.20 D_{60}= 0.45 D_{50}= 0.30
D_{30}= 0.12

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	28	45	26	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-203	2	1.5'	7/31/06		SAND Silty (SM); Strong Brown, Micaceous	15.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-203
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 7/31/06 **Natural Moisture:** 15.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	295.65
Tare =	110.71
Dry sample weight =	184.94

Tare for cumulative weight retained= .00

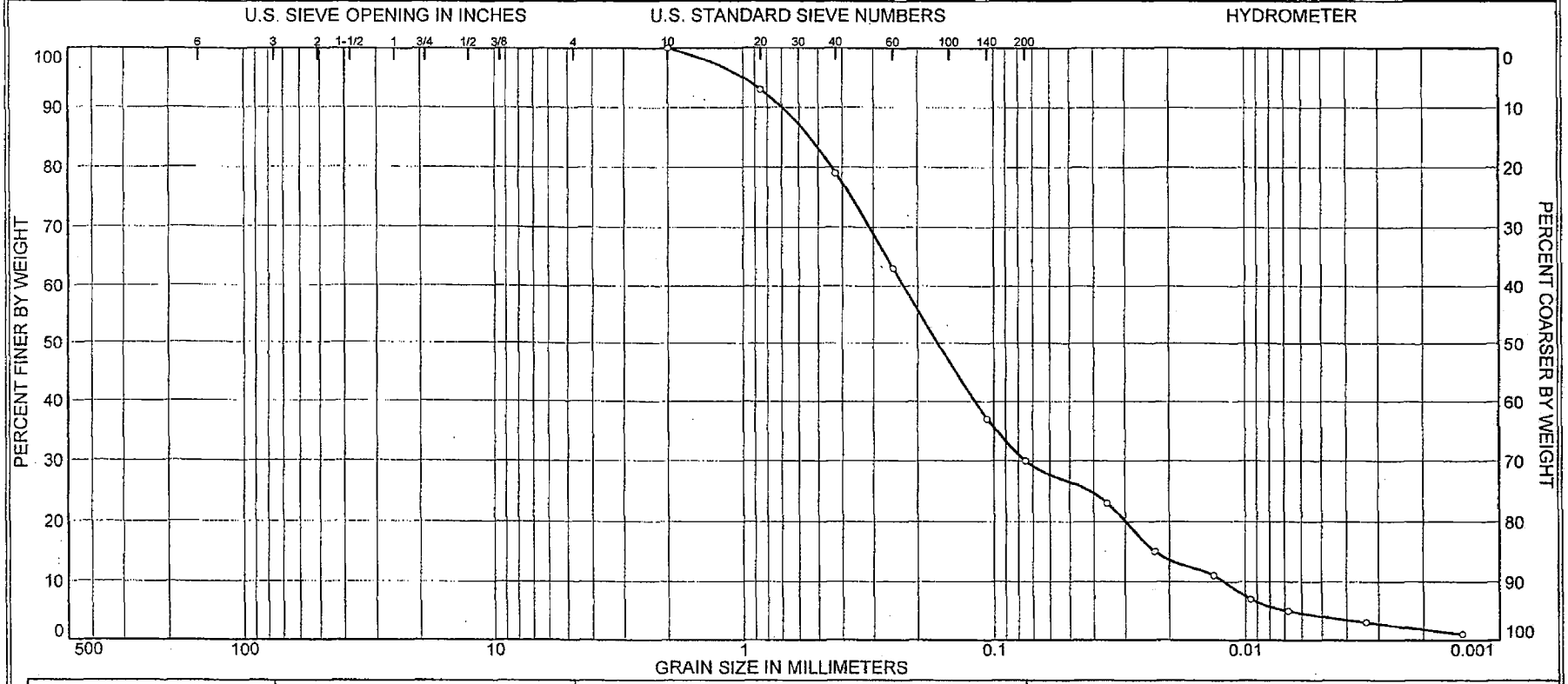
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.57	99
# 20	15.36	92
# 40	53.21	71
# 60	85.12	54
# 140	127.92	31
# 200	136.86	26

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 74 (% coarse = 1 % medium = 28 % fine = 45)
% FINES = 26

D_{85}= 0.65 D_{60}= 0.30 D_{50}= 0.22
D_{30}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	21	49	26	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-203	4	6.0'	8-8-06		SAND Silty (SM); Light Olive Brown, Micaceous	20.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-203
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Olive Brown, Micaceous
Date: 8-8-06 **Natural Moisture:** 20.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	143.27
Tare =	0.00
Dry sample weight =	143.27

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.26 Tare = .00 Sample weight = 50.26
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	3.37	93
# 40	10.33	79
# 60	18.84	63
# 140	31.61	37
# 200	35.41	30

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 50.66
Hygroscopic moisture correction:
Moist weight & tare = 26.58
Dry weight & tare = 26.46
Tare = 11.00
Hygroscopic moisture= 1 %
Calculated biased weight= 50.27
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

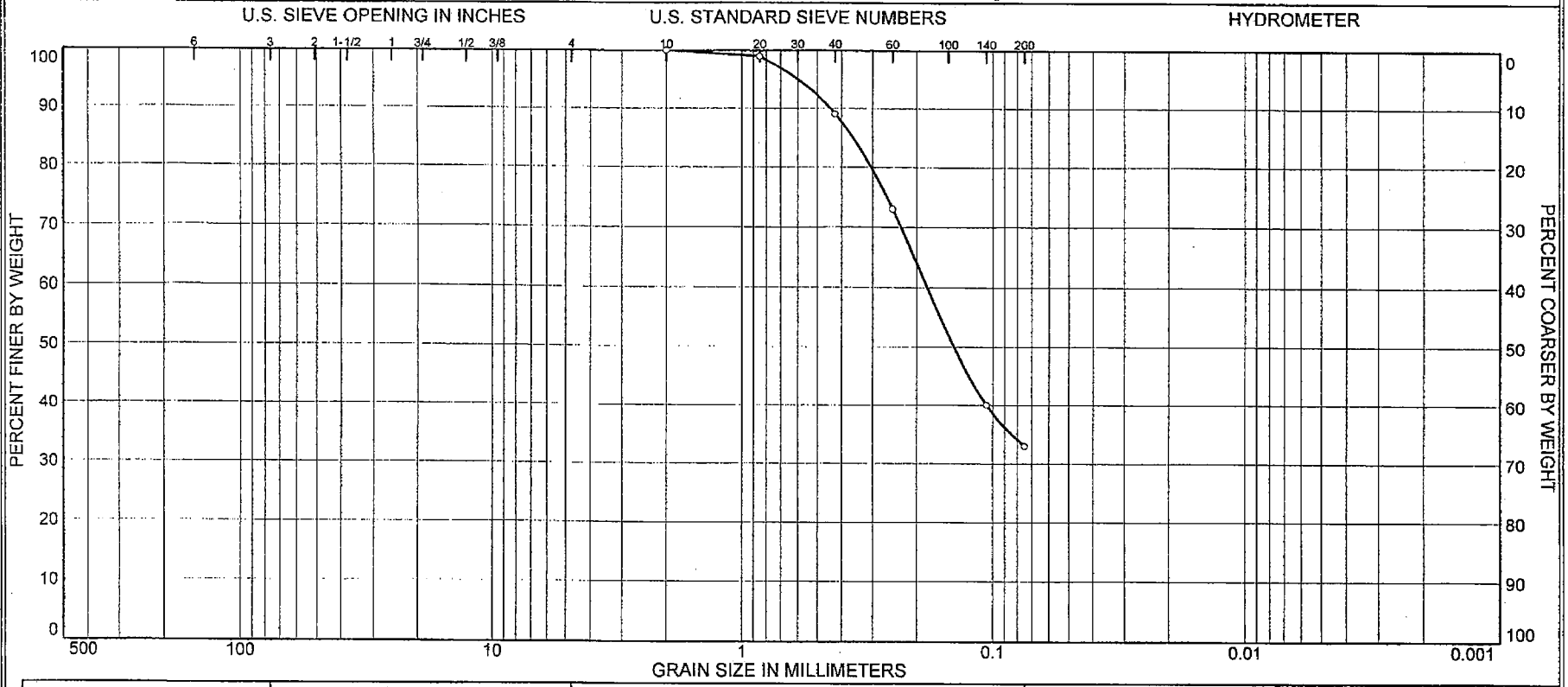
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.4	17.0	11.3	0.0136	17.0	13.5	0.0353	23
5.00	20.4	13.0	7.3	0.0136	13.0	14.2	0.0229	15
15.00	20.4	11.0	5.3	0.0136	11.0	14.5	0.0133	11
30.00	20.4	9.0	3.3	0.0136	9.0	14.8	0.0095	7
60.00	20.4	8.0	2.3	0.0136	8.0	15.0	0.0068	5
250.00	20.4	7.0	1.3	0.0136	7.0	15.1	0.0033	3
1440.00	20.4	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 70 (**% coarse =** **% medium** = 21 **% fine** = 49)
% SILT = 26 **% CLAY** = 4

D_{85}= 0.54 D_{60}= 0.23 D_{50}= 0.17
D_{30}= 0.08 D_{15}= 0.02 D_{10}= 0.01
C_C= 2.0253 C_u= 18.6995

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	11	56	33	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-203	6	11.0'	7/31/06		SAND silty (SM); Strong Brown, Micaceous	24.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-203
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND silty (SM); Strong Brown, Micaceous
Date: 7/31/06 **Natural Moisture:** 24.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	386.94
Tare =	190.35
Dry sample weight =	196.59

Tare for cumulative weight retained= .00

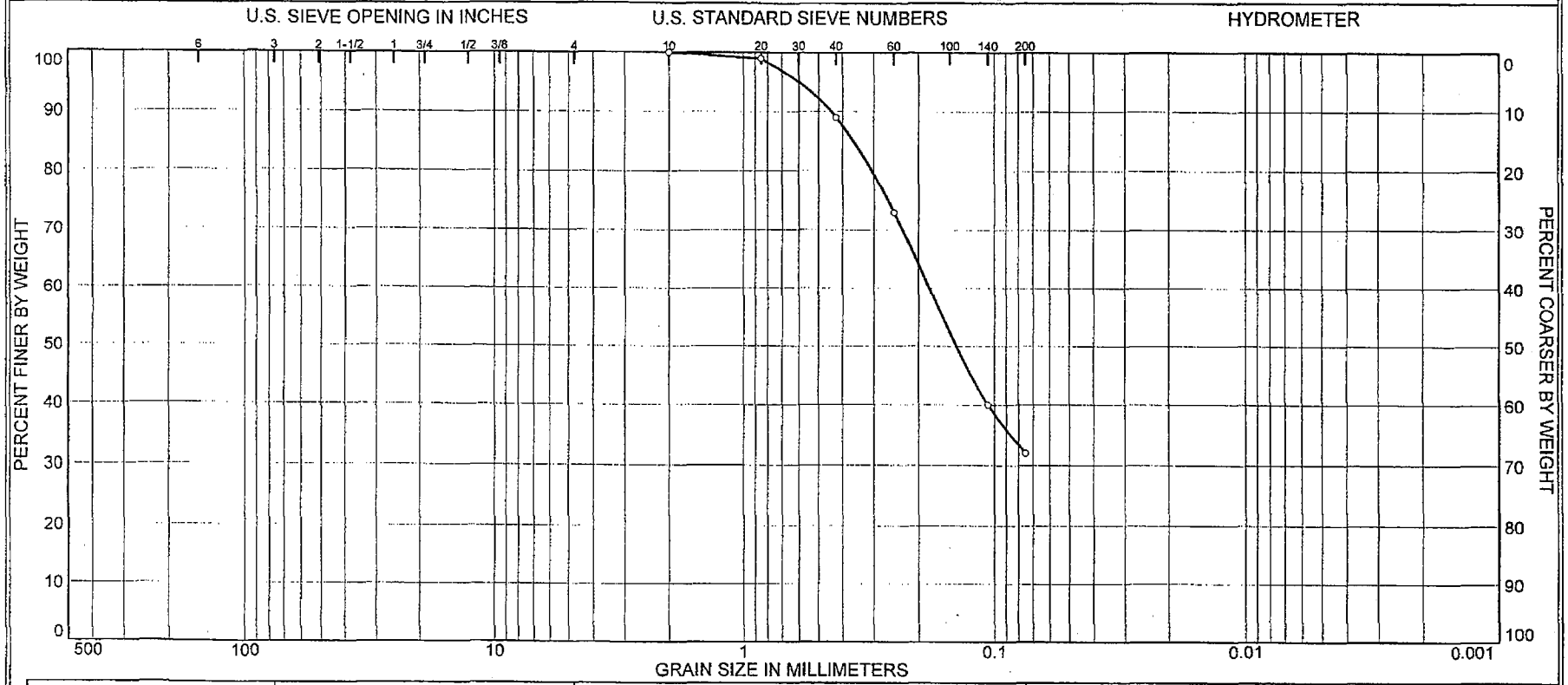
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	1.67	99
# 40	22.18	89
60	52.85	73
# 140	117.30	40
# 200	132.43	33

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 67 (% coarse = % medium = 11 % fine = 56)
% FINES = 33

D_{85}= 0.36 D_{60}= 0.18 D_{50}= 0.14

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	11	57	32	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-203	8	18.5'	7/31/06		SAND silty (SM); Strong Brown, Micaceous	23.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-203
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND silty (SM); Strong Brown, Micaceous
Date: 7/31/06 **Natural Moisture:** 23.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	310.00
Tare =	87.23
Dry sample weight =	222.77

Tare for cumulative weight retained= .00

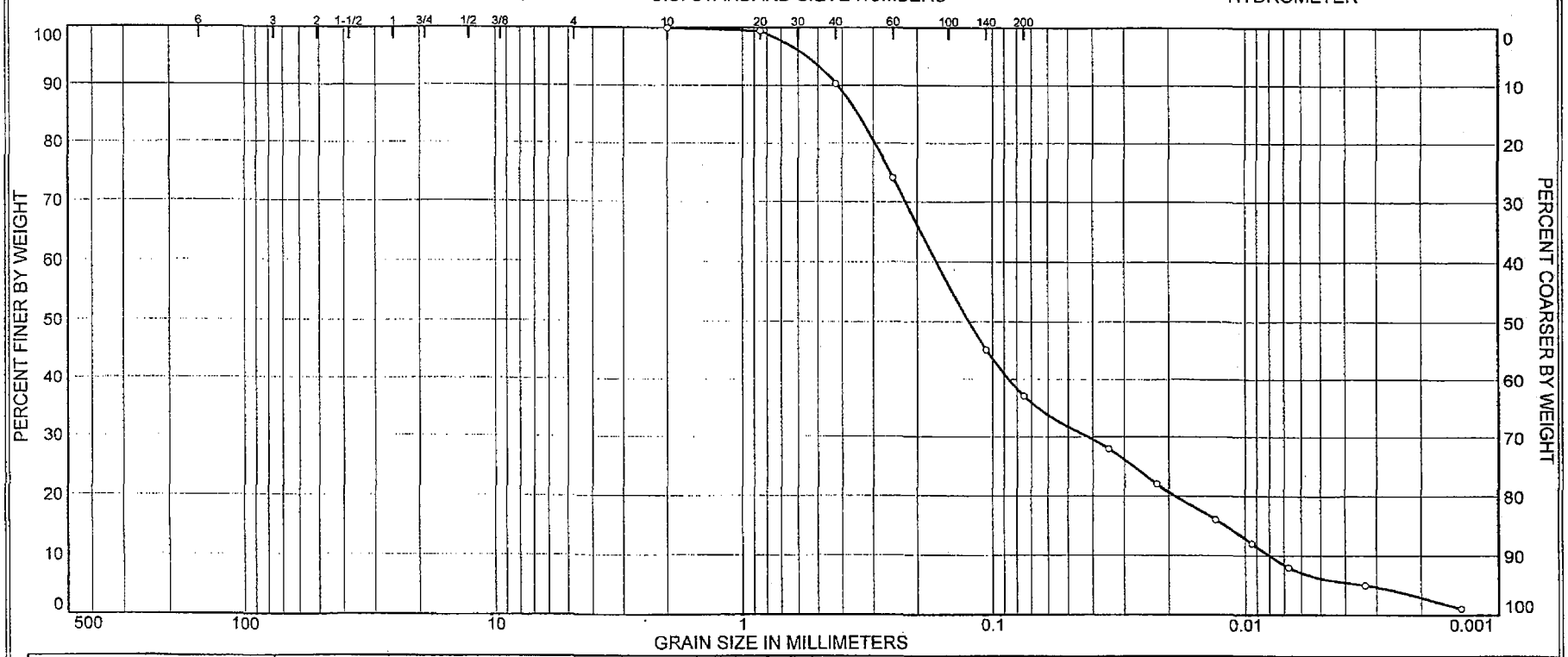
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	1.79	99
# 40	24.35	89
# 60	60.52	73
# 140	134.49	40
# 200	150.94	32

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 68 (% coarse = % medium = 11 % fine = 57)
% FINES = 32

D_{85}= 0.36 D_{60}= 0.18 D_{50}= 0.14

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	10	53	31	6

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-203	9	23.5'	8-8-06		SAND silty (SM); Dark Brown, Micaceous	31.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-203
Sample No.: 9
Elev. or Depth: -23.5' **Sample Length(in./cm.):**
Location:
Description: SAND silty (SM); Dark Brown, Micaceous
Date: 8-8-06 **Natural Moisture:** 31.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	76.08
Tare =	0.00
Dry sample weight =	76.08

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.21 Tare = .00 Sample weight = 51.21
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.30	99
# 40	4.95	90
# 60	13.26	74
# 140	28.07	45
# 200	32.21	37

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.23
Hygroscopic moisture correction:
Moist weight & tare = 36.23
Dry weight & tare = 35.74
Tare = 11.01
Hygroscopic moisture= 2 %
Calculated biased weight= 51.22
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

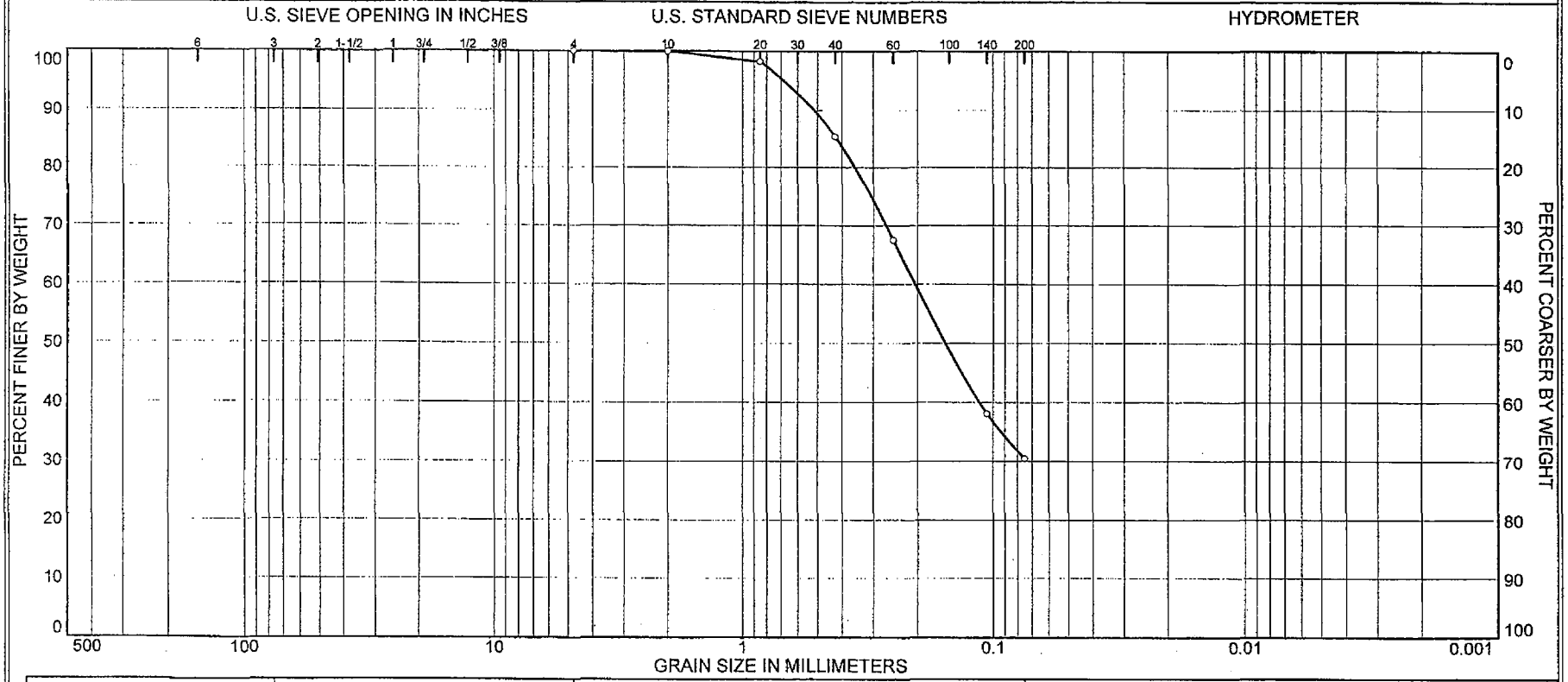
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.4	20.0	14.3	0.0136	20.0	13.0	0.0346	28
5.00	20.4	17.0	11.3	0.0136	17.0	13.5	0.0223	22
15.00	20.4	14.0	8.3	0.0136	14.0	14.0	0.0131	16
30.00	20.4	12.0	6.3	0.0136	12.0	14.3	0.0094	12
60.00	20.4	10.0	4.3	0.0136	10.0	14.7	0.0067	8
250.00	20.4	8.0	2.3	0.0136	8.0	15.0	0.0033	5
1440.00	20.4	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 63 (**% coarse =** **% medium =** 10 **% fine =** 53)
% SILT = 31 **% CLAY =** 6

D_{85}= 0.35 D_{60}= 0.17 D_{50}= 0.12
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.2909 C_u= 20.9497

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	15	55	31	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-203	11	33.5'	7/31/06		SAND silty (SM); Dark Brown, Micaceous	29.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-203
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND silty (SM); Dark Brown, Micaceous
Date: 7/31/06 **Natural Moisture:** 29.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	333.76
Tare =	87.08
Dry sample weight =	246.68

Tare for cumulative weight retained= .00

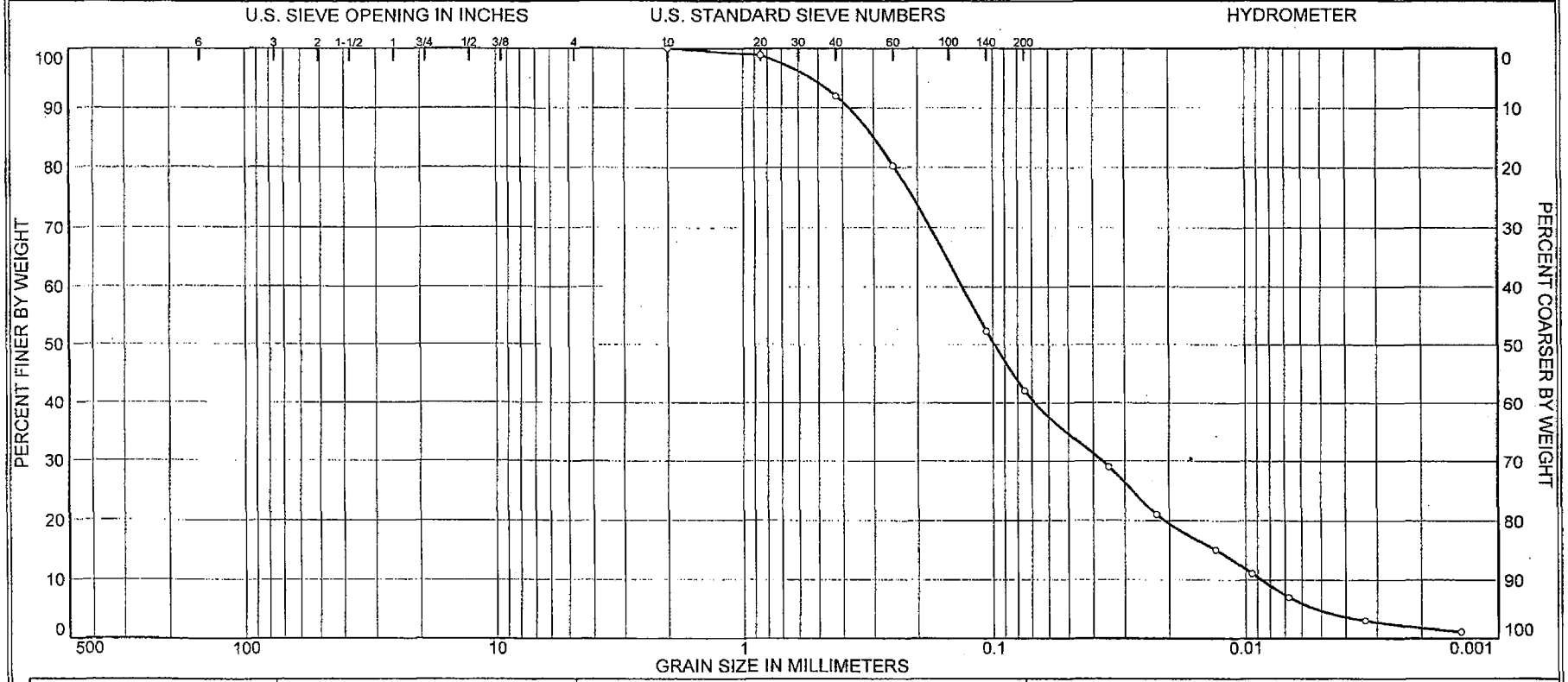
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.22	100
# 20	4.25	98
# 40	36.22	85
# 60	80.21	68
# 140	152.67	38
# 200	171.42	31

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 70 (% coarse = 0 % medium = 15 % fine = 55)
% FINES = 31

D_{85}= 0.42 D_{60}= 0.20 D_{50}= 0.16

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	8	50	37	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-203	13	43.5'	8-8-06		SAND silty (SM); Dark Brown, Micaceous	32.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS

ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-203
Sample No.: 13
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SAND silty (SM); Dark Brown, Micaceous
Date: 8-8-06 **Natural Moisture:** 32.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	73.97
Tare =	0.00
Dry sample weight =	73.97

Sample split on number 10 sieve
Split sample data:
Sample and tare = 49.47 Tare = .00 Sample weight = 49.47
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.54	99
# 40	3.98	92
# 60	9.76	80
# 140	23.59	52
# 200	28.63	42

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 50.51
Hygroscopic moisture correction:
Moist weight & tare = 35.96
Dry weight & tare = 35.44
Tare = 10.93
Hygroscopic moisture= 2 %
Calculated biased weight= 49.46
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

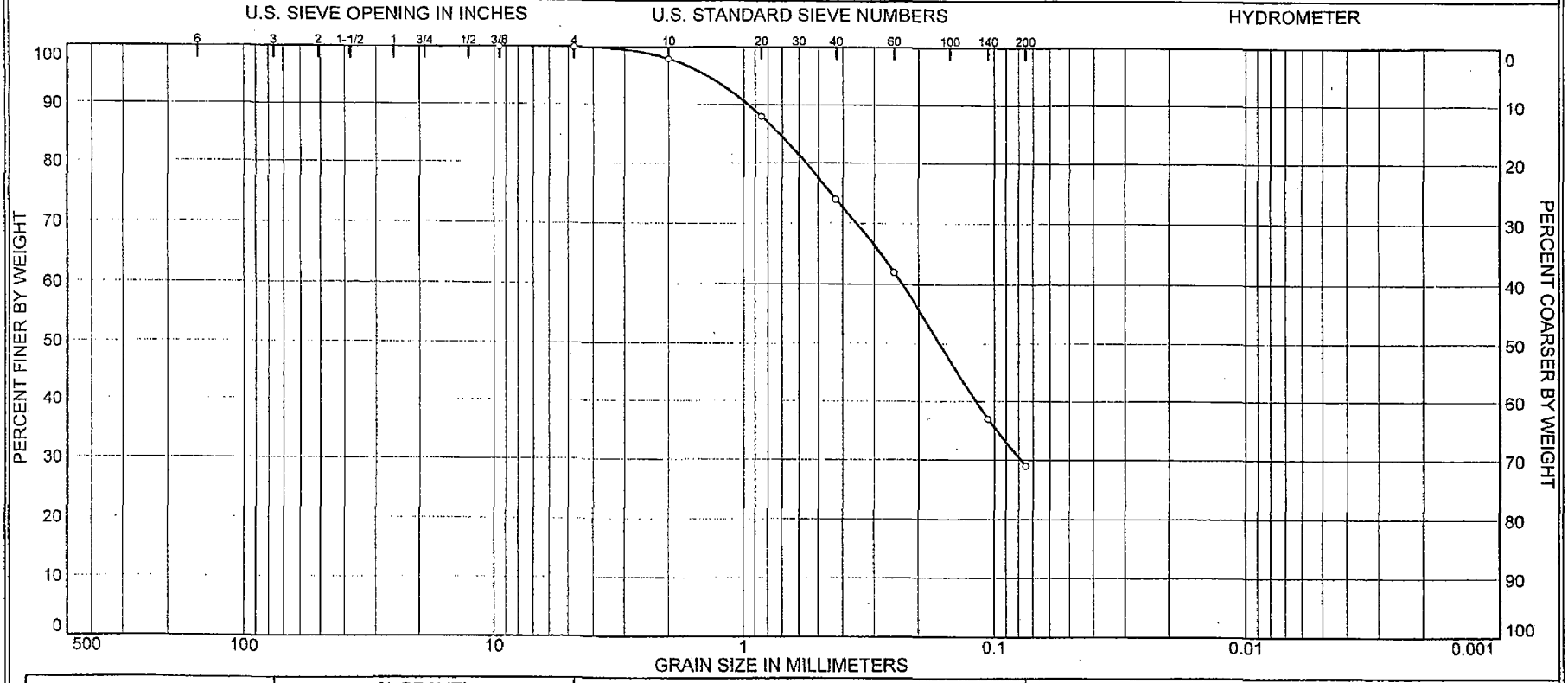
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.4	20.0	14.3	0.0136	20.0	13.0	0.0346	29
5.00	20.4	16.0	10.3	0.0136	16.0	13.7	0.0225	21
15.00	20.4	13.0	7.3	0.0136	13.0	14.2	0.0132	15
30.00	20.4	11.0	5.3	0.0136	11.0	14.5	0.0094	11
60.00	20.4	9.0	3.3	0.0136	9.0	14.8	0.0067	7
250.00	20.4	7.0	1.3	0.0136	7.0	15.1	0.0033	3
1440.00	20.4	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 58 (**% coarse =** **% medium** = 8 **% fine** = 50)
% SILT = 37 **% CLAY** = 5

D_{85}= 0.30 D_{60}= 0.13 D_{50}= 0.10
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.162 C_u= 15.2724

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	2	24	45	29	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-203	14	48.5'	7/31/06		SAND silty (SM); Dark Brown, Micaceous	24.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-203
Sample No.: 14
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND silty (SM); Dark Brown, Micaceous
Date: 7/31/06 **Natural Moisture:** 24.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	362.07
Tare =	87.43
Dry sample weight =	274.64

Tare for cumulative weight retained= .00

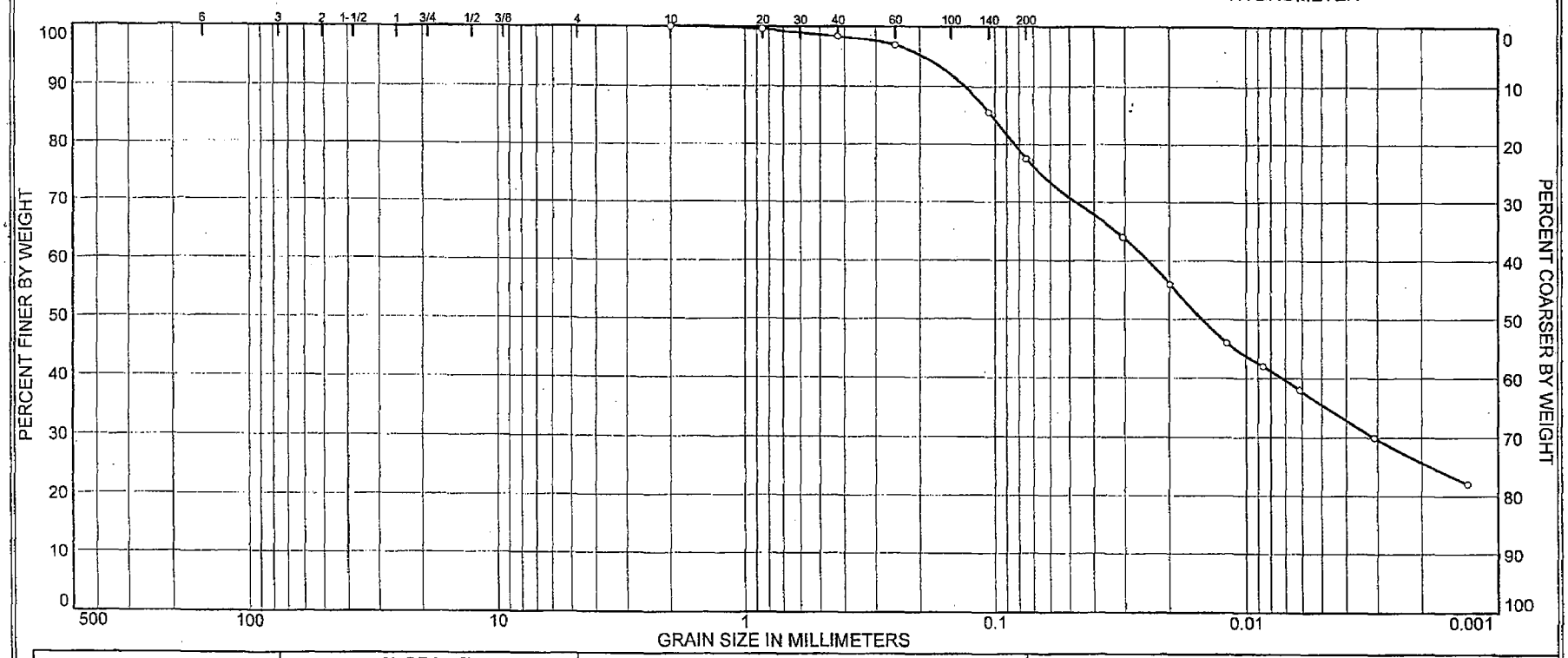
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.60	100
# 10	6.34	98
# 20	32.02	88
# 40	71.65	74
# 60	103.73	62
# 140	173.06	37
# 200	195.17	29

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 71 **(% coarse** = 2 **% medium** = 24 **% fine** = 45)
% FINES = 29

D_{85}= 0.72 D_{60}= 0.23 D_{50}= 0.17
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	2	21	42	36

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	2	1.5'	8-8-06	ML	SILT Sandy (ML); Red	34.6	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Red
Date: 8-8-06 **Natural Moisture:** 34.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	133.73
Tare =	0.00
Dry sample weight =	133.73

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.38 Tare = .00 Sample weight = 50.38
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.18	100
# 40	0.79	98
# 60	1.58	97
# 140	7.27	86
# 200	11.34	78

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.34
Hygroscopic moisture correction:
Moist weight & tare = 37.90
Dry weight & tare = 37.42
Tare = 11.62
Hygroscopic moisture= 2 %
Calculated biased weight= 50.40
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

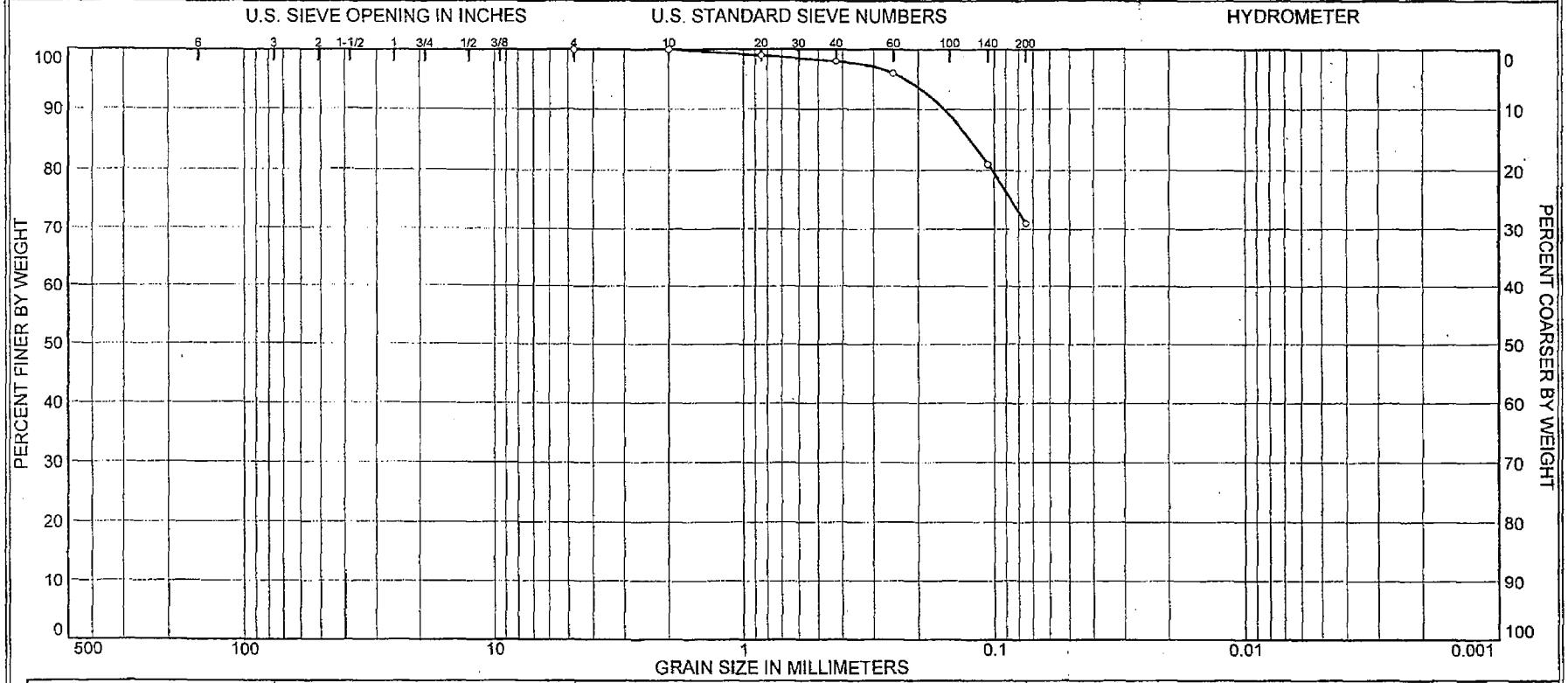
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.2	38.0	32.3	0.0136	38.0	10.1	0.0305	64
5.00	20.2	34.0	28.3	0.0136	34.0	10.7	0.0199	56
15.00	20.2	29.0	23.3	0.0136	29.0	11.5	0.0119	46
30.00	20.2	27.0	21.3	0.0136	27.0	11.9	0.0086	42
60.00	20.2	25.0	19.3	0.0136	25.0	12.2	0.0061	38
250.00	20.2	21.0	15.3	0.0136	21.0	12.9	0.0031	30
1440.00	20.2	17.0	11.3	0.0136	17.0	13.5	0.0013	22

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 23 (**% coarse =** **% medium** = 2 **% fine** = 21)
% SILT = 42 **% CLAY** = 36

D_{85}= 0.10 D_{60}= 0.02 D_{50}= 0.01
D_{30}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	2	27	71	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	4	6.0'	8-23-06		SILT Sandy (ML); Dark Red	22.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Dark Red
Date: 8-23-06 **Natural Moisture:** 22.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	305.74
Tare =	190.87
Dry sample weight =	114.87

Tare for cumulative weight retained= .00

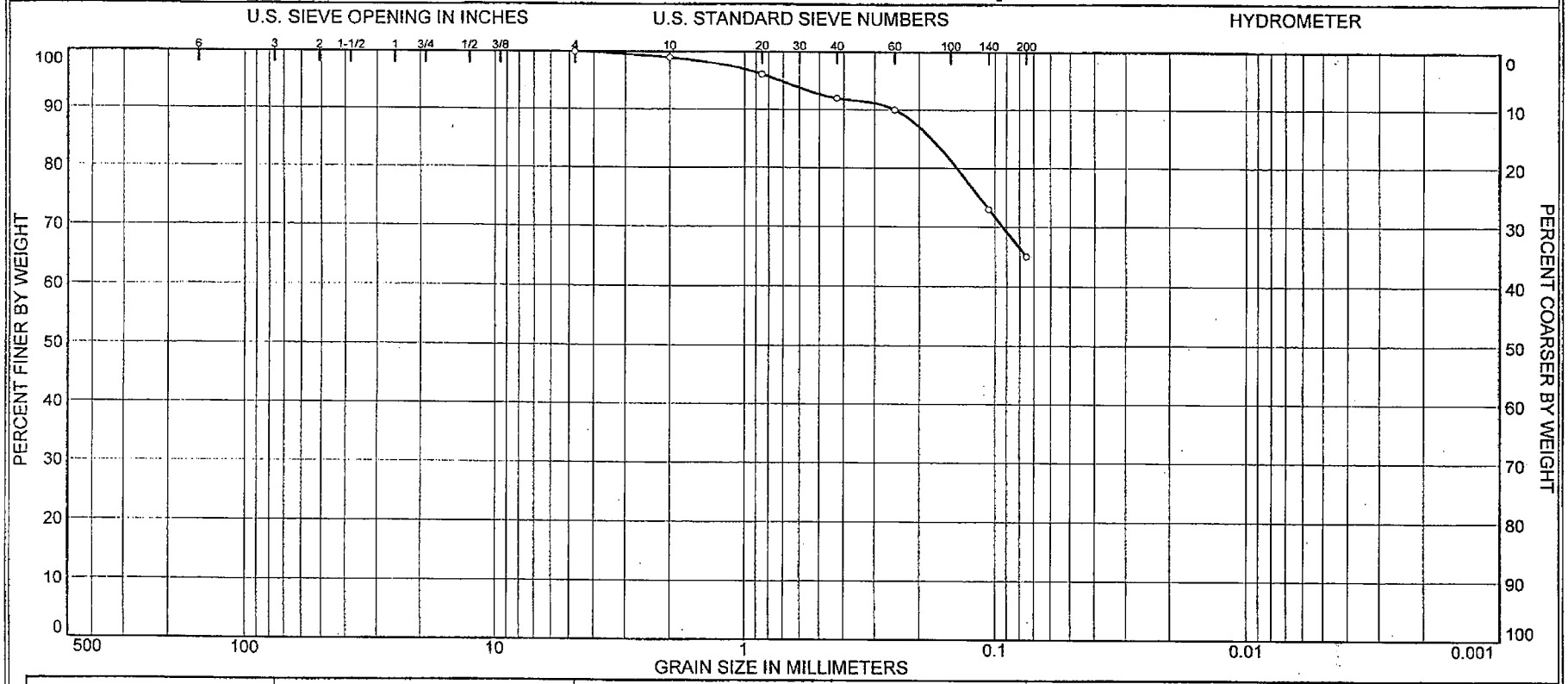
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.05	100
# 20	0.89	99
# 40	2.32	98
# 60	4.53	96
# 140	21.44	81
# 200	33.68	71

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 29 **(% coarse =** 0 **% medium =** 2 **% fine =** 27**)**
% FINES = 71

D_{85}= 0.12

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	7	27	65	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	6	11.0'	8-23-06		SILT Sandy (ML); Red	31.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Red
Date: 8-23-06 **Natural Moisture:** 31.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	381.57
Tare =	190.07
Dry sample weight =	191.50

Tare for cumulative weight retained= .00

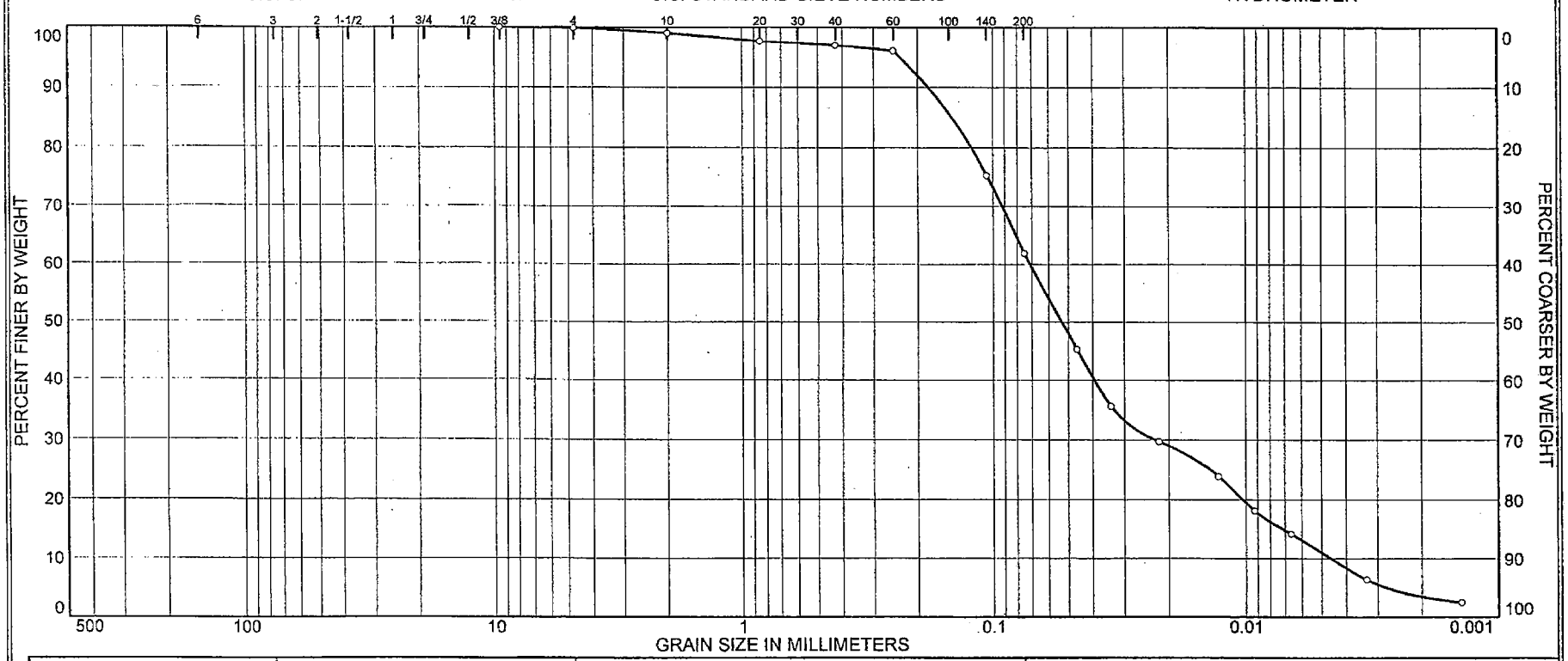
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.56	99
# 20	7.19	96
# 40	14.78	92
# 60	19.70	90
# 140	51.20	73
# 200	67.18	65

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 35 (% coarse = 1 % medium = 7 % fine = 27)
% FINES = 65

D_{85}= 0.18

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	2	35	51	11

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	8	18.5'	8-8-06	ML	SILT sandy (ML); Strong Brown, Micaceous	30.8	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SILT sandy (ML); Strong Brown, Micaceous
Date: 8-8-06 **Natural Moisture:** 30.8
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	325.91
Tare =	0.00
Dry sample weight =	325.91

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.93 Tare = .00 Sample weight = 50.93
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.71	100
# 10	3.27	99
# 20	0.69	98
# 40	1.04	97
# 60	1.51	96
# 140	12.21	75
# 200	19.11	62

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 51.54
Hygroscopic moisture correction:
Moist weight & tare = 42.31
Dry weight & tare = 41.93
Tare = 11.00
Hygroscopic moisture= 1 %
Calculated biased weight= 51.43
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

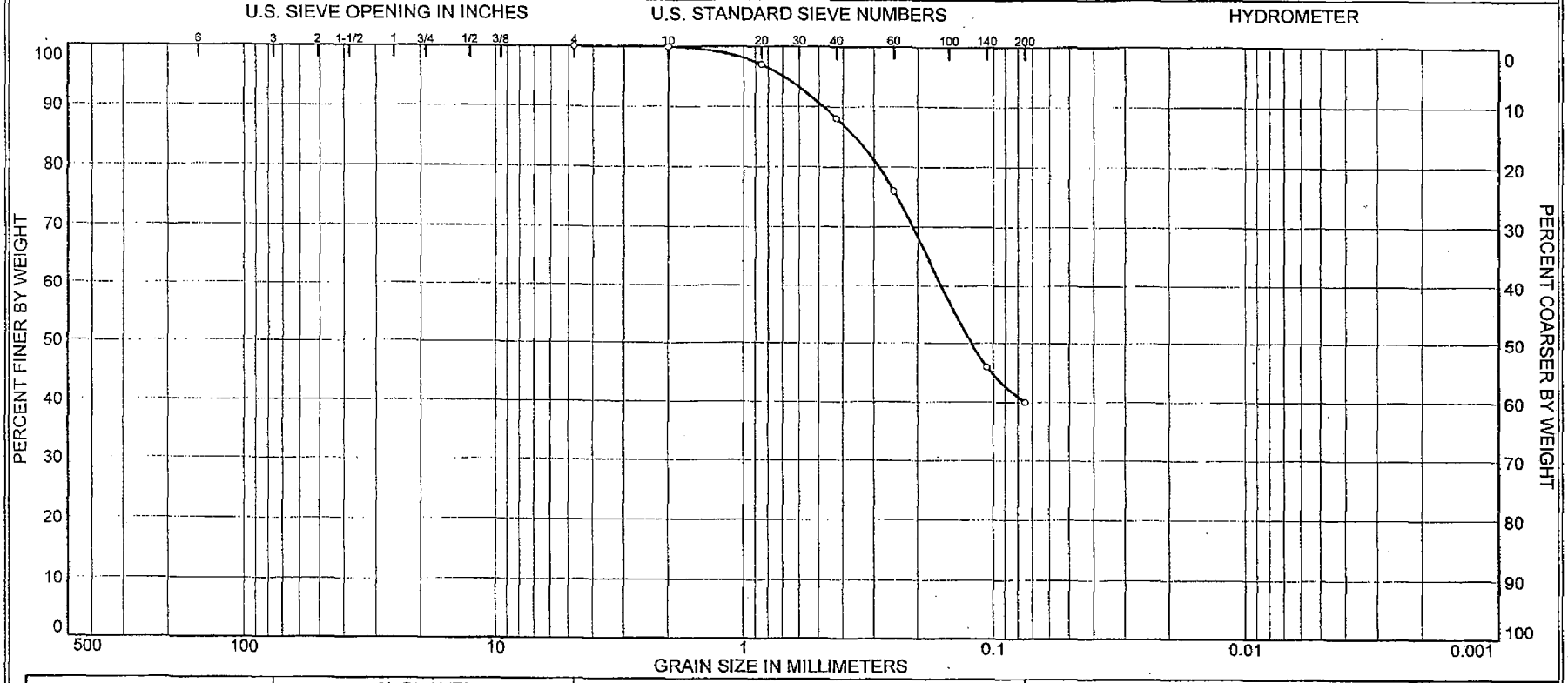
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.2	29.0	23.3	0.0136	29.0	11.5	0.0462	45
2.00	20.2	24.0	18.3	0.0136	24.0	12.4	0.0338	36
5.00	20.2	21.0	15.3	0.0136	21.0	12.9	0.0218	30
15.00	20.2	18.0	12.3	0.0136	18.0	13.3	0.0128	24
30.00	20.2	15.0	9.3	0.0136	15.0	13.8	0.0092	18
60.00	20.2	13.0	7.3	0.0136	13.0	14.2	0.0066	14
250.00	20.2	9.0	3.3	0.0136	9.0	14.8	0.0033	6
1440.00	20.2	7.0	1.3	0.0136	7.0	15.1	0.0014	3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 0 (**% coarse =** **% fine** = 0)
% SAND = 38 (**% coarse** = 1 **% medium** = 2 **% fine** = 35)
% SILT = 51 **% CLAY** = 11

D_{85}= 0.15 D_{60}= 0.07 D_{50}= 0.05
D_{30}= 0.02 D_{15}= 0.01 D_{10}= 0.00
C_c= 1.5543 C_u= 15.4112

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	12	48	40	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	9	23.5'	8-23-06		SAND Silty (SM); Yellowish Red, Micaceous	31.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Micaceous
Date: 8-23-06 **Natural Moisture:** 31.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	736.04
Tare =	194.56
Dry sample weight =	541.48

Tare for cumulative weight retained= .00

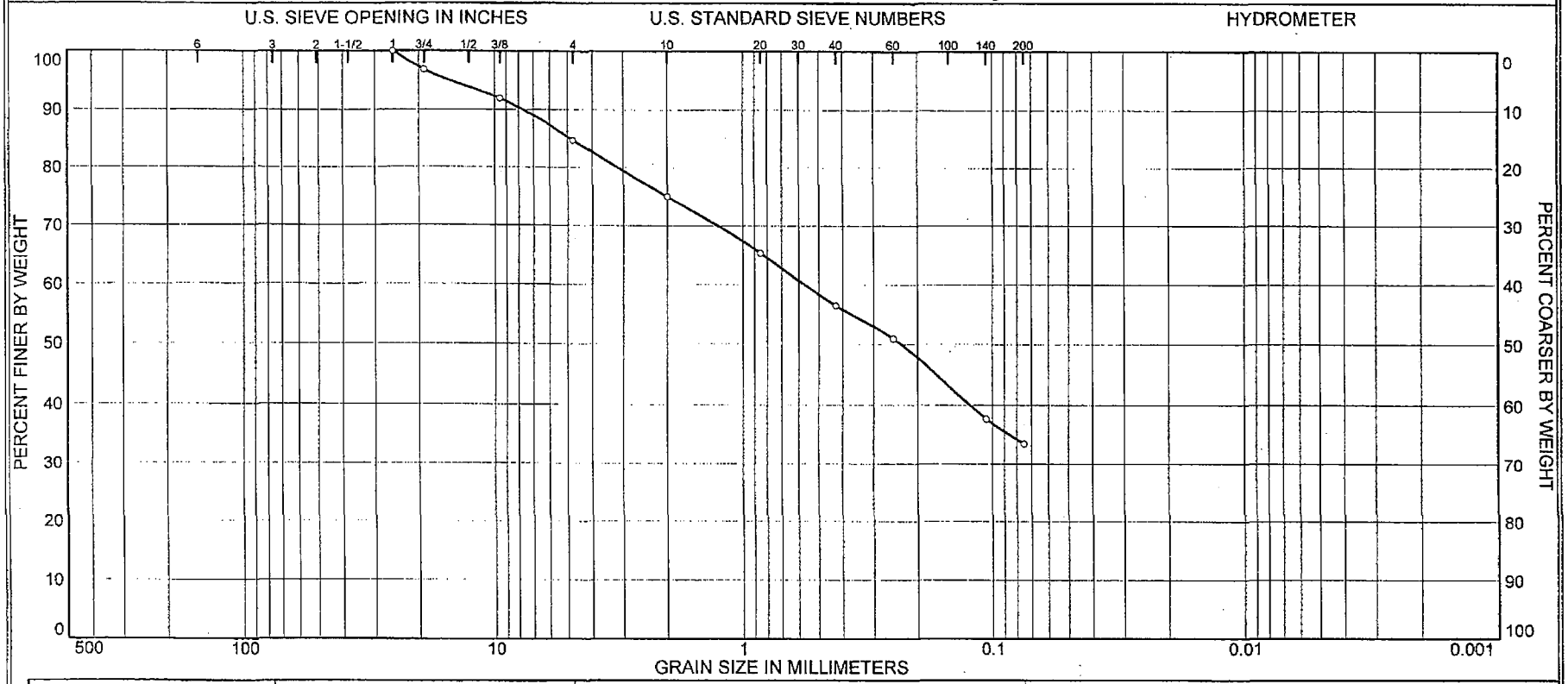
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.36	100
# 20	13.63	97
# 40	62.64	88
# 60	131.65	76
# 140	289.89	46
# 200	325.32	40

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 60 **(% coarse =** 0 **% medium =** 12 **% fine =** 48**)**
% FINES = 40

D_{85}= 0.36 D_{60}= 0.16 D_{50}= 0.12

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	3	12	10	19	22	34	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	10	28.5'	8-23-06		SAND Silty with Gravel (SM); Yellowish Red, Micaceous	34.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Testd by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than minimum required by ASTM.

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty with Gravel (SM); Yellowish Red, Micaceous
Date: 8-23-06 **Natural Moisture:** 34.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Testd by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than minimum required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	709.63
Tare =	189.63
Dry sample weight =	520.00

Tare for cumulative weight retained= .00

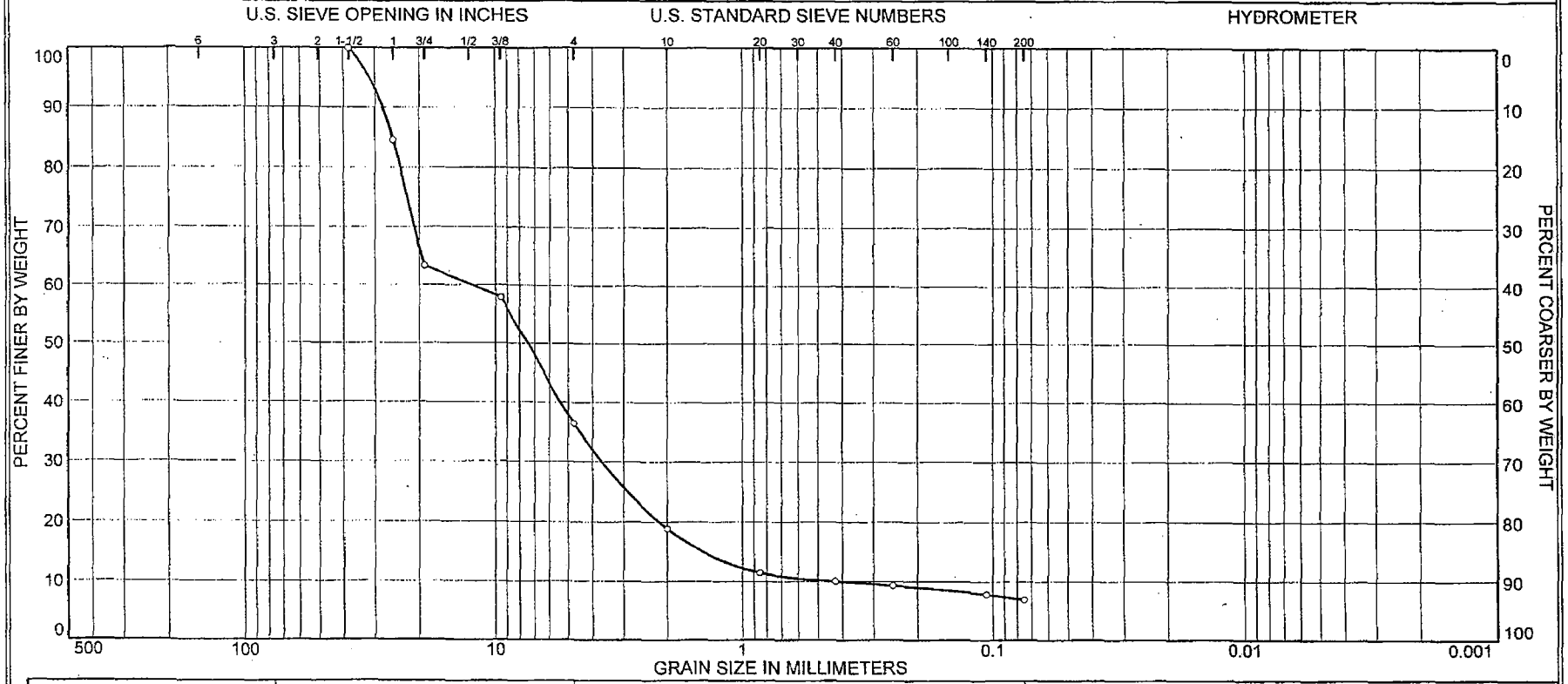
Sieve	Cumul. Wt. retained	Percent finer
1 inch	0.00	100
.75 inch	16.85	97
.375 inch	42.03	92
# 4	79.63	85
# 10	129.95	75
# 20	180.51	65
# 40	226.67	56
# 60	255.26	51
# 140	324.00	38
# 200	345.75	34

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 15 **(% coarse =** 3 **% fine =** 12)
% SAND = 51 **(% coarse =** 10 **% medium =** 19 **% fine =** 22)
% FINES = 34

D_{85}= 4.88 D_{60}= 0.57 D_{50}= 0.23

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	37	27	18	9	3	7	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	11	33.5'	8-23-06		GRAVEL Sandy with Silt (GM); Red (silt), Black (gravel), Micaceous	13.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than minimum required by ASTM.

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: GRAVEL Sandy with Silt (GM); Red (silt), Black (gravel), Micaceous
Date: 8-23-06 **Natural Moisture:** 13.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than minimum required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	474.94
Tare =	190.21
Dry sample weight =	284.73

Tare for cumulative weight retained= .00

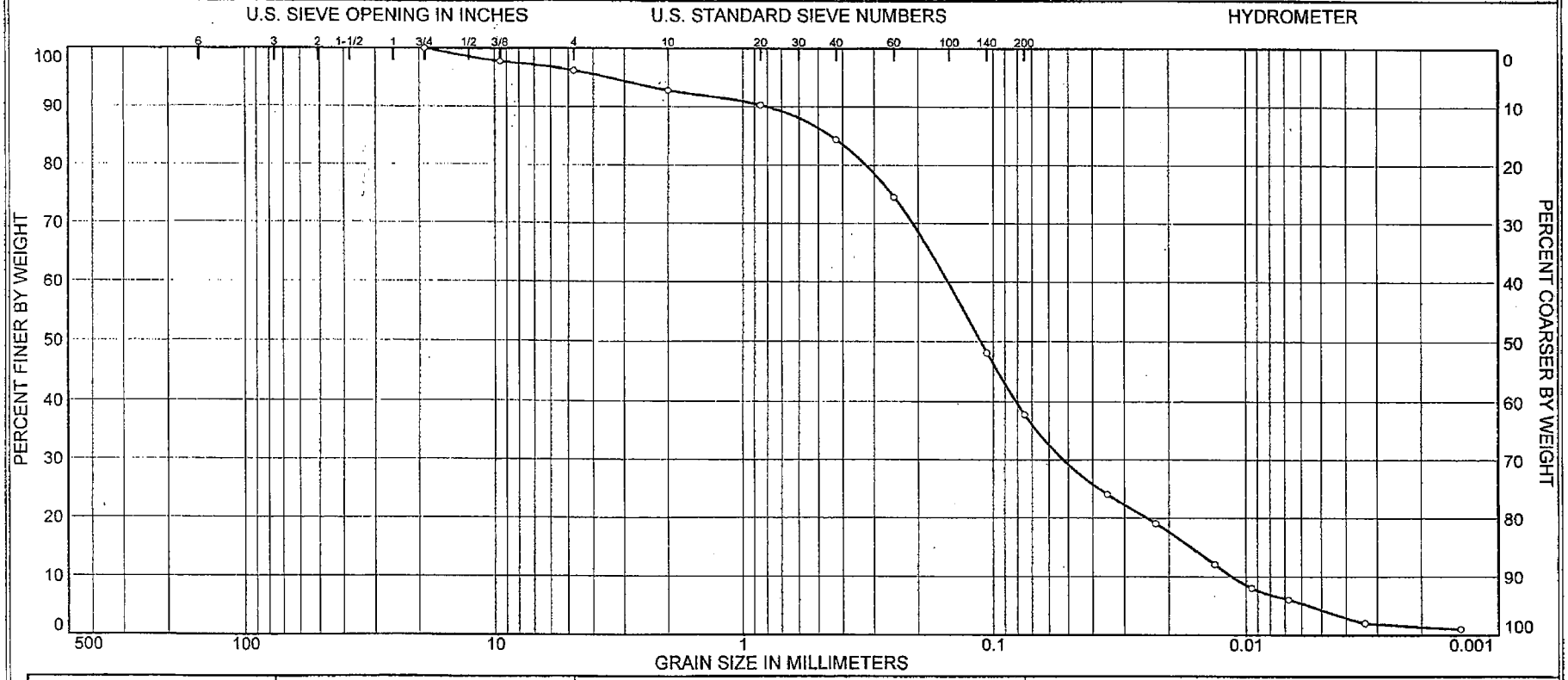
Sieve	Cumul. Wt. retained	Percent finer
1.5 inch	0.00	100
¾ inch	44.03	85
.75 inch	104.19	63
.375 inch	119.89	58
# 4	180.96	36
# 10	231.10	19
# 20	252.23	11
# 40	256.38	10
# 60	258.32	9
# 140	262.57	8
# 200	265.02	7

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 64 **(% coarse** = 37 **% fine** = 27)
% SAND = 30 **(% coarse** = 18 **% medium** = 9 **% fine** = 3)
% FINES = 7

D_{85}= 25.59 D_{60}= 12.41 D_{50}= 7.47
D_{30}= 3.68 D_{15}= 1.45 D_{10}= 0.43
C_C= 2.565 C_u= 29.2021

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	4	3	9	46	34	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	13	43.5'	8-8-06	SM	SAND Silty (SM); Strong Brown, Micaceous	21.5	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002);
Sample mass was less than minimum required by ASTM.

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 13
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 8-8-06 **Natural Moisture:** 21.5
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002);
Sample mass was less than minimum required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	237.77
Tare =	0.00
Dry sample weight =	237.77

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.88 Tare = .00 Sample weight = 50.88
Cumulative weight retained tare= .00
e for cumulative weight retained= .00

Sieve	**Cumul. Wt. retained**	**Percent finer**
.75 inch	0.00	100
.375 inch	5.14	98
# 4	8.96	96
# 10	17.08	93
# 20	1.36	90
# 40	4.65	84
# 60	10.04	75
# 140	24.50	48
# 200	30.14	38

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 93
Weight of hydrometer sample: 51.75
Hygroscopic moisture correction:
Moist weight & tare = 38.50
Dry weight & tare = 38.04
Tare = 11.04
Hygroscopic moisture= 2 %
Calculated biased weight= 54.71
Table of composite correction values:

emp, deg C:	10.7	23.1	40.2
omp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0

Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

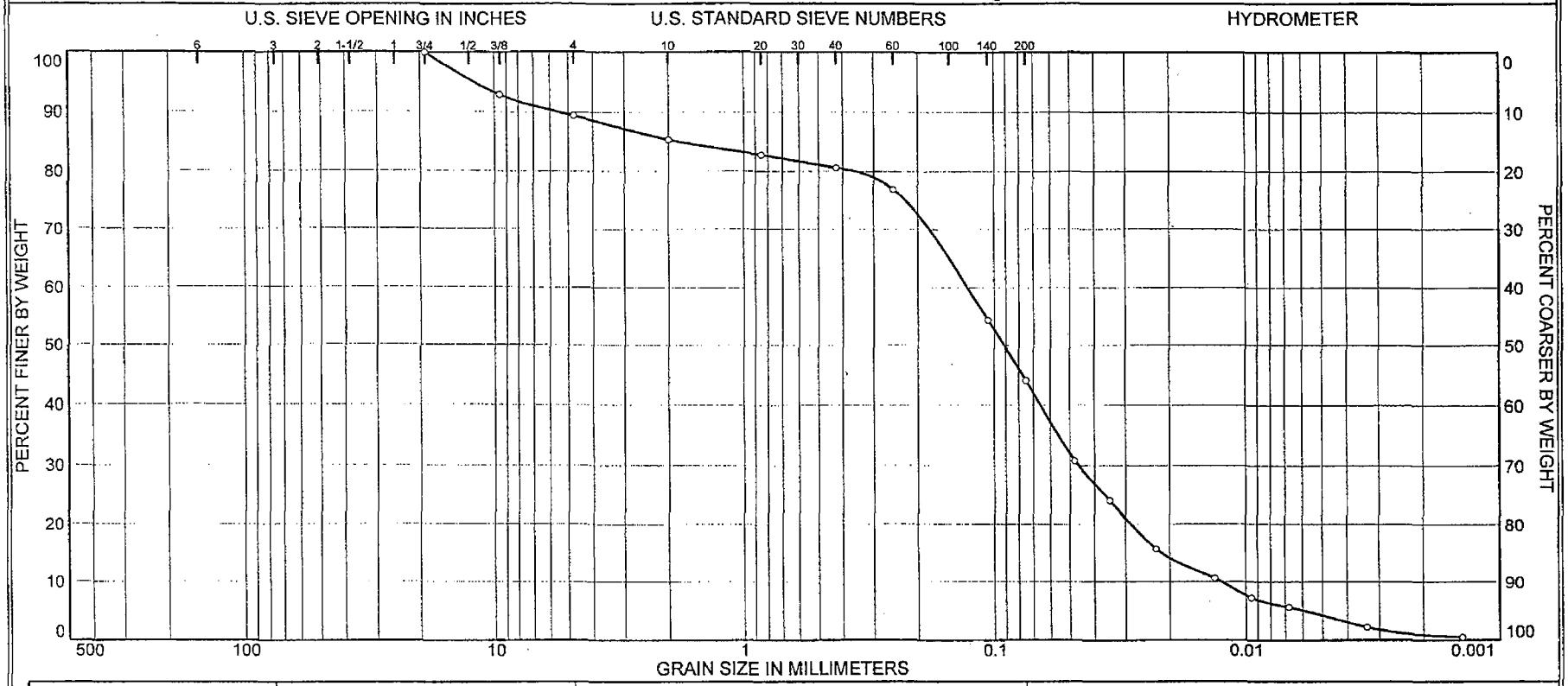
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.2	19.0	13.3	0.0136	19.0	13.2	0.0349	24
5.00	20.2	16.0	10.3	0.0136	16.0	13.7	0.0225	19
15.00	20.2	12.0	6.3	0.0136	12.0	14.3	0.0133	12
30.00	20.2	10.0	4.3	0.0136	10.0	14.7	0.0095	8
60.00	20.2	9.0	3.3	0.0136	9.0	14.8	0.0068	6
250.00	20.2	7.0	1.3	0.0136	7.0	15.1	0.0034	2
1440.00	20.2	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 4 (% coarse = % fine = 4)
% SAND = 58 (% coarse = 3 % medium = 9 % fine = 46)
% SILT = 34 % CLAY = 4

D_{85}= 0.45 D_{60}= 0.15 D_{50}= 0.11
D_{30}= 0.05 D_{15}= 0.02 D_{10}= 0.01
C_c= 1.5796 C_u= 13.314

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	11	4	5	36	40	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-205	14	48.5'	8-8-06	SM	SAND Silty (SM); Strong Brown, Micaceous	7.8	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than minimum required by ASTM.

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-205
Sample No.: 14
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 8-8-06 **Natural Moisture:** 7.8
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than minimum required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	324.73
Tare =	0.00
Dry sample weight =	324.73

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.70 Tare = .00 Sample weight = 50.70
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100
.375 inch	23.05	93
# 4	34.49	89
# 10	47.47	85
# 20	1.53	83
# 40	2.83	81
# 60	5.05	77
# 140	18.46	54
# 200	24.53	44

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 85
Weight of hydrometer sample: 51.71
Hygroscopic moisture correction:
Moist weight & tare = 40.68
Dry weight & tare = 40.09
Tare = 10.79
Hygroscopic moisture= 2 %
Calculated biased weight= 59.36
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0

Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

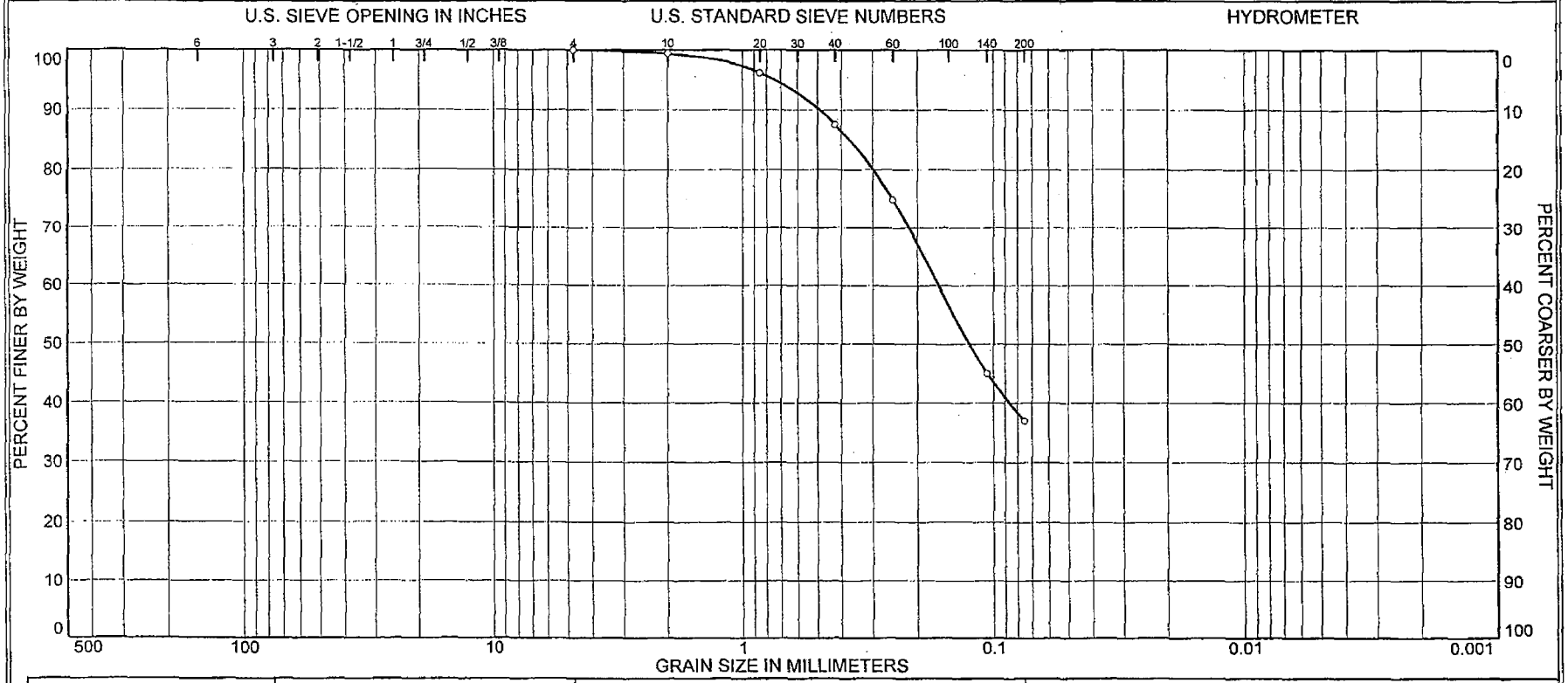
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.2	24.0	18.3	0.0136	24.0	12.4	0.0479	31
2.00	20.2	20.0	14.3	0.0136	20.0	13.0	0.0347	24
5.00	20.2	15.0	9.3	0.0136	15.0	13.8	0.0226	16
15.00	20.2	12.0	6.3	0.0136	12.0	14.3	0.0133	11
30.00	20.2	10.0	4.3	0.0136	10.0	14.7	0.0095	7
60.00	20.2	9.0	3.3	0.0136	9.0	14.8	0.0068	6
250.00	20.2	7.0	1.3	0.0136	7.0	15.1	0.0034	2
1440.00	20.2	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 11 (% coarse = % fine = 11)
% SAND = 45 (% coarse = 4 % medium = 5 % fine = 36)
% SILT = 40 % CLAY = 4

D_{85}= 1.80 D_{60}= 0.13 D_{50}= 0.09
D_{30}= 0.05 D_{15}= 0.02 D_{10}= 0.01
C_c= 1.3359 C_u= 10.1962

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	12	50	37	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-206	4	6.0'	8/4/06		SAND Silty (SM); Yellowish Red	29.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-206
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red
Date: 8/4/06 **Natural Moisture:** 29.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	395.21
Tare =	189.04
Dry sample weight =	206.17

Tare for cumulative weight retained= .00

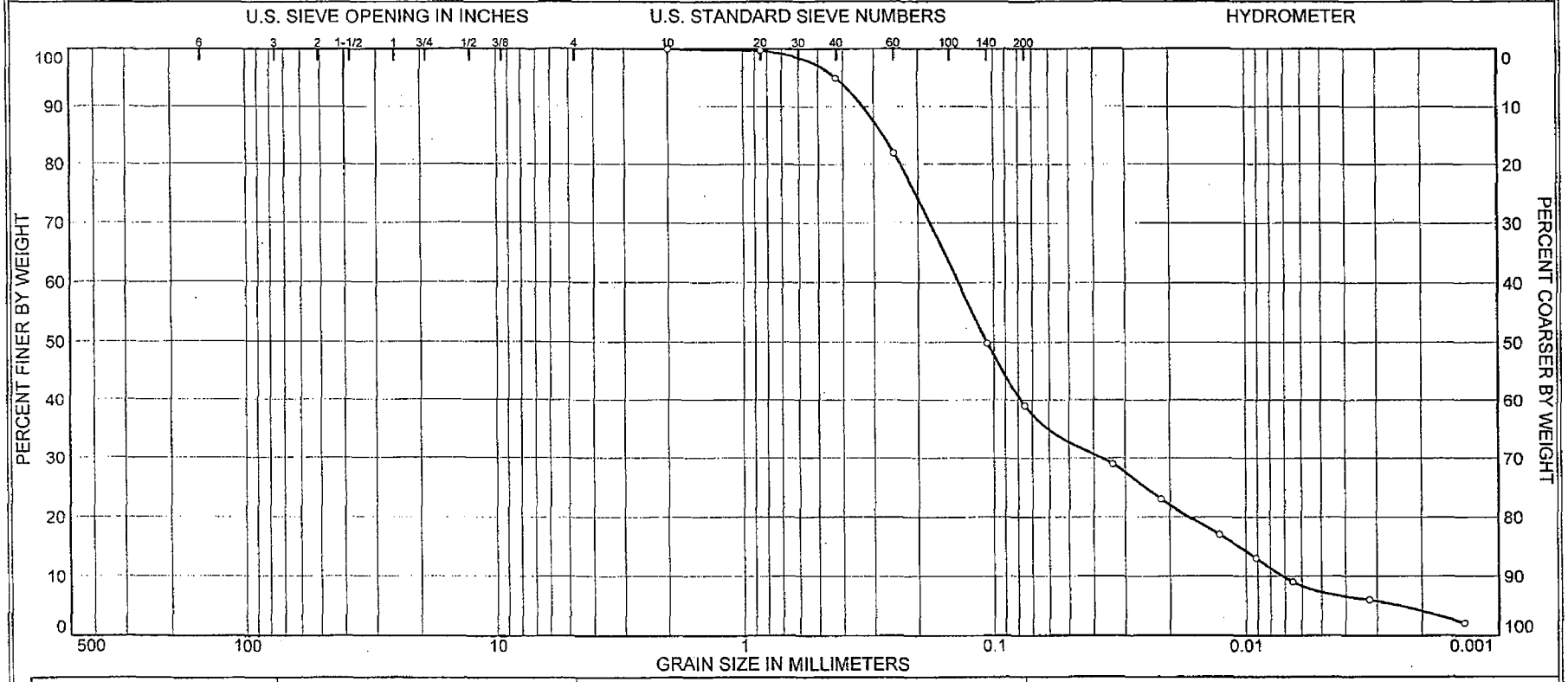
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.19	99
# 20	7.87	96
# 40	25.59	88
# 60	51.89	75
# 140	113.41	45
# 200	129.93	37

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 63 (% coarse = 1 % medium = 12 % fine = 50)
% FINES = 37

D_{85}= 0.37 D_{60}= 0.16 D_{50}= 0.12

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	5	56	32	7

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-206	6	11.0'	8/16/06		SAND Silty (SM); Dark Yellowish Brown	30.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-206
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Yellowish Brown
Date: 8/16/06 **Natural Moisture:** 30.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	117.38
Tare =	0.00
Dry sample weight =	117.38

Sample split on number 10 sieve
Split sample data:
Sample and tare = 52.12 Tare = .00 Sample weight = 52.12
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.17	100
# 40	2.68	95
# 60	9.41	82
# 140	26.18	50
# 200	31.77	39

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 53.01
Hygroscopic moisture correction:
Moist weight & tare = 36.15
Dry weight & tare = 35.73
Tare = 10.82
Hygroscopic moisture= 2 %
Calculated biased weight= 52.13
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

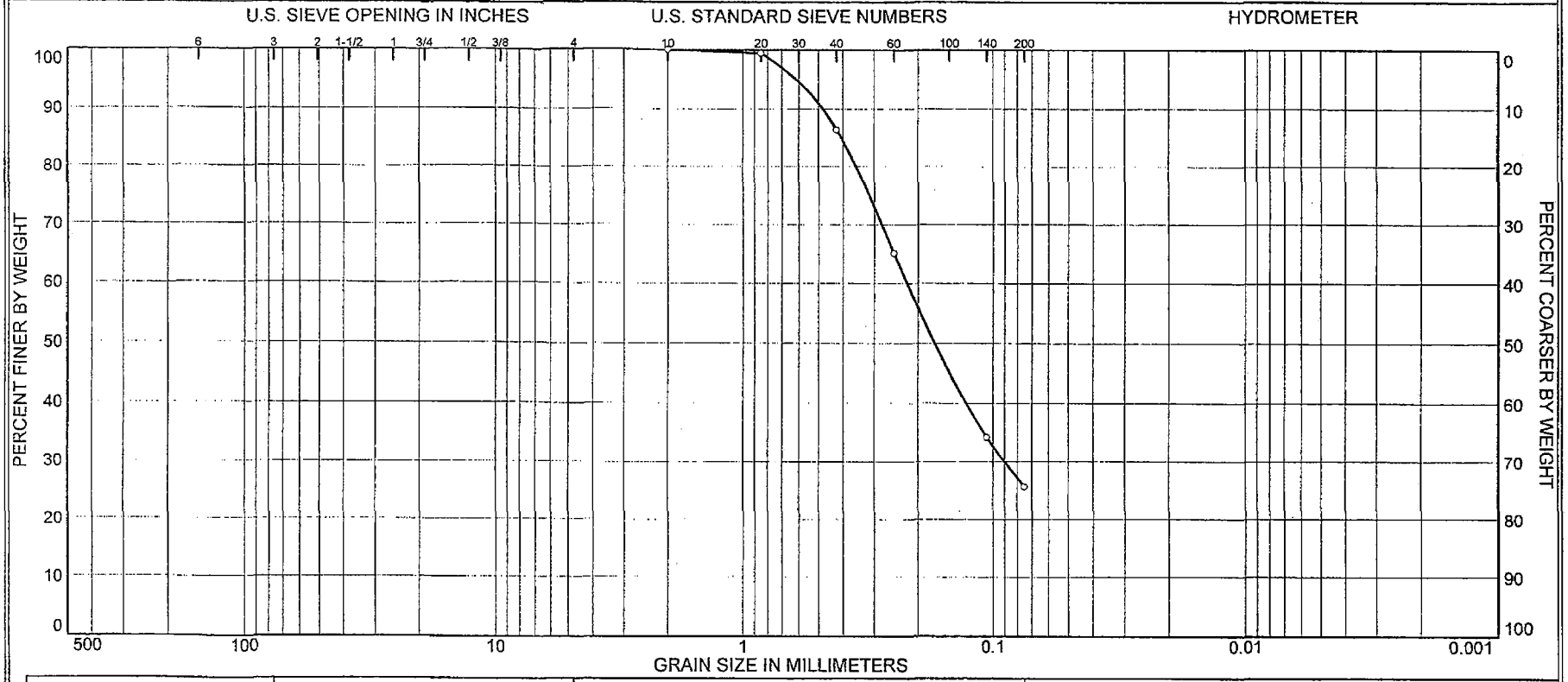
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.8	20.0	14.9	0.0132	20.0	13.0	0.0336	29
5.00	22.8	17.0	11.9	0.0132	17.0	13.5	0.0217	23
15.00	22.8	14.0	8.9	0.0132	14.0	14.0	0.0127	17
30.00	22.8	12.0	6.9	0.0132	12.0	14.3	0.0091	13
60.00	22.8	10.0	4.9	0.0132	10.0	14.7	0.0065	9
250.00	22.8	8.0	2.9	0.0132	8.0	15.0	0.0032	6
1440.00	22.8	6.0	0.9	0.0132	6.0	15.3	0.0014	2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 61 (**% coarse =** **% medium =** 5 **% fine =** 56)
% SILT = 32 **% CLAY =** 7

D_{85}= 0.28 D_{60}= 0.14 D_{50}= 0.11
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.3801 C_u= 19.3407

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	14	60	26	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-206	8	18.5'	8/4/06		SAND Silty (SM); Dark Yellowish Brown, Micaceous	13.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11.16.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-206
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Yellowish Brown, Micaceous
Date: 8/4/06 **Natural Moisture:** 13.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	358.77
Tare =	195.60
Dry sample weight =	163.17

Tare for cumulative weight retained= .00

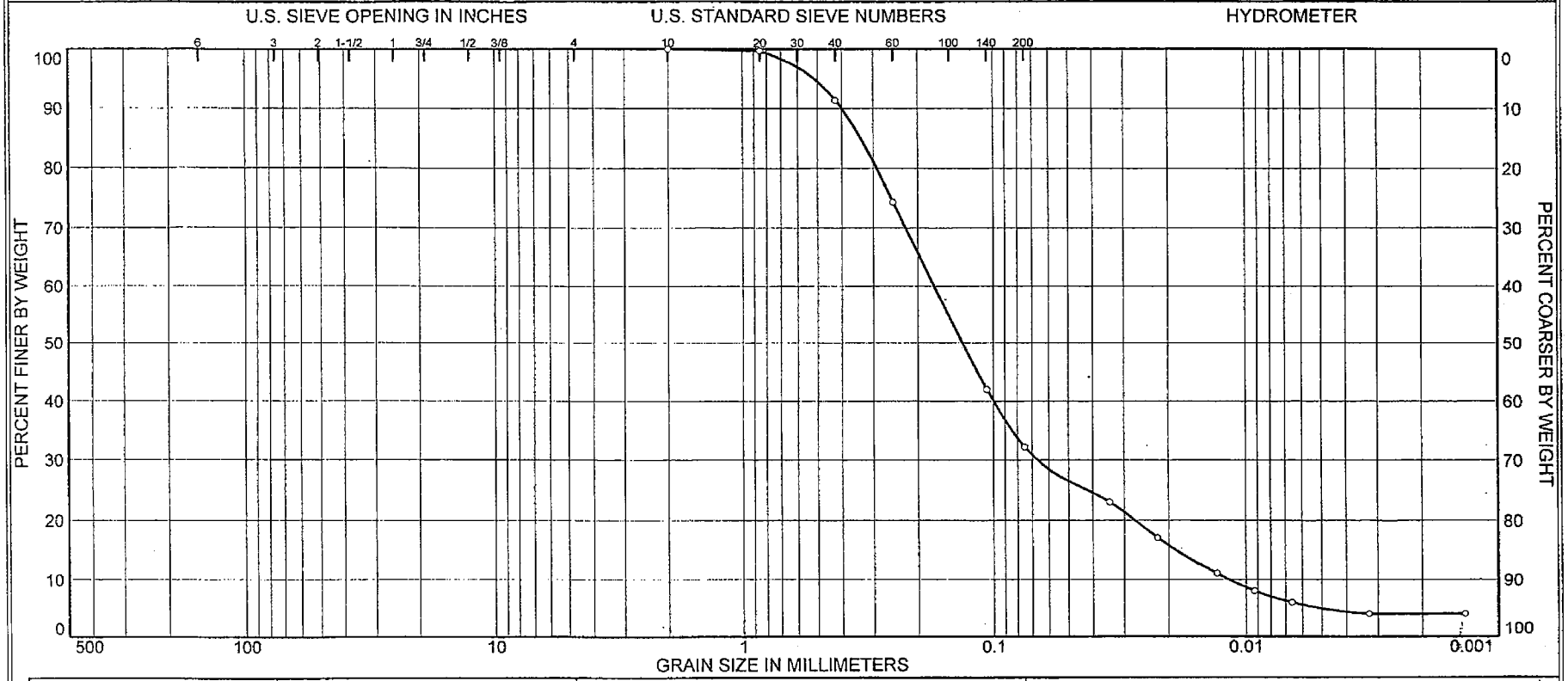
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.99	99
# 40	22.19	86
# 60	56.89	65
# 140	107.37	34
# 200	121.48	26

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 74 (% coarse = % medium = 14 % fine = 60)
% FINES = 26

D_{85}= 0.41 D_{60}= 0.22 D_{50}= 0.17
D_{30}= 0.09

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	9	59	27	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-206	10	28.5'	8/16/06		SAND Silty (SM); Dark Brown, Micaceous	30.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-206
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Brown, Micaceous
Date: 8/16/06 **Natural Moisture:** 30.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	88.92
Tare =	0.00
Dry sample weight =	88.92

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.55 Tare = .00 Sample weight = 51.55
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.15	100
# 40	4.45	91
# 60	13.20	74
# 140	29.90	42
# 200	34.96	32

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.43
Hygroscopic moisture correction:
Moist weight & tare = 36.37
Dry weight & tare = 35.95
Tare = 11.60
Hygroscopic moisture= 2 %
Calculated biased weight= 51.54
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

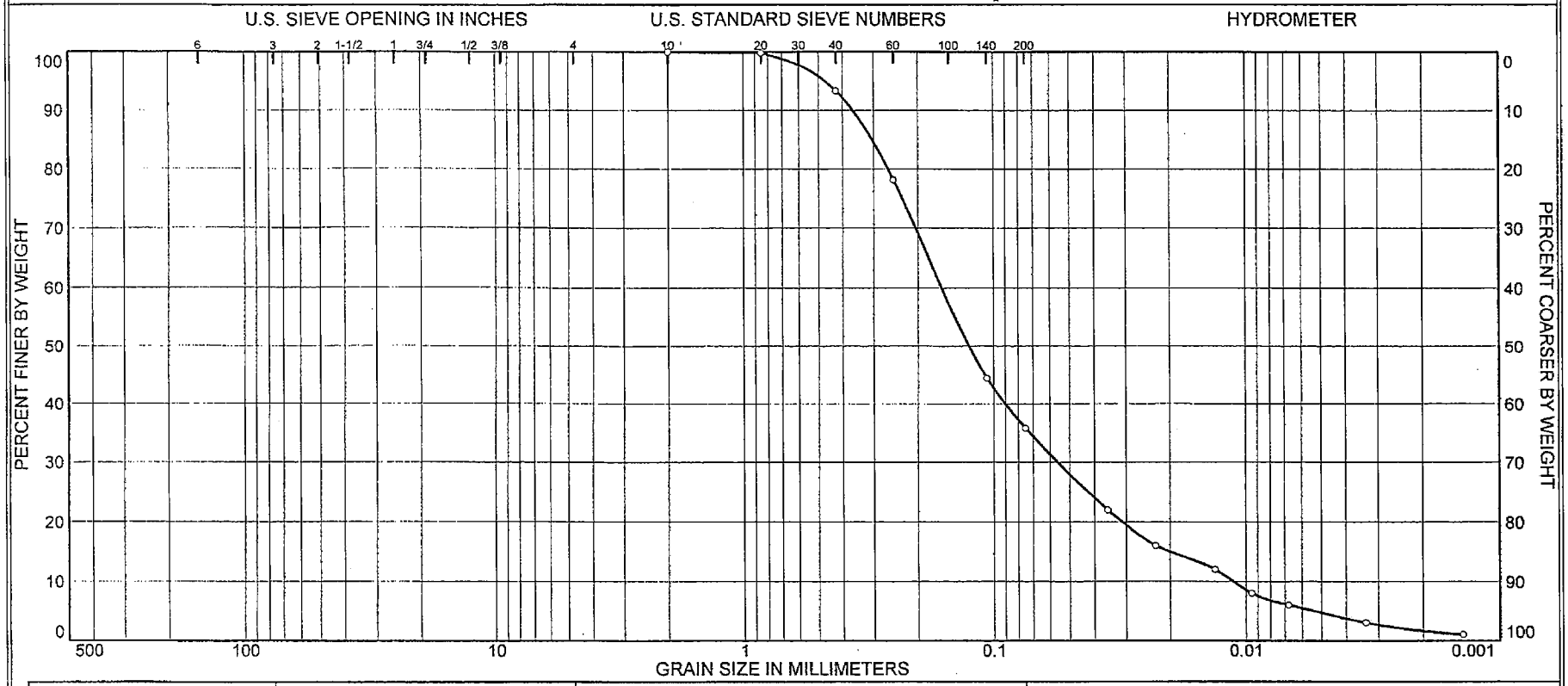
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.8	17.0	11.9	0.0132	17.0	13.5	0.0343	23
5.00	22.8	14.0	8.9	0.0132	14.0	14.0	0.0221	17
15.00	22.8	10.5	5.4	0.0132	10.5	14.6	0.0130	11
30.00	22.8	9.0	3.9	0.0132	9.0	14.8	0.0093	8
60.00	22.8	8.0	2.9	0.0132	8.0	15.0	0.0066	6
250.00	22.8	7.0	1.9	0.0132	7.0	15.1	0.0032	4
1440.00	22.8	7.0	1.9	0.0132	7.0	15.1	0.0014	4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 68 (**% coarse =** **% medium** = 9 **% fine** = 59)
% SILT = 27 **% CLAY** = 5

D_{85}= 0.34 D_{60}= 0.17 D_{50}= 0.13
D_{30}= 0.07 D_{15}= 0.02 D_{10}= 0.01
C_C= 2.2052 C_u= 14.7332

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	7	57	31	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-206	12	38.5'	8/4/06	SM	SAND Silty (SM); Light Olive Brown, Micaceous	27.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-6-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-206
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Olive Brown, Micaceous
Date: 8/4/06 **Natural Moisture:** 27.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	195.31
Tare =	0.00
Dry sample weight =	195.31

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.91 Tare = .00 Sample weight = 50.91
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.11	100
# 40	3.43	93
# 60	11.16	78
# 140	28.33	44
# 200	32.67	36

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.52
Hygroscopic moisture correction:
Moist weight & tare = 38.61
Dry weight & tare = 38.28
Tare = 10.84
Hygroscopic moisture= 1 %
Calculated biased weight= 50.91
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

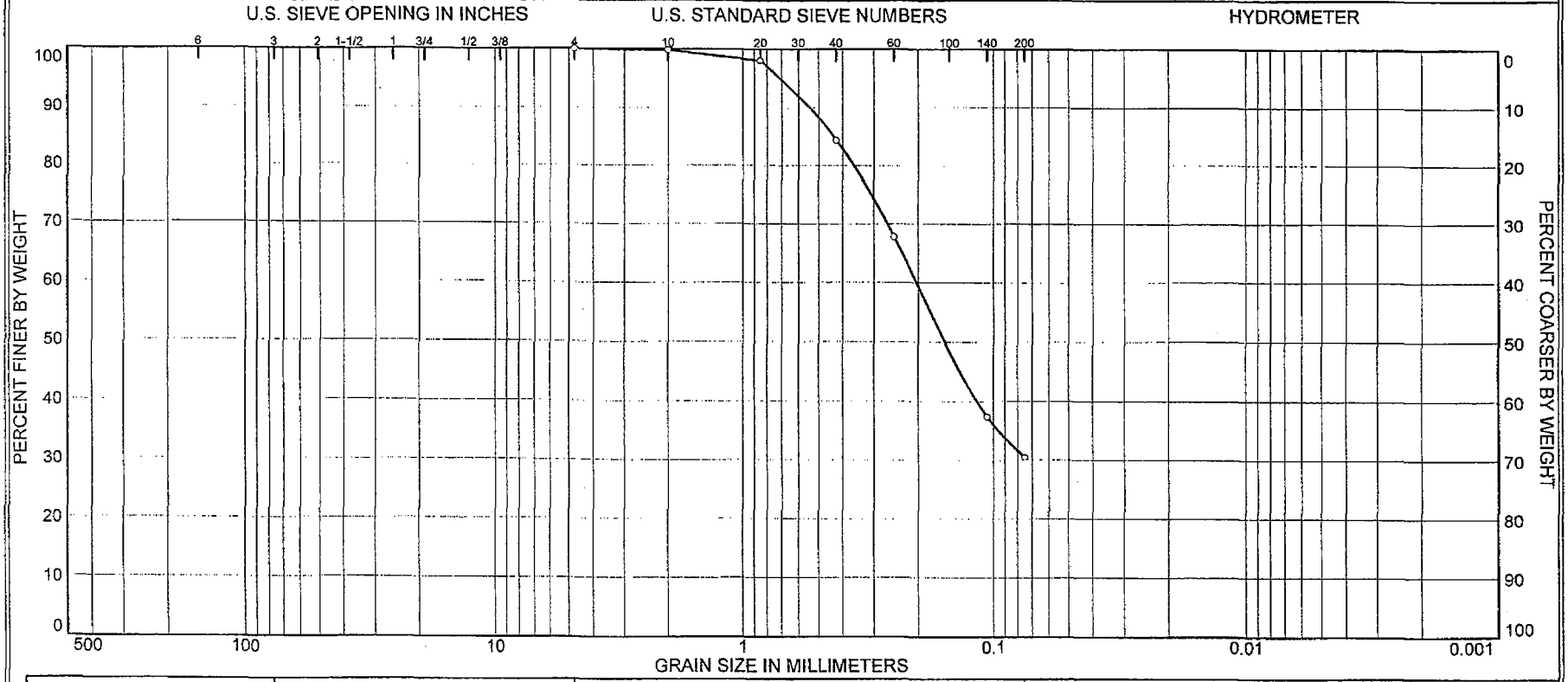
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.2	17.0	11.3	0.0136	17.0	13.5	0.0354	22
5.00	20.2	14.0	8.3	0.0136	14.0	14.0	0.0228	16
15.00	20.2	12.0	6.3	0.0136	12.0	14.3	0.0133	12
30.00	20.2	10.0	4.3	0.0136	10.0	14.7	0.0095	8
60.00	20.2	9.0	3.3	0.0136	9.0	14.8	0.0068	6
250.00	20.2	7.0	1.3	0.0136	7.0	15.1	0.0034	3
1440.00	20.2	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 64 (**% coarse =** **% medium =** 7 **% fine =** 57)
% SILT = 31 **% CLAY =** 5

D_{85}= 0.31 D_{60}= 0.16 D_{50}= 0.13
D_{30}= 0.06 D_{15}= 0.02 D_{10}= 0.01
C_c= 1.7341 C_u= 14.2555

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	15	55	31	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-206	14	48.5'	8/4/06		SAND Silty (SM); Olive Brown, Micaceous	26.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-206
Sample No.: 14
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Olive Brown, Micaceous
Date: 8/4/06 **Natural Moisture:** 26.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	369.99
Tare =	110.77
Dry sample weight =	259.22

Tare for cumulative weight retained= .00

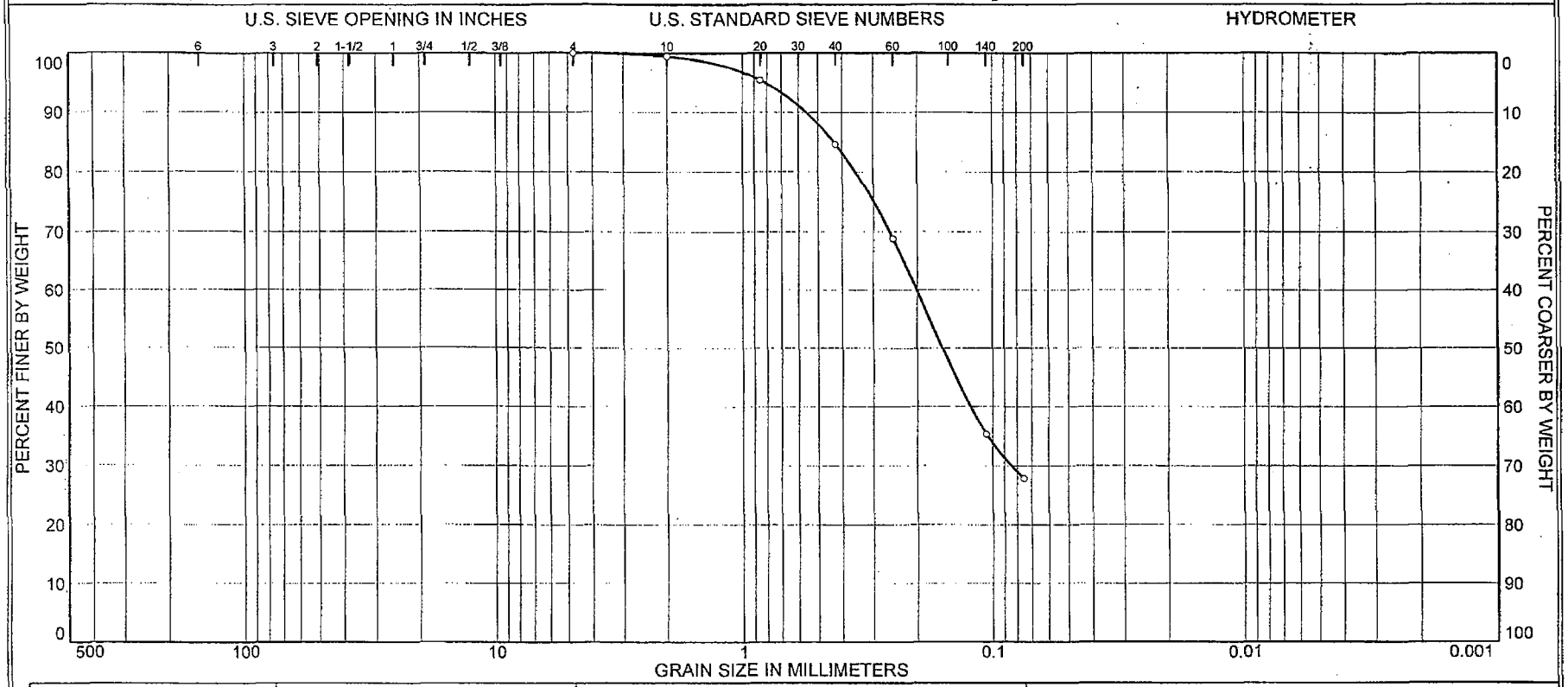
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.56	100
# 20	4.88	98
# 40	40.43	84
# 60	83.56	68
# 140	162.40	37
# 200	180.22	31

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 70 (% coarse = 0 % medium = 15 % fine = 55)
% FINES = 31

D_{85}= 0.44 D_{60}= 0.20 D_{50}= 0.16

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
O	0	0	0	1	15	56	28	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
O	B-206	16	58.5'	8/4/06		SAND Silty (SM); Olive Brown, Micaceous	24.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

O Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-206
Sample No.: 16
Elev. or Depth: 58.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Olive Brown, Micaceous
Date: 8/4/06 **Natural Moisture:** 24.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	383.23
Tare =	110.43
Dry sample weight =	272.80

Tare for cumulative weight retained= .00

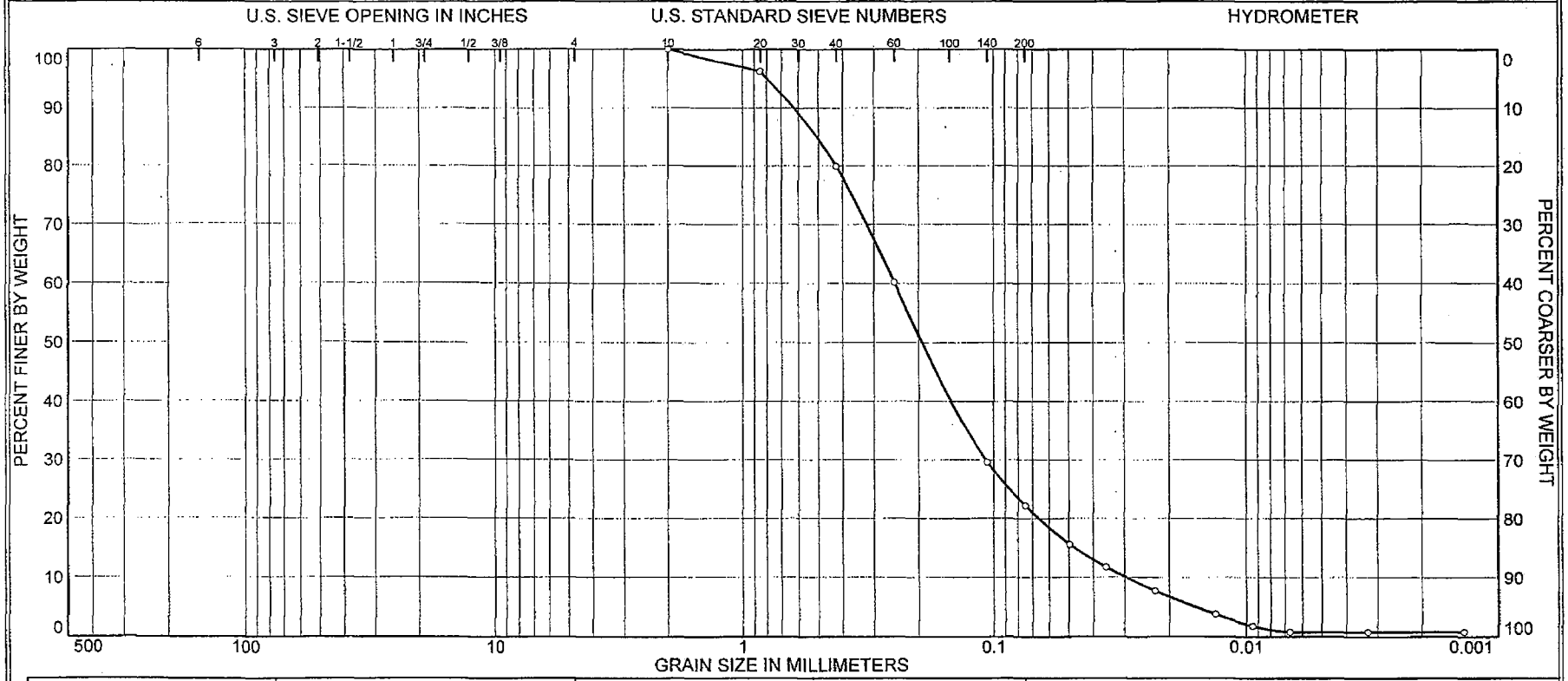
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.36	100
# 20	12.31	96
# 40	42.07	85
# 60	85.11	69
# 140	176.41	35
# 200	197.07	28

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 72 (% coarse = 1 % medium = 15 % fine = 56)
% FINES = 28

D_{85}= 0.43 D_{60}= 0.20 D_{50}= 0.16
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	20	58	21	1

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-206	18	68.5'	8/16/06		SAND Silty (SM); Olive Brown, Micaceous	21.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-206
Sample No.: 18
Elev. or Depth: 68.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Olive Brown, Micaceous
Date: 8/16/06 **Natural Moisture:** 21.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	97.81
Tare =	0.00
Dry sample weight =	97.81

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.79 Tare = .00 Sample weight = 50.79
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	1.90	96
# 40	10.19	80
# 60	20.22	60
# 140	35.77	30
# 200	39.50	22

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.35
Hygroscopic moisture correction:
Moist weight & tare = 37.39
Dry weight & tare = 37.10
Tare = 10.94
Hygroscopic moisture= 1 %
Calculated biased weight= 50.79
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

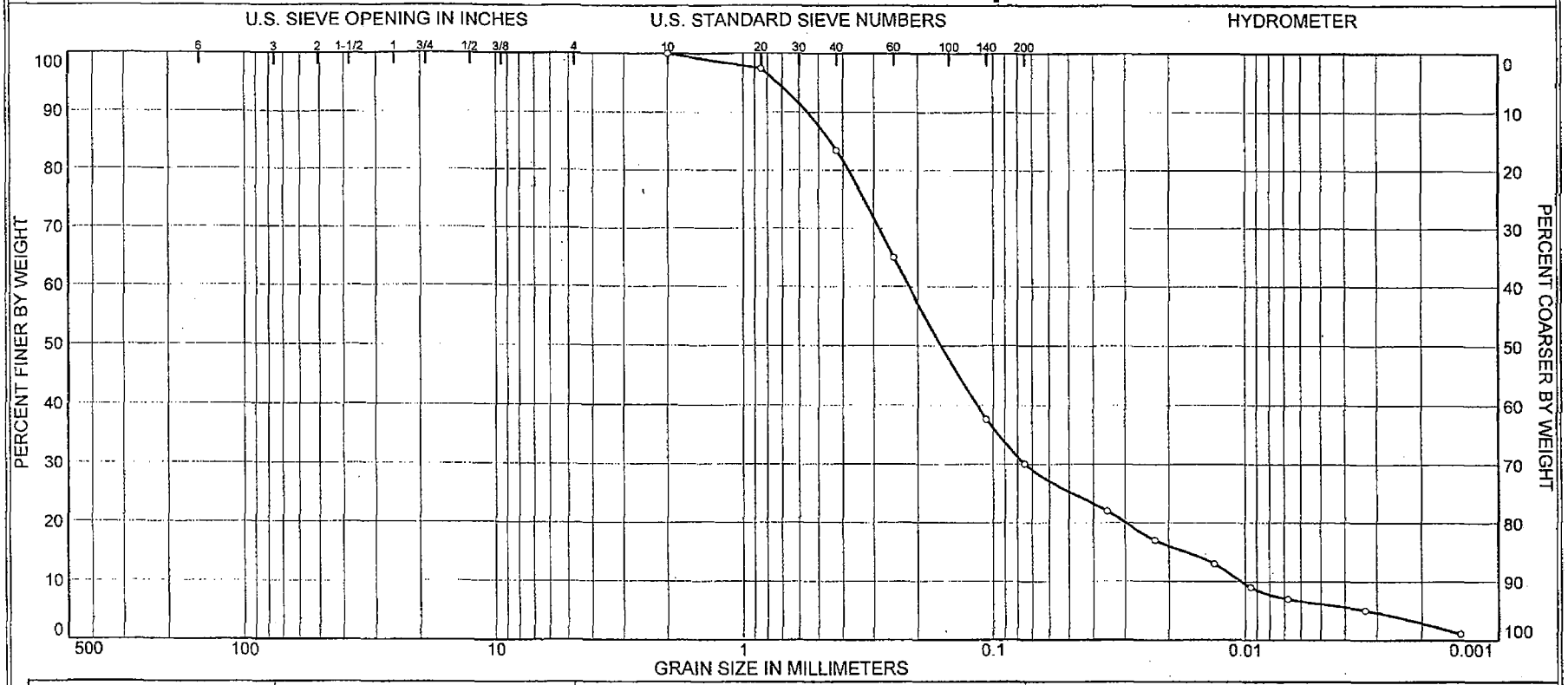
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.8	13.0	7.9	0.0132	13.0	14.2	0.0496	16
2.00	22.8	11.0	5.9	0.0132	11.0	14.5	0.0355	12
5.00	22.8	9.0	3.9	0.0132	9.0	14.8	0.0227	8
15.00	22.8	7.0	1.9	0.0132	7.0	15.1	0.0132	4
30.00	22.8	6.0	0.9	0.0132	6.0	15.3	0.0094	2
60.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0067	1
250.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0033	1
1440.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 78 (**% coarse =** **% medium** = 20 **% fine** = 58)
% SILT = 21 **% CLAY** = 1

D_{85}= 0.51 D_{60}= 0.25 D_{50}= 0.19
D_{30}= 0.11 D_{15}= 0.05 D_{10}= 0.03
C_c= 1.5655 C_u= 8.3626

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	17	53	24	6

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	1	0.0'	8/4/06	SM	SAND Silty (SM); Red and Brown	9.4	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 1
Elev. or Depth: 0.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red and Brown
Date: 8/4/06 **Natural Moisture:** 9.4
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	136.75
Tare =	0.00
Dry sample weight =	136.75

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.28 Tare = .00 Sample weight = 50.28
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	1.30	97
# 40	8.37	83
# 60	17.58	65
# 140	31.39	38
# 200	35.16	30

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 50.83
Hygroscopic moisture correction:
Moist weight & tare = 38.42
Dry weight & tare = 38.13
Tare = 11.60
Hygroscopic moisture= 1 %
Calculated biased weight= 50.28
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

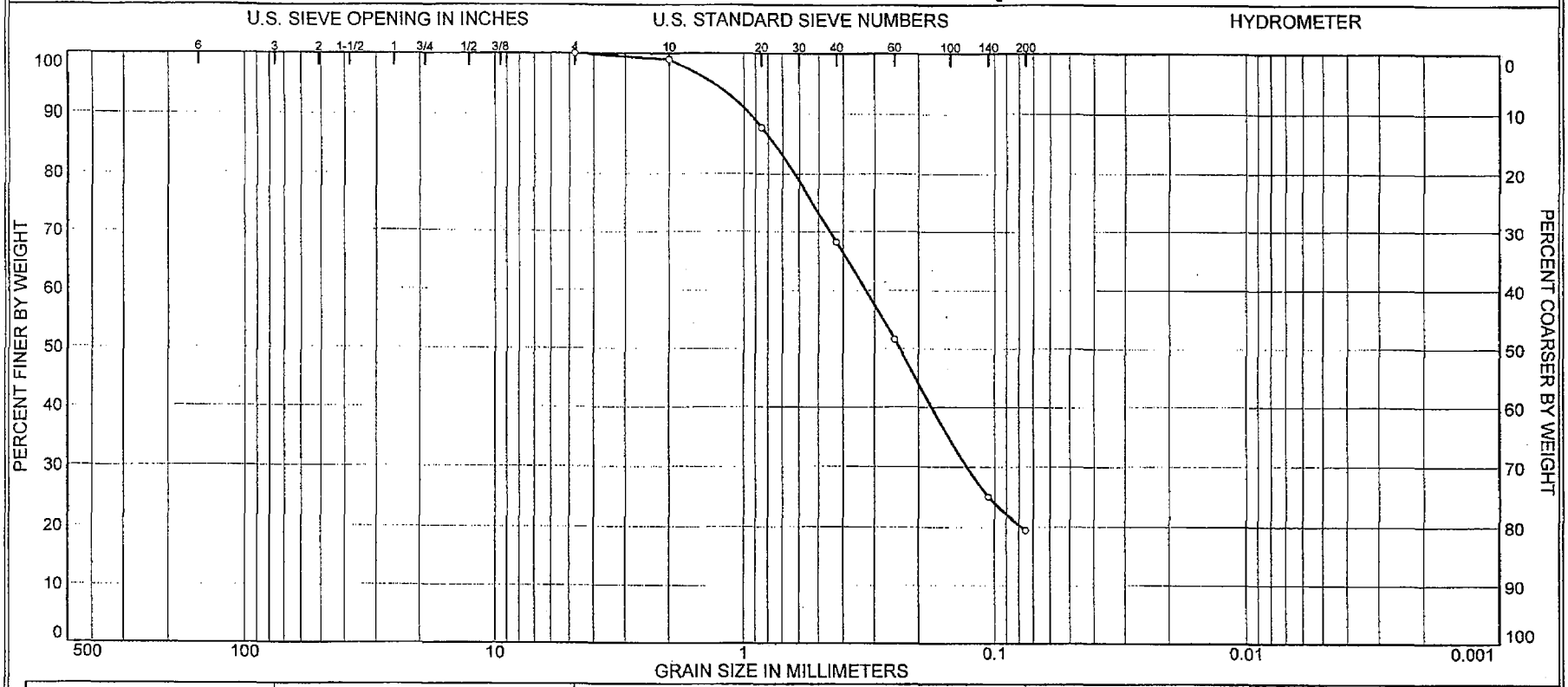
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.2	17.0	11.3	0.0136	17.0	13.5	0.0354	22
5.00	20.2	14.0	8.3	0.0136	14.0	14.0	0.0228	17
15.00	20.2	12.0	6.3	0.0136	12.0	14.3	0.0133	13
30.00	20.2	10.0	4.3	0.0136	10.0	14.7	0.0095	9
60.00	20.2	9.0	3.3	0.0136	9.0	14.8	0.0068	7
250.00	20.2	8.0	2.3	0.0136	8.0	15.0	0.0033	5
1440.00	20.2	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 70 (**% coarse =** **% medium =** 17 **% fine =** 53)
% SILT = 24 **% CLAY =** 6

D_{85}= 0.45 D_{60}= 0.22 D_{50}= 0.16
D_{30}= 0.07 D_{15}= 0.02 D_{10}= 0.01
C_c= 2.4532 C_u= 20.9106

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	31	49	19	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	5	8.5'	8/4/06		SAND Silty (SM); Brown, Micaceous	20.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 5
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/4/06 **Natural Moisture:** 20.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	266.89
Tare =	189.40
Dry sample weight =	77.49

Tare for cumulative weight retained= .00

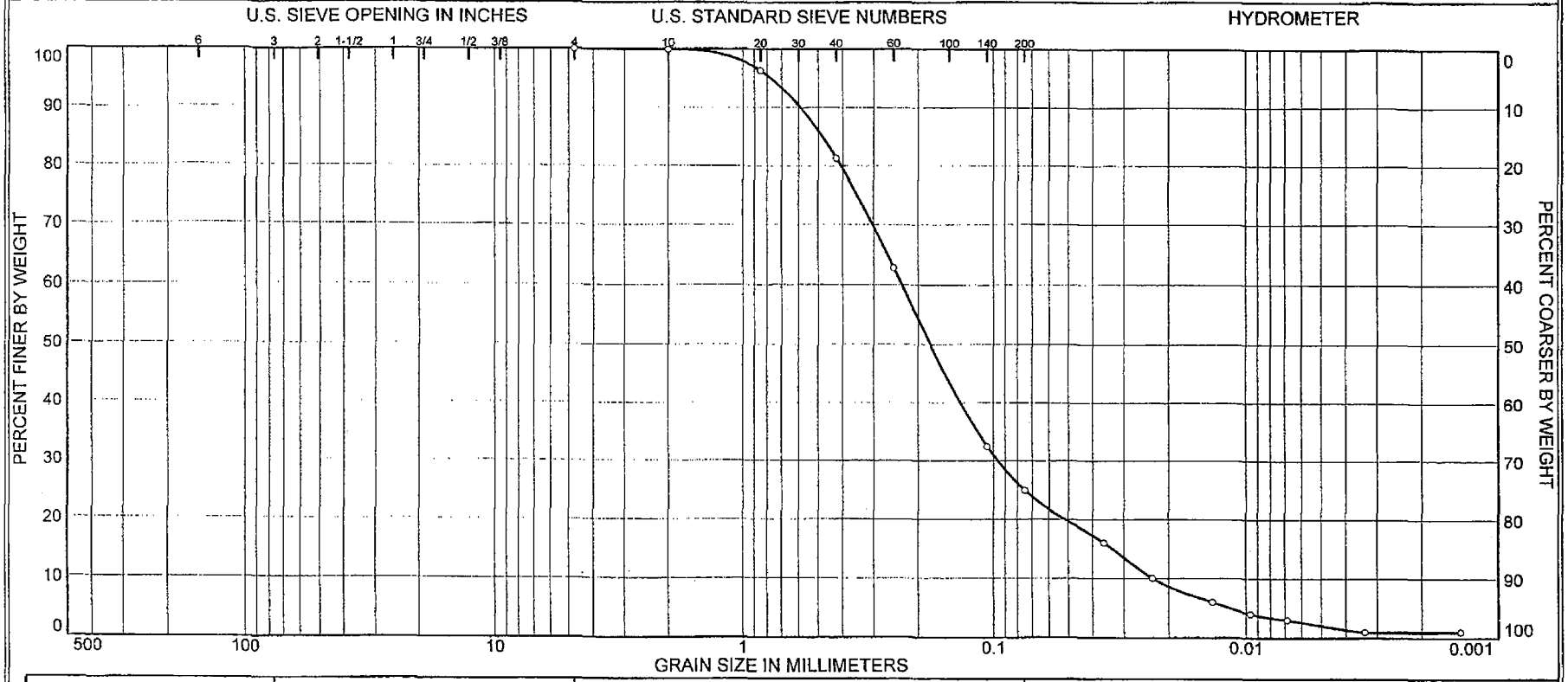
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.77	99
# 20	9.44	88
# 40	24.68	68
# 60	37.53	52
# 140	58.14	25
# 200	62.48	19

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 81 (% coarse = 1 % medium = 31 % fine = 49)
% FINES = 19

D_{85}= 0.75 D_{60}= 0.33 D_{50}= 0.24
D_{30}= 0.13

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	19	56	23	2

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	6	11.0'	8/4/06	SM	SAND Silty (SM); Brown, Micaceous	19.2	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/4/06 **Natural Moisture:** 19.2
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	171.13
Tare =	0.00
Dry sample weight =	171.13

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.11 Tare = .00 Sample weight = 51.11
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.19	100
# 20	1.84	96
# 40	9.50	81
# 60	18.98	63
# 140	34.49	33
# 200	38.38	25

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.57
Hygroscopic moisture correction:
Moist weight & tare = 43.45
Dry weight & tare = 43.17
Tare = 11.59
Hygroscopic moisture= 1 %
Calculated biased weight= 51.12
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

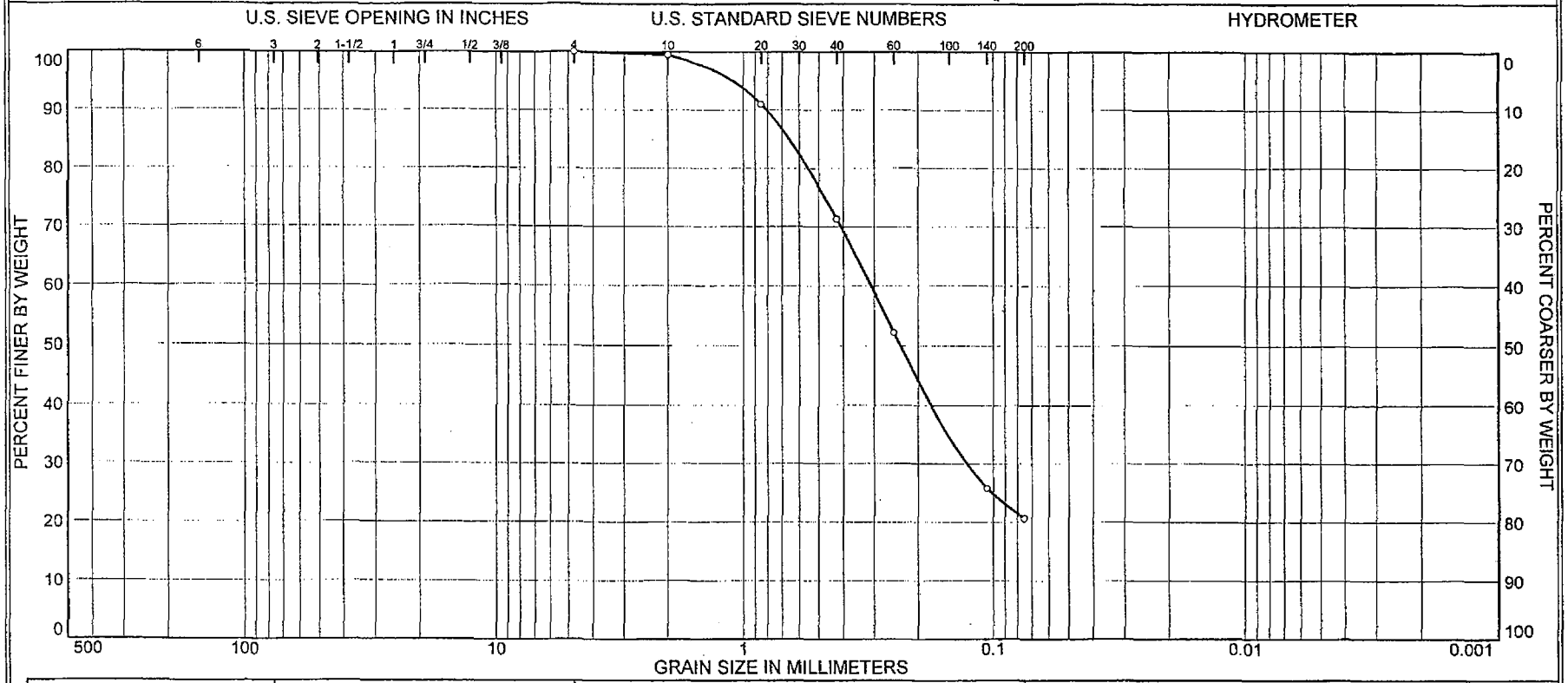
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.2	14.0	8.3	0.0136	14.0	14.0	0.0360	16
5.00	20.2	11.0	5.3	0.0136	11.0	14.5	0.0232	10
15.00	20.2	9.0	3.3	0.0136	9.0	14.8	0.0135	6
30.00	20.2	8.0	2.3	0.0136	8.0	15.0	0.0096	4
60.00	20.2	7.0	1.3	0.0136	7.0	15.1	0.0068	3
250.00	20.2	6.0	0.3	0.0136	6.0	15.3	0.0034	1
1440.00	20.2	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 75 (% coarse = 0 % medium = 19 % fine = 56)
% SILT = 23 % CLAY = 2

D_{85}= 0.48 D_{60}= 0.23 D_{50}= 0.18
D_{30}= 0.10 D_{15}= 0.03 D_{10}= 0.02
C_c= 1.7181 C_u= 10.0263

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	28	50	21	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	7	13.5'	8/4/06		SAND Silty (SM); Brown with White, Micaceous	17.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown with White, Micaceous
Date: 8/4/06 **Natural Moisture:** 17.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	246.39
Tare =	91.19
Dry sample weight =	155.20

Tare for cumulative weight retained= .00

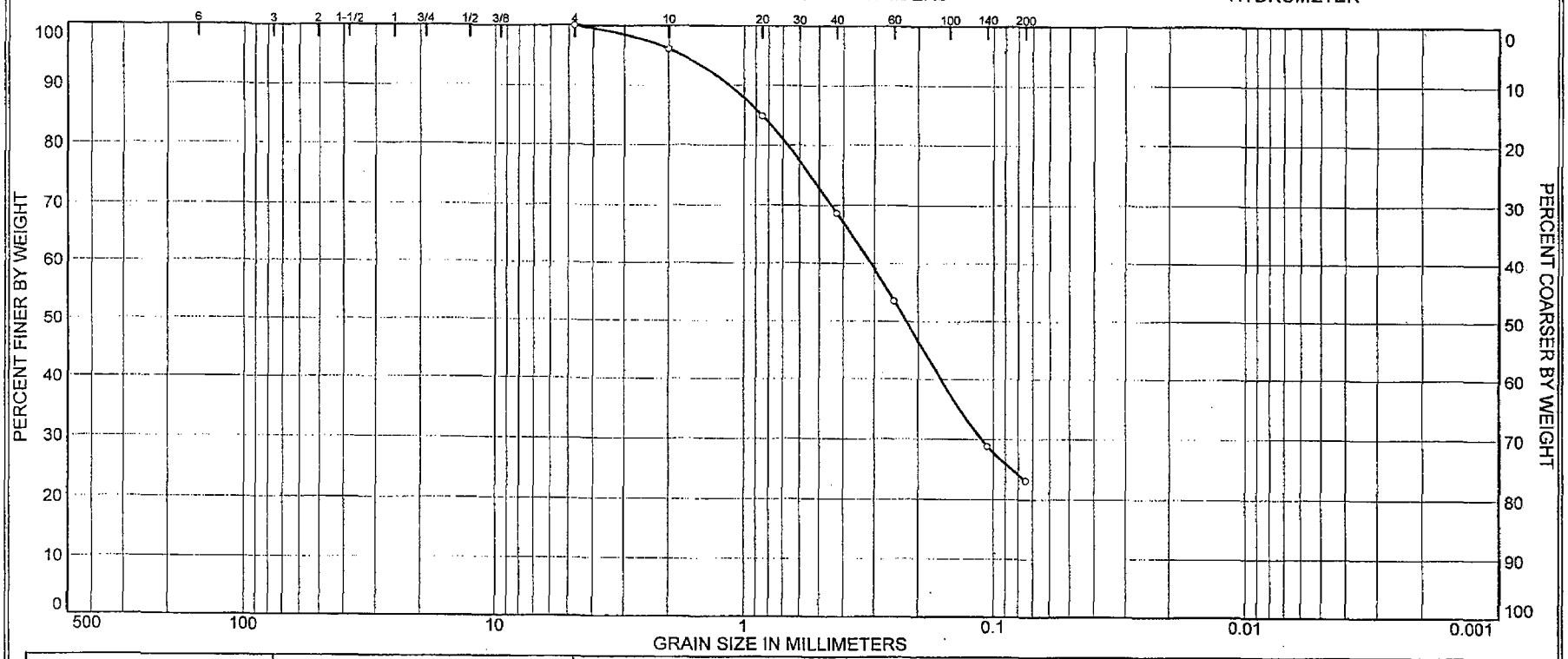
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.82	100
# 20	13.90	91
40	44.56	71
# 60	74.21	52
# 140	115.38	26
# 200	123.29	21

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 79 **(% coarse** = 1 **% medium** = 28 **% fine** = 50)
% FINES = 21

D_{85}= 0.66 D_{60}= 0.31 D_{50}= 0.24
D_{30}= 0.13

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	4	28	45	23	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	8	18.5'	8/4/06		SAND Silty (SM); Brown, Orange/Pink, and White, Micaceous	21.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Orange/Pink, and White, Micaceous
Date: 8/4/06 **Natural Moisture:** 21.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	283.40
Tare =	93.18
Dry sample weight =	190.22

Tare for cumulative weight retained= .00

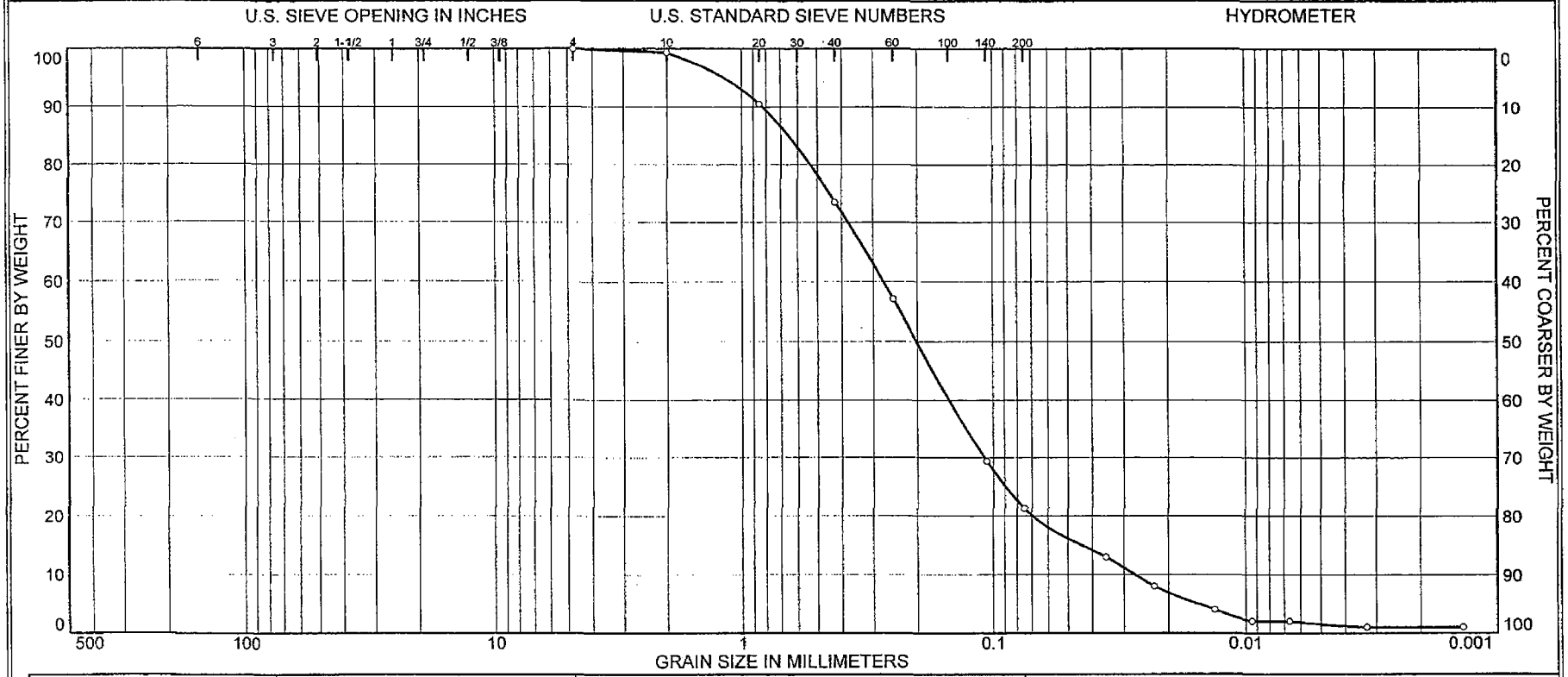
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	7.19	96
# 20	28.67	85
40	59.71	69
# 60	88.38	54
# 140	135.36	29
# 200	146.21	23

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 77 (% coarse = 4 % medium = 28 % fine = 45)
% FINES = 23

D_{85}= 0.85 D_{60}= 0.31 D_{50}= 0.22
D_{30}= 0.11

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	26	52	20	2

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	9	23.5'	8/16/06		SAND Silty (SM); Brown, Orange/Pink, and White, Micaceous	32.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JBS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Orange/Pink, and White, Micaceous
Date: 8/16/06 **Natural Moisture:** 32.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	80.88
Tare =	0.00
Dry sample weight =	80.88

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.64 Tare = .00 Sample weight = 51.64
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.45	99
# 20	4.63	91
# 40	13.45	74
# 60	21.98	57
# 140	36.36	29
# 200	40.56	21

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 52.16
Hygroscopic moisture correction:
Moist weight & tare = 40.19
Dry weight & tare = 39.91
Tare = 11.41
Hygroscopic moisture= 1 %
Calculated biased weight= 52.17
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

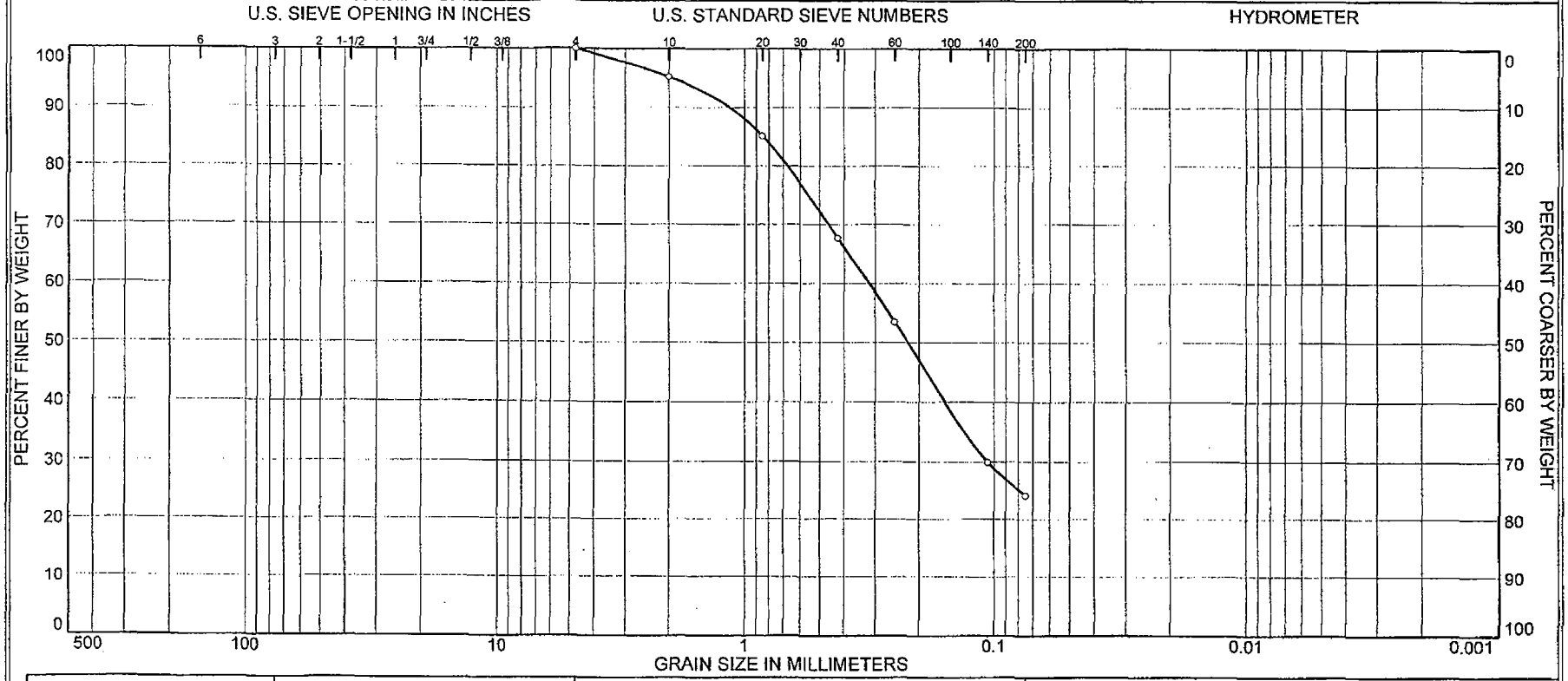
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.8	12.0	6.9	0.0132	12.0	14.3	0.0353	13
5.00	22.8	9.0	3.9	0.0132	9.0	14.8	0.0227	8
15.00	22.8	7.0	1.9	0.0132	7.0	15.1	0.0132	4
30.00	22.8	6.0	0.9	0.0132	6.0	15.3	0.0094	2
60.00	22.8	6.0	0.9	0.0132	6.0	15.3	0.0067	2
250.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0033	1
1440.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 79 (% coarse = 1 % medium = 26 % fine = 52)
% SILT = 20 % CLAY = 2

D_{85}= 0.65 D_{60}= 0.27 D_{50}= 0.20
D_{30}= 0.11 D_{15}= 0.04 D_{10}= 0.03
C_C= 1.5787 C_u= 10.0547

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	5	28	43	24	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	10	28.5'	8/4/06		SAND Silty (SM); Black, Brown and White, Micaceous	29.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Black, Brown and White, Micaceous
Date: 8/4/06 **Natural Moisture:** 29.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	292.55
Tare =	87.32
Dry sample weight =	205.23

Tare for cumulative weight retained= .00

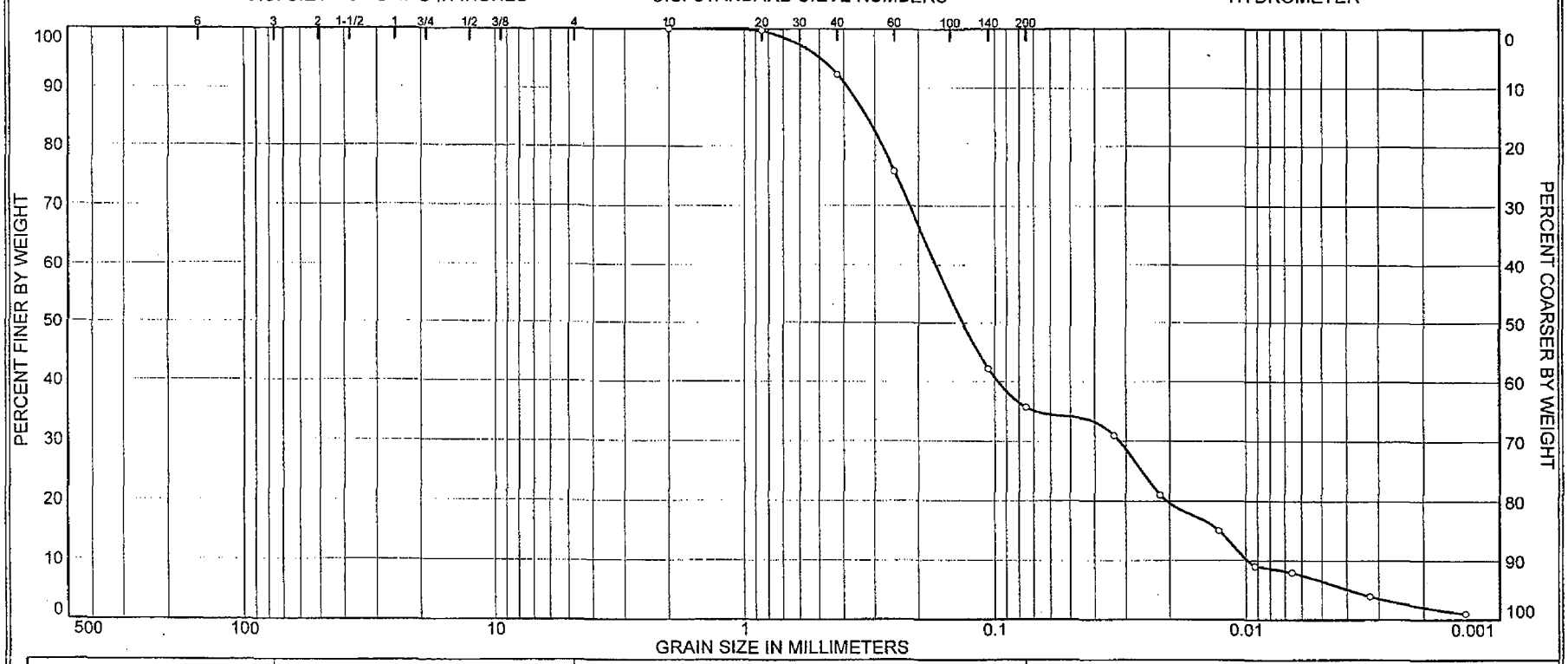
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	9.77	95
# 20	30.68	85
40	66.30	68
# 60	95.37	54
# 140	143.78	30
# 200	155.71	24

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 76 (% coarse = 5 % medium = 28 % fine = 43)
% FINES = 24

D_{85}= 0.85 D_{60}= 0.32 D_{50}= 0.22
D_{30}= 0.11

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	8	56	29	6

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	11	33.5'	8/3/06	SM	SAND Silty (SM); Yellowish Red, Micaceous	23.1	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM 422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Micaceous
Date: 8/3/06 **Natural Moisture:** 23.1
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	152.30
Tare =	0.00
Dry sample weight =	152.30

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.98 Tare = .00 Sample weight = 51.98
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.17	100
# 40	4.07	92
# 60	12.56	76
# 140	30.02	42
# 200	33.41	36

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.86
Hygroscopic moisture correction:
Moist weight & tare = 43.18
Dry weight & tare = 42.64
Tare = 11.57
Hygroscopic moisture= 2 %
Calculated biased weight= 51.96
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

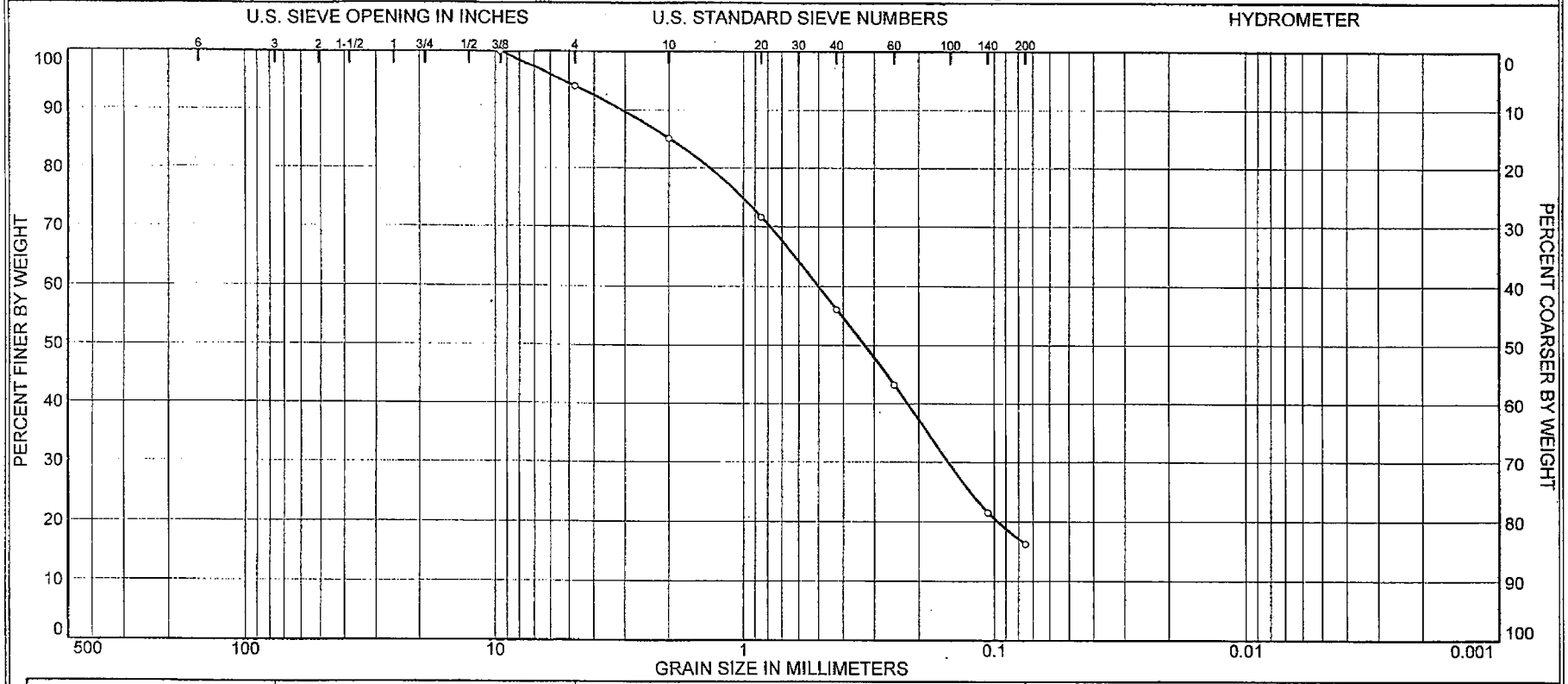
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	21.0	15.9	0.0132	21.0	12.9	0.0335	31
5.00	22.7	16.0	10.9	0.0132	16.0	13.7	0.0218	21
15.00	22.7	13.0	7.9	0.0132	13.0	14.2	0.0128	15
30.00	22.7	10.0	4.9	0.0132	10.0	14.7	0.0092	9
60.00	22.7	9.0	3.9	0.0132	9.0	14.8	0.0066	8
250.00	22.7	7.0	1.9	0.0132	7.0	15.1	0.0032	4
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 64 (**% coarse =** **% medium** = 8 **% fine** = 57)
% SILT = 29 **% CLAY** = 6

D_{85}= 0.32 D_{60}= 0.17 D_{50}= 0.13
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_C= 0.597 C_u= 17.3623

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	6	9	29	40	16	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-207	12	38.5'	8/4/06		SAND Silty with Gravel (SM); Black and Gray, some Brown	16.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-207
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty with Gravel (SM); Black and Gray, some Brown
Date: 8/4/06 **Natural Moisture:** 16.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	311.91
Tare =	87.21
Dry sample weight =	224.70

Tare for cumulative weight retained= .00

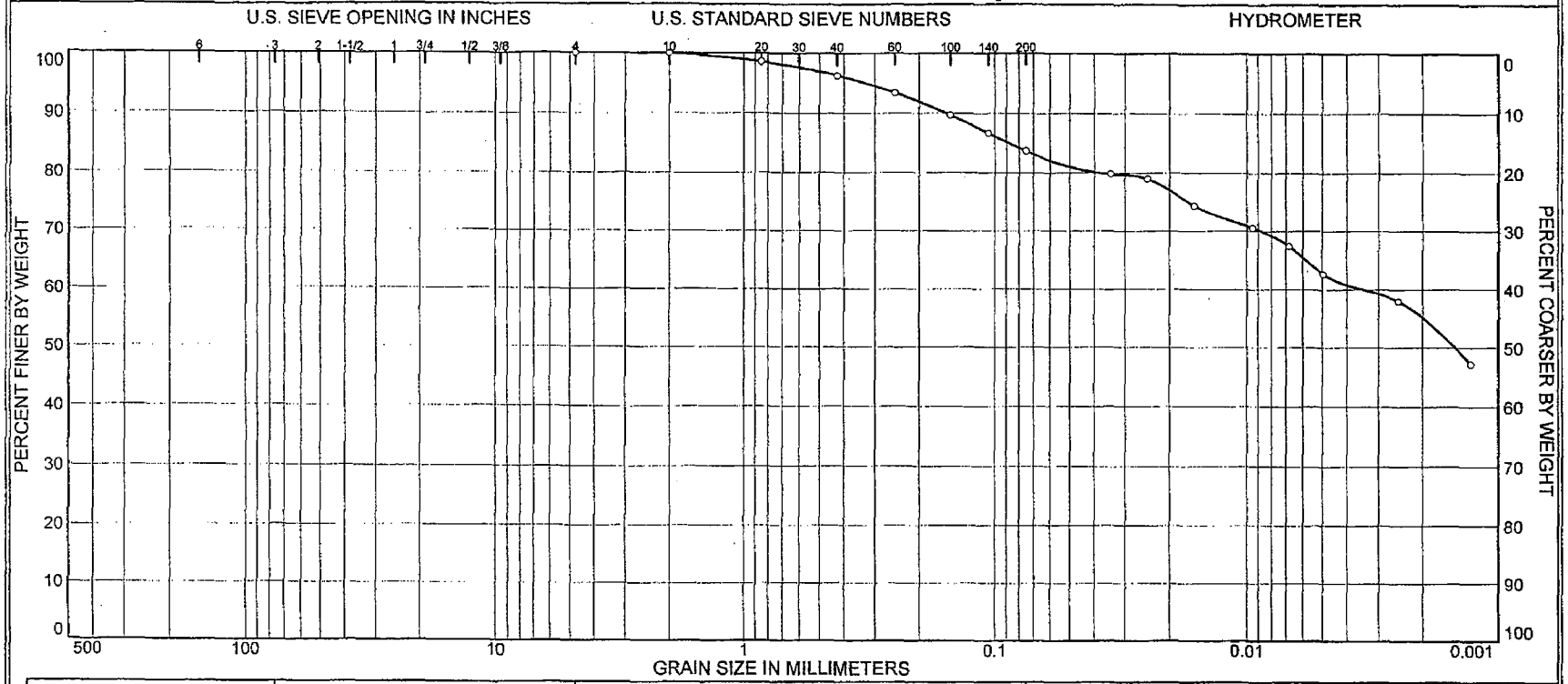
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	13.37	94
# 10	33.59	85
20	63.81	72
# 40	98.95	56
# 60	127.59	43
# 140	176.45	22
# 200	188.40	16

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 6 **(% coarse =** **% fine =** 6)
% SAND = 78 **(% coarse =** 9 **% medium =** 29 **% fine =** 40)
% FINES = 16

D_{85}= 1.98 D_{60}= 0.50 D_{50}= 0.33
D_{30}= 0.15

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	4	12	21	63

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-208	UD-1	8.5 Ft.	11/09/6	CH	Fat clay with sand	N/A	59	28

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-208
Sample No.: UD-1
Elev. or Depth: 8.5 Ft. **Sample Length(in./cm.):** 5362
Location: B-208
Description: Fat clay with sand
Date: 11/09/6 **Natural Moisture:** N/A
Liquid Limit: 59 **Plastic Limit:** 28 **USCS Class.:** CH
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	63.69
Tare =	0.00
Dry sample weight =	63.69

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.06	100
# 20	0.92	99
# 40	2.34	96
# 60	4.18	93
# 100	6.55	90
# 140	8.47	87
# 200	10.37	84

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 84
Weight of hydrometer sample: 53.32
Calculated biased weight= 63.70
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	56.0	51.4	0.0129	56.0	7.1	0.0344	80
2.00	23.5	55.5	50.9	0.0129	55.5	7.2	0.0244	79
5.00	23.5	52.5	47.9	0.0129	52.5	7.7	0.0160	74
15.00	23.5	50.0	45.4	0.0129	50.0	8.1	0.0095	71
30.00	23.5	48.0	43.4	0.0129	48.0	8.4	0.0068	67
60.00	23.5	45.0	40.4	0.0129	45.0	8.9	0.0050	63

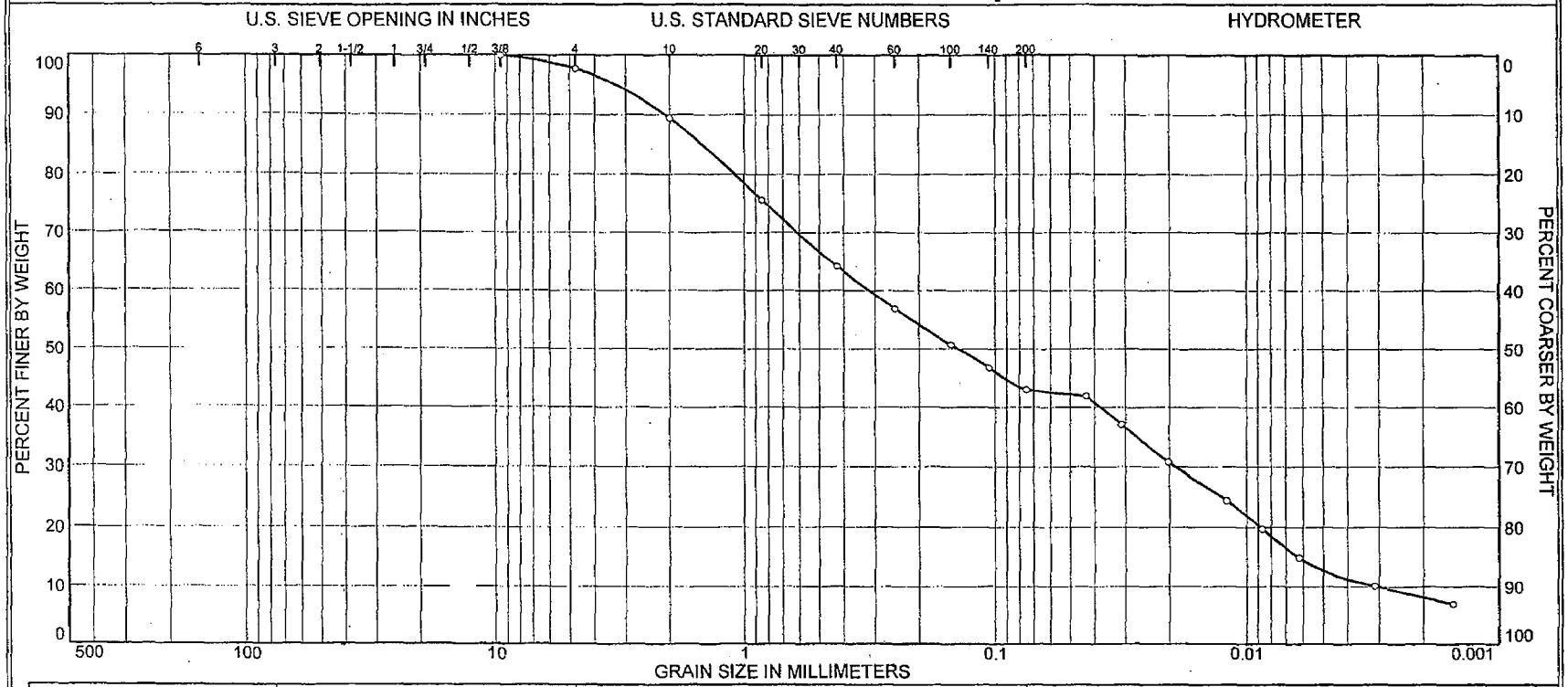
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
250.00	23.4	42.0	37.4	0.0129	42.0	9.4	0.0025	58
1057.00	23.5	35.0	30.4	0.0129	35.0	10.6	0.0013	47

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 16 (**% coarse** = 0 **% medium** = 4 **% fine** = 12)
% SILT = 21 **% CLAY** = 63

D_{85}= 0.09 D_{60}= 0.00 D_{50}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	2	8	25	22	30	13

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-209	UD-2	18.5 Ft.	11/09/6	SM	Silty sand	N/A	55	43

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-209
Sample No.: UD-2
Elev. or Depth: 18.5 Ft. **Sample Length(in./cm.):** 5366
Location: B-209
Description: Silty sand
Date: 11/09/6 **Natural Moisture:** N/A
Liquid Limit: 55 **Plastic Limit:** 43 **USCS Class.:** SM
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	62.44
Tare =	0.00
Dry sample weight =	62.44

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	1.42	98
# 10	6.61	89
# 20	15.24	76
# 40	22.44	64
# 60	26.89	57
# 100	30.81	51
# 140	33.19	47
# 200	35.62	43

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 43
Weight of hydrometer sample: 26.82
Calculated biased weight= 62.37
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	31.0	26.4	0.0129	31.0	11.2	0.0431	42
2.00	23.5	28.0	23.4	0.0129	28.0	11.7	0.0312	37
5.00	23.5	24.0	19.4	0.0129	24.0	12.4	0.0203	31
15.00	23.5	20.0	15.4	0.0129	20.0	13.0	0.0120	24
30.00	23.5	17.0	12.4	0.0129	17.0	13.5	0.0086	20

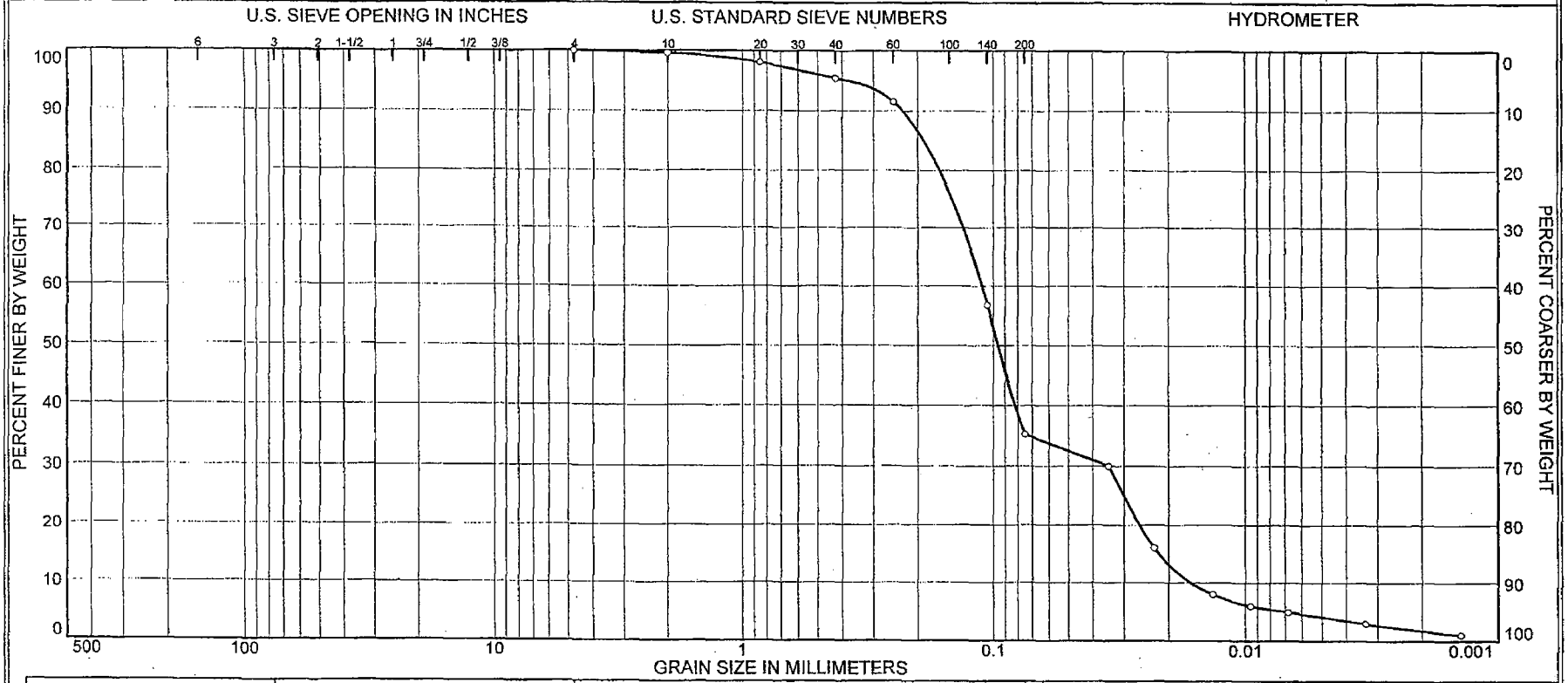
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
60.00	23.5	14.0	9.4	0.0129	14.0	14.0	0.0062	15
250.00	23.4	11.0	6.4	0.0129	11.0	14.5	0.0031	10
1057.00	23.5	9.0	4.4	0.0129	9.0	14.8	0.0015	7

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 2 **(% coarse =** **% fine =** 2)
% SAND = 55 **(% coarse =** 8 **% medium =** 25 **% fine =** 22)
% SILT = 30 **% CLAY =** 13

D_{85}= 1.48 D_{60}= 0.32 D_{50}= 0.14
D_{30}= 0.02 D_{15}= 0.01 D_{10}= 0.00
C_c= 0.3765 C_u= 104.6324

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	4	61	31	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	2	1.5'	8/6/06	SM	SAND Silty (SM); Red	14.8	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red
Date: 8/6/06 **Natural Moisture:** 14.8
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	172.92
Tare =	0.00
Dry sample weight =	172.92

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.46 Tare = .00 Sample weight = 51.46
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.62	100
# 20	0.75	98
# 40	2.15	95
# 60	4.16	92
# 140	22.12	57
# 200	33.24	35

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.88
Hygroscopic moisture correction:
Moist weight & tare = 35.93
Dry weight & tare = 35.73
Tare = 10.88
Hygroscopic moisture= 1 %
Calculated biased weight= 51.47
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

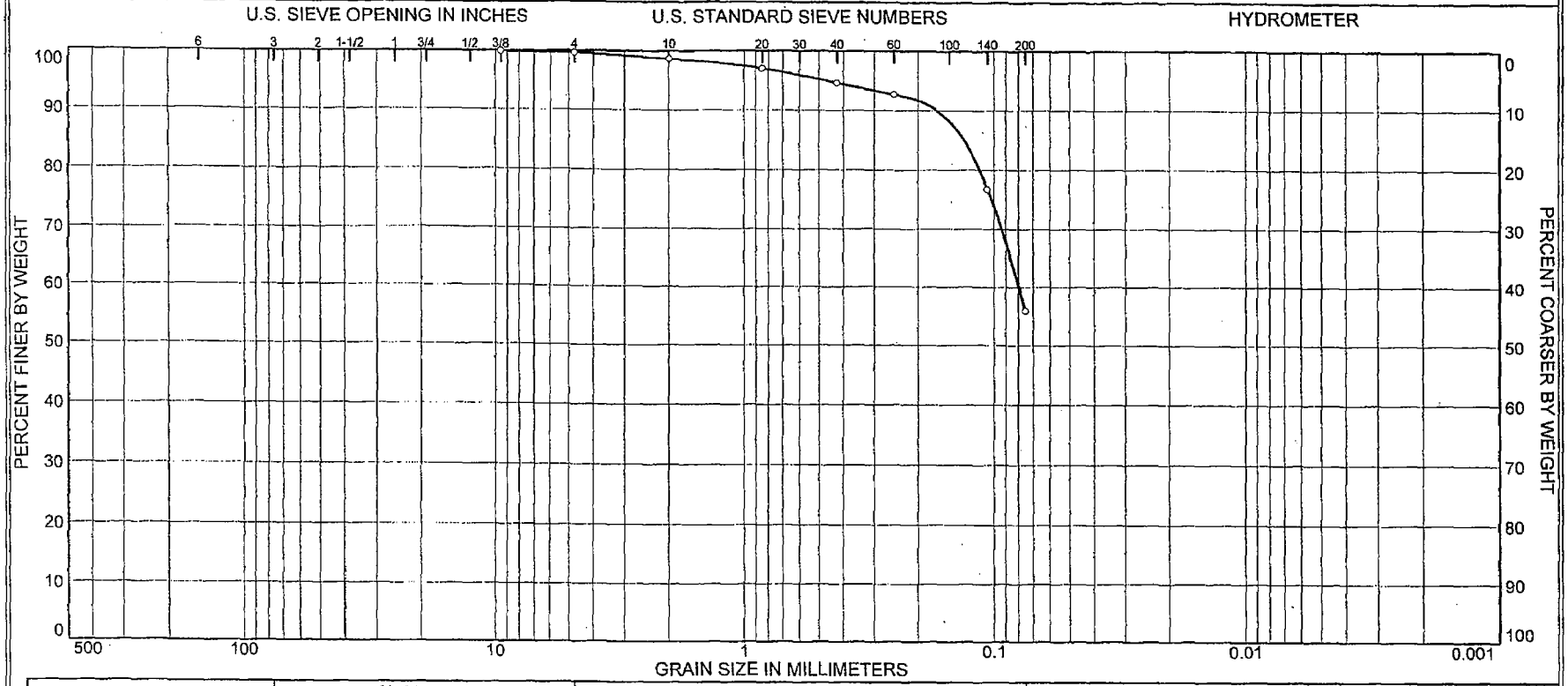
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	21.0	15.3	0.0136	21.0	12.9	0.0345	30
5.00	20.3	14.0	8.3	0.0136	14.0	14.0	0.0227	16
15.00	20.3	10.0	4.3	0.0136	10.0	14.7	0.0134	8
30.00	20.3	9.0	3.3	0.0136	9.0	14.8	0.0096	6
60.00	20.3	8.0	2.3	0.0136	8.0	15.0	0.0068	5
250.00	20.3	7.0	1.3	0.0136	7.0	15.1	0.0033	3
1440.00	20.3	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 65 (**% coarse =** 0 **% medium =** 4 **% fine =** 61)
% SILT = 31 **% CLAY =** 4

D_{85}= 0.19 D_{60}= 0.11 D_{50}= 0.10
D_{30}= 0.03 D_{15}= 0.02 D_{10}= 0.02
C_c= 0.6484 C_u= 6.7686

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	4	39	56	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	3	3.5'	8/11/06		SILT Sandy (ML); Red, Slightly Micaceous	20.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Red, Slightly Micaceous
Date: 8/11/06 **Natural Moisture:** 20.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	283.34
Tare =	93.20
Dry sample weight =	190.14

Tare for cumulative weight retained= .00

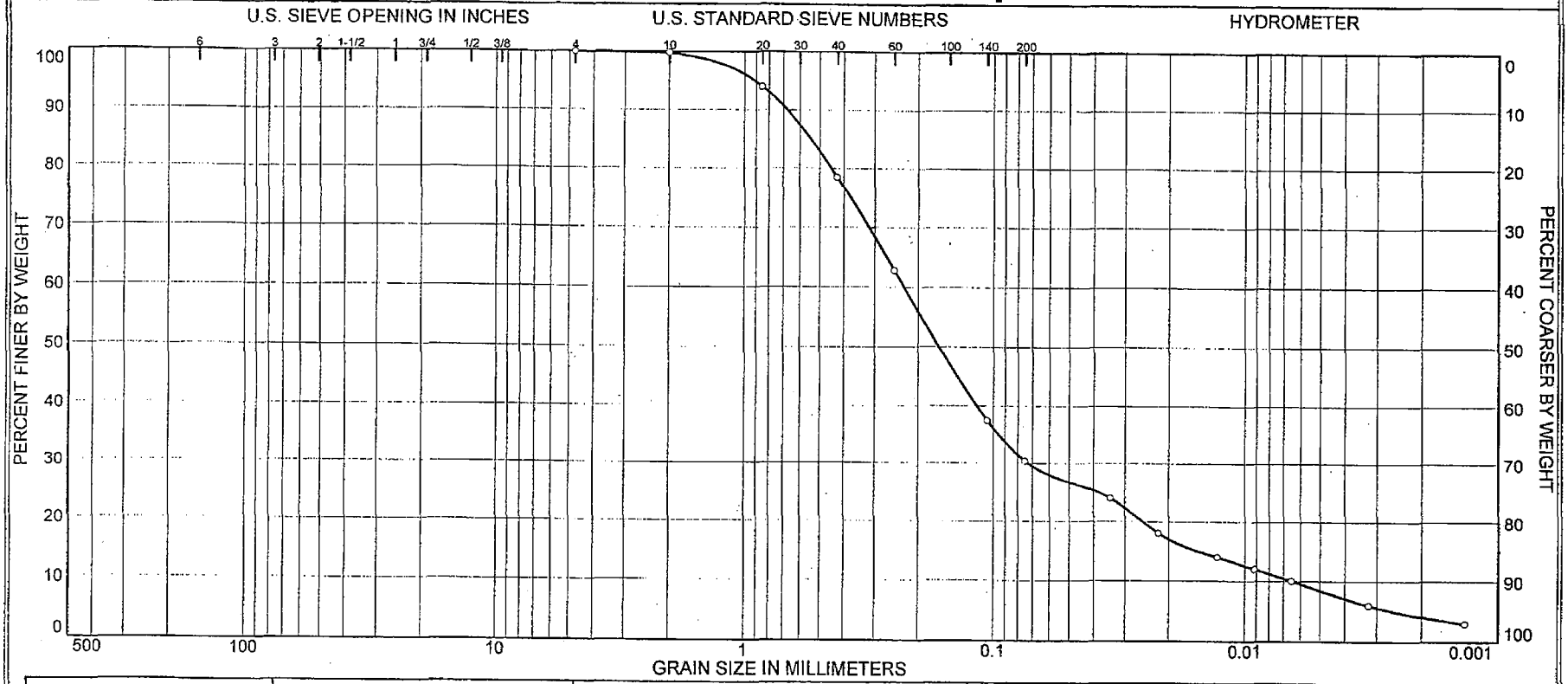
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.65	100
# 10	2.55	99
# 20	5.58	97
# 40	10.01	95
# 60	13.91	93
# 140	44.18	77
# 200	83.93	56

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0 (% coarse = % fine = 0)
% SAND = 44 (% coarse = 1 % medium = 4 % fine = 39)
% FINES = 56

D_{85}= 0.13 D_{60}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	21	49	22	8

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	4	6.0'	8/6/06	SM	SAND Silty (SM); Strong Brown, Micaceous	28.2	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 8/6/06 **Natural Moisture:** 28.2
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	161.67
Tare =	0.00
Dry sample weight =	161.67

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.47 Tare = .00 Sample weight = 50.47
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.28	100
# 20	2.88	94
# 40	10.76	79
# 60	18.70	63
# 140	31.50	38
# 200	35.10	30

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.03
Hygroscopic moisture correction:
Moist weight & tare = 38.38
Dry weight & tare = 38.09
Tare = 10.98
Hygroscopic moisture= 1 %
Calculated biased weight= 50.49
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

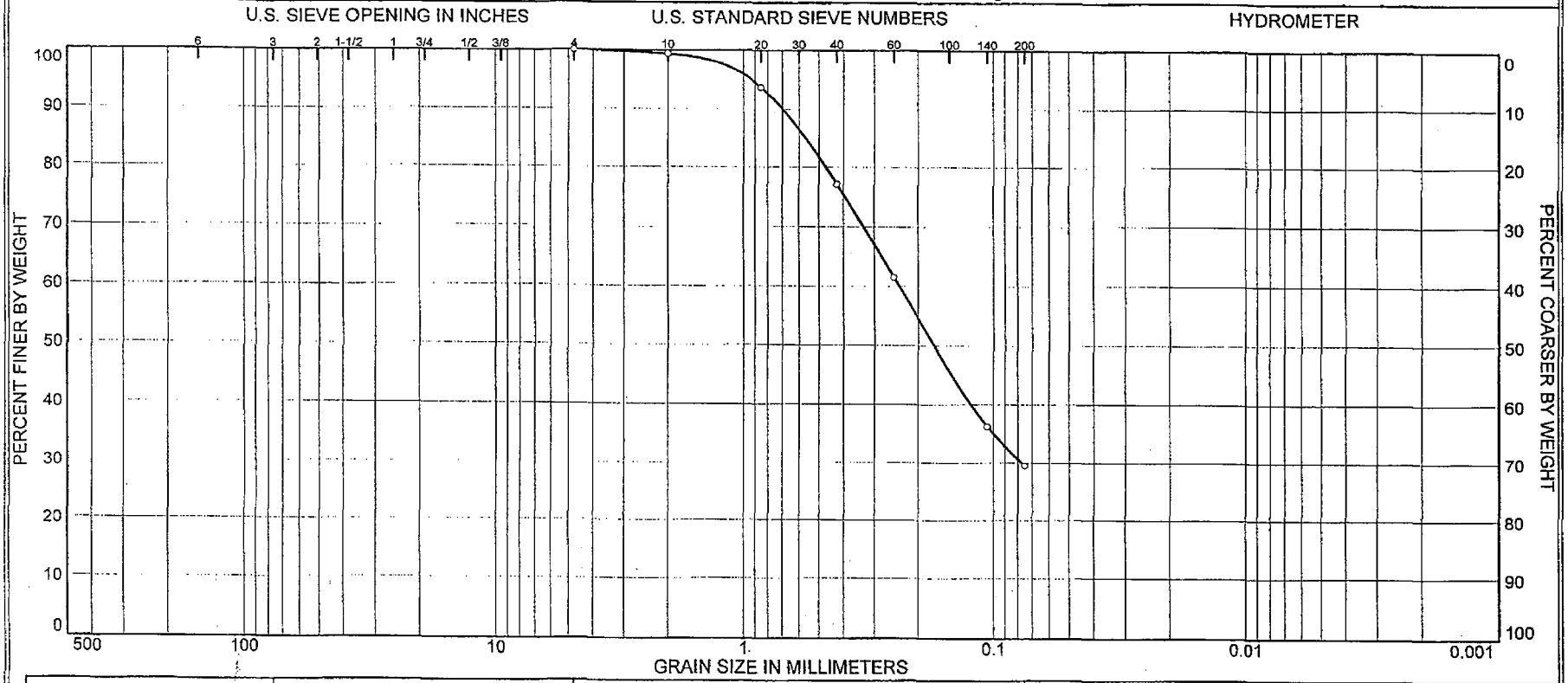
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.8	17.0	11.9	0.0132	17.0	13.5	0.0343	24
5.00	22.8	14.0	8.9	0.0132	14.0	14.0	0.0221	18
15.00	22.8	12.0	6.9	0.0132	12.0	14.3	0.0129	14
30.00	22.8	11.0	5.9	0.0132	11.0	14.5	0.0092	12
60.00	22.8	10.0	4.9	0.0132	10.0	14.7	0.0065	10
250.00	22.8	8.0	2.9	0.0132	8.0	15.0	0.0032	6
1440.00	22.8	6.5	1.4	0.0132	6.5	15.2	0.0014	3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 70 (% coarse = 0 % medium = 21 % fine = 49)
% SILT = 22 % CLAY = 8

D_{85}= 0.54 D_{60}= 0.23 D_{50}= 0.17
D_{30}= 0.07 D_{15}= 0.02 D_{10}= 0.01
C_c= 3.5713 C_u= 35.0631

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	22	48	30	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	5	8.5'	8/14/06		SAND Silty (SM); Strong Brown, Very Micaceous	35.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 5
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Very Micaceous
Date: 8/14/06 **Natural Moisture:** 35.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	312.72
Tare =	87.49
Dry sample weight =	225.23

Tare for cumulative weight retained= .00

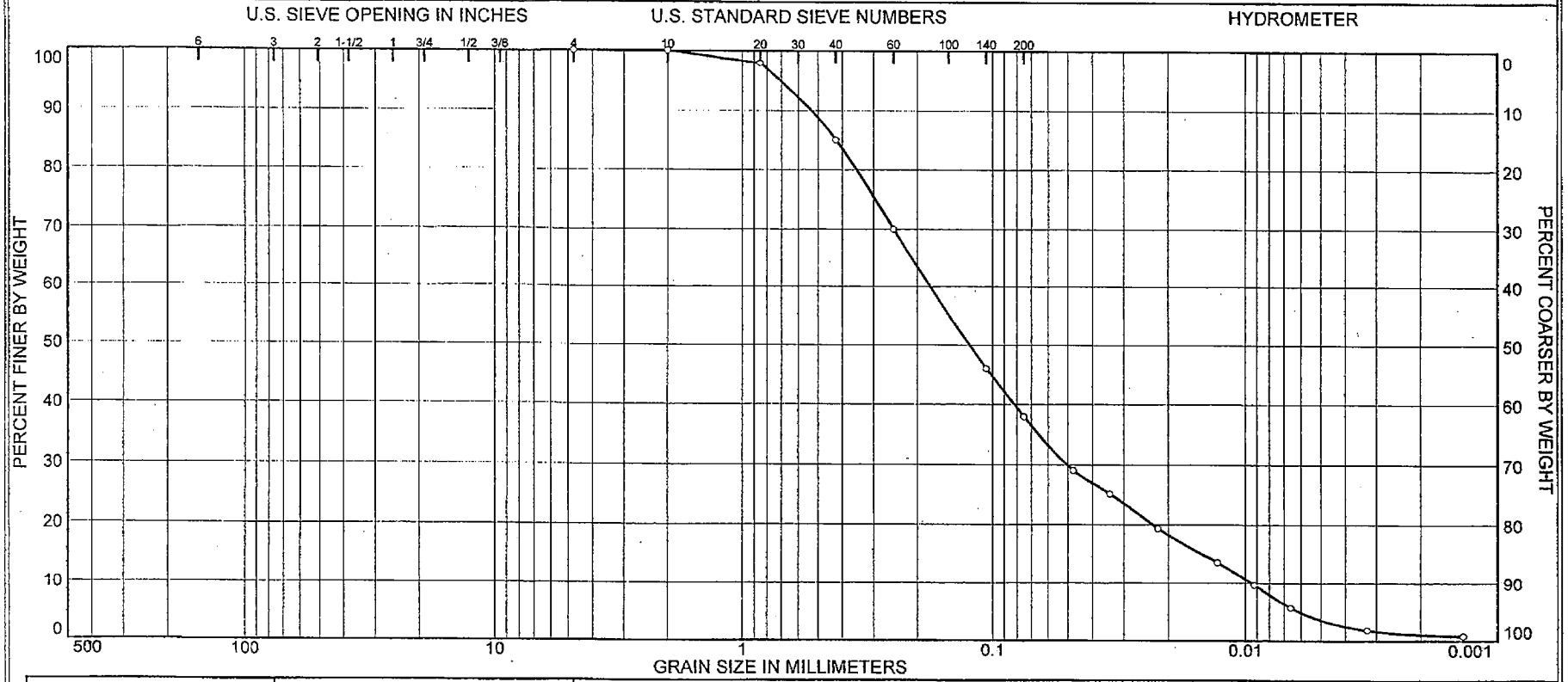
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.34	99
20	14.16	94
# 40	51.56	77
# 60	86.68	62
# 140	143.50	36
# 200	158.78	30

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 71 (% coarse = 1 % medium = 22 % fine = 48)
% FINES = 30

D_{85}= 0.57 D_{60}= 0.24 D_{50}= 0.17
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	15	47	34	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	6	11.0'	8/6/06	SM	SAND Silty (SM); Light Brown, Very Micaceous	17.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Brown, Very Micaceous
Date: 8/6/06 **Natural Moisture:** 17.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	168.76
Tare =	0.00
Dry sample weight =	168.76

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.37 Tare = .00 Sample weight = 51.37
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.04	100
# 20	1.01	98
# 40	7.75	85
# 60	15.50	70
# 140	27.75	46
# 200	31.78	38

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.78
Hygroscopic moisture correction:
Moist weight & tare = 35.68
Dry weight & tare = 35.48
Tare = 10.93
Hygroscopic moisture= 1 %
Calculated biased weight= 51.36
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

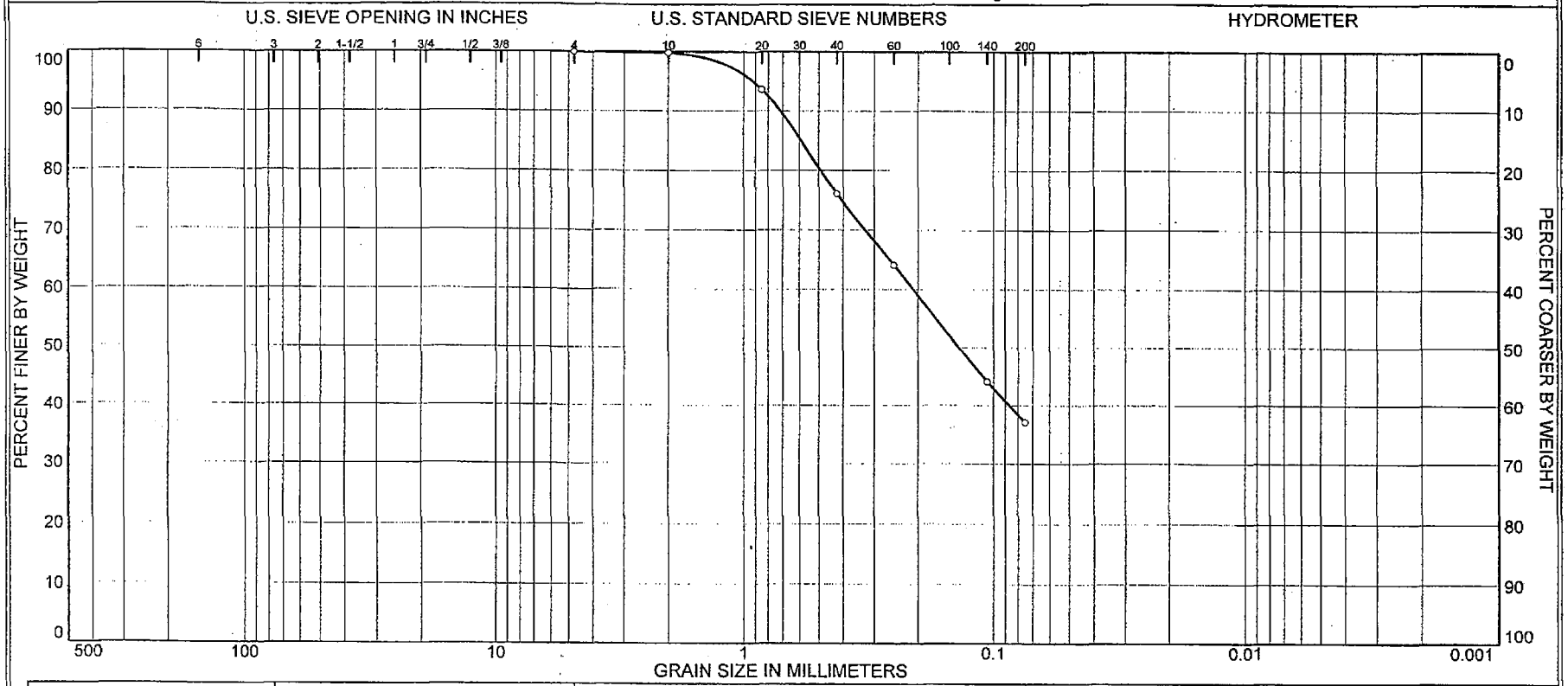
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.8	20.0	14.9	0.0132	20.0	13.0	0.0476	29
2.00	22.8	18.0	12.9	0.0132	18.0	13.3	0.0341	25
5.00	22.8	15.0	9.9	0.0132	15.0	13.8	0.0219	19
15.00	22.8	12.0	6.9	0.0132	12.0	14.3	0.0129	14
30.00	22.8	10.0	4.9	0.0132	10.0	14.7	0.0092	10
60.00	22.8	8.0	2.9	0.0132	8.0	15.0	0.0066	6
250.00	22.8	6.0	0.9	0.0132	6.0	15.3	0.0033	2
1440.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 62 (**% coarse** = 0 **% medium** = 15 **% fine** = 47)
% SILT = 34 **% CLAY** = 4

D_{85}= 0.43 D_{60}= 0.18 D_{50}= 0.12
D_{30}= 0.05 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.4991 C_u= 18.7202

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	24	39	37	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	7	13.5'	08/14/06		SAND Silty (SM); Light Brown, Very Micaceous	26.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Brown, Very Micaceous
Date: 08/14/06 **Natural Moisture:** 26.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	301.36
Tare =	87.25
Dry sample weight =	214.11

Tare for cumulative weight retained= .00

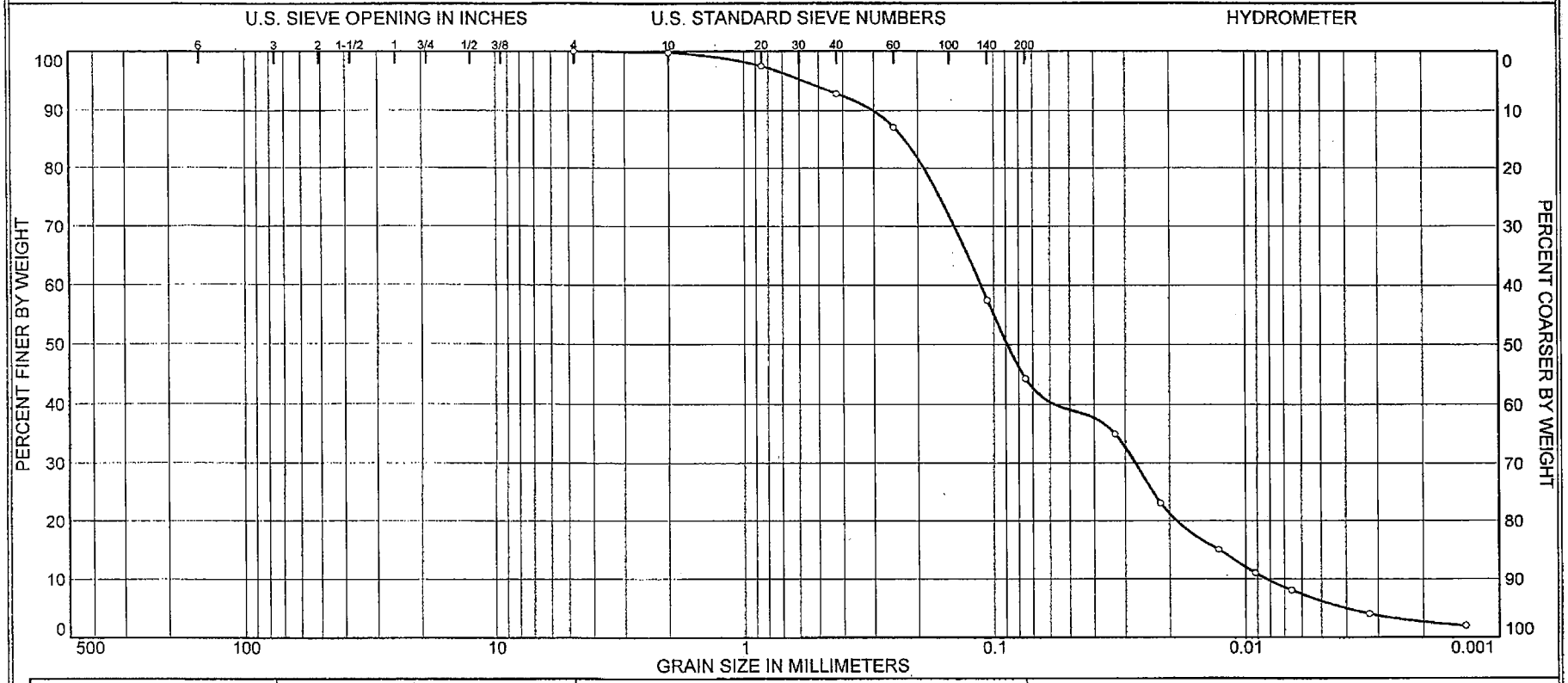
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.46	100
# 20	13.77	94
# 40	51.19	76
# 60	76.93	64
# 140	119.62	44
# 200	134.64	37

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 63 **(% coarse =** 0 **% medium =** 24 **% fine =** 39)
% FINES = 37

D_{85}= 0.59 D_{60}= 0.21 D_{50}= 0.14

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	7	49	38	6

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	8	18.5'	8/6/06	SM	SAND Silty (SM); Strong Brown, Very Micaceous	22.6	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-4-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Very Micaceous
Date: 8/6/06 **Natural Moisture:** 22.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	161.61
Tare =	0.00
Dry sample weight =	161.61

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.89 Tare = .00 Sample weight = 51.89
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.32	100
# 20	1.17	98
# 40	3.65	93
# 60	6.58	87
# 140	22.02	57
# 200	28.85	44

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.46
Hygroscopic moisture correction:
Moist weight & tare = 36.79
Dry weight & tare = 36.51
Tare = 10.99
Hygroscopic moisture= 1 %
Calculated biased weight= 51.89
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Viscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

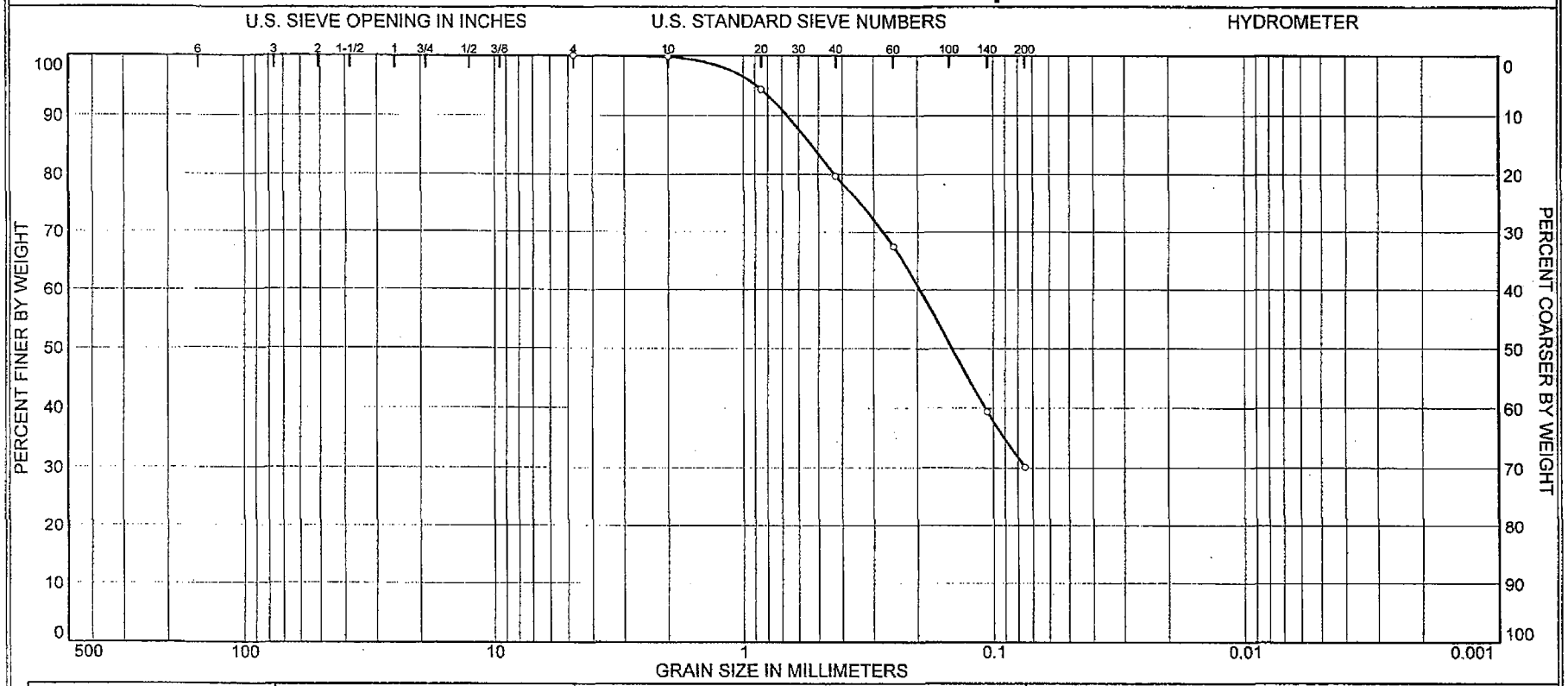
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.8	23.0	17.9	0.0132	23.0	12.5	0.0330	35
5.00	22.8	17.0	11.9	0.0132	17.0	13.5	0.0217	23
15.00	22.8	13.0	7.9	0.0132	13.0	14.2	0.0128	15
30.00	22.8	11.0	5.9	0.0132	11.0	14.5	0.0092	11
60.00	22.8	9.0	3.9	0.0132	9.0	14.8	0.0066	8
250.00	22.8	7.0	1.9	0.0132	7.0	15.1	0.0032	4
1440.00	22.8	6.0	0.9	0.0132	6.0	15.3	0.0014	2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 56 (% coarse = 0 % medium = 7 % fine = 49)
% SILT = 38 % CLAY = 6

D_{85}= 0.23 D_{60}= 0.11 D_{50}= 0.09
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.803 C_u= 13.5535

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	20	50	30	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	9	23.5'	08/14/06		SAND Silty (SM); Strong Brown, Very Micaceous	26.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Very Micaceous
Date: 08/14/06 **Natural Moisture:** 26.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	233.69
Tare =	87.09
Dry sample weight =	146.60

Tare for cumulative weight retained= .00

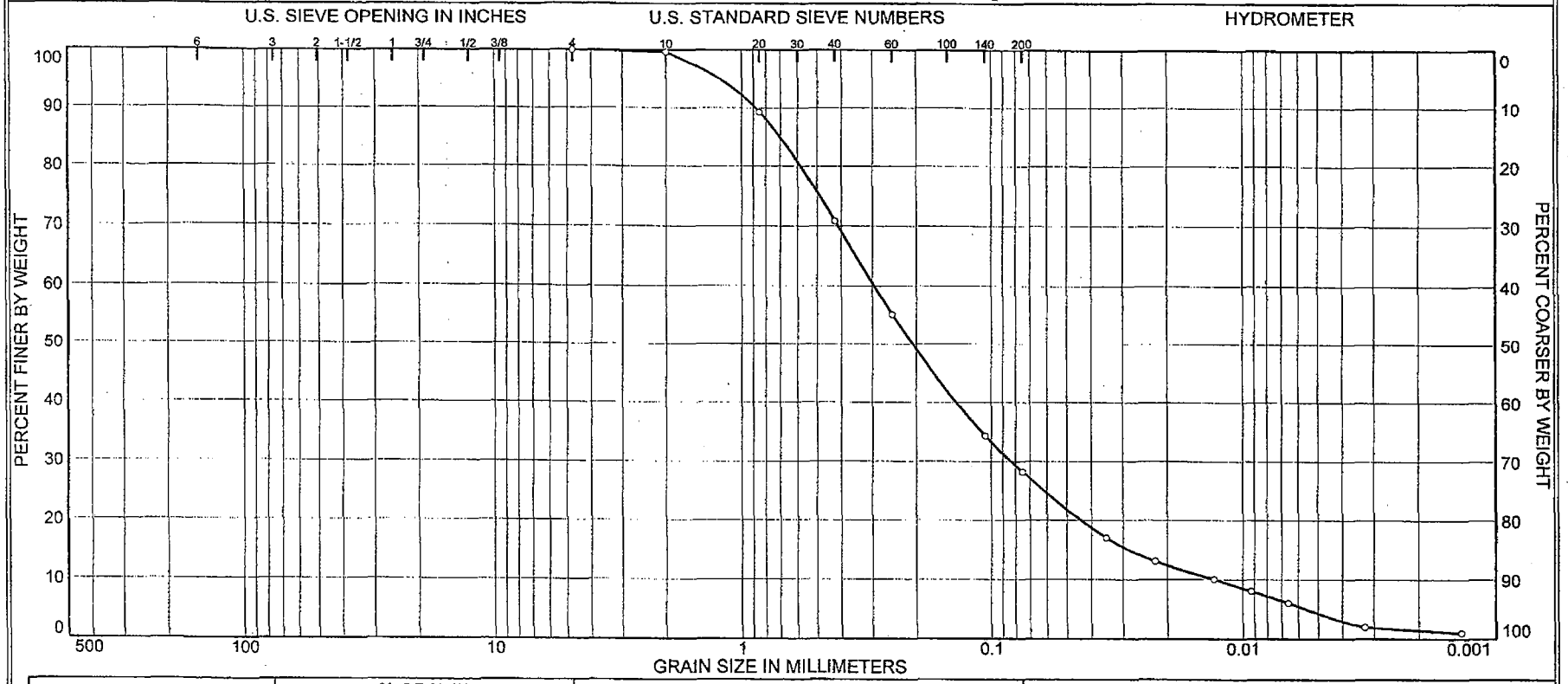
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.35	100
20	8.35	94
# 40	29.73	80
# 60	47.82	67
# 140	88.88	39
# 200	102.48	30

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 70 (% coarse = 0 % medium = 20 % fine = 50)
% FINES = 30

D_{85}= 0.54 D_{60}= 0.20 D_{50}= 0.15

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	29	43	24	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	10	28.5'	8/6/06	SM	SAND Silty (SM); Strong Brown, Very Micaceous	26.0	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Very Micaceous
Date: 8/6/06 **Natural Moisture:** 26.0
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	156.95
Tare =	0.00
Dry sample weight =	156.95

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.35 Tare = .00 Sample weight = 51.35
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.52	100
# 20	5.43	89
# 40	14.91	71
# 60	22.91	55
# 140	33.69	34
# 200	36.80	28

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.02
Hygroscopic moisture correction:
Moist weight & tare = 39.67
Dry weight & tare = 39.31
Tare = 10.92
Hygroscopic moisture= 1 %
Calculated biased weight= 51.37
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Viscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

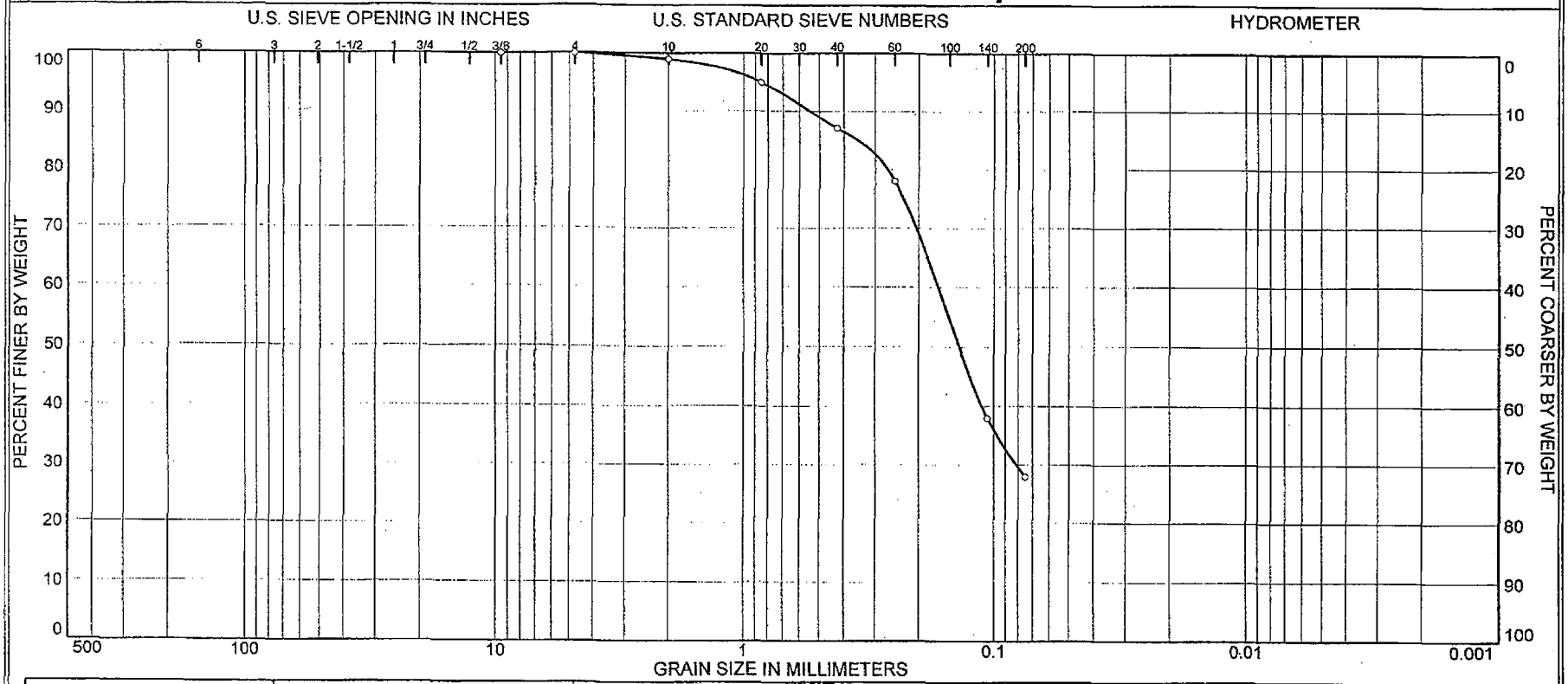
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.8	14.0	8.9	0.0132	14.0	14.0	0.0349	17
5.00	22.8	12.0	6.9	0.0132	12.0	14.3	0.0223	13
15.00	22.8	10.0	4.9	0.0132	10.0	14.7	0.0130	10
30.00	22.8	9.0	3.9	0.0132	9.0	14.8	0.0093	8
60.00	22.8	8.0	2.9	0.0132	8.0	15.0	0.0066	6
250.00	22.8	6.0	0.9	0.0132	6.0	15.3	0.0033	2
1440.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 72 (**% coarse** = 0 **% medium** = 29 **% fine** = 43)
% SILT = 24 **% CLAY** = 4

D_{85}= 0.71 D_{60}= 0.30 D_{50}= 0.21
D_{30}= 0.08 D_{15}= 0.03 D_{10}= 0.01
C_C= 1.8109 C_u= 22.6654

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	12	59	28	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	11	33.5'	8/15/06		SAND Silty (SM); Strong Brown, Very Micaceous	23.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Very Micaceous
Date: 8/15/06 **Natural Moisture:** 23.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	245.14
Tare =	13.49
Dry sample weight =	231.65

Tare for cumulative weight retained= .00

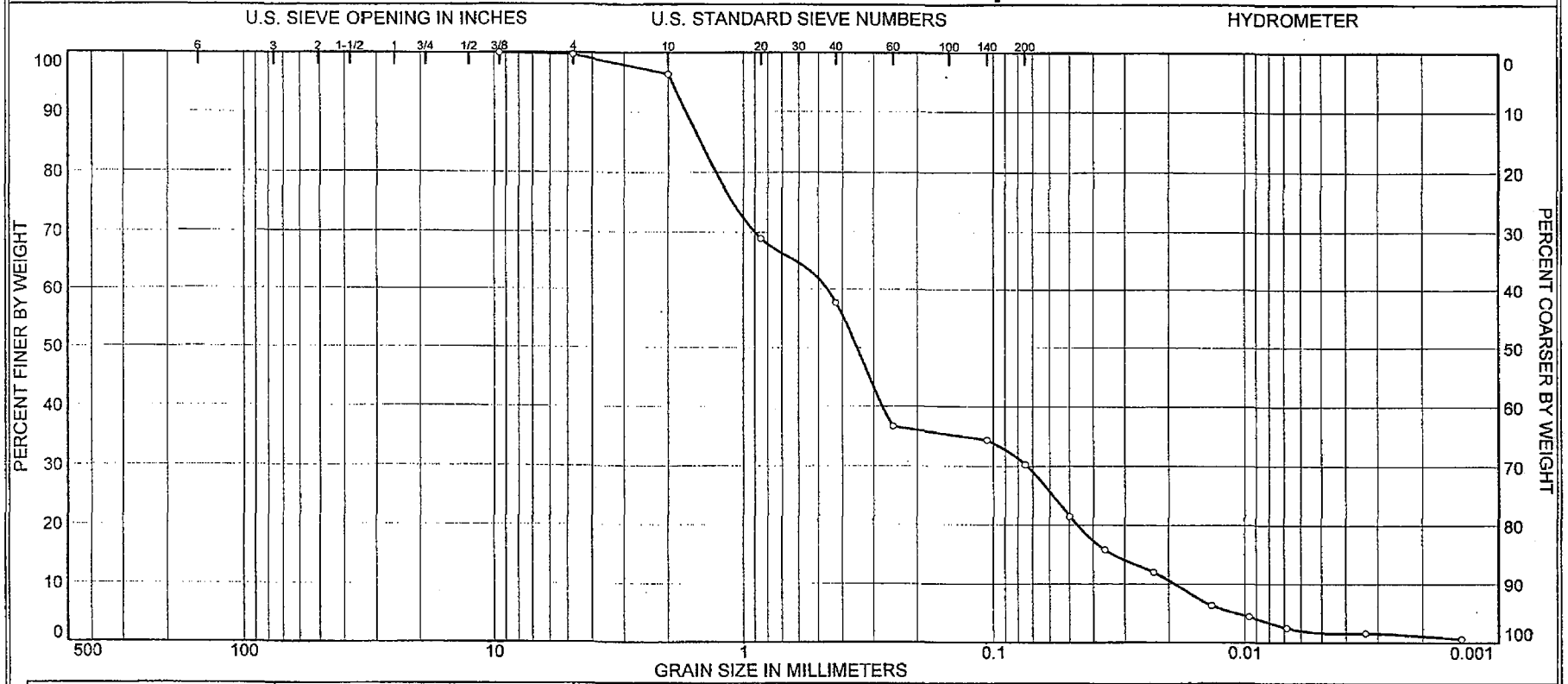
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.32	100
10	2.58	99
# 20	12.41	95
# 40	29.73	87
# 60	49.97	78
# 140	144.27	38
# 200	167.21	28

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 72 **(% coarse** = 1 **% medium** = 12 **% fine** = 59)
% FINES = 28

D_{85}= 0.35 D_{60}= 0.17 D_{50}= 0.14
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	3	39	27	29	2

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-211	12	38.5'	8/6/06	SM	SAND Silty (SM); Brown, Very Micaceous	31.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-211
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Very Micaceous
Date: 8/6/06 **Natural Moisture:** 31.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	154.01
Tare =	0.00
Dry sample weight =	154.01

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.70 Tare = .00 Sample weight = 50.70
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.41	100
# 10	5.57	96
# 20	14.44	69
# 40	20.33	58
# 60	31.38	37
# 140	32.63	34
# 200	34.77	30

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96
Weight of hydrometer sample: 51.21
Hygroscopic moisture correction:
Moist weight & tare = 38.87
Dry weight & tare = 38.59
Tare = 10.83
Hygroscopic moisture= 1 %
Calculated biased weight= 52.59
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

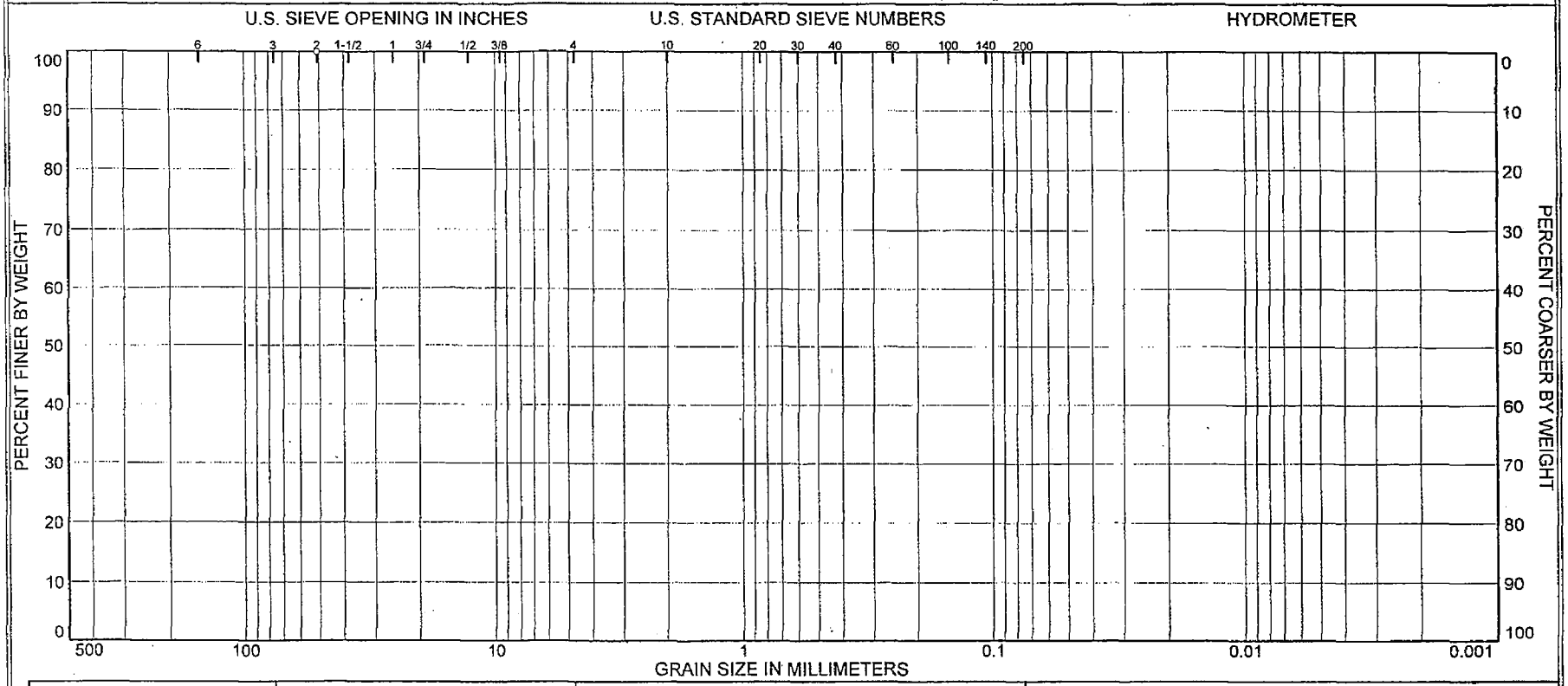
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.3	17.0	11.3	0.0136	17.0	13.5	0.0500	22
2.00	20.3	14.0	8.3	0.0136	14.0	14.0	0.0360	16
5.00	20.3	12.0	6.3	0.0136	12.0	14.3	0.0230	12
15.00	20.3	9.0	3.3	0.0136	9.0	14.8	0.0135	6
30.00	20.3	8.0	2.3	0.0136	8.0	15.0	0.0096	4
60.00	20.3	7.0	1.3	0.0136	7.0	15.1	0.0068	3
250.00	20.3	6.5	0.8	0.0136	6.5	15.2	0.0034	2
1440.00	20.3	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 0 (**% coarse =** **% fine** = 0)
% SAND = 69 (**% coarse** = 3 **% medium** = 39 **% fine** = 27)
% SILT = 29 **% CLAY** = 2

D_{85}= 1.49 D_{60}= 0.46 D_{50}= 0.35
D_{30}= 0.07 D_{15}= 0.03 D_{10}= 0.02
C_C= 0.6192 C_u= 24.1178

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0							

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	2	1.5'	8/6/06		SILT Sandy (ML); Strong Brown	21.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Insufficient sample size to determine Atterberg limits.
Insufficient sample to perform grain-size analysis.

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-215
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Strong Brown
Date: 8/6/06 **Natural Moisture:** 21.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Insufficient sample size to determine Atterberg limits.
Insufficient sample to perform grain-size analysis.

Mechanical Analysis Data

	Initial
Dry sample and tare=	100.00
Tare =	0.00
Dry sample weight =	100.00

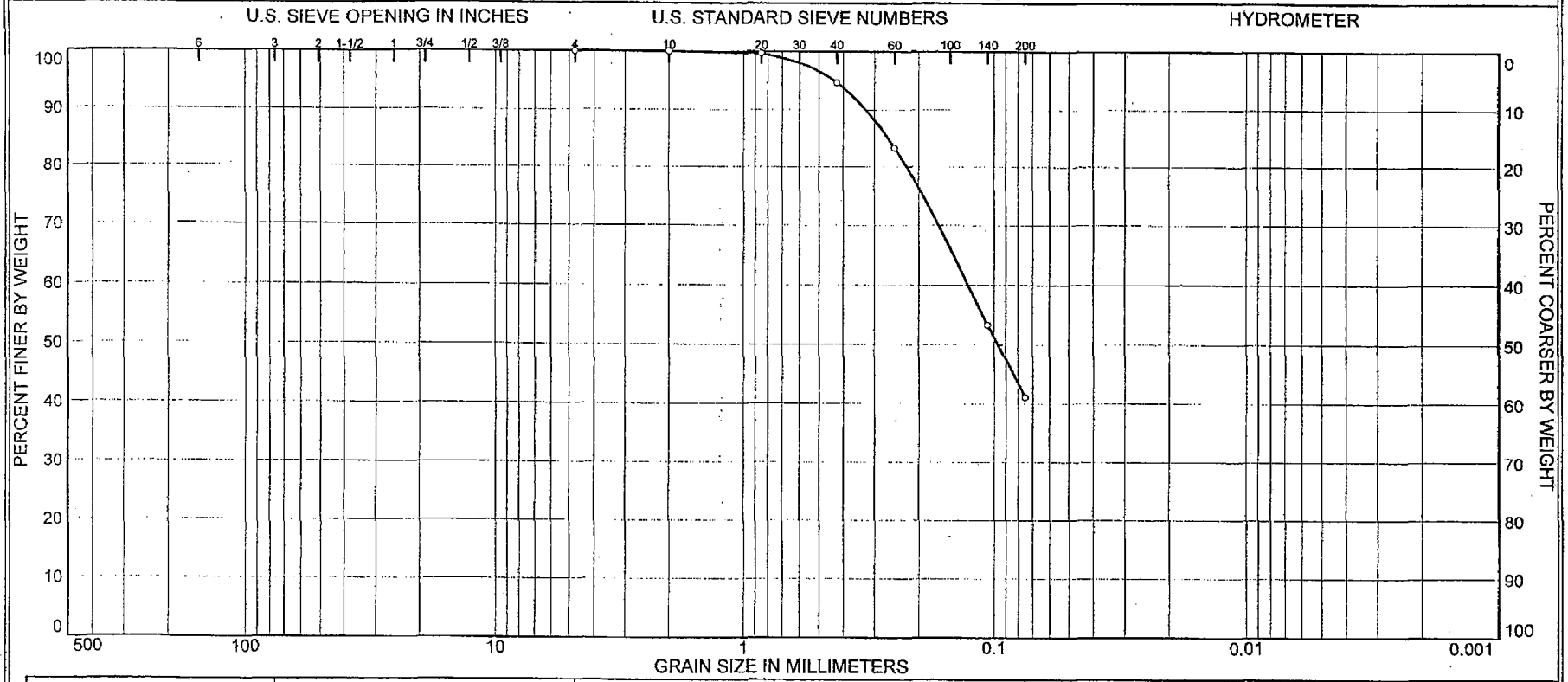
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
? inch	0.00	100

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND =

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	5	54	41	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	3	3.5'	8/15/06		SAND Silty (SM); Yellowish Red, Micaceous	28.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-215
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Micaceous
Date: 8/15/06 **Natural Moisture:** 28.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	324.06
Tare =	104.41
Dry sample weight =	219.65

Tare for cumulative weight retained= .00

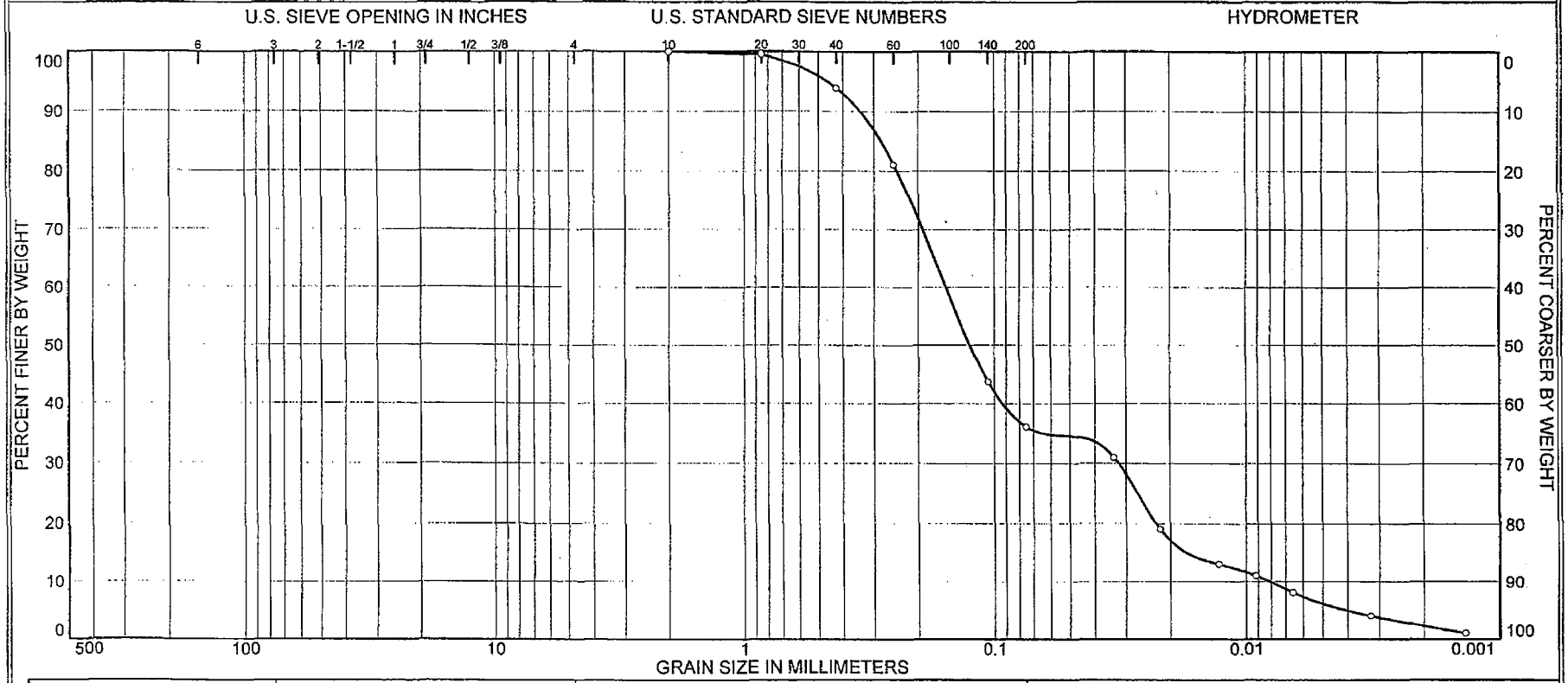
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.04	100
# 20	0.64	100
# 40	11.70	95
# 60	36.74	83
# 140	102.68	53
# 200	129.39	41

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 59 (% coarse = 0 % medium = 5 % fine = 54)
% FINES = 41

D_{85}= 0.27 D_{60}= 0.13 D_{50}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	6	58	30	6

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	4	6.0'	8/31/06		SAND Silty (SM); Strong Brown	34.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM 422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-215
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown
Date: 8/31/06 **Natural Moisture:** 34.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	101.34
Tare =	0.00
Dry sample weight =	101.34

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.39 Tare = .00 Sample weight = 51.39
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.28	100
# 40	3.16	94
# 60	9.71	81
# 140	28.93	44
# 200	32.82	36

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.32
Hygroscopic moisture correction:
Moist weight & tare = 37.05
Dry weight & tare = 36.58
Tare = 11.15
Hygroscopic moisture= 2 %
Calculated biased weight= 51.37
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

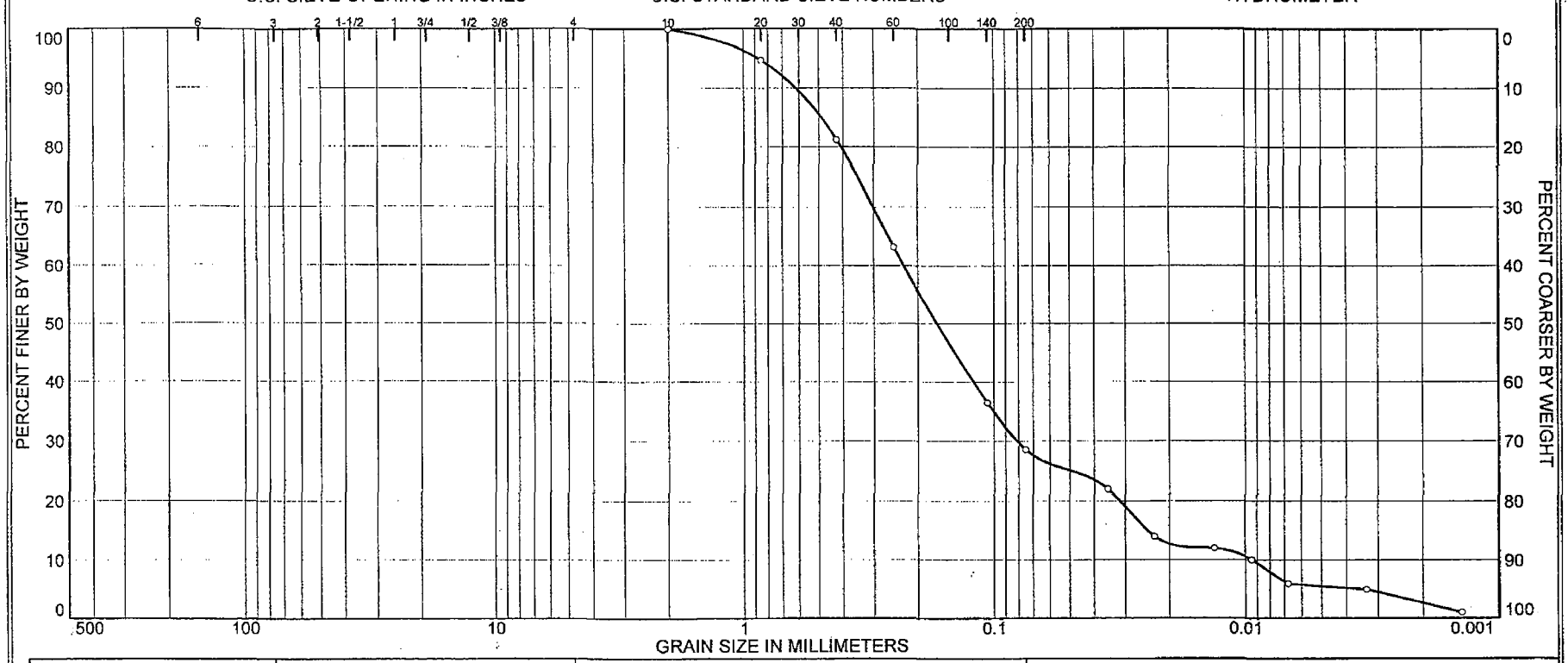
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	21.0	15.9	0.0132	21.0	12.9	0.0335	31
5.00	22.7	15.0	9.9	0.0132	15.0	13.8	0.0220	19
15.00	22.7	12.0	6.9	0.0132	12.0	14.3	0.0129	13
30.00	22.7	11.0	5.9	0.0132	11.0	14.5	0.0092	11
60.00	22.7	9.0	3.9	0.0132	9.0	14.8	0.0066	8
250.00	22.7	7.0	1.9	0.0132	7.0	15.1	0.0032	4
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 64 (**% coarse =** **% medium** = 6 **% fine** = 58)
% SILT = 30 **% CLAY** = 6

D_{85}= 0.28 D_{60}= 0.16 D_{50}= 0.13
D_{30}= 0.03 D_{15}= 0.02 D_{10}= 0.01
C_c= 0.8067 C_u= 19.1267

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	19	52	23	6

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	5	11.0'	8/6/06	SM	SAND Silty (SM); Strong Brown	25.7	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-215
Sample No.: 5
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown
Date: 8/6/06 **Natural Moisture:** 25.7
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	160.10
Tare =	0.00
Dry sample weight =	160.10

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.30 Tare = .00 Sample weight = 51.30
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	2.72	95
# 40	9.65	81
# 60	18.89	63
# 140	32.63	36
# 200	36.64	29

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.12
Hygroscopic moisture correction:
Moist weight & tare = 37.78
Dry weight & tare = 37.38
Tare = 11.58
Hygroscopic moisture= 2 %
Calculated biased weight= 51.32
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

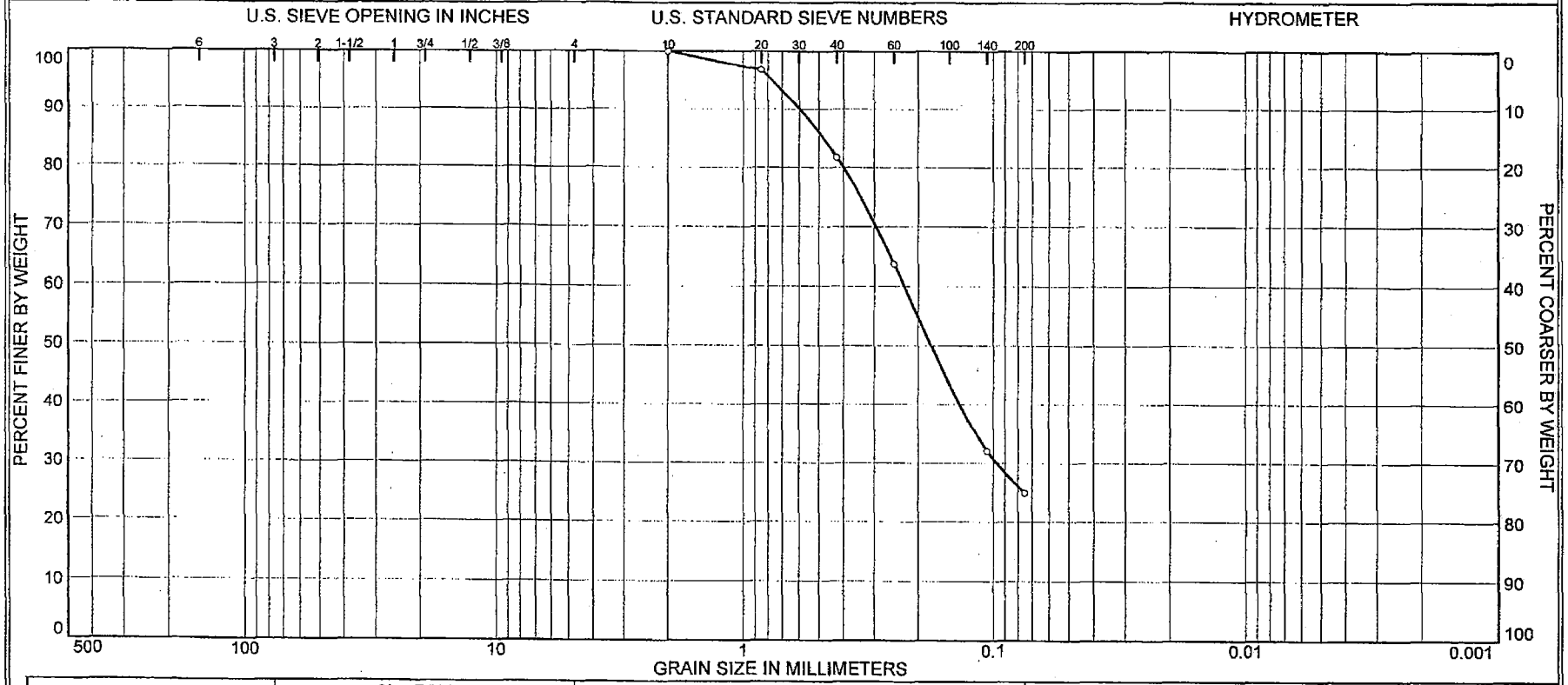
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	17.0	11.3	0.0136	17.0	13.5	0.0353	22
5.00	20.3	13.0	7.3	0.0136	13.0	14.2	0.0229	14
15.00	20.3	12.0	6.3	0.0136	12.0	14.3	0.0133	12
30.00	20.3	11.0	5.3	0.0136	11.0	14.5	0.0094	10
60.00	20.3	9.0	3.3	0.0136	9.0	14.8	0.0068	6
250.00	20.3	8.0	2.3	0.0136	8.0	15.0	0.0033	5
1440.00	20.3	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 71 (**% coarse =** **% medium** = 19 **% fine** = 52)
% SILT = 23 **% CLAY** = 6

D_{85}= 0.49 D_{60}= 0.23 D_{50}= 0.17
D_{30}= 0.08 D_{15}= 0.02 D_{10}= 0.01
C_c= 3.058 C_u= 24.1378

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	18	57	25	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	6	13.5'	8/15/06		SAND Silty (SM); Strong Brown	25.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-215
Sample No.: 6
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown
Date: 8/15/06 **Natural Moisture:** 25.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	319.30
Tare =	101.96
Dry sample weight =	217.34

Tare for cumulative weight retained= .00

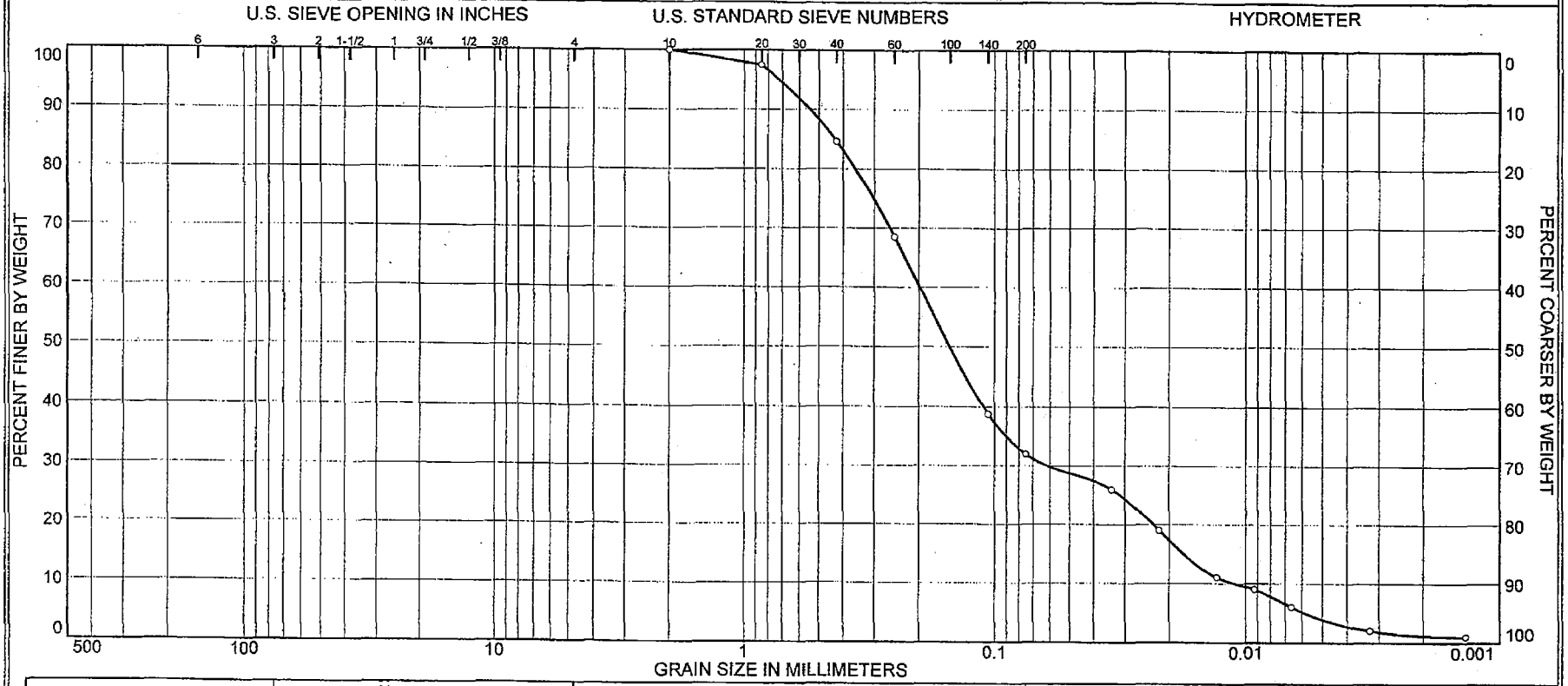
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	7.02	97
# 40	39.81	82
# 60	78.99	64
# 140	147.61	32
# 200	163.29	25

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 75 **(% coarse =** **% medium** = 18 **% fine** = 57)
% FINES = 25

D_{85}= 0.48 D_{60}= 0.23 D_{50}= 0.18
D_{30}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	15	53	28	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	7	23.5'	8/31/06		SAND Silty (SM); Strong Brown	22.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-215
Sample No.: 7
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown
Date: 8/31/06 **Natural Moisture:** 22.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	104.15
Tare =	0.00
Dry sample weight =	104.15

Sample split on number 10 sieve
Split sample data:
Sample and tare = 52.49 Tare = .00 Sample weight = 52.49
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.09	100
# 20	1.26	98
# 40	8.05	85
# 60	16.49	69
# 140	32.09	39
# 200	35.67	32

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 53.33
Hygroscopic moisture correction:
Moist weight & tare = 38.71
Dry weight & tare = 38.28
Tare = 10.73
Hygroscopic moisture= 2 %
Calculated biased weight= 52.51
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

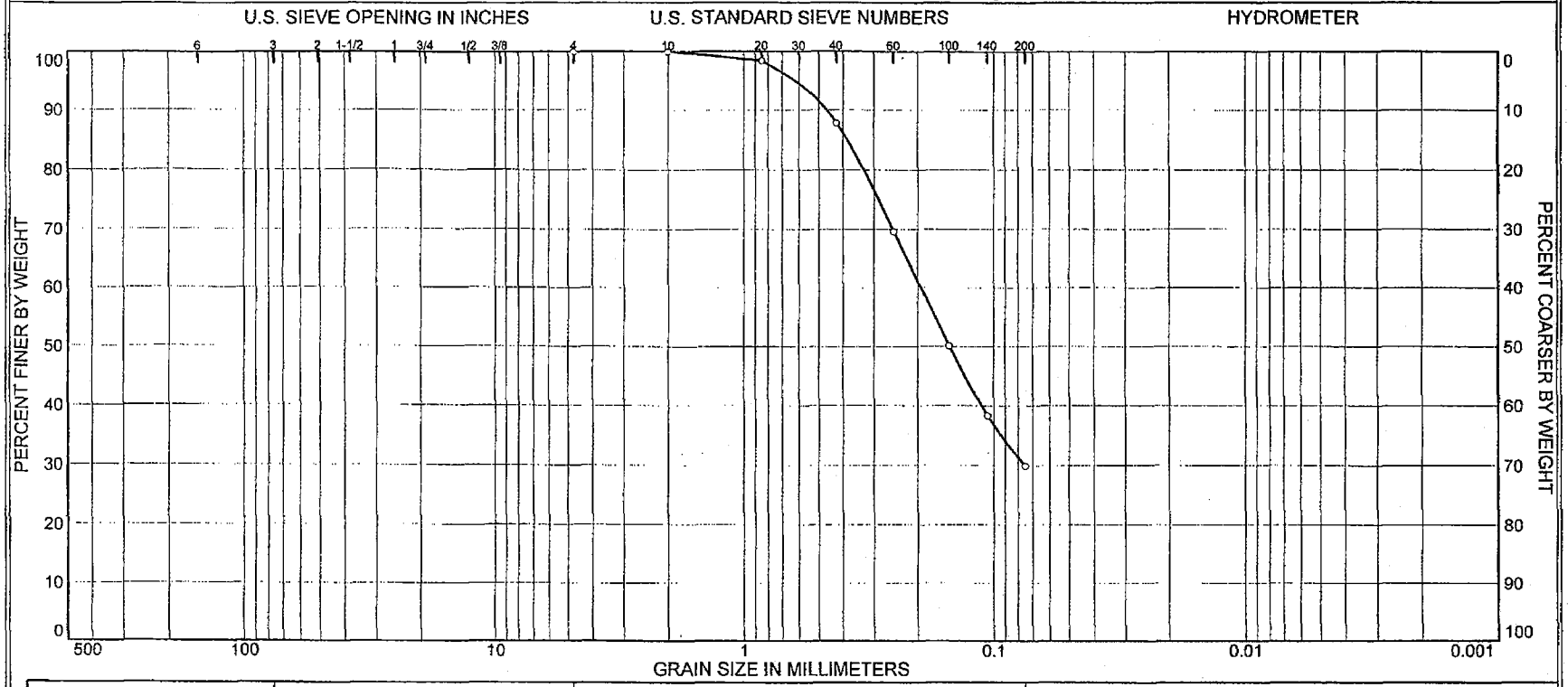
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	19.0	13.9	0.0132	19.0	13.2	0.0339	26
5.00	22.7	15.0	9.9	0.0132	15.0	13.8	0.0220	19
15.00	22.7	11.0	5.9	0.0132	11.0	14.5	0.0130	11
30.00	22.7	10.0	4.9	0.0132	10.0	14.7	0.0092	9
60.00	22.7	8.0	2.9	0.0132	8.0	15.0	0.0066	6
250.00	22.7	6.0	0.9	0.0132	6.0	15.3	0.0033	2
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 68 (**% coarse =** **% medium =** 15 **% fine =** 53)
% SILT = 28 **% CLAY =** 4

D_{85}= 0.43 D_{60}= 0.20 D_{50}= 0.15
D_{30}= 0.06 D_{15}= 0.02 D_{10}= 0.01
C_c= 1.7061 C_u= 17.8279

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	12	58	30	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	UD-3	28.5 Ft.	11/17/06		Silty sand	N/A		

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 6319-04

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-215
Sample No.: UD-3
Elev. or Depth: 28.5 Ft. **Sample Length(in./cm.):** 5375
Location: B-215
Description: Silty sand
Date: 11/17/06 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 6319-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	159.67
Tare =	0.00
Dry sample weight =	159.67

Tare for cumulative weight retained= .00

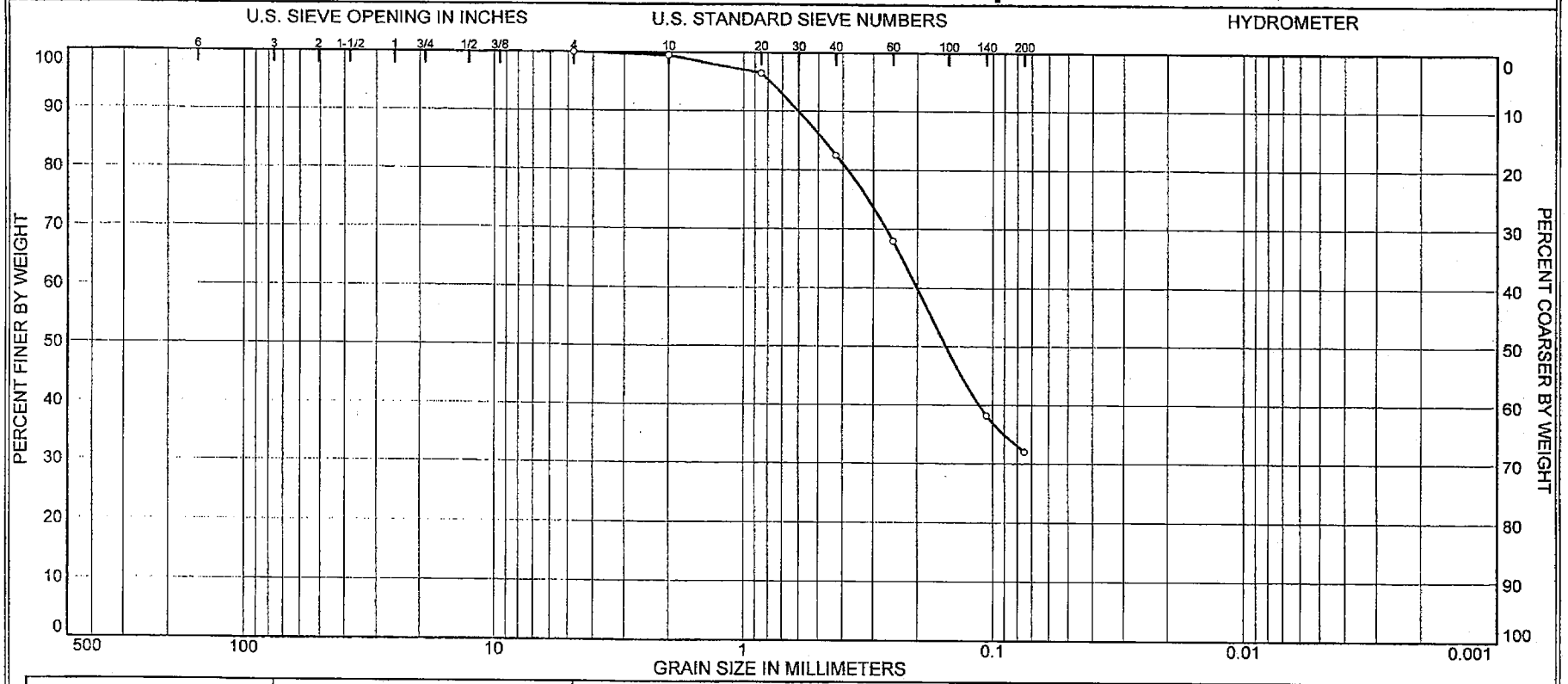
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.00	100
# 20	2.49	98
# 40	19.49	88
# 60	48.50	70
# 100	79.75	50
# 140	98.50	38
# 200	111.89	30

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 70 (% coarse = 0 % medium = 12 % fine = 58)
% FINES = 30

D_{85}= 0.38 D_{60}= 0.19 D_{50}= 0.15
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	17	50	32	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	8	33.5'	08/15/06		SAND Silty (SM); Strong Brown, Micaceous	24.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-215
Sample No.: 8
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 08/15/06 **Natural Moisture:** 24.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	199.64
Tare =	13.52
Dry sample weight =	186.12

Tare for cumulative weight retained= .00

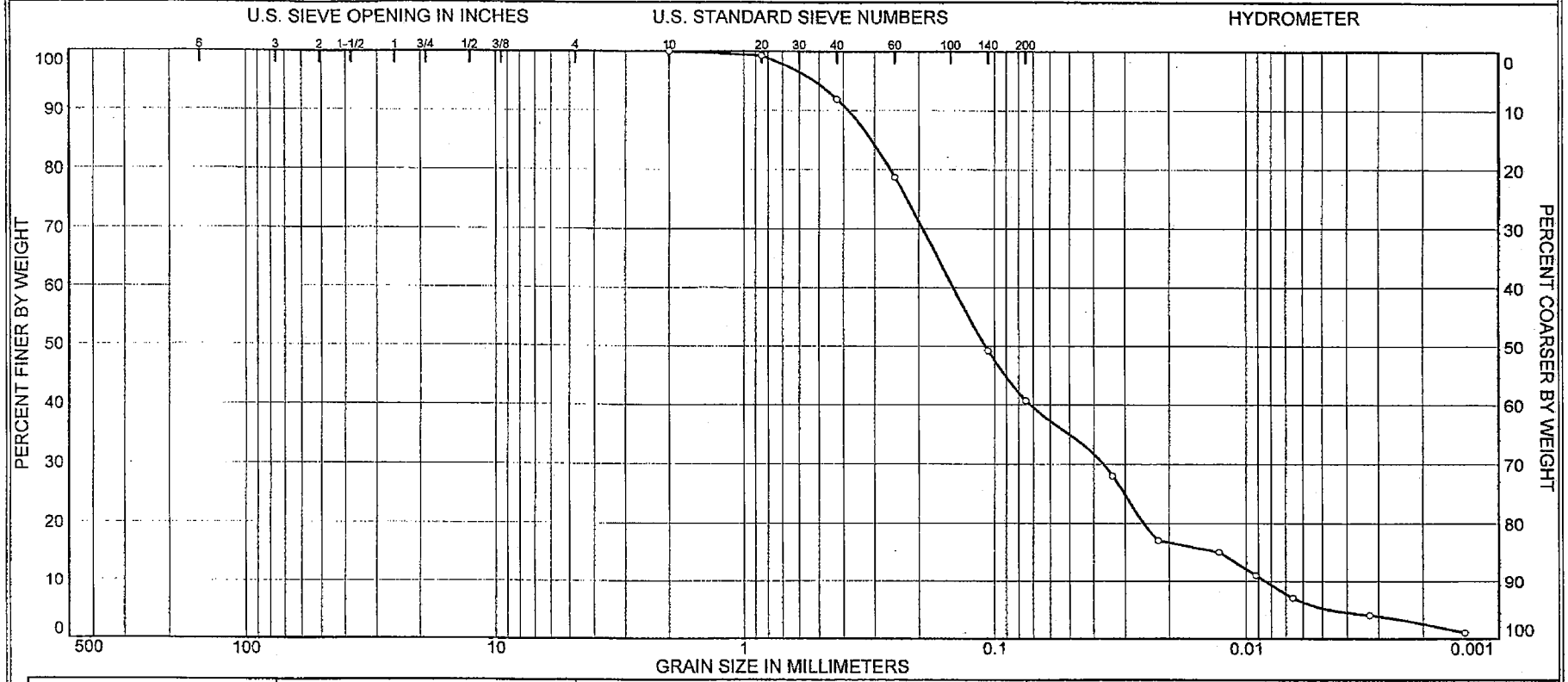
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.96	100
# 20	6.60	97
# 40	32.63	83
# 60	59.72	68
# 140	115.03	38
# 200	126.59	32

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 68 **(% coarse** = 1 **% medium** = 17 **% fine** = 50)
% FINES = 32

D_{85}= 0.48 D_{60}= 0.20 D_{50}= 0.15

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	8	51	36	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-215	9	43.5'	8/31/06		SAND Silty (SM); Dark Yellowish Brown, Micaceous	27.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-215
Sample No.: 9
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Yellowish Brown, Micaceous
Date: 8/31/06 **Natural Moisture:** 27.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	110.50
Tare =	0.00
Dry sample weight =	110.50

Sample split on number 10 sieve
Split sample data:
Sample and tare = 52.32 Tare = .00 Sample weight = 52.32
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.37	99
# 40	4.24	92
# 60	11.12	79
# 140	26.56	49
# 200	31.04	41

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 53.31
Hygroscopic moisture correction:
Moist weight & tare = 43.97
Dry weight & tare = 43.37
Tare = 11.44
Hygroscopic moisture= 2 %
Calculated biased weight= 52.33
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

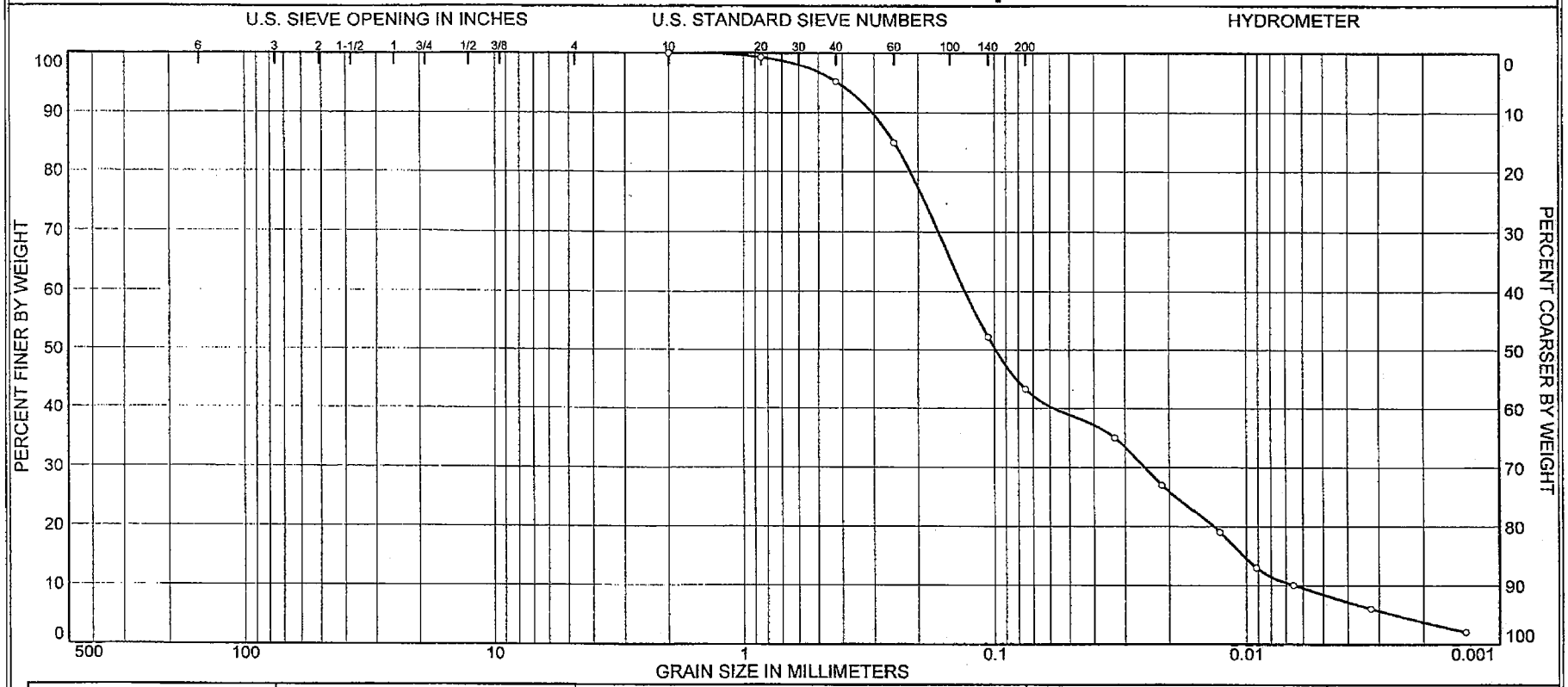
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	20.0	14.9	0.0132	20.0	13.0	0.0337	28
5.00	22.7	14.0	8.9	0.0132	14.0	14.0	0.0221	17
15.00	22.7	13.0	7.9	0.0132	13.0	14.2	0.0128	15
30.00	22.7	11.0	5.9	0.0132	11.0	14.5	0.0092	11
60.00	22.7	9.0	3.9	0.0132	9.0	14.8	0.0066	7
250.00	22.7	7.0	1.9	0.0132	7.0	15.1	0.0032	4
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 59 **(% coarse =** **% medium =** 8 **% fine =** 51**)**
% SILT = 36 **% CLAY =** 5

D_{85}= 0.31 D_{60}= 0.15 D_{50}= 0.11
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.0837 C_u= 17.2835

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	5	52	35	8

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	2	1.5'	9/12/06	SM	SAND Silty (SM); Red, Micaceous	20.6	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Moisture Content= 20.6%
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Micaceous
Date: 9/12/06 **Natural Moisture:** 20.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Moisture Content= 20.6%
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	177.34
Tare =	0.00
Dry sample weight =	177.34

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.59 Tare = .00 Sample weight = 51.59
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.35	99
# 40	2.48	95
# 60	7.81	85
# 140	24.68	52
# 200	29.26	43

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.47
Hygroscopic moisture correction:
Moist weight & tare = 38.64
Dry weight & tare = 38.17
Tare = 10.74
Hygroscopic moisture= 2 %
Calculated biased weight= 51.59
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

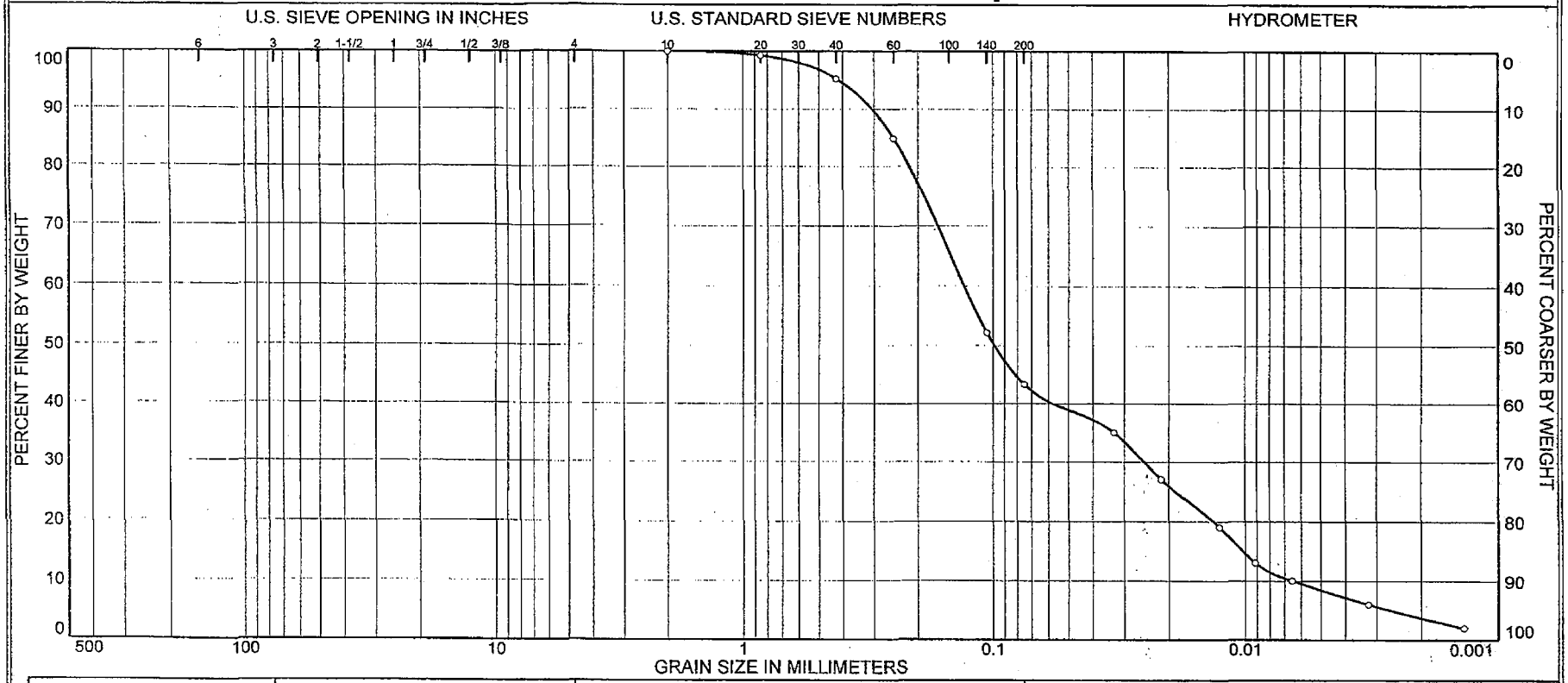
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	23.0	17.9	0.0132	23.0	12.5	0.0330	35
5.00	22.7	19.0	13.9	0.0132	19.0	13.2	0.0214	27
15.00	22.7	15.0	9.9	0.0132	15.0	13.8	0.0127	19
30.00	22.7	12.0	6.9	0.0132	12.0	14.3	0.0091	13
60.00	22.7	10.0	4.9	0.0132	10.0	14.7	0.0065	10
250.00	22.7	8.0	2.9	0.0132	8.0	15.0	0.0032	6
1440.00	22.7	6.0	0.9	0.0132	6.0	15.3	0.0014	2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 57 (**% coarse =** **% medium** = 5 **% fine** = 52)
% SILT = 35 **% CLAY** = 8

D_{85}= 0.25 D_{60}= 0.13 D_{50}= 0.10
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.7373 C_u= 20.0733

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	5	52	35	8

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	2	1.5'	9/12/06	SM	SAND Silty (SM); Red, Micaceous	20.6	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Micaceous
Date: 9/12/06 **Natural Moisture:** 20.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	177.34
Tare =	0.00
Dry sample weight =	177.34

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.59 Tare = .00 Sample weight = 51.59
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.35	99
# 40	2.48	95
# 60	7.81	85
# 140	24.68	52
# 200	29.26	43

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.47
Hygroscopic moisture correction:
Moist weight & tare = 38.64
Dry weight & tare = 38.17
Tare = 10.74
Hygroscopic moisture= 2 %
Calculated biased weight= 51.59
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

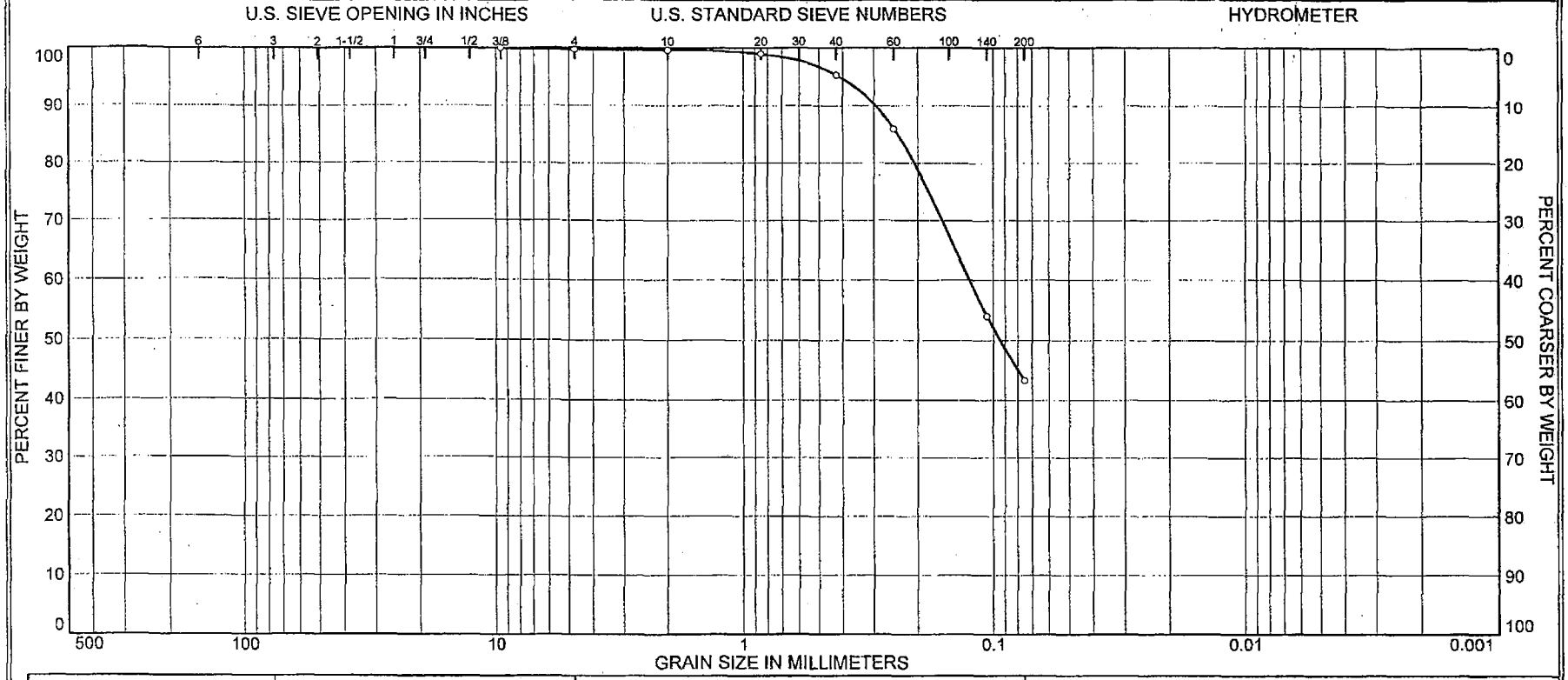
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	23.0	17.9	0.0132	23.0	12.5	0.0330	35
5.00	22.7	19.0	13.9	0.0132	19.0	13.2	0.0214	27
15.00	22.7	15.0	9.9	0.0132	15.0	13.8	0.0127	19
30.00	22.7	12.0	6.9	0.0132	12.0	14.3	0.0091	13
60.00	22.7	10.0	4.9	0.0132	10.0	14.7	0.0065	10
250.00	22.7	8.0	2.9	0.0132	8.0	15.0	0.0032	6
1440.00	22.7	6.0	0.9	0.0132	6.0	15.3	0.0014	2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 57 **(% coarse =** **% medium =** 5 **% fine =** 52)
% SILT = 35 **% CLAY =** 8

D_{85}= 0.25 D_{60}= 0.13 D_{50}= 0.10
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.7373 C_u= 20.0733

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	4	52	43	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	3	3.5'	08/15/06		SAND Silty (SM); Strong Brown and Red	22.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown and Red
Date: 08/15/06 **Natural Moisture:** 22.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	368.57
Tare =	116.79
Dry sample weight =	251.78

Tare for cumulative weight retained= .00

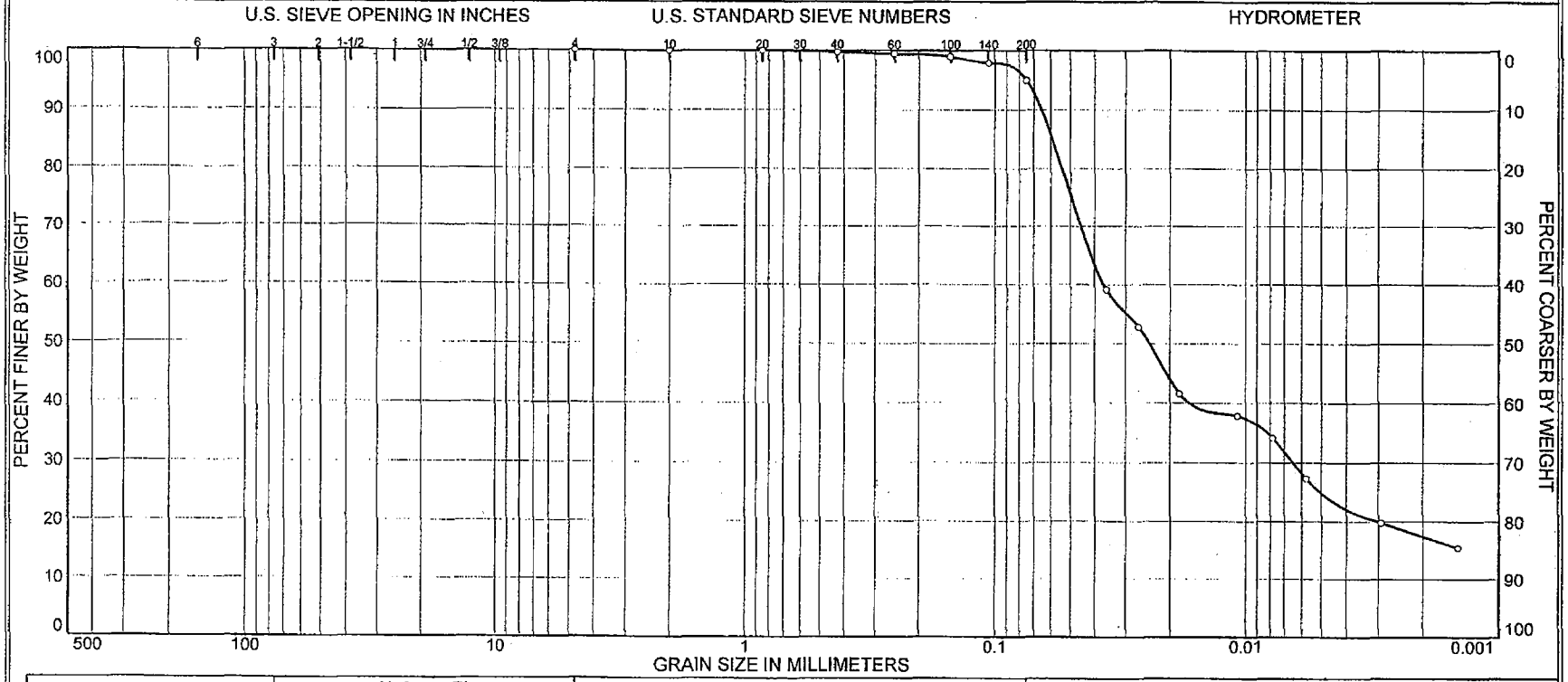
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.69	100
# 10	1.04	100
20	2.57	99
# 40	11.82	95
# 60	35.16	86
# 140	115.70	54
# 200	142.64	43

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 0 **(% coarse =** **% fine** = 0)
% SAND = 56 **(% coarse** = 0 **% medium** = 4 **% fine** = 52)
% FINES = 43

D_{85}= 0.24 D_{60}= 0.12 D_{50}= 0.09

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	0	5	70	25

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	UD-1	6.5 Ft.	11/10/0	ML	Silt	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-216
Sample No.: UD-1
Elev. or Depth: 6.5 Ft. **Sample Length(in./cm.):** 5377
Location: B-216
Description: Silt
Date: 11/10/0 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	79.36
Tare =	0.00
Dry sample weight =	79.36

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.04	100
# 20	0.11	100
# 40	0.25	100
# 60	0.44	99
# 100	0.90	99
# 140	1.70	98
# 200	3.96	95

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 95
Weight of hydrometer sample: 75.4
Calculated biased weight= 79.37
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	52.0	47.4	0.0129	52.0	7.8	0.0359	59
2.00	23.5	47.0	42.4	0.0129	47.0	8.6	0.0267	53
5.00	23.5	38.0	33.4	0.0129	38.0	10.1	0.0183	42
15.00	23.5	35.0	30.4	0.0129	35.0	10.6	0.0108	38
30.00	23.5	32.0	27.4	0.0129	32.0	11.0	0.0078	34
60.00	23.5	26.5	21.9	0.0129	26.5	11.9	0.0057	27

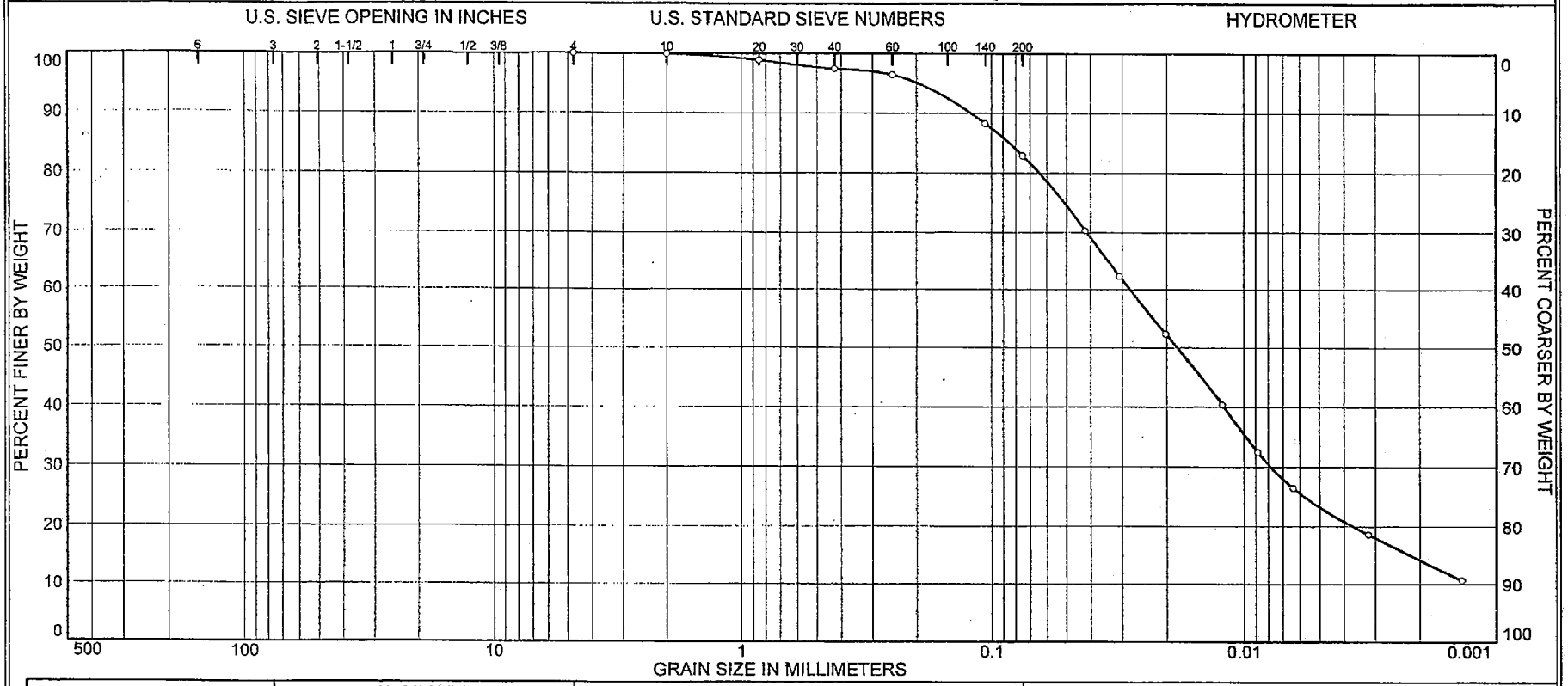
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
250.00	23.5	20.5	15.9	0.0129	20.5	12.9	0.0029	20
1057.00	23.5	17.0	12.4	0.0129	17.0	13.5	0.0015	16

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 5 (**% coarse** = 0 **% medium** = 0 **% fine** = 5)
% SILT = 70 **% CLAY** = 25

D_{85}= 0.06 D_{60}= 0.04 D_{50}= 0.02
D_{30}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	3	14	60	23

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	4	8.5'	8/6/06		SILT Clayey (ML); Light Olive Brown, Yellowish Brown, Brownish Yellow, Black, Micaceous	41.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)
Insufficient sample to determine Atterberg limits.

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 4
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: SILT Clayey (ML); Light Olive Brown, Yellowish Brown, Brownish Yellow, Black, Micaceous
Date: 8/6/06 **Natural Moisture:** 41.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)
Insufficient sample to determine Atterberg limits.

Mechanical Analysis Data

	Initial
Dry sample and tare=	140.37
Tare =	0.00
Dry sample weight =	140.37

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.19 Tare = .00 Sample weight = 50.19
Cumulative weight retained tare= .00
e for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.16	100
# 20	0.51	99
# 40	1.25	97
# 60	1.76	96
# 140	5.86	88
# 200	8.56	83

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.29
Hygroscopic moisture correction:
Moist weight & tare = 37.53
Dry weight & tare = 36.96
Tare = 10.83
Hygroscopic moisture= 2 %
Calculated biased weight= 50.25
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

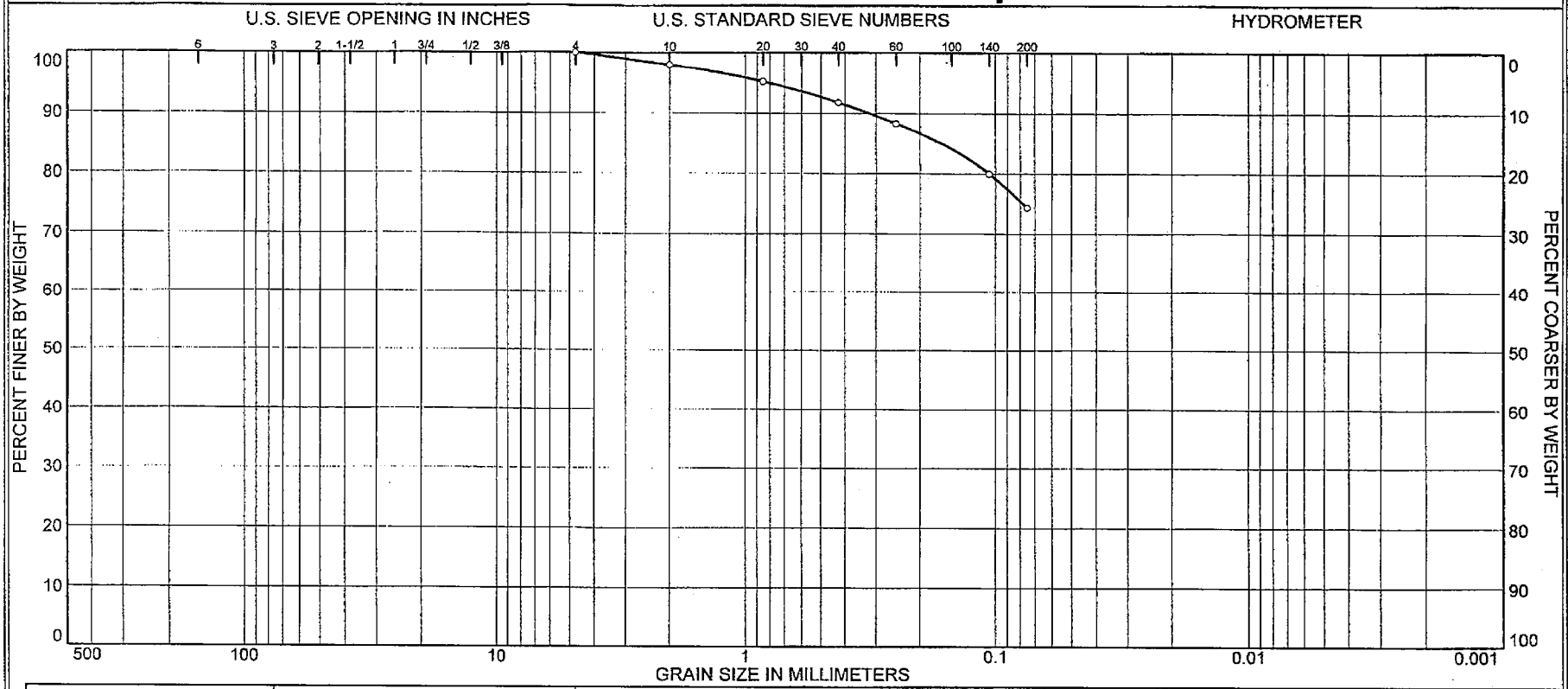
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.3	41.0	35.3	0.0136	41.0	9.6	0.0421	70
2.00	20.3	37.0	31.3	0.0136	37.0	10.2	0.0307	62
5.00	20.3	32.0	26.3	0.0136	32.0	11.0	0.0202	52
15.00	20.3	26.0	20.3	0.0136	26.0	12.0	0.0122	40
30.00	20.3	22.0	16.3	0.0136	22.0	12.7	0.0088	33
60.00	20.3	19.0	13.3	0.0136	19.0	13.2	0.0064	27
250.00	20.3	15.0	9.3	0.0136	15.0	13.8	0.0032	19
1440.00	20.3	11.0	5.3	0.0136	11.0	14.5	0.0014	11

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 17 (% coarse = 0 % medium = 3 % fine = 14)
% SILT = 60 % CLAY = 23

D_{85}= 0.09 D_{60}= 0.03 D_{50}= 0.02
D_{30}= 0.01 D_{15}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	2	6	18	74	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	5	11.0'	08/15/06		SILT Sandy (ML); Yellowish Brown, Very Pale Brown, White, Black, Micaceous	38.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 5
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Yellowish Brown, Very Pale Brown, White, Black, Micaceous
Date: 08/15/06 **Natural Moisture:** 38.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	246.60
Tare =	115.11
Dry sample weight =	131.49

Tare for cumulative weight retained= .00

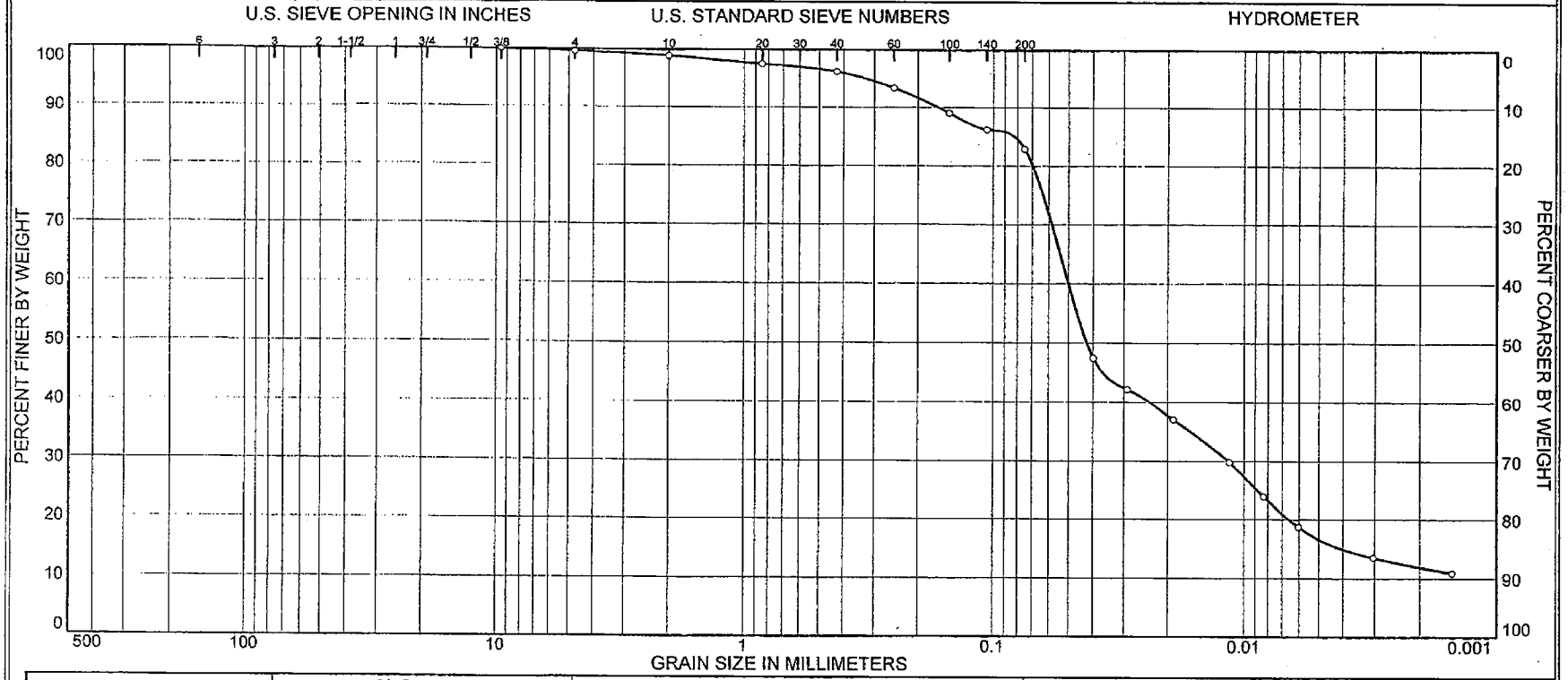
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	2.48	98
20	6.16	95
# 40	10.81	92
# 60	15.33	88
# 140	26.28	80
# 200	33.71	74

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 26 **(% coarse** = 2 **% medium** = 6 **% fine** = 18)
% FINES = 74

D_{85}= 0.16

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	1	1	3	13	66	17

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-216	UD-2	13.5 Ft.	11/10/6	ML	Silt with sand	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-216
Sample No.: UD-2
Elev. or Depth: 13.5 Ft. **Sample Length(in./cm.):** 5378
Location: B-216
Description: Silt with sand
Date: 11/10/6 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	76.01
Tare =	0.00
Dry sample weight =	76.01

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.36	100
# 10	0.89	99
# 20	1.96	97
# 40	2.97	96
# 60	5.07	93
# 100	8.36	89
# 140	10.50	86
# 200	12.99	83

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 83
Weight of hydrometer sample: 63.02
Calculated biased weight= 76.02
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	41.0	36.4	0.0129	41.0	9.6	0.0399	47
2.00	23.5	37.0	32.4	0.0129	37.0	10.2	0.0291	42
5.00	23.5	33.0	28.4	0.0129	33.0	10.9	0.0190	37
15.00	23.5	27.5	22.9	0.0129	27.5	11.8	0.0114	30
30.00	23.5	23.0	18.4	0.0129	23.0	12.5	0.0083	24

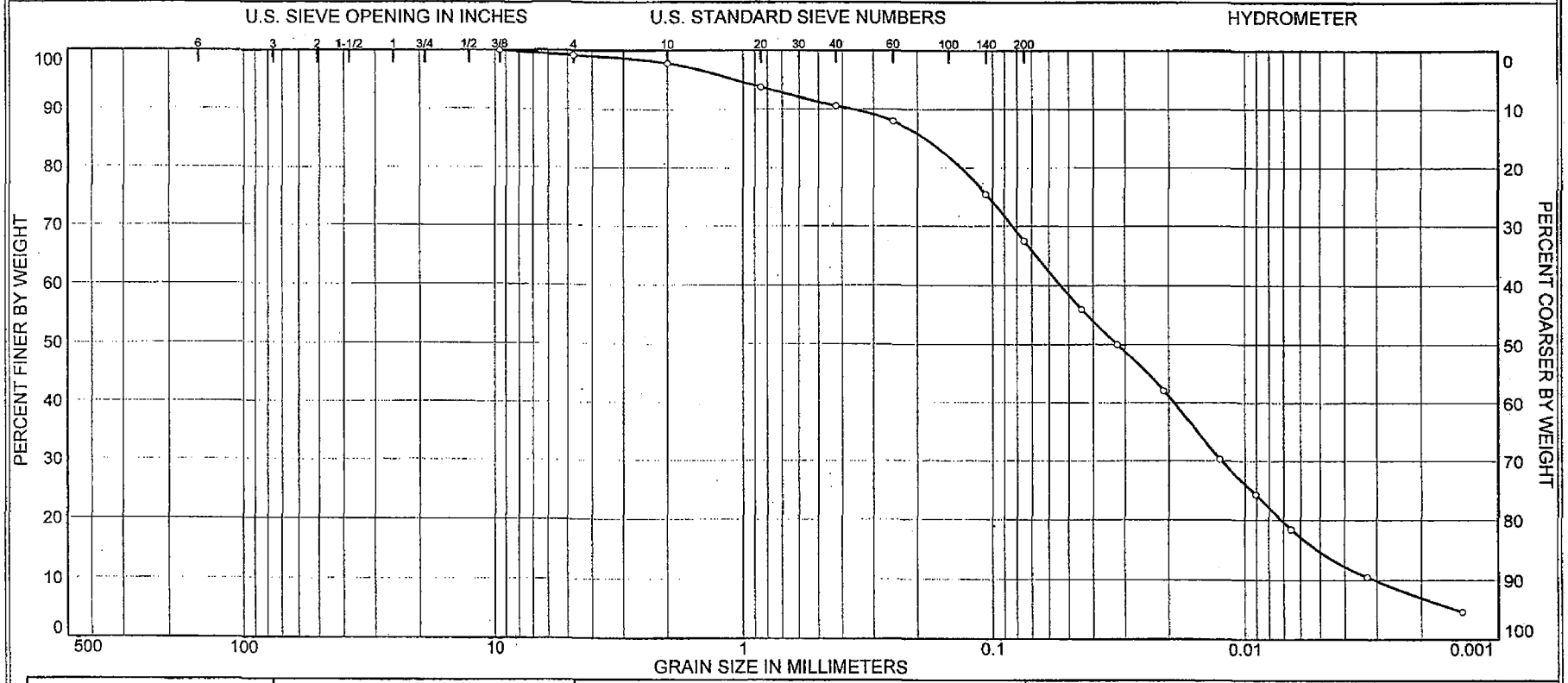
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
60.00	23.5	19.0	14.4	0.0129	19.0	13.2	0.0060	19
250.00	23.4	15.0	10.4	0.0129	15.0	13.8	0.0030	14
1057.00	23.5	13.0	8.4	0.0129	13.0	14.2	0.0015	11

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL = 1** **(% coarse =** **% fine = 1)**
% SAND = 17 **(% coarse = 1** **% medium = 3** **% fine = 13)**
% SILT = 66 **% CLAY = 17**

D_{85}= 0.08 D_{60}= 0.05 D_{50}= 0.04
D_{30}= 0.01 D_{15}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	1	1	7	24	53	15

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	6	18.5'	8/6/06	ML	SILT Sandy (ML); Yellowish Brown, Very Pale Brown, White, Black, Micaceous	49.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 6
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Yellowish Brown, Very Pale Brown, White, Black, Micaceous
Date: 8/6/06 **Natural Moisture:** 49.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	123.63
Tare =	0.00
Dry sample weight =	123.63

Sample split on number 10 sieve
Split sample data:
Sample and tare = 49.54 Tare = .00 Sample weight = 49.54
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	1.05	99
# 10	2.59	98
# 20	2.05	94
# 40	3.67	91
# 60	5.01	88
# 140	11.37	75
# 200	15.36	68

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98
Weight of hydrometer sample: 51.13
Hygroscopic moisture correction:
Moist weight & tare = 36.29
Dry weight & tare = 35.51
Tare = 11.04
Hygroscopic moisture= 3 %
Calculated biased weight= 50.61
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

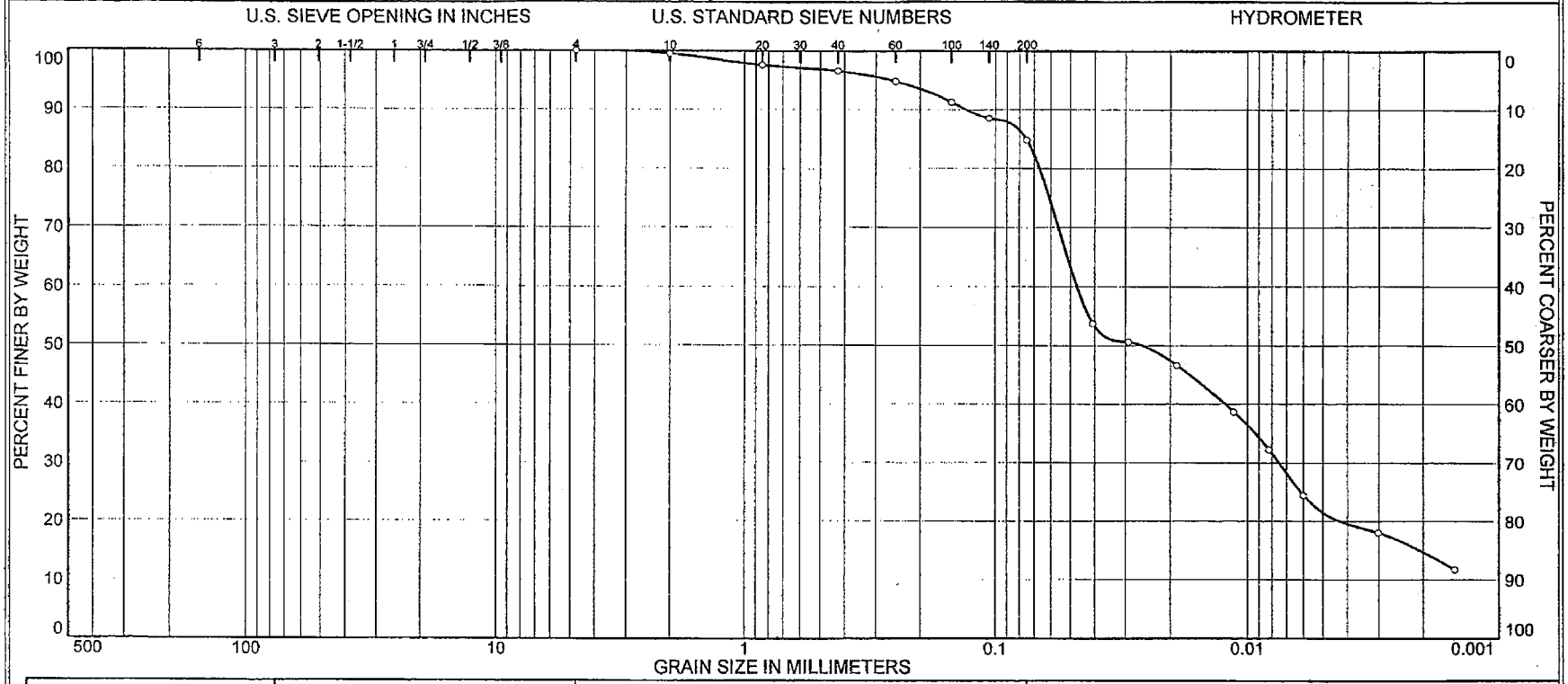
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.3	34.0	28.3	0.0136	34.0	10.7	0.0445	56
2.00	20.3	31.0	25.3	0.0136	31.0	11.2	0.0322	50
5.00	20.3	27.0	21.3	0.0136	27.0	11.9	0.0209	42
15.00	20.3	21.0	15.3	0.0136	21.0	12.9	0.0126	30
30.00	20.3	18.0	12.3	0.0136	18.0	13.3	0.0091	24
60.00	20.3	15.0	9.3	0.0136	15.0	13.8	0.0065	18
250.00	20.3	11.0	5.3	0.0136	11.0	14.5	0.0033	11
1440.00	20.3	8.0	2.3	0.0136	8.0	15.0	0.0014	5

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 1 (% coarse = % fine = 1)
% SAND = 32 (% coarse = 1 % medium = 7 % fine = 24)
% SILT = 53 % CLAY = 15

D_{85}= 0.19 D_{60}= 0.05 D_{50}= 0.03
D_{30}= 0.01 D_{15}= 0.01 D_{10}= 0.00
C_C= 0.9274 C_u= 17.5263

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	3	11	63	21

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	UD-3	23.5 Ft.	11/10/6	ML	Silt with sand	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-322
Sample No.: UD-2
Elev. or Depth: 18.5 Ft. **Sample Length(in./cm.):** 5401
Location: B-322
Description: Silty sand
Date: 11/10/6 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	74.54
Tare =	0.00
Dry sample weight =	74.54

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.06	100
# 20	2.35	97
# 40	11.53	85
# 60	24.67	67
# 100	38.96	48
# 140	47.14	37
# 200	53.02	29

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 29
Weight of hydrometer sample: 21.52
Calculated biased weight= 74.46
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	25.0	20.4	0.0129	25.0	12.2	0.0450	27
2.00	23.5	24.0	19.4	0.0129	24.0	12.4	0.0320	26
5.00	23.5	21.0	16.4	0.0129	21.0	12.9	0.0207	22
15.00	23.5	17.0	12.4	0.0129	17.0	13.5	0.0122	17
30.00	23.5	14.0	9.4	0.0129	14.0	14.0	0.0088	13
60.00	23.5	12.5	7.9	0.0129	12.5	14.2	0.0063	11

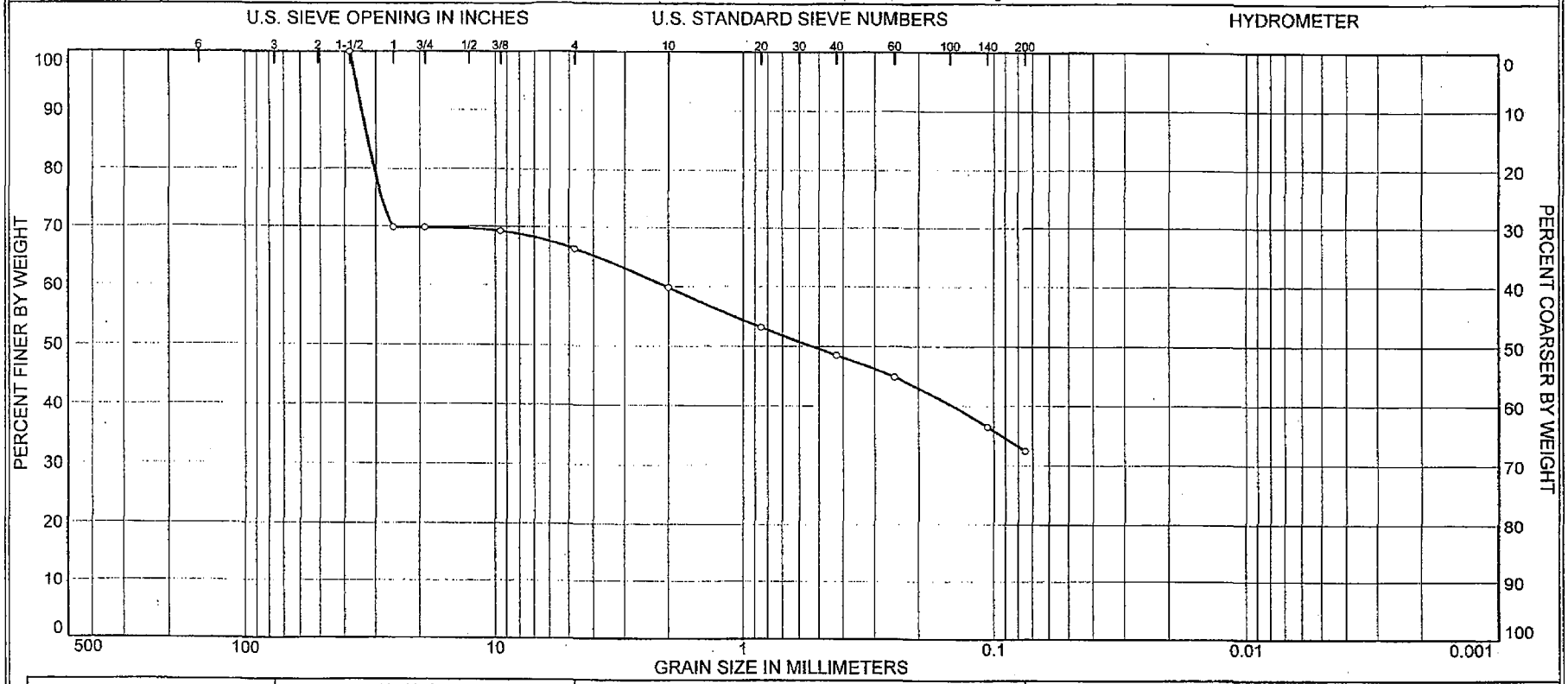
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
250.00	23.4	10.0	5.4	0.0129	10.0	14.7	0.0031	7
1057.00	23.5	9.0	4.4	0.0129	9.0	14.8	0.0015	6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 71 (**% coarse** = 0 **% medium** = 15 **% fine** = 56)
% SILT = 20 **% CLAY** = 9

D_{85}= 0.43 D_{60}= 0.21 D_{50}= 0.16
D_{30}= 0.08 D_{15}= 0.01 D_{10}= 0.01
C_c= 5.4543 C_u= 36.8832

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	30	4	7	11	16	33	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	7	28.5'	08/15/06		GRAVEL Silty with Sand (GM); Yellowish Red, Pale Yellow, White, Black	24.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 7
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: GRAVEL Silty with Sand (GM); Yellowish Red, Pale Yellow, White, Black
Date: 08/15/06 **Natural Moisture:** 24.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	242.12
Tare =	101.48
Dry sample weight =	140.64

Tare for cumulative weight retained= .00

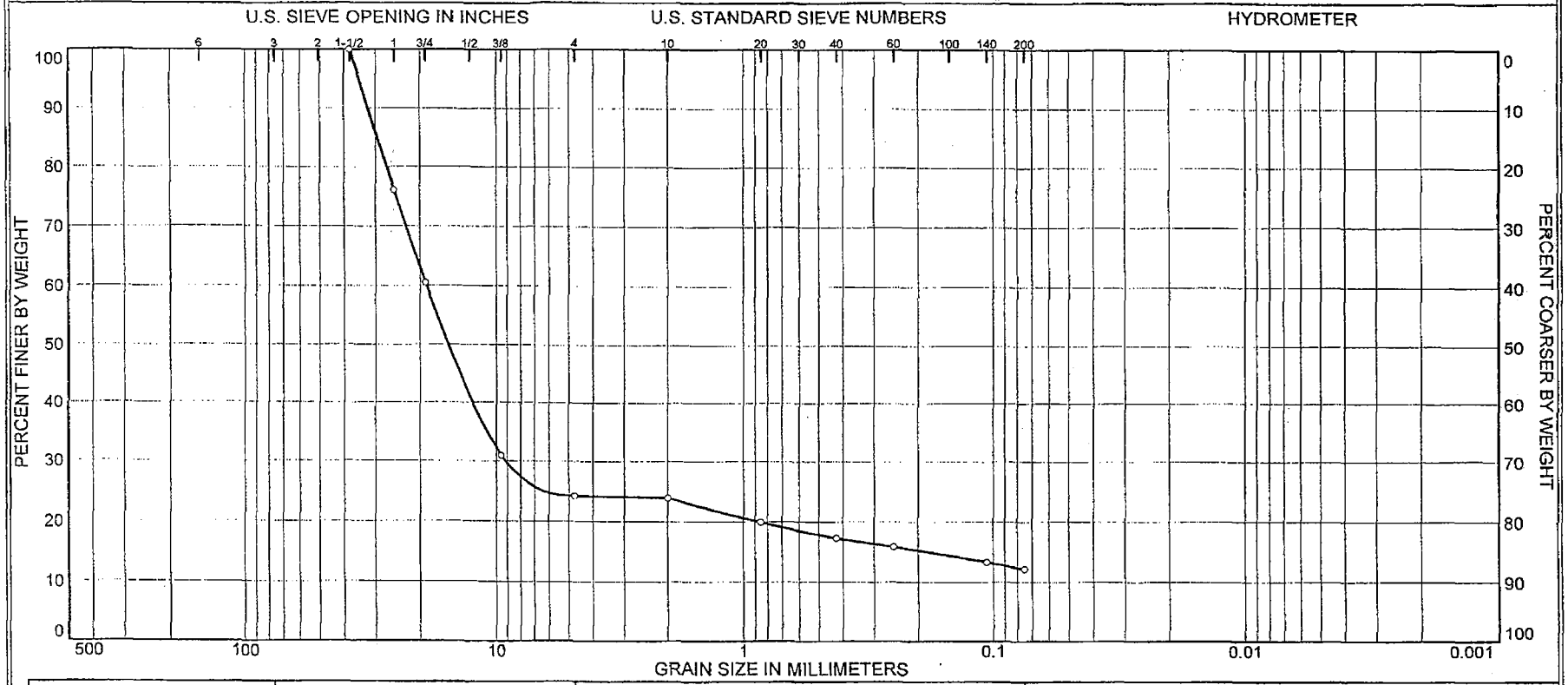
Sieve	Cumul. Wt. retained	Percent finer
1.5 inch	0.00	100
inch	42.54	70
.75 inch	42.54	70
.375 inch	43.29	69
# 4	47.37	66
# 10	56.58	60
# 20	65.84	53
# 40	72.45	49
# 60	77.53	45
# 140	89.37	37
# 200	94.94	33

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL = 34** **(% coarse = 30** **% fine = 4)**
% SAND = 34 **(% coarse = 7** **% medium = 11** **% fine = 16)**
% FINES = 33

D_{85}= 32.45 D_{60}= 2.05 D_{50}= 0.53

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	40	36	0	7	5	12	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	8	32.0'	08/15/06		GRAVEL Silty with sand (GM); Yellowish Red, Pale Yellow, White, Black	10.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 8
Elev. or Depth: 32.0' **Sample Length(in./cm.):**
Location:
Description: GRAVEL Silty with sand (GM); Yellowish Red, Pale Yellow, White, Black
Date: 08/15/06 **Natural Moisture:** 10.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	463.56
Tare =	107.25
Dry sample weight =	356.31

Tare for cumulative weight retained= .00

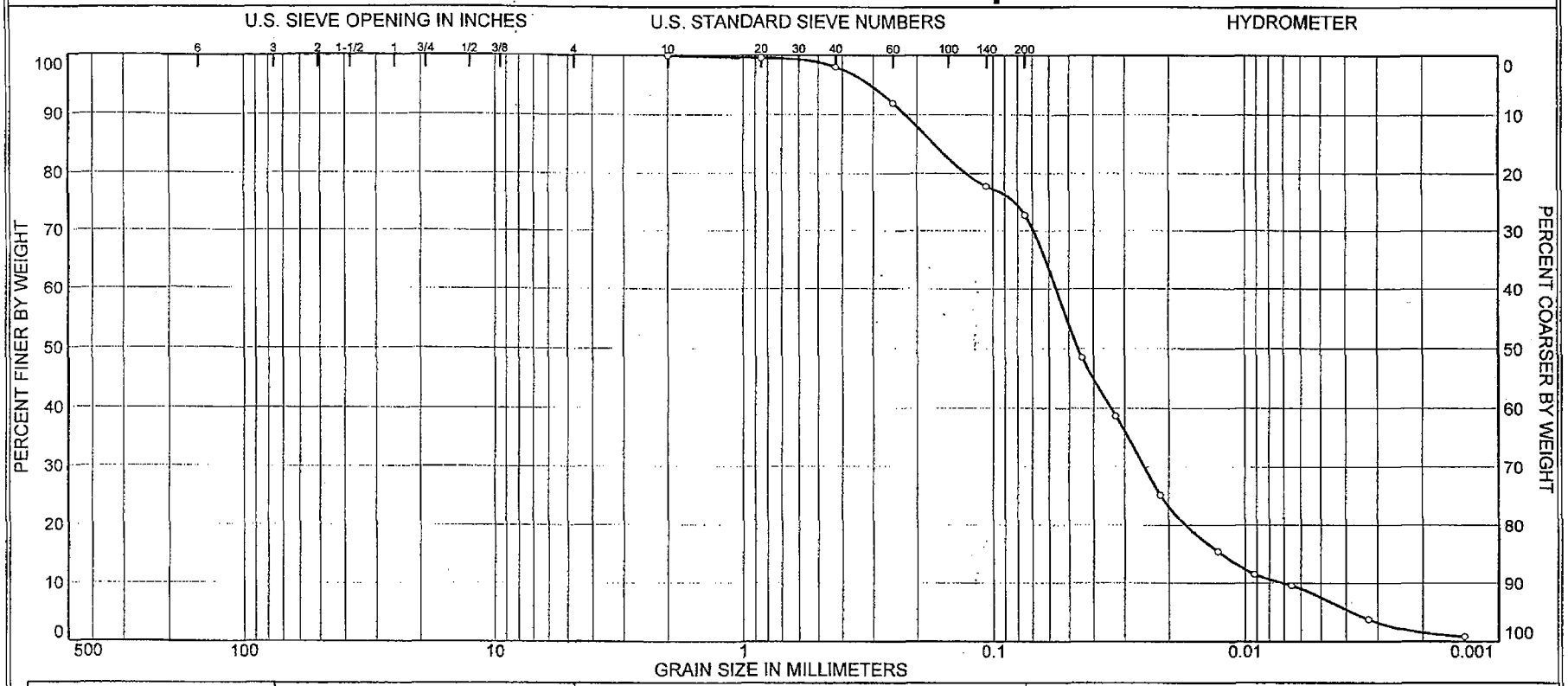
Sieve	Cumul. Wt. retained	Percent finer
1.5 inch	0.00	100
inch	85.33	76
.75 inch	140.77	61
.375 inch	246.08	31
# 4	270.04	24
# 10	271.23	24
# 20	285.28	20
# 40	294.52	17
# 60	299.53	16
# 140	308.77	13
# 200	313.00	12

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 76 **(% coarse =** 40 **% fine =** 36**)**
% SAND = 12 **(% coarse =** 0 **% medium =** 7 **% fine =** 5**)**
% FINES = 12

D_{85}= 29.64 D_{60}= 18.87 D_{50}= 15.51
D_{30}= 9.19 D_{15}= 0.18

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○					2	25	65	7

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	9	38.5'	8/31/06		SILT Sandy (ML); Olive Brown, Reddish Brown, Black, Micaceous	28.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 9
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Olive Brown, Reddish Brown, Black, Micaceous
Date: 8/31/06 **Natural Moisture:** 28.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	87.32
Tare =	0.00
Dry sample weight =	87.32

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.32 Tare = .00 Sample weight = 51.32
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.05	100
# 20	0.20	100
# 40	0.97	98
# 60	4.10	92
# 140	11.38	78
# 200	13.96	73

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.24
Hygroscopic moisture correction:
Moist weight & tare = 43.18
Dry weight & tare = 42.62
Tare = 11.53
Hygroscopic moisture= 2 %
Calculated biased weight= 51.37
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

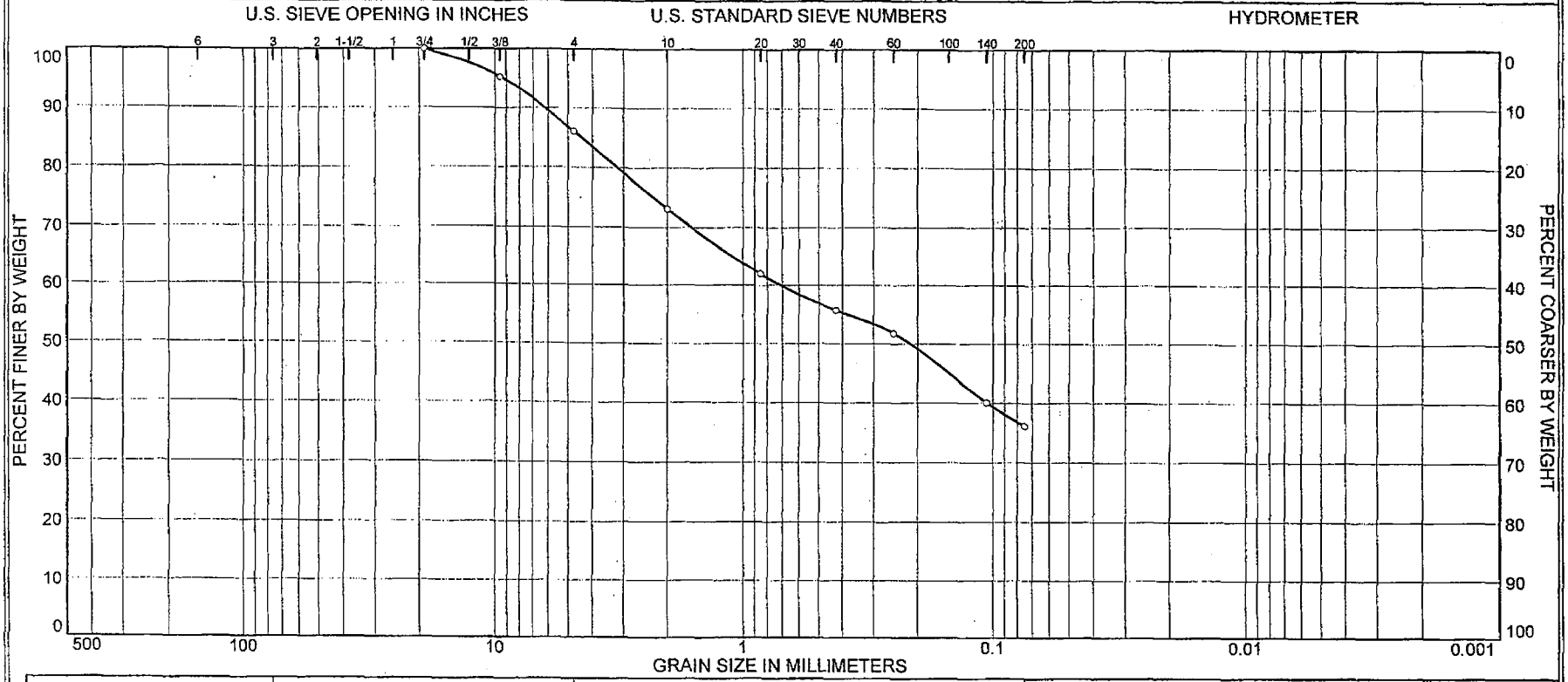
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.7	30.0	24.9	0.0132	30.0	11.4	0.0445	49
2.00	22.7	25.0	19.9	0.0132	25.0	12.2	0.0326	39
5.00	22.7	18.0	12.9	0.0132	18.0	13.3	0.0216	25
15.00	22.7	13.0	7.9	0.0132	13.0	14.2	0.0128	15
30.00	22.7	11.0	5.9	0.0132	11.0	14.5	0.0092	12
60.00	22.7	10.0	4.9	0.0132	10.0	14.7	0.0065	10
250.00	22.7	7.0	1.9	0.0132	7.0	15.1	0.0032	4
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = **(% coarse =** **% medium =** 2 **% fine =** 25)
% SILT = 65 **% CLAY =** 7

D_{85}= 0.17 D_{60}= 0.06 D_{50}= 0.05
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.5724 C_u= 7.8907

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	14	13	17	20	36	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-216	10	43.5'	08/15/06		SAND Silty with Gravel (SM); Olive Brown, Reddish Brown, Black, Micaceous	24.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-216
Sample No.: 10
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty with Gravel (SM); Olive Brown, Reddish Brown, Black, Micaceous
Date: 08/15/06 **Natural Moisture:** 24.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	397.33
Tare =	115.22
Dry sample weight =	282.11

Tare for cumulative weight retained= .00

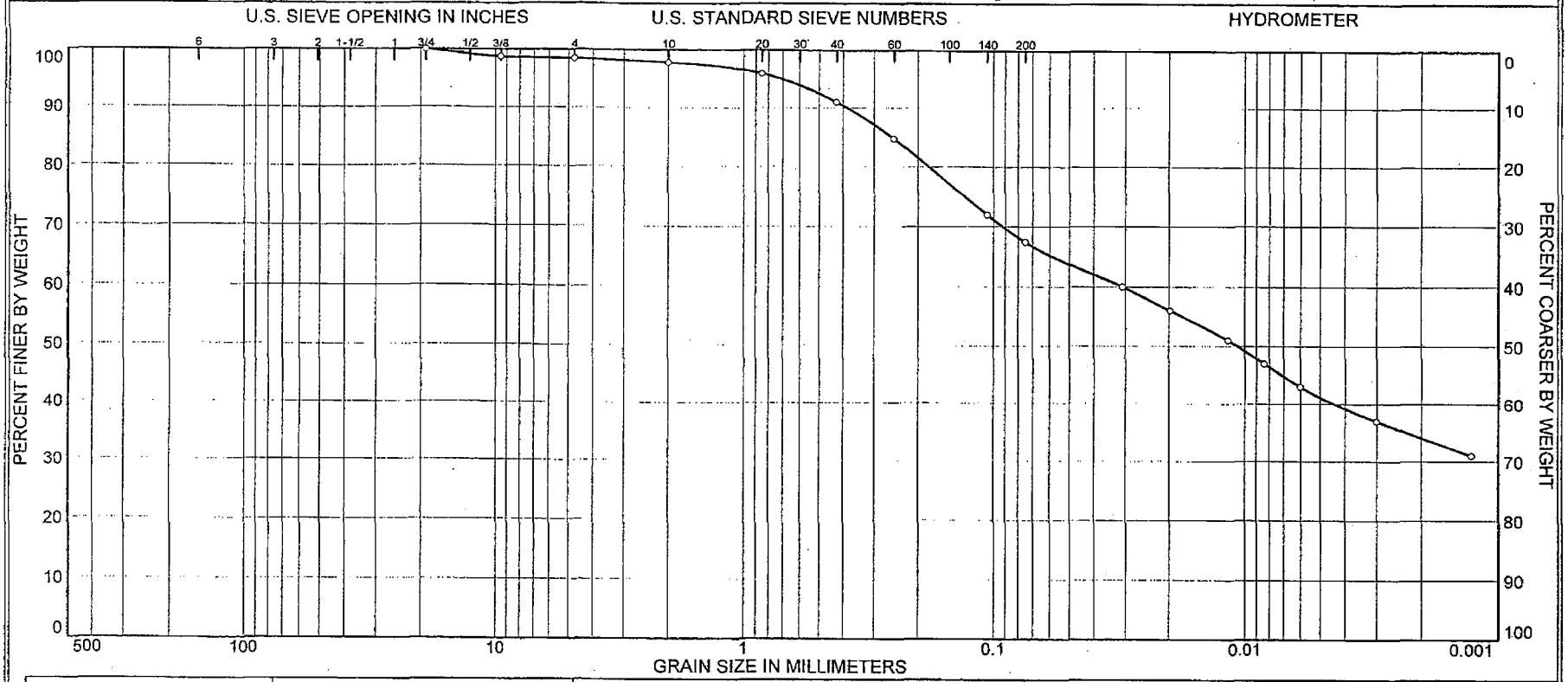
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100
.375 inch	13.61	95
4	39.39	86
# 10	75.93	73
# 20	107.45	62
# 40	124.96	56
# 60	136.04	52
# 140	168.93	40
# 200	180.36	36

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 14 **(% coarse =** **% fine =** 14)
% SAND = 50 **(% coarse =** 13 **% medium =** 17 **% fine =** 20)
% FINES = 36

D_{85}= 4.44 D_{60}= 0.71 D_{50}= 0.21

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	2	1	7	23	26	41

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	2	1.5'	8/3/06	ML	SILT Sandy (ML); Red, Micaceous	26.6	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Red, Micaceous
Date: 8/3/06 **Natural Moisture:** 26.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	213.07
Tare =	0.00
Dry sample weight =	213.07

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.88 Tare = .00 Sample weight = 50.88
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100
.375 inch	2.60	99
# 4	3.20	99
# 10	4.79	98
# 20	1.01	96
# 40	3.52	91
# 60	6.81	85
# 140	13.47	72
# 200	15.79	67

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98
Weight of hydrometer sample: 51.59
Hygroscopic moisture correction:
Moist weight & tare = 38.31
Dry weight & tare = 37.93
Tare = 10.84
Hygroscopic moisture= 1 %
Calculated biased weight= 51.91
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

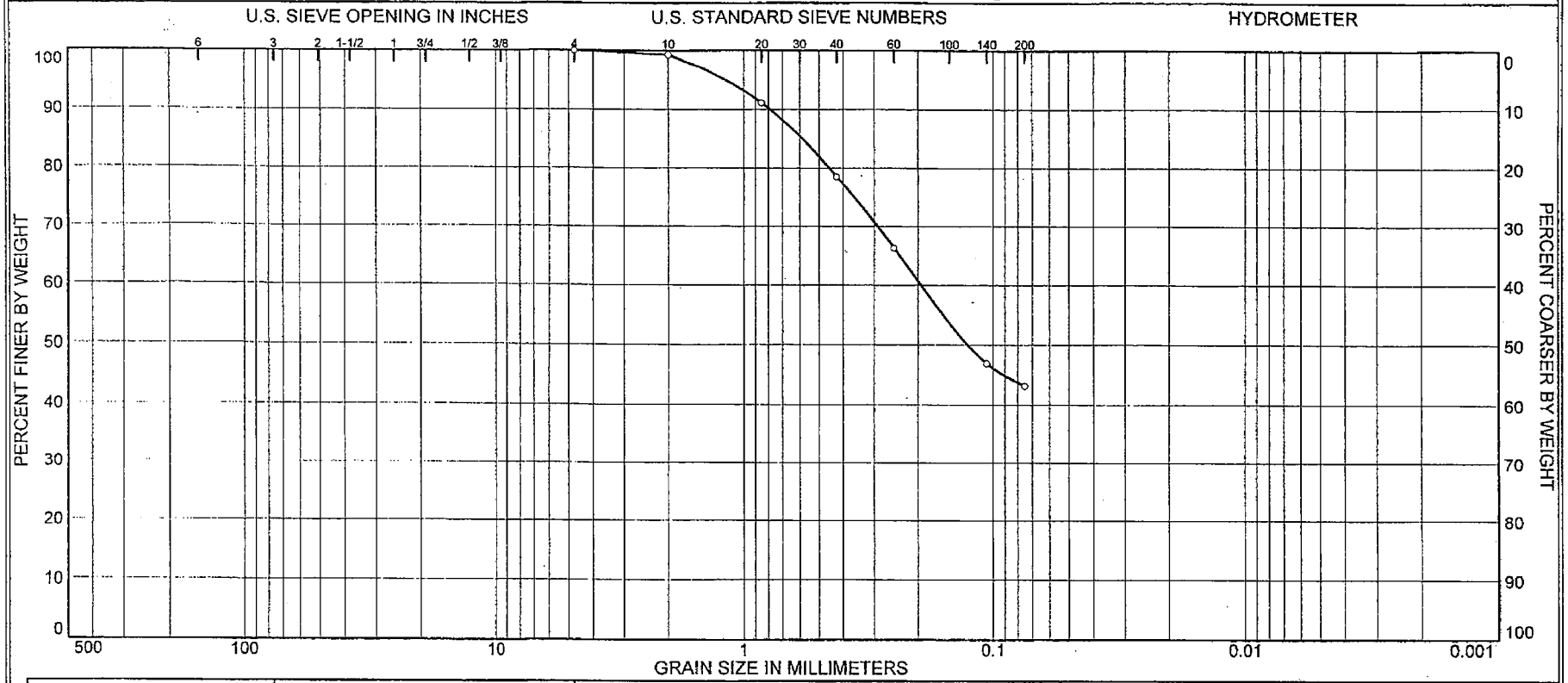
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.2	37.0	31.3	0.0136	37.0	10.2	0.0308	60
5.00	20.2	35.0	29.3	0.0136	35.0	10.6	0.0198	56
15.00	20.2	32.0	26.3	0.0136	32.0	11.0	0.0117	51
30.00	20.2	30.0	24.3	0.0136	30.0	11.4	0.0084	47
60.00	20.2	28.0	22.3	0.0136	28.0	11.7	0.0060	43
250.00	20.2	25.0	19.3	0.0136	25.0	12.2	0.0030	37
1440.00	20.2	22.0	16.3	0.0136	22.0	12.7	0.0013	31

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 2 (% coarse = % fine = 2)
% SAND = 31 (% coarse = 1 % medium = 7 % fine = 23)
% SILT = 26 % CLAY = 41

D_{85}= 0.26 D_{60}= 0.03 D_{50}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	21	35	43	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	3	3.5'	8/4/06		Sand Silty (SM); Red, Micaceous	28.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: Sand Silty (SM); Red, Micaceous
Date: 8/4/06 **Natural Moisture:** 28.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	374.77
Tare =	87.54
Dry sample weight =	287.23

Tare for cumulative weight retained= .00

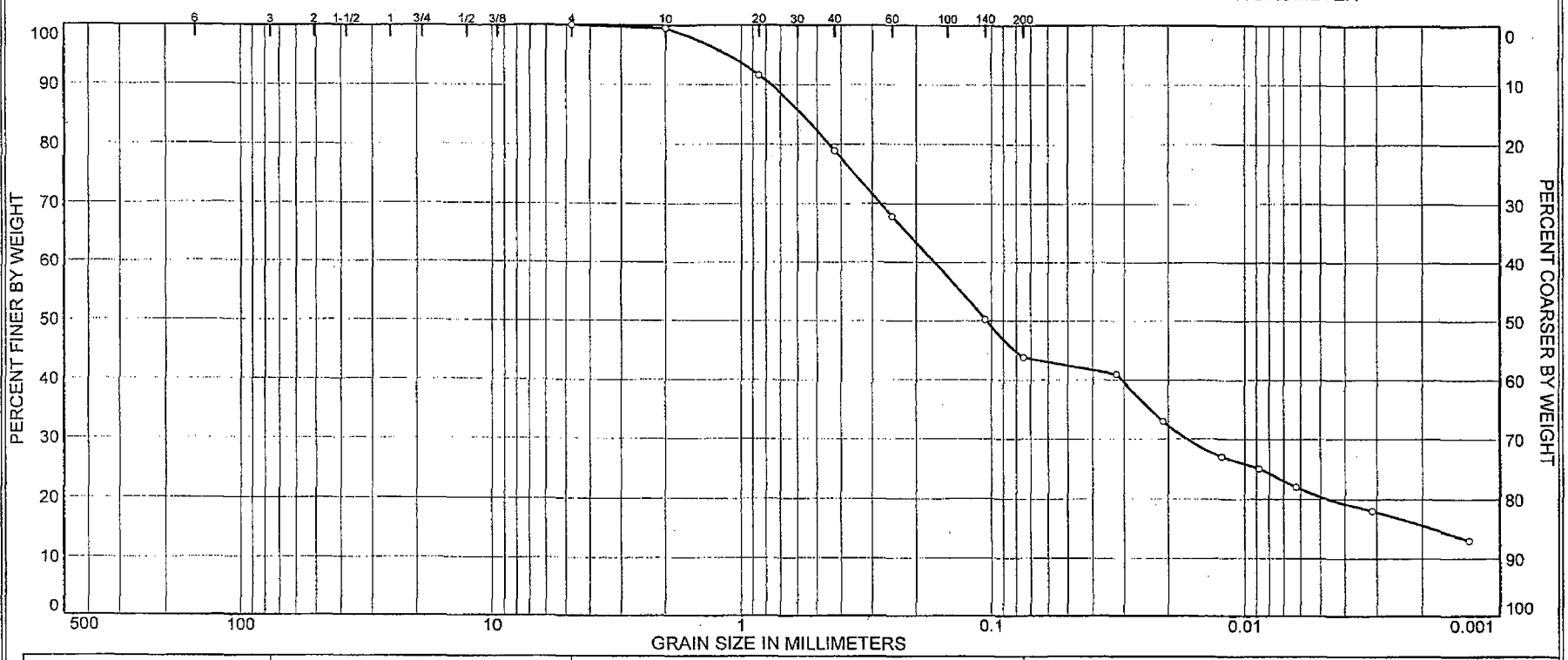
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.98	99
# 20	25.58	91
40	61.78	79
# 60	96.74	66
# 140	152.59	47
# 200	163.23	43

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 57 (% coarse = 1 % medium = 21 % fine = 35)
% FINES = 43

D_{85}= 0.59 D_{60}= 0.20 D_{50}= 0.13

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	21	34	23	20

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	4	6.0'	8/16/06		SAND Silty (SM); Red, Strong Brown, Micaceous	23.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Strong Brown, Micaceous
Date: 8/16/06 **Natural Moisture:** 23.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	184.95
Tare =	0.00
Dry sample weight =	184.95

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.16 Tare = .00 Sample weight = 51.16
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.93	100
# 20	4.07	92
# 40	10.59	79
# 60	16.32	68
# 140	25.37	50
# 200	28.66	44

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.57
Hygroscopic moisture correction:
Moist weight & tare = 38.72
Dry weight & tare = 38.49
Tare = 10.86
Hygroscopic moisture= 1 %
Calculated biased weight= 51.14
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
cific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

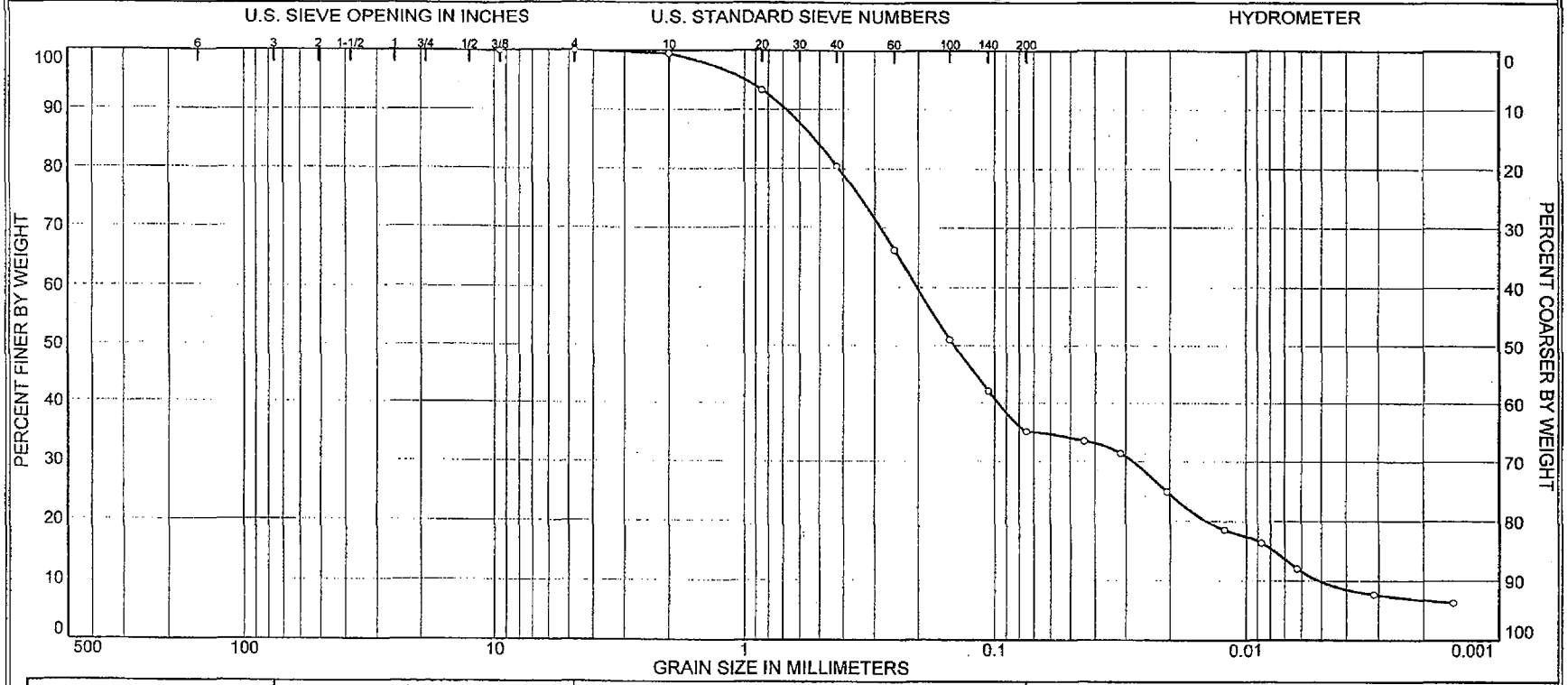
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	26.0	21.0	0.0132	26.0	12.0	0.0323	41
5.00	22.9	22.0	17.0	0.0132	22.0	12.7	0.0210	33
15.00	22.9	19.0	14.0	0.0132	19.0	13.2	0.0123	27
30.00	22.9	18.0	13.0	0.0132	18.0	13.3	0.0088	25
60.00	22.9	16.5	11.5	0.0132	16.5	13.6	0.0063	22
250.00	22.9	14.0	9.0	0.0132	14.0	14.0	0.0031	18
1440.00	22.7	12.0	6.9	0.0132	12.0	14.3	0.0013	13

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 56 (**% coarse** = 1 **% medium** = 21 **% fine** = 34)
% SILT = 23 **% CLAY** = 20

D_{85}= 0.58 D_{60}= 0.17 D_{50}= 0.11
D_{30}= 0.02 D_{15}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	19	45	25	10

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	UD-1	8.5 Ft.	11/10/6	SM	Silty sand	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by:HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-217
Sample No.: UD-1
Elev. or Depth: 8.5 Ft. **Sample Length(in./cm.):** 5380
Location: B-217
Description: Silty sand
Date: 11/10/6 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JM Reviewed by:HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	69.11
Tare =	0.00
Dry sample weight =	69.11

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.00	100
# 10	0.41	99
# 20	4.65	93
# 40	13.52	80
# 60	23.37	66
# 100	33.87	51
# 140	40.04	42
# 200	44.88	35

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 35
Weight of hydrometer sample: 24.23
Calculated biased weight= 69.03
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	28.0	23.4	0.0129	28.0	11.7	0.0441	34
2.00	23.5	26.5	21.9	0.0129	26.5	11.9	0.0315	31
5.00	23.5	22.0	17.4	0.0129	22.0	12.7	0.0205	25
15.00	23.5	17.5	12.9	0.0129	17.5	13.4	0.0122	19
30.00	23.5	16.0	11.4	0.0129	16.0	13.7	0.0087	16

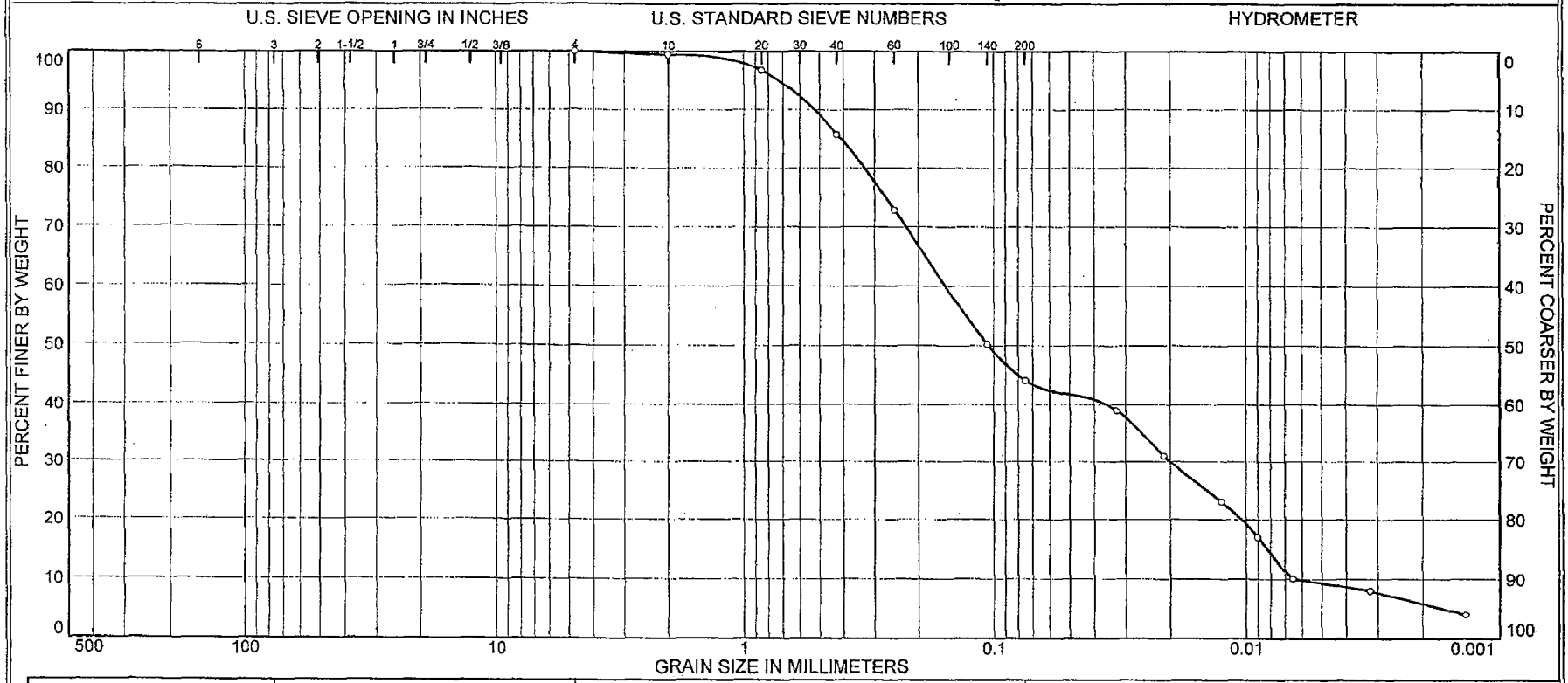
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
60.00	23.5	13.0	8.4	0.0129	13.0	14.2	0.0063	12
250.00	23.4	10.0	5.4	0.0129	10.0	14.7	0.0031	8
1057.00	23.5	9.0	4.4	0.0129	9.0	14.8	0.0015	6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 65 **(% coarse** = 1 **% medium** = 19 **% fine** = 45)
% SILT = 25 **% CLAY** = 10

D_{85}= 0.52 D_{60}= 0.20 D_{50}= 0.14
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.7574 C_u= 39.5805

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	14	41	35	9

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	5	10.5'	8/3/06	SM	SAND Silty (SM); Light Olive Brown, White, Light Gray, Micaceous	21.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11.17.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 5
Elev. or Depth: 10.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Olive Brown, White, Light Gray, Micaceous
Date: 8/3/06 **Natural Moisture:** 21.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	99.32
Tare =	0.00
Dry sample weight =	99.32

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.53 Tare = .00 Sample weight = 51.53
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.51	100
# 20	1.40	97
# 40	7.07	86
# 60	13.76	73
# 140	25.53	50
# 200	28.67	44

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.15
Hygroscopic moisture correction:
Moist weight & tare = 40.23
Dry weight & tare = 39.90
Tare = 11.45
Hygroscopic moisture= 1 %
Calculated biased weight= 51.55
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

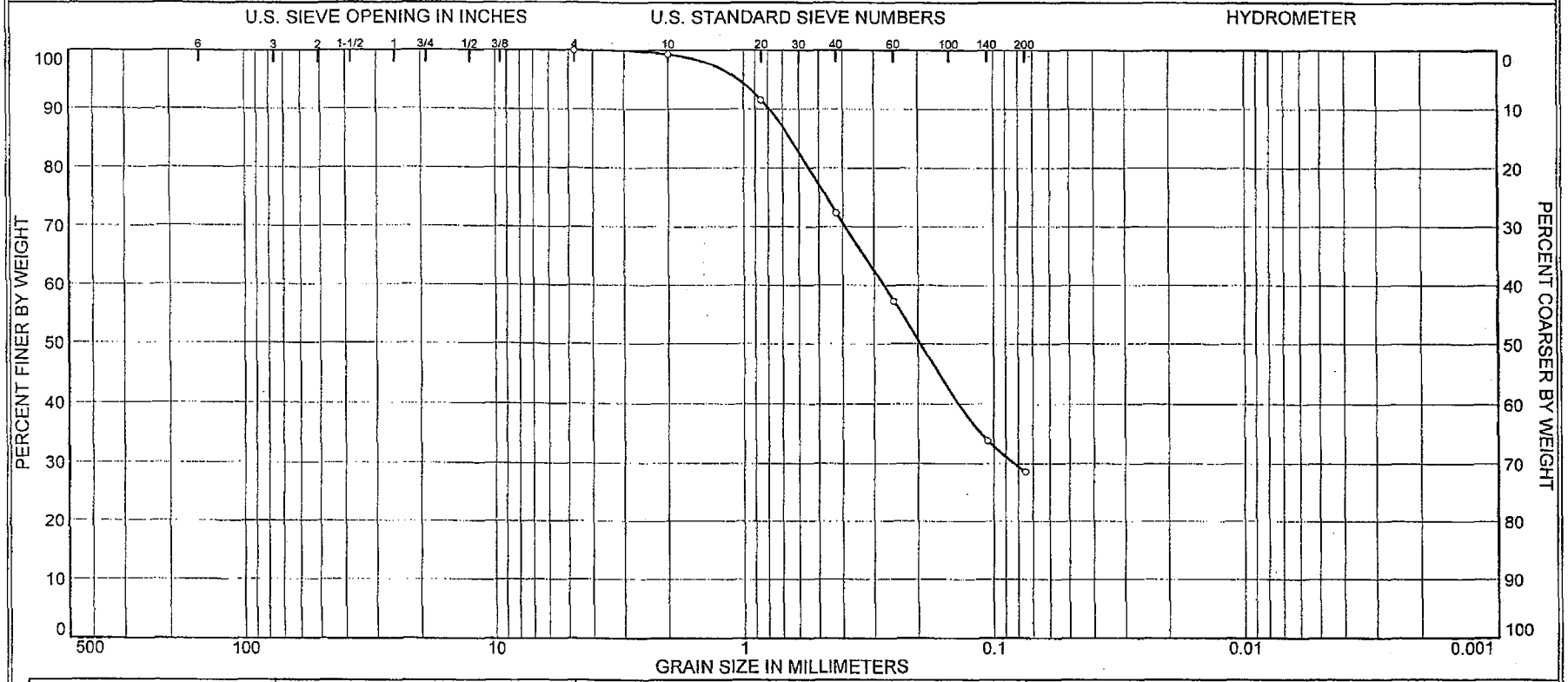
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	25.0	19.9	0.0132	25.0	12.2	0.0326	39
5.00	22.7	21.0	15.9	0.0132	21.0	12.9	0.0212	31
15.00	22.7	17.0	11.9	0.0132	17.0	13.5	0.0125	23
30.00	22.7	14.0	8.9	0.0132	14.0	14.0	0.0090	17
60.00	22.7	10.0	4.9	0.0132	10.0	14.7	0.0065	10
250.00	22.7	9.0	3.9	0.0132	9.0	14.8	0.0032	8
1440.00	22.7	7.0	1.9	0.0132	7.0	15.1	0.0014	4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 56 (% coarse = 1 % medium = 14 % fine = 41)
% SILT = 35 % CLAY = 9

D_{85}= 0.41 D_{60}= 0.16 D_{50}= 0.11
D_{30}= 0.02 D_{15}= 0.01 D_{10}= 0.01
C_C= 0.3918 C_u= 24.0002

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	27	43	29	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	6	13.5'	8/4/06		SAND Silty (SM); Light Olive Brown, White, Light Brown, Yellowish Brown	27.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 6
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Olive Brown, White, Light Brown, Yellowish Brown
Date: 8/4/06 **Natural Moisture:** 27.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	319.73
Tare =	92.74
Dry sample weight =	226.99

Tare for cumulative weight retained= .00

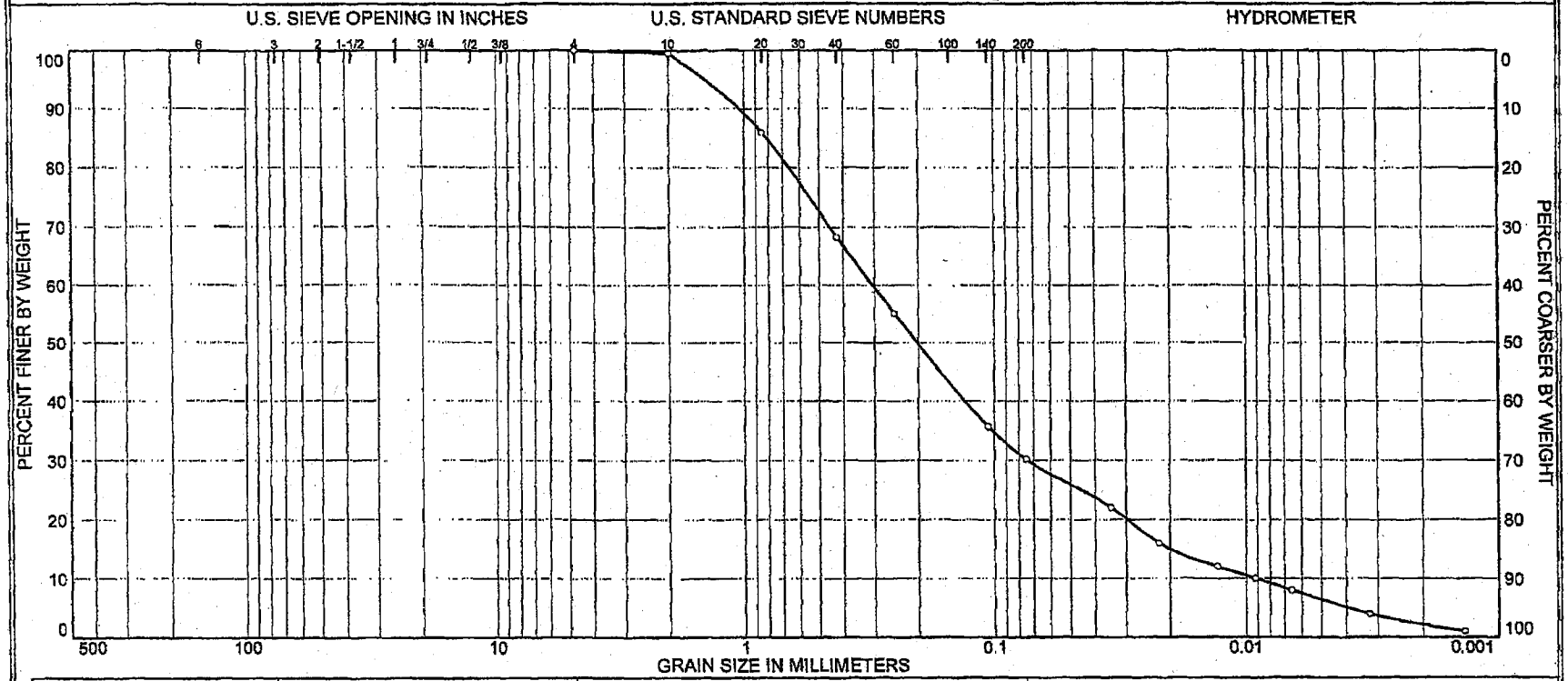
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.55	99
20	19.27	92
# 40	62.79	72
# 60	96.96	57
# 140	150.05	34
# 200	162.04	29

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 71 (% coarse = 1 % medium = 27 % fine = 43)
% FINES = 29

D_{85}= 0.65 D_{60}= 0.27 D_{50}= 0.20
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	31	38	24	6

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	7	23.5'	8/16/06		SAND Silty (SM); Light Olive Brown, White, Light Brown, Yellowish Brown	26.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 7
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Olive Brown, White, Light Brown, Yellowish Brown
Date: 8/16/06 **Natural Moisture:** 26.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	192.33
Tare =	0.00
Dry sample weight =	192.33

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.82 Tare = .00 Sample weight = 50.82
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.99	100
# 20	6.94	86
# 40	15.96	68
# 60	22.68	55
# 140	32.58	36
# 200	35.42	30

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.12
Hygroscopic moisture correction:
Moist weight & tare = 37.04
Dry weight & tare = 36.89
Tare = 10.92
Hygroscopic moisture= 1 %
Calculated biased weight= 50.83
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Viscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

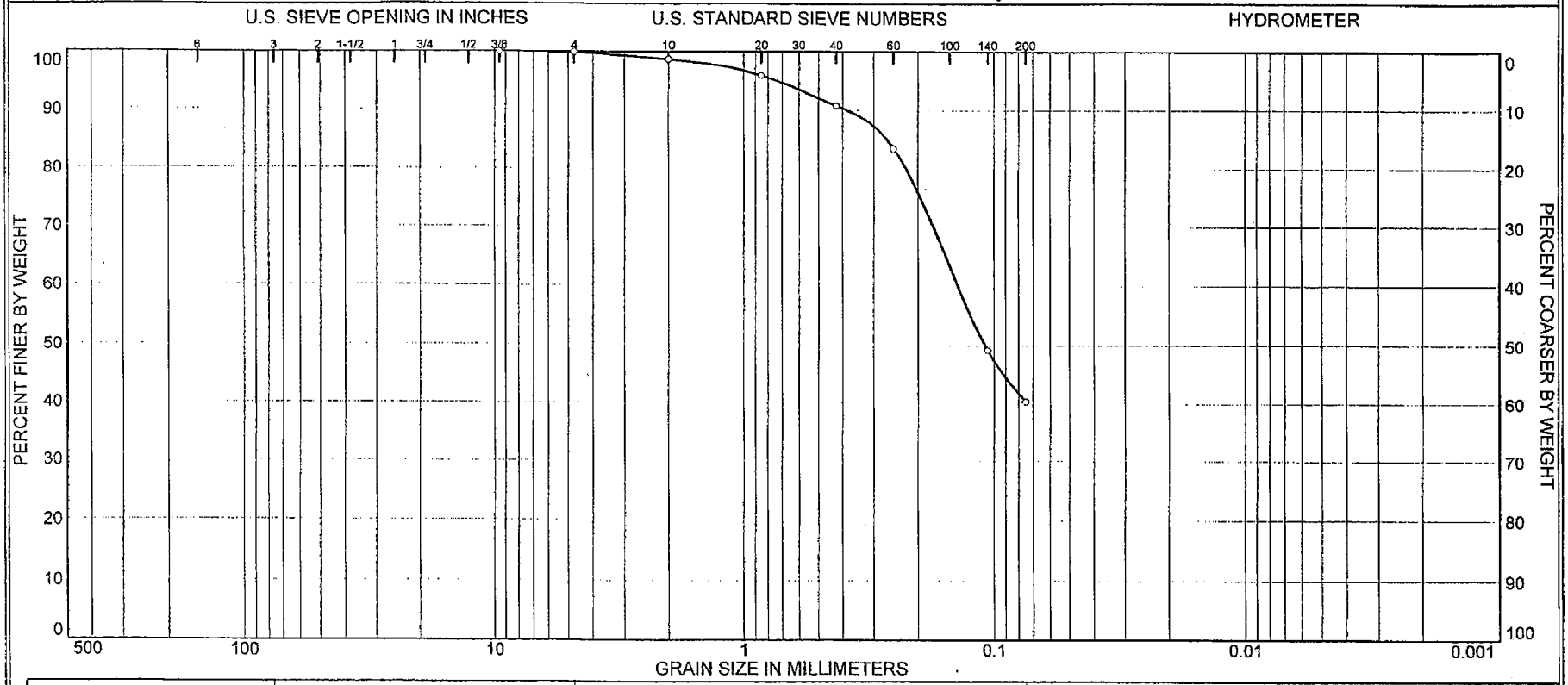
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	16.0	11.0	0.0132	16.0	13.7	0.0344	22
5.00	22.9	13.0	8.0	0.0132	13.0	14.2	0.0222	16
15.00	22.9	11.0	6.0	0.0132	11.0	14.5	0.0129	12
30.00	22.9	10.0	5.0	0.0132	10.0	14.7	0.0092	10
60.00	22.9	9.0	4.0	0.0132	9.0	14.8	0.0065	8
250.00	22.9	7.0	2.0	0.0132	7.0	15.1	0.0032	4
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 70 **(% coarse =** 1 **% medium =** 31 **% fine =** 38**)**
% SILT = 24 **% CLAY =** 6

D_{85}= 0.82 D_{60}= 0.31 D_{50}= 0.20
D_{30}= 0.07 D_{15}= 0.02 D_{10}= 0.01
C_c= 1.9386 C_u= 33.1966

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	8	51	40	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	8	33.5'	8/4/06		SAND Silty (SM); Yellowish Brown, Black, Trace Light Gray, Red, Micaceous	45.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 8
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Brown, Black, Trace Light Gray, Red, Micaceous
Date: 8/4/06 **Natural Moisture:** 45.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	214.72
Tare =	13.51
Dry sample weight =	201.21

Tare for cumulative weight retained= .00

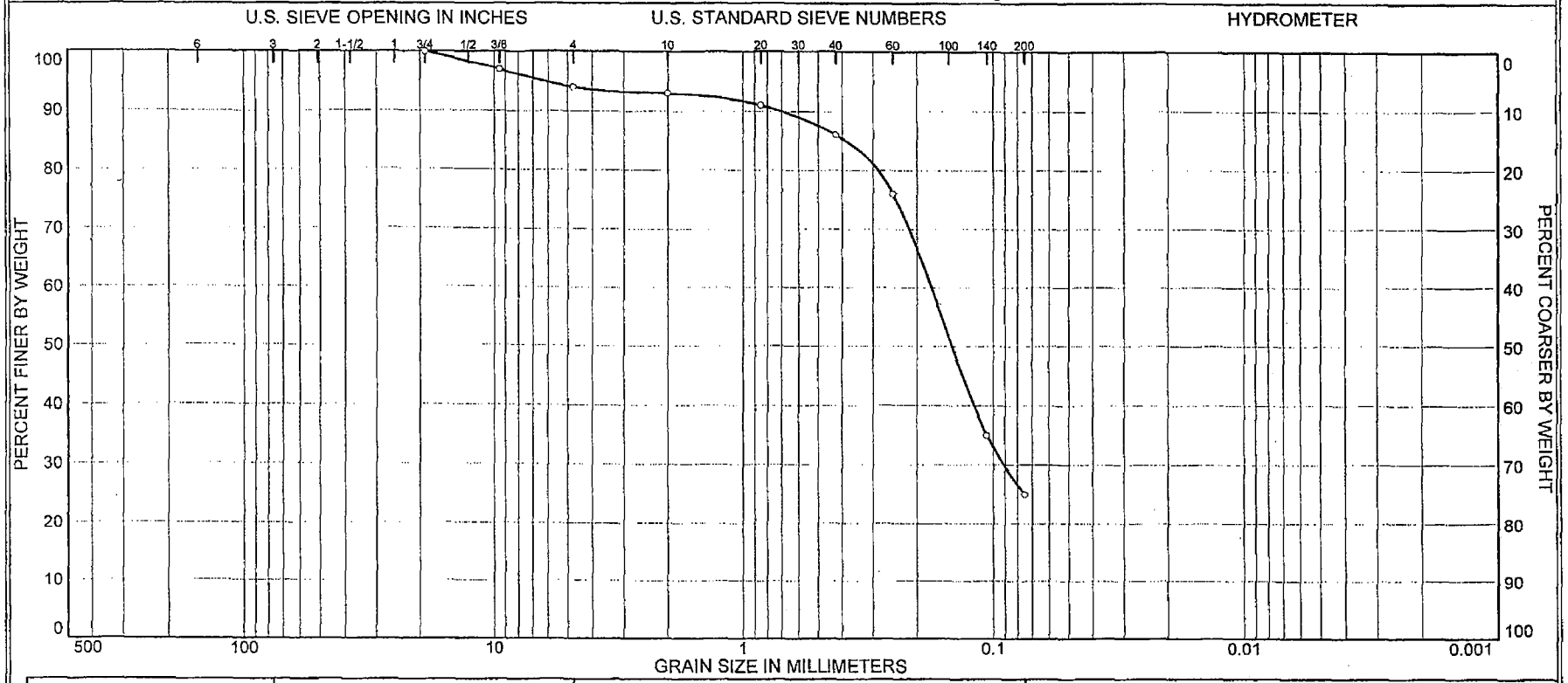
Sieve	Cumul. Wt. retained	Percent finer
3/8in. inch	0.00	100
# 4	0.14	100
10	2.69	99
# 20	8.29	96
# 40	18.63	91
# 60	33.46	83
# 140	102.47	49
# 200	120.11	40

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0 (% coarse = % fine = 0)
% SAND = 60 (% coarse = 1 % medium = 8 % fine = 51)
% FINES = 40

D_{85}= 0.27 D_{60}= 0.14 D_{50}= 0.11

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
C	0	0	6	1	7	61	25	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
C	B-217	9	43.5'	8/4/06		SAND Silty (SM); Light Olive Brown, Olive Yellow, Black,	19.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 9
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Olive Brown, Olive Yellow, Black,
Date: 8/4/06 **Natural Moisture:** 19.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	266.60
Tare =	13.61
Dry sample weight =	252.99

Tare for cumulative weight retained= .00

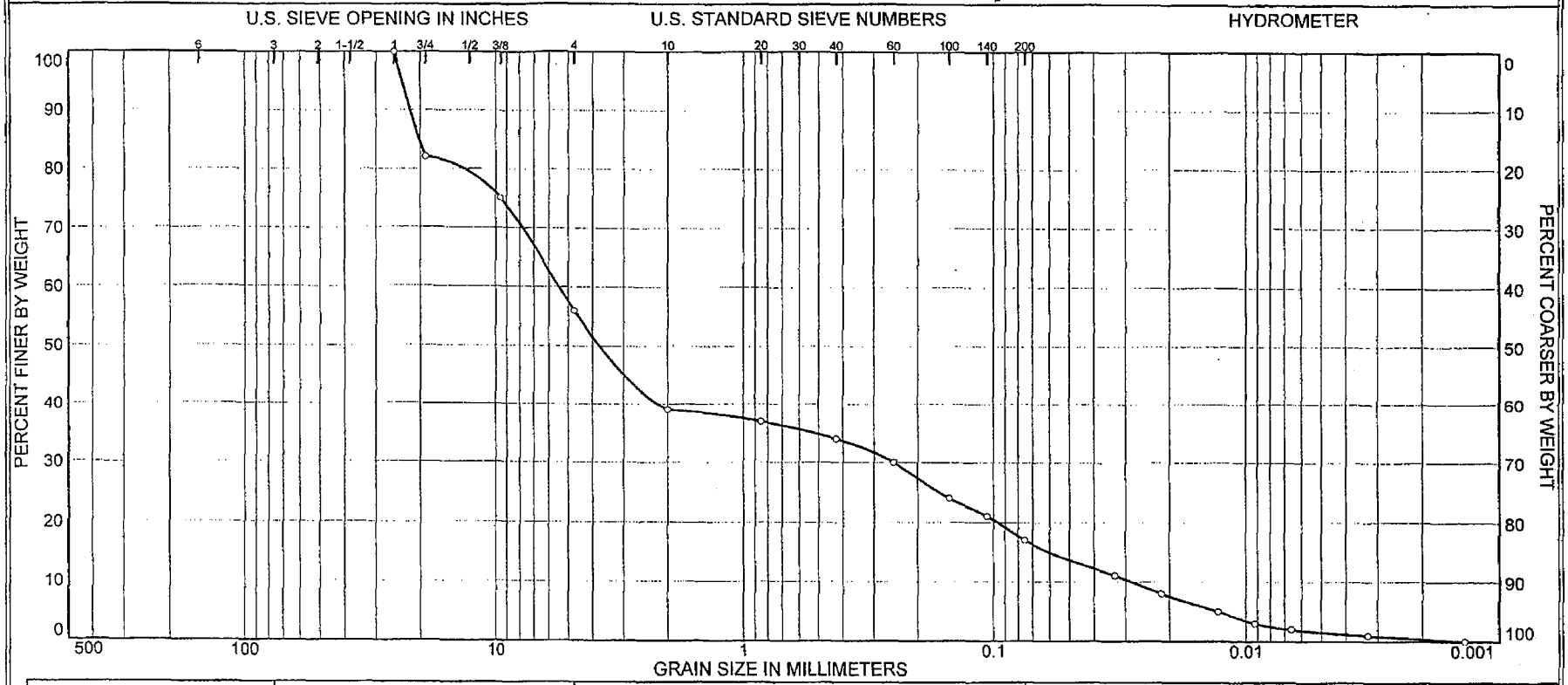
Sieve	Cumul. Wt. retained	Percent finer
3/4 inch	0.00	100
3/8 inch	8.83	97
# 4	14.26	94
10	17.79	93
# 20	22.56	91
# 40	36.55	86
# 60	60.02	76
# 140	163.60	35
# 200	190.33	25

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 6 (**% coarse =** **% fine** = 6)
% SAND = 69 (**% coarse** = 1 **% medium** = 7 **% fine** = 61)
% FINES = 25

D_{85}= 0.39 D_{60}= 0.18 D_{50}= 0.15
D_{30}= 0.09

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	18	26	17	5	17	15	2

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-217	10	48.5'	11/16/06		SAND Silty with Gravel (SM); Light Olive Brown, Olive Yellow, Black	13.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

JRS 11-22-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-217
Sample No.: 10
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty with Gravel (SM); Light Olive Brown, Olive Yellow, Black
Date: 11/16/06 **Natural Moisture:** 13.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

Mechanical Analysis Data

	Initial	After wash
Dry sample and tare=	182.80	182.80
Tare =	0.00	0.00
Dry sample weight =	182.80	182.80

Minus #200 from wash= 0 %
Sample split on number 10 **sieve**
Split sample data:
Sample and tare = 65.57 **Tare =** .00 **Sample weight =** 65.57
Cumulative weight retained tare= .00
e for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
1in. inch	0.00	100
3/4in. inch	32.58	82
3/8in. inch	46.25	75
# 4	80.18	56
# 10	110.78	39
# 20	3.30	37
# 40	8.94	34
# 60	14.90	30
# 100	24.45	24
# 140	31.02	21
# 200	37.00	17

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 39
Weight of hydrometer sample: 66.42
Hygroscopic moisture correction:
Moist weight & tare = 46.81
Dry weight & tare = 46.35
Tare = 11.01
Hygroscopic moisture= 1 %
culated biased weight= 168.12
Table of composite correction values:
Temp, deg C: 10.7 23.1 40.2

Comp. corr: -8.0 -5.0 -1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

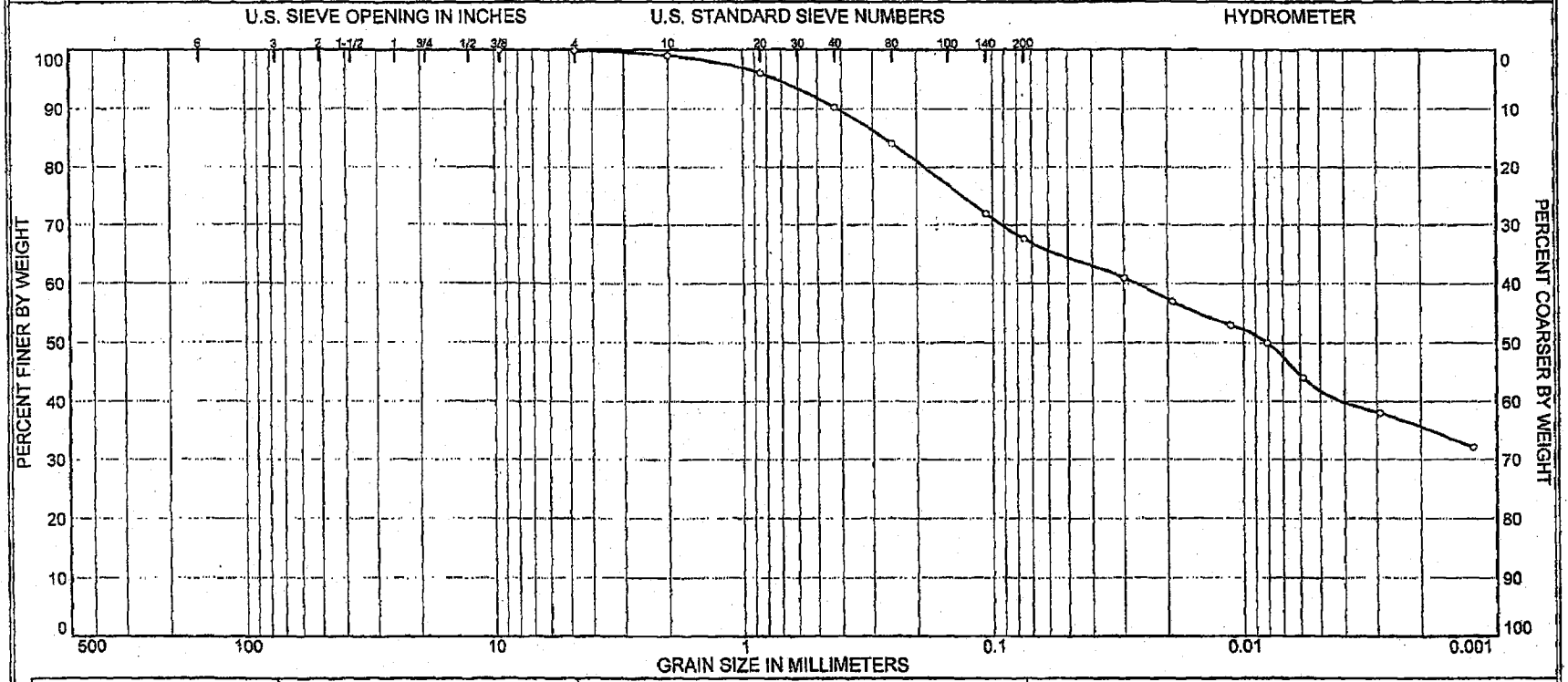
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.5	23.0	17.9	0.0132	23.0	12.5	0.0331	11
5.00	22.5	18.0	12.9	0.0132	18.0	13.3	0.0216	8
15.00	22.5	13.0	7.9	0.0132	13.0	14.2	0.0129	5
30.00	22.5	11.0	5.9	0.0132	11.0	14.5	0.0092	3
60.00	22.5	9.0	3.9	0.0132	9.0	14.8	0.0066	2
250.00	22.5	6.0	0.9	0.0132	6.0	15.3	0.0033	1
1440.00	22.7	5.0	-0.1	0.0132	5.0	15.5	0.0014	0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 44 (% coarse = 18 % fine = 26)
% SAND = 39 (% coarse = 17 % medium = 5 % fine = 17)
% SILT = 15 % CLAY = 2 (% CLAY COLLOIDS = 0)

D_{85}= 20.24 D_{60}= 5.48 D_{50}= 3.77
D_{30}= 0.25 D_{15}= 0.06 D_{10}= 0.03
C_c= 0.3975 C_u= 190.7466

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	9	22	26	42

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	2	1.5'	8/6/06		CLAY Sandy with Silt (CL); Red	20.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2000)
Insufficient material to determine Atterberg limits.

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: CLAY Sandy with Silt (CL); Red
Date: 8/6/06 **Natural Moisture:** 20.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2000)
Insufficient material to determine Atterberg limits.

Mechanical Analysis Data

	Initial
Dry sample and tare=	126.12
Tare =	0.00
Dry sample weight =	126.12

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.82 Tare = .00 Sample weight = 51.82
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.18	100
# 10	1.24	99
# 20	1.55	96
# 40	4.60	90
# 60	7.85	84
# 140	14.18	72
# 200	16.41	68

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 52.55
Hygroscopic moisture correction:
Moist weight & tare = 36.89
Dry weight & tare = 36.52
Tare = 10.97
Hygroscopic moisture= 1 %
Calculated biased weight= 52.32
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

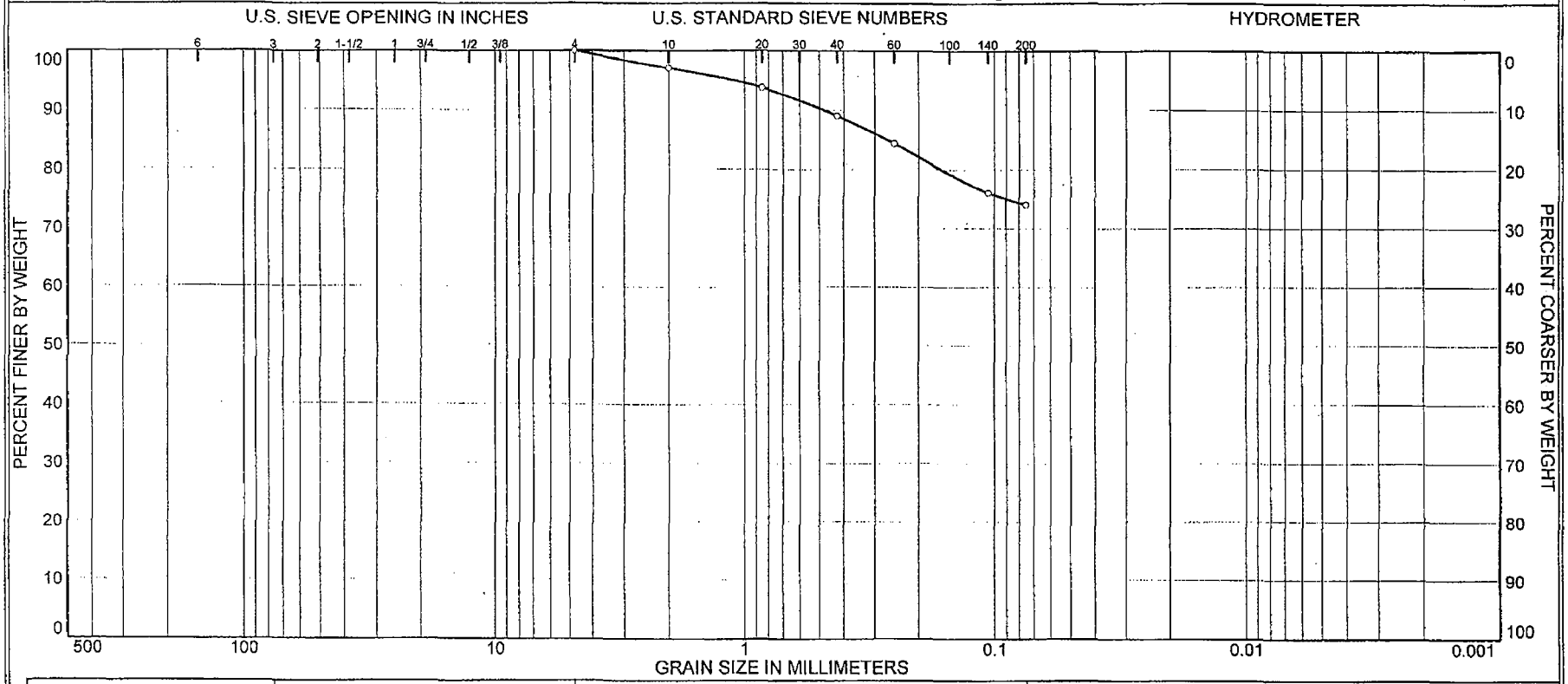
Elapsed ime, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.8	37.0	31.9	0.0132	37.0	10.2	0.0298	61
5.00	22.8	35.0	29.9	0.0132	35.0	10.6	0.0192	57
15.00	22.8	33.0	27.9	0.0132	33.0	10.9	0.0112	53
30.00	22.8	31.0	25.9	0.0132	31.0	11.2	0.0081	50
60.00	22.8	28.0	22.9	0.0132	28.0	11.7	0.0058	44
250.00	22.8	25.0	19.9	0.0132	25.0	12.2	0.0029	38
1440.00	22.8	22.0	16.9	0.0132	22.0	12.7	0.0012	32

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0 (% coarse = % fine = 0)
% SAND = 32 (% coarse = 1 % medium = 9 % fine = 22)
% SILT = 26 % CLAY = 42

D_{85}= 0.27 D_{60}= 0.03 D_{50}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	3	8	15	74	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	3	3.5'	8/15/06		SILT Sandy with Clay (ML); Dark Red	25.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy with Clay (ML); Dark Red
Date: 8/15/06 **Natural Moisture:** 25.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	254.68
Tare =	107.41
Dry sample weight =	147.27

Tare for cumulative weight retained= .00

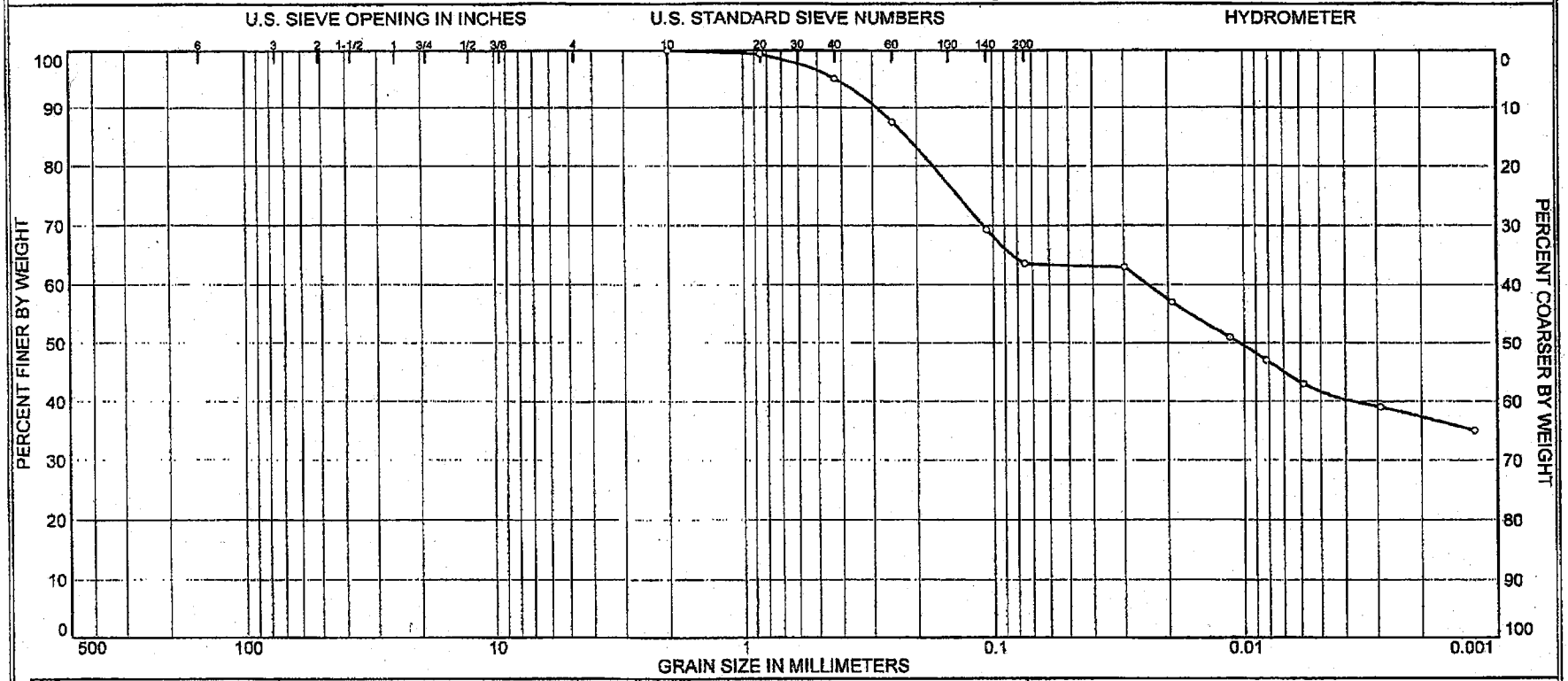
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	4.20	97
20	9.17	94
40	16.25	89
# 60	23.02	84
# 140	35.20	76
# 200	38.27	74

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 26 (% coarse = 3 % medium = 8 % fine = 15)
% FINES = 74

D_{85}= 0.27

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	5	31	22	42

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	5	8.5'	8/17/06		CLAY Sandy with Silt (CL); Red	23.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 5
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: CLAY Sandy with Silt (CL); Red
Date: 8/17/06 **Natural Moisture:** 23.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	72.70
Tare =	0.00
Dry sample weight =	72.70

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.85 Tare = .00 Sample weight = 50.85
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

ieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.29	99
# 40	2.50	95
# 60	6.38	88
# 140	15.59	69
# 200	18.51	64

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.46
Hygroscopic moisture correction:
Moist weight & tare = 32.61
Dry weight & tare = 32.36
Tare = 10.96
Hygroscopic moisture= 1 %
Calculated biased weight= 50.87
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
cific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

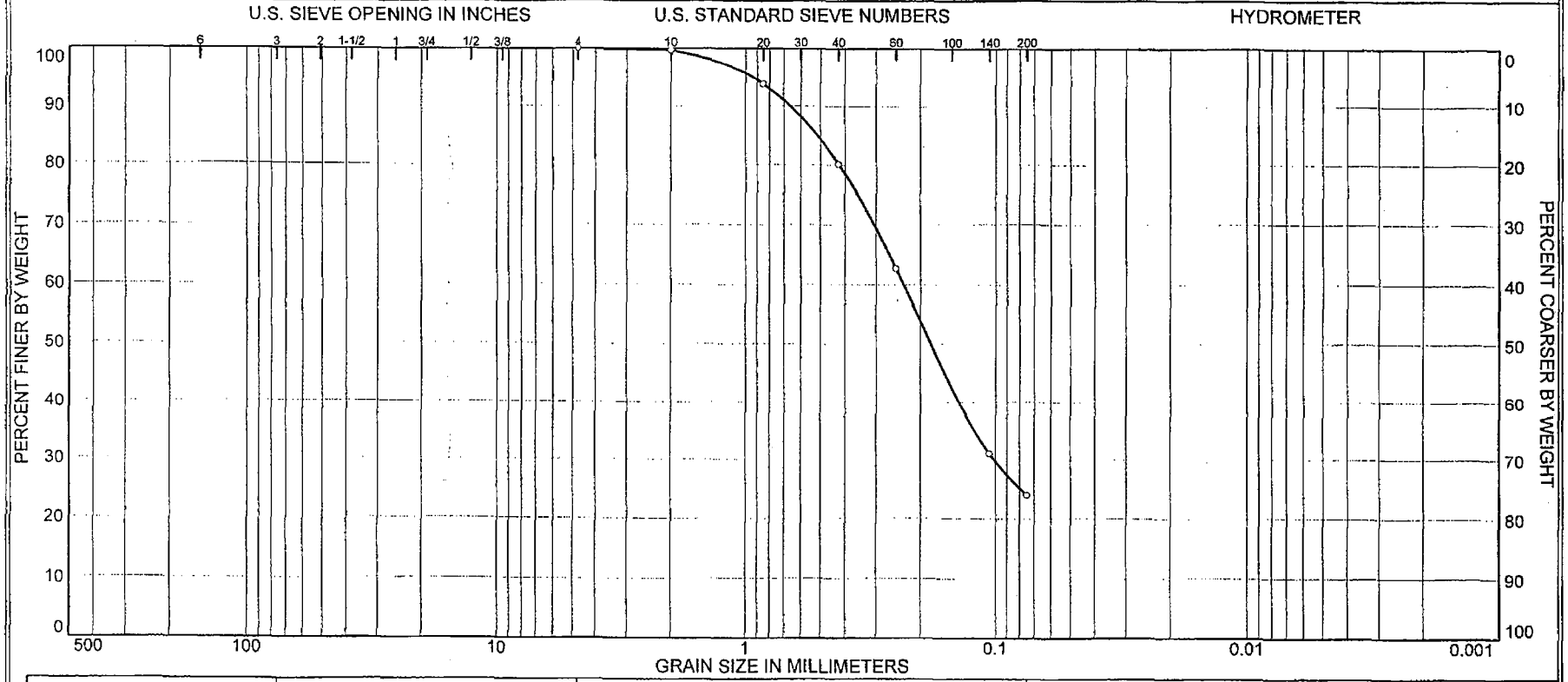
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	37.0	32.0	0.0132	37.0	10.2	0.0298	63
5.00	22.9	34.0	29.0	0.0132	34.0	10.7	0.0193	57
15.00	22.9	31.0	26.0	0.0132	31.0	11.2	0.0114	51
30.00	22.9	29.0	24.0	0.0132	29.0	11.5	0.0082	47
60.00	22.9	27.0	22.0	0.0132	27.0	11.9	0.0059	43
250.00	22.9	25.0	20.0	0.0132	25.0	12.2	0.0029	39
1440.00	22.9	23.0	18.0	0.0132	23.0	12.5	0.0012	35

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 36 (**% coarse =** **% medium** = 5 **% fine** = 31)
% SILT = 22 **% CLAY** = 42

D_{85}= 0.22 D_{60}= 0.02 D_{50}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	20	56	24	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	6	11.0'	8/15/06		SAND Silty (SM); Red, Micaceous	23.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Micaceous
Date: 8/15/06 **Natural Moisture:** 23.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	368.40
Tare =	156.65
Dry sample weight =	211.75

Tare for cumulative weight retained= .00

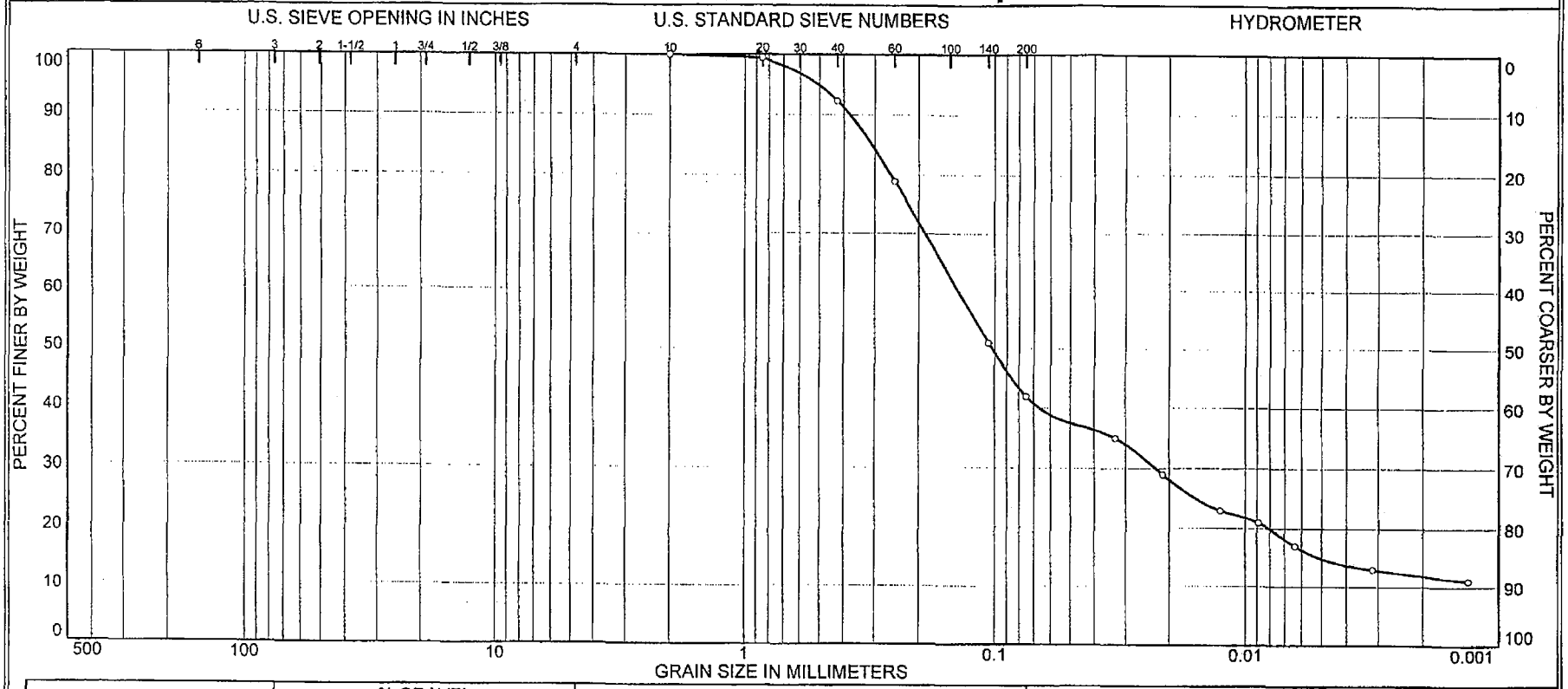
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.59	100
20	12.95	94
# 40	42.21	80
# 60	78.99	63
# 140	146.19	31
# 200	161.06	24

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 76 (% coarse = 0 % medium = 20 % fine = 56)
% FINES = 24

D_{85}= 0.52 D_{60}= 0.23 D_{50}= 0.18
D_{30}= 0.10

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	8	50	27	15

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	7	13.5'	8/20/06		SAND Silty with Clay (SM); Red, Micaceous	21.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty with Clay (SM); Red, Micaceous
Date: 8/20/06 **Natural Moisture:** 21.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	92.98
Tare =	0.00
Dry sample weight =	92.98

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.80 Tare = .00 Sample weight = 51.80
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.33	99
# 40	3.99	92
# 60	10.91	79
# 140	25.39	51
# 200	30.08	42

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.63
Hygroscopic moisture correction:
Moist weight & tare = 39.11
Dry weight & tare = 38.67
Tare = 10.92
Hygroscopic moisture= 2 %
Calculated biased weight= 51.81
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

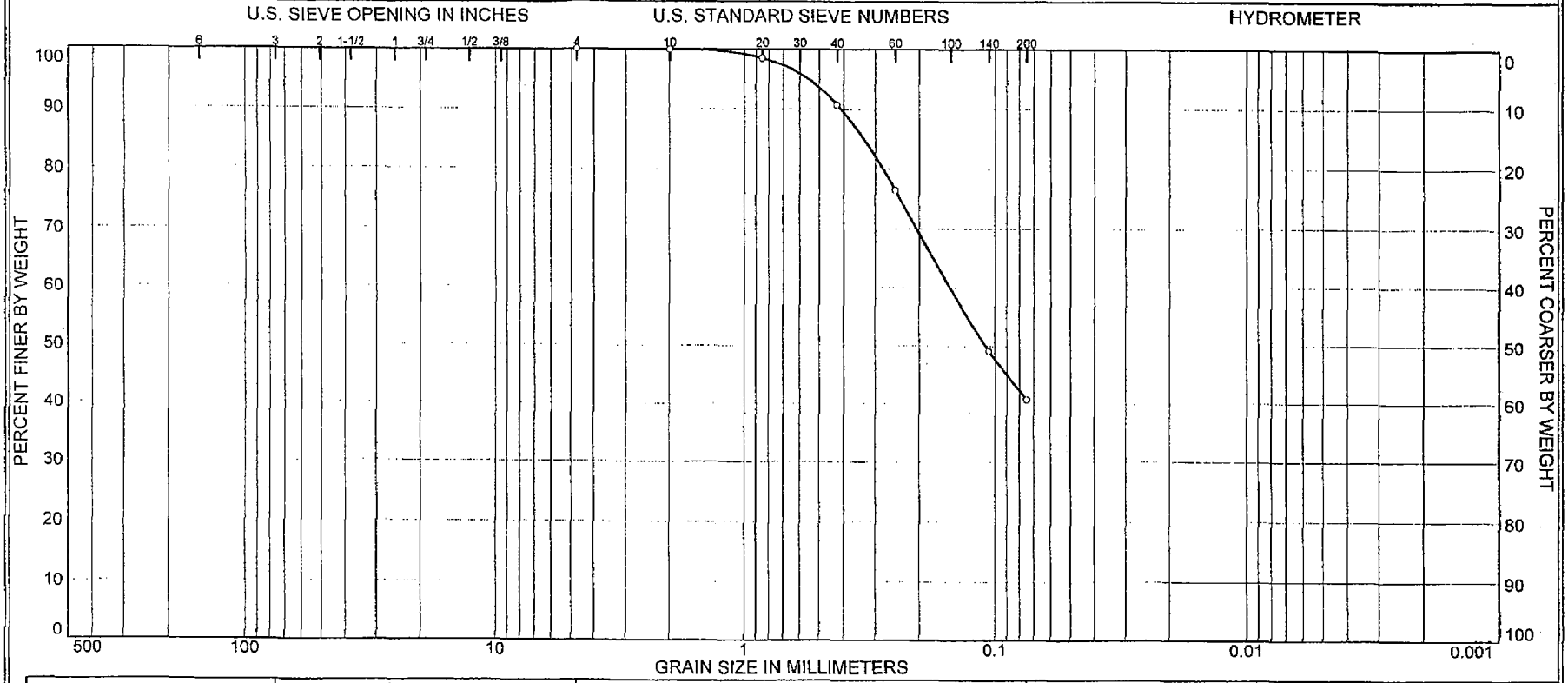
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	23.0	18.0	0.0132	23.0	12.5	0.0330	35
5.00	22.9	20.0	15.0	0.0132	20.0	13.0	0.0212	29
15.00	22.9	17.0	12.0	0.0132	17.0	13.5	0.0125	23
30.00	22.9	16.0	11.0	0.0132	16.0	13.7	0.0089	21
60.00	22.9	14.0	9.0	0.0132	14.0	14.0	0.0064	17
250.00	22.9	12.0	7.0	0.0132	12.0	14.3	0.0032	13
1440.00	22.7	11.0	5.9	0.0132	11.0	14.5	0.0013	11

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 58 (**% coarse =** **% medium** = 8 **% fine** = 50)
% SILT = 27 **% CLAY** = 15

D_{85}= 0.31 D_{60}= 0.14 D_{50}= 0.10
D_{30}= 0.02 D_{15}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	9	50	41	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	8	18.5'	8/15/06		SAND Silty with Clay (SM); Red, Micaceous	25.2		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty with Clay (SM); Red, Micaceous
Date: 8/15/06 **Natural Moisture:** 25.2
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	296.96
Tare =	13.52
Dry sample weight =	283.44

Tare for cumulative weight retained= .00

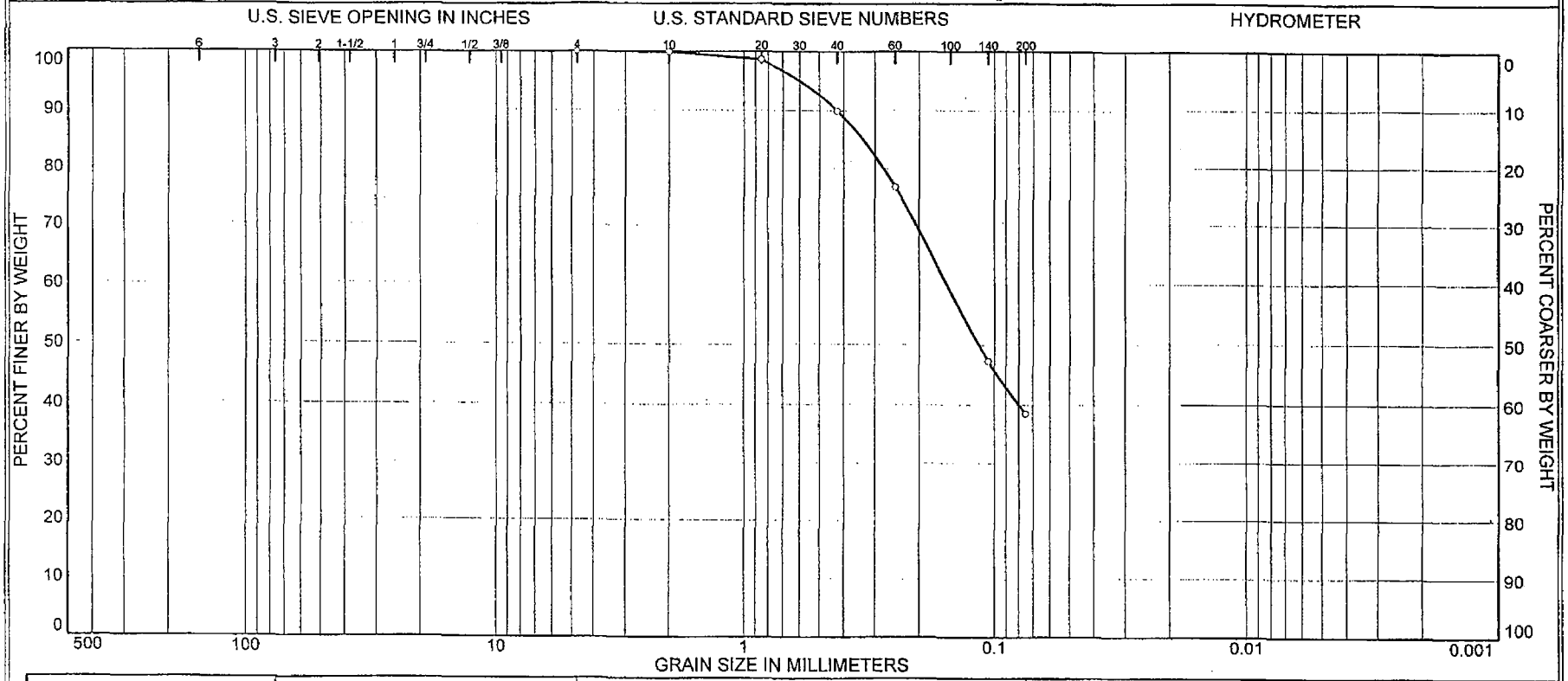
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.20	100
20	4.27	99
# 40	26.29	91
# 60	66.64	77
# 140	144.25	49
# 200	168.11	41

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 59 (% coarse = 0 % medium = 9 % fine = 50)
% FINES = 41

D_{85}= 0.33 D_{60}= 0.15 D_{50}= 0.11

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	10	52	39	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	9	23.5'	8/15/06		SAND Silty (SM); Brown, Micaceous	22.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JBS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/15/06 **Natural Moisture:** 22.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	201.14
Tare =	13.55
Dry sample weight =	187.59

Tare for cumulative weight retained= .00

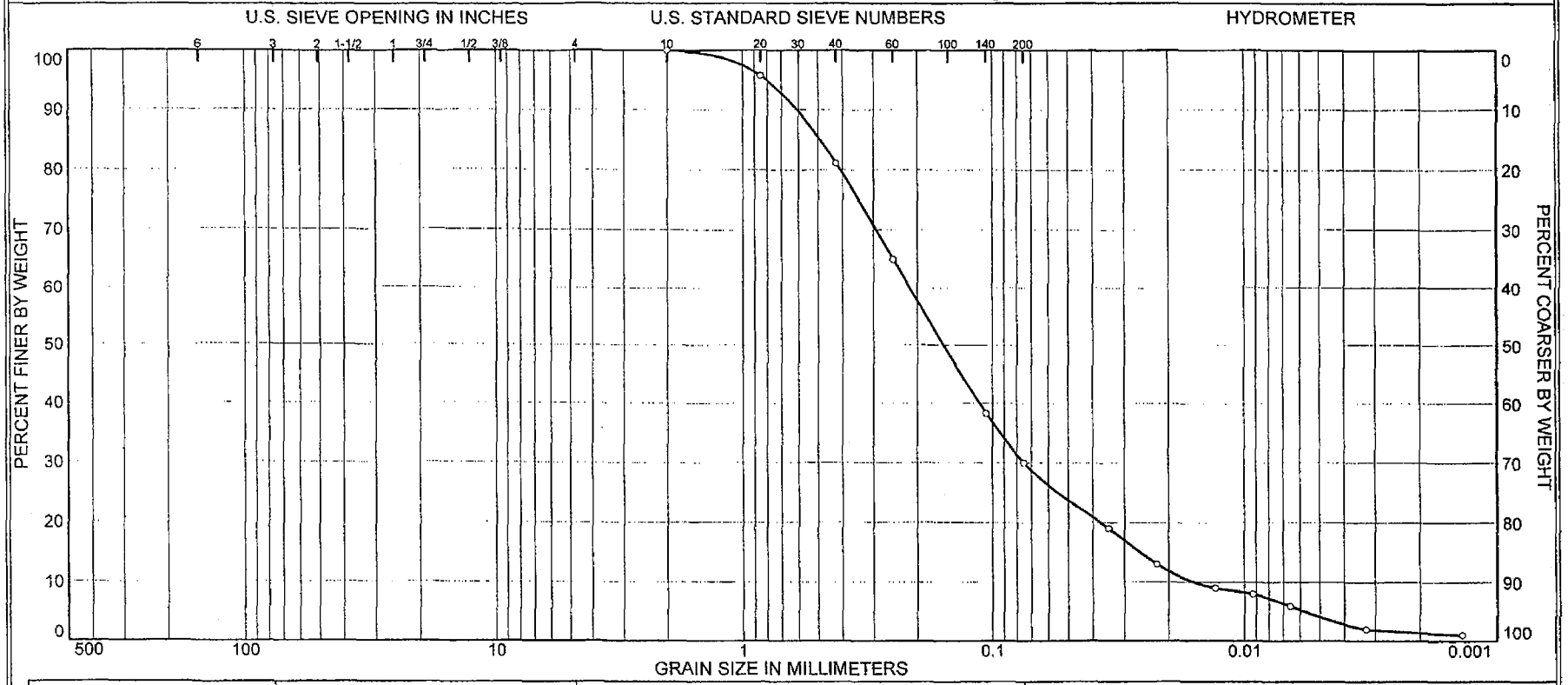
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.23	100
20	2.53	99
# 40	18.96	90
# 60	43.73	77
# 140	98.85	47
# 200	115.31	39

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 62 (% coarse = 0 % medium = 10 % fine = 52)
% FINES = 39

D_{85}= 0.34 D_{60}= 0.16 D_{50}= 0.12

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	19	51	26	4

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-220	11	33.5'	8/20/06		SAND Silty (SM); Brown, Micaceous	20.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/20/06 **Natural Moisture:** 20.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	91.34
Tare =	0.00
Dry sample weight =	91.34

Sample split on number 10 sieve
Split sample data:
Sample and tare = 52.43 Tare = .00 Sample weight = 52.43
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	2.24	96
# 40	9.90	81
# 60	18.42	65
# 140	32.33	38
# 200	36.71	30

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 53.11
Hygroscopic moisture correction:
Moist weight & tare = 39.05
Dry weight & tare = 38.69
Tare = 10.99
Hygroscopic moisture= 1 %
Calculated biased weight= 52.43
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

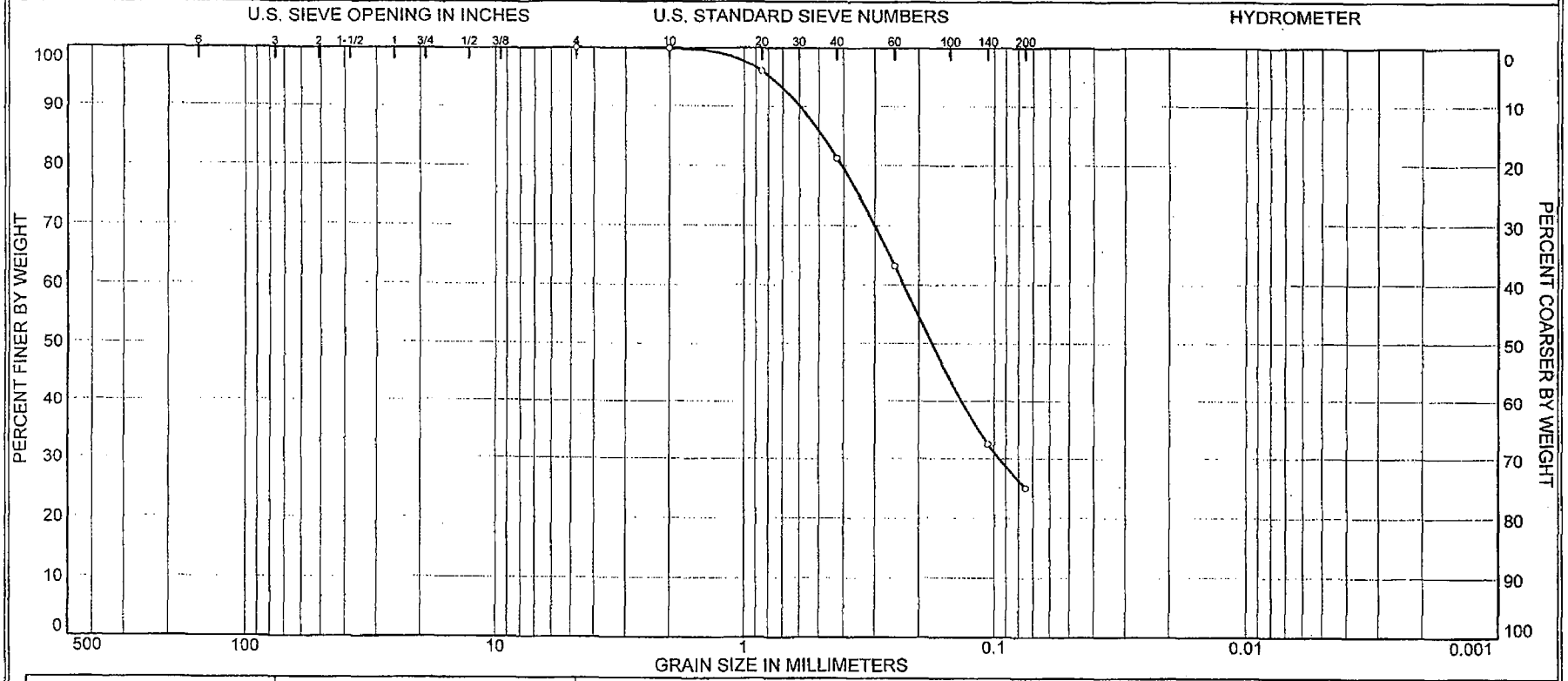
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	15.0	10.0	0.0132	15.0	13.8	0.0346	19
5.00	22.9	12.0	7.0	0.0132	12.0	14.3	0.0223	13
15.00	22.9	10.0	5.0	0.0132	10.0	14.7	0.0130	9
30.00	22.9	9.0	4.0	0.0132	9.0	14.8	0.0093	8
60.00	22.9	8.0	3.0	0.0132	8.0	15.0	0.0066	6
250.00	22.9	6.0	1.0	0.0132	6.0	15.3	0.0033	2
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 70 (**% coarse =** **% medium** = 19 **% fine** = 51)
% SILT = 26 **% CLAY** = 4

D_{85}= 0.49 D_{60}= 0.21 D_{50}= 0.16
D_{30}= 0.08 D_{15}= 0.03 D_{10}= 0.02
C_c= 1.639 C_u= 13.4623

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	19	56	25	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	12A	41.0'	8/15/06		SAND Silty (SM); Brown, Micaceous	19.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 12A
Elev. or Depth: 41.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/15/06 **Natural Moisture:** 19.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	199.49
Tare =	13.54
Dry sample weight =	185.95

Tare for cumulative weight retained= .00

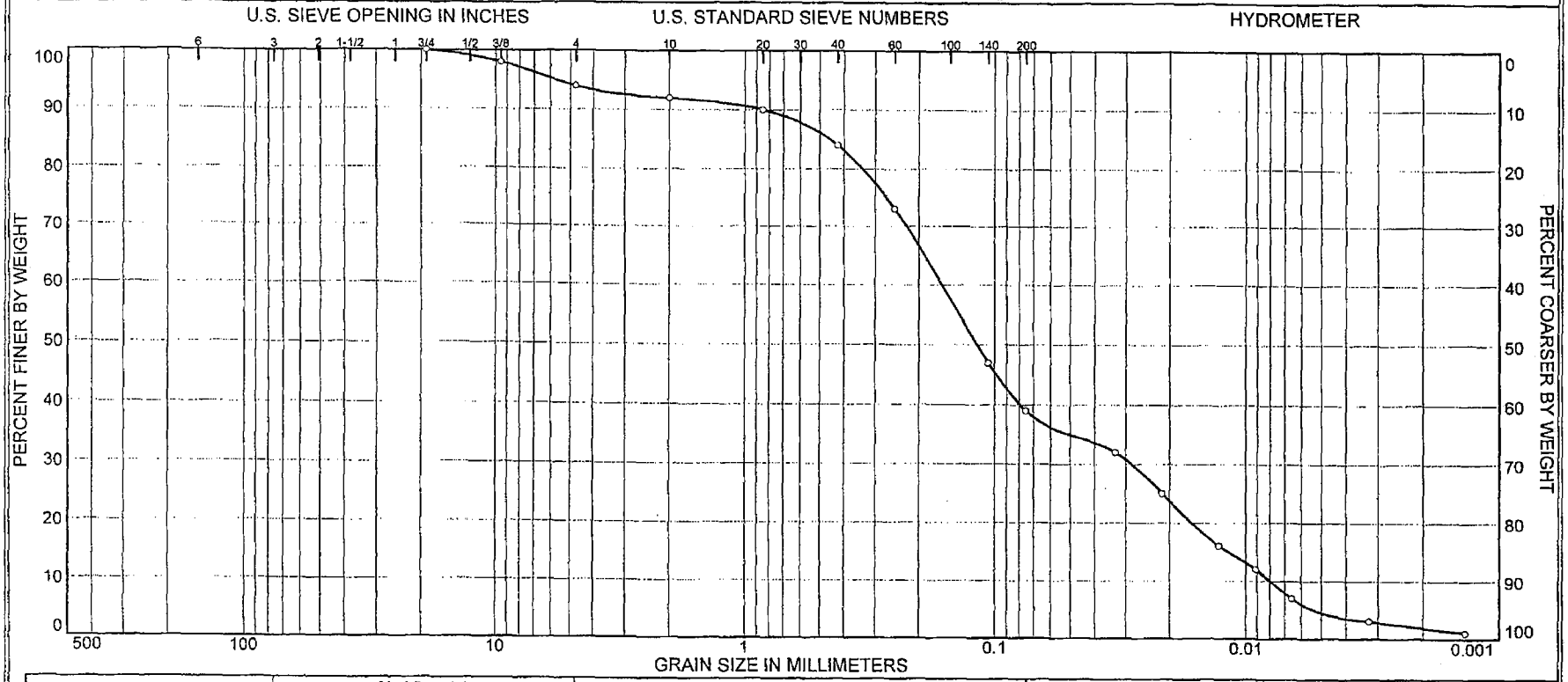
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.19	100
20	7.49	96
# 40	34.92	81
# 60	68.49	63
# 140	125.52	33
# 200	139.42	25

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 75 (% coarse = 0 % medium = 19 % fine = 56)
% FINES = 25

D_{85}= 0.49 D_{60}= 0.23 D_{50}= 0.18
D_{30}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	6	2	8	45	35	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	14	48.5'	8/31/06		SAND Silty (SM); Brown, Micaceous	27.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 14
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/31/06 **Natural Moisture:** 27.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	84.07
Tare =	0.00
Dry sample weight =	84.07

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.34 Tare = .00 Sample weight = 51.34
Cumulative weight retained tare= .00
e for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100
.375 inch	2.09	98
# 4	5.34	94
# 10	7.13	92
# 20	0.92	90
# 40	4.21	84
# 60	10.63	73
# 140	25.03	47
# 200	29.51	39

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 92
Weight of hydrometer sample: 52.47
Hygroscopic moisture correction:
Moist weight & tare = 36.86
Dry weight & tare = 36.31
Tare = 10.84
Hygroscopic moisture= 2 %
Calculated biased weight= 55.83
Table of composite correction values:

emp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0

Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

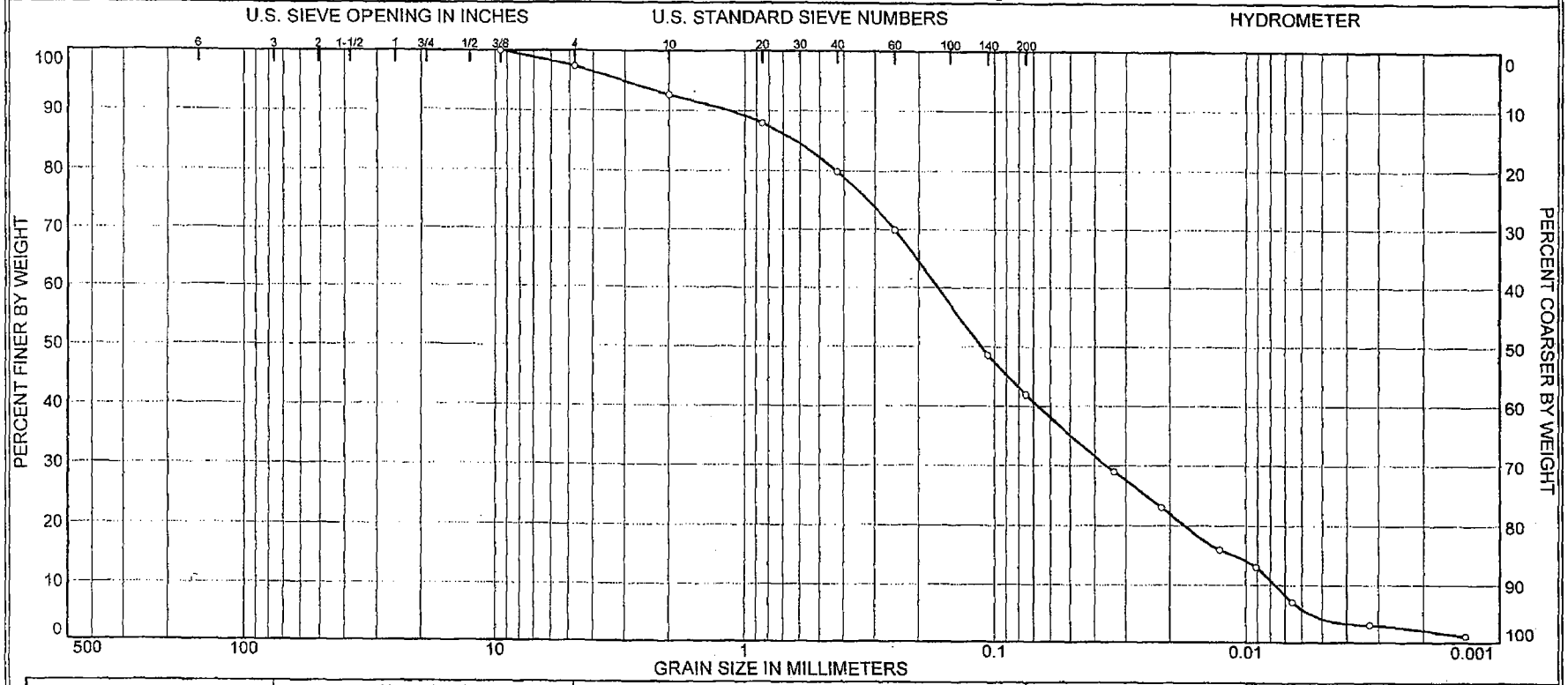
lapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	23.0	17.9	0.0132	23.0	12.5	0.0330	32
5.00	22.7	19.0	13.9	0.0132	19.0	13.2	0.0214	25
15.00	22.7	14.0	8.9	0.0132	14.0	14.0	0.0128	16
30.00	22.7	12.0	6.9	0.0132	12.0	14.3	0.0091	12
60.00	22.7	9.0	3.9	0.0132	9.0	14.8	0.0066	7
250.00	22.7	7.0	1.9	0.0132	7.0	15.1	0.0032	3
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 6 (% coarse = % fine = 6)
% SAND = 55 (% coarse = 2 % medium = 8 % fine = 45)
% SILT = 35 % CLAY = 4

D_{85}= 0.46 D_{60}= 0.16 D_{50}= 0.12
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.6251 C_u= 20.2751

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	3	5	13	38	38	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-220	16	58.5'	8/31/06		SAND Silty (SM); Brown, Micaceous	22.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-17-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-220
Sample No.: 16
Elev. or Depth: 58.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/31/06 **Natural Moisture:** 22.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	89.52
Tare =	0.00
Dry sample weight =	89.52

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.28 Tare = .00 Sample weight = 51.28
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	2.30	97
# 10	6.52	93
# 20	2.67	88
# 40	7.12	80
# 60	12.61	70
# 140	24.40	49
# 200	28.12	42

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 93
Weight of hydrometer sample: 52.56
Hygroscopic moisture correction:
Moist weight & tare = 43.52
Dry weight & tare = 42.74
Tare = 11.56
Hygroscopic moisture= 3 %
Calculated biased weight= 55.14
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

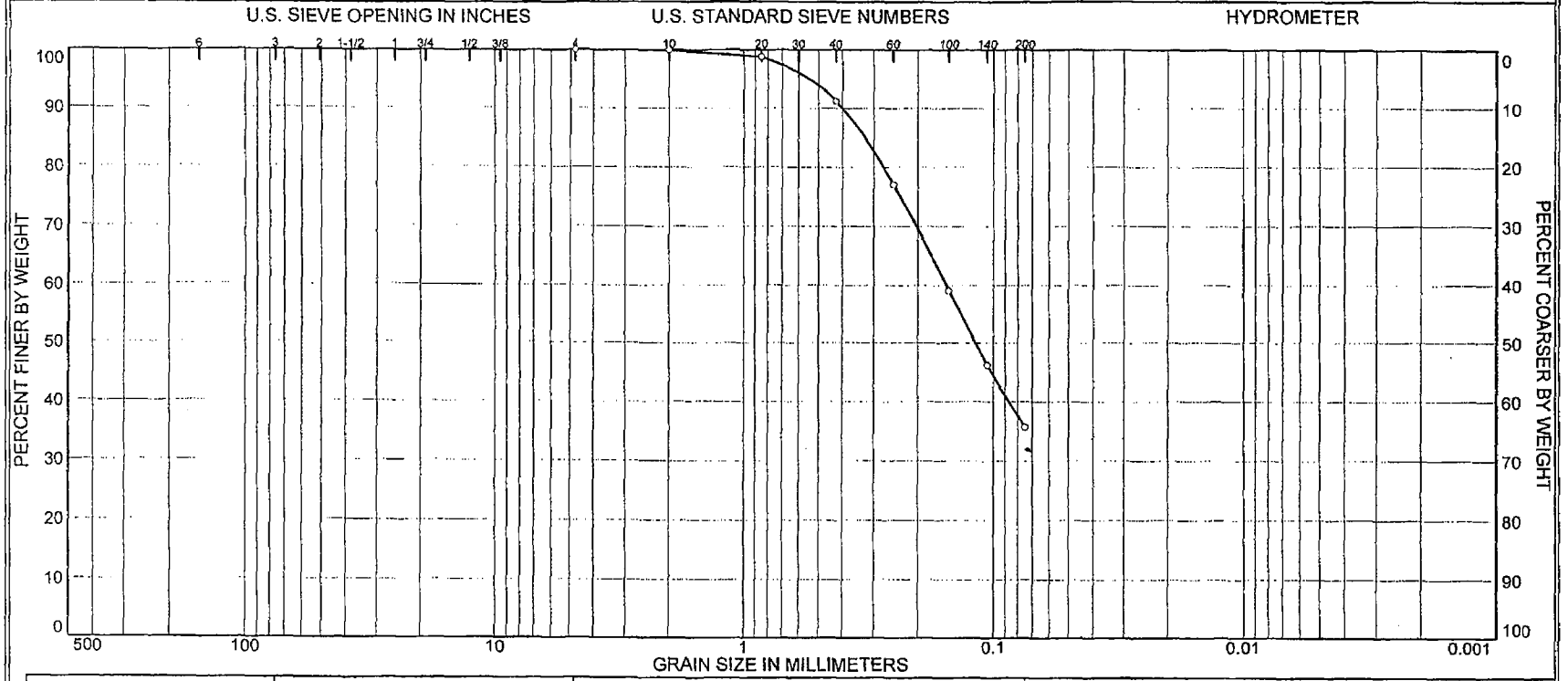
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.7	21.0	15.9	0.0132	21.0	12.9	0.0335	29
5.00	22.7	18.0	12.9	0.0132	18.0	13.3	0.0216	23
15.00	22.7	14.0	8.9	0.0132	14.0	14.0	0.0128	16
30.00	22.7	12.0	6.9	0.0132	12.0	14.3	0.0091	13
60.00	22.7	9.0	3.9	0.0132	9.0	14.8	0.0066	7
250.00	22.7	7.0	1.9	0.0132	7.0	15.1	0.0032	3
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 3 (**% coarse =** **% fine** = 3)
% SAND = 56 (**% coarse** = 5 **% medium** = 13 **% fine** = 38)
% SILT = 38 **% CLAY** = 4

D_{85}= 0.63 D_{60}= 0.17 D_{50}= 0.11
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.9969 C_u= 21.8296

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	9	55	36	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-222	UD-3	28.5 F.	11/17/06		Silty sand	N/A		

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 6319-04

11/29/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-222
Sample No.: UD-3
Elev. or Depth: 28.5 F. **Sample Length(in./cm.):** 5386
Location: B-222
Description: Silty sand
Date: 11/17/06 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 6319-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	169.93
Tare =	0.00
Dry sample weight =	169.93

Tare for cumulative weight retained= .00

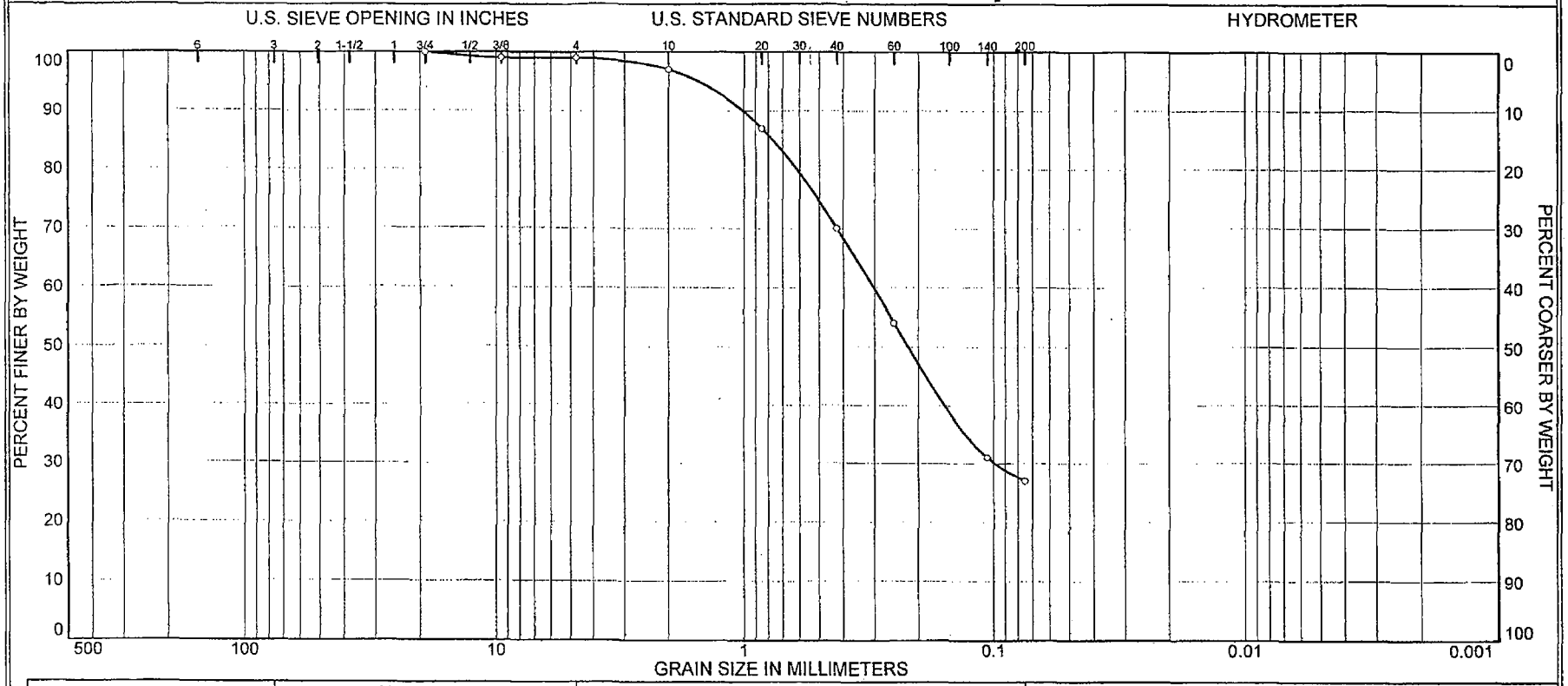
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.09	100
# 20	2.05	99
# 40	14.95	91
# 60	39.02	77
# 100	69.72	59
# 140	91.37	46
# 200	109.26	36

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 64 (% coarse = 0 % medium = 9 % fine = 56)
% FINES = 36

D_{85}= 0.33 D_{60}= 0.15 D_{50}= 0.12

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	1	2	27	43	27	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-301	2	1.5'	8/15/06		SAND Silty (SM); Strong Brown	12.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown
Date: 8/15/06 **Natural Moisture:** 12.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample mass was less than required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	416.61
Tare =	189.02
Dry sample weight =	227.59

Tare for cumulative weight retained= .00

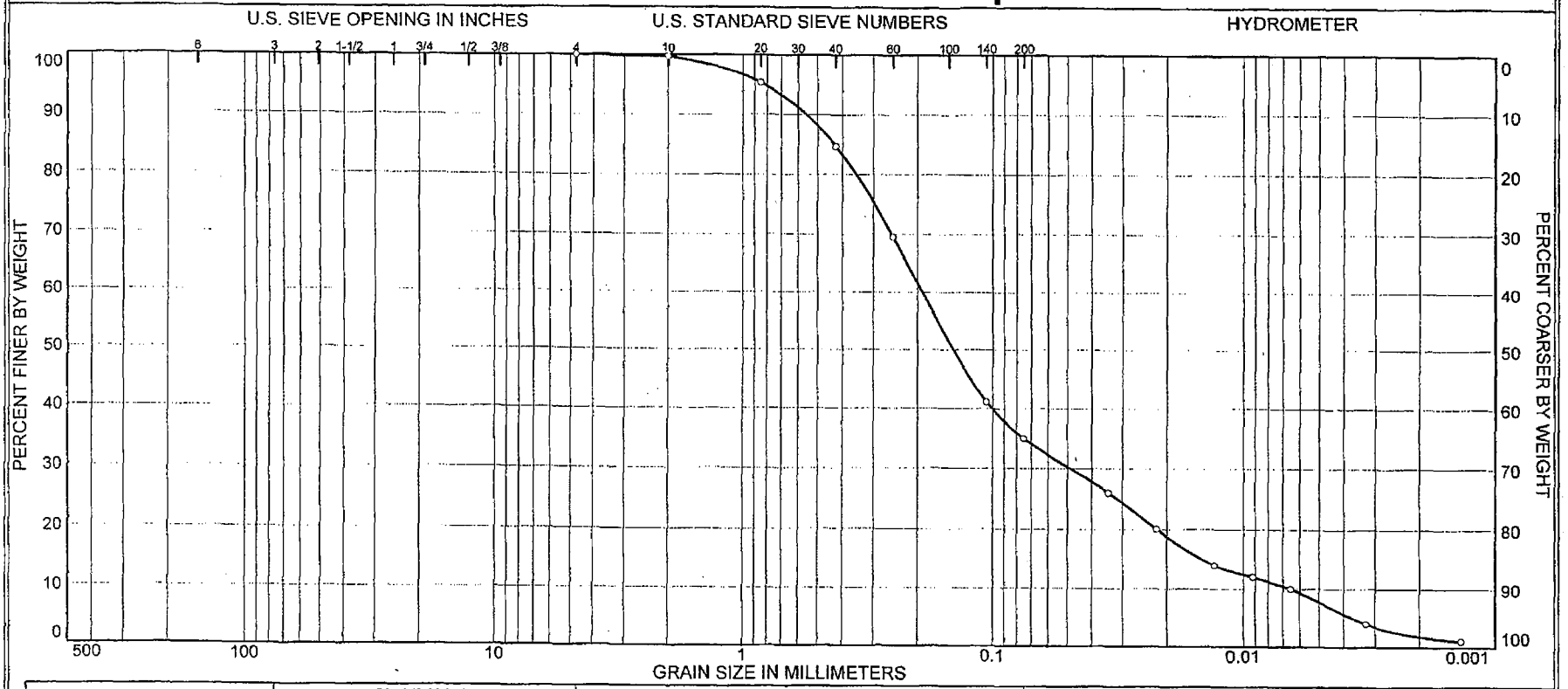
Sieve	Cumul. Wt. retained	Percent finer
75 inch	0.00	100
.375 inch	1.88	99
# 4	3.21	99
# 10	7.52	97
# 20	29.39	87
# 40	68.61	70
# 60	104.58	54
# 140	156.16	31
# 200	167.27	27

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL = 1** **(% coarse =** **% fine = 1)**
% SAND = 72 **(% coarse = 2** **% medium = 27** **% fine = 43)**
% FINES = 27

D_{85}= 0.77 D_{60}= 0.30 D_{50}= 0.22
D_{30}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	15	50	27	8

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	4	6.0'	9/14/06		SAND Silty (SM); Strong Brown and Light Gray, Slightly Micaceous	18.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown and Light Gray, Slightly Micaceous
Date: 9/14/06 **Natural Moisture:** 18.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	73.21
Tare =	0.00
Dry sample weight =	73.21

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.35 Tare = .00 Sample weight = 50.35
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.23	100
# 20	2.17	95
# 40	7.56	85
# 60	15.27	70
# 140	29.58	41
# 200	32.65	35

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 50.85
Hygroscopic moisture correction:
Moist weight & tare = 34.28
Dry weight & tare = 34.05
Tare = 11.49
Hygroscopic moisture= 1 %
Calculated biased weight= 50.34
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

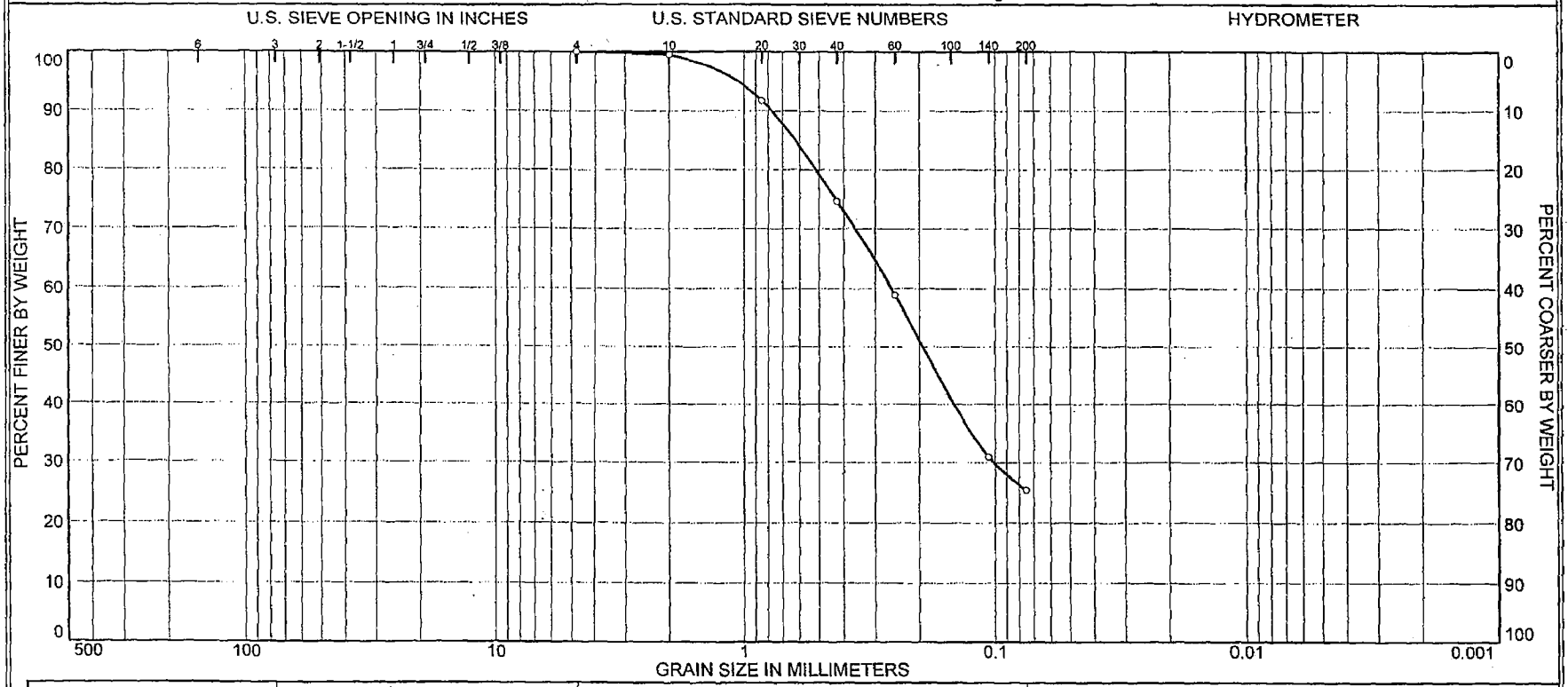
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.6	18.0	12.9	0.0132	18.0	13.3	0.0341	26
5.00	22.6	15.0	9.9	0.0132	15.0	13.8	0.0220	20
15.00	22.6	12.0	6.9	0.0132	12.0	14.3	0.0129	14
30.00	22.6	11.0	5.9	0.0132	11.0	14.5	0.0092	12
60.00	22.6	10.0	4.9	0.0132	10.0	14.7	0.0065	10
250.00	22.6	7.0	1.9	0.0132	7.0	15.1	0.0033	4
1440.00	22.6	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 65 (**% coarse** = 0 **% medium** = 15 **% fine** = 50)
% SILT = 27 **% CLAY** = 8

D_{85}= 0.43 D_{60}= 0.19 D_{50}= 0.14
D_{30}= 0.05 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.9032 C_u= 29.3135

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	25	49	25	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	6	11.0'	8/15/06		SAND Silty (SM); Strong Brown, Light Gray, Micaceous	15.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Light Gray, Micaceous
Date: 8/15/06 **Natural Moisture:** 15.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	430.13
Tare =	195.65
Dry sample weight =	234.48

Tare for cumulative weight retained= .00

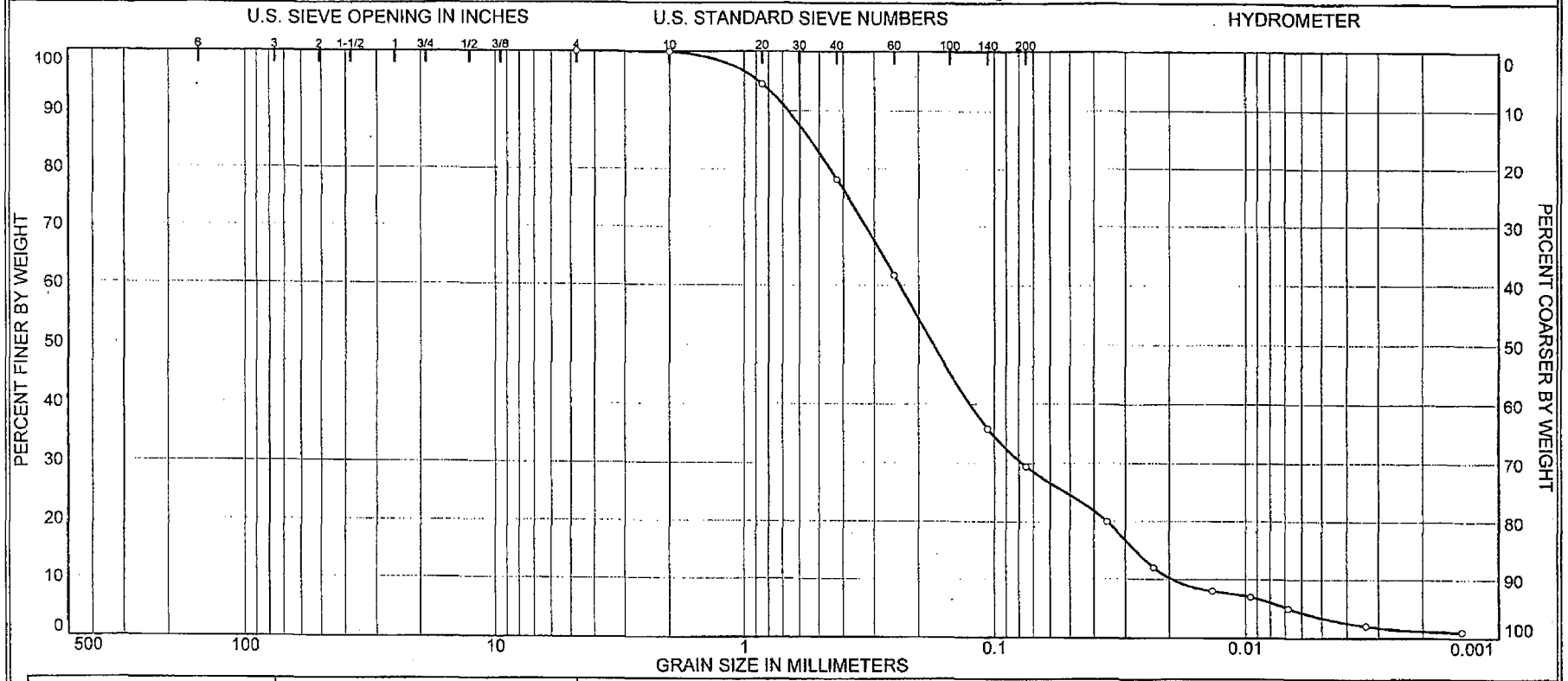
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.10	100
# 20	19.42	92
# 40	59.58	75
# 60	96.48	59
# 140	161.97	31
# 200	174.98	25

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 75 (% coarse = 1 % medium = 25 % fine = 49)
% FINES = 25

D_{85}= 0.62 D_{60}= 0.26 D_{50}= 0.19
D_{30}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	22	49	26	3

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	7	13.5'	8/6/06	SM	SAND Silty (SM); Brown, Micaceous	15.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/6/06 **Natural Moisture:** 15.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	156.05
Tare =	0.00
Dry sample weight =	156.05

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.95 Tare = .00 Sample weight = 50.95
Cumulative weight retained tare= .00
e for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.18	100
# 20	2.77	95
# 40	11.10	78
# 60	19.51	62
# 140	32.69	36
# 200	35.94	29

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.36
Hygroscopic moisture correction:
Moist weight & tare = 38.52
Dry weight & tare = 38.31
Tare = 11.02
Hygroscopic moisture= 1 %
Calculated biased weight= 50.97
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

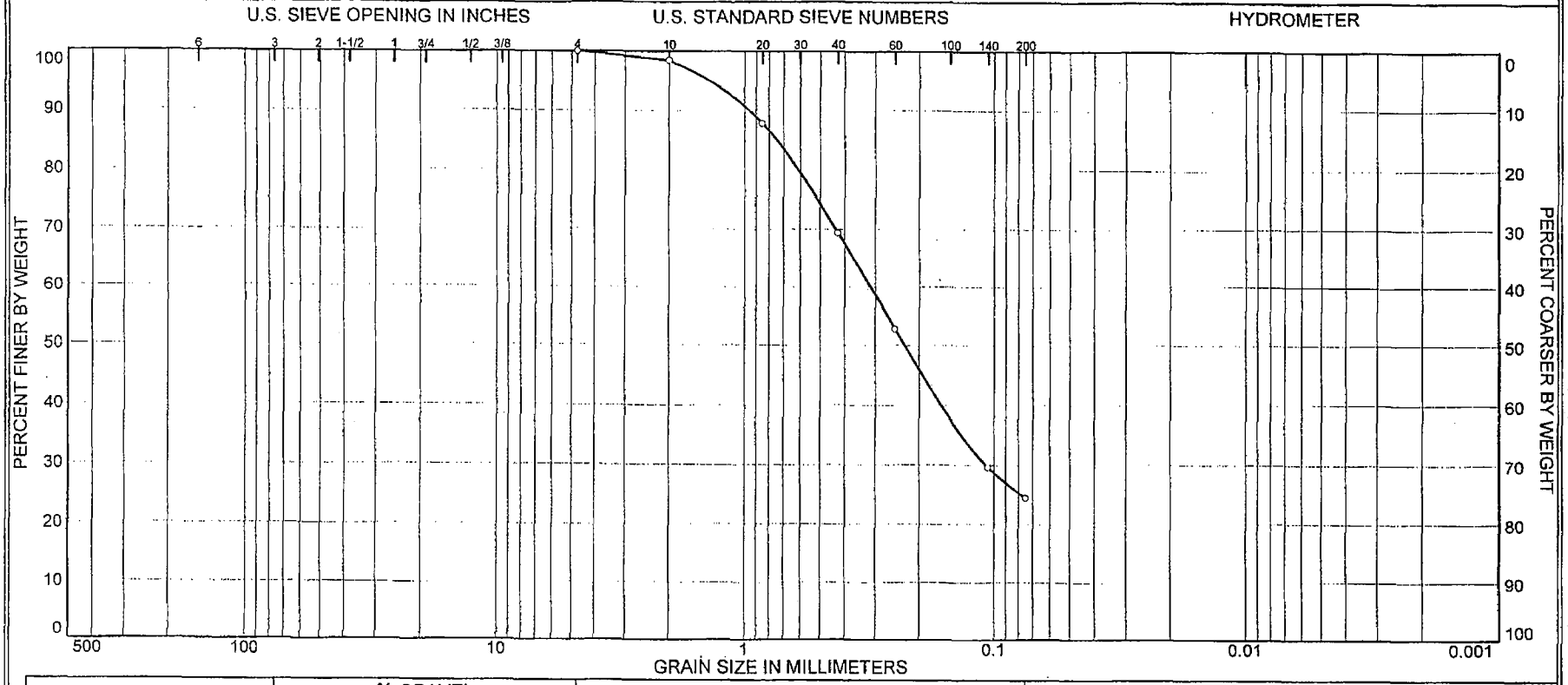
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	16.0	10.3	0.0136	16.0	13.7	0.0355	20
5.00	20.3	12.0	6.3	0.0136	12.0	14.3	0.0230	12
15.00	20.3	10.0	4.3	0.0136	10.0	14.7	0.0134	8
30.00	20.3	9.0	3.3	0.0136	9.0	14.8	0.0096	7
60.00	20.3	8.0	2.3	0.0136	8.0	15.0	0.0068	5
250.00	20.3	6.5	0.8	0.0136	6.5	15.2	0.0034	2
1440.00	20.3	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 71 (**% coarse** = 0 **% medium** = 22 **% fine** = 49)
% SILT = 26 **% CLAY** = 3

D_{85}= 0.54 D_{60}= 0.24 D_{50}= 0.18
D_{30}= 0.08 D_{15}= 0.03 D_{10}= 0.02
C_c= 1.315 C_u= 12.2234

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	2	29	45	24	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	8	18.5'	8/15/06		SAND Silty (SM); Brown, Micaceous	15.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/15/06 **Natural Moisture:** 15.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	363.63
Tare =	189.39
Dry sample weight =	174.24

Tare for cumulative weight retained= .00

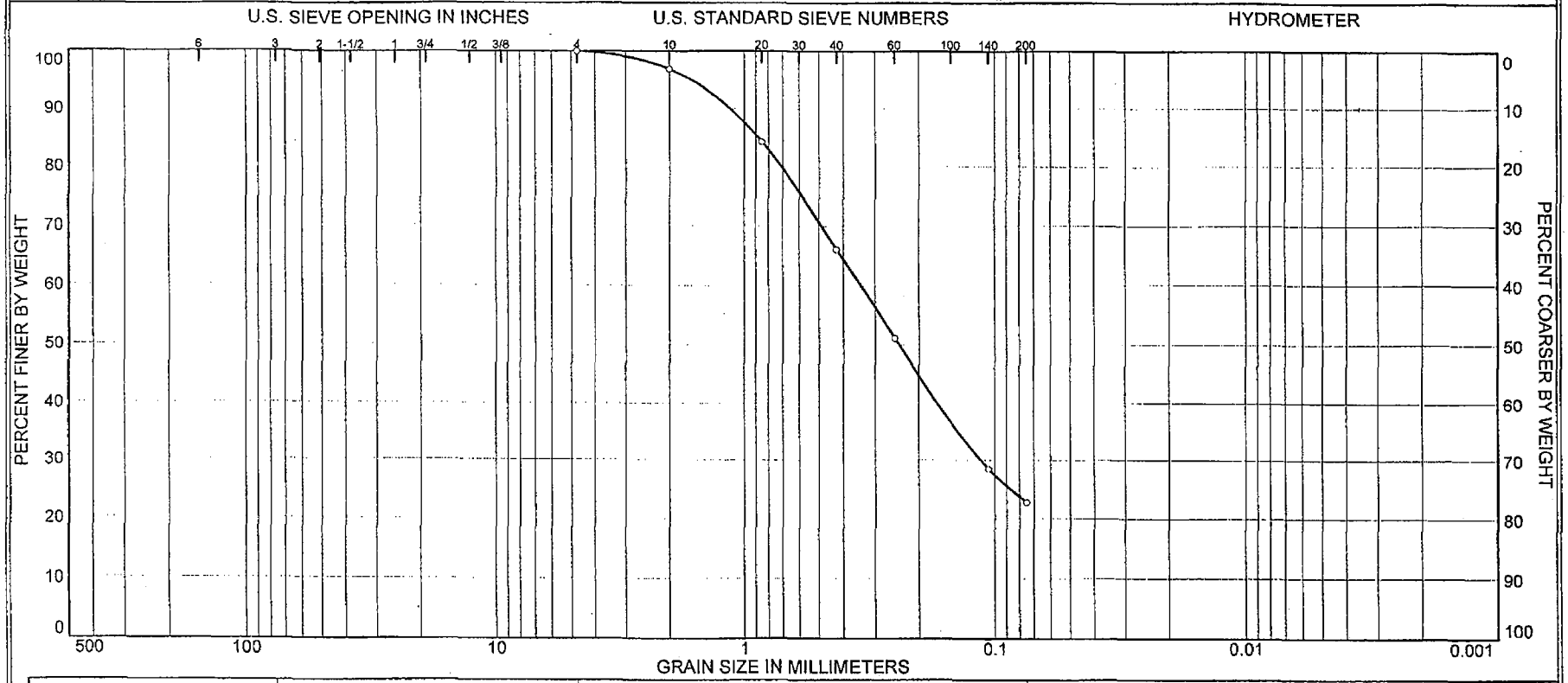
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
10	2.54	99
20	21.23	88
# 40	53.37	69
# 60	82.25	53
# 140	122.67	30
# 200	131.77	24

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 76 (% coarse = 2 % medium = 29 % fine = 45)
% FINES = 24

D_{85}= 0.75 D_{60}= 0.31 D_{50}= 0.23
D_{30}= 0.11

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	3	31	43	23	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-301	9	23.5'	8/15/06		SAND Silty (SM); Brown, Micaceous	14.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

Tested by: FHM Reviewed by: JRS

ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/15/06 **Natural Moisture:** 14.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	368.00
Tare =	110.70
Dry sample weight =	257.30

Tare for cumulative weight retained= .00

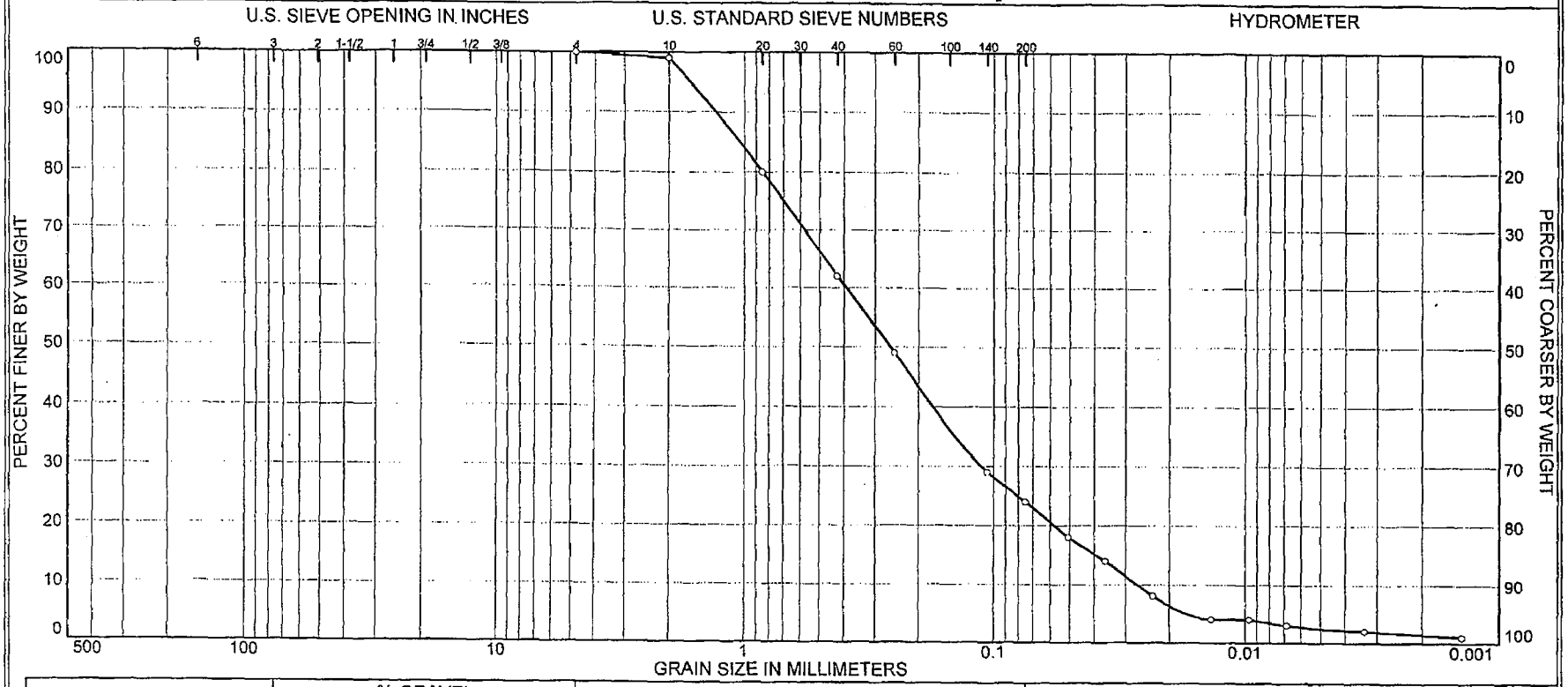
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	7.93	97
# 20	40.56	84
# 40	87.24	66
# 60	125.82	51
# 140	184.08	29
# 200	198.74	23

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 77 (% coarse = 3 % medium = 31 % fine = 43)
% FINES = 23

D_{85}= 0.88 D_{60}= 0.34 D_{50}= 0.24
D_{30}= 0.11

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	37	38	22	2

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	10	28.5'	8/6/06	SM	SAND Silty (SM); Brown, Micaceous	15.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/6/06 **Natural Moisture:** 15.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	164.66
Tare =	0.00
Dry sample weight =	164.66

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.15 Tare = .00 Sample weight = 51.15
Cumulative weight retained tare= .00
e for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.90	99
# 20	9.70	80
# 40	18.93	62
# 60	25.83	49
# 140	36.05	29
# 200	38.73	24

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 51.51
Hygroscopic moisture correction:
Moist weight & tare = 39.55
Dry weight & tare = 39.35
Tare = 10.72
Hygroscopic moisture= 1 %
Calculated biased weight= 51.67
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

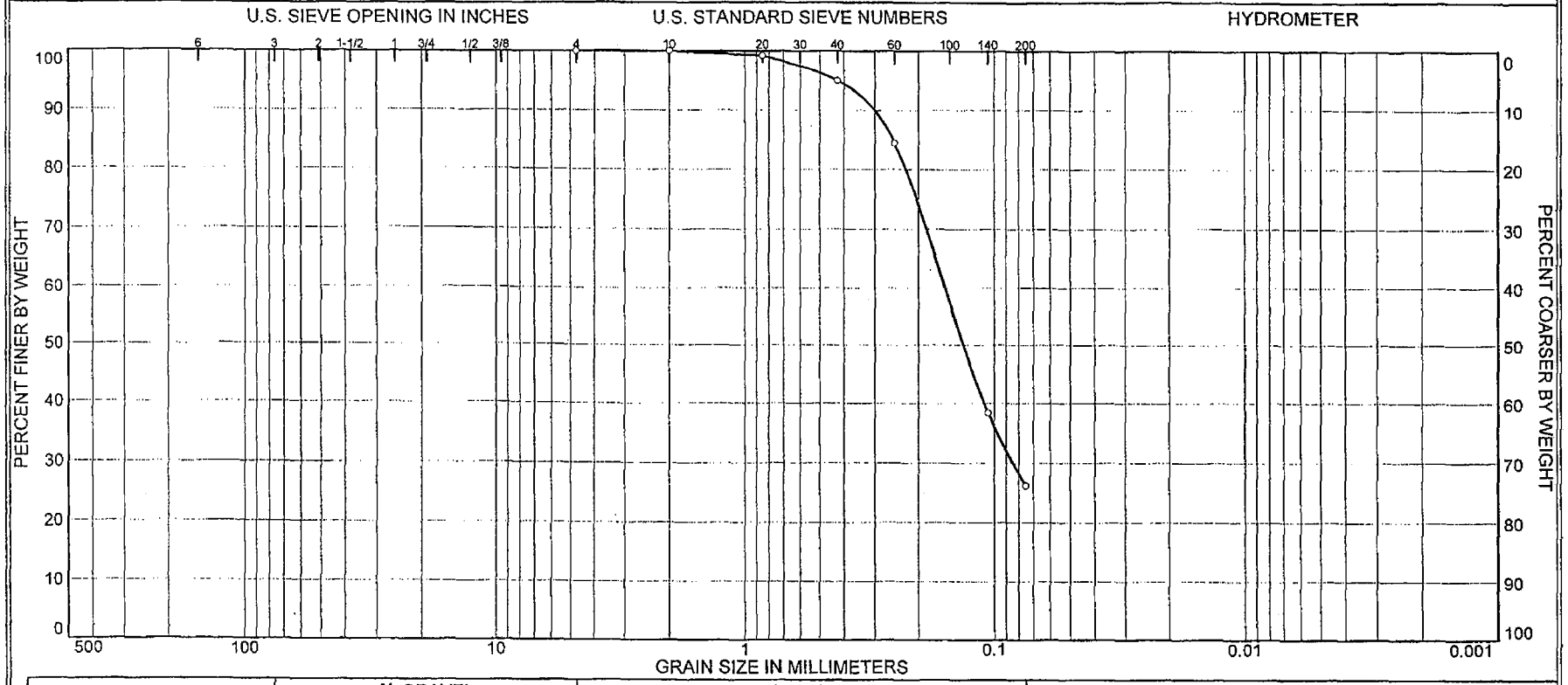
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	20.3	15.0	9.3	0.0136	15.0	13.8	0.0506	18
2.00	20.3	13.0	7.3	0.0136	13.0	14.2	0.0362	14
5.00	20.3	10.0	4.3	0.0136	10.0	14.7	0.0233	8
15.00	20.3	8.0	2.3	0.0136	8.0	15.0	0.0136	4
30.00	20.3	7.5	1.8	0.0136	7.5	15.1	0.0096	4
60.00	20.3	7.0	1.3	0.0136	7.0	15.1	0.0068	3
250.00	20.3	6.5	0.8	0.0136	6.5	15.2	0.0034	2
1440.00	20.3	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 76 **(% coarse =** 1 **% medium =** 37 **% fine =** 38**)**
% SILT = 22 **% CLAY =** 2

D_{85}= 1.05 D_{60}= 0.39 D_{50}= 0.26
D_{30}= 0.11 D_{15}= 0.04 D_{10}= 0.03
C_C= 1.1883 C_u= 14.5085

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	5	69	26	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	11	33.5'	8/15/06		SAND Silty (SM); Brown, Very Micaceous	17.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Very Micaceous
Date: 8/15/06 **Natural Moisture:** 17.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	382.68
Tare =	110.44
Dry sample weight =	272.24

Tare for cumulative weight retained= .00

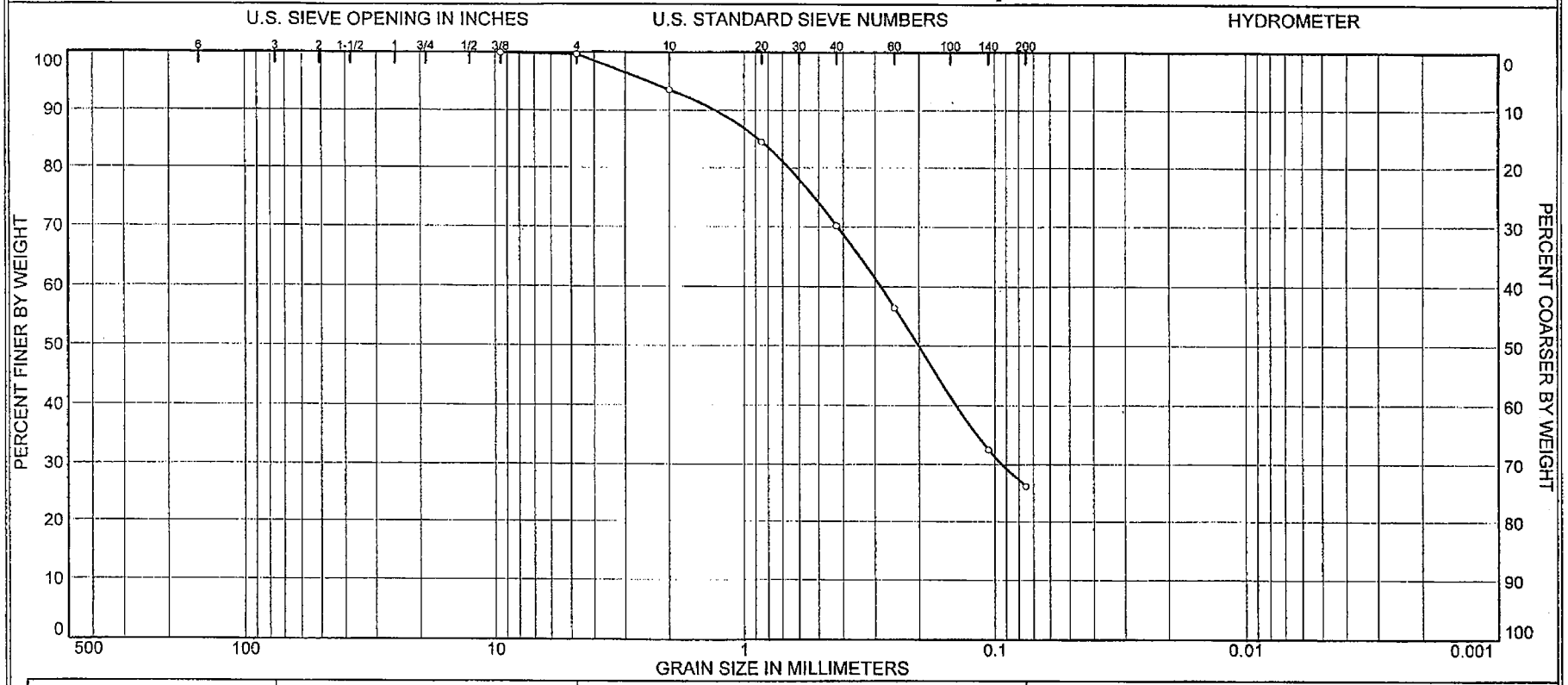
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.11	100
# 20	2.16	99
# 40	13.72	95
# 60	42.26	85
# 140	167.75	38
# 200	200.79	26

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 74 (% coarse = 0 % medium = 5 % fine = 69)
% FINES = 26

D_{85}= 0.25 D_{60}= 0.16 D_{50}= 0.13
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	6	23	45	26	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	12	38.5'	8/15/06		SAND Silty (SM); Brown, Micaceous	19.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/15/06 **Natural Moisture:** 19.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	344.39
Tare =	92.77
Dry sample weight =	251.62

Tare for cumulative weight retained= .00

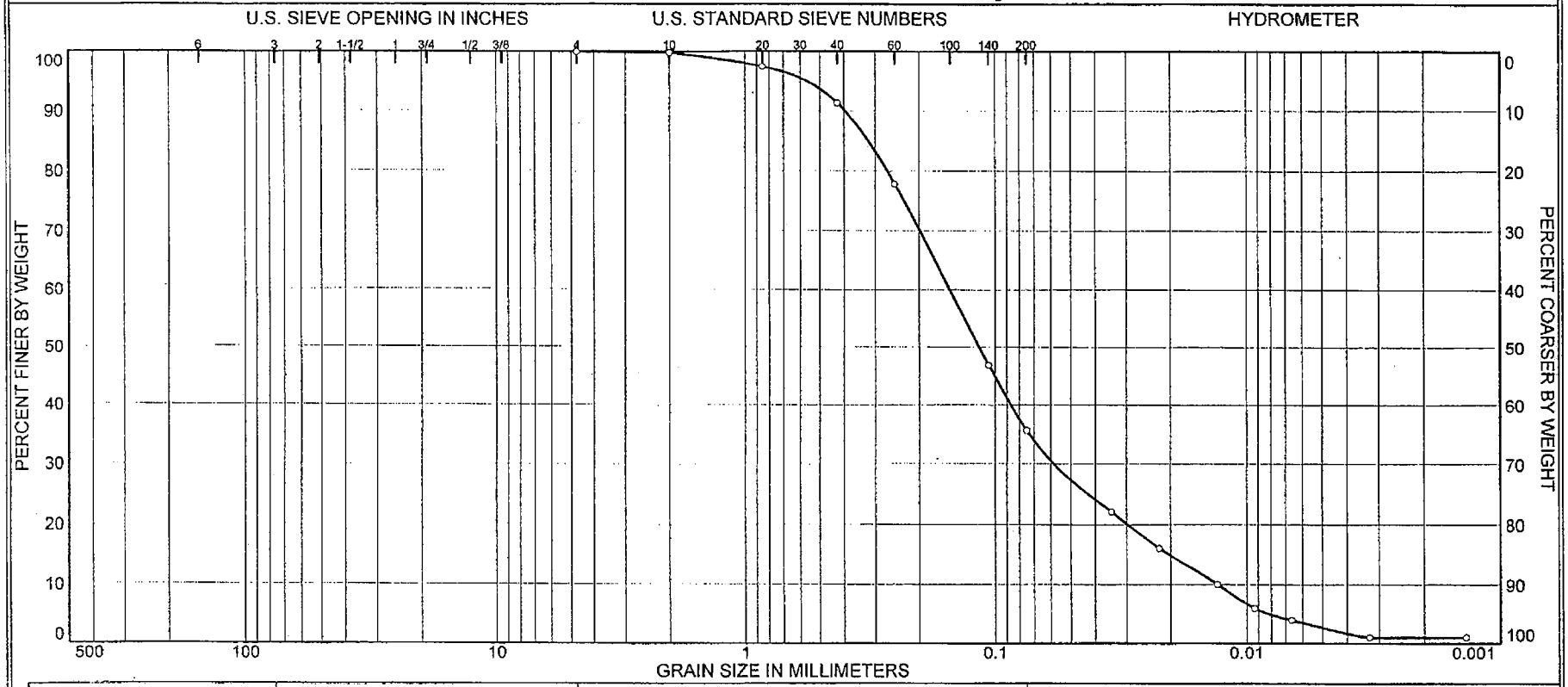
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.83	100
# 10	16.03	94
# 20	38.99	85
# 40	74.95	70
# 60	109.62	56
# 140	169.74	33
# 200	186.07	26

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 0 **(% coarse =** **% fine =** 0)
% SAND = 74 **(% coarse =** 6 **% medium =** 23 **% fine =** 45)
% FINES = 26

D_{85}= 0.88 D_{60}= 0.28 D_{50}= 0.20
D_{30}= 0.09

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	9	55	33	3

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	13	43.5'	8/17/06		SAND Silty (SM); Strong Brown, Micaceous	33.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 13
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 8/17/06 **Natural Moisture:** 33.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	150.79
Tare =	0.00
Dry sample weight =	150.79

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.90 Tare = .00 Sample weight = 50.90
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.30	100
# 20	1.18	98
# 40	4.36	91
# 60	11.15	78
# 140	27.00	47
# 200	32.68	36

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.71
Hygroscopic moisture correction:
Moist weight & tare = 37.31
Dry weight & tare = 36.89
Tare = 10.80
Hygroscopic moisture= 2 %
Calculated biased weight= 50.89
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

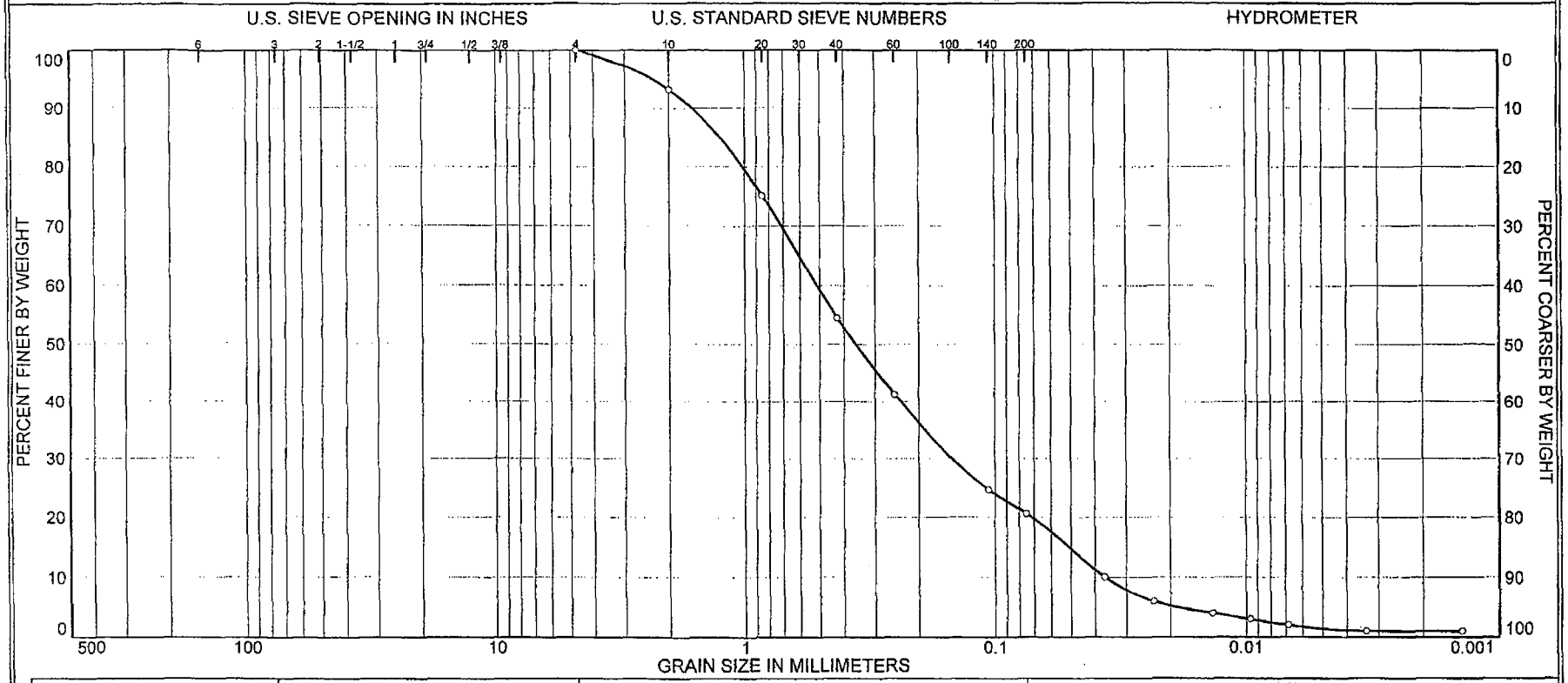
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	16.0	11.0	0.0132	16.0	13.7	0.0344	22
5.00	22.9	13.0	8.0	0.0132	13.0	14.2	0.0222	16
15.00	22.9	10.0	5.0	0.0132	10.0	14.7	0.0130	10
30.00	22.9	8.0	3.0	0.0132	8.0	15.0	0.0093	6
60.00	22.9	7.0	2.0	0.0132	7.0	15.1	0.0066	4
250.00	22.9	5.5	0.5	0.0132	5.5	15.4	0.0033	1
1440.00	22.7	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 64 (**% coarse** = 0 **% medium** = 9 **% fine** = 55)
% SILT = 33 **% CLAY** = 3

D_{85}= 0.32 D_{60}= 0.15 D_{50}= 0.12
D_{30}= 0.06 D_{15}= 0.02 D_{10}= 0.01
C_c= 1.7395 C_u= 11.5936

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	7	39	33	19	1

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-301	14	48.5'	8/6/06	SM	SAND Silty (SM); Yellowish Brown, Micaceous	18.4	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

Tested by: JA Reviewed by: JRS

ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 14
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Brown, Micaceous
Date: 8/6/06 **Natural Moisture:** 18.4
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	168.74
Tare =	0.00
Dry sample weight =	168.74

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.71 Tare = .00 Sample weight = 51.71
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	11.53	93
# 20	10.04	75
# 40	21.45	55
# 60	28.87	41
# 140	38.06	25
# 200	40.26	21

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 93
Weight of hydrometer sample: 52.23
Hygroscopic moisture correction:
Moist weight & tare = 42.58
Dry weight & tare = 42.27
Tare = 11.61
Hygroscopic moisture= 1 %
Calculated biased weight= 55.60
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

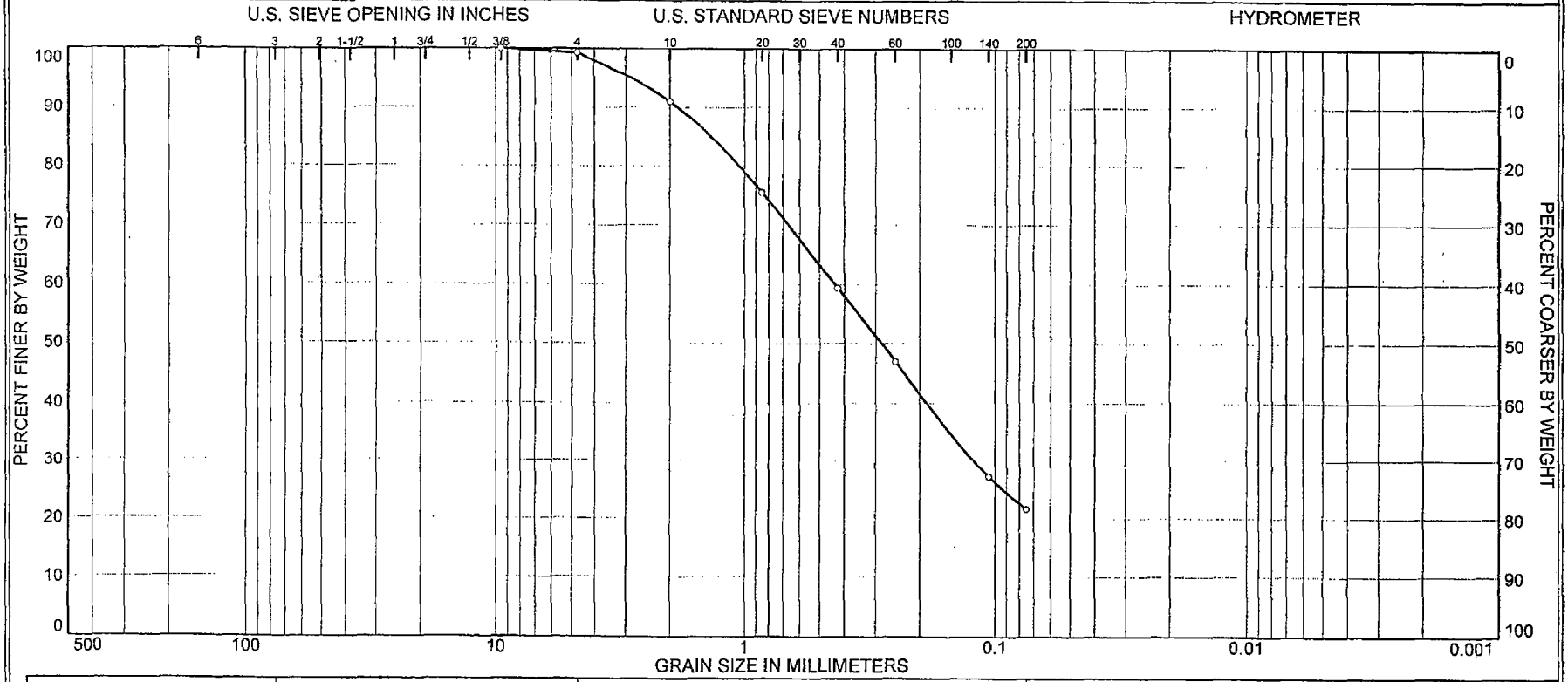
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	11.0	5.3	0.0136	11.0	14.5	0.0366	10
5.00	20.3	9.0	3.3	0.0136	9.0	14.8	0.0234	6
15.00	20.3	8.0	2.3	0.0136	8.0	15.0	0.0136	4
30.00	20.3	7.5	1.8	0.0136	7.5	15.1	0.0096	3
60.00	20.3	7.0	1.3	0.0136	7.0	15.1	0.0068	2
250.00	20.3	6.5	0.8	0.0136	6.5	15.2	0.0034	1
1440.00	20.3	6.0	0.3	0.0136	6.0	15.3	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 79 (**% coarse =** 7 **% medium =** 39 **% fine =** 33)
% SILT = 19 **% CLAY =** 1

D_{85}= 1.26 D_{60}= 0.51 D_{50}= 0.36
D_{30}= 0.15 D_{15}= 0.05 D_{10}= 0.04
C_c= 1.1724 C_u= 14.0294

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	1	8	32	38	22	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-301	15	53.5'	8/15/06		SAND Silty with Gravel (SM); Yellowish Brown, Micaceous	20.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-301
Sample No.: 15
Elev. or Depth: 53.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty with Gravel (SM); Yellowish Brown, Micaceous
Date: 8/15/06 **Natural Moisture:** 20.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	363.58
Tare =	91.17
Dry sample weight =	272.41

Tare for cumulative weight retained= .00

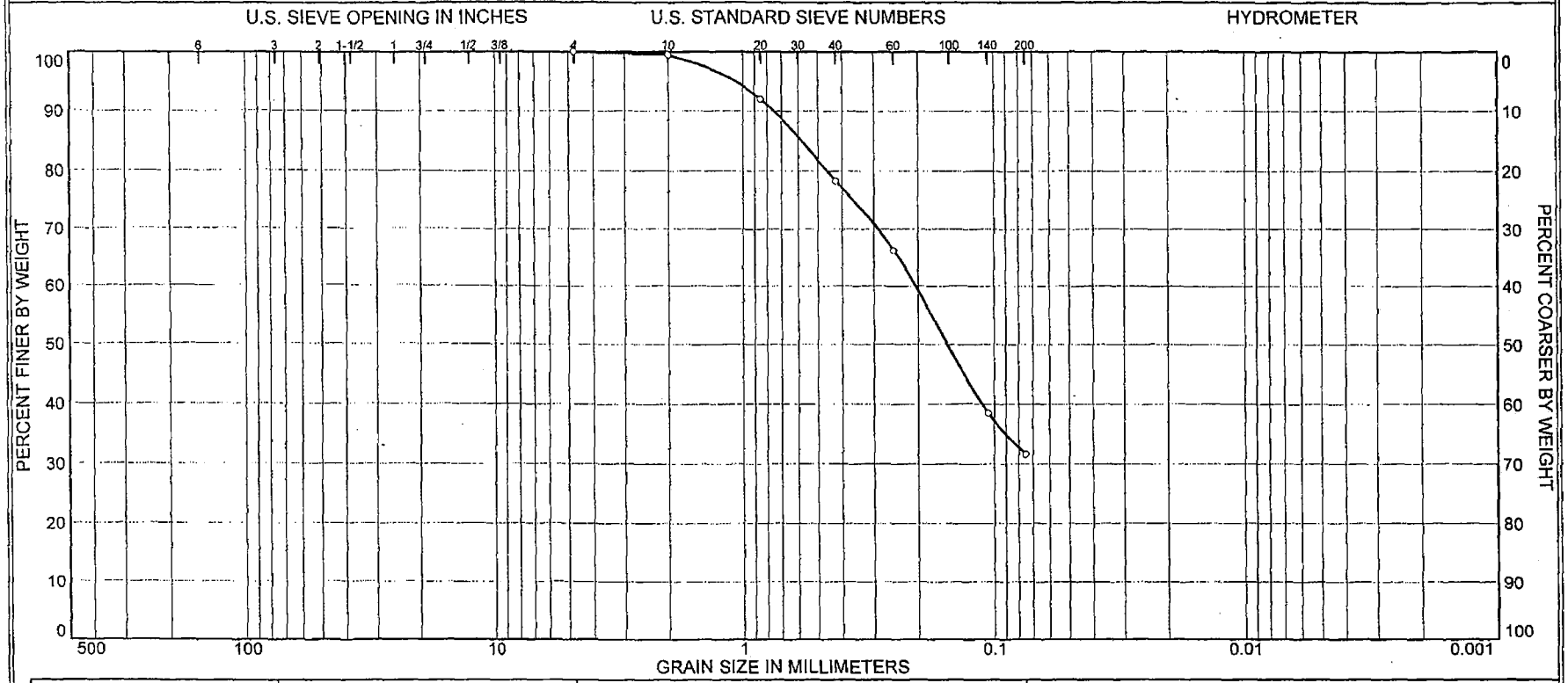
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	1.85	99
# 10	24.47	91
# 20	66.86	76
# 40	110.51	59
# 60	144.37	47
# 140	198.18	27
# 200	213.62	22

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 1 **(% coarse =** **% fine** = 1)
% SAND = 78 **(% coarse** = 8 **% medium** = 32 **% fine** = 38)
% FINES = 22

D_{85}= 1.37 D_{60}= 0.44 D_{50}= 0.28
D_{30}= 0.12

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	21	46	32	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-305	2	1.5'	8/6/06		SAND Silty (SM); Red	18.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-305
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red
Date: 8/6/06 **Natural Moisture:** 18.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	436.06
Tare =	190.79
Dry sample weight =	245.27

Tare for cumulative weight retained= .00

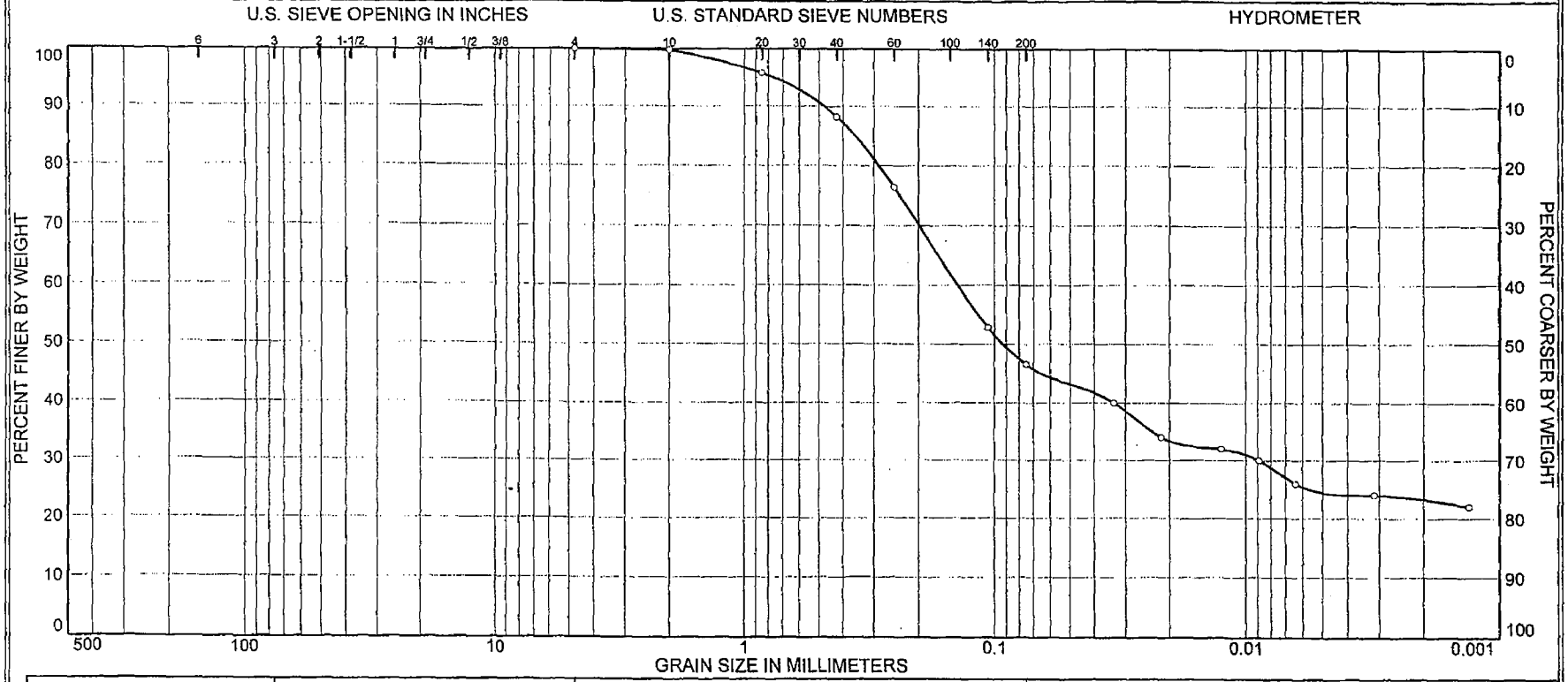
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.29	100
# 20	19.72	92
40	53.23	78
# 60	82.97	66
# 140	150.95	39
# 200	167.69	32

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 68 (**% coarse** = 1 **% medium** = 21 **% fine** = 46)
% FINES = 32

D_{85}= 0.58 D_{60}= 0.21 D_{50}= 0.15

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	12	42	22	24

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-305	3	3.5'	8/6/06	SM	SAND Silty (SM); Red, Micaceous	30.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-305
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Micaceous
Date: 8/6/06 **Natural Moisture:** 30.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	154.12
Tare =	0.00
Dry sample weight =	154.12

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.25 Tare = .00 Sample weight = 51.25
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.38	100
# 20	2.10	96
# 40	5.97	88
# 60	12.02	76
# 140	24.14	53
# 200	27.38	47

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.92
Hygroscopic moisture correction:
Moist weight & tare = 36.38
Dry weight & tare = 36.04
Tare = 10.80
Hygroscopic moisture= 1 %
Calculated biased weight= 51.23
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

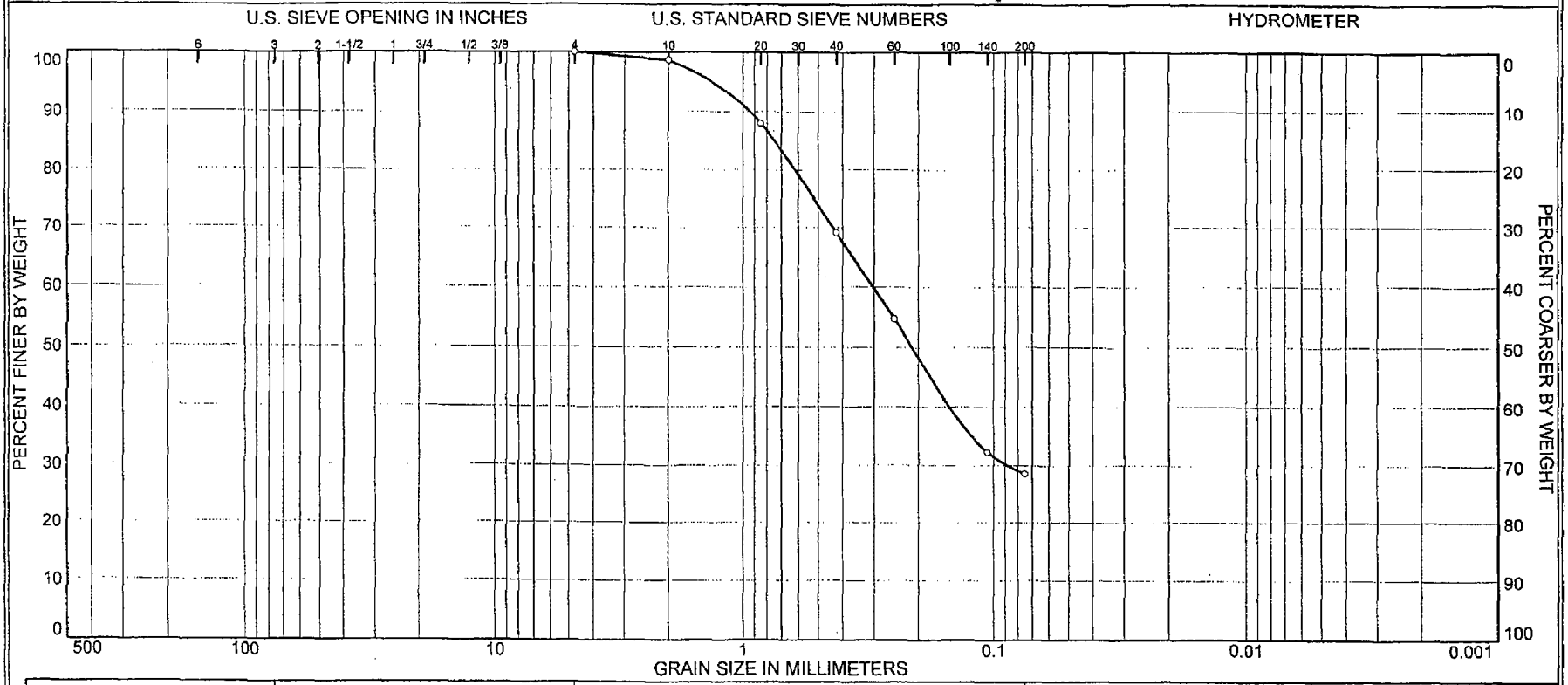
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	26.0	20.3	0.0136	26.0	12.0	0.0333	40
5.00	20.3	23.0	17.3	0.0136	23.0	12.5	0.0215	34
15.00	20.3	22.0	16.3	0.0136	22.0	12.7	0.0125	32
30.00	20.3	21.0	15.3	0.0136	21.0	12.9	0.0089	30
60.00	20.3	19.0	13.3	0.0136	19.0	13.2	0.0064	26
250.00	20.3	18.0	12.3	0.0136	18.0	13.3	0.0031	24
1440.00	20.3	17.0	11.3	0.0136	17.0	13.5	0.0013	22

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 54 (**% coarse** = 0 **% medium** = 12 **% fine** = 42)
% SILT = 22 **% CLAY** = 24

D_{85}= 0.36 D_{60}= 0.14 D_{50}= 0.09
D_{30}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	30	40	29	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-305	5	8.5'	8/15/06		SAND Silty (SM); Red, Micaceous	38.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-305
Sample No.: 5
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Micaceous
Date: 8/15/06 **Natural Moisture:** 38.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	288.38
Tare =	190.07
Dry sample weight =	98.31

Tare for cumulative weight retained= .00

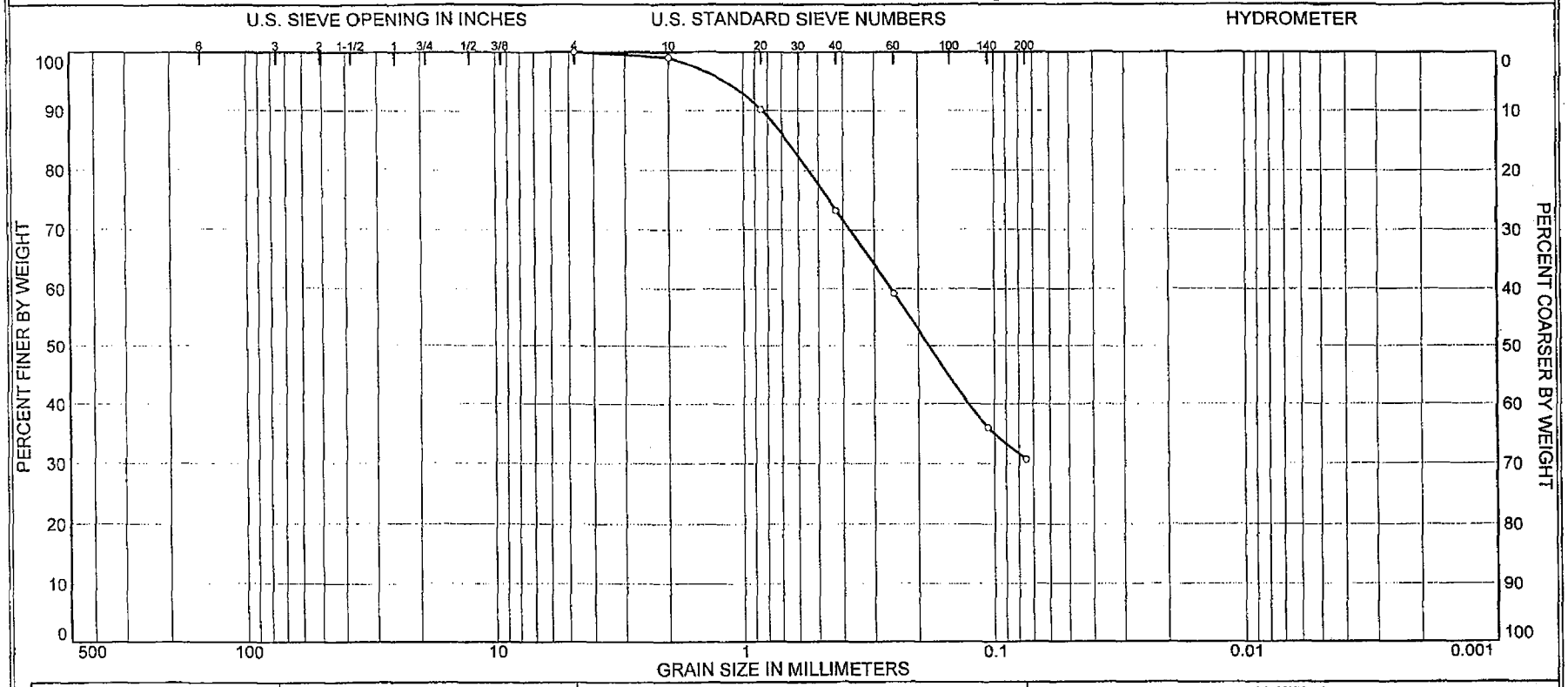
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.27	99
# 20	11.77	88
# 40	30.39	69
# 60	44.57	55
# 140	66.59	32
# 200	70.22	29

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 71 (% coarse = 1 % medium = 30 % fine = 40)
% FINES = 29

D_{85}= 0.75 D_{60}= 0.30 D_{50}= 0.21
D_{30}= 0.09

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	26	42	31	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-305	7	13.5'	8/15/06		SAND Silty (SM); Red, Micaceous	39.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-305
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Micaceous
Date: 8/15/06 **Natural Moisture:** 39.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	388.79
Tare =	194.56
Dry sample weight =	194.23

Tare for cumulative weight retained= .00

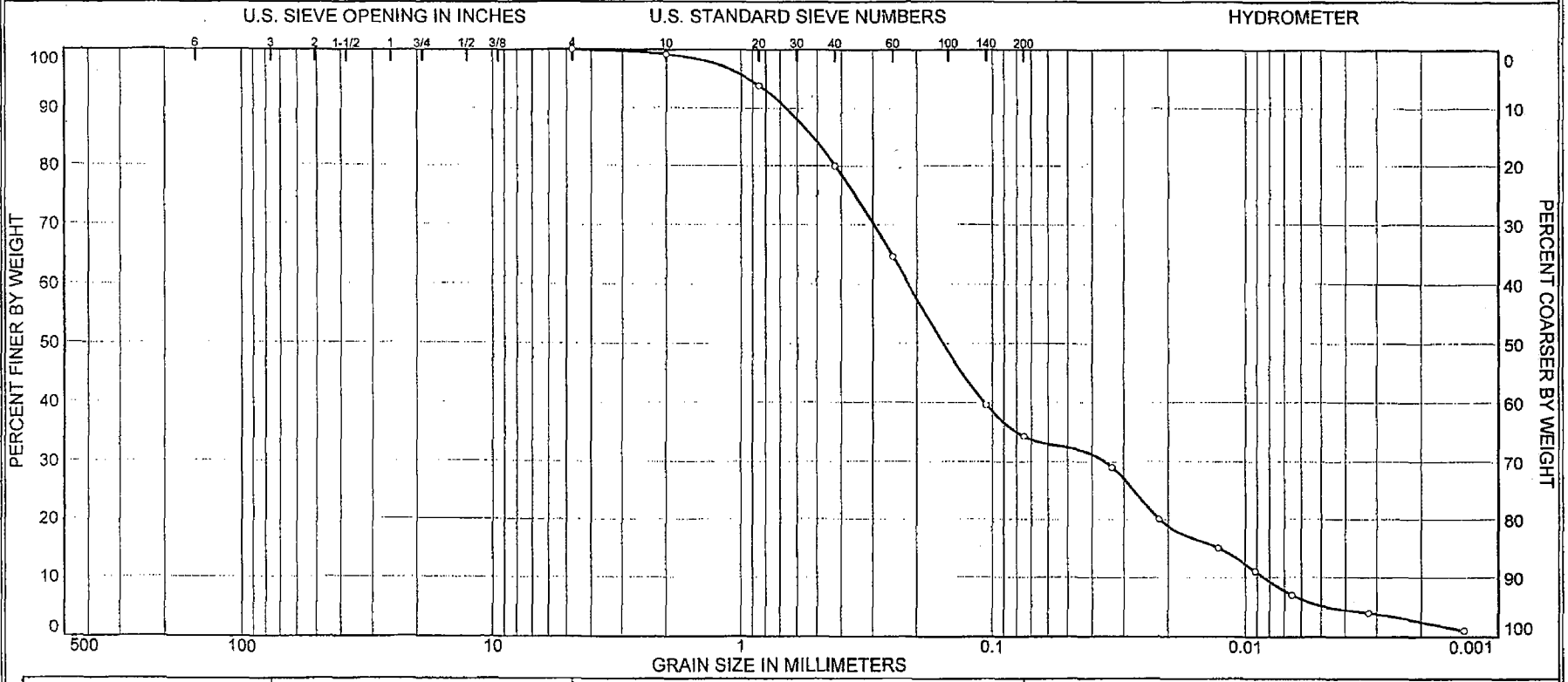
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.74	99
# 20	19.01	90
# 40	52.11	73
# 60	79.31	59
# 140	124.29	36
# 200	134.51	31

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 69 **(% coarse =** 1 **% medium =** 26 **% fine =** 43)
% FINES = 31

D_{85}= 0.67 D_{60}= 0.26 D_{50}= 0.18

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	19	46	29	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-305	8	18.5'	8/31/06		SAND Silty (SM); Brown, Micaceous	26.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11.15.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-305
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 8/31/06 **Natural Moisture:** 26.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

Initial
Dry sample and tare= 106.65
Tare = 0.00
Dry sample weight = 106.65
Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.42 **Tare =** .00 **Sample weight =** 54.42
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.84	99
# 20	2.91	94
# 40	10.52	80
# 60	18.99	65
# 140	32.67	40
# 200	35.58	34

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 54.69
Hygroscopic moisture correction:
Moist weight & tare = 36.98
Dry weight & tare = 36.85
Tare = 10.91
Hygroscopic moisture= 1 %
Calculated biased weight= 54.97
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

iscus correction only= 0.0
cific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

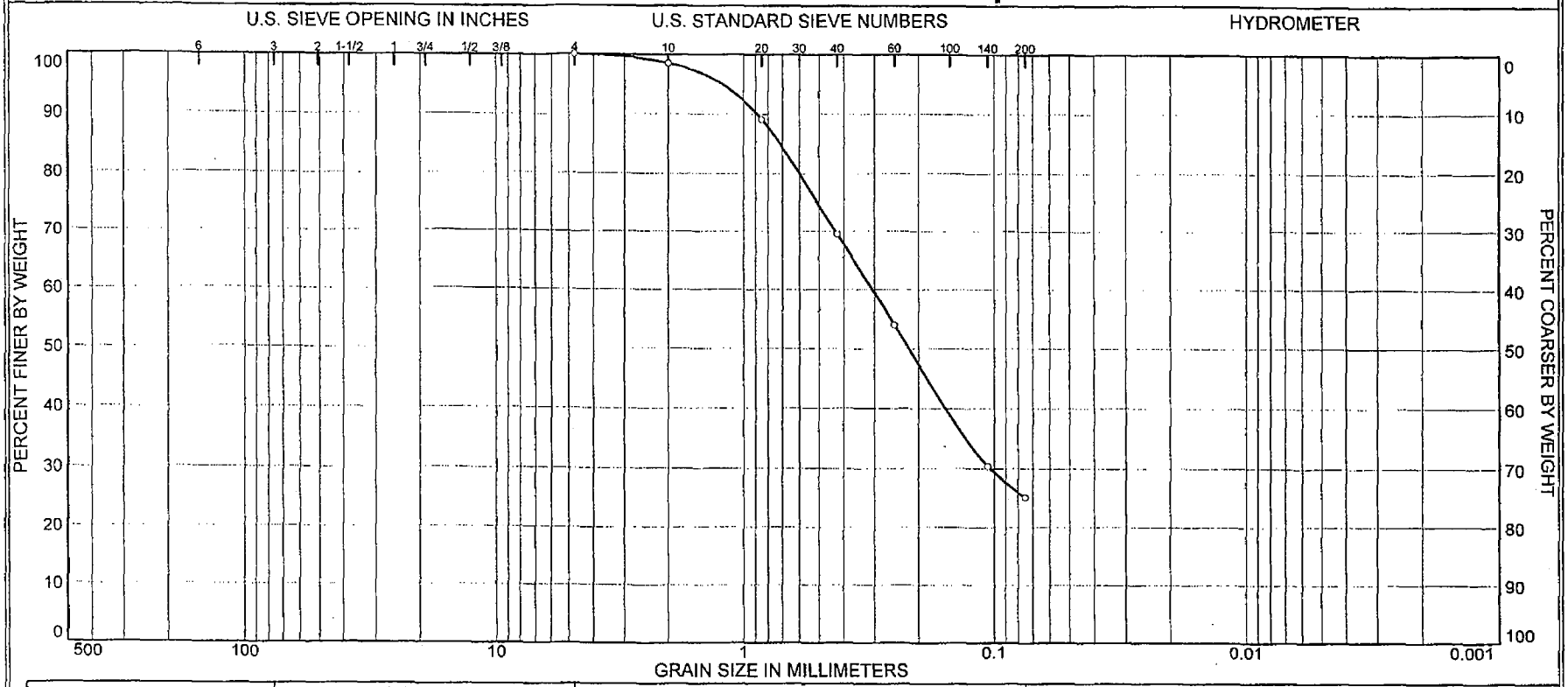
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	21.0	16.0	0.0132	21.0	12.9	0.0333	29
5.00	23.0	16.0	11.0	0.0132	16.0	13.7	0.0217	20
15.00	23.0	13.0	8.0	0.0132	13.0	14.2	0.0128	15
30.00	23.0	11.0	6.0	0.0132	11.0	14.5	0.0091	11
60.00	23.0	9.0	4.0	0.0132	9.0	14.8	0.0065	7
250.00	23.2	7.0	2.0	0.0131	7.0	15.1	0.0032	4
1440.00	23.0	5.5	0.5	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 66 (% coarse = 1 % medium = 19 % fine = 46)
% SILT = 29 % CLAY = 5

D_{85}= 0.52 D_{60}= 0.22 D_{50}= 0.16
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_C= 0.6918 C_u= 25.5377

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	29	45	25	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-305	10	28.5'	8/15/06		SAND Silty (SM); Brown, Red and White, Micaceous	26.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11.15.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-305
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Red and White, Micaceous
Date: 8/15/06 **Natural Moisture:** 26.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	383.48
Tare =	189.57
Dry sample weight =	193.91

Tare for cumulative weight retained= .00

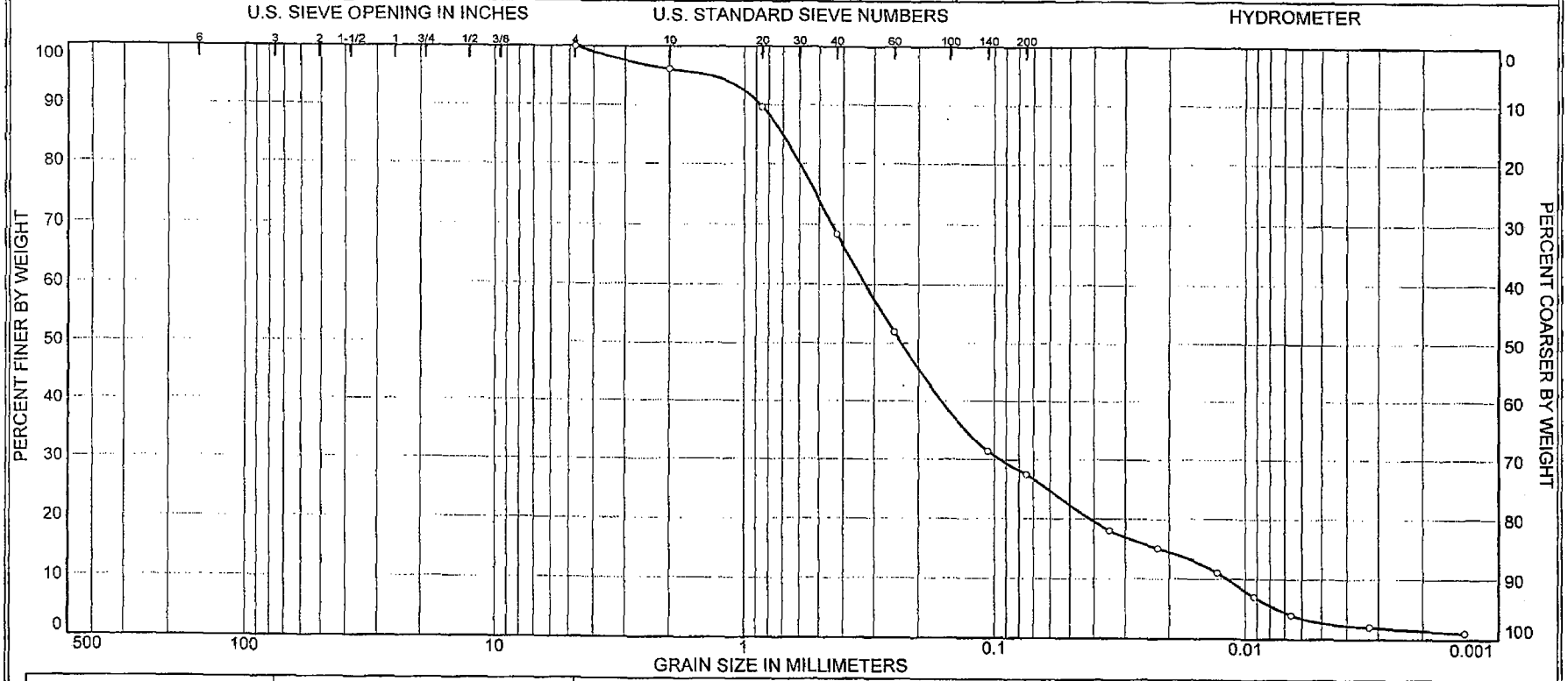
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	2.81	99
# 20	21.15	89
# 40	59.11	70
# 60	89.13	54
# 140	135.03	30
# 200	145.23	25

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 75 (**% coarse** = 1 **% medium** = 29 **% fine** = 45)
% FINES = 25

D_{85}= 0.72 D_{60}= 0.31 D_{50}= 0.22
D_{30}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	4	28	41	25	3

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-305	12	38.5'	8/15/06		SAND Silty (SM); Brown, Red and White, Micaceous	29.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-305
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Red and White, Micaceous
Date: 8/15/06 **Natural Moisture:** 29.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	104.04
Tare =	0.00
Dry sample weight =	104.04

Sample split on number 10 sieve
Split sample data:
Sample and tare = 52.36 Tare = .00 Sample weight = 52.36
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	4.05	96
# 20	3.55	90
# 40	15.07	68
# 60	24.07	52
# 140	35.23	31
# 200	37.44	27

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96
Weight of hydrometer sample: 52.67
Hygroscopic moisture correction:
Moist weight & tare = 48.65
Dry weight & tare = 48.44
Tare = 11.46
Hygroscopic moisture= 1 %
Calculated biased weight= 54.55
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Viscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

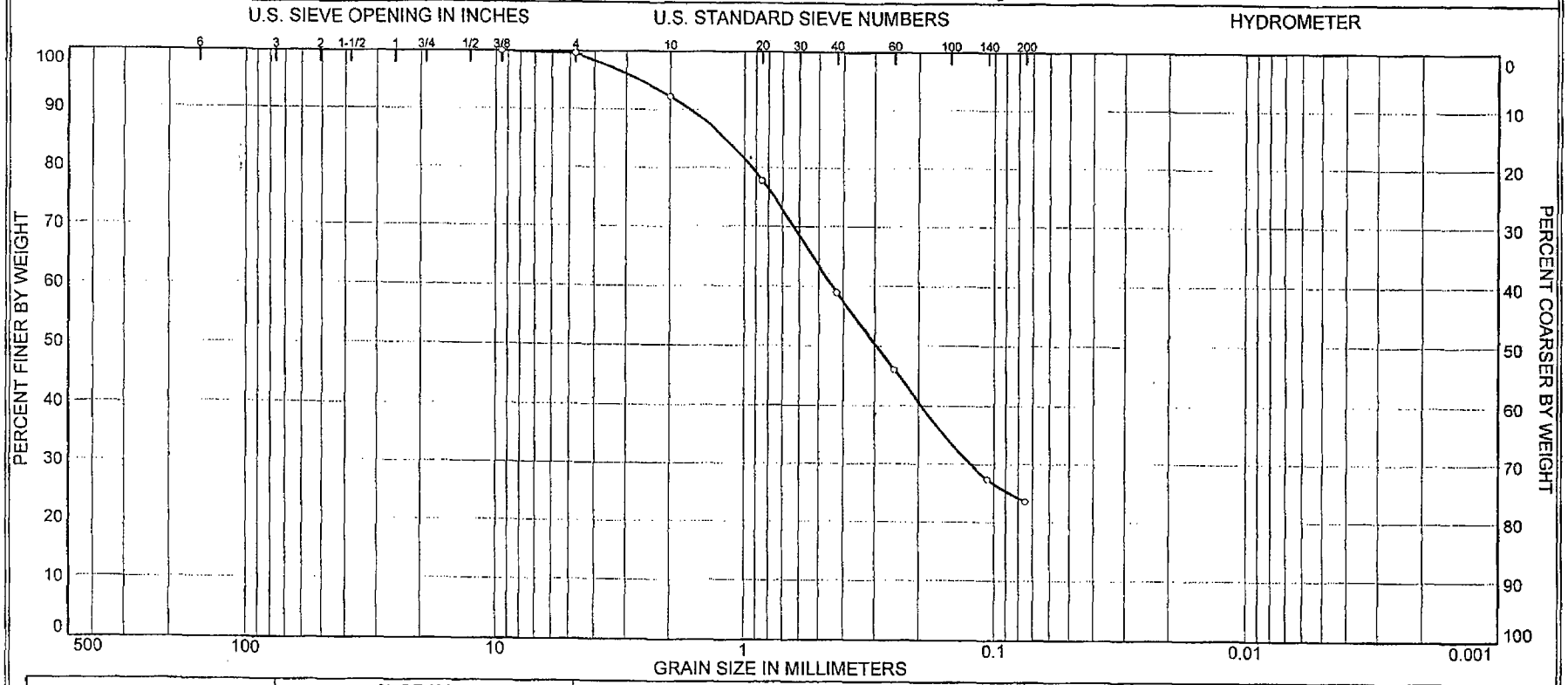
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	15.0	10.0	0.0132	15.0	13.8	0.0346	18
5.00	23.0	13.0	8.0	0.0132	13.0	14.2	0.0221	15
15.00	23.0	11.0	6.0	0.0132	11.0	14.5	0.0129	11
30.00	23.0	9.0	4.0	0.0132	9.0	14.8	0.0092	7
60.00	23.0	7.0	2.0	0.0132	7.0	15.1	0.0066	4
250.00	23.2	6.0	1.0	0.0131	6.0	15.3	0.0032	2
1440.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 73 (% coarse = 4 % medium = 28 % fine = 41)
% SILT = 25 % CLAY = 3

D_{85}= 0.71 D_{60}= 0.33 D_{50}= 0.23
D_{30}= 0.10 D_{15}= 0.02 D_{10}= 0.01
C_C= 2.338 C_u= 27.6376

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	7	33	36	24	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-305	14	48.5'	8/15/06		SAND Silty (SM); Brown, Red and White, Micaceous	27.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-305
Sample No.: 14
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Red and White, Micaceous
Date: 8/15/06 **Natural Moisture:** 27.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	440.30
Tare =	190.21
Dry sample weight =	250.09

Tare for cumulative weight retained= .00

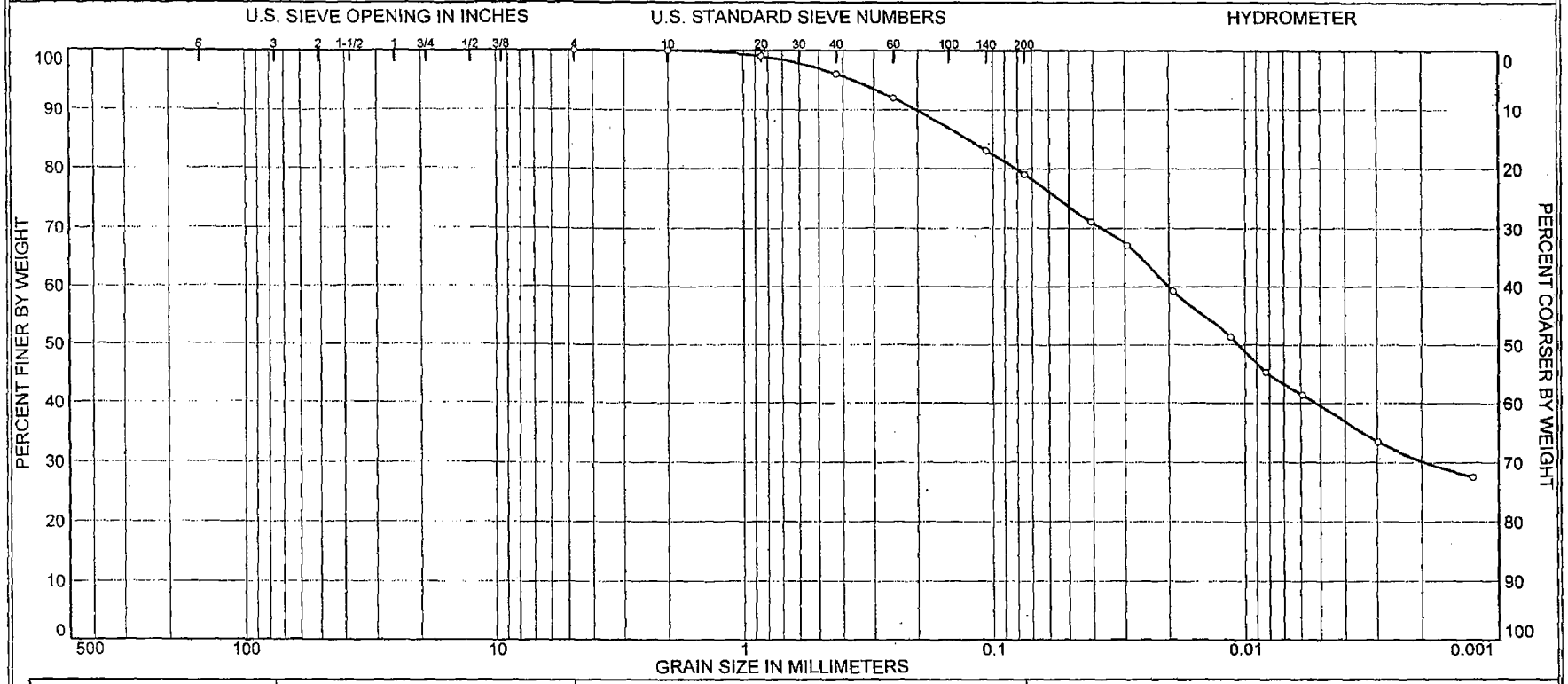
Sieve	Cumul. Wt. retained	Percent finer
3/8in. inch	0.00	100
# 4	1.07	100
# 10	19.47	92
# 20	55.50	78
# 40	102.73	59
# 60	135.03	46
# 140	181.87	27
# 200	191.43	24

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL = 0** **(% coarse =** **% fine = 0)**
% SAND = 76 **(% coarse = 7** **% medium = 33** **% fine = 36)**
% FINES = 24

D_{85}= 1.20 D_{60}= 0.44 D_{50}= 0.30
D_{30}= 0.12

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	4	17	39	40

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-306	2	1.5'	8/24/06	ML	SILT Sandy with Clay (ML); Red	29.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-306
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy with Clay (ML); Red
Date: 8/24/06 **Natural Moisture:** 29.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	183.05
Tare =	0.00
Dry sample weight =	183.05

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.51 Tare = .00 Sample weight = 50.51
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.02	100
# 20	0.38	99
# 40	2.22	96
# 60	3.98	92
# 140	8.45	83
# 200	10.46	79

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.82
Hygroscopic moisture correction:
Moist weight & tare = 38.84
Dry weight & tare = 38.14
Tare = 10.82
Hygroscopic moisture= 3 %
Calculated biased weight= 50.53
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

? iscus correction only= 0.0
Specific gravity of solids= 2.65+
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

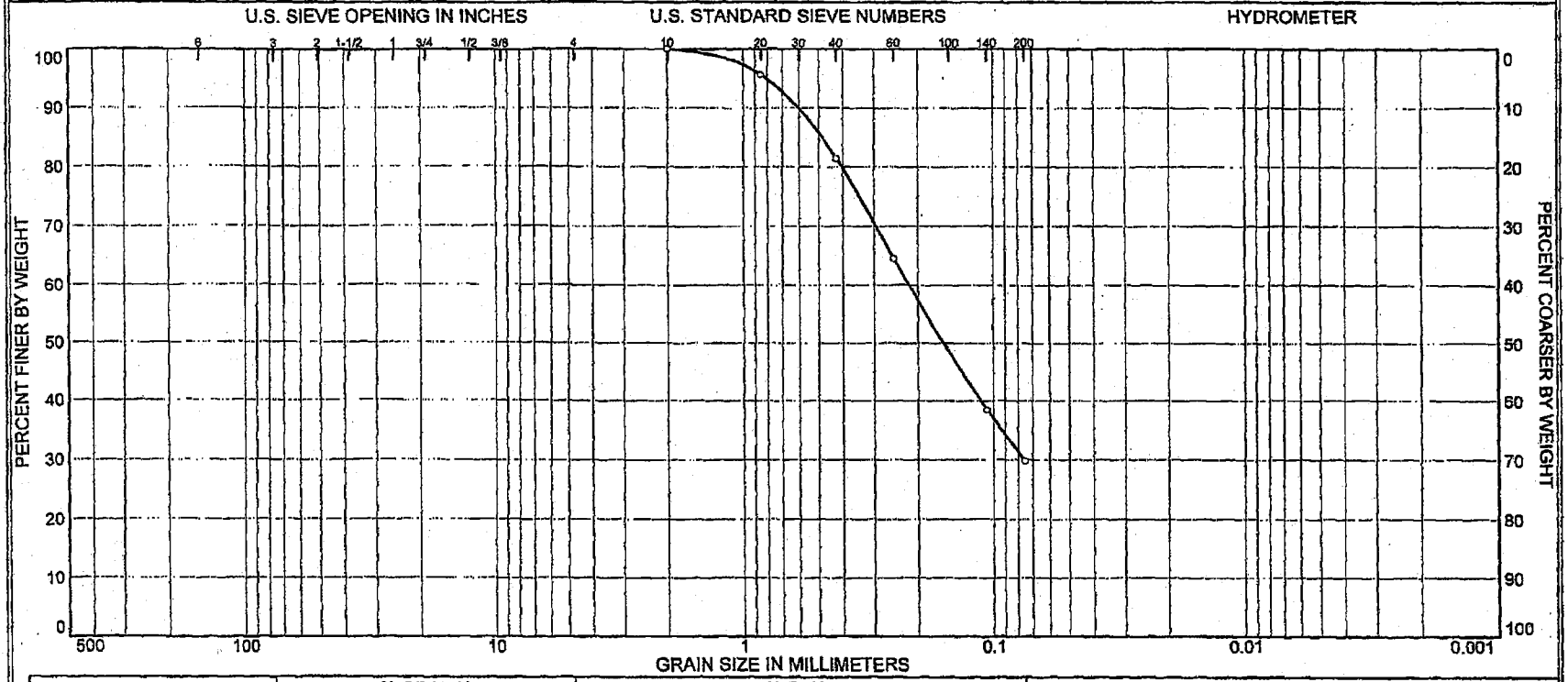
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.7	41.0	35.9	0.0132	41.0	9.6	0.0408	71
2.00	22.7	39.0	33.9	0.0132	39.0	9.9	0.0294	67
5.00	22.7	35.0	29.9	0.0132	35.0	10.6	0.0192	59
15.00	22.7	31.0	25.9	0.0132	31.0	11.2	0.0114	51
30.00	22.7	28.0	22.9	0.0132	28.0	11.7	0.0082	45
60.00	22.7	26.0	20.9	0.0132	26.0	12.0	0.0059	41
250.00	22.7	22.0	16.9	0.0132	22.0	12.7	0.0030	34
1440.00	22.7	19.0	13.9	0.0132	19.0	13.2	0.0013	28

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 21 (% coarse = 0 % medium = 4 % fine = 17)
% SILT = 39 % CLAY = 40

D_{85}= 0.13 D_{60}= 0.02 D_{50}= 0.01
D_{30}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	19	51	30	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-306	3	3.5'	9-21-06		SAND Silty (SM); Red	34.2		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-306
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red
Date: 9-21-06 **Natural Moisture:** 34.2
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	365.50
Tare =	190.19
Dry sample weight =	175.31

Tare for cumulative weight retained= .00

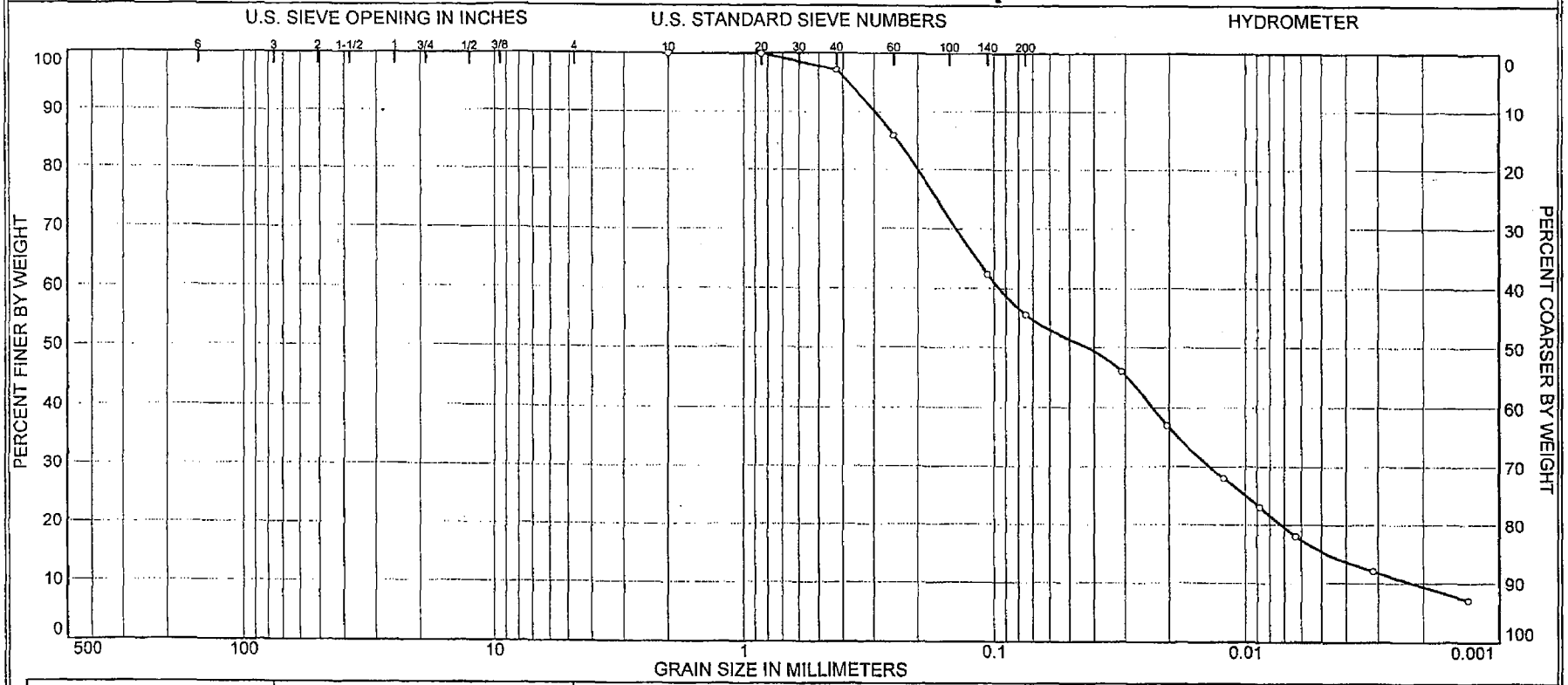
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	7.74	96
# 40	32.55	81
# 60	62.09	65
# 140	108.07	38
# 200	123.09	30

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 70 **(% coarse =** **% medium** = 19 **% fine** = 51)
% FINES = 30

D_{85}= 0.49 D_{60}= 0.22 D_{50}= 0.16
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	3	42	40	15

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-306	4	6.0'	8/31/06		SILT Sandy (ML); Red	29.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-306
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Red
Date: 8/31/06 **Natural Moisture:** 29.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	165.88
Tare =	0.00
Dry sample weight =	165.88

Sample split on number 10 sieve
Split sample data:
Sample and tare = 56.45 Tare = .00 Sample weight = 56.45
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.05	100
# 40	1.56	97
# 60	7.98	86
# 140	21.29	62
# 200	25.10	56

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 57.13
Hygroscopic moisture correction:
Moist weight & tare = 51.22
Dry weight & tare = 50.76
Tare = 11.67
Hygroscopic moisture= 1 %
Calculated biased weight= 56.47
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
cific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

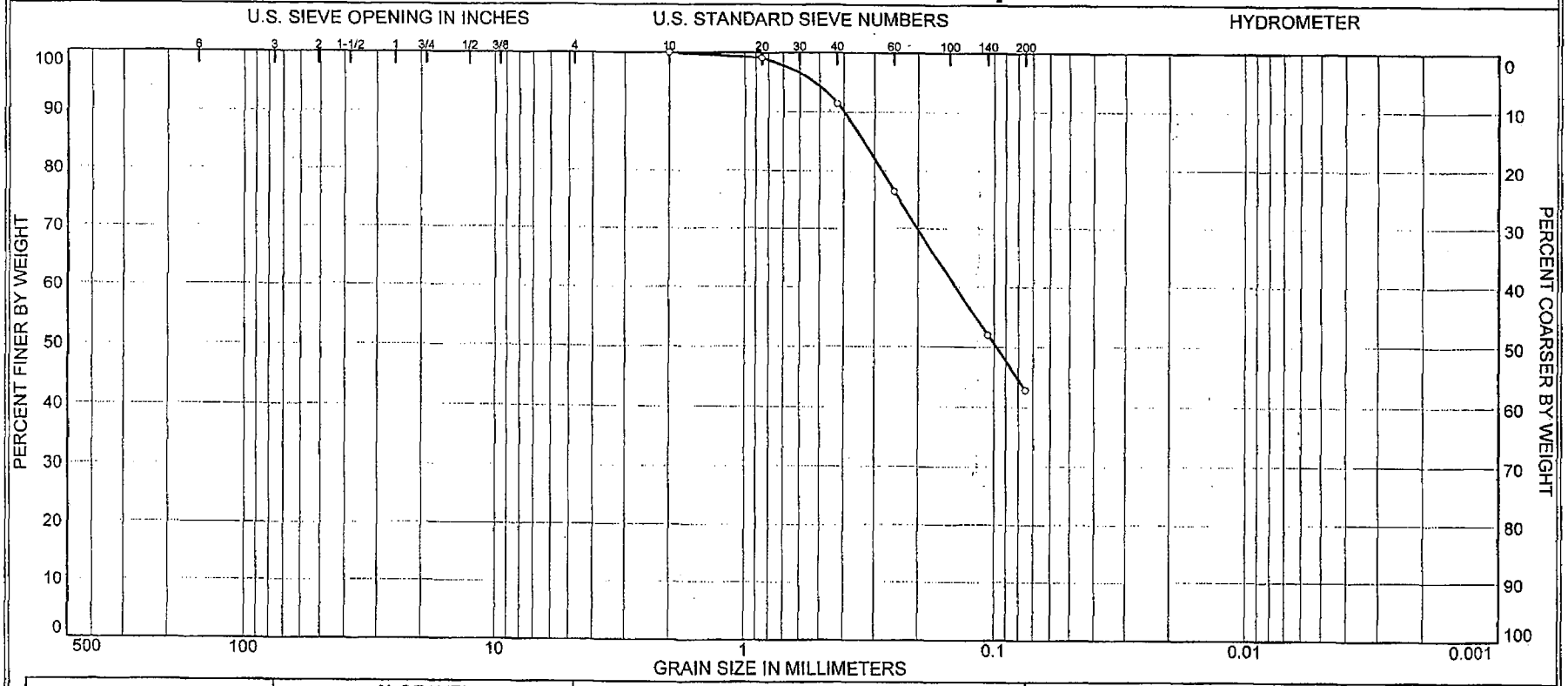
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	31.0	26.0	0.0132	31.0	11.2	0.0311	46
5.00	23.0	26.0	21.0	0.0132	26.0	12.0	0.0204	37
15.00	23.0	21.0	16.0	0.0132	21.0	12.9	0.0122	28
30.00	23.0	18.0	13.0	0.0132	18.0	13.3	0.0088	23
60.00	23.0	15.0	10.0	0.0132	15.0	13.8	0.0063	18
250.00	23.2	12.0	7.0	0.0131	12.0	14.3	0.0031	12
1440.00	23.0	9.0	4.0	0.0132	9.0	14.8	0.0013	7

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 45 (**% coarse =** **% medium** = 3 **% fine** = 42)
% SILT = 40 **% CLAY** = 15

D_{85}= 0.24 D_{60}= 0.10 D_{50}= 0.04
D_{30}= 0.01 D_{15}= 0.00 D_{10}= 0.00
C_C= 0.8914 C_U= 42.7054

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	9	48	43	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-306	6	11.0'	9/12/06	SM	SAND Silty (SM); Red	29.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-306
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red
Date: 9/12/06 **Natural Moisture:** 29.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	266.56
Tare =	189.56
Dry sample weight =	77.00

Tare for cumulative weight retained= .00

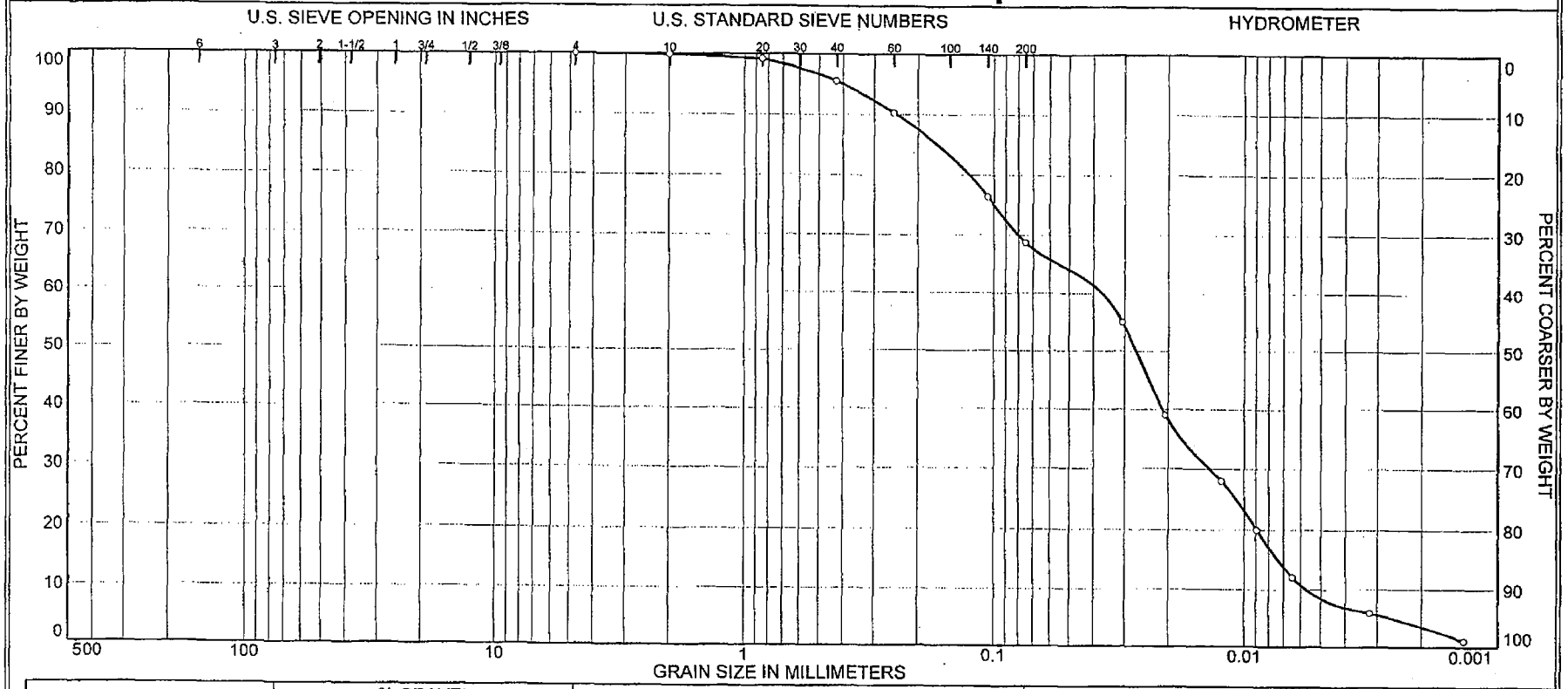
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.68	99
40	6.65	91
60	18.16	76
# 140	36.99	52
# 200	44.04	43

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 57 (% coarse = % medium = 9 % fine = 48)
% FINES = 43

D_{85}= 0.33 D_{60}= 0.14 D_{50}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	4	27	60	8

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-306	8	18.5'	9-21-06		SILT Sandy (ML); Yellowish Red, Micaceous	29.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11.14.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-306
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Yellowish Red, Micaceous
Date: 9-21-06 **Natural Moisture:** 29.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	144.17
Tare =	0.00
Dry sample weight =	144.17

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.76 Tare = .00 Sample weight = 50.76
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.14	100
# 20	0.38	99
# 40	2.19	96
# 60	4.88	90
# 140	11.93	76
# 200	15.86	69

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.27
Hygroscopic moisture correction:
Moist weight & tare = 46.31
Dry weight & tare = 45.95
Tare = 11.17
Hygroscopic moisture= 1 %
Calculated biased weight= 50.74
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

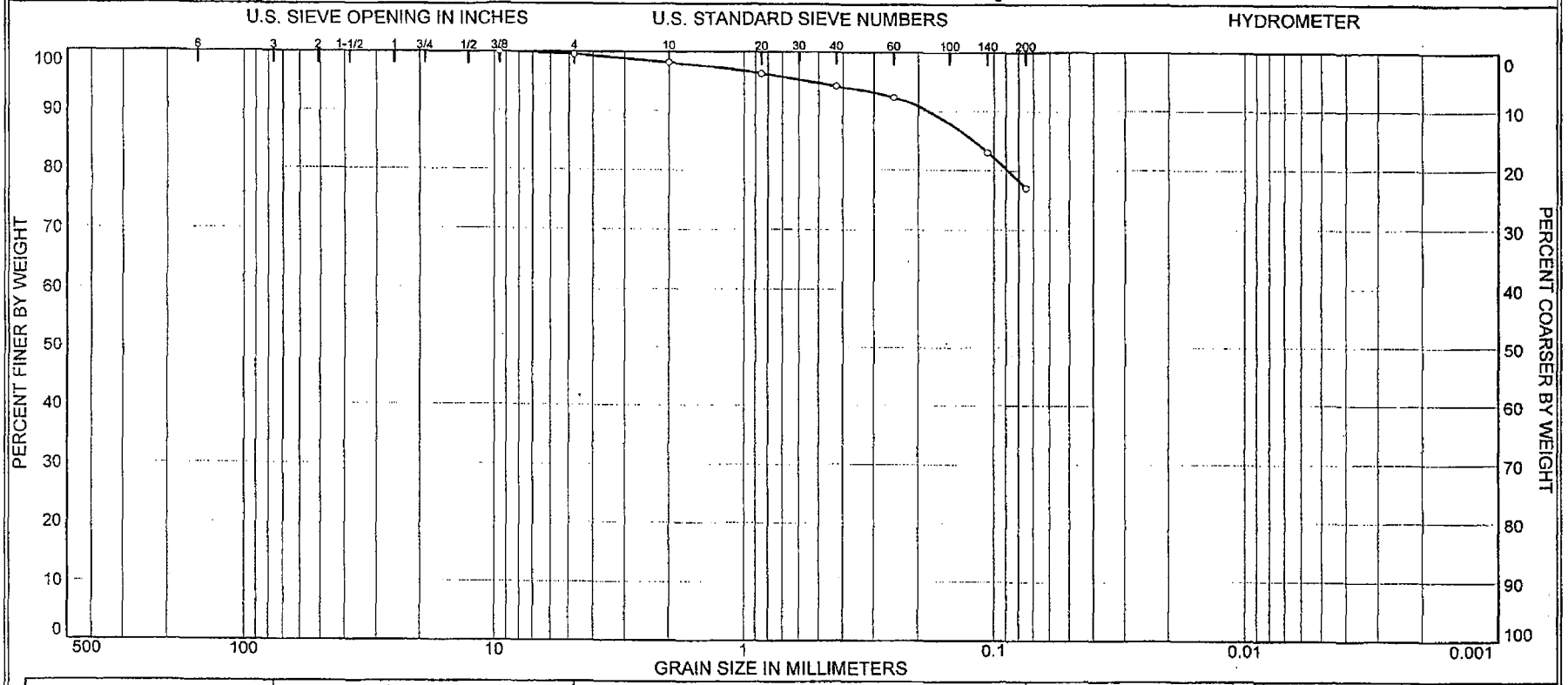
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	33.0	28.0	0.0132	33.0	10.9	0.0307	55
5.00	23.0	25.0	20.0	0.0132	25.0	12.2	0.0205	39
15.00	23.0	19.0	14.0	0.0132	19.0	13.2	0.0123	28
30.00	23.0	15.0	10.0	0.0132	15.0	13.8	0.0089	20
60.00	23.0	11.0	6.0	0.0132	11.0	14.5	0.0065	12
250.00	23.2	8.0	3.0	0.0131	8.0	15.0	0.0032	6
1440.00	23.0	5.5	0.5	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 31 (% coarse = 0 % medium = 4 % fine = 27)
% SILT = 60 % CLAY = 8

D_{85}= 0.17 D_{60}= 0.04 D_{50}= 0.03
D_{30}= 0.01 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.8851 C_u= 6.453

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
C	0	0	1	1	4	18	77	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
C	B-306	9	23.5'	9/21/06	MH	SILT Clayey with sand (MH); Brownish Yellow	52.1	62	49

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-306
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SILT Clayey with sand (MH); Brownish Yellow
Date: 9/21/06 **Natural Moisture:** 52.1
Liquid Limit: 62 **Plastic Limit:** 49 **USCS Class.:** MH
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	255.22
Tare =	188.85
Dry sample weight =	66.37

Tare for cumulative weight retained= .00

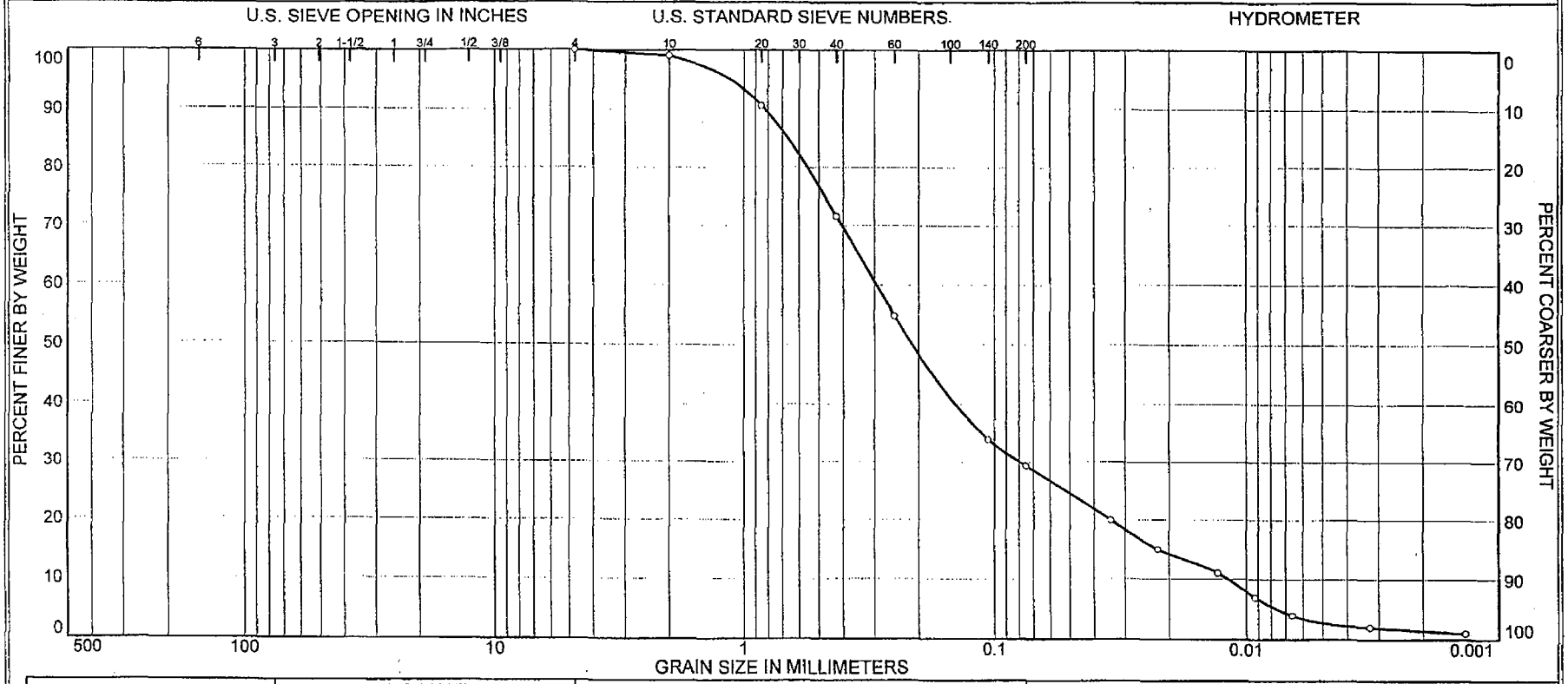
Sieve	Cumul. Wt. retained	Percent finer
3/8in. inch	0.00	100
# 4	0.35	100
# 10	1.20	98
# 20	2.38	96
# 40	3.76	94
# 60	5.03	92
# 140	11.26	83
# 200	15.26	77

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 1 (% coarse = % fine = 1)
% SAND = 23 (% coarse = 1 % medium = 4 % fine = 18)
% FINES = 77

D_{85}= 0.12

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	28	42	27	3

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-306	11	33.5'	8/31/06		SAND Silty (SM); Light Olive Brown, Micaceous	25.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-306
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Olive Brown, Micaceous
Date: 8/31/06 **Natural Moisture:** 25.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	158.45
Tare =	0.00
Dry sample weight =	158.45

Sample split on number 10 sieve
Split sample data:
Sample and tare = 53.09 Tare = .00 Sample weight = 53.09
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.35	99
# 20	4.55	91
# 40	14.72	72
# 60	23.71	55
# 140	34.92	34
# 200	37.38	29

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 53.36
Hygroscopic moisture correction:
Moist weight & tare = 47.30
Dry weight & tare = 47.11
Tare = 10.71
Hygroscopic moisture= 1 %
Calculated biased weight= 53.62
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

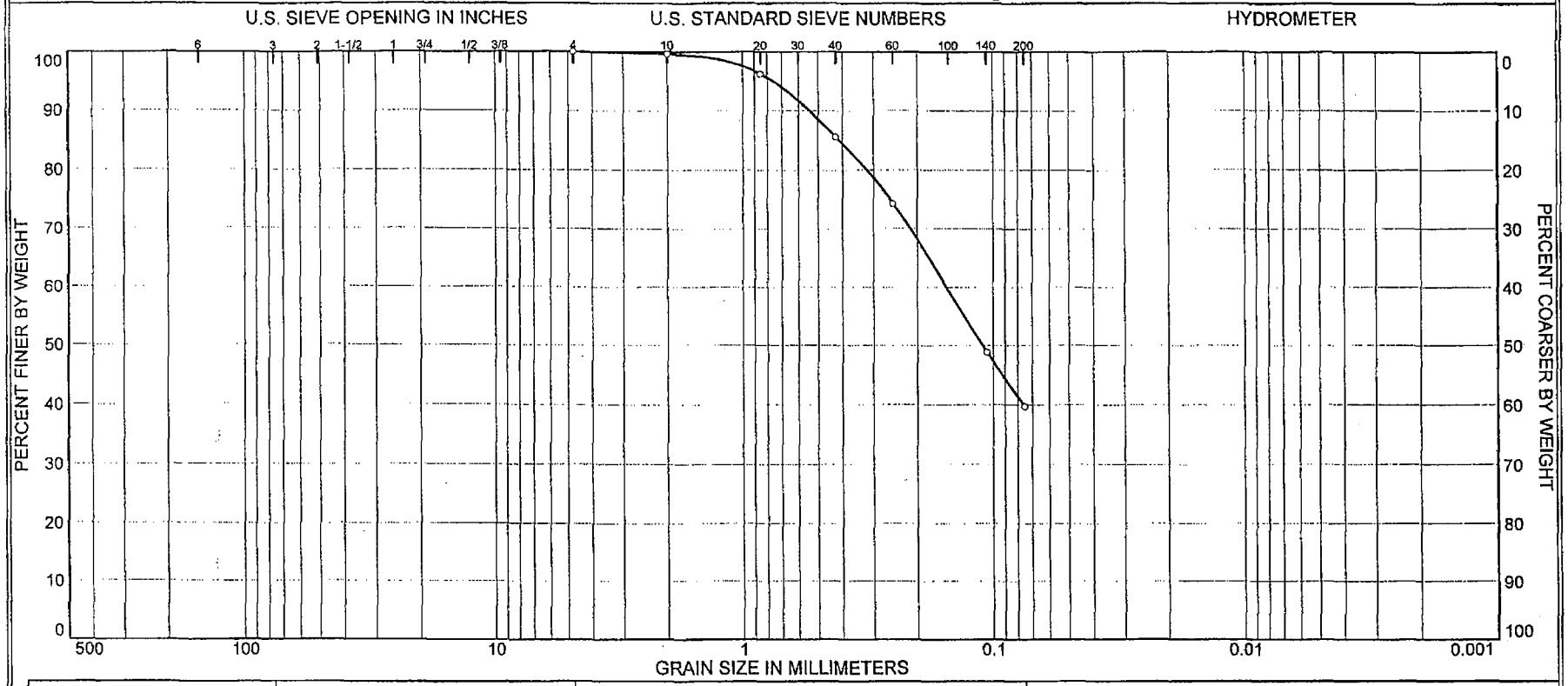
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	16.0	11.0	0.0132	16.0	13.7	0.0344	20
5.00	23.0	13.0	8.0	0.0132	13.0	14.2	0.0221	15
15.00	23.0	11.0	6.0	0.0132	11.0	14.5	0.0129	11
30.00	23.0	9.0	4.0	0.0132	9.0	14.8	0.0092	7
60.00	23.0	7.0	2.0	0.0132	7.0	15.1	0.0066	4
250.00	23.2	6.0	1.0	0.0131	6.0	15.3	0.0032	2
1440.00	23.0	5.5	0.5	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 71 (% coarse = 1 % medium = 28 % fine = 42)
% SILT = 27 % CLAY = 3

D_{85}= 0.67 D_{60}= 0.30 D_{50}= 0.21
D_{30}= 0.08 D_{15}= 0.02 D_{10}= 0.01
C_C= 1.813 C_u= 25.0417

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	14	46	40	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-306	12	38.5'	08/30/06		SAND Silty (SM); Light Olive Brown, Micaceous	31.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-24-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-306
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Light Olive Brown, Micaceous
Date: 08/30/06 **Natural Moisture:** 31.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	388.89
Tare =	189.99
Dry sample weight =	198.90

Tare for cumulative weight retained= .00

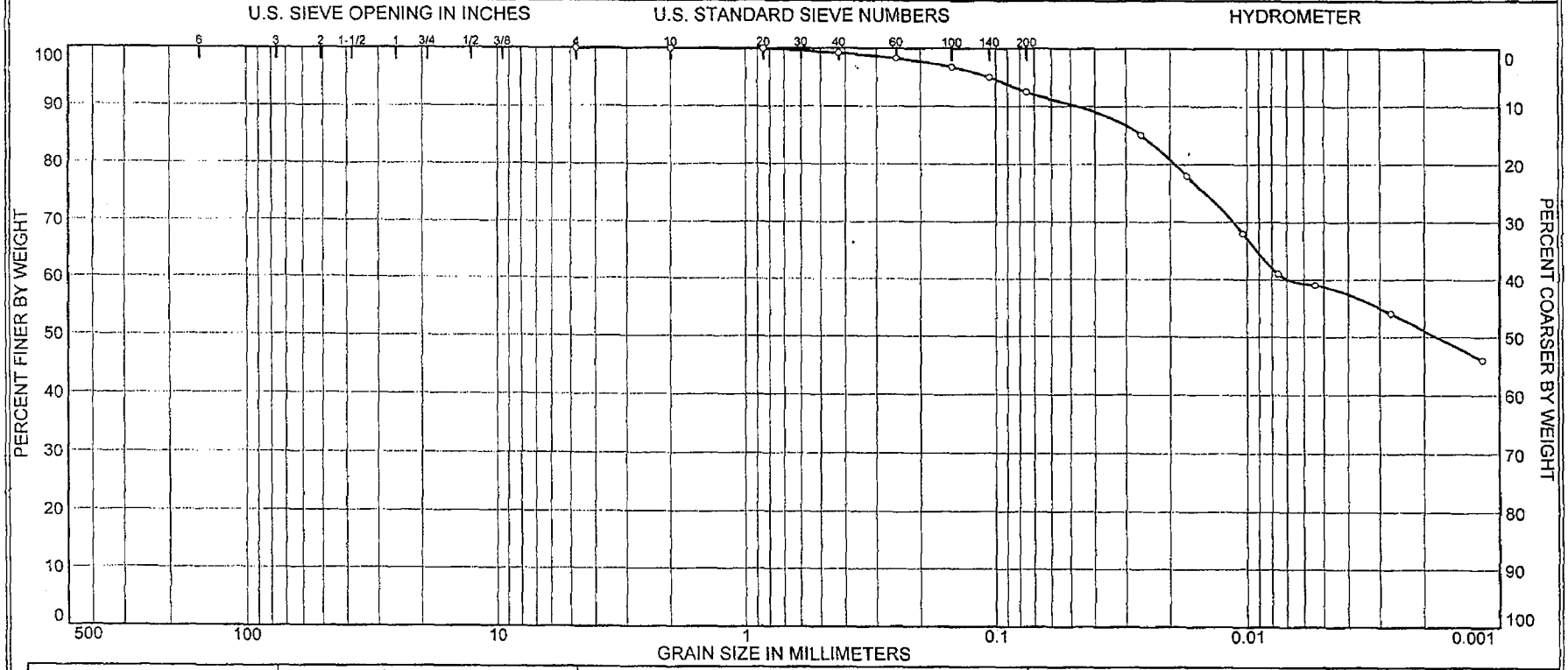
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.80	100
# 20	7.62	96
# 40	28.68	86
# 60	51.20	74
# 140	101.84	49
# 200	119.87	40

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 60 (% coarse = 0 % medium = 14 % fine = 46)
% FINES = 40

D_{85}= 0.41 D_{60}= 0.15 D_{50}= 0.11

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	1	7	34	59

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-307	2	1.5'	09/18/06	MH	SILT Clayey with Sand (MH); Dark Red	29.3	76	57

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

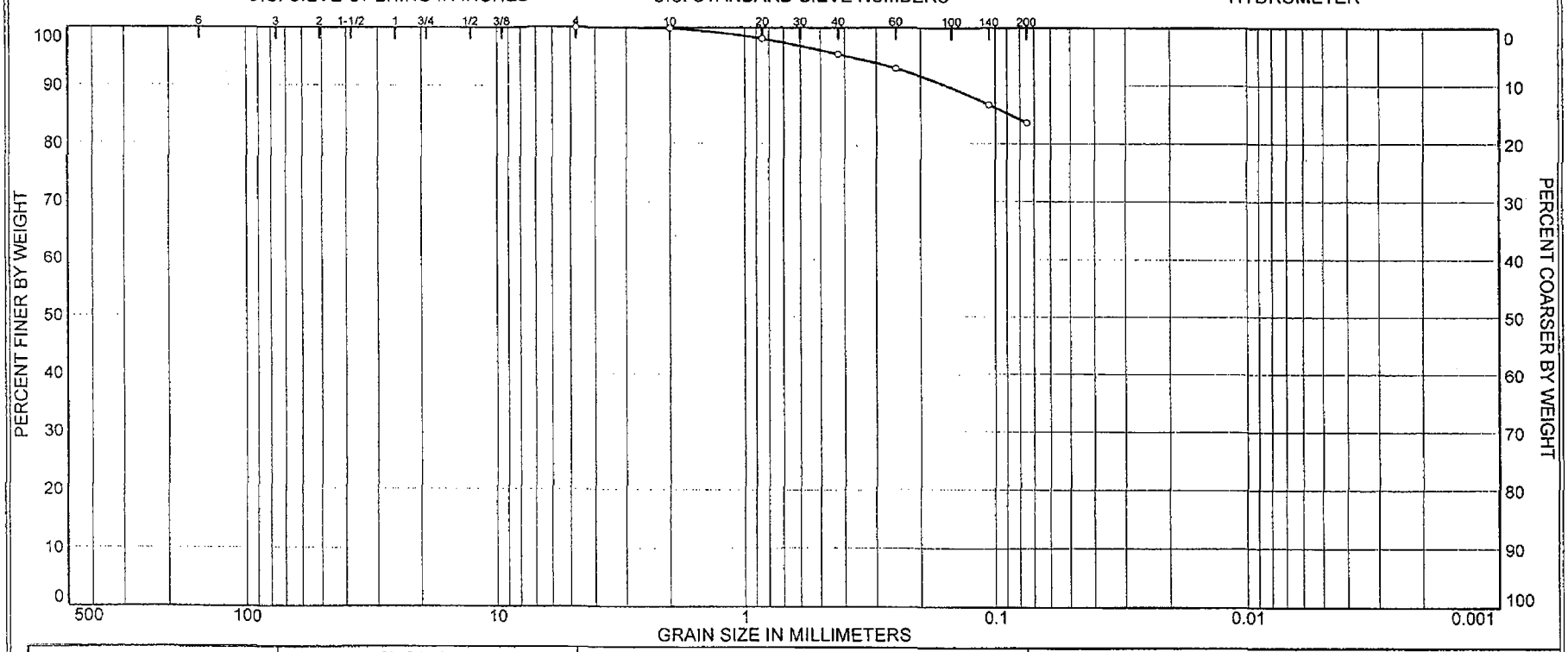
MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	5	11	84	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-307	3	3.5'	08/30/06		SILT Clayey with Sand (MH); Dark Red	27.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SILT Clayey with Sand (MH); Dark Red
Date: 09/18/06 **Natural Moisture:** 29.3
Liquid Limit: 76 **Plastic Limit:** 57 **USCS Class.:** MH
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	187.18
Tare =	0.00
Dry sample weight =	187.18

Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.84 Tare = .00 Sample weight = 54.84
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.00	100
# 20	0.07	100
# 40	0.42	99
# 60	0.92	98
# 100	1.73	97
# 140	2.73	95
# 200	4.09	93

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 54.84
Hygroscopic moisture correction:
Moist weight & tare = 34.07
Dry weight & tare = 33.81
Tare = 11.47
Hygroscopic moisture= 1 %
Calculated biased weight= 54.21
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.4	51.0	46.1	0.0131	51.0	7.9	0.0261	85
5.00	23.4	47.0	42.1	0.0131	47.0	8.6	0.0172	78
15.00	23.4	42.0	37.1	0.0131	42.0	9.4	0.0104	68
30.00	23.4	38.0	33.1	0.0131	38.0	10.1	0.0076	61
60.00	23.4	37.0	32.1	0.0131	37.0	10.2	0.0054	59
250.00	23.4	34.0	29.1	0.0131	34.0	10.7	0.0027	54
1440.00	22.9	30.0	25.0	0.0132	30.0	11.4	0.0012	46

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 8 (% coarse = 0 % medium = 1 % fine = 7)
% SILT = 34 % CLAY = 59

D_{85}= 0.03 D_{60}= 0.01 D_{50}= 0.00

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SILT Clayey with Sand (MH); Dark Red
Date: 08/30/06 **Natural Moisture:** 27.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	398.79
Tare =	156.65
Dry sample weight =	242.14

Tare for cumulative weight retained= .00

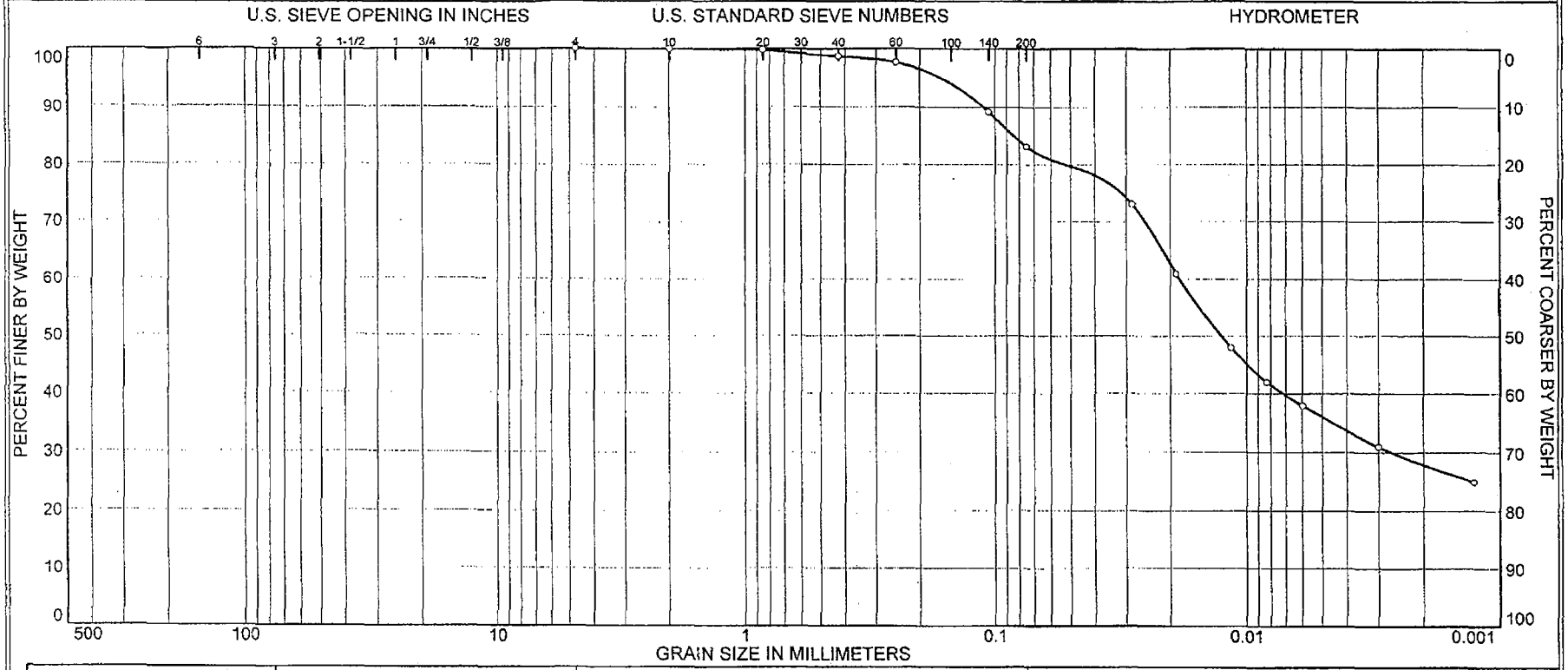
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.28	100
# 20	4.54	98
# 40	11.05	95
# 60	17.06	93
# 140	31.92	87
# 200	39.44	84

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 16 **(% coarse = 0** **% medium = 5** **% fine = 11)**
% FINES = 84

D_{85}= 0.09

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	1	16	47	36

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-307	4	6.0'	09/13/06		SILT Clayey with Sand (MH); Dark Red	27.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SILT Clayey with Sand (MH); Dark Red
Date: 09/13/06 **Natural Moisture:** 27.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	96.29
Tare =	0.00
Dry sample weight =	96.29

Sample split on number 10 sieve
Split sample data:
Sample and tare = 52.78 Tare = .00 Sample weight = 52.78
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.00	100
# 20	0.13	100
# 40	0.68	99
# 60	1.21	98
# 140	5.72	89
# 200	8.88	83

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.78
Hygroscopic moisture correction:
Moist weight & tare = 37.82
Dry weight & tare = 37.44
Tare = 10.65
Hygroscopic moisture= 1 %
Calculated biased weight= 52.04
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

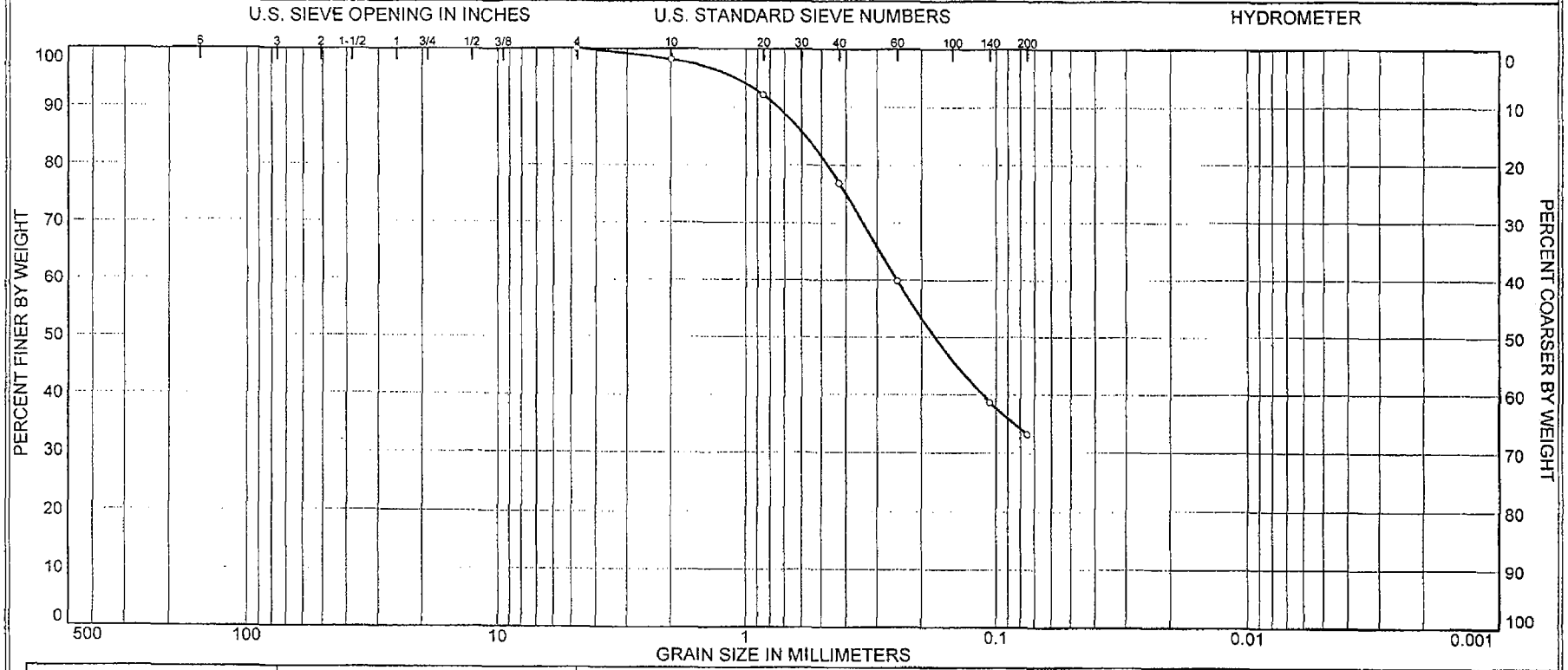
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.5	43.0	37.9	0.0132	43.0	9.2	0.0284	73
5.00	22.5	37.0	31.9	0.0132	37.0	10.2	0.0189	61
15.00	22.5	30.0	24.9	0.0132	30.0	11.4	0.0115	48
30.00	22.5	27.0	21.9	0.0132	27.0	11.9	0.0083	42
60.00	22.5	25.0	19.9	0.0132	25.0	12.2	0.0060	38
250.00	22.6	21.0	15.9	0.0132	21.0	12.9	0.0030	31
1440.00	22.6	18.0	12.9	0.0132	18.0	13.3	0.0013	25

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 17 (% coarse = 0 % medium = 1 % fine = 16)
% SILT = 47 % CLAY = 36

D_{85}= 0.08 D_{60}= 0.02 D_{50}= 0.01
D_{30}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	2	21	44	33	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-307	5	8.5'	8/30/06		SAND Silty (SM); Strong Brown, Micaceous	11.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 5
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 8/30/06 **Natural Moisture:** 11.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	355.77
Tare =	110.64
Dry sample weight =	245.13

Tare for cumulative weight retained= .00

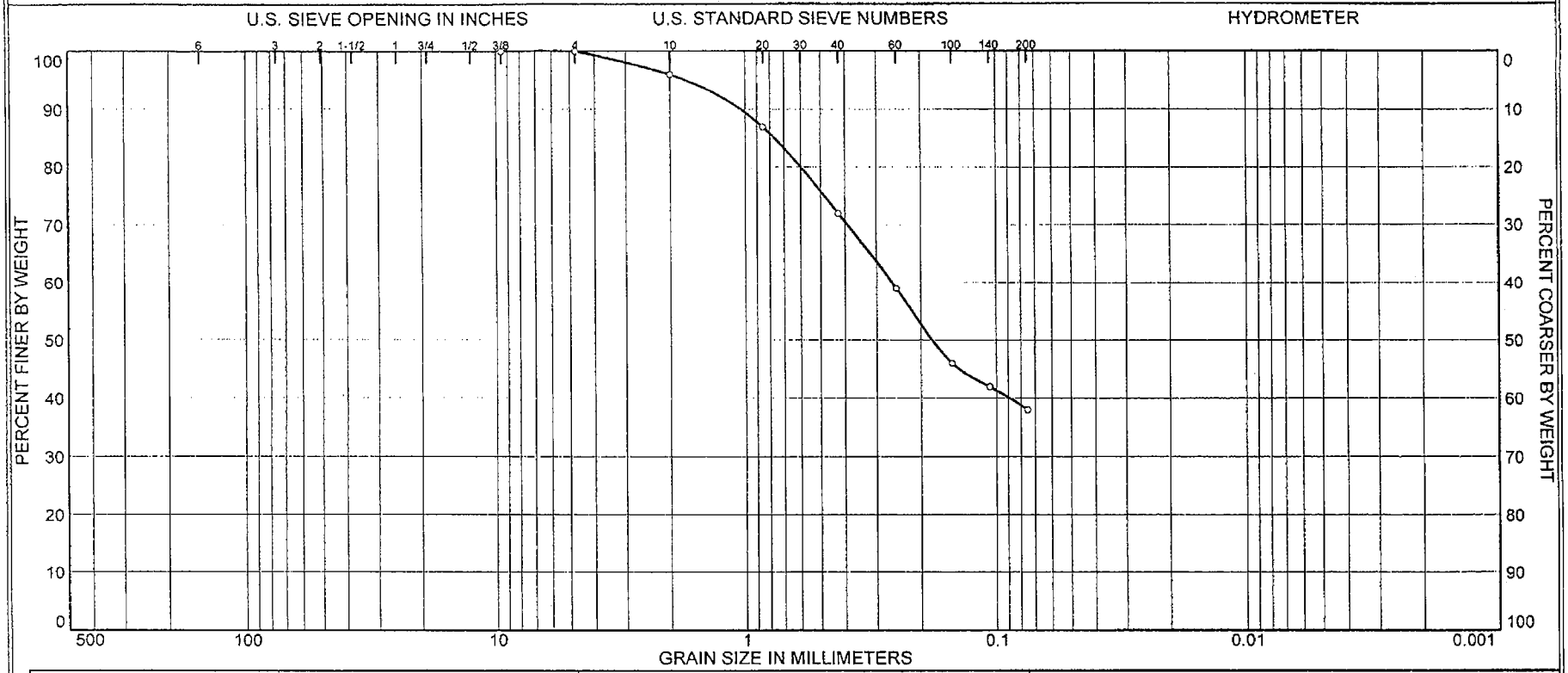
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	4.41	98
# 20	19.36	92
# 40	56.75	77
# 60	98.46	60
# 140	150.27	39
# 200	163.91	33

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 67 (% coarse = 2 % medium = 21 % fine = 44)
% FINES = 33

D_{85}= 0.58 D_{60}= 0.25 D_{50}= 0.18

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	4	24	34	38	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-307	6	11.0'	08/19/06		SAND Silty (SM); Strong Brown, Micaceous	13.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Micaceous
Date: 08/19/06 **Natural Moisture:** 13.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	464.82
Tare =	194.47
Dry sample weight =	270.35

Tare for cumulative weight retained= .00

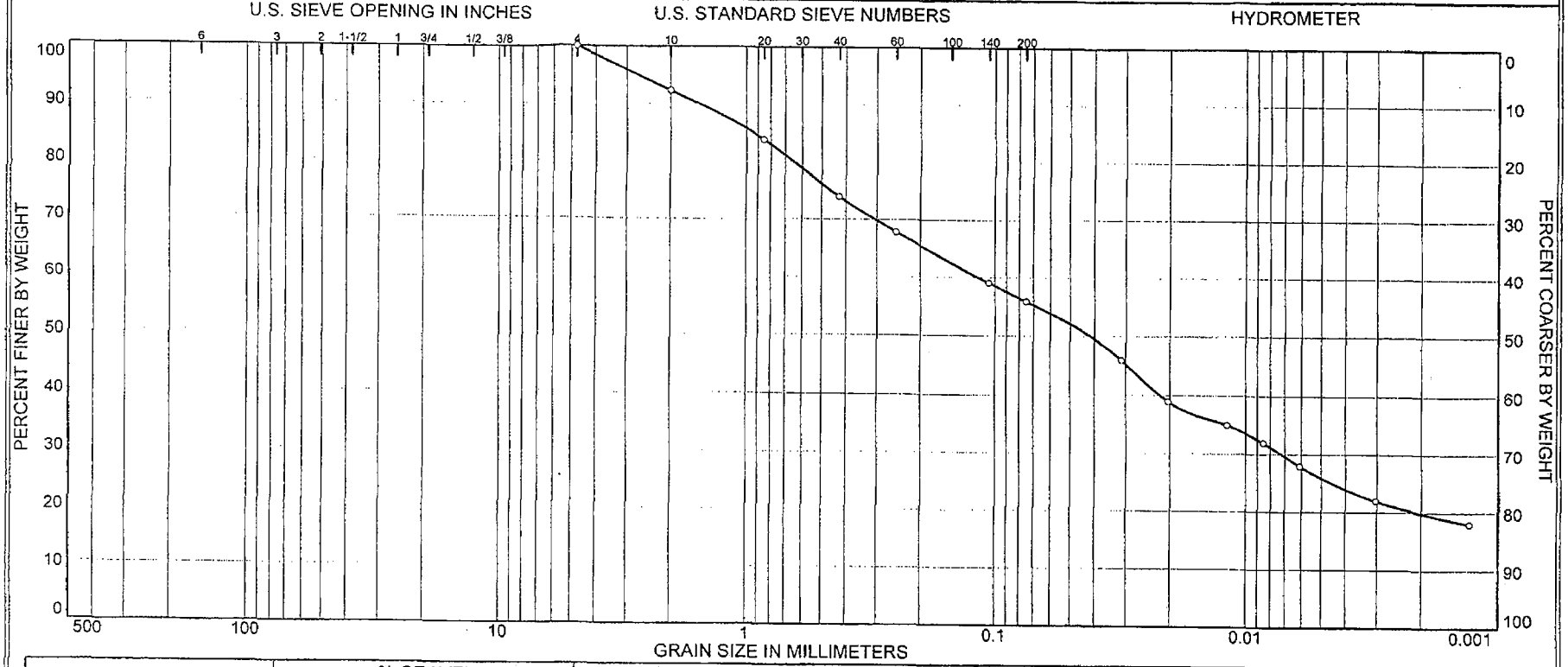
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.79	100
# 10	10.00	96
# 20	35.80	87
# 40	75.98	72
# 60	110.91	59
# 100	145.00	46
# 140	156.75	42
# 200	166.75	38

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 62 **(% coarse =** 4 **% medium =** 24 **% fine =** 34)
% FINES = 38

D_{85}= 0.76 D_{60}= 0.26 D_{50}= 0.18

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	8	18	18	30	26

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-307	7A	16.0'	9-12-06	ML	SILT Sandy (ML); Dark Red, Micaceous	46.5	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 7A
Elev. or Depth: 16.0' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Dark Red, Micaceous
Date: 9-12-06 **Natural Moisture:** 46.5
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	162.45
Tare =	0.00
Dry sample weight =	162.45

Sample split on number 10 sieve
Split sample data:
Sample and tare = 49.47 Tare = .00 Sample weight = 49.47
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	12.56	92
# 20	4.58	84
# 40	9.81	74
# 60	13.06	68
# 140	17.85	59
# 200	19.55	56

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 92
Weight of hydrometer sample: 50.49
Hygroscopic moisture correction:
Moist weight & tare = 24.24
Dry weight & tare = 24.02
Tare = 11.04
Hygroscopic moisture= 2 %
Calculated biased weight= 53.97
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

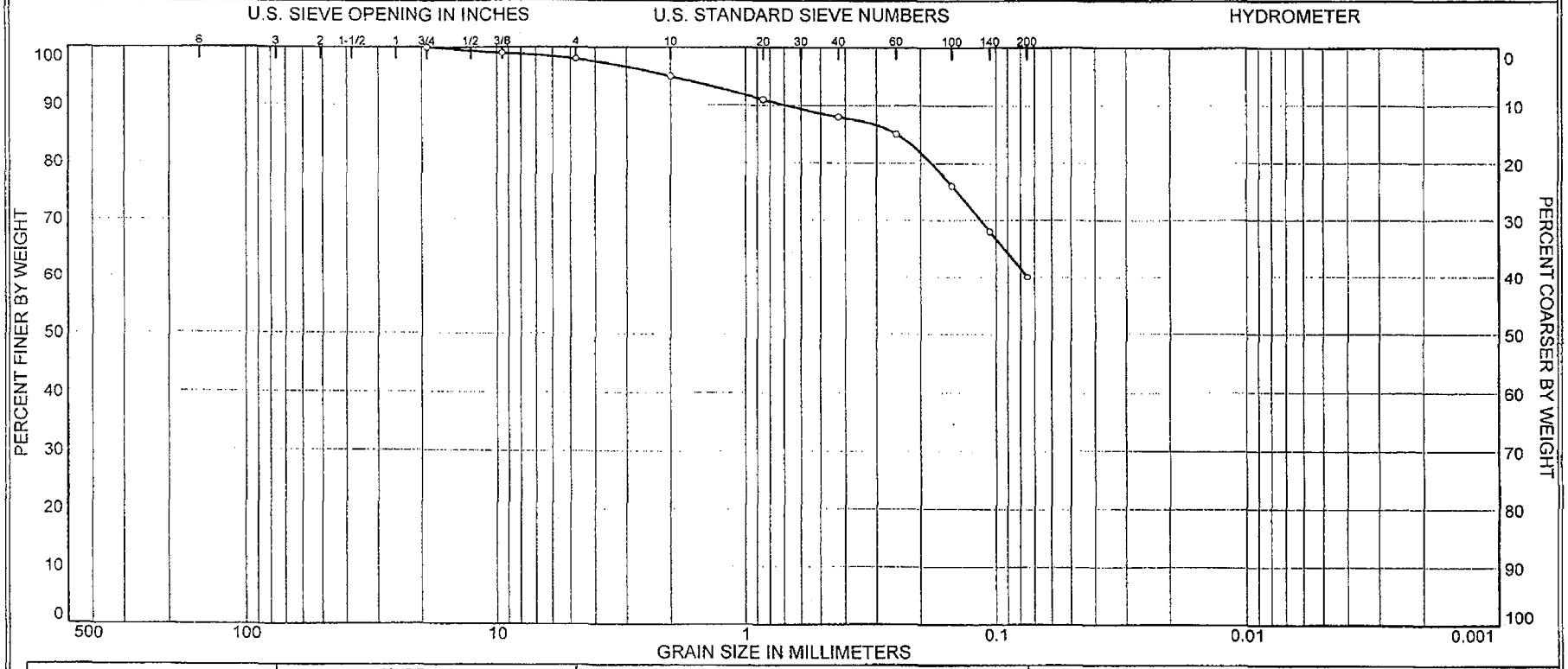
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.4	30.0	25.1	0.0131	30.0	11.4	0.0312	46
5.00	23.4	26.0	21.1	0.0131	26.0	12.0	0.0203	39
15.00	23.4	24.0	19.1	0.0131	24.0	12.4	0.0119	35
30.00	23.4	22.0	17.1	0.0131	22.0	12.7	0.0085	32
60.00	23.4	20.0	15.1	0.0131	20.0	13.0	0.0061	28
250.00	23.4	17.0	12.1	0.0131	17.0	13.5	0.0030	22
1440.00	22.9	15.0	10.0	0.0132	15.0	13.8	0.0013	18

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 44 (**% coarse** = 8 **% medium** = 18 **% fine** = 18)
% SILT = 30 **% CLAY** = 26

D_{85}= 0.94 D_{60}= 0.12 D_{50}= 0.04
D_{30}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	2	3	7	28	60	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-307	9	23.5'	8/19/06		SILT Sandy (ML); Strong Brown, Micaceous	31.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 1-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Strong Brown, Micaceous
Date: 8/19/06 **Natural Moisture:** 31.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	400.93
Tare =	190.78
Dry sample weight =	210.15

Tare for cumulative weight retained= .00

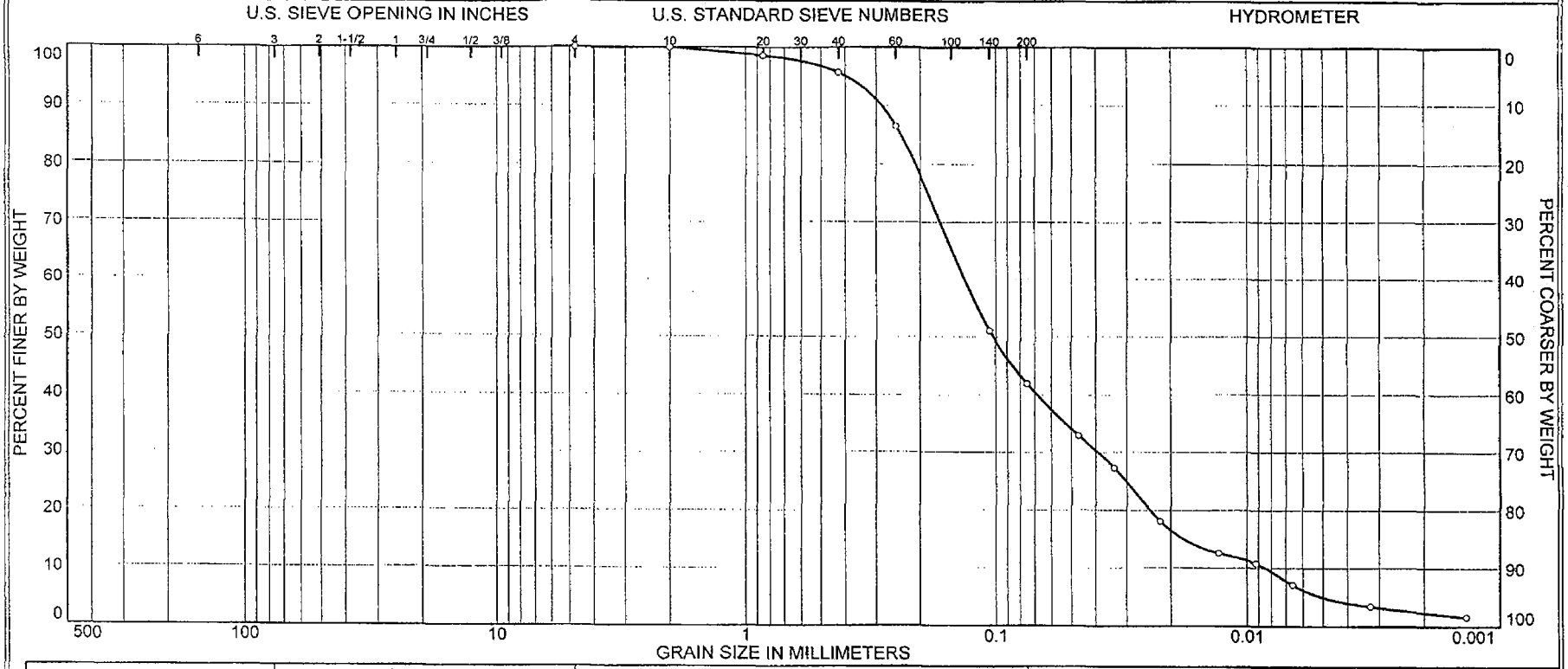
Sieve	Cumul. Wt. retained	Percent finer
3/4 inch	0.00	100
3/8 inch	1.46	99
# 4	4.54	98
# 10	10.22	95
# 20	18.05	91
# 40	25.24	88
# 60	31.84	85
# 100	50.55	76
# 140	66.38	68
# 200	83.05	60

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL = 2** **(% coarse =** **% fine = 2)**
% SAND = 38 **(% coarse = 3** **% medium = 7** **% fine = 28)**
% FINES = 60

D_{85}= 0.25 D_{60}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	4	54	37	5

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-307	10	28.5'	9/18/06		SAND Silty (SM); Dark Yellowish Brown	22.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Yellowish Brown
Date: 9/18/06 **Natural Moisture:** 22.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	143.57
Tare =	0.00
Dry sample weight =	143.57

Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.31 Tare = .00 Sample weight = 54.31
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.05	100
# 20	0.79	99
# 40	2.38	96
# 60	7.36	86
# 140	26.61	51
# 200	31.55	42

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 55.18
Hygroscopic moisture correction:
Moist weight & tare = 55.02
Dry weight & tare = 54.35
Tare = 11.60
Hygroscopic moisture= 2 %
Calculated biased weight= 54.33
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

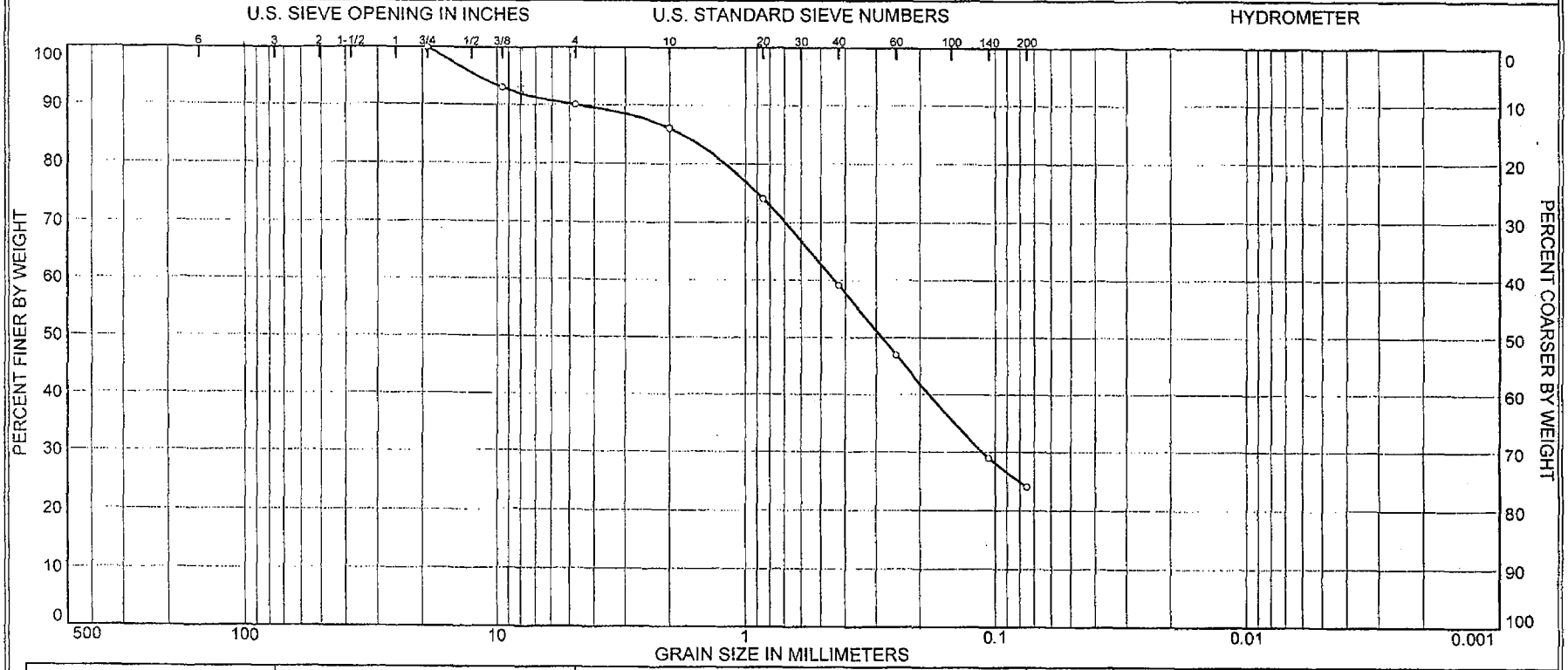
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.5	23.0	17.9	0.0132	23.0	12.5	0.0468	33
2.00	22.5	20.0	14.9	0.0132	20.0	13.0	0.0338	27
5.00	22.5	15.0	9.9	0.0132	15.0	13.8	0.0220	18
15.00	22.5	12.0	6.9	0.0132	12.0	14.3	0.0129	13
30.00	22.5	11.0	5.9	0.0132	11.0	14.5	0.0092	11
60.00	22.5	9.0	3.9	0.0132	9.0	14.8	0.0066	7
250.00	22.5	7.0	1.9	0.0132	7.0	15.1	0.0033	3
1440.00	22.5	6.0	0.9	0.0132	6.0	15.3	0.0014	2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 58 (% coarse = 0 % medium = 4 % fine = 54)
% SILT = 37 % CLAY = 5

D_{85}= 0.24 D_{60}= 0.13 D_{50}= 0.10
D_{30}= 0.04 D_{15}= 0.02 D_{10}= 0.01
C_C= 1.3621 C_u= 15.7418

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	10	4	27	35	24	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-307	11	33.5'	9/5/06		SAND Silty (SM); Brown, Micaceous	23.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 9/5/06 **Natural Moisture:** 23.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	344.81
Tare =	88.05
Dry sample weight =	256.76

Tare for cumulative weight retained= .00

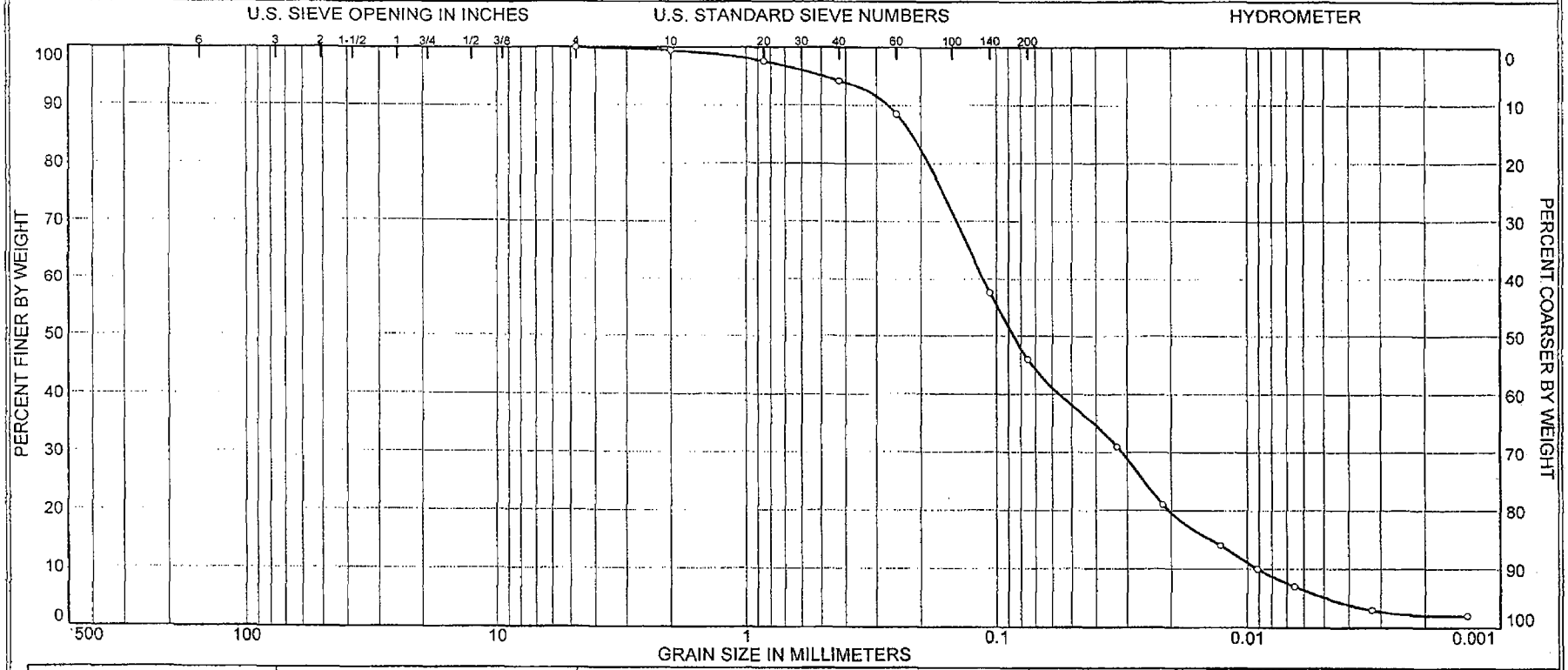
Sieve	Cumul. Wt. retained	Percent finer
3/4 inch	0.00	100
3/8 inch	18.31	93
# 4	25.14	90
# 10	36.41	86
# 20	65.70	74
# 40	105.56	59
# 60	135.36	47
# 140	182.28	29
# 200	196.18	24

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 10 **(% coarse =** **% fine =** 10)
% SAND = 66 **(% coarse =** 4 **% medium =** 27 **% fine =** 35)
% FINES = 24

D_{85}= 1.80 D_{60}= 0.44 D_{50}= 0.29
D_{30}= 0.11

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	5	48	41	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-307	12	38.5'	9/19/06		SAND Silty (SM); Brown, Micaceous	36.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-307
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Brown, Micaceous
Date: 9/19/06 **Natural Moisture:** 36.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	127.31
Tare =	0.00
Dry sample weight =	127.31

Sample split on number 10 sieve
Split sample data:
Sample and tare = 56.97 Tare = .00 Sample weight = 56.97
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.78	99
# 20	1.05	98
# 40	2.98	94
# 60	6.27	89
# 140	24.02	58
# 200	30.63	46

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 57.77
Hygroscopic moisture correction:
Moist weight & tare = 43.63
Dry weight & tare = 43.17
Tare = 10.72
Hygroscopic moisture= 1 %
Calculated biased weight= 57.54
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

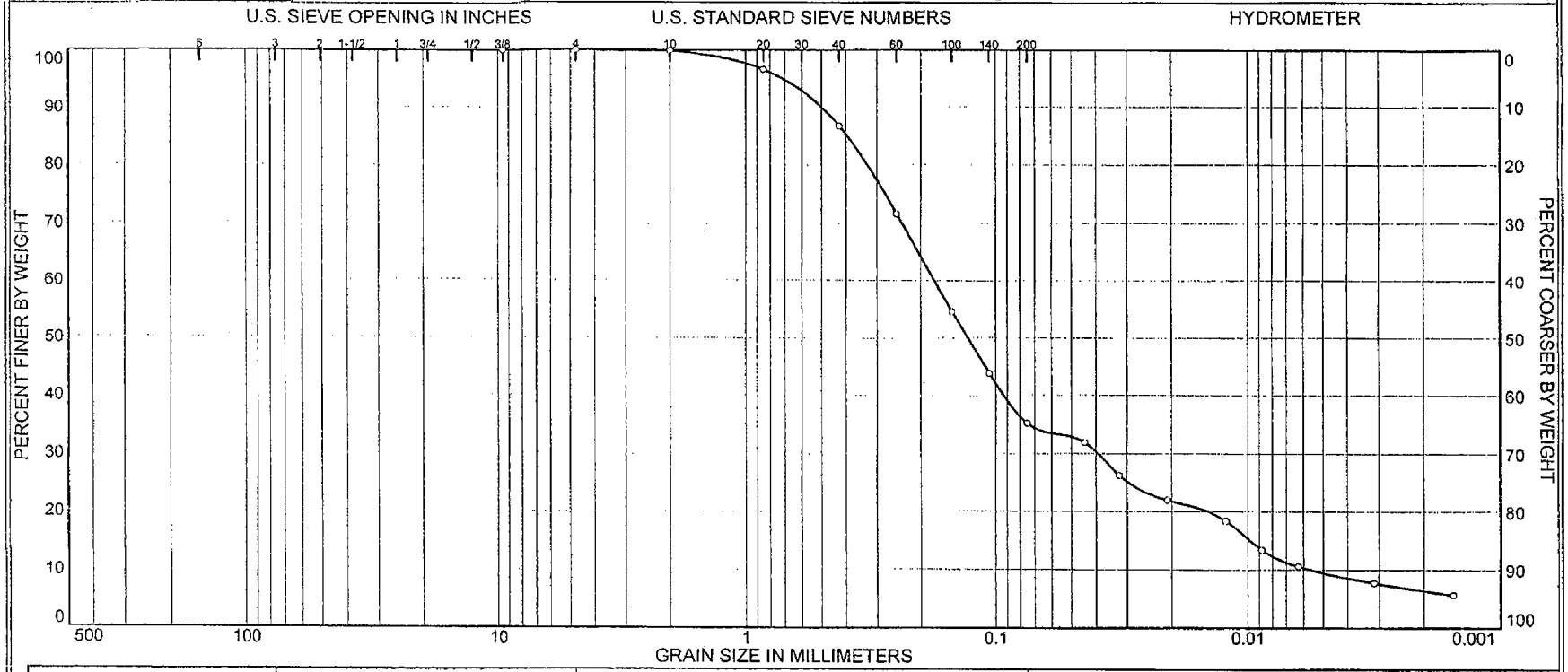
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	23.0	18.0	0.0132	23.0	12.5	0.0329	31
5.00	23.0	17.0	12.0	0.0132	17.0	13.5	0.0216	21
15.00	23.0	13.0	8.0	0.0132	13.0	14.2	0.0128	14
30.00	23.0	11.0	6.0	0.0132	11.0	14.5	0.0091	10
60.00	23.0	9.0	4.0	0.0132	9.0	14.8	0.0065	7
250.00	23.0	7.0	2.0	0.0132	7.0	15.1	0.0032	3
1440.00	23.0	6.0	1.0	0.0132	6.0	15.3	0.0014	2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 54 (% coarse = 1 % medium = 5 % fine = 48)
% SILT = 41 % CLAY = 5

D_{85}= 0.22 D_{60}= 0.11 D_{50}= 0.09
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_C= 0.9597 C_u= 12.358

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	13	52	26	9

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-309	UD-1	8.5 Ft.	11/10/6	SM	Silty sand	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-309
Sample No.: UD-1
Elev. or Depth: 8.5 Ft. **Sample Length(in./cm.):** 5388
Location: B-309
Description: Silty sand
Date: 11/10/6 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	69.22
Tare =	0.00
Dry sample weight =	69.22

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.00	100
# 10	0.06	100
# 20	2.34	97
# 40	9.18	87
# 60	19.65	72
# 100	31.46	55
# 140	38.87	44
# 200	44.78	35

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 35
Weight of hydrometer sample: 24.44
Calculated biased weight= 69.24
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	27.0	22.4	0.0129	27.0	11.9	0.0444	32
2.00	23.5	23.0	18.4	0.0129	23.0	12.5	0.0322	26
5.00	23.5	20.0	15.4	0.0129	20.0	13.0	0.0208	22
15.00	23.5	17.5	12.9	0.0129	17.5	13.4	0.0122	18
30.00	23.5	14.0	9.4	0.0129	14.0	14.0	0.0088	13

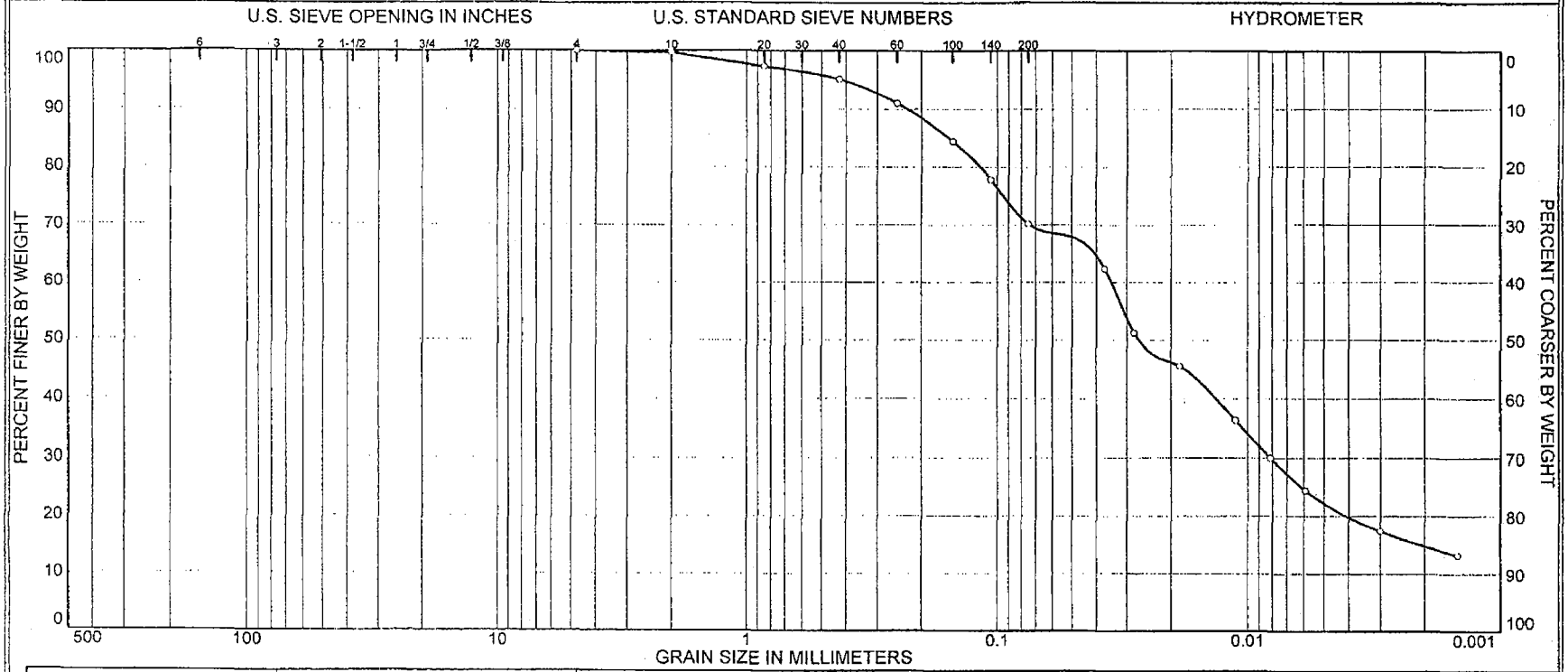
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
60.00	23.5	12.0	7.4	0.0129	12.0	14.3	0.0063	11
250.00	23.4	10.0	5.4	0.0129	10.0	14.7	0.0031	8
1057.00	23.5	8.5	3.9	0.0129	8.5	14.9	0.0015	6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 65 (**% coarse** = 0 **% medium** = 13 **% fine** = 51)
% SILT = 26 **% CLAY** = 9

D_{85}= 0.40 D_{60}= 0.18 D_{50}= 0.13
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.5451 C_u= 31.4782

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
O	0	0	0	0	5	25	48	22

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
O	B-309	UD-3	28.5 Ft.	11/10/6	ML	Silt with sand	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

O Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-309
Sample No.: UD-3
Elev. or Depth: 28.5 Ft. **Sample Length(in./cm.):** 5390
Location: B-309
Description: Silt with sand
Date: 11/10/6 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	70.36
Tare =	0.00
Dry sample weight =	70.36

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.20	100
# 20	1.89	97
# 40	3.48	95
# 60	6.32	91
# 100	11.01	84
# 140	15.59	78
# 200	20.96	70

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 70
Weight of hydrometer sample: 49.4
Calculated biased weight= 70.37
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	49.0	44.4	0.0129	49.0	8.3	0.0370	62
2.00	23.5	41.0	36.4	0.0129	41.0	9.6	0.0282	51
5.00	23.5	37.0	32.4	0.0129	37.0	10.2	0.0184	46
15.00	23.5	30.5	25.9	0.0129	30.5	11.3	0.0112	36
30.00	23.5	26.0	21.4	0.0129	26.0	12.0	0.0082	30
60.00	23.5	22.0	17.4	0.0129	22.0	12.7	0.0059	25

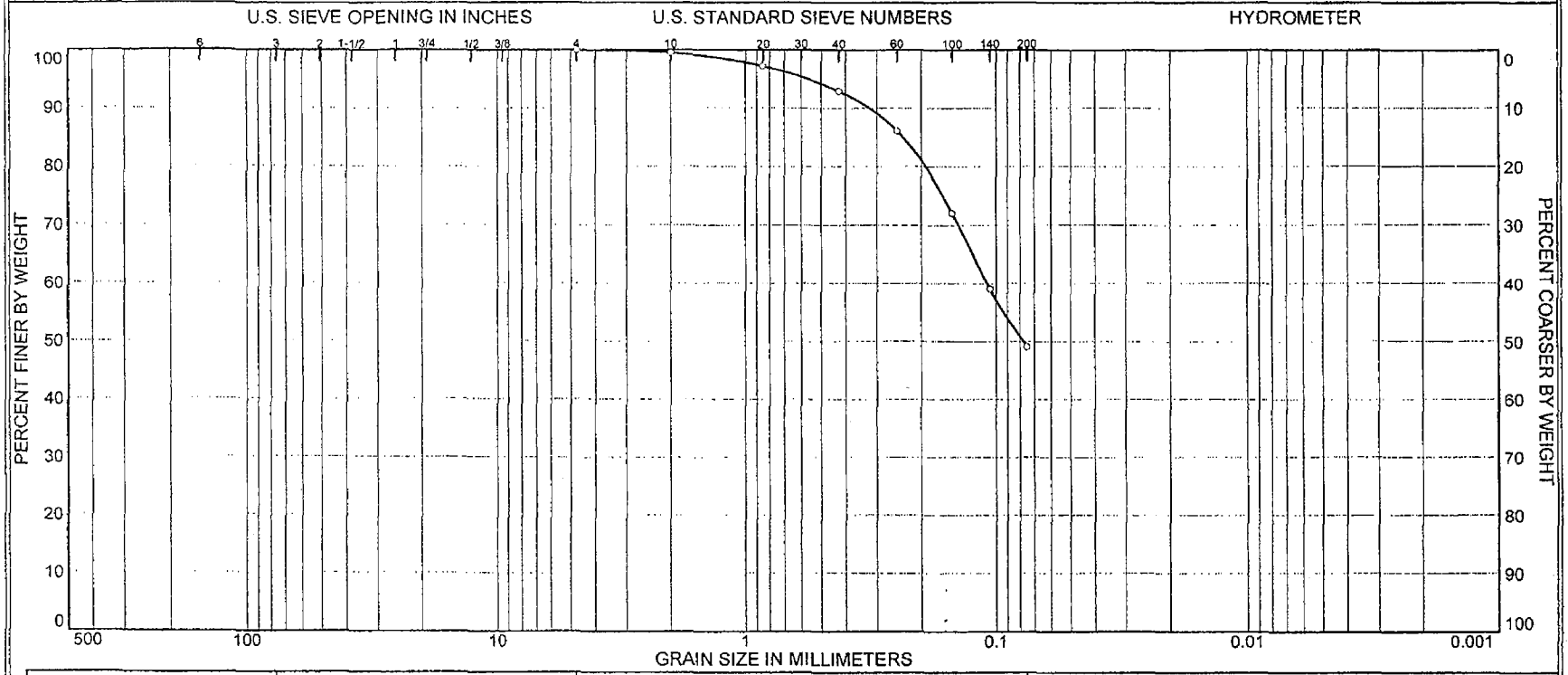
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
250.00	23.4	17.0	12.4	0.0129	17.0	13.5	0.0030	17
1057.00	23.5	14.0	9.4	0.0129	14.0	14.0	0.0015	13

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 30 (% coarse = 0 % medium = 5 % fine = 25)
% SILT = 48 % CLAY = 22

D_{85}= 0.16 D_{60}= 0.03 D_{50}= 0.03
D_{30}= 0.01 D_{15}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	7	43	49	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-309	UD-4	38.5 Ft.	11/17/06	SM	Silty sand	N/A		

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 6319-04

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-309
Sample No.: UD-4
Elev. or Depth: 38.5 Ft. **Sample Length(in./cm.):** 5391
Location: B-309
Description: Silty sand
Date: 11/17/06 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** **USCS Class.:** SM
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 6319-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	163.93
Tare =	0.00
Dry sample weight =	163.93

Tare for cumulative weight retained= .00

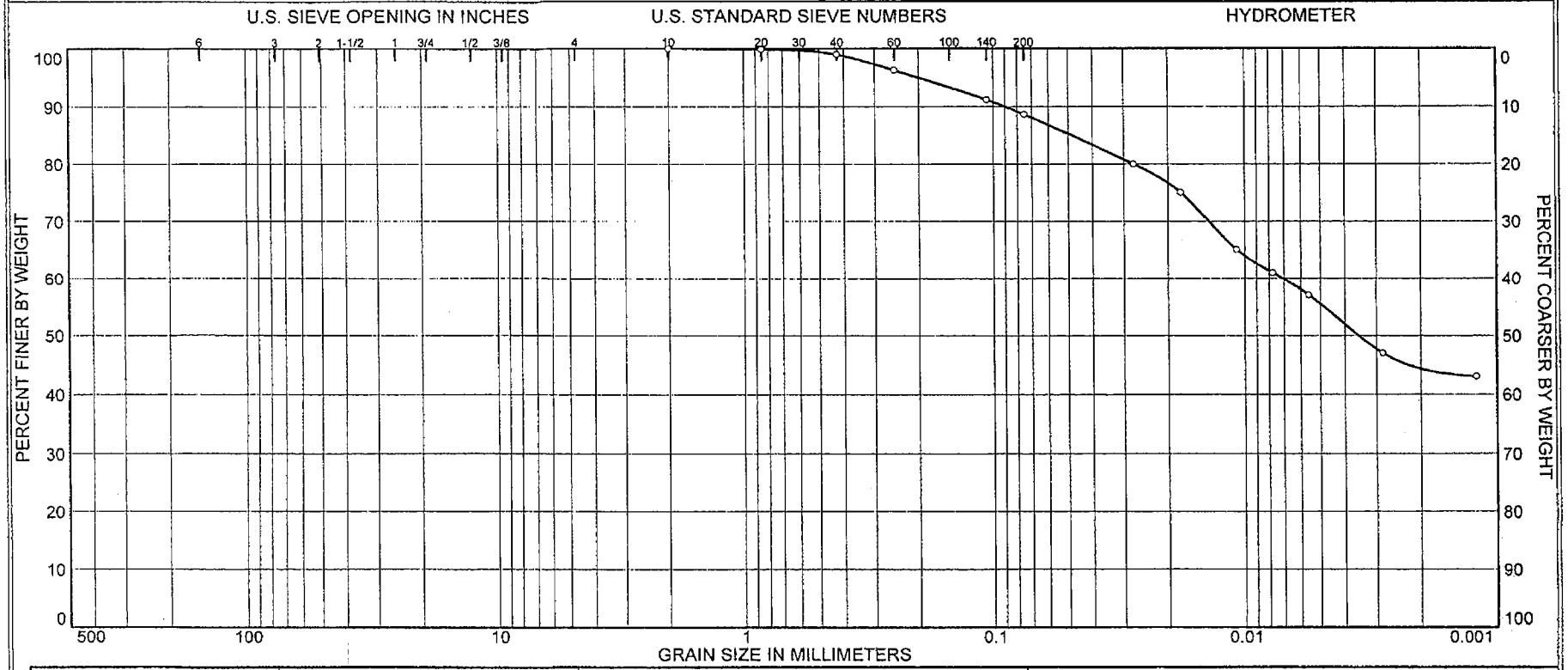
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.88	100
# 20	4.66	97
# 40	11.57	93
# 60	22.76	86
# 100	45.84	72
# 140	67.13	59
# 200	83.41	49

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 51 (% coarse = 1 % medium = 7 % fine = 44)
% FINES = 49

D_{85}= 0.24 D_{60}= 0.11 D_{50}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	1	10	33	55

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	1	0.0	9-28-06	MH	SILT Clayey (MH); Red, Micaceous	30.9	70	51

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 1
Elev. or Depth: 0.0 **Sample Length(in./cm.):**
Location:
Description: SILT Clayey (MH); Red, Micaceous
Date: 9-28-06 **Natural Moisture:** 30.9
Liquid Limit: 70 **Plastic Limit:** 51 **USCS Class.:** MH
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	206.43
Tare =	0.00
Dry sample weight =	206.43

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.99 Tare = .00 Sample weight = 50.99
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.04	100
# 40	0.50	99
# 60	1.87	96
# 140	4.51	91
# 200	5.78	89

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 51.40
Hygroscopic moisture correction:
Moist weight & tare = 30.71
Dry weight & tare = 30.55
Tare = 11.62
Hygroscopic moisture= 1 %
Calculated biased weight= 50.97
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

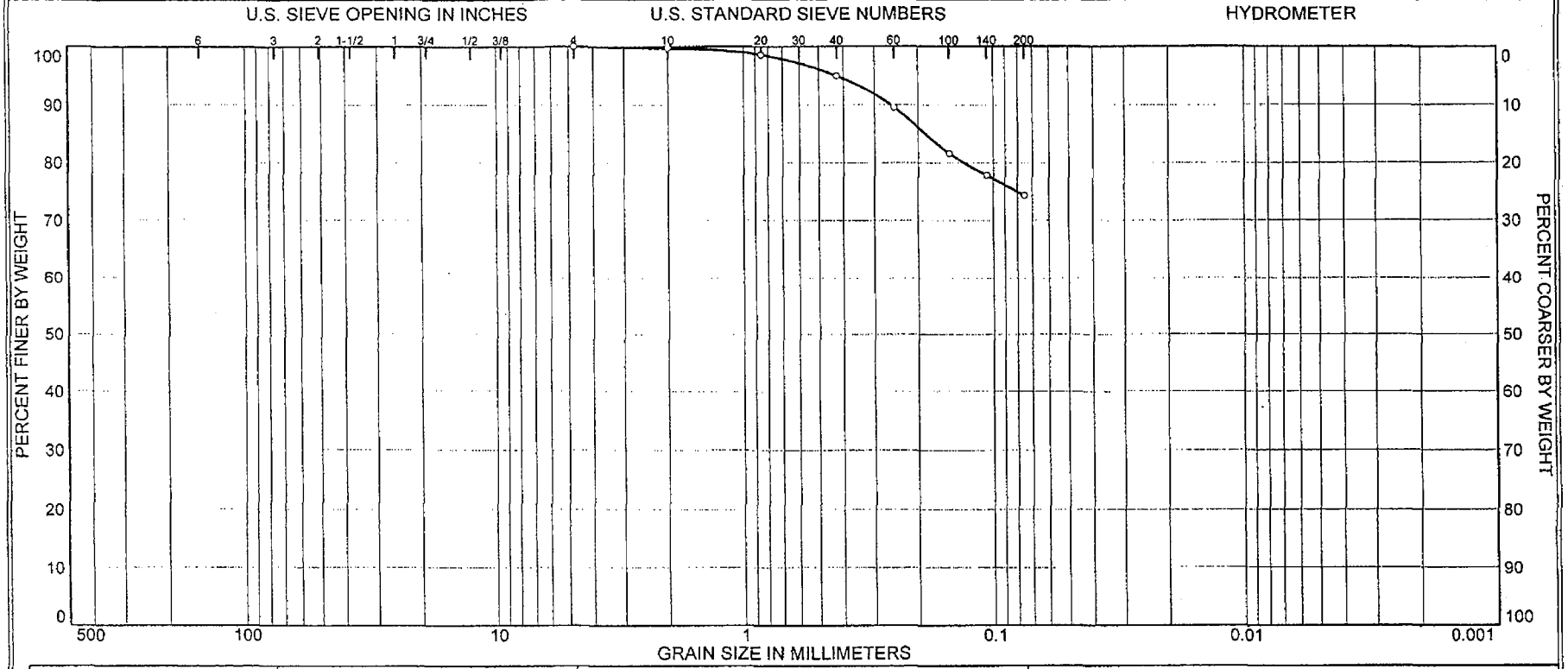
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	46.0	41.0	0.0132	46.0	8.8	0.0275	80
5.00	23.0	43.0	38.0	0.0132	43.0	9.2	0.0179	75
15.00	23.0	38.0	33.0	0.0132	38.0	10.1	0.0108	65
30.00	23.0	36.0	31.0	0.0132	36.0	10.4	0.0077	61
60.00	23.0	34.0	29.0	0.0132	34.0	10.7	0.0056	57
250.00	23.0	29.0	24.0	0.0132	29.0	11.5	0.0028	47
1440.00	22.4	27.0	21.8	0.0132	27.0	11.9	0.0012	43

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 11 **(% coarse =** **% medium =** 1 **% fine =** 10**)**
% SILT = 33 **% CLAY =** 55

D_{85}= 0.05 D_{60}= 0.01 D_{50}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	5	21	74	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	2	1.5'	08/31/06		SILT Clayey with Sand (MH); Red, Micaceous	35.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SILT Clayey with Sand (MH); Red, Micaceous
Date: 08/31/06 **Natural Moisture:** 35.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	313.67
Tare =	110.39
Dry sample weight =	203.28

Tare for cumulative weight retained= .00

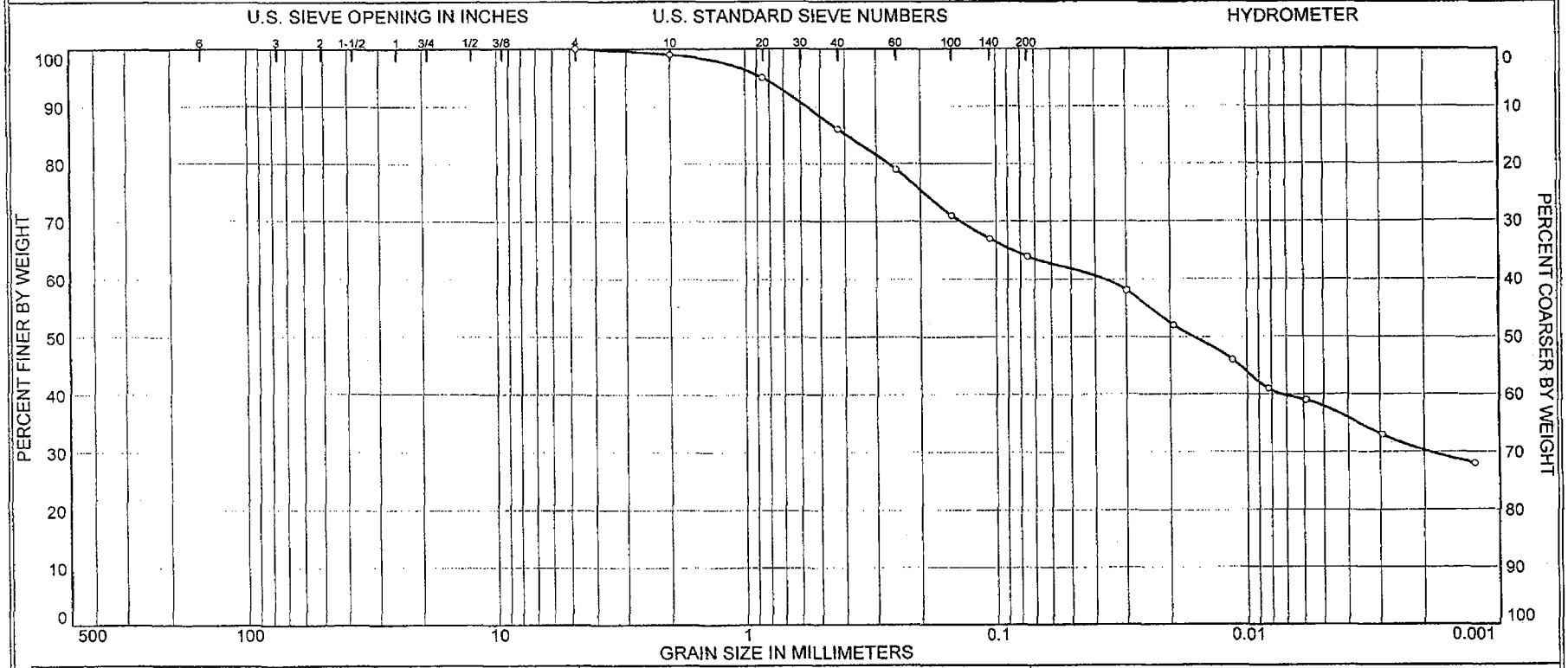
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.60	100
# 20	2.81	99
# 40	10.11	95
# 60	21.05	90
# 100	37.38	82
# 140	45.04	78
# 200	52.33	74

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 26 (% coarse = 0 % medium = 5 % fine = 21)
% FINES = 74

D_{85}= 0.19

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	13	22	26	38

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	3	3.5'	09/18/06	MH	SILT Clayey with Sand (MH); Red, Micaceous	30.5	77	52

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SILT Clayey with Sand (MH); Red, Micaceous
Date: 09/18/06 **Natural Moisture:** 30.5
Liquid Limit: 77 **Plastic Limit:** 52 **USCS Class.:** MH
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	210.19
Tare =	0.00
Dry sample weight =	210.19

Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.00 Tare = .00 Sample weight = 54.00
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.09	99
# 20	2.05	95
# 40	6.84	86
# 60	10.89	79
# 100	15.44	71
# 140	17.50	67
# 200	19.33	64

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 54.00
Hygroscopic moisture correction:
Moist weight & tare = 37.51
Dry weight & tare = 37.25
Tare = 11.03
Hygroscopic moisture= 1 %
Calculated biased weight= 54.01
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

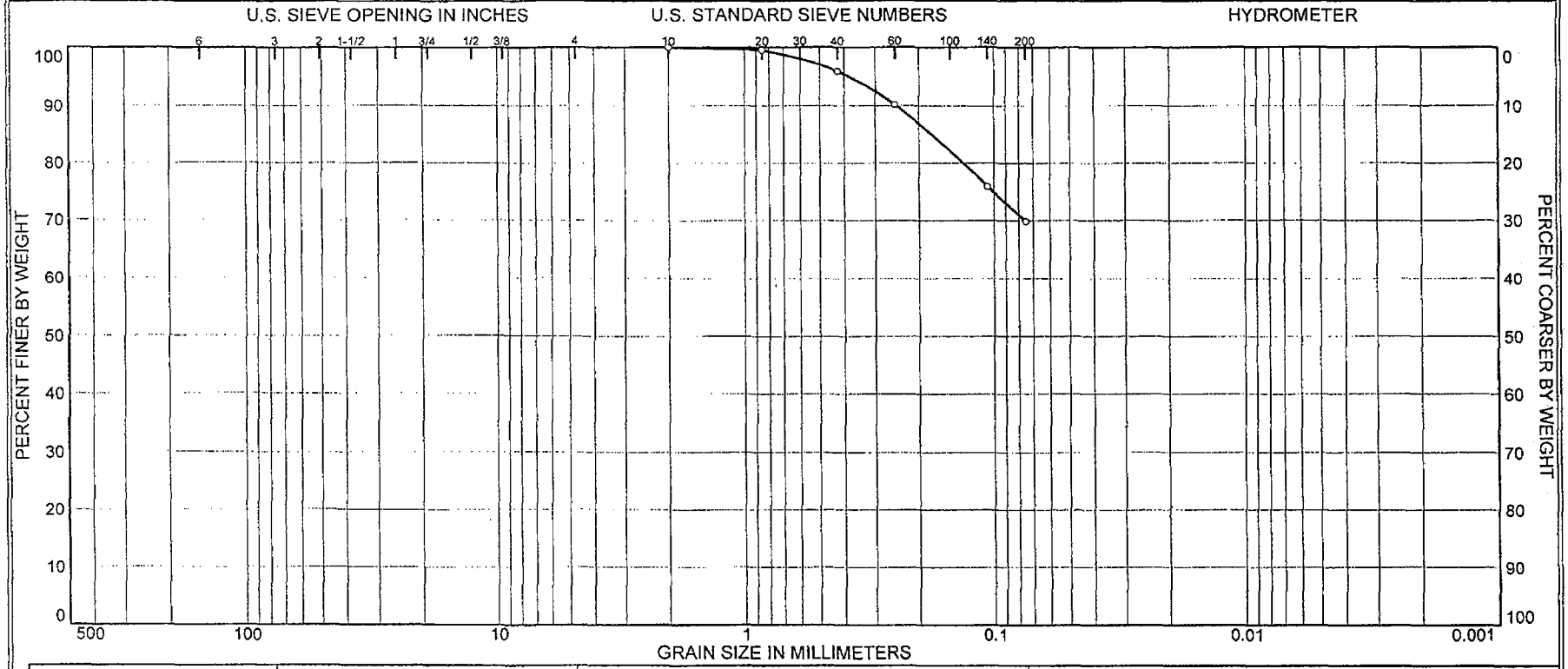
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.4	36.0	31.1	0.0131	36.0	10.4	0.0298	58
5.00	23.4	33.0	28.1	0.0131	33.0	10.9	0.0193	52
15.00	23.4	30.0	25.1	0.0131	30.0	11.4	0.0114	46
30.00	23.4	27.0	22.1	0.0131	27.0	11.9	0.0082	41
60.00	23.4	26.0	21.1	0.0131	26.0	12.0	0.0059	39
250.00	23.4	23.0	18.1	0.0131	23.0	12.5	0.0029	33
1440.00	22.9	20.0	15.0	0.0132	20.0	13.0	0.0013	28

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 36 (% coarse = 1 % medium = 13 % fine = 22)
% SILT = 26 % CLAY = 38

D_{85}= 0.39 D_{60}= 0.04 D_{50}= 0.02
D_{30}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	4	26	70	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	4	6.0'	9-28-06		SILT Sandy with Clay (ML); Red, Micaceous	34.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy with Clay (ML); Red, Micaceous
Date: 9-28-06 **Natural Moisture:** 34.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	355.54
Tare =	115.00
Dry sample weight =	240.54

Tare for cumulative weight retained= .00

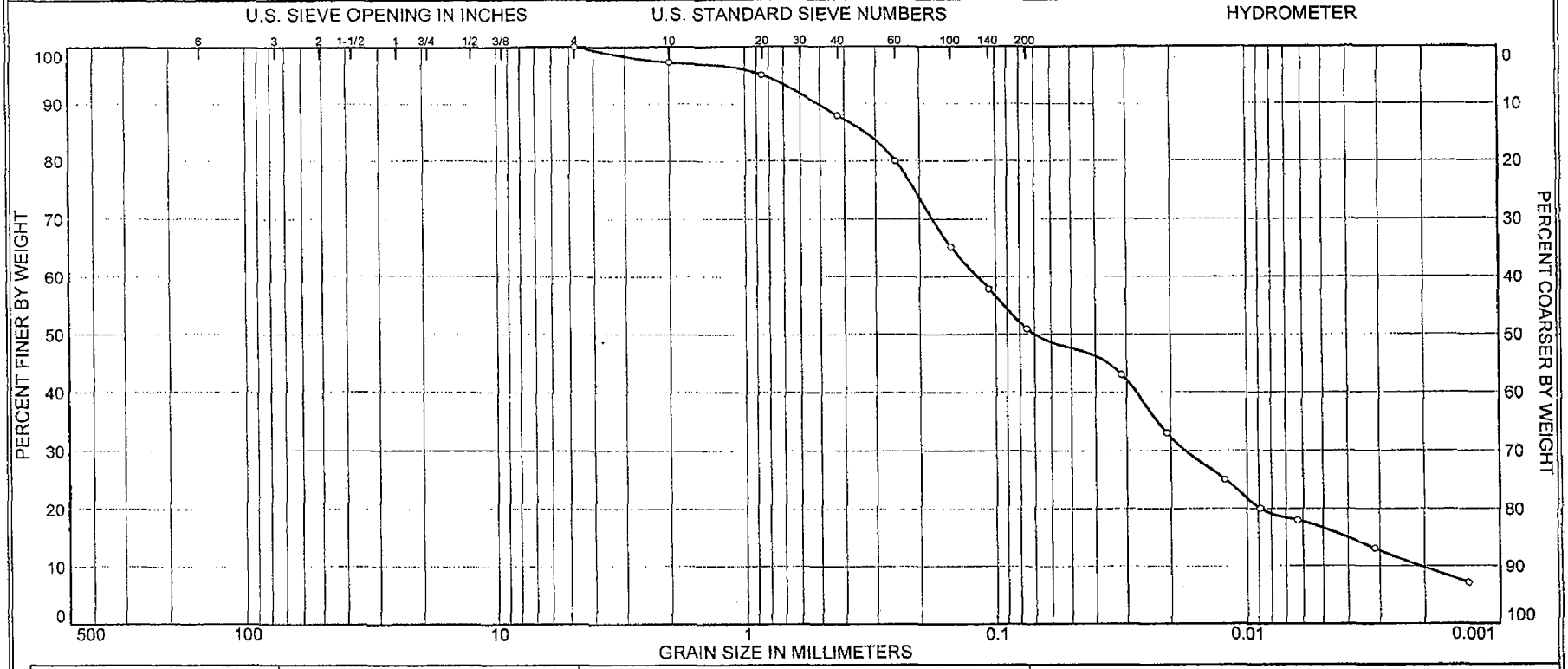
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	1.11	100
# 40	9.84	96
# 60	23.64	90
# 140	58.07	76
# 200	72.66	70

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 30 (% coarse = % medium = 4 % fine = 26)
% FINES = 70

D_{85}= 0.18

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	3	9	37	34	17

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	5	8.5'	09/18/06	ML	SILT Sandy with Clay (ML); Red, Micaceous	29.1	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS. 11.14.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 5
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy with Clay (ML); Red, Micaceous
Date: 09/18/06 **Natural Moisture:** 29.1
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	204.42
Tare =	0.00
Dry sample weight =	204.42

Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.19 Tare = .00 Sample weight = 54.19
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	5.44	97
# 20	1.24	95
# 40	5.23	88
# 60	9.63	80
# 100	17.95	65
# 140	22.00	58
# 200	25.76	51

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 97
Weight of hydrometer sample: 54.19
Hygroscopic moisture correction:
Moist weight & tare = 37.00
Dry weight & tare = 36.79
Tare = 11.05
Hygroscopic moisture= 1 %
Calculated biased weight= 55.41
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

eniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

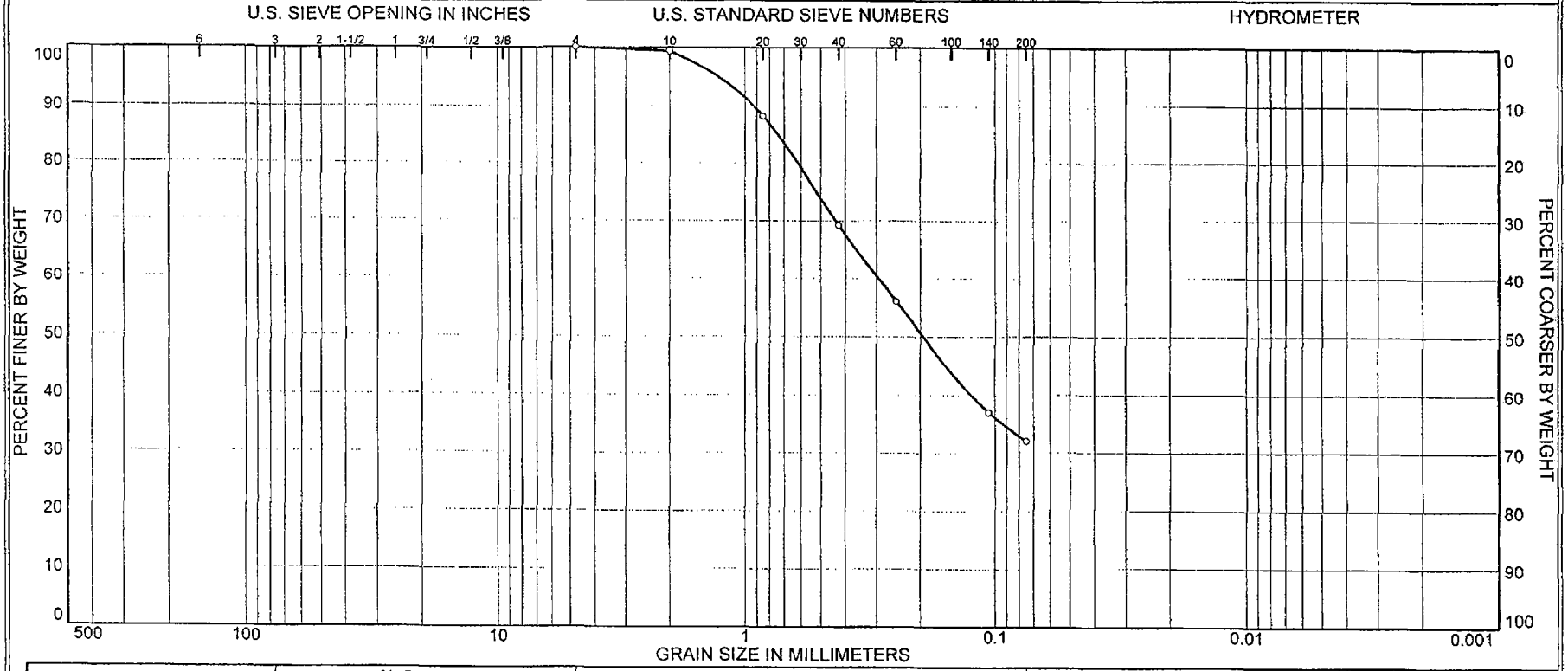
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.4	29.0	24.1	0.0131	29.0	11.5	0.0314	43
5.00	23.4	23.0	18.1	0.0131	23.0	12.5	0.0207	33
15.00	23.4	19.0	14.1	0.0131	19.0	13.2	0.0123	25
30.00	23.4	16.0	11.1	0.0131	16.0	13.7	0.0088	20
60.00	23.4	15.0	10.1	0.0131	15.0	13.8	0.0063	18
250.00	23.4	12.0	7.1	0.0131	12.0	14.3	0.0031	13
1440.00	22.9	9.0	4.0	0.0132	9.0	14.8	0.0013	7

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 49 (% coarse = 3 % medium = 9 % fine = 37)
% SILT = 34 % CLAY = 17

D_{85}= 0.33 D_{60}= 0.12 D_{50}= 0.07
D_{30}= 0.02 D_{15}= 0.00 D_{10}= 0.00
C_C= 1.2447 C_u= 56.6852

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	30	37	32	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	6	11.0'	09/05/06		SAND Silty (SM); Yellowish Red, Micaceous	26.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Micaceous
Date: 09/05/06 **Natural Moisture:** 26.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	301.62
Tare =	107.38
Dry sample weight =	194.24

Tare for cumulative weight retained= .00

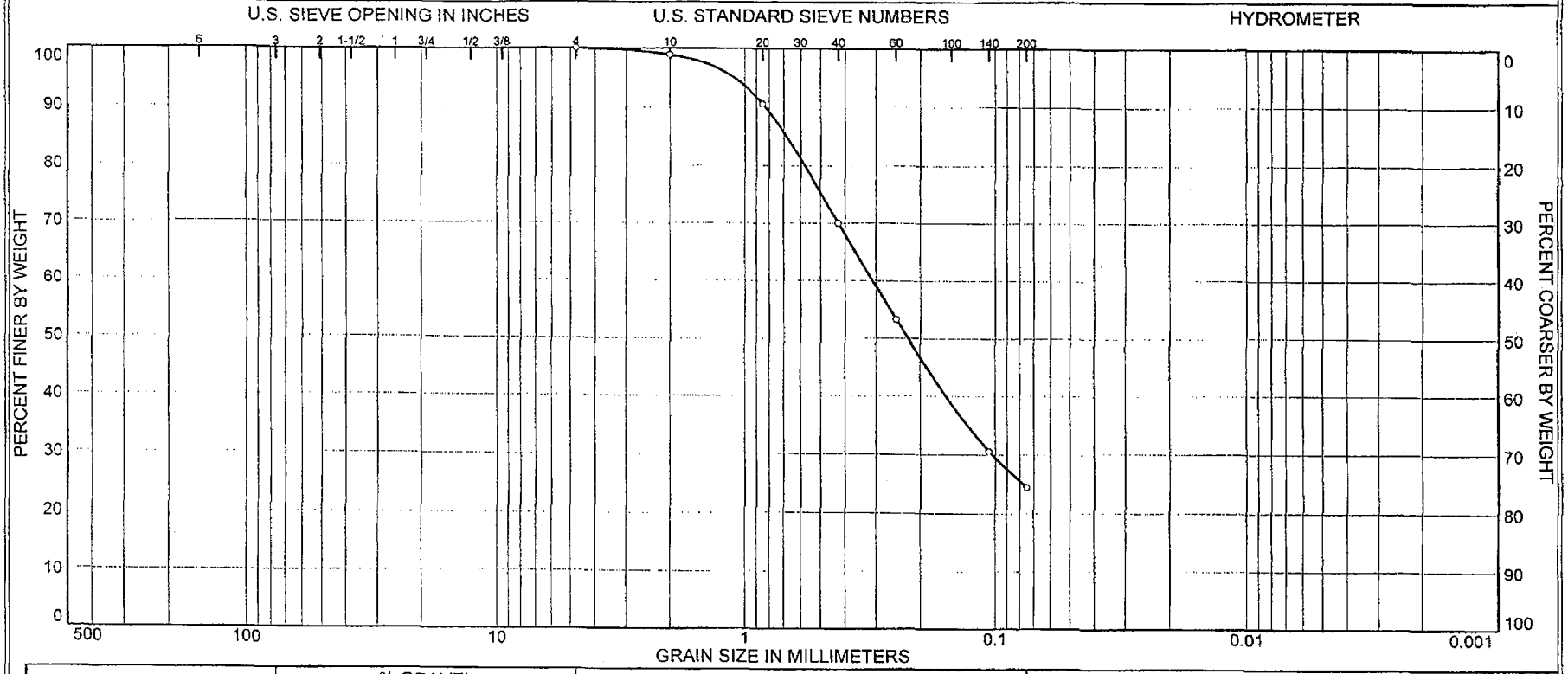
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.16	99
# 20	22.68	88
# 40	59.86	69
# 60	85.49	56
# 140	122.29	37
# 200	131.90	32

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 68 **(% coarse =** 1 **% medium =** 30 **% fine =** 37**)**
% FINES = 32

D_{85}= 0.74 D_{60}= 0.30 D_{50}= 0.20

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	1	29	46	24	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-311	7	13.5'	9/28/06		SAND Silty (SM); Yellowish Red, Micaceous	20.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Micaceous
Date: 9/28/06 **Natural Moisture:** 20.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	258.86
Tare =	107.17
Dry sample weight =	151.69

Tare for cumulative weight retained= .00

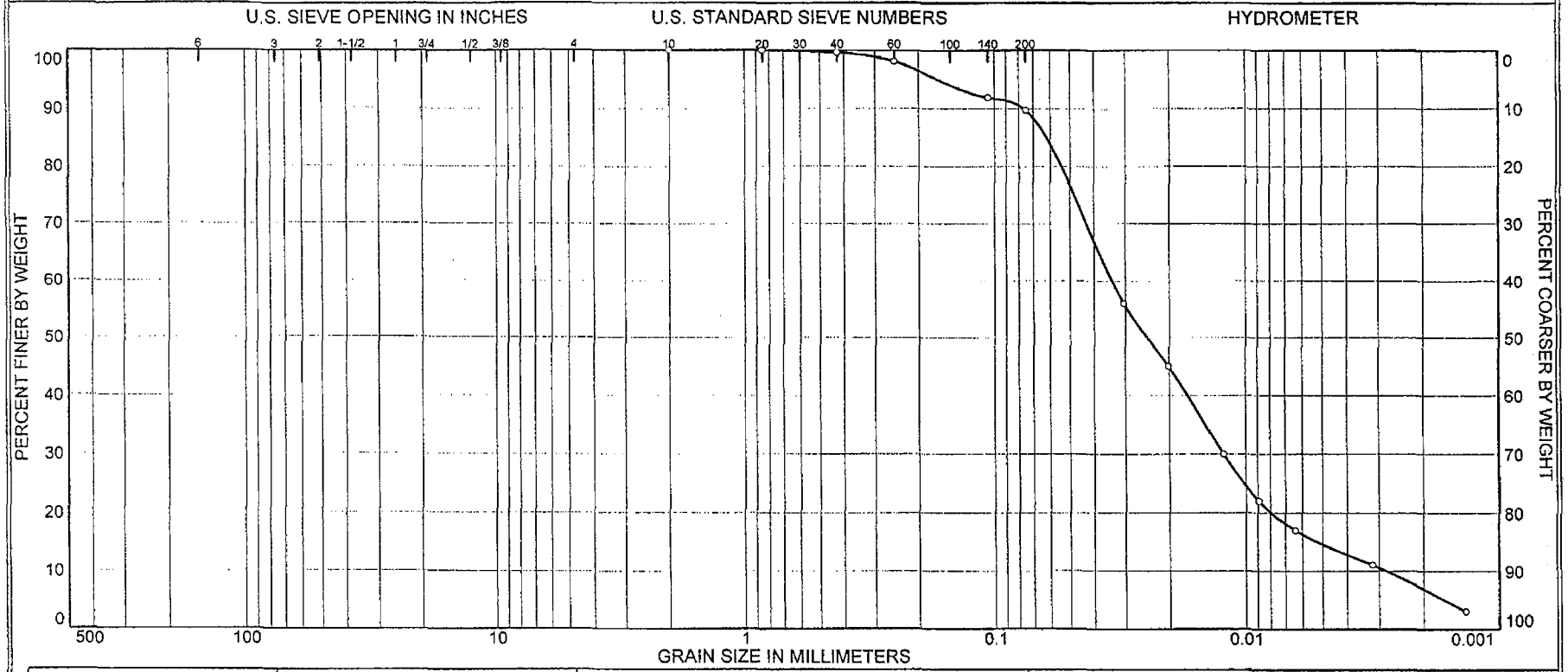
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.69	99
# 20	14.38	91
# 40	45.57	70
# 60	70.80	53
# 140	105.39	31
# 200	114.65	24

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 76 (% coarse = 1 % medium = 29 % fine = 46)
% FINES = 24

D_{85}= 0.68 D_{60}= 0.31 D_{50}= 0.22
D_{30}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
O	0	0	0	0	0	10	75	15

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
O	B-311	8	18.5'	9-28-06		SILT Sandy (ML); Yellowish Red, Micaceous	28.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

O Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Yellowish Red, Micaceous
Date: 9-28-06 **Natural Moisture:** 28.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	184.17
Tare =	0.00
Dry sample weight =	184.17

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.06	100
# 40	0.69	100
# 60	3.50	98
# 140	14.92	92
# 200	18.95	90

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.91
Hygroscopic moisture correction:
Moist weight & tare = 48.48
Dry weight & tare = 48.40
Tare = 11.56
Hygroscopic moisture= 0 %
Calculated biased weight= 52.80
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

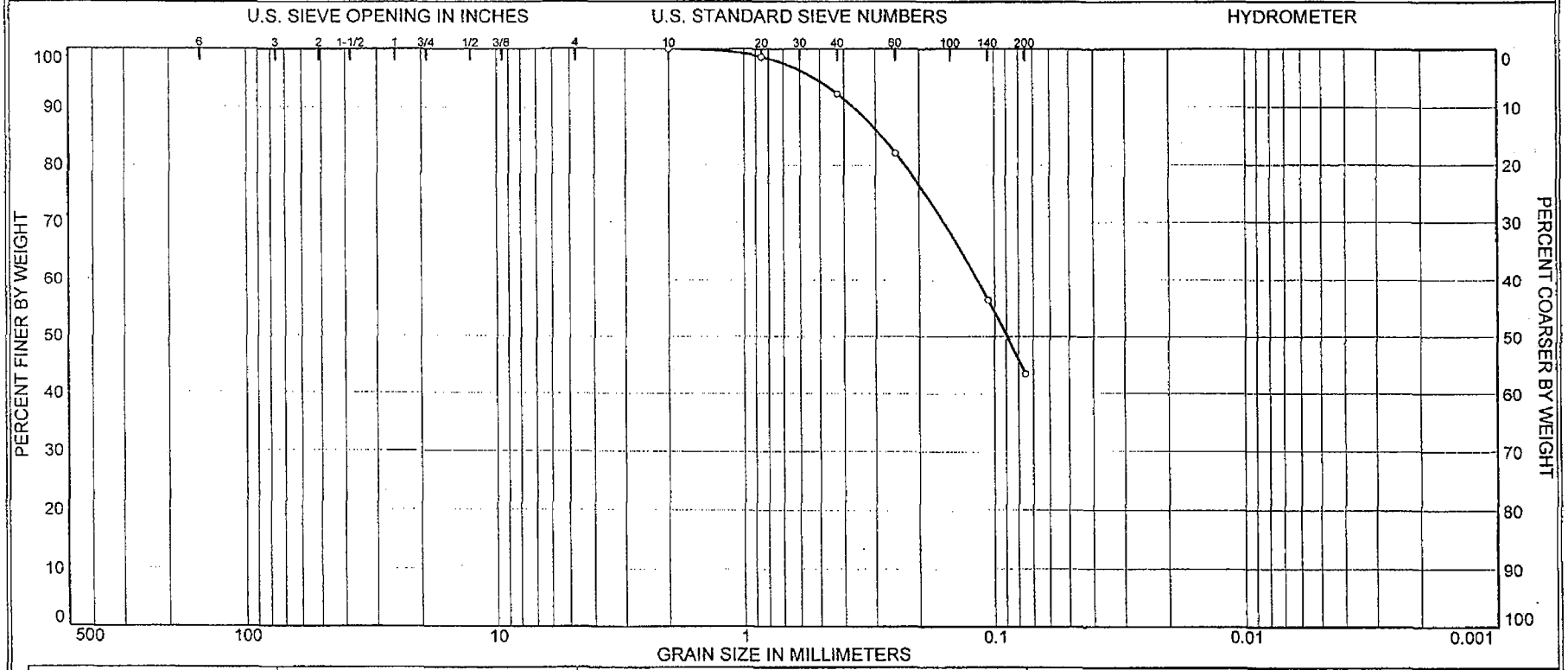
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.3	35.0	29.8	0.0133	35.0	10.6	0.0305	56
5.00	22.3	29.0	23.8	0.0133	29.0	11.5	0.0202	45
15.00	22.3	21.0	15.8	0.0133	21.0	12.9	0.0123	30
30.00	22.3	17.0	11.8	0.0133	17.0	13.5	0.0089	22
60.00	22.6	14.0	8.9	0.0132	14.0	14.0	0.0064	17
250.00	22.6	11.0	5.9	0.0132	11.0	14.5	0.0032	11
1440.00	22.3	7.0	1.8	0.0133	7.0	15.1	0.0014	3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 10 (**% coarse =** **% medium** = 0 **% fine** = 10)
% SILT = 75 **% CLAY** = 15

D_{85}= 0.06 D_{60}= 0.03 D_{50}= 0.02
D_{30}= 0.01 D_{15}= 0.01 D_{10}= 0.00
C_c= 1.5707 C_u= 12.0539

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	8	49	44	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-311	9	23.5'	9-28-06		SAND Silty (SM); Yellowish Red, Micaceous	24.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Micaceous
Date: 9-28-06 **Natural Moisture:** 24.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	328.32
Tare =	101.42
Dry sample weight =	226.90

Tare for cumulative weight retained= .00

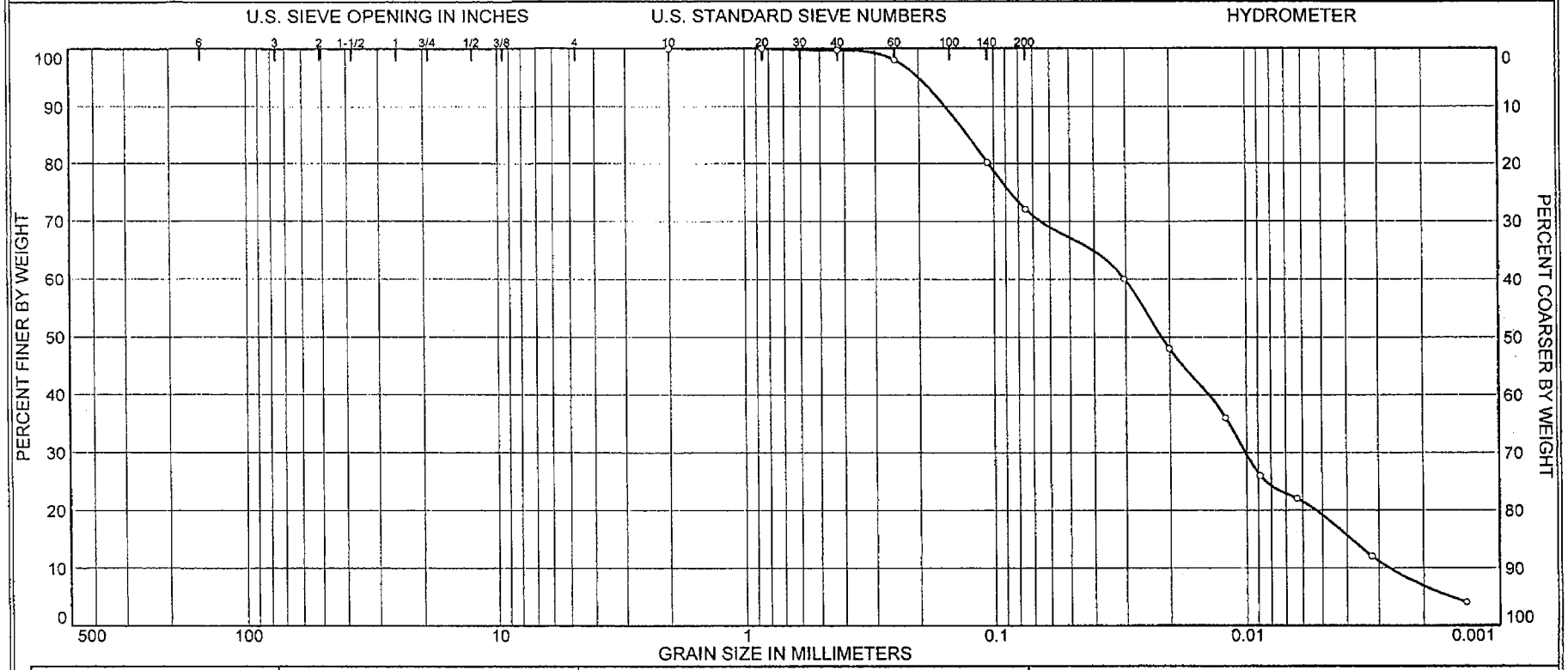
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	3.14	99
# 40	17.45	92
# 60	40.61	82
# 140	98.88	56
# 200	128.19	44

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 57 (% coarse = % medium = 8 % fine = 49)
% FINES = 44

D_{85}= 0.28 D_{60}= 0.12 D_{50}= 0.09

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	0	28	53	19

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	10	28.5'	9-28-06		SILT Sandy (ML); Yellowish Red, Micaceous	34.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Yellowish Red, Micaceous
Date: 9-28-06 **Natural Moisture:** 34.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	173.54
Tare =	0.00
Dry sample weight =	173.54

Sample split on number 10 sieve
Split sample data:
Sample and tare = 49.75 Tare = .00 Sample weight = 49.75
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.00	100
# 40	0.15	100
# 60	1.00	98
# 140	9.83	80
# 200	13.89	72

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 50.10
Hygroscopic moisture correction:
Moist weight & tare = 41.13
Dry weight & tare = 40.91
Tare = 10.93
Hygroscopic moisture= 1 %
Calculated biased weight= 49.74
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

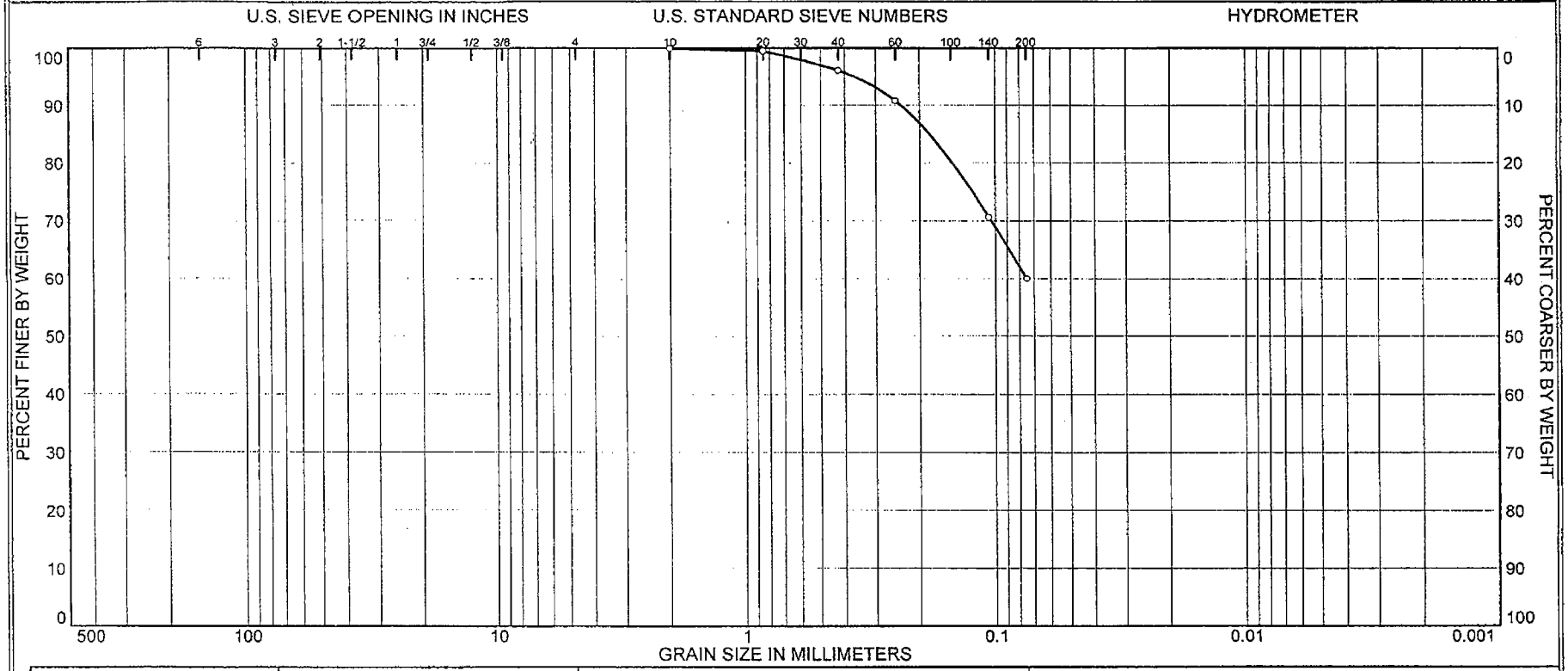
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.5	35.0	29.9	0.0132	35.0	10.6	0.0304	60
5.00	22.5	29.0	23.9	0.0132	29.0	11.5	0.0201	48
15.00	22.5	23.0	17.9	0.0132	23.0	12.5	0.0121	36
30.00	22.5	18.0	12.9	0.0132	18.0	13.3	0.0088	26
60.00	22.5	16.0	10.9	0.0132	16.0	13.7	0.0063	22
250.00	22.5	11.0	5.9	0.0132	11.0	14.5	0.0032	12
1440.00	22.5	7.0	1.9	0.0132	7.0	15.1	0.0014	4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 28 (**% coarse =** **% medium =** 0 **% fine =** 28)
% SILT = 53 **% CLAY =** 19

D_{85}= 0.13 D_{60}= 0.03 D_{50}= 0.02
D_{30}= 0.01 D_{15}= 0.00 D_{10}= 0.00
C_c= 1.2318 C_u= 11.1162

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	4	36	60	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	11	33.5'	9-28-06		SILT Sandy (ML); Reddish Brown, Micaceous	35.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Reddish Brown, Micaceous
Date: 9-28-06 **Natural Moisture:** 35.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	312.44
Tare =	115.14
Dry sample weight =	197.30

Tare for cumulative weight retained= .00

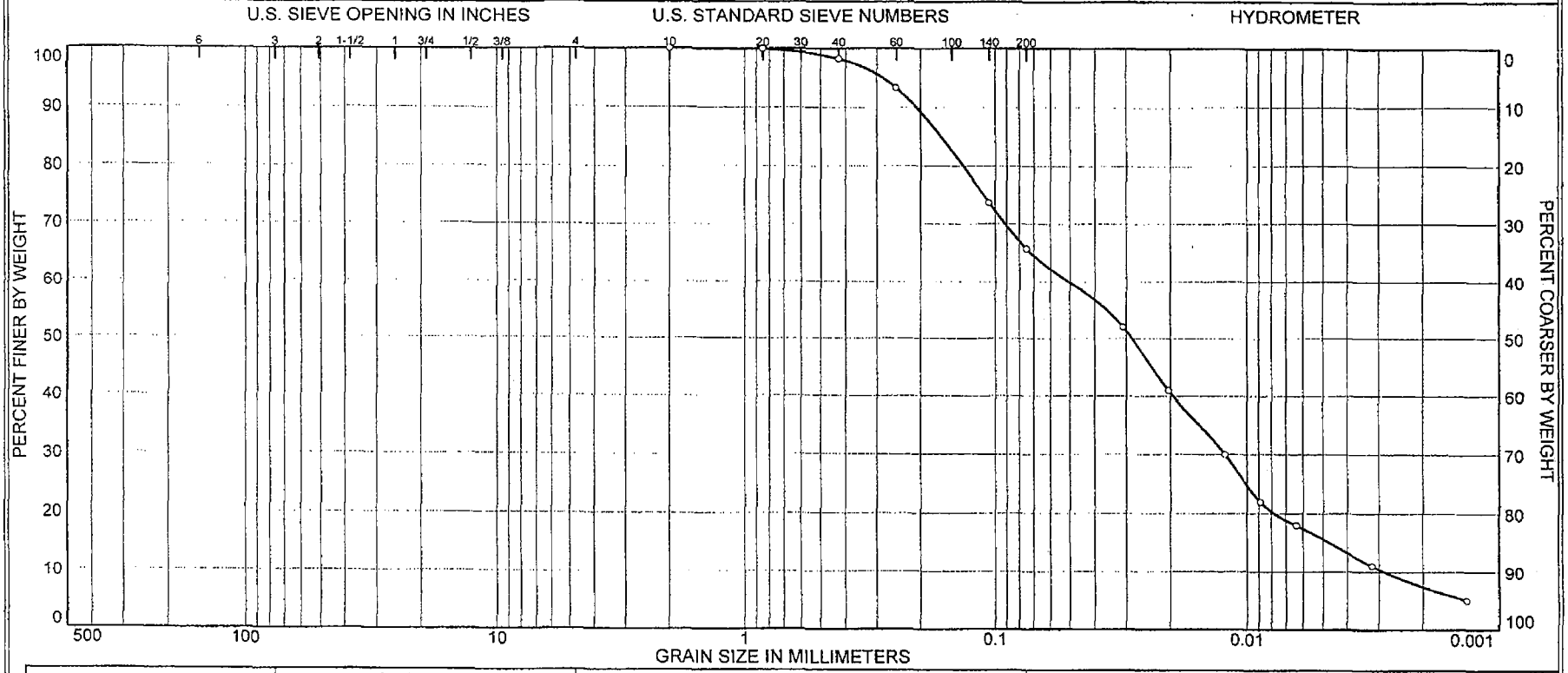
Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.99	100
# 40	7.78	96
# 60	17.91	91
# 140	57.90	71
# 200	78.69	60

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 40 (% coarse = % medium = 4 % fine = 36)
% FINES = 60

D_{85}= 0.18

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	2	32	50	16

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	12	38.5'	9-28-06		SILT Sandy (ML); Reddish Brown, Micaceous	39.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Reddish Brown, Micaceous
Date: 9-28-06 **Natural Moisture:** 39.7
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	148.62
Tare =	0.00
Dry sample weight =	148.62

Sample split on number 10 **sieve**
Split sample data:
Sample and tare = 53.47 **Tare** = .00 **Sample weight** = 53.47
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.08	100
# 40	0.95	98
# 60	3.58	93
# 140	14.06	74
# 200	18.33	66

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 54.06
Hygroscopic moisture correction:
Moist weight & tare = 41.68
Dry weight & tare = 41.33
Tare = 10.88
Hygroscopic moisture= 1 %
Calculated biased weight= 53.45
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

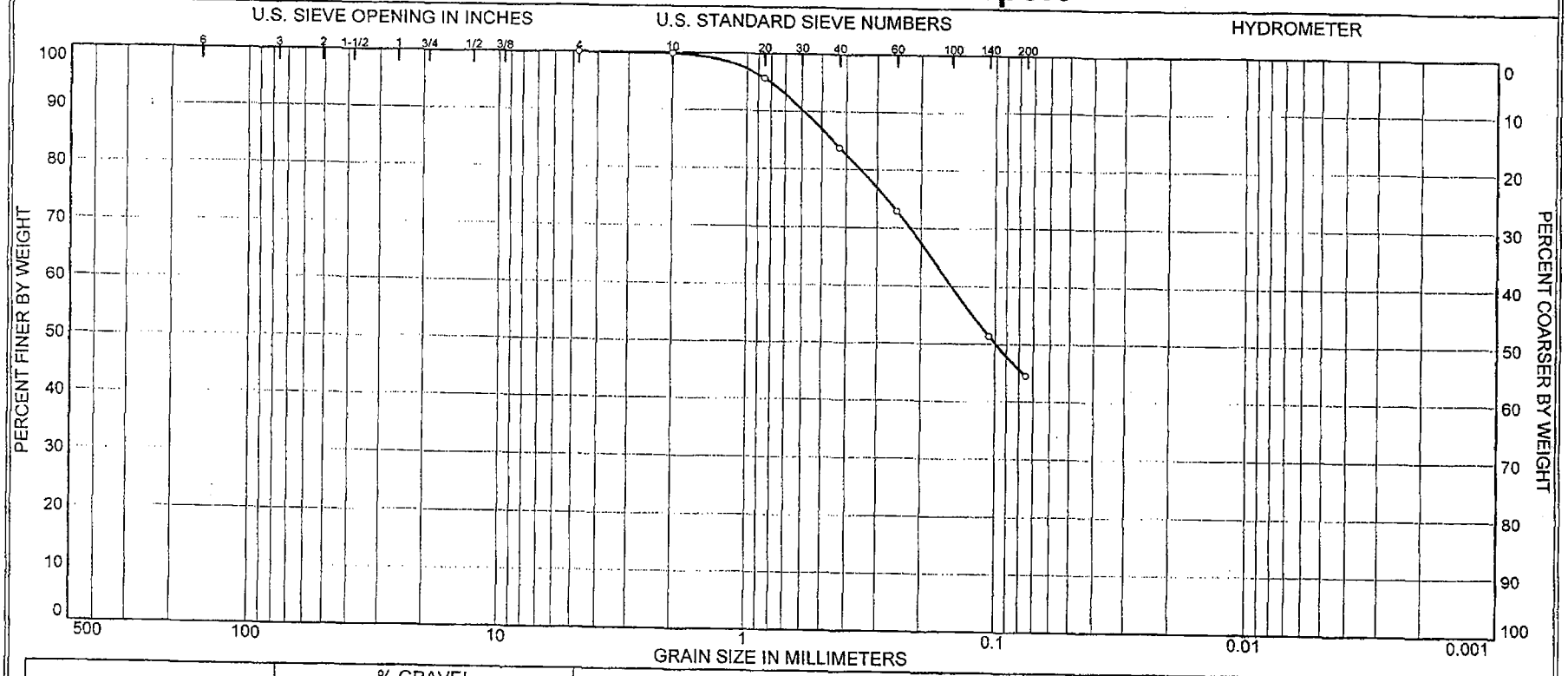
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.5	33.0	27.9	0.0132	33.0	10.9	0.0309	52
5.00	22.5	27.0	21.9	0.0132	27.0	11.9	0.0204	41
15.00	22.5	21.0	15.9	0.0132	21.0	12.9	0.0122	30
30.00	22.5	17.0	11.9	0.0132	17.0	13.5	0.0089	22
60.00	22.5	15.0	9.9	0.0132	15.0	13.8	0.0064	18
250.00	22.5	11.0	5.9	0.0132	11.0	14.5	0.0032	11
1440.00	22.5	8.0	2.9	0.0132	8.0	15.0	0.0013	5

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 34 **(% coarse =** **% medium** = 2 **% fine** = 32)
% SILT = 50 **% CLAY** = 16

D_{85}= 0.17 D_{60}= 0.05 D_{50}= 0.03
D_{30}= 0.01 D_{15}= 0.00 D_{10}= 0.00
C_c= 1.0364 C_u= 17.872

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	16	40	45	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	13	43.5'	08/30/06		SAND Silty (SM); Reddish Brown, Micaceous	43.2		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 13
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Reddish Brown, Micaceous
Date: 08/30/06 **Natural Moisture:** 43.2
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	291.95
Tare =	116.71
Dry sample weight =	175.24

Tare for cumulative weight retained= .00

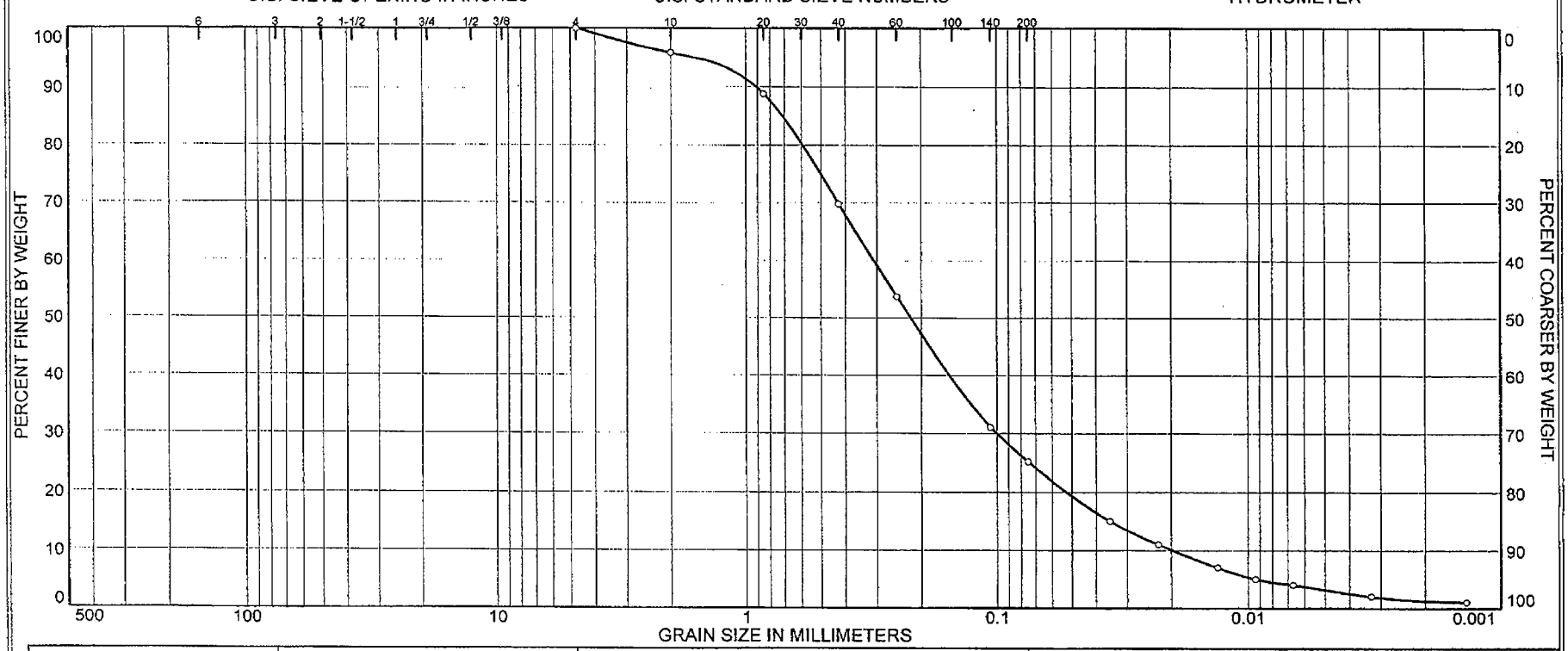
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.12	100
# 20	7.47	96
# 40	28.55	84
# 60	47.47	73
# 140	85.38	51
# 200	97.31	45

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 56 (% coarse = 0 % medium = 16 % fine = 40)
% FINES = 45

D_{85}= 0.45 D_{60}= 0.15 D_{50}= 0.10

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	4	26	45	22	3

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	14	48.5'	9-28-06		SAND Silty (SM); Dark Yellowish Brown, Micaceous	21.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 14
Elev. or Depth: 48.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Yellowish Brown, Micaceous
Date: 9-28-06 **Natural Moisture:** 21.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	204.98
Tare =	0.00
Dry sample weight =	204.98

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.81 Tare = .00 Sample weight = 50.81
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	8.31	96
# 20	3.72	89
# 40	13.81	70
# 60	22.29	54
# 140	34.31	31
# 200	37.47	25

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96
Weight of hydrometer sample: 51.17
Hygroscopic moisture correction:
Moist weight & tare = 50.78
Dry weight & tare = 50.49
Tare = 11.57
Hygroscopic moisture= 1 %
Calculated biased weight= 52.91
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

niscus correction only= 0.0
ecific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

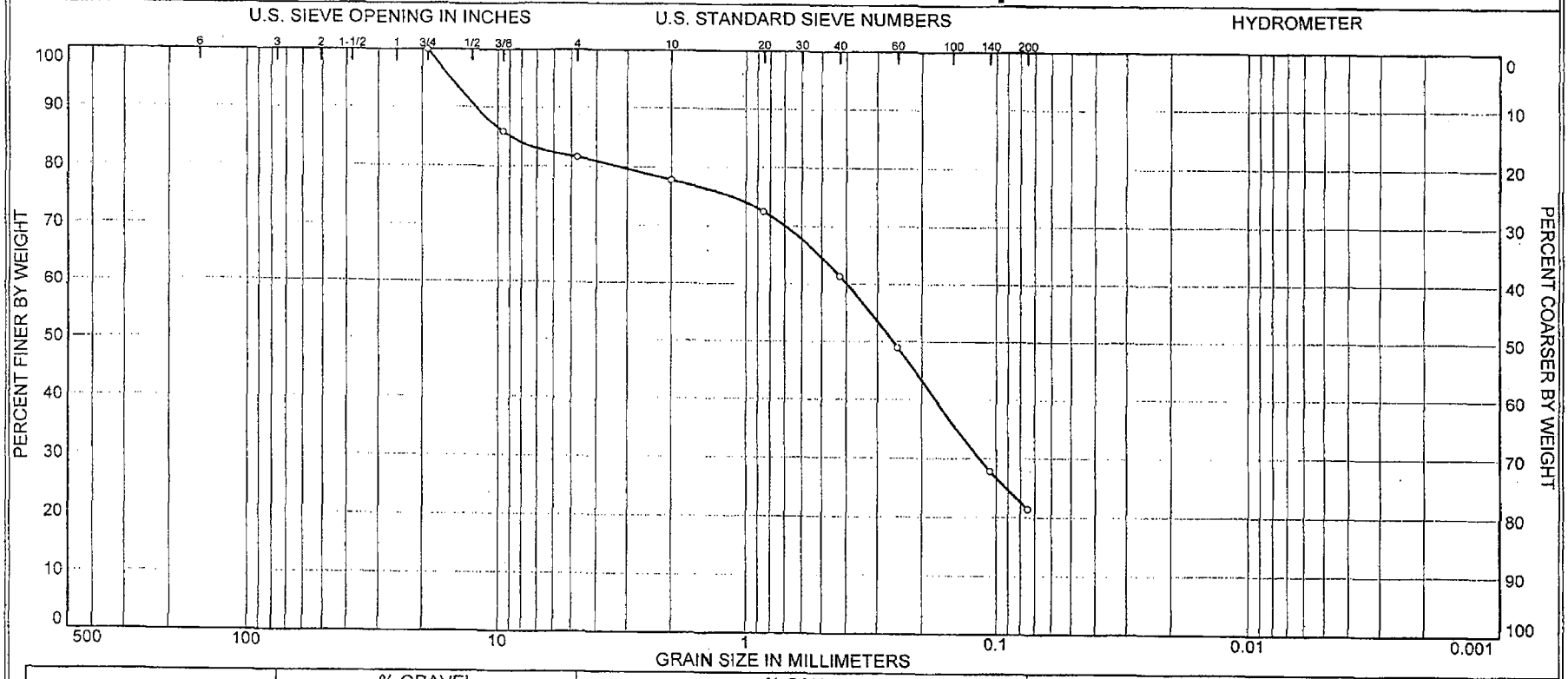
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.5	13.0	7.9	0.0132	13.0	14.2	0.0352	15
5.00	22.5	11.0	5.9	0.0132	11.0	14.5	0.0225	11
15.00	22.5	9.0	3.9	0.0132	9.0	14.8	0.0132	7
30.00	22.5	8.0	2.9	0.0132	8.0	15.0	0.0094	5
60.00	22.5	7.0	1.9	0.0132	7.0	15.1	0.0066	4
250.00	22.5	6.0	0.9	0.0132	6.0	15.3	0.0033	2
1440.00	22.5	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 75 (% coarse = 4 % medium = 26 % fine = 45)
% SILT = 22 % CLAY = 3

D_{85}= 0.71 D_{60}= 0.31 D_{50}= 0.22
D_{30}= 0.10 D_{15}= 0.04 D_{10}= 0.02
C_c= 1.642 C_u= 15.5255

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	18	4	17	39	21	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-311	15	53.5'	08/30/06		SAND Silty with Gravel (SM); Light Gray to Dark Brown	13.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample size was less than required by ASTM.

JRS 11-15-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-311
Sample No.: 15
Elev. or Depth: 53.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty with Gravel (SM); Light Gray to Dark Brown
Date: 08/30/06 **Natural Moisture:** 13.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)
Sample size was less than required by ASTM.

Mechanical Analysis Data

	Initial
Dry sample and tare=	316.65
Tare =	104.39
Dry sample weight =	212.26

Tare for cumulative weight retained= .00

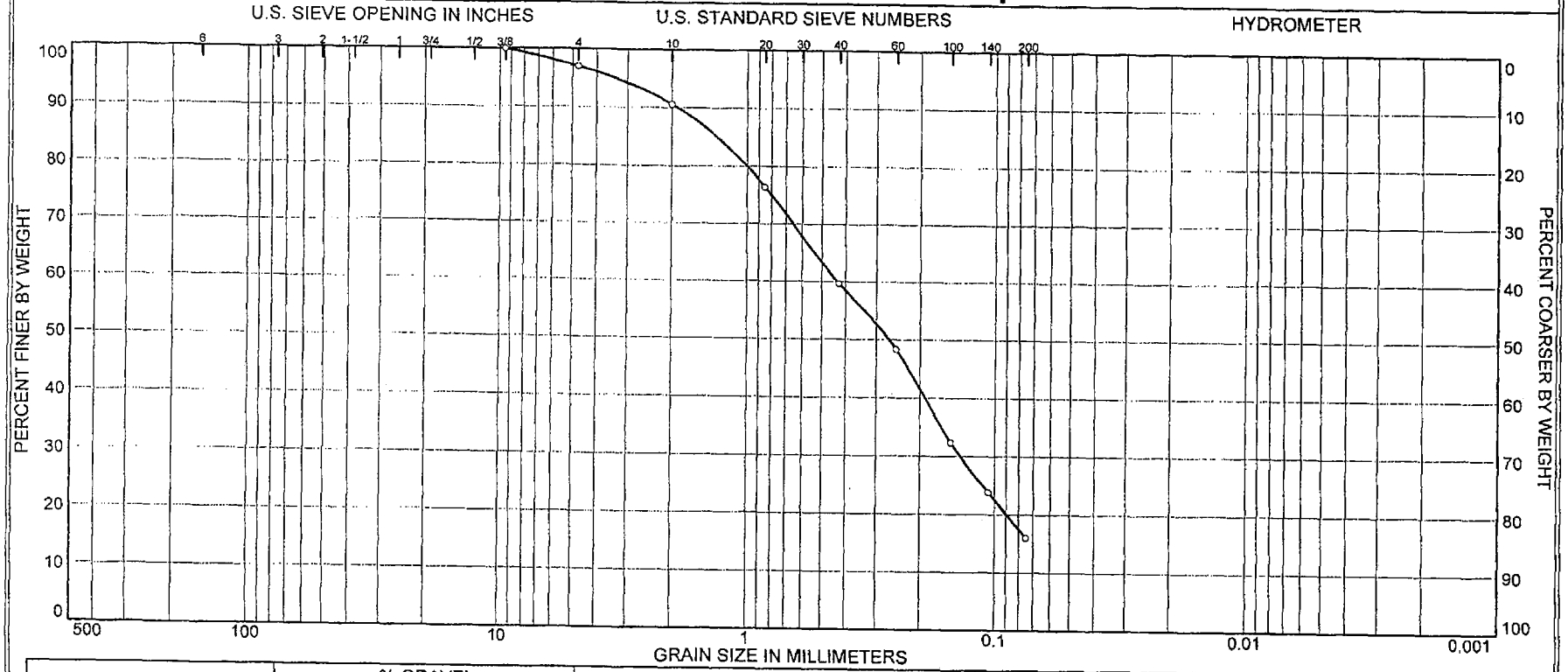
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100
.375 inch	30.11	86
# 4	39.09	82
# 10	47.13	78
# 20	58.43	73
# 40	82.24	61
# 60	108.33	49
# 140	153.19	28
# 200	166.90	21

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 18 **(% coarse =** **% fine =** 18)
% SAND = 60 **(% coarse =** 4 **% medium =** 17 **% fine =** 39)
% FINES = 21

D_{85}= 8.91 D_{60}= 0.40 D_{50}= 0.26
D_{30}= 0.12

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	3	6	31	44	16	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-317	2	1.5'	9-28-06		SAND Silty (SM); Red	24.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-317
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red
Date: 9-28-06 **Natural Moisture:** 24.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	162.39
Tare =	13.50
Dry sample weight =	148.89

Tare for cumulative weight retained= .00

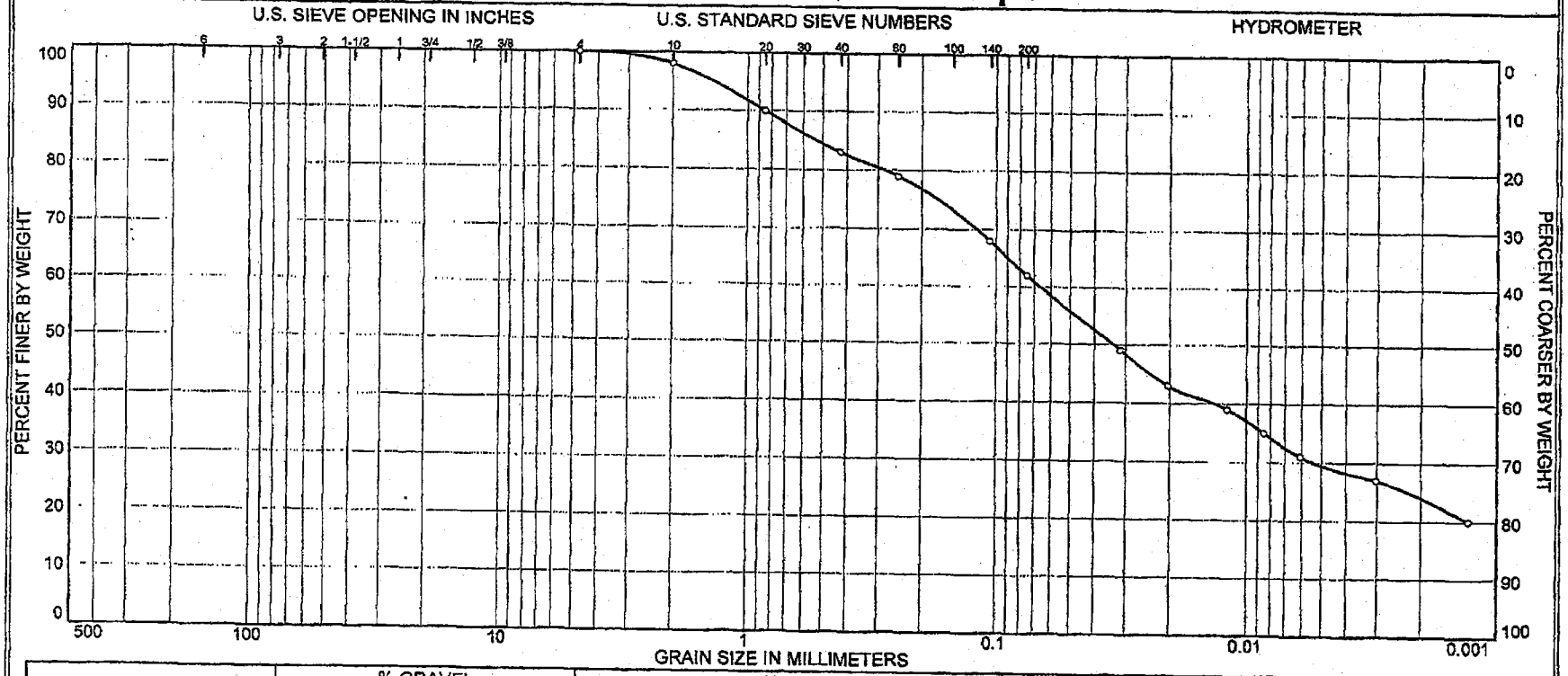
Sieve	Cumul. Wt. retained	Percent finer
3/8in. inch	0.00	100
# 4	4.51	97
# 10	14.06	91
# 20	35.18	76
# 40	60.10	60
# 60	76.99	48
# 100	100.61	32
# 140	113.48	24
# 200	125.12	16

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 3 (% coarse = % fine = 3)
% SAND = 81 (% coarse = 6 % medium = 31 % fine = 44)
% FINES = 16

D_{85}= 1.32 D_{60}= 0.43 D_{50}= 0.27
D_{30}= 0.14

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	2	15	21	33	29

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-317	3	3.5'	9-28-06	MH	SILT Clayey with Sand (MH); Yellowish Red	26.1	58	47

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-317
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SILT Clayey with Sand (MH); Yellowish Red
Date: 9-28-06 **Natural Moisture:** 26.1
Liquid Limit: 58 **Plastic Limit:** 47 **USCS Class.:** MH
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	173.95
Tare =	0.00
Dry sample weight =	173.95

Sample split on number 10 sieve
Split sample data:
Sample and tare = 48.27 Tare = .00 Sample weight = 48.27
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	3.55	98
# 20	3.82	90
# 40	7.23	83
# 60	9.34	79
# 140	14.79	68
# 200	17.63	62

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98
Weight of hydrometer sample: 49.62
Hygroscopic moisture correction:
Moist weight & tare = 26.44
Dry weight & tare = 26.02
Tare = 11.02
Hygroscopic moisture= 3 %
Calculated biased weight= 49.25
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

niscus correction only= 0.0
ecific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

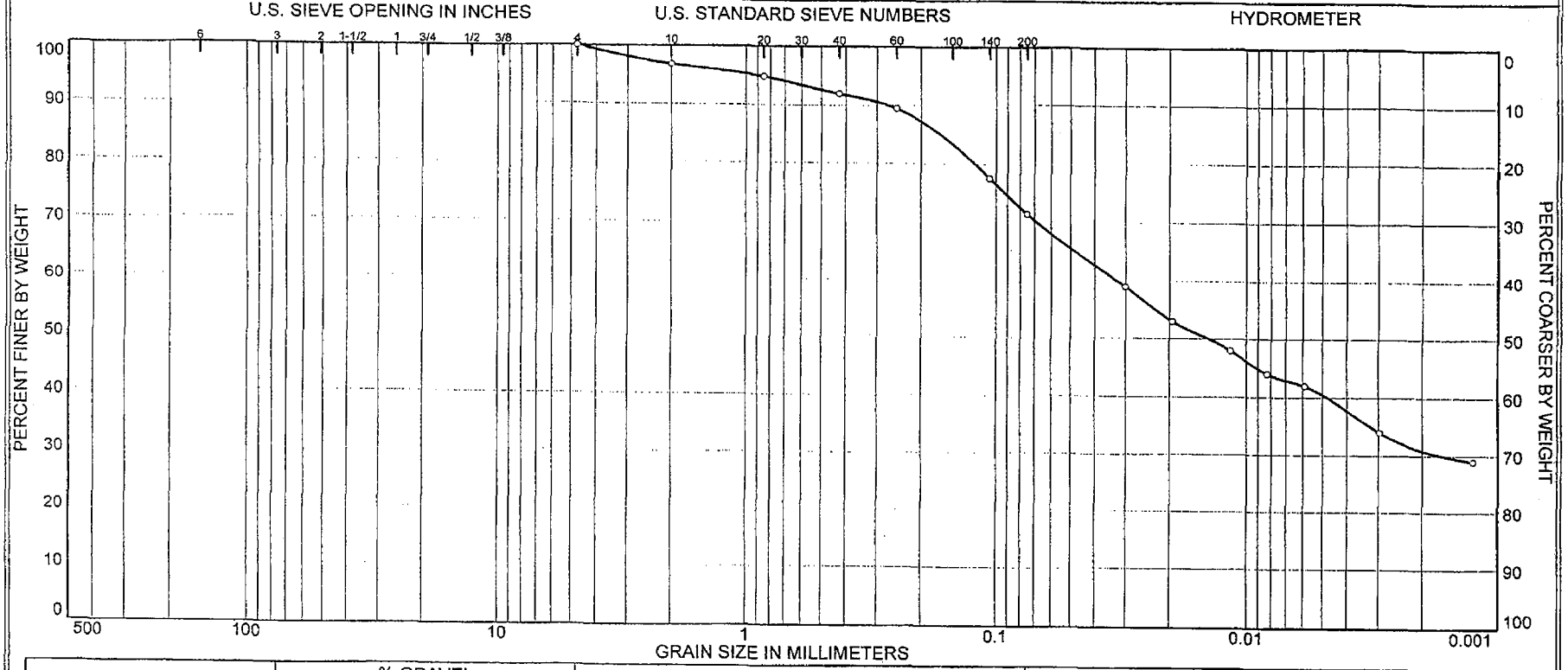
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.4	29.0	24.1	0.0131	29.0	11.5	0.0314	49
5.00	23.4	26.0	21.1	0.0131	26.0	12.0	0.0203	43
15.00	23.4	24.0	19.1	0.0131	24.0	12.4	0.0119	39
30.00	23.4	22.0	17.1	0.0131	22.0	12.7	0.0085	35
60.00	23.4	20.0	15.1	0.0131	20.0	13.0	0.0061	31
250.00	23.4	18.0	13.1	0.0131	18.0	13.3	0.0030	27
1440.00	22.9	15.0	10.0	0.0132	15.0	13.8	0.0013	20

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 38 (% coarse = 2 % medium = 15 % fine = 21)
% SILT = 33 % CLAY = 29

D_{85}= 0.51 D_{60}= 0.07 D_{50}= 0.03
D_{30}= 0.01

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	3	5	21	31	41

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-317	4	6.0'	9-28-06		CLAY Sandy with Silt (CL); Dark Red, Micaceous	29.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-317
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: CLAY Sandy with Silt (CL); Dark Red, Micaceous
Date: 9-28-06 **Natural Moisture:** 29.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	133.34
Tare =	0.00
Dry sample weight =	133.34

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.56 Tare = .00 Sample weight = 50.56
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	4.26	97
# 20	1.02	95
# 40	2.54	92
# 60	3.84	89
# 140	10.07	78
# 200	13.29	71

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 97
Weight of hydrometer sample: 52.33
Hygroscopic moisture correction:
Moist weight & tare = 47.71
Dry weight & tare = 46.47
Tare = 10.82
Hygroscopic moisture= 3 %
Calculated biased weight= 52.14
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

niscus correction only= 0.0
pecific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

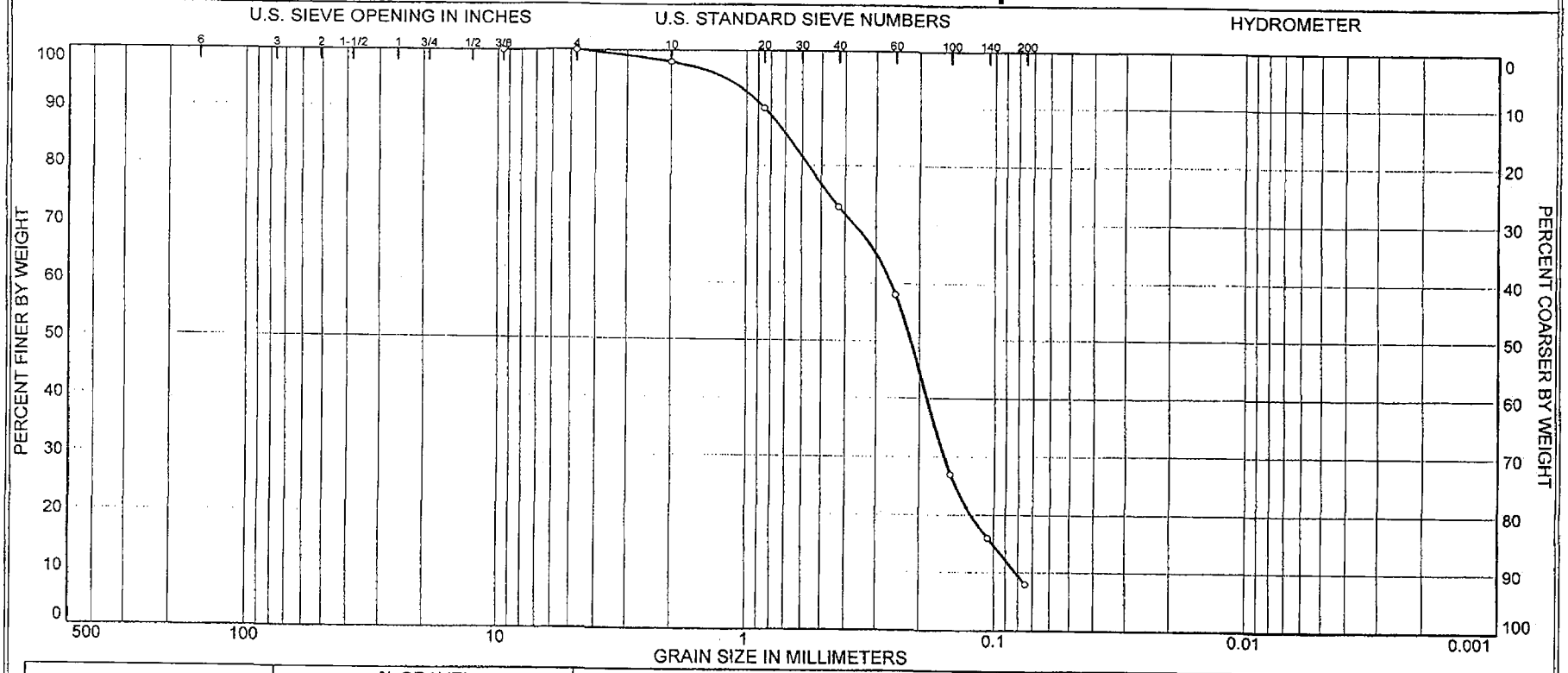
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.6	36.0	30.9	0.0132	36.0	10.4	0.0301	59
5.00	22.6	33.0	27.9	0.0132	33.0	10.9	0.0195	53
15.00	22.6	30.0	24.9	0.0132	30.0	11.4	0.0115	48
30.00	22.6	28.0	22.9	0.0132	28.0	11.7	0.0083	44
60.00	22.6	27.0	21.9	0.0132	27.0	11.9	0.0059	42
250.00	22.6	23.0	17.9	0.0132	23.0	12.5	0.0030	34
1440.00	22.6	20.0	14.9	0.0132	20.0	13.0	0.0013	29

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 29 (**% coarse =** 3 **% medium =** 5 **% fine =** 21)
% SILT = 31 **% CLAY =** 41

D_{85}= 0.17 D_{60}= 0.03 D_{50}= 0.01
D_{30}= 0.00

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	2	25	65	8	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-317	5	8.5'	9-28-06		SAND Silty (SM); Red, Yellowish Red, Black, Micaceous	24.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-317
Sample No.: 5
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Yellowish Red, Black, Micaceous
Date: 9-28-06 **Natural Moisture:** 24.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	230.19
Tare =	13.54
Dry sample weight =	216.65

Tare for cumulative weight retained= .00

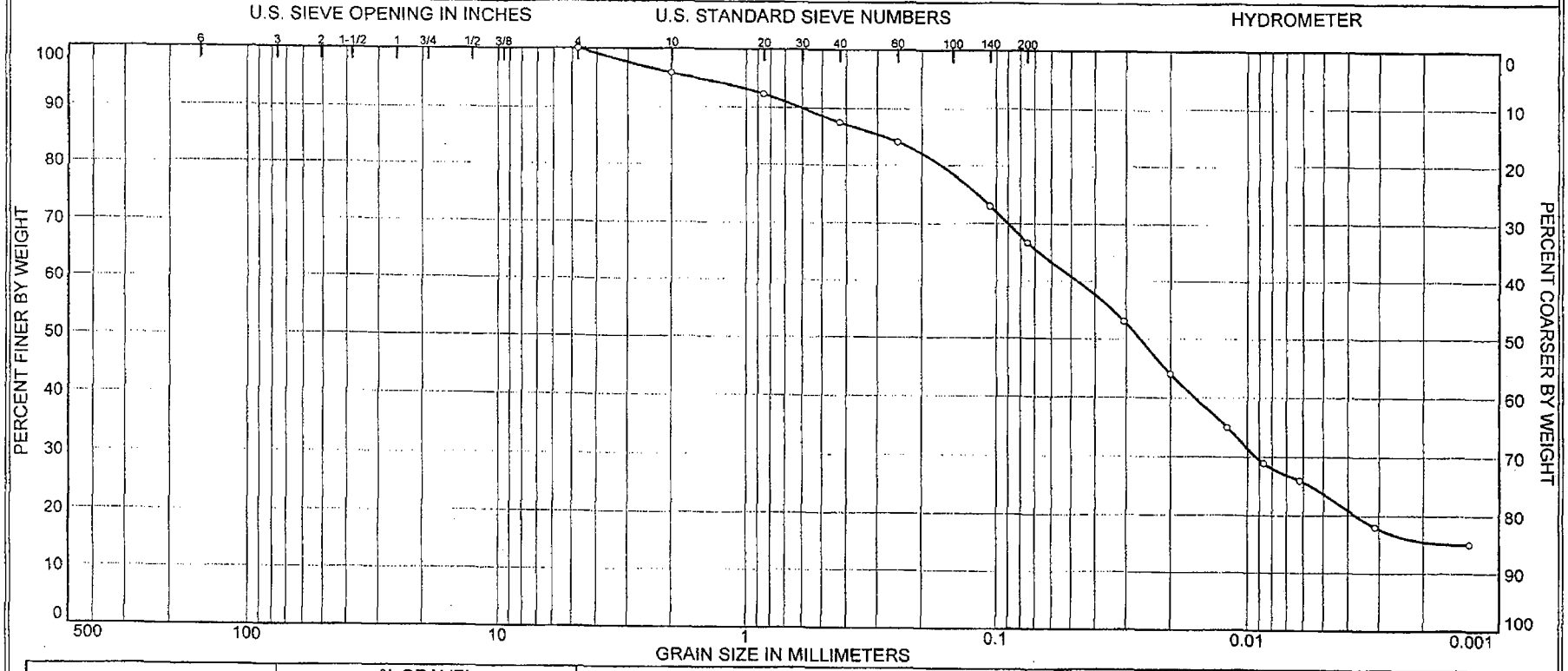
Sieve	Cumul. Wt. retained	Percent finer
3/8 inch	0.00	100
# 4	0.00	100
# 10	4.47	98
# 20	21.83	90
# 40	57.57	73
# 60	91.63	58
# 100	157.62	27
# 140	181.12	16
# 200	200.02	8

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 92 (**% coarse** = 2 **% medium** = 25 **% fine** = 65)
% FINES = 8

D_{85}= 0.68 D_{60}= 0.26 D_{50}= 0.22
D_{30}= 0.16 D_{15}= 0.10 D_{10}= 0.08
C_c= 1.1833 C_u= 3.1896

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	4	8	21	43	24

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-317	6	11.0'	9-28-06		SILT Sandy (MH); Red, Yellowish Red, Black, Micaceous	26.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-317
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (MH); Red, Yellowish Red, Black, Micaceous
Date: 9-28-06 **Natural Moisture:** 26.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	181.77
Tare =	0.00
Dry sample weight =	181.77

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.83 Tare = .00 Sample weight = 51.83
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	7.49	96
# 20	1.90	92
# 40	4.55	88
# 60	6.36	84
# 140	12.35	73
# 200	15.79	67

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96
Weight of hydrometer sample: 53.85
Hygroscopic moisture correction:
Moist weight & tare = 46.73
Dry weight & tare = 45.40
Tare = 10.98
Hygroscopic moisture= 4 %
Calculated biased weight= 54.01
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

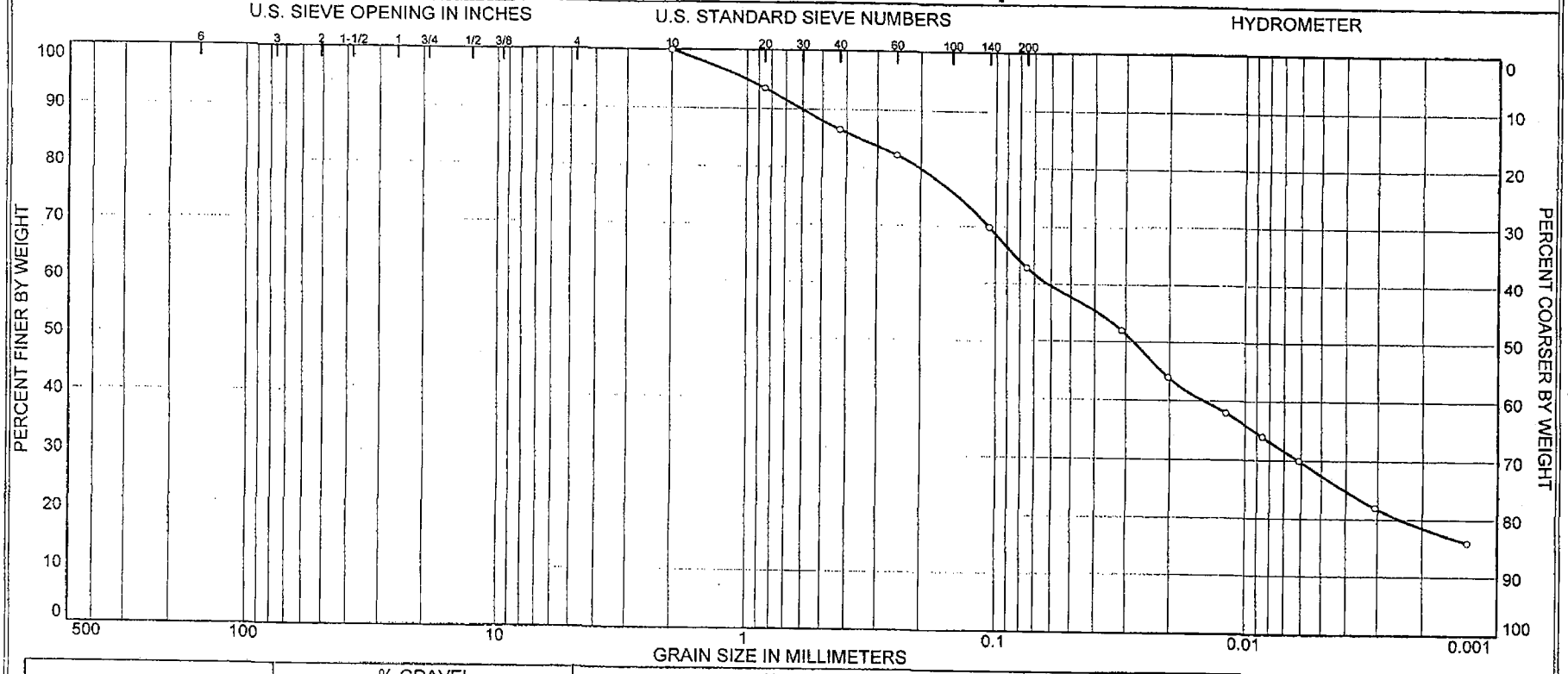
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.6	34.0	28.9	0.0132	34.0	10.7	0.0306	53
5.00	22.6	29.0	23.9	0.0132	29.0	11.5	0.0201	44
15.00	22.6	24.0	18.9	0.0132	24.0	12.4	0.0120	35
30.00	22.6	21.0	15.9	0.0132	21.0	12.9	0.0087	29
60.00	22.6	19.0	13.9	0.0132	19.0	13.2	0.0062	26
250.00	22.6	15.0	9.9	0.0132	15.0	13.8	0.0031	18
1440.00	22.6	13.0	7.9	0.0132	13.0	14.2	0.0013	15

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 33 (% coarse = 4 % medium = 8 % fine = 21)
% SILT = 43 % CLAY = 24

D_{85}= 0.28 D_{60}= 0.05 D_{50}= 0.03
D_{30}= 0.01 D_{15}= 0.00

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	14	23	35	28

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-317	7	13.5'	9-28-06	MH	SILT Sandy (MH); Red, Yellowish Red, Black, Micaceous	33.2	57	41

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-317
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (MH); Red, Yellowish Red, Black, Micaceous
Date: 9-28-06 **Natural Moisture:** 33.2
Liquid Limit: 57 **Plastic Limit:** 41 **USCS Class.:** MH
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	167.54
Tare =	0.00
Dry sample weight =	167.54

Sample split on number 10 sieve
Split sample data:
Sample and tare = 49.76 Tare = .00 Sample weight = 49.76
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	3.25	94
# 40	6.70	87
# 60	8.84	82
# 140	15.05	70
# 200	18.45	63

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 53.14
Hygroscopic moisture correction:
Moist weight & tare = 16.88
Dry weight & tare = 16.09
Tare = 4.39
Hygroscopic moisture= 7 %
Calculated biased weight= 49.78
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
ecific gravity of solids= 2.65
pecific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

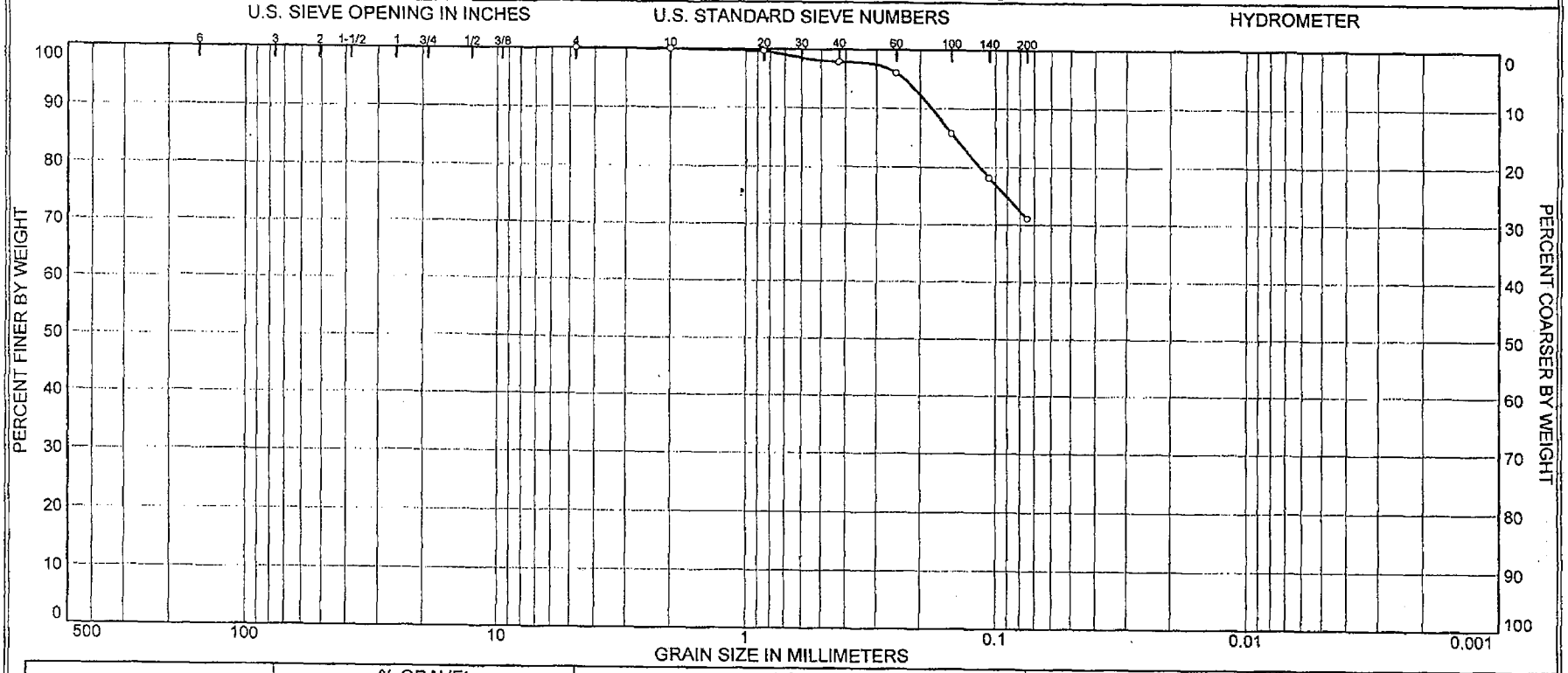
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	31.0	26.0	0.0132	31.0	11.2	0.0311	52
5.00	23.0	27.0	22.0	0.0132	27.0	11.9	0.0203	44
15.00	23.0	24.0	19.0	0.0132	24.0	12.4	0.0119	38
30.00	23.0	22.0	17.0	0.0132	22.0	12.7	0.0086	34
60.00	23.0	20.0	15.0	0.0132	20.0	13.0	0.0061	30
250.00	23.0	16.0	11.0	0.0132	16.0	13.7	0.0031	22
1440.00	22.4	13.0	7.8	0.0132	13.0	14.2	0.0013	16

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 37 **(% coarse =** **% medium =** 14 **% fine =** 23**)**
% SILT = 35 **% CLAY =** 28

D_{85}= 0.35 D_{60}= 0.06 D_{50}= 0.03
D_{30}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	2	27	71	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-317	8	18.5'	9-26-06		SILT Sandy (ML); Strong Brown, Black	31.8		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-14-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-317
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Strong Brown, Black
Date: 9-26-06 **Natural Moisture:** 31.8
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	238.74
Tare =	13.65
Dry sample weight =	225.09

Tare for cumulative weight retained= .00

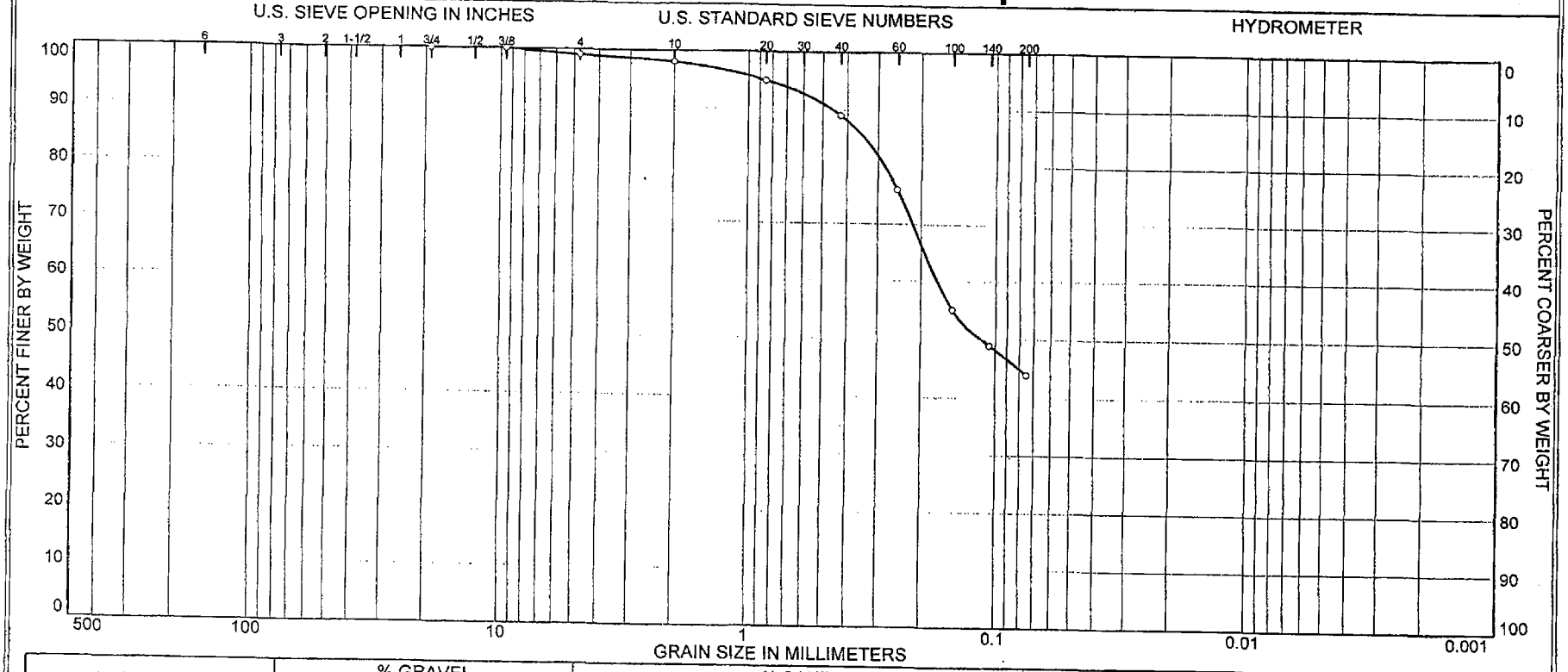
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.02	100
# 20	0.70	100
# 40	4.67	98
# 60	9.10	96
# 100	31.98	86
# 140	49.00	78
# 200	65.00	71

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 29 (% coarse = 0 % medium = 2 % fine = 27)
% FINES = 71

D_{85}= 0.14

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	1	1	9	45	44	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-317	9	23.5'	9-28-06		SAND Silty (SM); Olive, Red, Black, White	32.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11.14.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-317
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Olive, Red, Black, White
Date: 9-28-06 **Natural Moisture:** 32.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	276.93
Tare =	13.51
Dry sample weight =	263.42

Tare for cumulative weight retained= .00

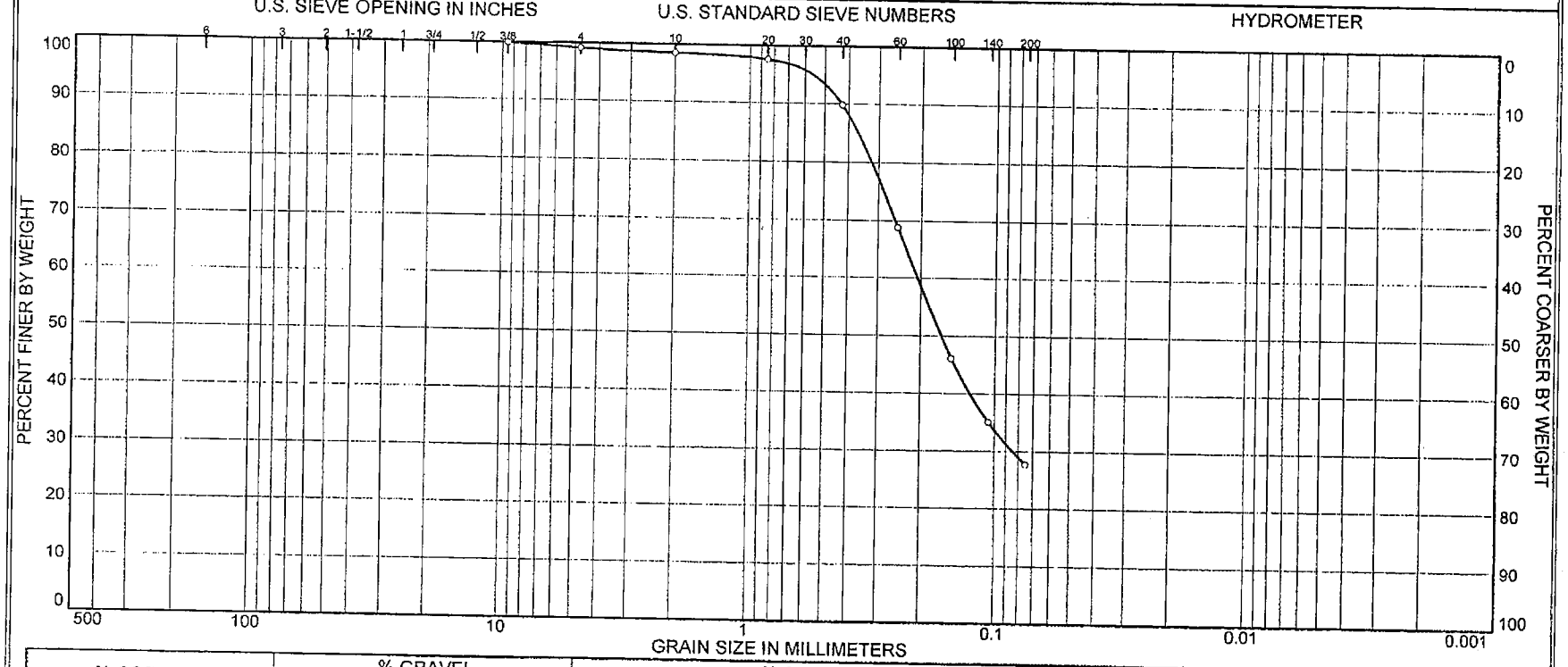
Sieve	Cumul. Wt. retained	Percent finer
3/4 inch	0.00	100
3/8 inch	1.18	100
# 4	3.19	99
# 10	5.85	98
# 20	13.31	95
# 40	27.69	89
# 60	62.03	76
# 100	118.98	55
# 140	135.42	49
# 200	146.24	44

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL = 1** **(% coarse =** **% fine = 1)**
% SAND = 55 **(% coarse = 1** **% medium = 9** **% fine = 45)**
% FINES = 44

D_{85}= 0.34 D_{60}= 0.17 D_{50}= 0.11

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	1	1	9	61	28	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-319	UD-2	18.5 Ft.	10/18/6	N/A	Silty sand	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-319
Sample No.: UD-2
Elev. or Depth: 18.5 Ft. **Sample Length(in./cm.):** 5393
Location: B-319
Description: Silty sand
Date: 10/18/6 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** N/A
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	111.32
Tare =	0.00
Dry sample weight =	111.32

Tare for cumulative weight retained= .00

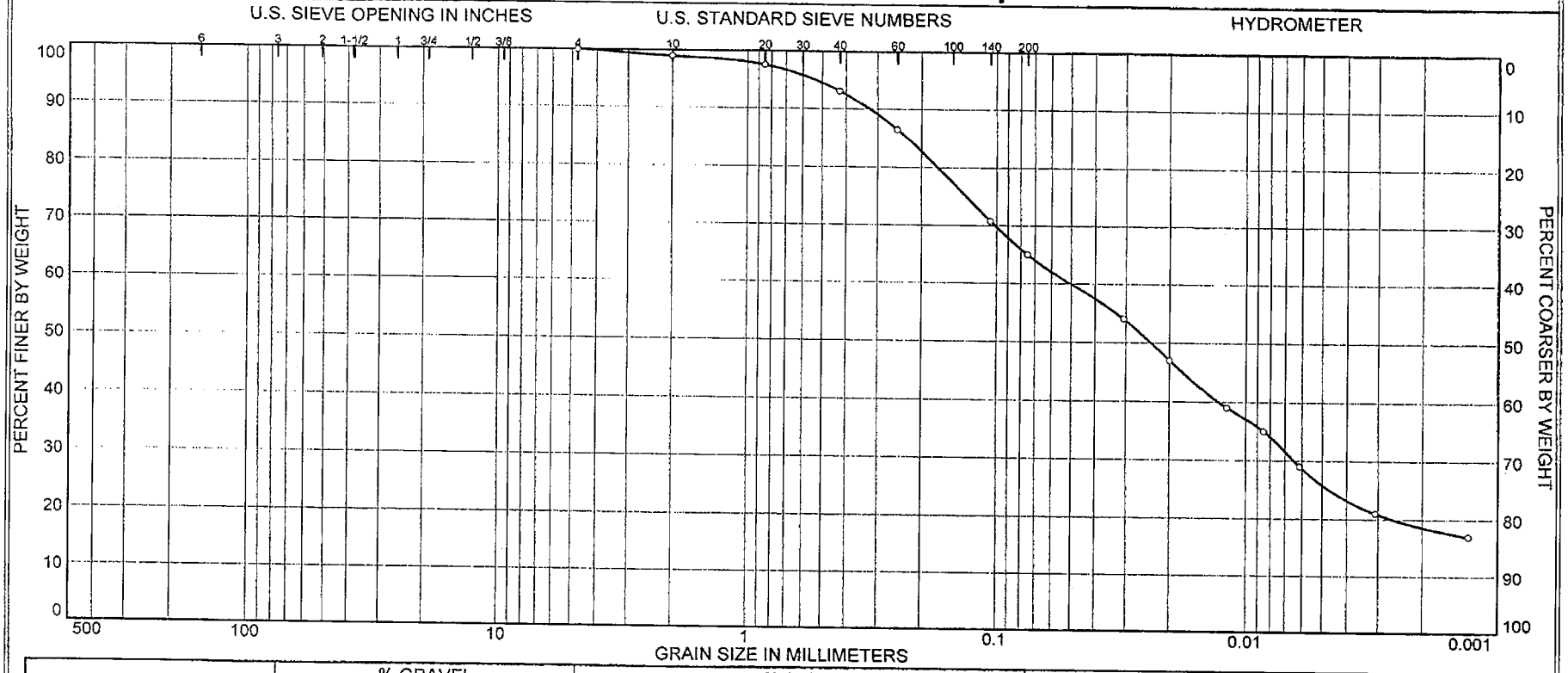
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.97	99
# 10	1.66	99
# 20	2.68	98
# 40	11.30	90
# 60	34.62	69
# 100	59.95	46
# 140	72.26	35
# 200	80.43	28

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 1 (**% coarse =** **% fine =** 1)
% SAND = 71 (**% coarse =** 1 **% medium =** 9 **% fine =** 62)
% FINES = 28

D_{85}= 0.37 D_{60}= 0.21 D_{50}= 0.17
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	6	28	39	26

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-320	2	1.5'	9/12/06	ML	SILT Sandy with Clay (ML); Dark Red	23.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy with Clay (ML); Dark Red
Date: 9/12/06 **Natural Moisture:** 23.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.76
Tare =	0.00
Dry sample weight =	200.76

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.99 Tare = .00 Sample weight = 50.99
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	2.05	99
# 20	0.70	98
# 40	3.02	93
# 60	6.42	87
# 140	14.54	71
# 200	17.53	65

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 51.24
Hygroscopic moisture correction:
Moist weight & tare = 26.23
Dry weight & tare = 26.15
Tare = 10.89
Hygroscopic moisture= 1 %
Calculated biased weight= 51.49
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

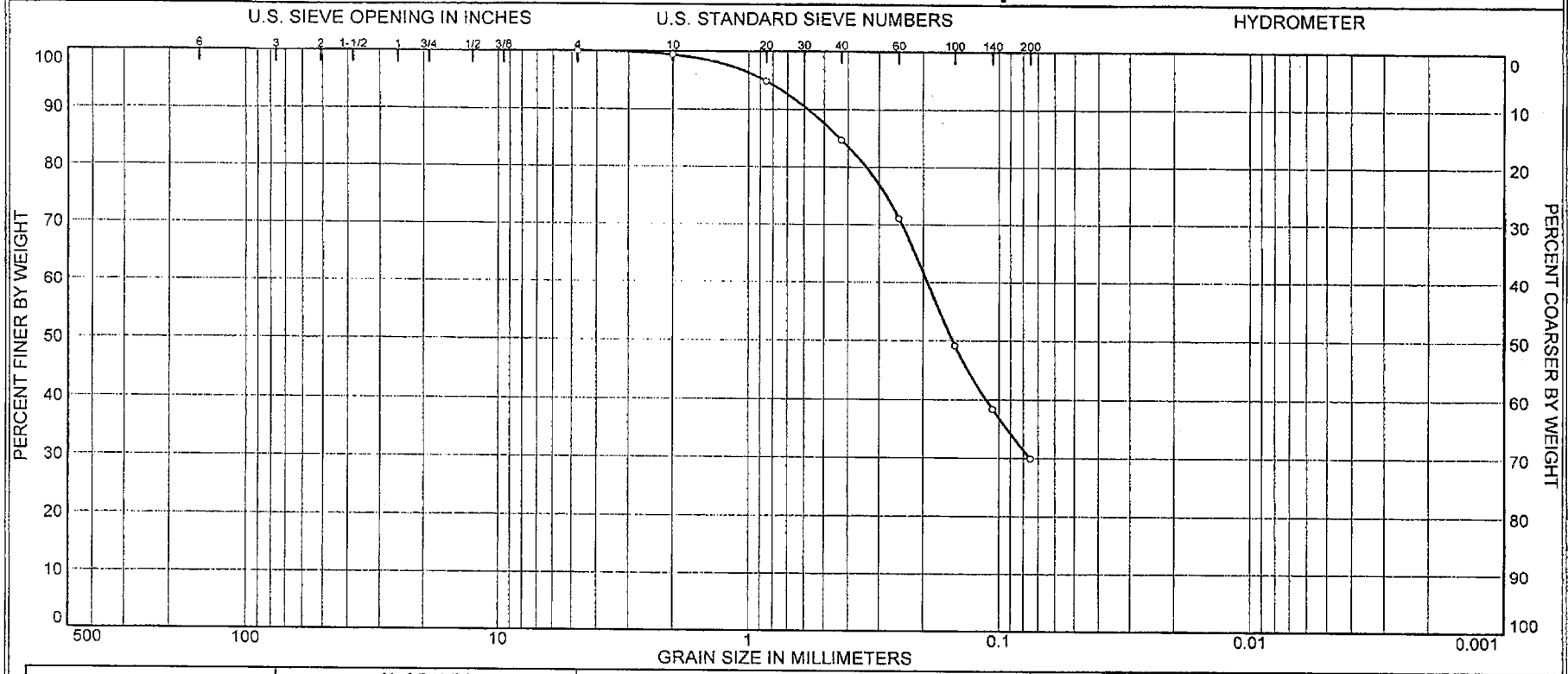
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	33.0	28.0	0.0132	33.0	10.9	0.0307	54
5.00	23.0	29.0	24.0	0.0132	29.0	11.5	0.0200	47
15.00	23.0	25.0	20.0	0.0132	25.0	12.2	0.0119	39
30.00	23.0	23.0	18.0	0.0132	23.0	12.5	0.0085	35
60.00	23.0	20.0	15.0	0.0132	20.0	13.0	0.0061	29
250.00	23.0	16.0	11.0	0.0132	16.0	13.7	0.0031	21
1440.00	22.3	14.0	8.8	0.0133	14.0	14.0	0.0013	17

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 35 (% coarse = 1 % medium = 6 % fine = 28)
% SILT = 39 % CLAY = 26

D_{85}= 0.23 D_{60}= 0.05 D_{50}= 0.02
D_{30}= 0.01

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	15	54	30	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-320	3	3.5'	9/12/06	SM	SAND Silty (SM); Red, Strong Brown, Micaceous	29.5	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 3
Elev. or Depth: 3.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Strong Brown, Micaceous
Date: 9/12/06 **Natural Moisture:** 29.5
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	234.75
Tare =	93.17
Dry sample weight =	141.58

Tare for cumulative weight retained= .00

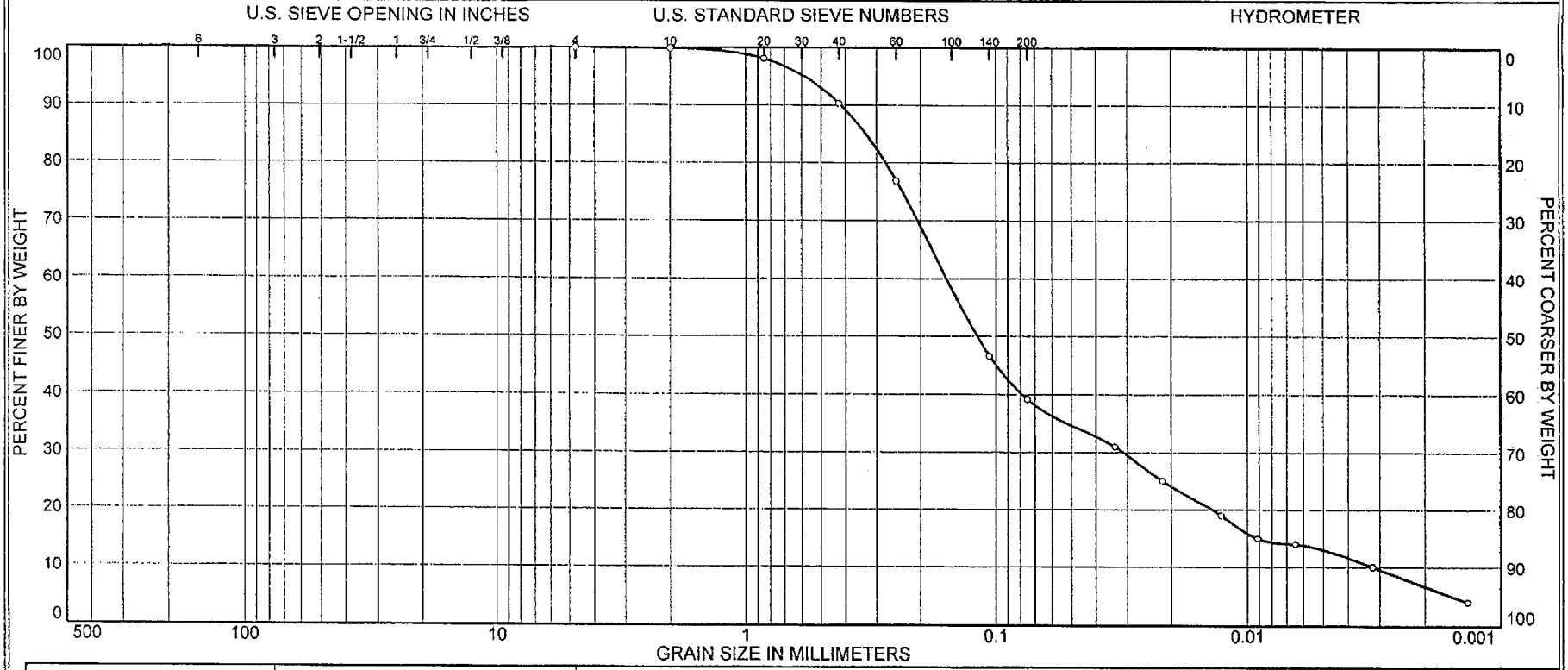
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.81	99
# 20	7.29	95
# 40	21.68	85
# 60	40.94	71
# 100	71.87	49
# 140	87.15	38
# 200	99.26	30

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 70 (**% coarse** = 1 **% medium** = 15 **% fine** = 54)
% FINES = 30

D_{85}= 0.43 D_{60}= 0.19 D_{50}= 0.15
D_{30}= 0.08

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	10	51	26	13

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-320	4	6.0'	8/30/06		SAND Silty (SM); Red, Strong Brown, Micaceous	20.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 4
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Strong Brown, Micaceous
Date: 8/30/06 **Natural Moisture:** 20.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	126.74
Tare =	0.00
Dry sample weight =	126.74

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.37 **Tare =** .00 **Sample weight =** 50.37
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.18	100
# 20	0.89	98
# 40	4.83	90
# 60	11.60	77
# 140	26.87	47
# 200	30.59	39

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 50.77
Hygroscopic moisture correction:
Moist weight & tare = 40.10
Dry weight & tare = 39.87
Tare = 10.91
Hygroscopic moisture= 1 %
Calculated biased weight= 50.37
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

niscus correction only= 0.0
ecific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

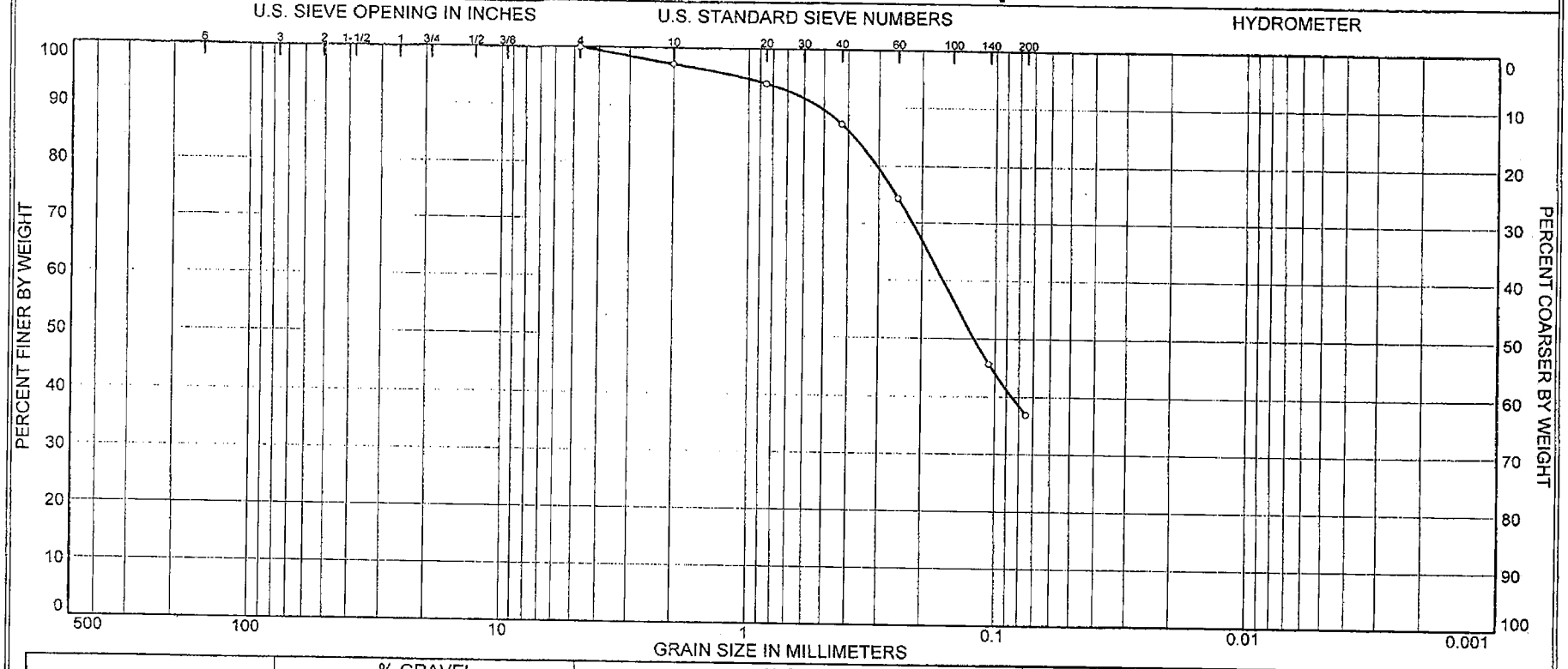
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.3	21.0	15.8	0.0133	21.0	12.9	0.0336	31
5.00	22.3	18.0	12.8	0.0133	18.0	13.3	0.0217	25
15.00	22.3	15.0	9.8	0.0133	15.0	13.8	0.0127	19
30.00	22.3	13.0	7.8	0.0133	13.0	14.2	0.0091	15
60.00	22.6	12.0	6.9	0.0132	12.0	14.3	0.0065	14
250.00	22.6	10.0	4.9	0.0132	10.0	14.7	0.0032	10
1440.00	22.6	7.0	1.9	0.0132	7.0	15.1	0.0014	4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 61 (**% coarse =** 0 **% medium =** 10 **% fine =** 51)
% SILT = 26 **% CLAY =** 13

D_{85}= 0.33 D_{60}= 0.16 D_{50}= 0.12
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.00
C_c= 1.912 C_u= 49.2338

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	3	10	50	37	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-320	5	8.5'	8/30/06		SAND Silty (SM); Yellowish Red, Red, Micaceous	25.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 5
Elev. or Depth: 8.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Red, Micaceous
Date: 8/30/06 **Natural Moisture:** 25.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	282.06
Tare =	92.73
Dry sample weight =	189.33

Tare for cumulative weight retained= .00

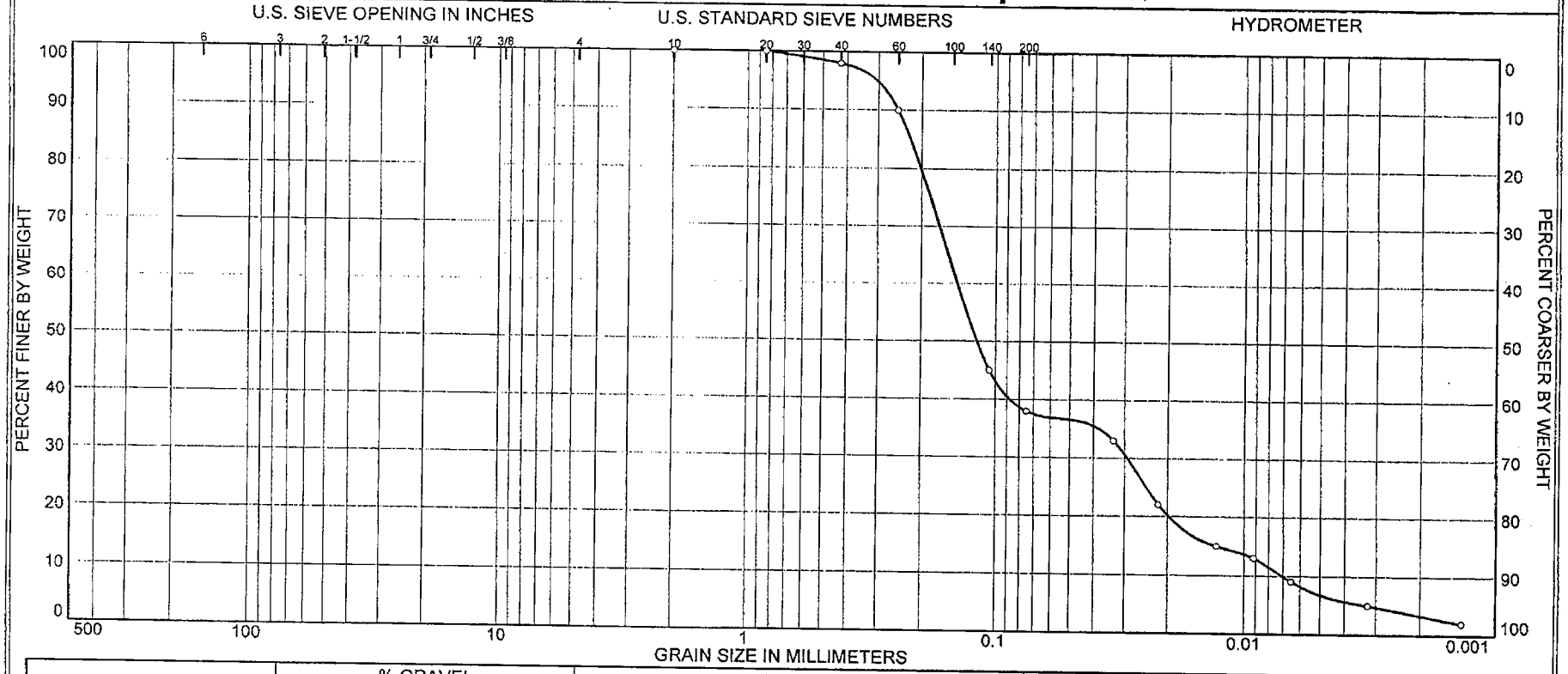
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	5.15	97
# 20	11.25	94
# 40	24.25	87
# 60	48.52	74
# 140	102.76	46
# 200	119.25	37

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 63 (% coarse = 3 % medium = 10 % fine = 50)
% FINES = 37

D_{85}= 0.38 D_{60}= 0.16 D_{50}= 0.12

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	2	60	31	7

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-320	6	11.0'	8/30/06		SAND Silty (SM); Yellowish Red, Trace Black	33.4		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 6
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Trace Black
Date: 8/30/06 **Natural Moisture:** 33.4
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	137.79
Tare =	0.00
Dry sample weight =	137.79

Sample split on number 10 sieve
Split sample data:
Sample and tare = 53.16 Tare = .00 Sample weight = 53.16
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 10	0.00	100
# 20	0.21	100
# 40	0.99	98
# 60	5.40	90
# 140	29.09	45
# 200	33.16	38

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 53.48
Hygroscopic moisture correction:
Moist weight & tare = 46.38
Dry weight & tare = 46.18
Tare = 10.71
Hygroscopic moisture= 1 %
Calculated biased weight= 53.18
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

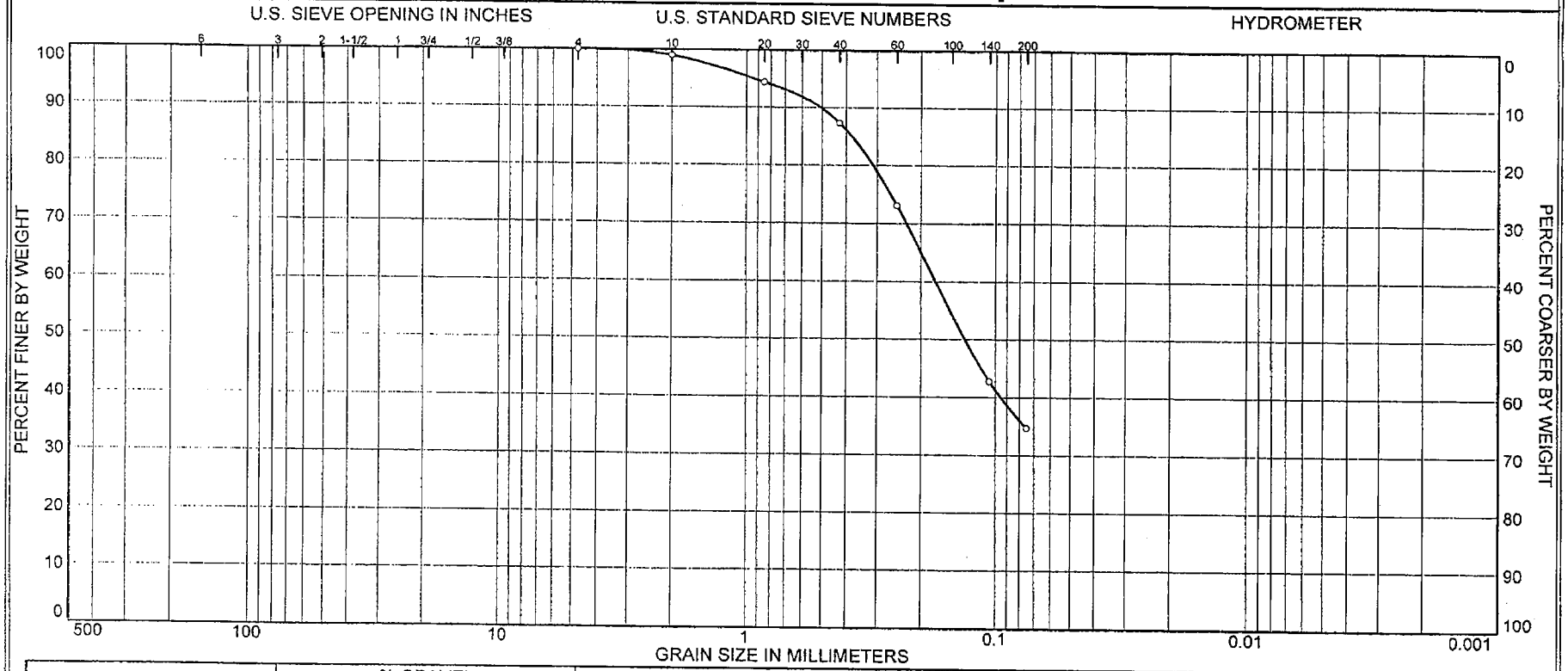
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.3	23.0	17.8	0.0133	23.0	12.5	0.0332	33
5.00	22.3	17.0	11.8	0.0133	17.0	13.5	0.0218	22
15.00	22.3	13.0	7.8	0.0133	13.0	14.2	0.0129	15
30.00	22.3	12.0	6.8	0.0133	12.0	14.3	0.0092	13
60.00	22.6	10.0	4.9	0.0132	10.0	14.7	0.0065	9
250.00	22.6	8.0	2.9	0.0132	8.0	15.0	0.0032	5
1440.00	22.6	6.0	0.9	0.0132	6.0	15.3	0.0014	2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 62 (**% coarse =** **% medium =** 2 **% fine =** 60)
% SILT = 31 **% CLAY =** 7

D_{85}= 0.22 D_{60}= 0.14 D_{50}= 0.12
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.8368 C_u= 20.222

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	1	12	52	35	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-320	7	13.5'	8/30/06		SAND Silty (SM); Yellowish Red, Trace Black	23.3		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 7
Elev. or Depth: 13.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Trace Black
Date: 8/30/06 **Natural Moisture:** 23.3
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	399.58
Tare =	87.41
Dry sample weight =	312.17

Tare for cumulative weight retained= .00

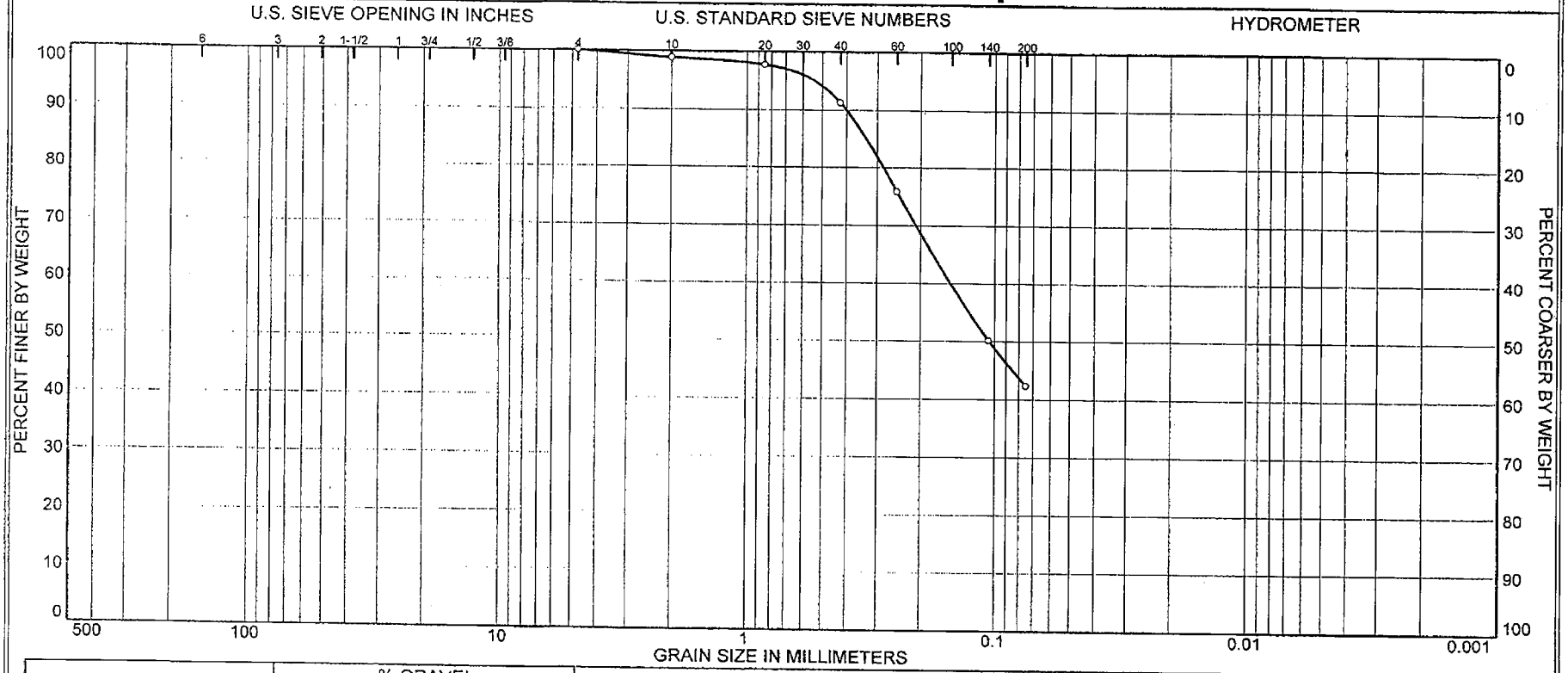
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	3.17	99
# 20	17.42	94
# 40	39.54	87
# 60	84.06	73
# 140	178.58	43
# 200	203.87	35

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 65 **(% coarse** = 1 **% medium** = 12 **% fine** = 52)
% FINES = 35

D_{85}= 0.38 D_{60}= 0.17 D_{50}= 0.13

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	1	8	49	42	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-320	8	18.5'	8/30/06		SAND Silty (SM); Strong Brown, Dark Gray, Red, Micaceous	30.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 8
Elev. or Depth: 18.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Dark Gray, Red, Micaceous
Date: 8/30/06 **Natural Moisture:** 30.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	362.79
Tare =	91.09
Dry sample weight =	271.70

Tare for cumulative weight retained= .00

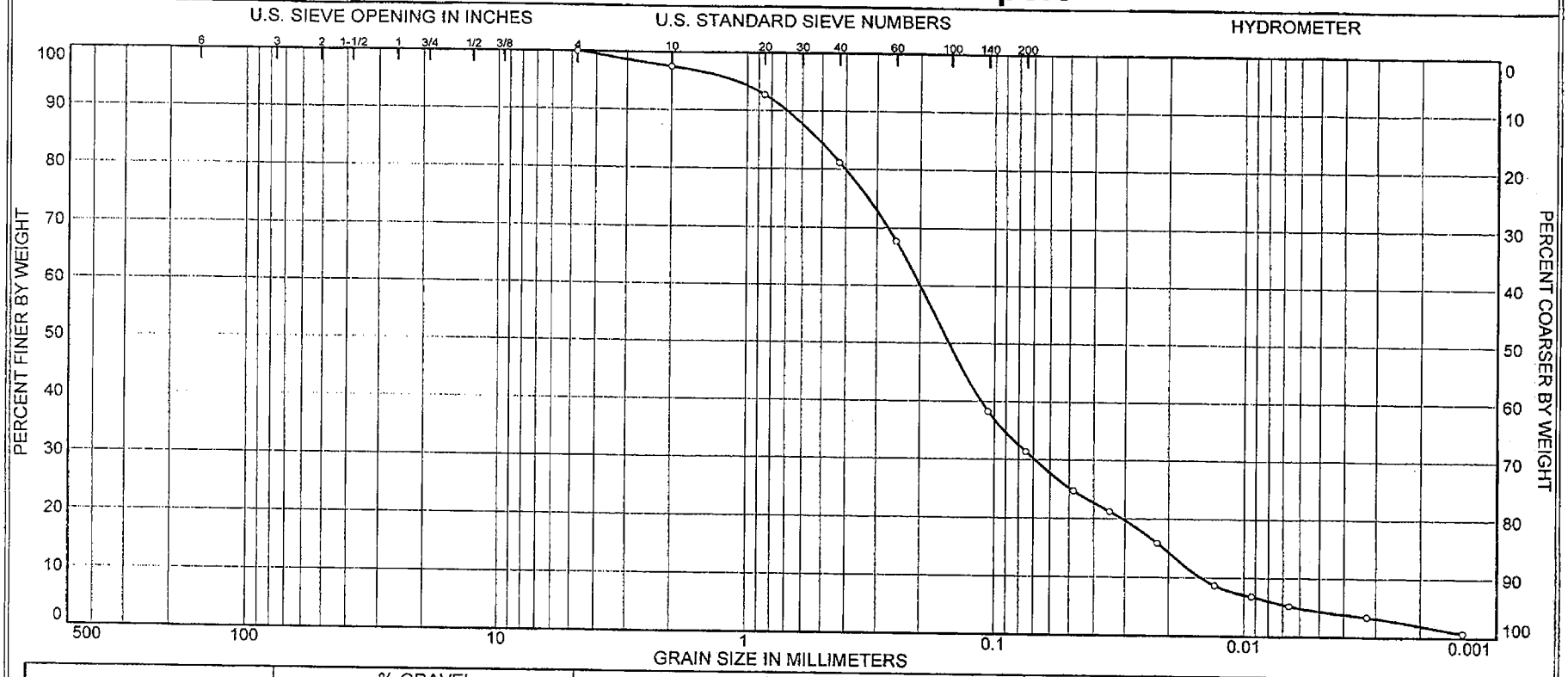
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	2.94	99
# 20	6.08	98
# 40	23.65	91
# 60	65.43	76
# 140	135.50	50
# 200	156.90	42

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 58 (**% coarse** = 1 **% medium** = 8 **% fine** = 49)
% FINES = 42

D_{85}= 0.33 D_{60}= 0.15 D_{50}= 0.11

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	3	16	50	27	4

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-320	9	23.5'	8/30/06		SAND Silty (SM); Dark Yellowish Brown, Scattered/Mottled White, Micaceous	27.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 9
Elev. or Depth: 23.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Yellowish Brown, Scattered/Mottled White, Micaceous
Date: 8/30/06 **Natural Moisture:** 27.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	121.67
Tare =	0.00
Dry sample weight =	121.67

Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.38 Tare = .00 Sample weight = 54.38
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	3.07	98
# 20	2.65	93
# 40	9.14	81
# 60	16.62	68
# 140	33.04	38
# 200	36.89	31

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98
Weight of hydrometer sample: 54.82
Hygroscopic moisture correction:
Moist weight & tare = 45.21
Dry weight & tare = 44.95
Tare = 11.49
Hygroscopic moisture= 1 %
Calculated biased weight= 55.79
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

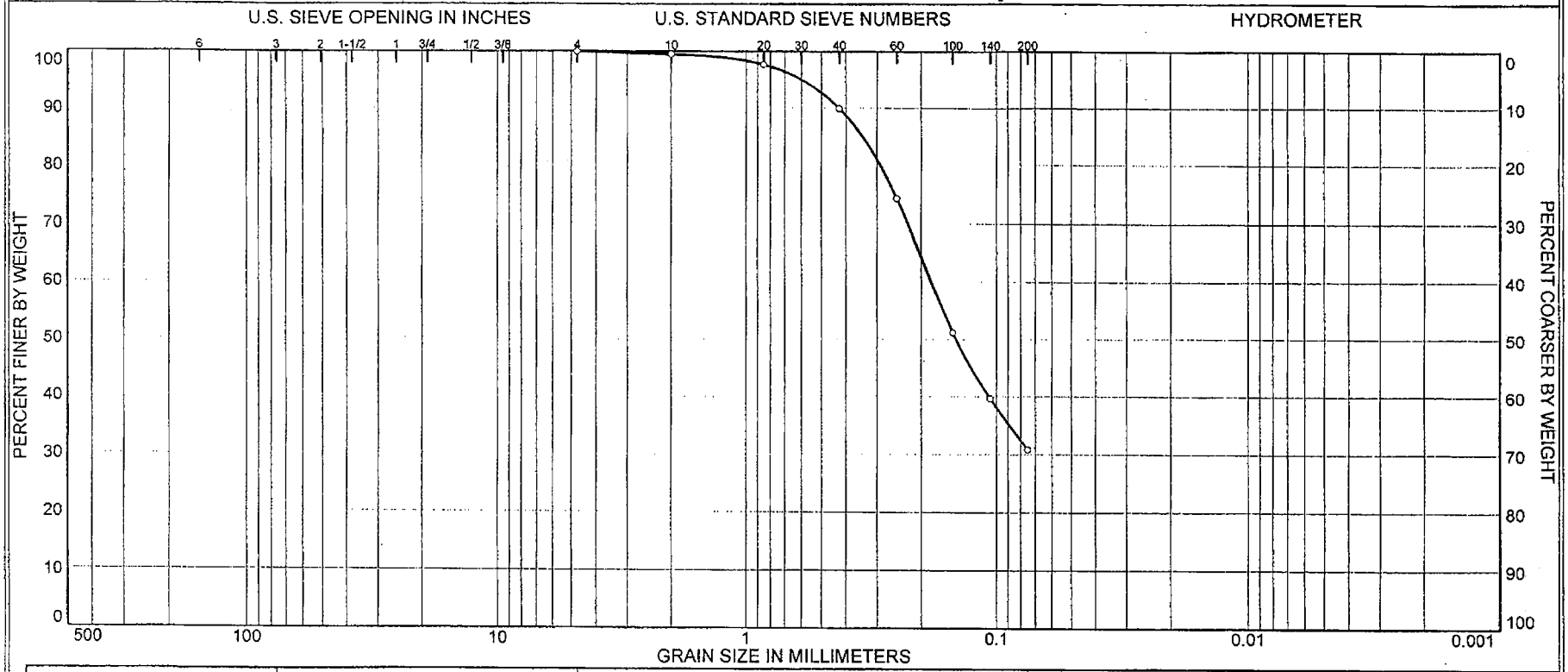
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.3	19.0	13.8	0.0133	19.0	13.2	0.0482	25
2.00	22.3	17.0	11.8	0.0133	17.0	13.5	0.0345	21
5.00	22.3	14.0	8.8	0.0133	14.0	14.0	0.0222	16
15.00	22.3	10.0	4.8	0.0133	10.0	14.7	0.0131	9
30.00	22.3	9.0	3.8	0.0133	9.0	14.8	0.0093	7
60.00	22.6	8.0	2.9	0.0132	8.0	15.0	0.0066	5
250.00	22.6	7.0	1.9	0.0132	7.0	15.1	0.0033	3
1440.00	22.6	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 69 (% coarse = 3 % medium = 16 % fine = 50)
% SILT = 27 % CLAY = 4

D_{85}= 0.52 D_{60}= 0.20 D_{50}= 0.15
D_{30}= 0.07 D_{15}= 0.02 D_{10}= 0.01
C_C= 1.5923 C_u= 13.3882

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	1	10	58	31	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-320	10	28.5'	9/21/06		SAND Silty (SM); Dark Yellowish Brown, Brownish Yellow, Micaceous	22.5		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA Reviewed by: JRS
ASTM D6913-04

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 10
Elev. or Depth: 28.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Yellowish Brown, Brownish Yellow, Micaceous
Date: 9/21/06 **Natural Moisture:** 22.5
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	376.02
Tare =	87.09
Dry sample weight =	288.93

Tare for cumulative weight retained= .00

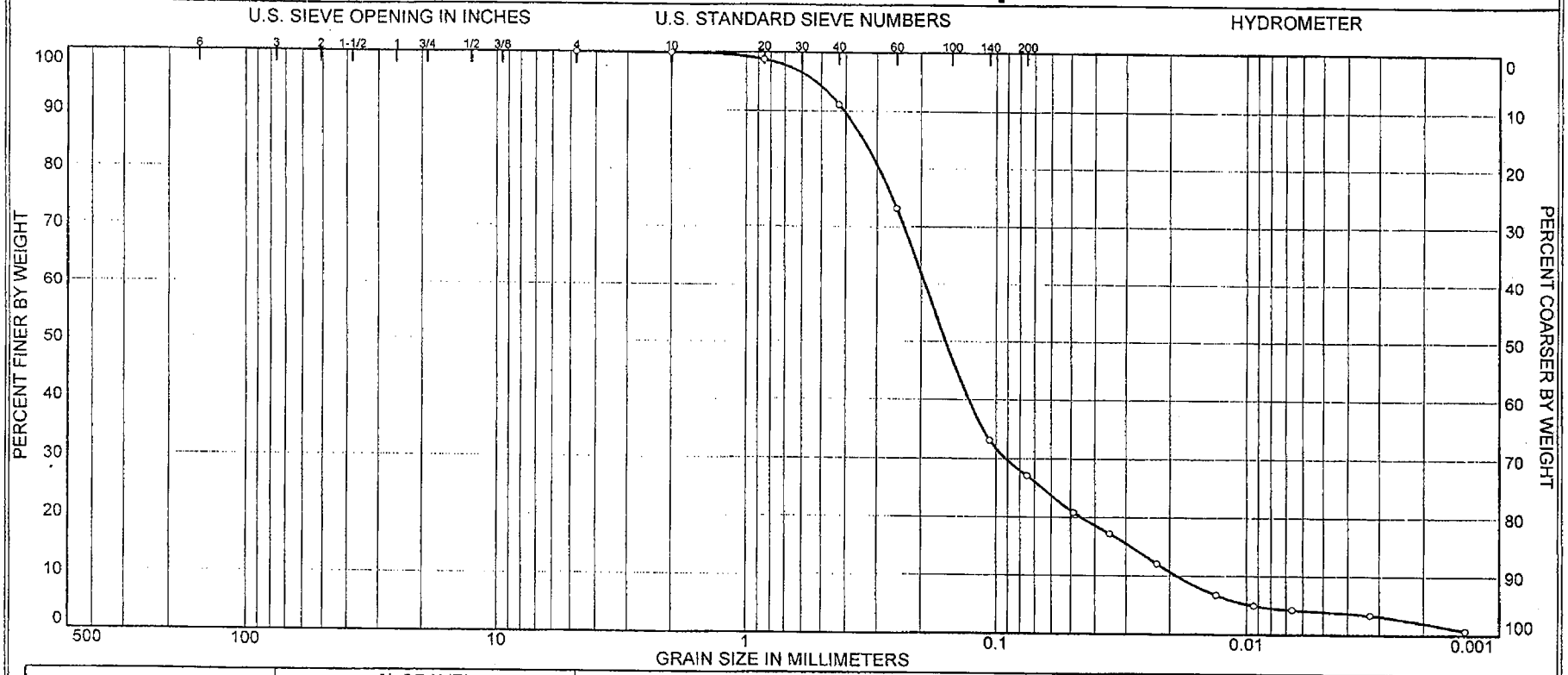
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.42	100
# 20	6.74	98
# 40	28.77	90
# 60	73.93	74
# 100	140.94	51
# 140	174.23	40
# 200	199.65	31

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 69 (% coarse = 1 % medium = 10 % fine = 58)
% FINES = 31

D_{85}= 0.34 D_{60}= 0.18 D_{50}= 0.15

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	9	64	23	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-320	11	33.5'	8/30/06		SAND Silty (SM); Dark Yellowish Brown, Brownish Yellow, Gray, Black, Micaceous	17.2		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 11
Elev. or Depth: 33.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Yellowish Brown, Brownish Yellow, Gray, Black, Micaceous
Date: 8/30/06 **Natural Moisture:** 17.2
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	229.84
Tare =	0.00
Dry sample weight =	229.84

Sample split on number 10 sieve
Split sample data:
Sample and tare = 56.78 Tare = .00 Sample weight = 56.78
Cumulative weight retained tare= .00
re for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.34	100
# 20	0.65	99
# 40	4.95	91
# 60	15.17	73
# 140	37.89	33
# 200	41.36	27

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 57.06
Hygroscopic moisture correction:
Moist weight & tare = 51.04
Dry weight & tare = 50.86
Tare = 11.00
Hygroscopic moisture= 0 %
Calculated biased weight= 56.86
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

niscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

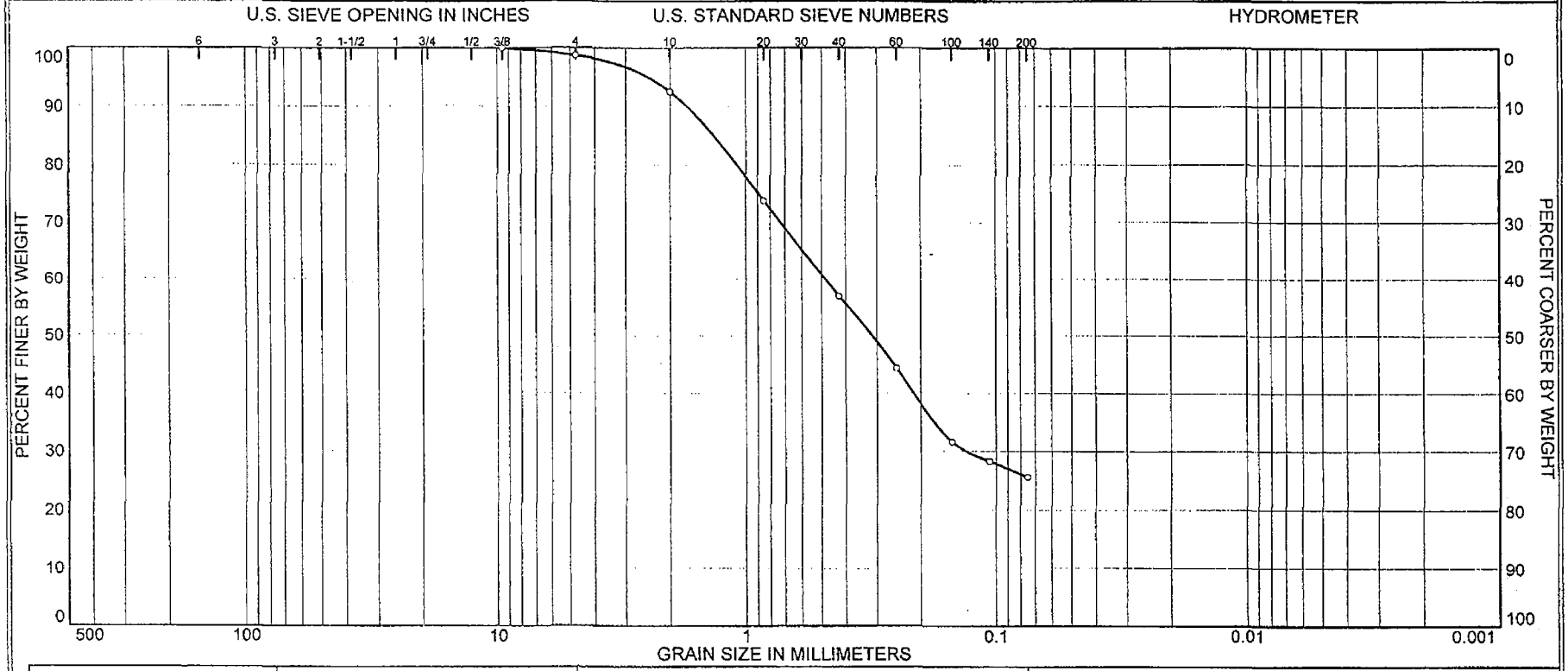
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.3	17.0	11.8	0.0133	17.0	13.5	0.0488	21
2.00	22.3	15.0	9.8	0.0133	15.0	13.8	0.0349	17
5.00	22.3	12.0	6.8	0.0133	12.0	14.3	0.0225	12
15.00	22.3	9.0	3.8	0.0133	9.0	14.8	0.0132	7
30.00	22.3	8.0	2.8	0.0133	8.0	15.0	0.0094	5
60.00	22.6	7.5	2.4	0.0132	7.5	15.1	0.0066	4
250.00	22.6	7.0	1.9	0.0132	7.0	15.1	0.0033	3
1440.00	22.6	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 73 (% coarse = 0 % medium = 9 % fine = 64)
% SILT = 23 % CLAY = 4

D_{85}= 0.34 D_{60}= 0.19 D_{50}= 0.16
D_{30}= 0.09 D_{15}= 0.03 D_{10}= 0.02
C_C= 2.3067 C_u= 10.2158

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	1	6	36	31	26	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-320	12	38.5'	8/19/06		SAND Silty (SM); Grayish Brown, White, Black, Micaceous	24.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 12
Elev. or Depth: 38.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Grayish Brown, White, Black, Micaceous
Date: 8/19/06 **Natural Moisture:** 24.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	312.27
Tare =	87.20
Dry sample weight =	225.07

Tare for cumulative weight retained= .00

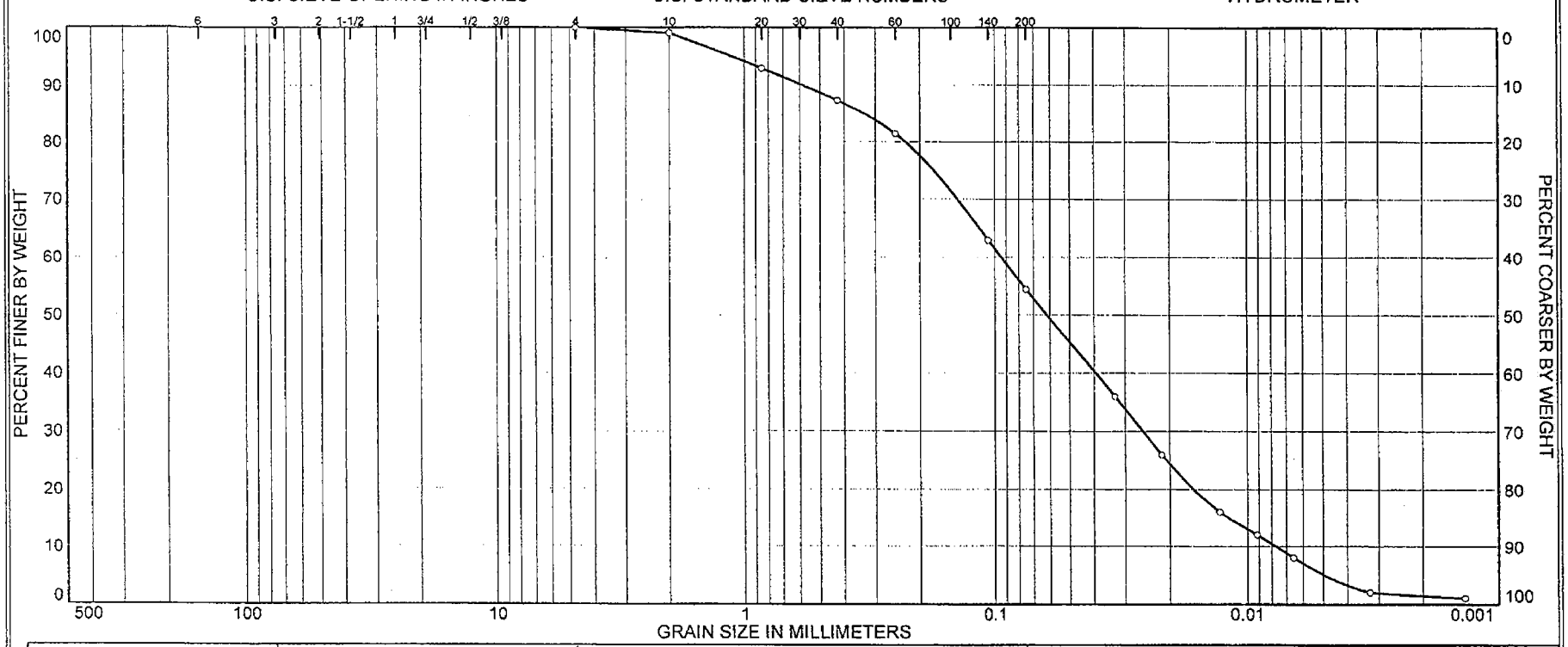
Sieve	Cumul. Wt. retained	Percent finer
3/8in. inch	0.00	100
# 4	2.98	99
# 10	16.93	93
# 20	59.05	74
# 40	96.83	57
# 60	125.15	44
# 100	153.75	32
# 140	161.11	28
# 200	167.24	26

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 1 **(% coarse =** **% fine =** 1)
% SAND = 73 **(% coarse =** 6 **% medium =** 36 **% fine =** 31)
% FINES = 26

D_{85}= 1.35 D_{60}= 0.48 D_{50}= 0.31
D_{30}= 0.13

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	12	33	49	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-320	13	43.5'	9/12/06	ML	SILT Sandy (ML); Brownish Yellow, White, Black, Yellowish Red, Mottled	44.2	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS

ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-320
Sample No.: 13
Elev. or Depth: 43.5' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Brownish Yellow, White, Black, Yellowish Red, Mottled
Date: 9/12/06 **Natural Moisture:** 44.2
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	199.37
Tare =	0.00
Dry sample weight =	199.37

Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.11 Tare = .00 Sample weight = 50.11
Cumulative weight retained tare= .00
re for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	1.82	99
# 20	3.09	93
# 40	5.92	87
# 60	8.88	82
# 140	18.24	63
# 200	22.56	55

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99
Weight of hydrometer sample: 51.46
Hygroscopic moisture correction:
Moist weight & tare = 35.10
Dry weight & tare = 34.48
Tare = 11.39
Hygroscopic moisture= 3 %
Calculated biased weight= 50.62
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

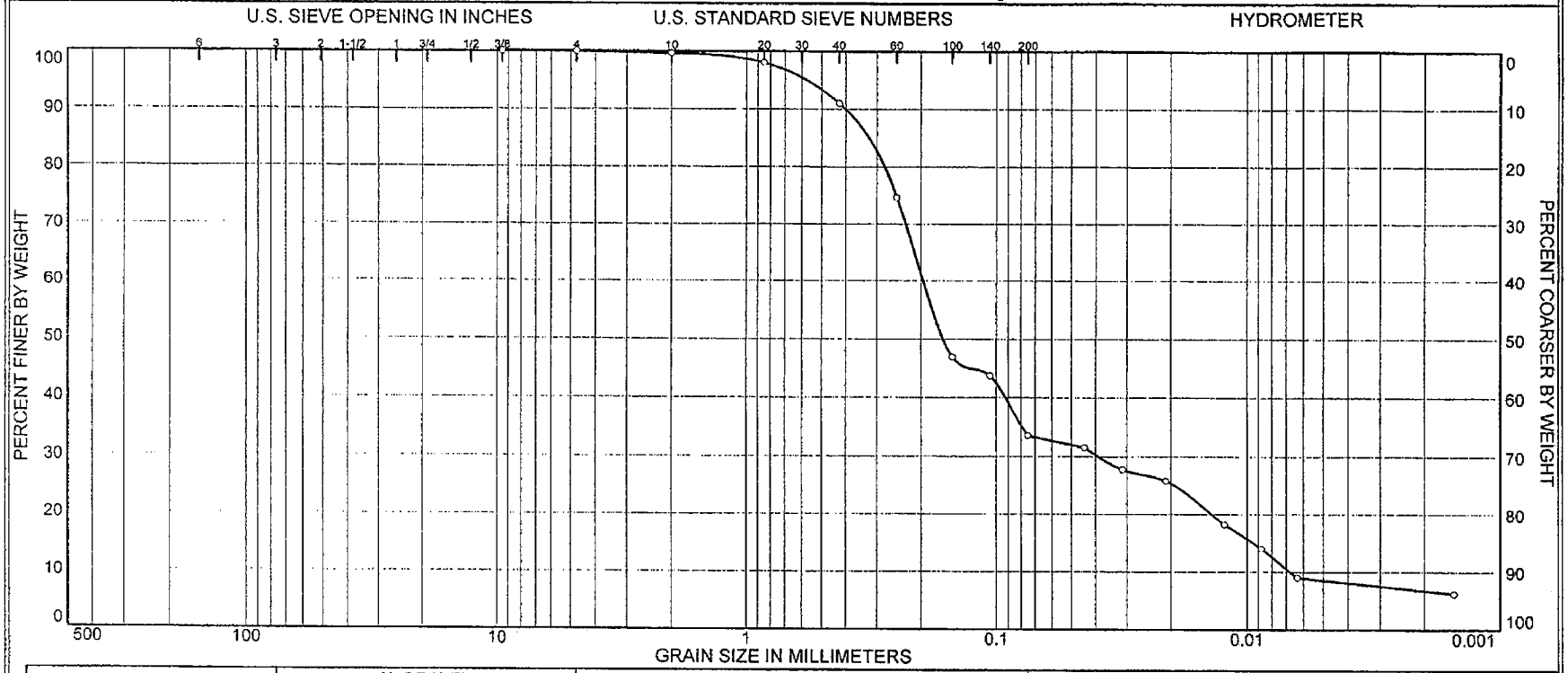
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	23.0	18.0	0.0132	23.0	12.5	0.0329	36
5.00	23.0	18.0	13.0	0.0132	18.0	13.3	0.0215	26
15.00	23.0	13.0	8.0	0.0132	13.0	14.2	0.0128	16
30.00	23.0	11.0	6.0	0.0132	11.0	14.5	0.0091	12
60.00	23.0	9.0	4.0	0.0132	9.0	14.8	0.0065	8
250.00	23.0	6.0	1.0	0.0132	6.0	15.3	0.0033	2
1440.00	23.0	5.5	0.5	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 46 (% coarse = 1 % medium = 12 % fine = 33)
% SILT = 49 % CLAY = 5

D_{85}= 0.33 D_{60}= 0.09 D_{50}= 0.06
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 0.8967 C_u= 12.1649

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	9	57	25	9

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-321	UD-2	18.5 Ft.	11/9/06	SM	Silty sand	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-321
Sample No.: UD-2
Elev. or Depth: 18.5 Ft. **Sample Length(in./cm.):** 5397
Location: B-321
Description: Silty sand
Date: 11/9/06 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	70.17
Tare =	0.00
Dry sample weight =	70.17

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.00	100
# 10	0.28	100
# 20	1.43	98
# 40	6.35	91
# 60	17.78	75
# 100	37.25	47
# 140	39.54	44
# 200	46.61	34

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 34
Weight of hydrometer sample: 23.56
Calculated biased weight= 70.12
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	27.0	22.4	0.0129	27.0	11.9	0.0444	32
2.00	26.0	23.5	19.7	0.0125	23.5	12.4	0.0312	28
5.00	21.0	23.5	18.3	0.0133	23.5	12.4	0.0209	26
15.00	23.5	17.5	12.9	0.0129	17.5	13.4	0.0122	18
30.00	23.5	14.5	9.9	0.0129	14.5	13.9	0.0088	14

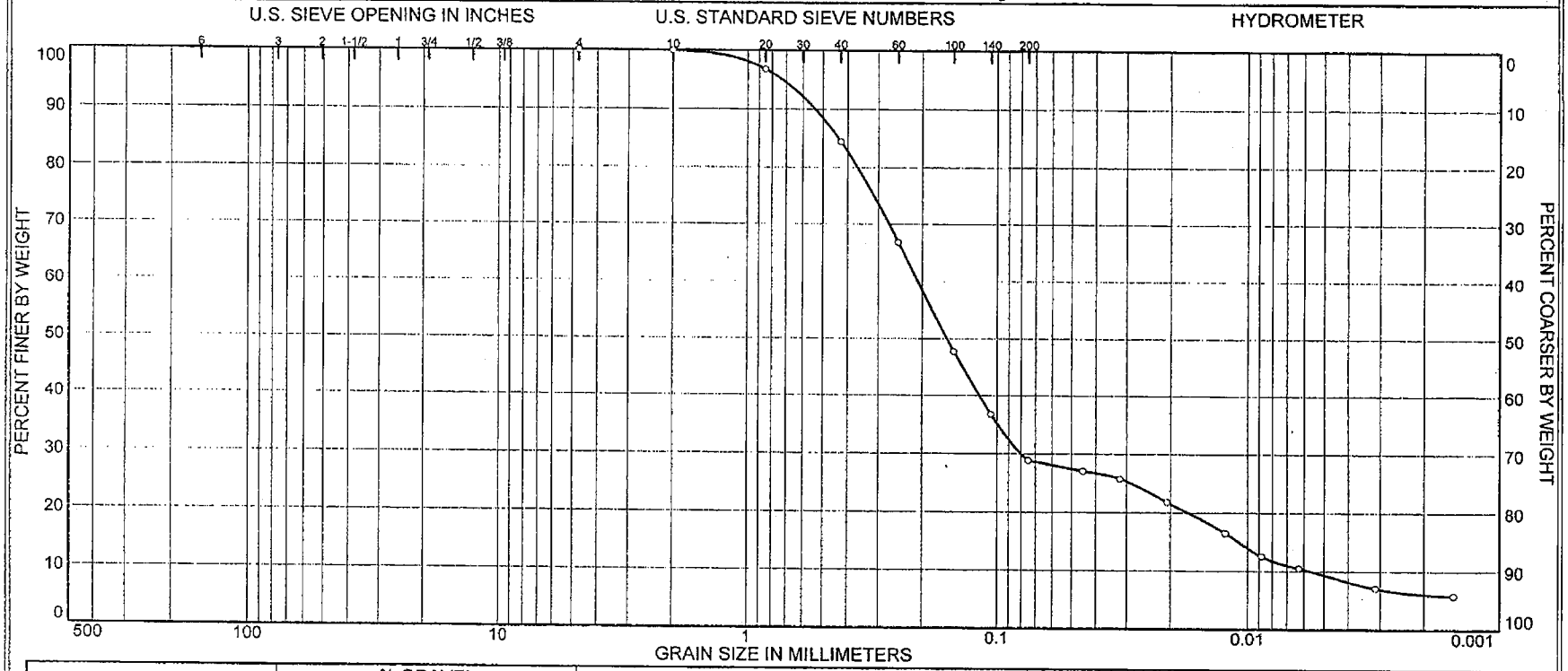
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
60.00	23.5	11.0	6.4	0.0129	11.0	14.5	0.0063	9
1057.00	23.5	9.0	4.4	0.0129	9.0	14.8	0.0015	6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 66 (% coarse = 0 % medium = 9 % fine = 57)
% SILT = 25 % CLAY = 9

D_{85}= 0.32 D_{60}= 0.20 D_{50}= 0.16
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.1434 C_u= 29.0318

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	15	56	20	9

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-322	UD-2	18.5 Ft.	11/10/6	SM	Silty sand	N/A		NP

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-322
Sample No.: UD-2
Elev. or Depth: 18.5 Ft. **Sample Length(in./cm.):** 5401
Location: B-322
Description: Silty sand
Date: 11/10/6 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	74.54
Tare =	0.00
Dry sample weight =	74.54

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.06	100
# 20	2.35	97
# 40	11.53	85
# 60	24.67	67
# 100	38.96	48
# 140	47.14	37
# 200	53.02	29

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 29
Weight of hydrometer sample: 21.52
Calculated biased weight= 74.46
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	23.5	25.0	20.4	0.0129	25.0	12.2	0.0450	27
2.00	23.5	24.0	19.4	0.0129	24.0	12.4	0.0320	26
5.00	23.5	21.0	16.4	0.0129	21.0	12.9	0.0207	22
15.00	23.5	17.0	12.4	0.0129	17.0	13.5	0.0122	17
30.00	23.5	14.0	9.4	0.0129	14.0	14.0	0.0088	13
60.00	23.5	12.5	7.9	0.0129	12.5	14.2	0.0063	11

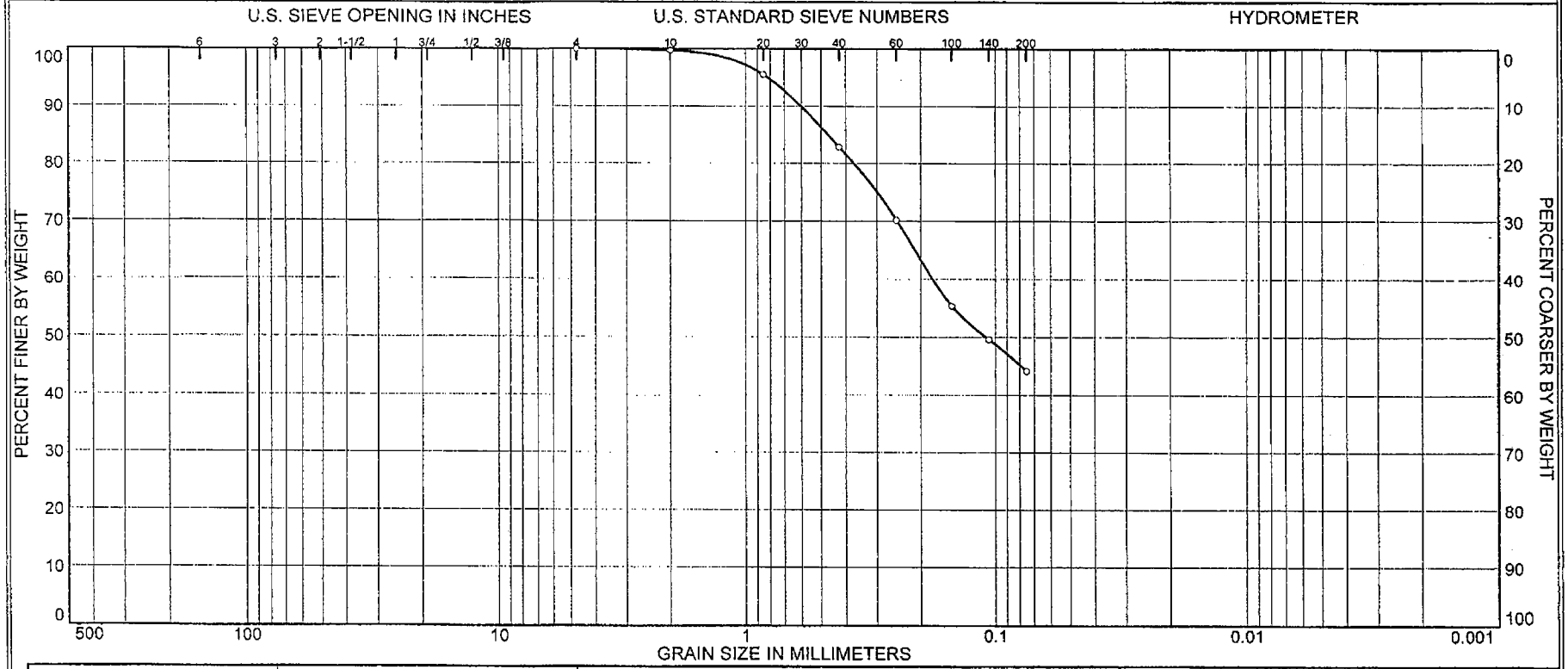
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
250.00	23.4	10.0	5.4	0.0129	10.0	14.7	0.0031	7
1057.00	23.5	9.0	4.4	0.0129	9.0	14.8	0.0015	6

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 71 (**% coarse** = 0 **% medium** = 15 **% fine** = 56)
% SILT = 20 **% CLAY** = 9

D_{85}= 0.43 D_{60}= 0.21 D_{50}= 0.16
D_{30}= 0.08 D_{15}= 0.01 D_{10}= 0.01
C_c= 5.4543 C_u= 36.8832

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	17	39	44	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	2	1.5'	8/30/06		SAND Silty (SM); Yellowish Red, Red	29.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 2
Elev. or Depth: 1.5' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Red
Date: 8/30/06 **Natural Moisture:** 29.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	351.01
Tare =	101.99
Dry sample weight =	249.02

Tare for cumulative weight retained= .00

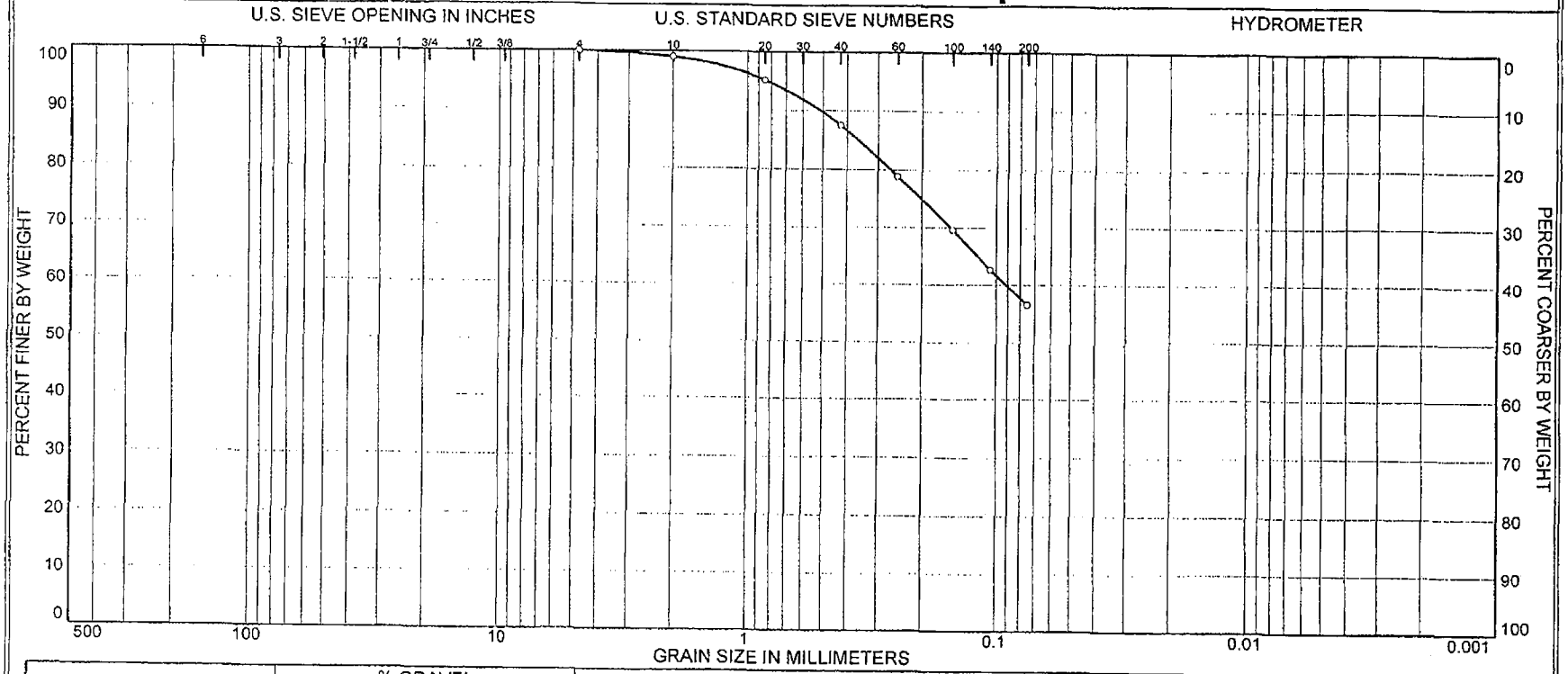
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.79	100
# 20	10.84	96
# 40	42.58	83
# 60	74.22	70
# 100	111.32	55
# 140	125.54	50
# 200	138.84	44

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 56 (% coarse = 0 % medium = 17 % fine = 39)
% FINES = 44

D_{85}= 0.47 D_{60}= 0.18 D_{50}= 0.11

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	1	12	31	57	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-325	UD-1	3.5 Ft.	11/17/06		Sandy silt	N/A		

Client

Project SCE&G COL

Project No. 6234-06-3534S | Figure

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: JM Reviewed by: HJ

ASTM D 6319-04

11/24/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client:
Project: SCE&G COL
Project Number: 6234-06-3534S

Sample Data

Source: B-325
Sample No.: UD-1
Elev. or Depth: 3.5 Ft. **Sample Length(in./cm.):** 5404
Location: B-325
Description: Sandy silt
Date: 11/17/06 **Natural Moisture:** N/A
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JM Reviewed by: HJ

ASTM D 6319-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	48.83
Tare =	0.00
Dry sample weight =	48.83

Tare for cumulative weight retained= .00

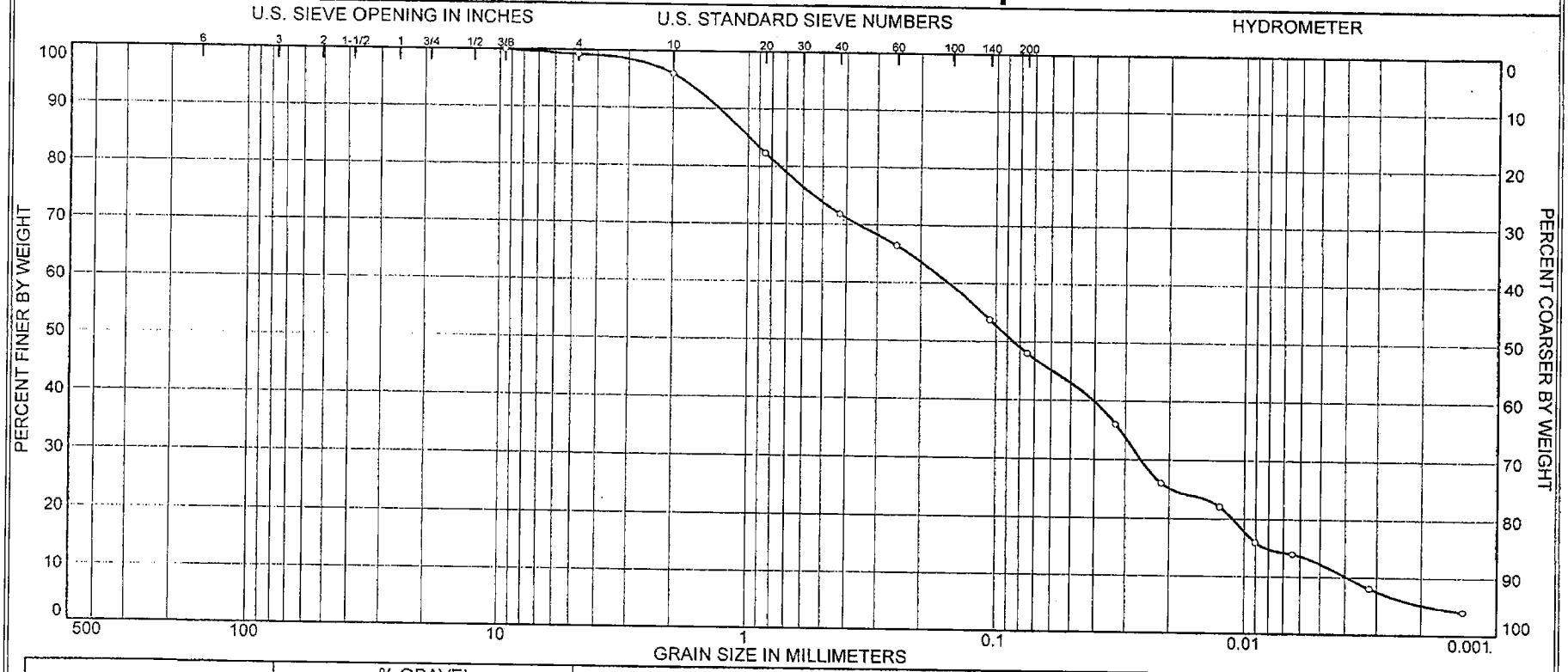
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.49	99
# 20	2.33	95
# 40	6.12	88
# 60	10.35	79
# 100	14.85	70
# 140	18.19	63
# 200	21.24	57

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 44 (% coarse = 1 % medium = 12 % fine = 31)
% FINES = 57

D_{85}= 0.36 D_{60}= 0.09

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	1	3	24	24	36	12

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	3	6.0'	9/12/06	SM	SAND Silty (SM); Yellowish Red, Red	39.9	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 3
Elev. or Depth: 6.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Yellowish Red, Red
Date: 9/12/06 **Natural Moisture:** 39.9
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	165.39
Tare =	0.00
Dry sample weight =	165.39

Sample split on number 10 sieve
Split sample data:
Sample and tare = 48.55 Tare = .00 Sample weight = 48.55
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	1.36	99
# 10	6.61	96
# 20	6.93	82
# 40	12.24	72
# 60	14.99	66
# 140	21.39	54
# 200	24.30	48

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96
Weight of hydrometer sample: 50.10
Hygroscopic moisture correction:
Moist weight & tare = 25.56
Dry weight & tare = 25.10
Tare = 10.78
Hygroscopic moisture= 3 %
Calculated biased weight= 50.56
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000

Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

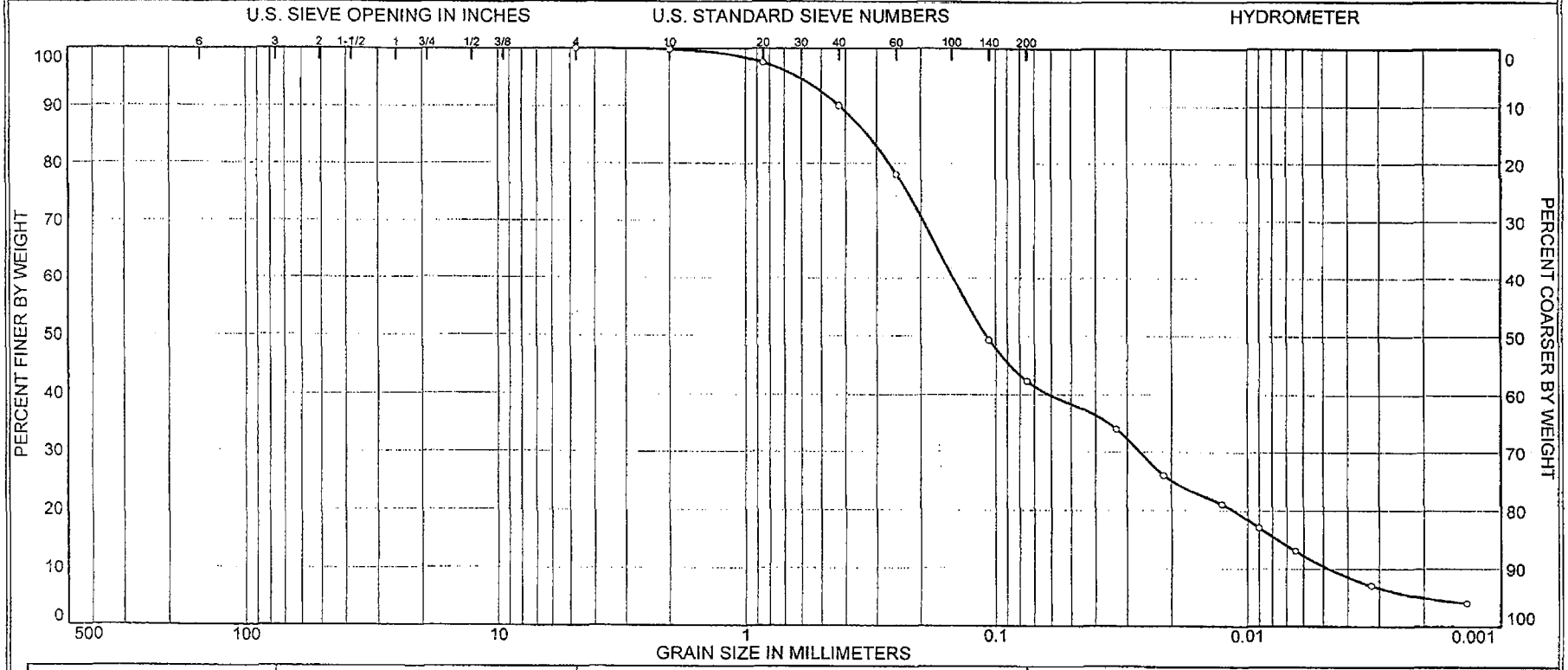
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	23.0	18.0	0.0132	23.0	12.5	0.0329	36
5.00	23.0	18.0	13.0	0.0132	18.0	13.3	0.0215	26
15.00	23.0	16.0	11.0	0.0132	16.0	13.7	0.0126	22
30.00	23.0	13.0	8.0	0.0132	13.0	14.2	0.0090	16
60.00	23.0	12.0	7.0	0.0132	12.0	14.3	0.0064	14
250.00	23.0	9.0	4.0	0.0132	9.0	14.8	0.0032	8
1440.00	22.4	7.0	1.8	0.0132	7.0	15.1	0.0014	4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 1 (% coarse = % fine = 1)
% SAND = 51 (% coarse = 3 % medium = 24 % fine = 24)
% SILT = 36 % CLAY = 12

D_{85}= 0.99 D_{60}= 0.16 D_{50}= 0.09
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.00
C_c= 1.1023 C_u= 39.2801

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	10	48	32	10

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	4	11.0'	9/19/06		SAND Silty (SM); Dark Red, Strong Brown, Micaceous	18.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11.16.06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 4
Elev. or Depth: 11.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Red, Strong Brown, Micaceous
Date: 9/19/06 **Natural Moisture:** 18.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	160.58
Tare =	0.00
Dry sample weight =	160.58

Sample split on number 10 sieve
Split sample data:
Sample and tare = 52.75 Tare = .00 Sample weight = 52.75
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.35	100
# 20	1.18	98
# 40	5.15	90
# 60	11.49	78
# 140	26.71	49
# 200	30.37	42

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 53.17
Hygroscopic moisture correction:
Moist weight & tare = 50.50
Dry weight & tare = 50.18
Tare = 11.00
Hygroscopic moisture= 1 %
Calculated biased weight= 52.74
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

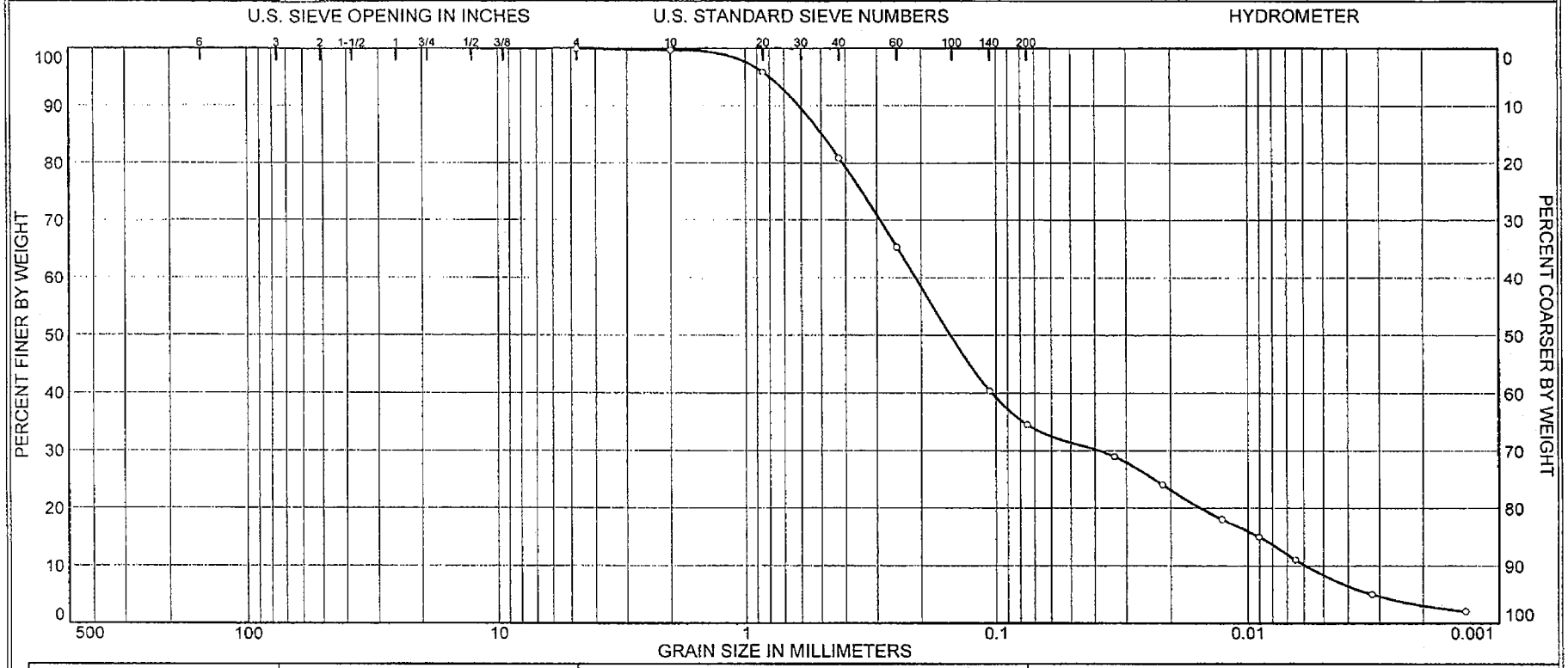
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.6	23.0	17.9	0.0132	23.0	12.5	0.0331	34
5.00	22.6	19.0	13.9	0.0132	19.0	13.2	0.0215	26
15.00	22.6	16.0	10.9	0.0132	16.0	13.7	0.0126	21
30.00	22.6	14.0	8.9	0.0132	14.0	14.0	0.0090	17
60.00	22.6	12.0	6.9	0.0132	12.0	14.3	0.0065	13
250.00	22.6	9.0	3.9	0.0132	9.0	14.8	0.0032	7
1440.00	22.6	7.0	1.9	0.0132	7.0	15.1	0.0014	4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 58 (**% coarse =** 0 **% medium =** 10 **% fine =** 48)
% SILT = 32 **% CLAY =** 10

D_{85}= 0.33 D_{60}= 0.15 D_{50}= 0.11
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.00
C_C= 1.0043 C_u= 30.9307

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	19	46	26	8

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	5	16.0'	9/12/06	SM	SAND Silty (SM); Dark Red, Strong Brown, Micaceous	22.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 5
Elev. or Depth: 16.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Red, Strong Brown, Micaceous
Date: 9/12/06 **Natural Moisture:** 22.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	223.66
Tare =	0.00
Dry sample weight =	223.66

Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.38 Tare = .00 Sample weight = 54.38
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.68	100
# 20	2.06	96
# 40	10.23	81
# 60	18.71	65
# 140	32.33	40
# 200	35.51	35

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 54.60
Hygroscopic moisture correction:
Moist weight & tare = 34.91
Dry weight & tare = 34.81
Tare = 10.96
Hygroscopic moisture= 0 %
Calculated biased weight= 54.37
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

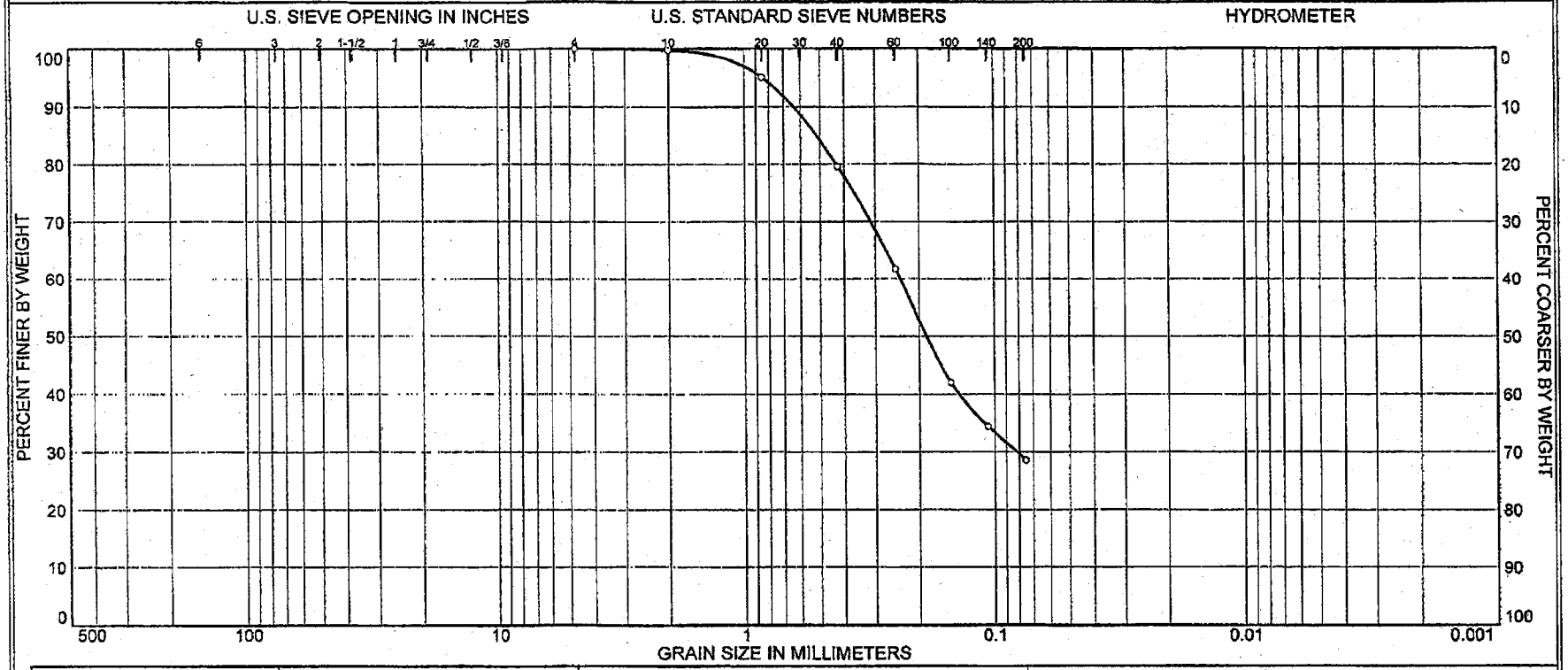
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.0	21.0	16.0	0.0132	21.0	12.9	0.0333	29
5.00	23.0	18.0	13.0	0.0132	18.0	13.3	0.0215	24
15.00	23.0	15.0	10.0	0.0132	15.0	13.8	0.0126	18
30.00	23.0	13.0	8.0	0.0132	13.0	14.2	0.0090	15
60.00	23.0	11.0	6.0	0.0132	11.0	14.5	0.0065	11
250.00	23.0	8.0	3.0	0.0132	8.0	15.0	0.0032	5
1440.00	23.0	6.0	1.0	0.0132	6.0	15.3	0.0014	2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL =
% SAND = 65 (% coarse = 0 % medium = 19 % fine = 46)
% SILT = 26 % CLAY = 8

D_{85}= 0.50 D_{60}= 0.21 D_{50}= 0.15
D_{30}= 0.04 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.1686 C_u= 35.5956

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	20	51	29	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	6	21.0'	8/31/06		SAND Silty (SM); Olive Yellow, Light Olive Brown, Red, White, Micaceous	35.6		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 6
Elev. or Depth: 21.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Olive Yellow, Light Olive Brown, Red, White, Micaceous
Date: 8/31/06 **Natural Moisture:** 35.6
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	409.60
Tare =	189.31
Dry sample weight =	220.29

Tare for cumulative weight retained= .00

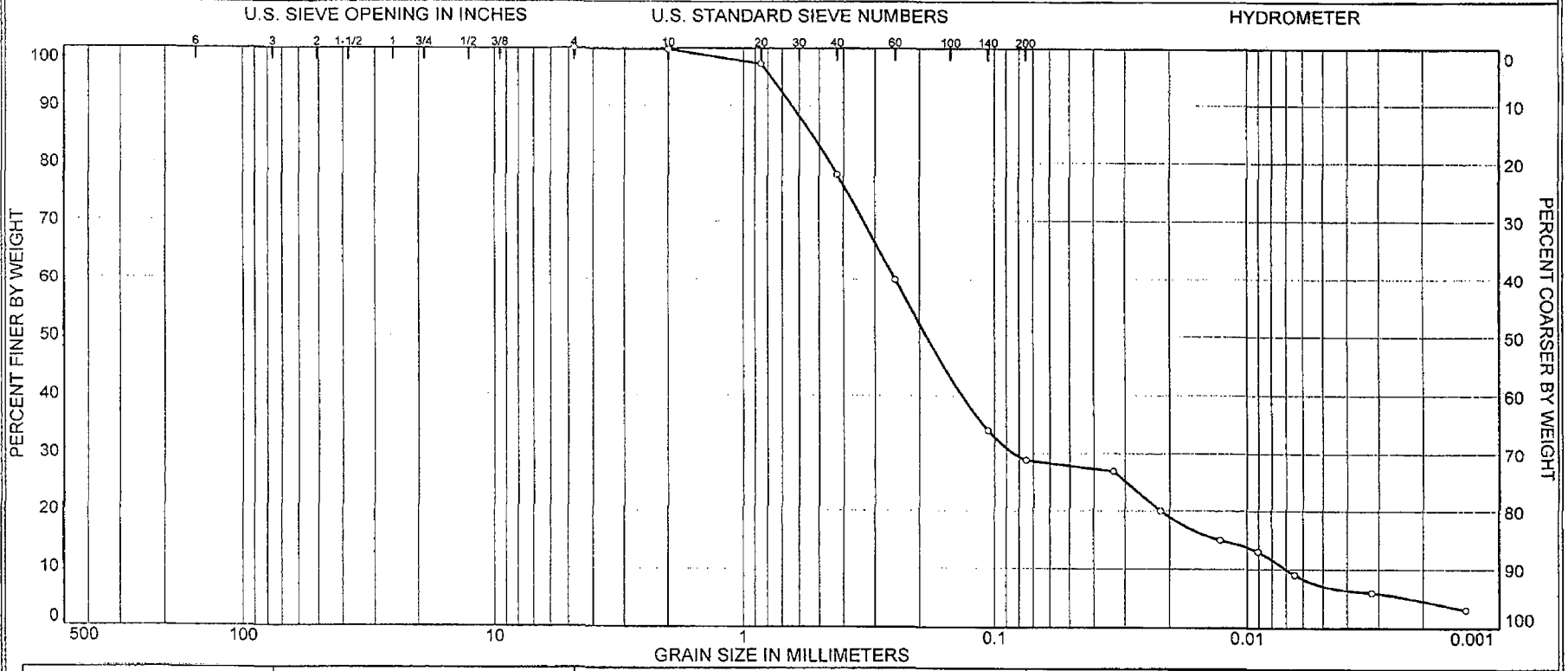
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.63	100
# 20	10.73	95
# 40	44.85	80
# 60	84.48	62
# 100	127.74	42
# 140	144.60	34
# 200	157.38	29

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 71 **(% coarse = 0** **% medium = 20** **% fine = 51)**
% FINES = 29

D_{85}= 0.52 D_{60}= 0.24 D_{50}= 0.19
D_{30}= 0.08

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0	0	0	0	22	49	22	7

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-325	7	26.0'	9/12/06	SM	SAND Silty (SM); Red, Olive Brown, Yellowish Brown, White, Micaceous	16.6	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 7
Elev. or Depth: 26.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Red, Olive Brown, Yellowish Brown, White, Micaceous
Date: 9/12/06 **Natural Moisture:** 16.6
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	225.73
Tare =	0.00
Dry sample weight =	225.73

Sample split on number 10 sieve
Split sample data:
Sample and tare = 55.37 Tare = .00 Sample weight = 55.37
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.55	100
# 20	1.40	97
# 40	12.07	78
# 60	22.15	60
# 140	36.50	34
# 200	39.32	29

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 55.65
Hygroscopic moisture correction:
Moist weight & tare = 30.23
Dry weight & tare = 30.13
Tare = 10.84
Hygroscopic moisture= 1 %
Calculated biased weight= 55.36
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

`niscus correction only= 0.0
pecific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

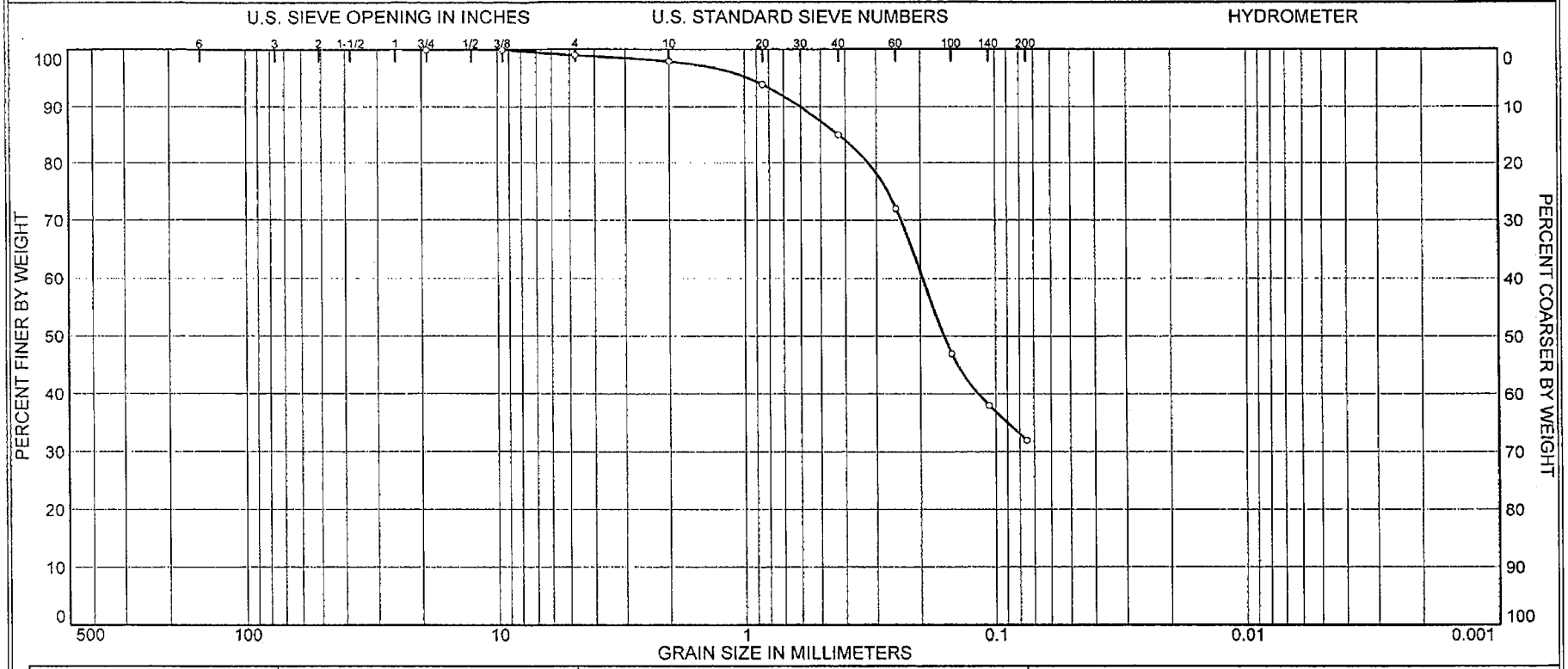
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.4	20.0	15.1	0.0131	20.0	13.0	0.0334	27
5.00	23.4	16.0	11.1	0.0131	16.0	13.7	0.0216	20
15.00	23.4	13.0	8.1	0.0131	13.0	14.2	0.0127	15
30.00	23.4	12.0	7.1	0.0131	12.0	14.3	0.0090	13
60.00	23.4	10.0	5.1	0.0131	10.0	14.7	0.0065	9
250.00	23.4	8.0	3.1	0.0131	8.0	15.0	0.0032	6
1440.00	22.9	6.5	1.5	0.0132	6.5	15.2	0.0014	3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 71 (**% coarse** = 0 **% medium** = 22 **% fine** = 49)
% SILT = 22 **% CLAY** = 7

D_{85}= 0.54 D_{60}= 0.25 D_{50}= 0.19
D_{30}= 0.08 D_{15}= 0.01 D_{10}= 0.01
C_C= 3.9638 C_u= 35.5857

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	1	1	13	53	32	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	8	31.0'	8/24/06		SAND Silty (SM); Strong Brown, Black, Red, White, Olive Brown, Micaceous	19.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 8
Elev. or Depth: 31.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Black, Red, White, Olive Brown, Micaceous
Date: 8/24/06 **Natural Moisture:** 19.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	491.34
Tare =	195.53
Dry sample weight =	295.81

Tare for cumulative weight retained= .00

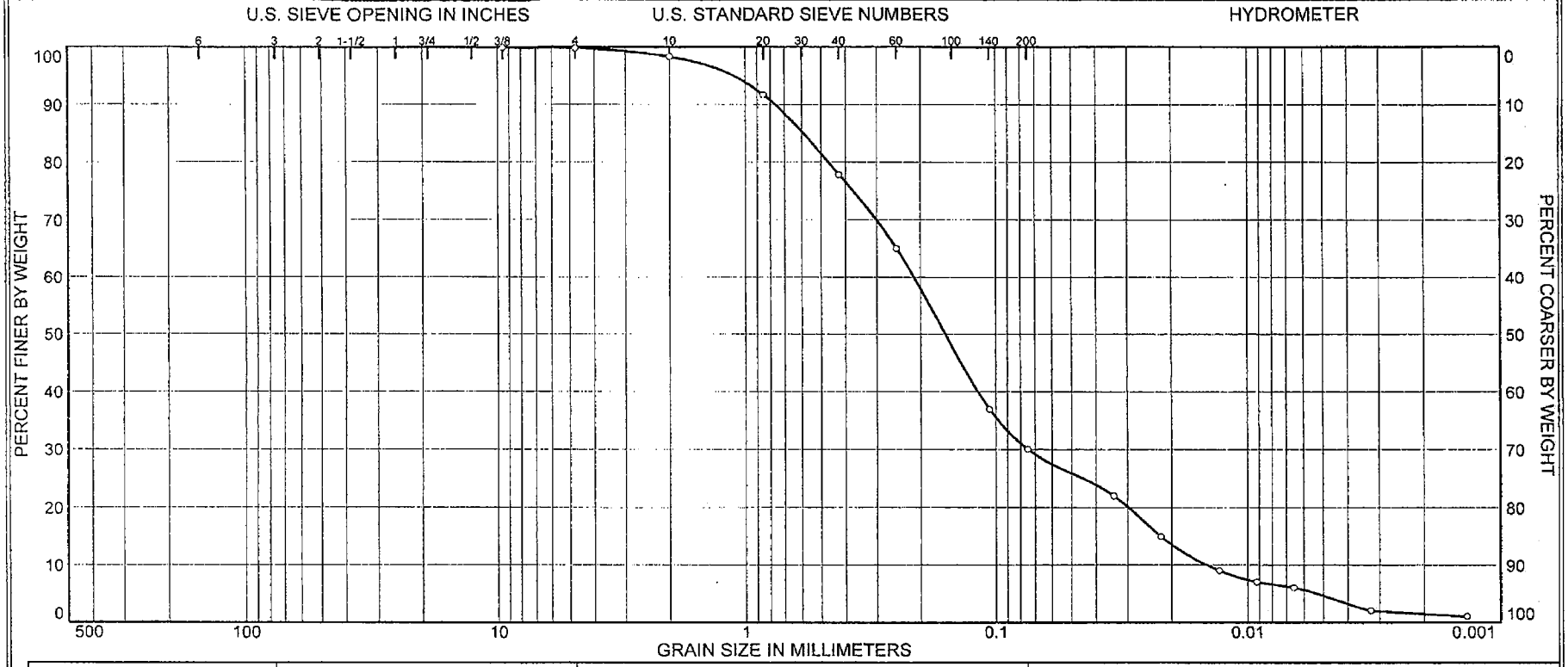
Sieve	Cumul. Wt. retained	Percent finer
3/4 inch	0.00	100
3/8 inch	0.72	100
# 4	2.46	99
# 10	5.50	98
# 20	16.27	94
# 40	44.86	85
# 60	82.20	72
# 100	158.10	47
# 140	182.53	38
# 200	201.08	32

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 1 **(% coarse =** **% fine =** 1)
% SAND = 67 **(% coarse =** 1 **% medium =** 13 **% fine =** 53)
% FINES = 32

D_{85}= 0.43 D_{60}= 0.20 D_{50}= 0.16

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	1	21	48	26	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	9	36.0'	9/12/06	SM	SAND Silty (SM); Strong Brown, Black, Dark Olive Gray, White, Micaceous	16.4	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11/16/06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 9
Elev. or Depth: 36.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Strong Brown, Black, Dark Olive Gray, White, Micaceous
Date: 9/12/06 **Natural Moisture:** 16.4
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	229.88
Tare =	0.00
Dry sample weight =	229.88

Sample split on number 10 sieve
Split sample data:
Sample and tare = 53.25 Tare = .00 Sample weight = 53.25
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100
# 4	0.41	100
# 10	3.75	98
# 20	3.57	92
# 40	11.11	78
# 60	18.02	65
# 140	33.22	37
# 200	36.95	30

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98
Weight of hydrometer sample: 53.57
Hygroscopic moisture correction:
Moist weight & tare = 31.64
Dry weight & tare = 31.52
Tare = 11.36
Hygroscopic moisture= 1 %
Calculated biased weight= 54.34
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

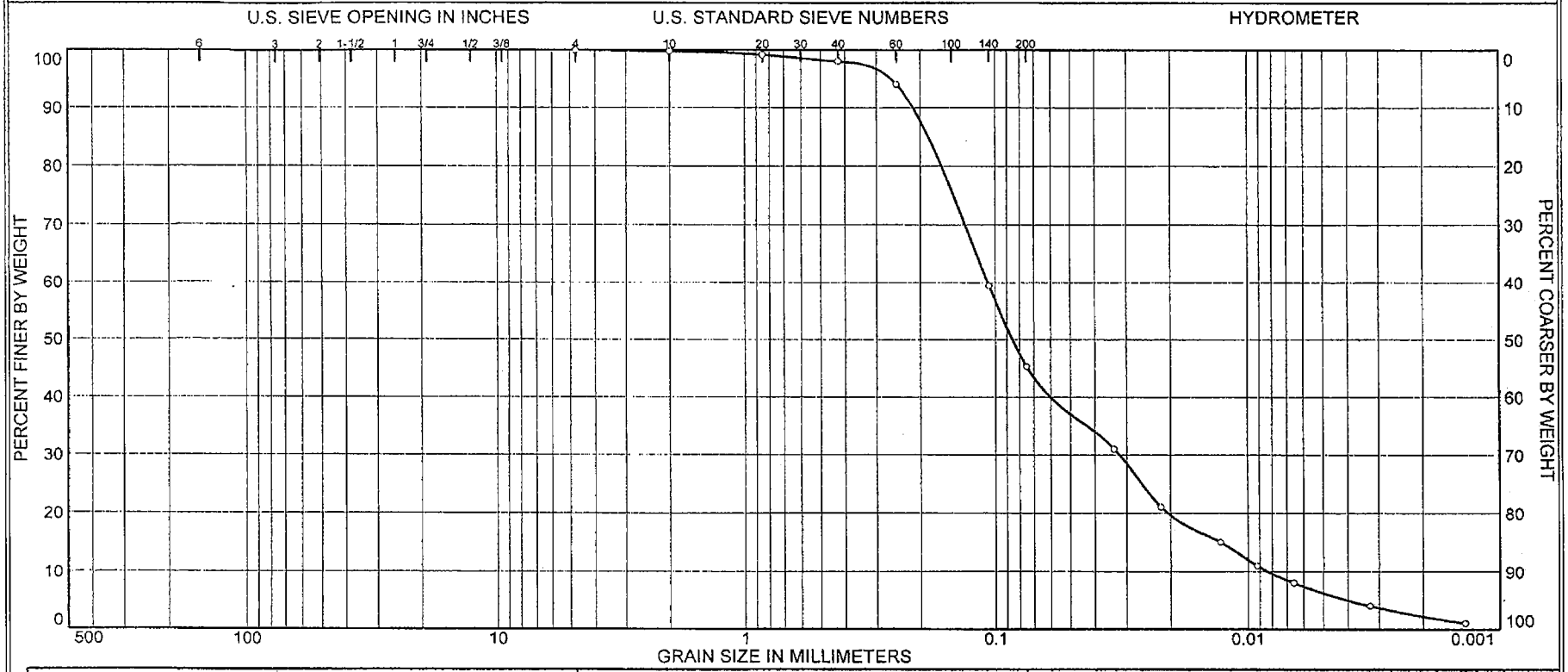
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.4	17.0	12.1	0.0131	17.0	13.5	0.0340	22
5.00	23.4	13.0	8.1	0.0131	13.0	14.2	0.0220	15
15.00	23.4	10.0	5.1	0.0131	10.0	14.7	0.0129	9
30.00	23.4	9.0	4.1	0.0131	9.0	14.8	0.0092	7
60.00	23.4	8.0	3.1	0.0131	8.0	15.0	0.0065	6
250.00	23.4	6.0	1.1	0.0131	6.0	15.3	0.0032	2
1440.00	22.9	5.5	0.5	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 0 (% coarse = % fine = 0)
% SAND = 70 (% coarse = 1 % medium = 21 % fine = 48)
% SILT = 26 % CLAY = 5

D_{85}= 0.59 D_{60}= 0.21 D_{50}= 0.16
D_{30}= 0.07 D_{15}= 0.02 D_{10}= 0.01
C_c= 1.7912 C_u= 14.6052

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	2	53	39	6

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	10	41.0'	8/30/06		SAND Silty (SM); Dark Olive Gray, White, Micaceous	23.9		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 10
Elev. or Depth: 41.0' **Sample Length(in./cm.):**
Location:
Description: SAND Silty (SM); Dark Olive Gray, White, Micaceous
Date: 8/30/06 **Natural Moisture:** 23.9
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: JA/FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	185.89
Tare =	0.00
Dry sample weight =	185.89

Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.51 Tare = .00 Sample weight = 51.51
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.42	100
# 20	0.30	99
# 40	0.90	98
# 60	2.93	94
# 140	20.85	59
# 200	28.15	45

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 52.08
Hygroscopic moisture correction:
Moist weight & tare = 50.90
Dry weight & tare = 50.46
Tare = 10.87
Hygroscopic moisture= 1 %
Calculated biased weight= 51.51
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

niscus correction only= 0.0
pecific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

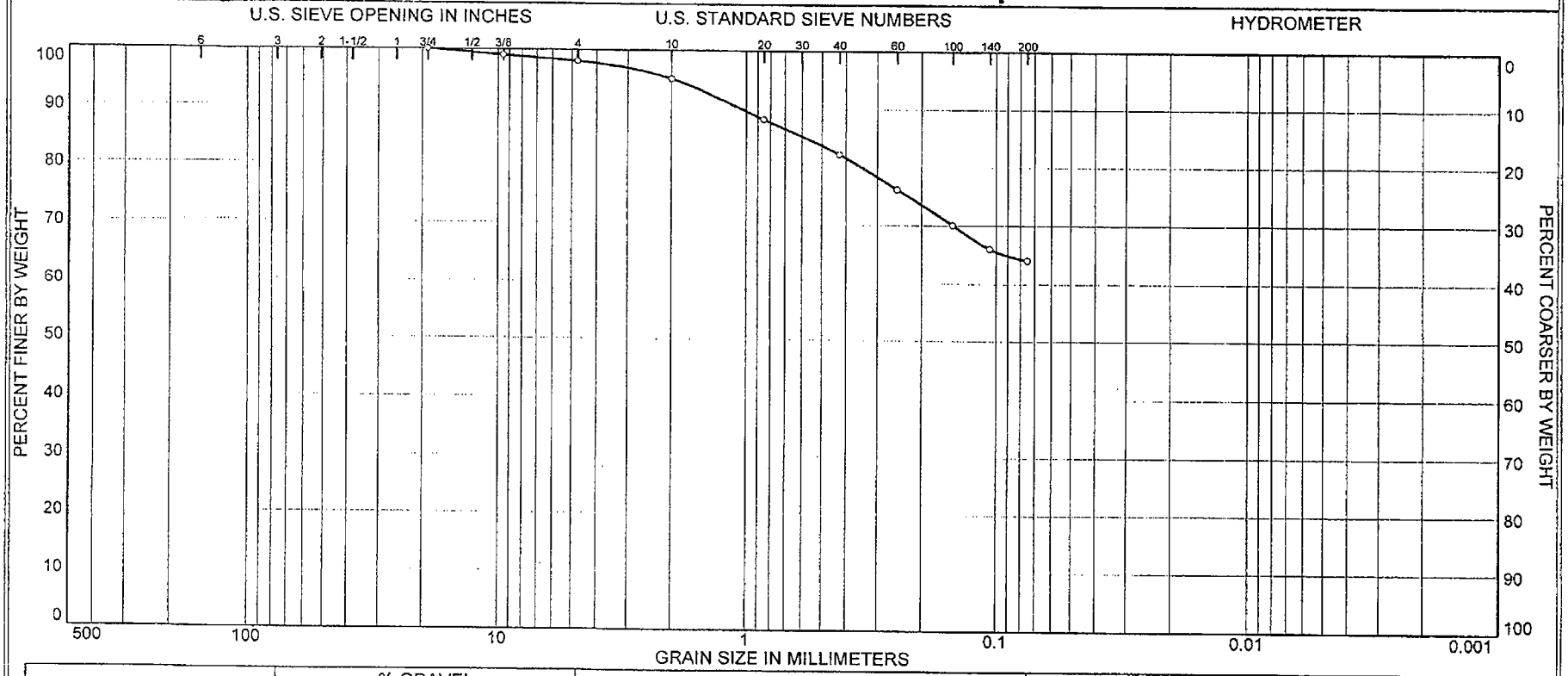
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.6	21.0	15.9	0.0132	21.0	12.9	0.0335	31
5.00	22.6	16.0	10.9	0.0132	16.0	13.7	0.0219	21
15.00	22.6	13.0	7.9	0.0132	13.0	14.2	0.0128	15
30.00	22.6	11.0	5.9	0.0132	11.0	14.5	0.0092	11
60.00	22.6	9.0	3.9	0.0132	9.0	14.8	0.0066	8
250.00	22.6	7.0	1.9	0.0132	7.0	15.1	0.0033	4
1440.00	22.6	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 55 (**% coarse =** 0 **% medium =** 2 **% fine =** 53)
% SILT = 39 **% CLAY =** 6

D_{85}= 0.19 D_{60}= 0.11 D_{50}= 0.09
D_{30}= 0.03 D_{15}= 0.01 D_{10}= 0.01
C_c= 1.1416 C_u= 12.8635

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	2	3	13	18	64	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	11	46.0'	8/31/06		SILT Sandy (ML); Olive, Yellowish Brown, Black, White, Micaceous	24.1		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 11
Elev. or Depth: 46.0' **Sample Length(in./cm.):**
Location:
Description: SILT Sandy (ML); Olive, Yellowish Brown, Black, White, Micaceous
Date: 8/31/06 **Natural Moisture:** 24.1
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	297.30
Tare =	13.54
Dry sample weight =	283.76

Tare for cumulative weight retained= .00

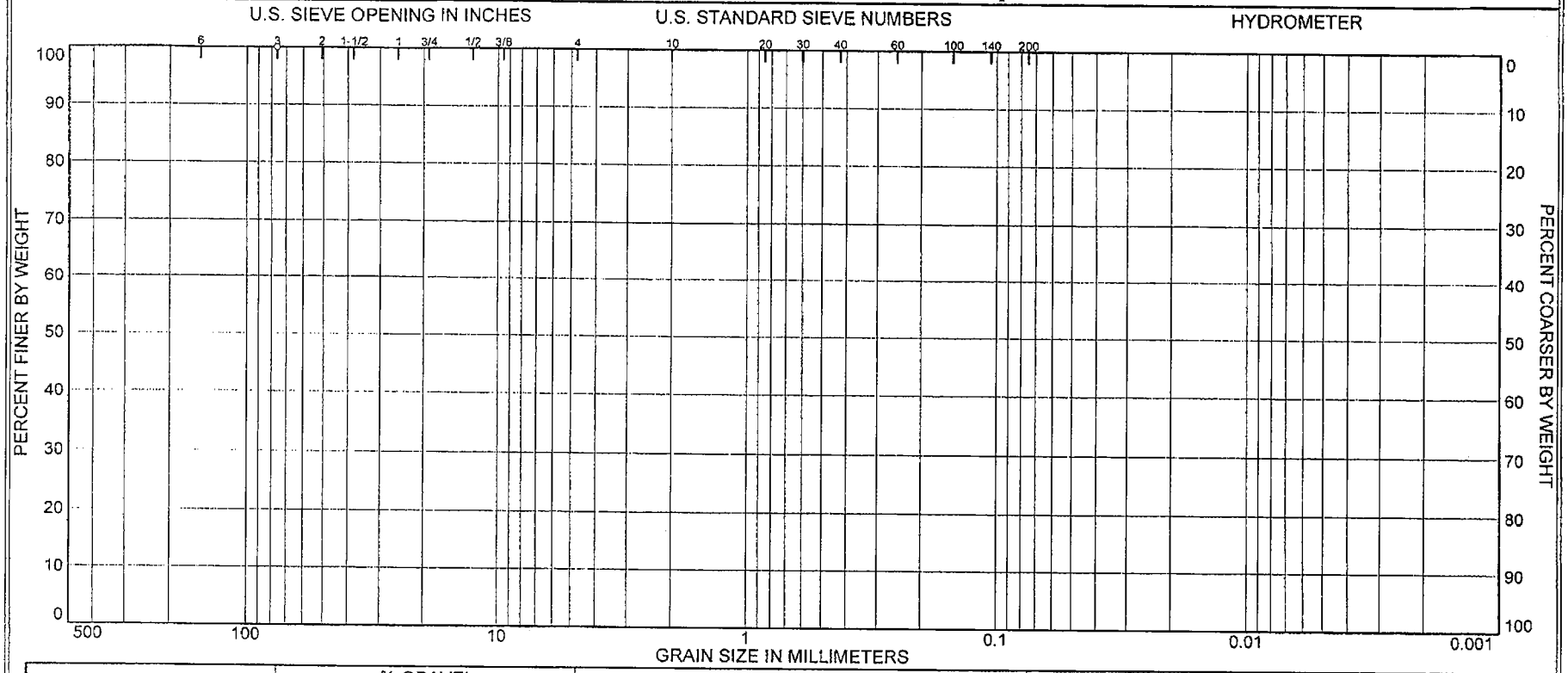
Sieve	Cumul. Wt. retained	Percent finer
3/4 inch	0.00	100
3/8 inch	2.61	99
# 4	6.36	98
# 10	14.48	95
# 20	32.96	88
# 40	52.39	82
# 60	66.78	76
# 100	86.21	70
# 140	95.21	66
# 200	102.82	64

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 2 (**% coarse =** **% fine** = 2)
% SAND = 34 (**% coarse** = 3 **% medium** = 13 **% fine** = 18)
% FINES = 64

D_{85}= 0.59

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0							

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-325	13	53.5'	9/25/06		No Recovery	n/a		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ No Recovery.

JRS. 11-16-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: B-325
Sample No.: 13
Elev. or Depth: 53.5' **Sample Length(in./cm.):**
Location:
Description: No Recovery
Date: 9/25/06 **Natural Moisture:** n/a
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: No Recovery.

Mechanical Analysis Data

	Initial
Dry sample and tare=	200.00
Tare =	0.00
Dry sample weight =	200.00

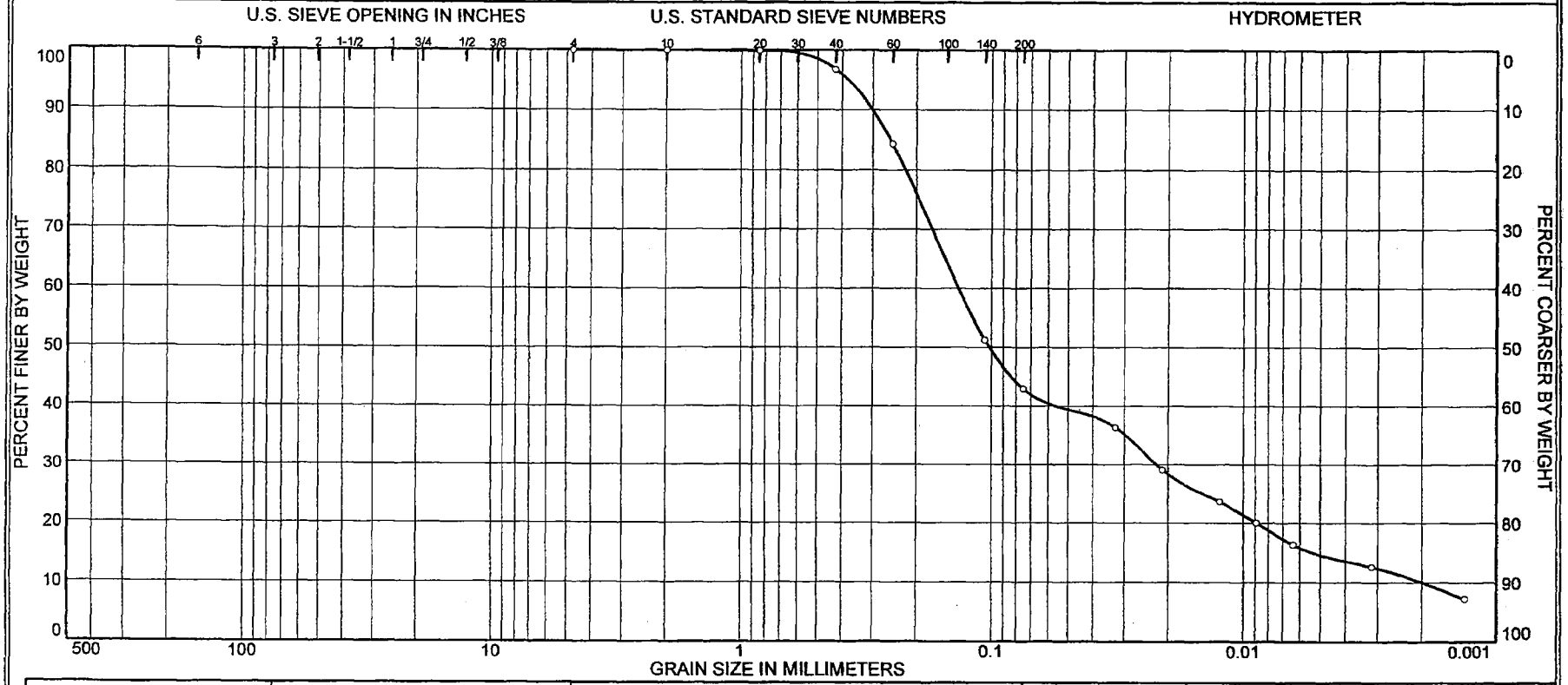
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
3in. inch	0.00	100

Fractional Components

avel/Sand based on #4
Sand/Fines based on #200
% COBBLES = 0 % GRAVEL =
% SAND =

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	3	54	28	15

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	TP-201	Bucket 2	1' - 6'	9-26-06	SM	SAND, Silty (SM), Red, Micaceous	23.4	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-29-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-201
Sample No.: Bucket 2
Elev. or Depth: 1' - 6' **Sample Length(in./cm.):**
Location: TP-201
Description: SAND, Silty (SM), Red, Micaceous
Date: 9-26-06 **Natural Moisture:** 23.4
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	180.84
Tare =	0.00
Dry sample weight =	180.84

Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.84 **Tare =** .00 **Sample weight =** 54.84
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.06	100
# 20	0.06	100
# 40	1.77	97
# 60	8.61	84
# 140	26.78	51
# 200	31.33	43

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 55.00
Hygroscopic moisture correction:
Moist weight & tare = 45.79
Dry weight & tare = 45.68
Tare = 10.73
Hygroscopic moisture= 0 %
Calculated biased weight= 54.83
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

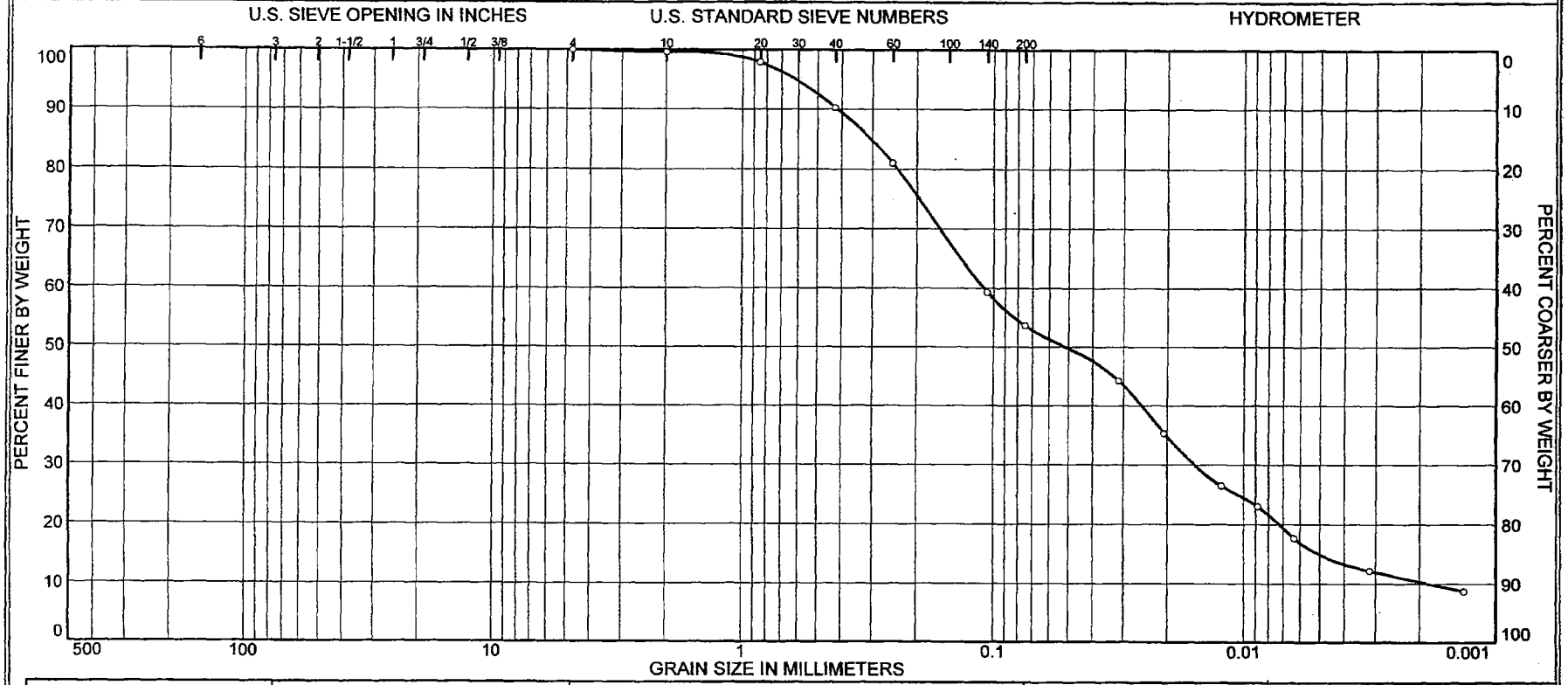
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	25.0	20.0	0.0132	25.0	12.2	0.0325	36
5.00	22.9	21.0	16.0	0.0132	21.0	12.9	0.0211	29
15.00	22.9	18.0	13.0	0.0132	18.0	13.3	0.0124	24
30.00	22.9	16.0	11.0	0.0132	16.0	13.7	0.0089	20
60.00	22.9	14.0	9.0	0.0132	14.0	14.0	0.0064	16
250.00	22.7	12.0	6.9	0.0132	12.0	14.3	0.0032	13
1440.00	22.8	9.0	3.9	0.0132	9.0	14.8	0.0013	7

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 57 **(% coarse** = 0 **% medium** = 3 **% fine** = 54)
% SILT = 28 **% CLAY** = 15

D_{85}= 0.26 D_{60}= 0.14 D_{50}= 0.10
D_{30}= 0.02 D_{15}= 0.01 D_{10}= 0.00
C_C= 1.8449 C_u= 67.7165

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	0	9	37	39	15

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	TP-227	Bucket 2	3' - 5'	9-26-06	ML	SILT, Sandy (ML), Red, Micaceous	27.8	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-29-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-227
Sample No.: Bucket 2
Elev. or Depth: 3' - 5' **Sample Length(in./cm.):**
Location: TP-227
Description: SILT, Sandy (ML), Red, Micaceous
Date: 9-26-06 **Natural Moisture:** 27.8
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** ML
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	180.90
Tare =	0.00
Dry sample weight =	180.90

Sample split on number 10 sieve
Split sample data:
Sample and tare = 56.13 Tare = .00 Sample weight = 56.13
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	0.77	100
# 20	0.93	98
# 40	5.22	90
# 60	10.50	81
# 140	22.70	59
# 200	25.92	54

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100
Weight of hydrometer sample: 57.25
Hygroscopic moisture correction:
Moist weight & tare = 45.48
Dry weight & tare = 44.82
Tare = 11.59
Hygroscopic moisture= 2 %
Calculated biased weight= 56.36
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

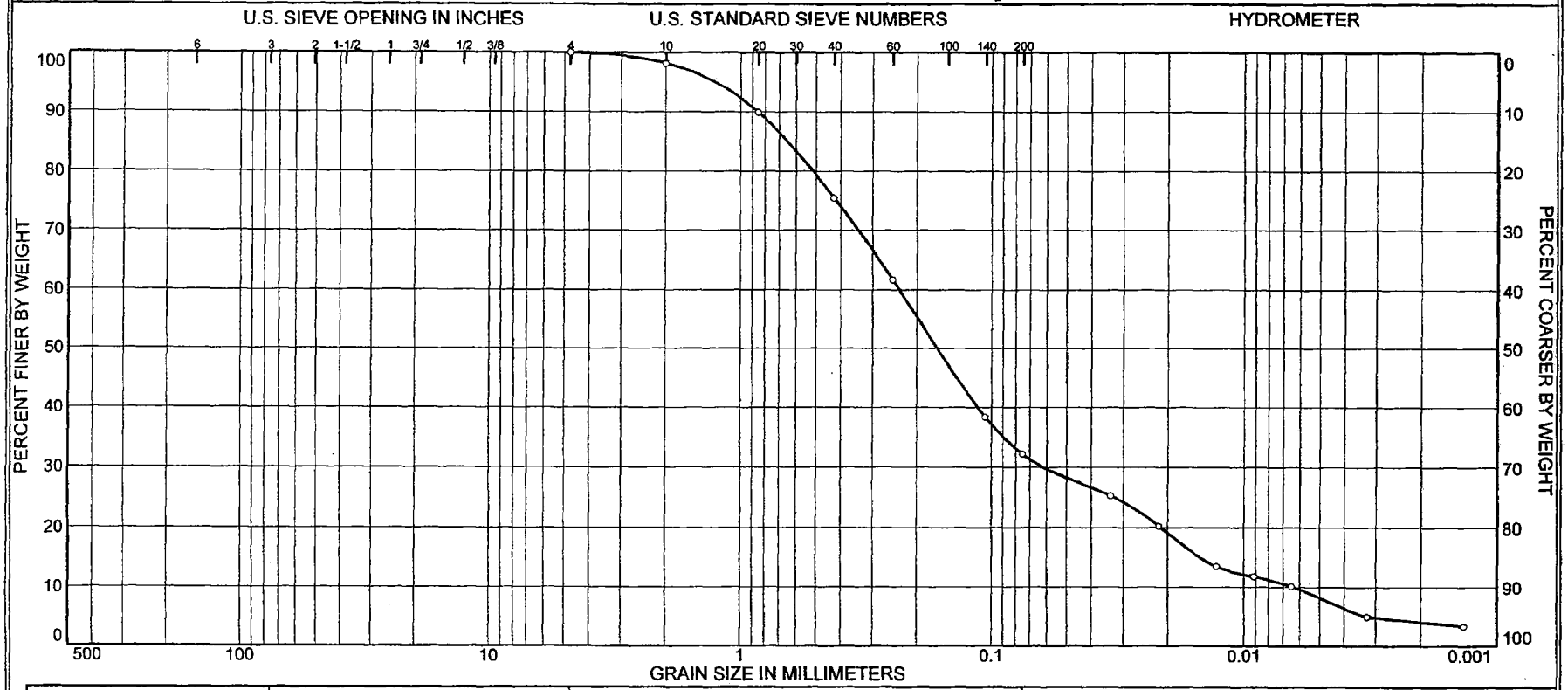
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	30.0	25.0	0.0132	30.0	11.4	0.0314	44
5.00	22.9	25.0	20.0	0.0132	25.0	12.2	0.0206	35
15.00	22.9	20.0	15.0	0.0132	20.0	13.0	0.0123	27
30.00	22.9	18.0	13.0	0.0132	18.0	13.3	0.0088	23
60.00	22.9	15.0	10.0	0.0132	15.0	13.8	0.0063	18
250.00	22.7	12.0	6.9	0.0132	12.0	14.3	0.0032	12
1440.00	22.8	10.0	4.9	0.0132	10.0	14.7	0.0013	9

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 46 (**% coarse** = 0 **% medium** = 9 **% fine** = 37)
% SILT = 39 **% CLAY** = 15

D_{85}= 0.30 D_{60}= 0.11 D_{50}= 0.05
D_{30}= 0.02 D_{15}= 0.01 D_{10}= 0.00
C_c= 1.2067 C_u= 59.2737

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	2	23	43	24	8

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	TP-301	Bucket 1	0' - 3'	9-26-06	SM	SAND, Silty (SM), Yellowish Brown, Micaceous	21.1	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D 422-63 (2002)

JRS 11-29-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-301
Sample No.: Bucket 1
Elev. or Depth: 0' - 3' **Sample Length(in./cm.):**
Location: TP-301
Description: SAND, Silty (SM), Yellowish Brown, Micaceous
Date: 9-26-06 **Natural Moisture:** 21.1
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D 422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	164.37
Tare =	0.00
Dry sample weight =	164.37

Sample split on number 10 sieve
Split sample data:
Sample and tare = 57.96 **Tare =** .00 **Sample weight =** 57.96
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	2.91	98
# 20	4.87	90
# 40	13.45	75
# 60	21.52	62
# 140	35.28	38
# 200	38.98	32

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98
Weight of hydrometer sample: 58.83
Hygroscopic moisture correction:
Moist weight & tare = 39.65
Dry weight & tare = 39.23
Tare = 10.98
Hygroscopic moisture= 1 %
Calculated biased weight= 59.03
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

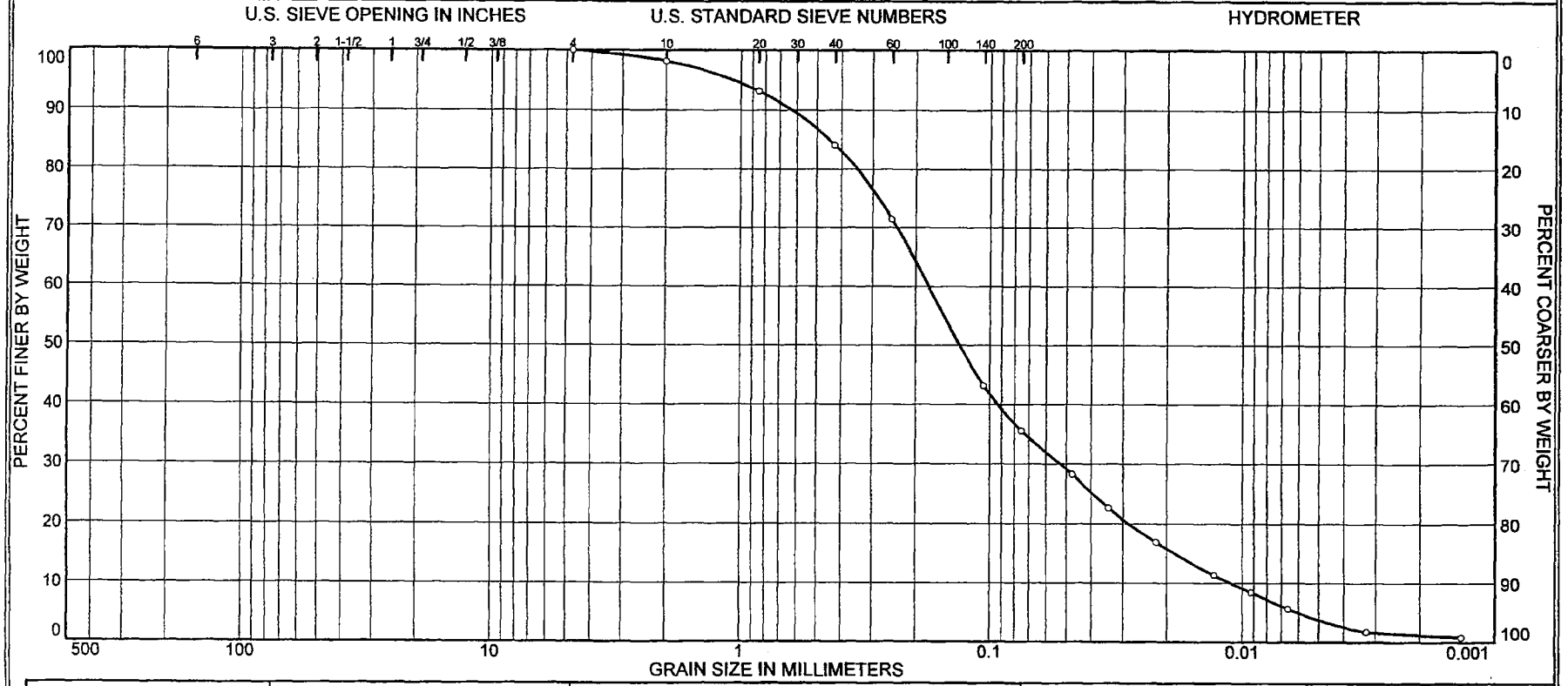
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.9	20.0	15.0	0.0132	20.0	13.0	0.0336	25
5.00	22.9	17.0	12.0	0.0132	17.0	13.5	0.0216	20
15.00	22.9	13.0	8.0	0.0132	13.0	14.2	0.0128	14
30.00	22.9	12.0	7.0	0.0132	12.0	14.3	0.0091	12
60.00	22.9	11.0	6.0	0.0132	11.0	14.5	0.0065	10
250.00	22.7	8.0	2.9	0.0132	8.0	15.0	0.0032	5
1440.00	22.8	7.0	1.9	0.0132	7.0	15.1	0.0014	3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = .68 **(% coarse =** 2 **% medium =** 23 **% fine =** 43**)**
% SILT = 24 **% CLAY =** 8

D_{85}= 0.65 D_{60}= 0.24 D_{50}= 0.17
D_{30}= 0.06 D_{15}= 0.01 D_{10}= 0.01
C_c= 2.5543 C_u= 36.9149

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	0	2	14	48	32	4

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	TP-405		0' - 4'	9-26-06	SM	SAND, Silty (SM), Dark Yellowish Brown, Micaceous	27.3	NV	NP

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 | Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

JRS 11-29-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-405
Sample No.:
Elev. or Depth: 0' - 4' **Sample Length(in./cm.):**
Location: TP-405
Description: SAND, Silty (SM), Dark Yellowish Brown, Micaceous
Date: 9-26-06 **Natural Moisture:** 27.3
Liquid Limit: NV **Plastic Limit:** NP **USCS Class.:** SM
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	197.37
Tare =	0.00
Dry sample weight =	197.37

Sample split on number 10 **sieve**
Split sample data:
Sample and tare = 51.93 **Tare** = .00 **Sample weight** = 51.93
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100
# 10	3.65	98
# 20	2.64	93
# 40	7.47	84
# 60	14.16	71
# 140	29.08	43
# 200	33.09	36

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98
Weight of hydrometer sample: 52.92
Hygroscopic moisture correction:
Moist weight & tare = 39.86
Dry weight & tare = 39.33
Tare = 11.33
Hygroscopic moisture= 2 %
Calculated biased weight= 52.89
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

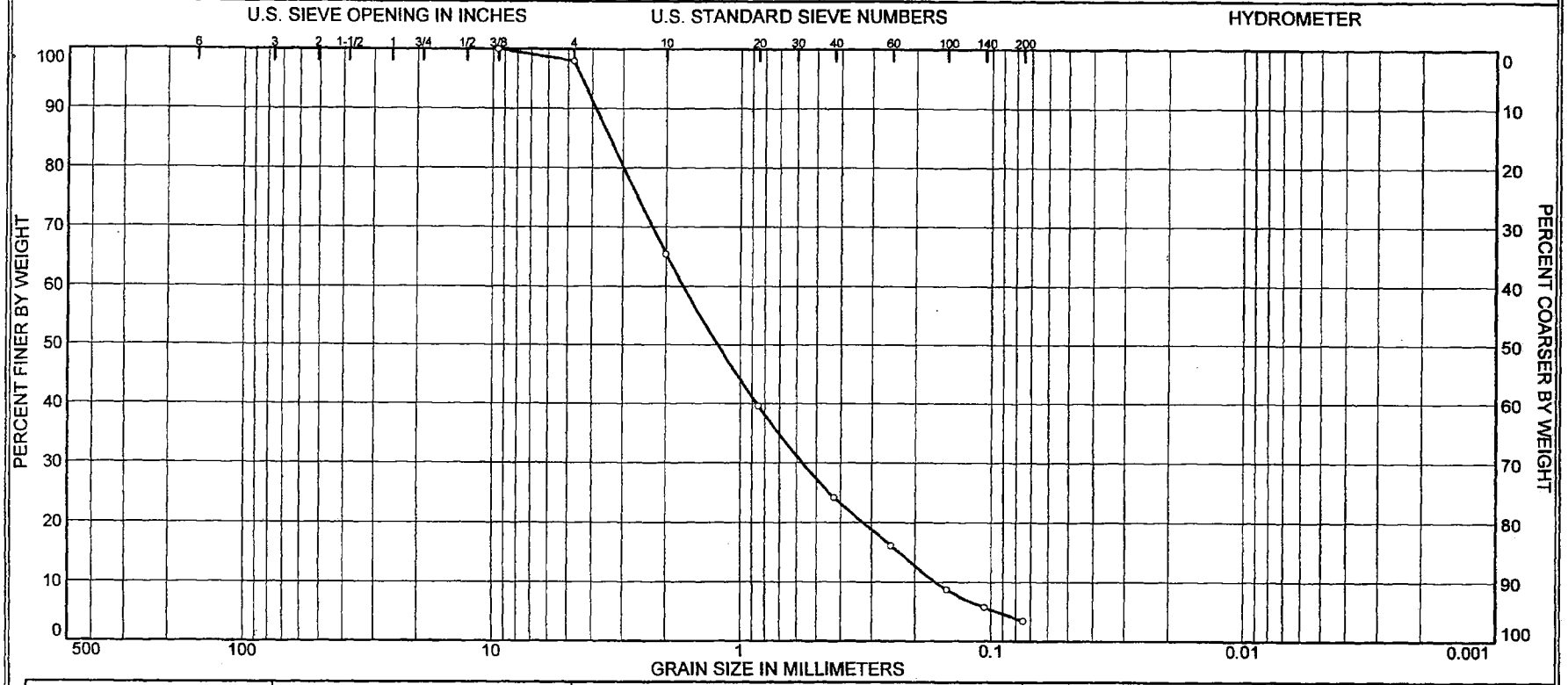
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.9	20.0	15.0	0.0132	20.0	13.0	0.0475	28
2.00	22.9	17.0	12.0	0.0132	17.0	13.5	0.0342	23
5.00	22.9	14.0	9.0	0.0132	14.0	14.0	0.0220	17
15.00	22.9	11.0	6.0	0.0132	11.0	14.5	0.0129	11
30.00	22.9	9.5	4.5	0.0132	9.5	14.7	0.0092	8
60.00	22.9	8.0	3.0	0.0132	8.0	15.0	0.0066	6
250.00	22.7	6.0	0.9	0.0132	6.0	15.3	0.0033	2
1440.00	22.8	5.5	0.4	0.0132	5.5	15.4	0.0014	1

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 64 (**% coarse** = 2 **% medium** = 14 **% fine** = 49)
% SILT = 32 **% CLAY** = 4

D_{85}= 0.45 D_{60}= 0.18 D_{50}= 0.13
D_{30}= 0.05 D_{15}= 0.02 D_{10}= 0.01
C_C= 1.4043 C_u= 15.892

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	2	33	41	21	3	

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	TP-MM1	Bucket 1	n/a	9-26-06		SAND (SW), Dark Gray, Washed Granitic Screenings from Stockpile	5.0		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM Reviewed by: JRS
ASTM D6913-04

JRS 11-29-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-MM1
Sample No.: Bucket 1
Elev. or Depth: n/a **Sample Length(in./cm.):**
Location: TP-MM1
Description: SAND (SW), Dark Gray, Washed Granitic Screenings from Stockpile
Date: 9-26-06 **Natural Moisture:** 5.0
Liquid Limit: **Plastic Limit:** **USCS Class.:**
Testing Remarks: Tested by: FHM Reviewed by: JRS
ASTM D6913-04

Mechanical Analysis Data

	Initial
Dry sample and tare=	442.54
Tare =	110.43
Dry sample weight =	332.11

Tare for cumulative weight retained= .00

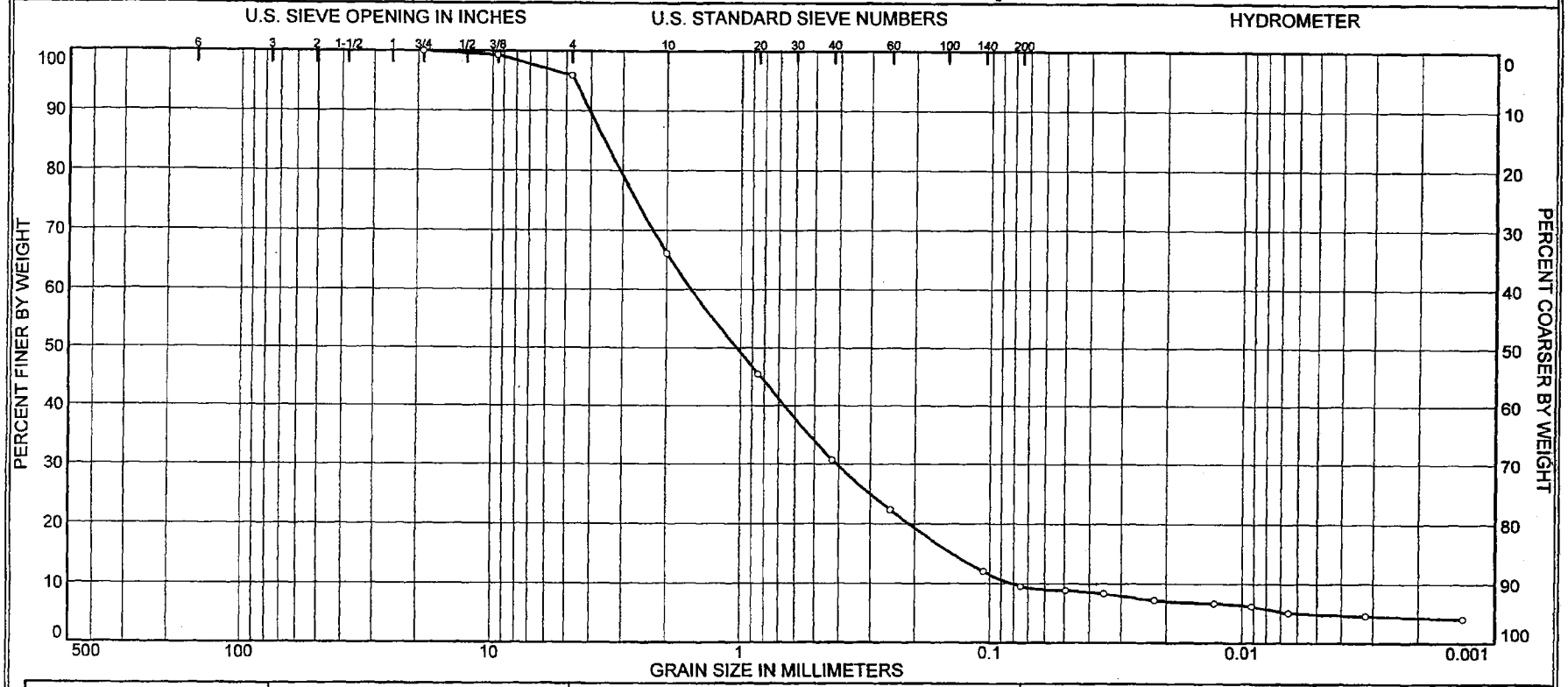
Sieve	Cumul. Wt. retained	Percent finer
3/8in. inch	0.00	100
# 4	6.67	98
# 10	114.75	65
20	200.62	40
# 40	251.72	24
# 60	278.80	16
# 100	303.31	9
# 140	313.31	6
# 200	320.95	3

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 2 **(% coarse =** **% fine** = 2)
% SAND = 95 **(% coarse** = 33 **% medium** = 41 **% fine** = 21)
% FINES = 3

D_{85}= 3.40 D_{60}= 1.70 D_{50}= 1.24
D_{30}= 0.57 D_{15}= 0.23 D_{10}= 0.17
C_c= 1.147 C_u= 10.2273

Particle Size Distribution Report



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0	0	4	30	35	21	5	5

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	TP-MM2	Bucket 1	n/a	9-26-06	SW-SM	SAND (SW-SM) with Silt, Dark Gray, Unwashed Granitic Screenings from Stockpile	1.7		

Client Bechtel Power Corporation

Project SCE&G COL

Project No. 6234-06-3534 Figure

MACTEC, INC.

Charlotte, North Carolina

○ Tested by: FHM/JA Reviewed by: JRS
ASTM D422-63 (2002)

JRS. 11-29-06

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel Power Corporation
Project: SCE&G COL
Project Number: 6234-06-3534

Sample Data

Source: TP-MM2
Sample No.: Bucket 1
Elev. or Depth: n/a **Sample Length(in./cm.):**
Location: TP-MM2
Description: SAND (SW-SM) with Silt, Dark Gray, Unwashed Granitic Screenings from Stockpile
Date: 9-26-06 **Natural Moisture:** 1.7
Liquid Limit: **Plastic Limit:** **USCS Class.:** SW-SM
Testing Remarks: Tested by: FHM/JA Reviewed by: JRS
ASTM D422-63 (2002)

Mechanical Analysis Data

	Initial
Dry sample and tare=	290.84
Tare =	0.00
Dry sample weight =	290.84

Sample split on number 10 **sieve**
Split sample data:
Sample and tare = 63.56 **Tare =** .00 **Sample weight =** 63.56
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

eve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100
.375 inch	1.90	99
# 4	11.94	96
# 10	98.52	66
# 20	19.84	46
# 40	34.00	31
# 60	42.14	22
# 140	52.04	12
# 200	54.40	10

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 66
Weight of hydrometer sample: 63.69
Hygroscopic moisture correction:
Moist weight & tare = 61.59
Dry weight & tare = 61.50
Tare = 11.15
Hygroscopic moisture= 0 %
Calculated biased weight= 96.18
Table of composite correction values:

Temp, deg C:	10.7	23.1	40.2
Comp. corr:	-8.0	-5.0	-1.0

Meniscus correction only= 0.0

Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed ne, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
1.00	22.9	13.5	8.5	0.0132	13.5	14.1	0.0494	9
2.00	22.9	13.0	8.0	0.0132	13.0	14.2	0.0350	8
5.00	22.9	12.0	7.0	0.0132	12.0	14.3	0.0223	7
15.00	22.9	11.5	6.5	0.0132	11.5	14.4	0.0129	7
30.00	22.9	11.0	6.0	0.0132	11.0	14.5	0.0092	6
60.00	22.9	10.0	5.0	0.0132	10.0	14.7	0.0065	5
250.00	22.7	9.5	4.4	0.0132	9.5	14.7	0.0032	5
1440.00	22.8	9.0	3.9	0.0132	9.0	14.8	0.0013	4

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =** 4 **(% coarse =** **% fine =** 4)
% SAND = 86 **(% coarse =** 30 **% medium =** 35 **% fine =** 21)
% SILT = 5 **% CLAY =** 5

D_{85}= 3.53 D_{60}= 1.60 D_{50}= 1.04
D_{30}= 0.41 D_{15}= 0.14 D_{10}= 0.08
C_c= 1.2707 C_u= 19.3733

MACTEC

SPECIFIC GRAVITY TEST (Rev. 1)

ASTM D854 - 06

Project No.: 6234-6-3534S
Project Name: SCE&G COL

Tested By: J. McCarthy
Test Date: See datasheets

Reviewed By: J. L. Lane
Review Date: 11/24/06

Boring No.	Depth (ft)	Sample No.	Lab No.	Flask no.	Temperature (°C)	Weight of Soil (grams)	Weight, CWF (grams)	Weight, DS (grams)	Specific Gravity (at test temp.)	Temperature Coefficient Factor	Specific Gravity (at 20.0°C)
B-204	18.5	UD-2	5359	2181	23.8	39.26	362.67	388.28	2.876	0.99914	2.874
B-204	28.5	UD-3	5360	2191	23.9	39.93	364.39	390.80	2.953	0.99912	2.951
B-209	8.5	UD-1	5365	2185	24.5	29.38	359.38	378.31	2.811	0.99897	2.809
B-209	38.5	UD-4	5368	2192	24.5	32.29	366.16	387.18	2.865	0.99897	2.862
B-210	8.8	UD-1	5369	2184	24.0	43.98	363.67	391.68	2.754	0.99909	2.751
B-210	28.5	UD-3	5371	2186	24.4	90.61	363.40	420.80	2.728	0.99899	2.726
B-210	38.5	UD-4	5372	2052	24.5	50.00	342.98	375.03	2.786	0.99897	2.783
B-215	8.5	UD-1	5373	2053	24.5	17.47	339.39	350.58	2.782	0.99897	2.779
B-215	18.5	UD-2	5374	2054	24.5	56.80	338.33	374.98	2.819	0.99897	2.816
B-222	8.5	UD-1	5384	2186	25.4	23.22	363.65	378.30	2.709	0.99874	2.706
B-222	18.5	UD-2	5385	2190	24.2	28.47	365.93	384.36	2.836	0.99904	2.833
B-319	28.5	UD-3	5394	2192	24.2	26.76	366.17	383.20	2.750	0.99902	2.748
B-319	38.5	UD-4	5395	2193	24.3	38.96	365.95	390.73	2.748	0.99902	2.745
B-321	28.5	UD-3	5398	2052	24.2	18.99	342.66	354.94	2.830	0.99904	2.827
B-325	13.5	UD-3	5406	2057	25.4	21.88	341.28	355.27	2.773	0.99904	2.770
B-325	38.5	UD-8	5411	2190	24.2	21.82	365.86	379.56	2.687	0.99904	2.685

CWF = Calibration Water and Flask

DS = Deaired Sample, Water and Flask

SEVERN TRENT STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 6234-06-3534

SCE&G COL PROJECT

Lot #: F6J220106

Mike Sufnarski

MACTEC Engineering & Consultin
2801 Yorkmont Rd
Suite 100
Charlotte, NC 28208

SEVERN TRENT LABORATORIES, INC.

T Romanko

Terry Romanko
Project Manager

November 21, 2006

Case Narrative
LOT NUMBER: F6J220106

This report contains the analytical results for the 22 samples received under chain of custody by STL St. Louis on October 21, 2006. These samples are associated with your SCE&G COL PROJECT project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

The samples on this lot were received past normal hold times for chloride, sulfate, and pH analyses.

Anions (Chloride, Sulfate) (MCAWW 300.0A)
The MS recovery for Sulfate in batch 6317344 and Sulfate in 6317431 is outside the established QC limits due to matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
Affected Samples:
F6J220106 (1): B-201 6 ft
F6J220106 (2): B-201 23.5ft
F6J220106 (3): B-201 33.5ft
F6J220106 (4): B-205
F6J220106 (5): B-206
F6J220106 (6): B-207
F6J220106 (7): B-211
F6J220106 (8): B-215
F6J220106 (9): B-216
F6J220106 (10): B-217
F6J220106 (11): B-220
F6J220106 (12): B-301 6ft
F6J220106 (13): B-301 18.5ft
F6J220106 (14): B-305
F6J220106 (15): B-306
F6J220106 (16): B-307
F6J220106 (17): B-311 13.5ft
F6J220106 (18): B-311 53.5ft
F6J220106 (19): B-317
F6J220106 (20): B-320 8.5ft
F6J220106 (21): B-320 38.5ft
F6J220106 (22): B-325

Percent Moisture (MCAWW 160.3 Mod)
There were no nonconformances or observations noted with this analysis.

Soil and Waste pH (SW846 9045C)
There were no nonconformances or observations noted with this analysis.

METHODS SUMMARY

F6J220106

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Soil and Waste pH	SW846 9045C	SW846 DI-LEACHA
Sulfate	MCAWW 300.0A	MCAWW 300.0A

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F6J220106

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JG2N6	001	B-201 6 ft	05/11/06	
JG2N7	002	B-201 23.5ft	05/11/06	
JG2N8	003	B-201 33.5ft	05/11/06	
JG2N9	004	B-205	05/01/06	
JG2PA	005	B-206	06/10/06	
JG2PC	006	B-207	06/10/06	
JG2PD	007	B-211	06/25/06	
JG2PE	008	B-215	06/24/06	
JG2PF	009	B-216	06/13/06	
JG2PG	010	B-217	06/20/06	
JG2PH	011	B-220	05/10/06	
JG2PJ	012	B-301 6ft	05/26/06	
JG2PK	013	B-301 18.5ft	05/26/06	
JG2PL	014	B-305	04/28/06	
JG2PM	015	B-306	05/29/06	
JG2PN	016	B-307	06/08/06	
JG2PP	017	B-311 13.5ft	05/11/06	
JG2PQ	018	B-311 53.5ft	05/11/06	
JG2PR	019	B-317	05/25/06	
JG2PT	020	B-320 8.5ft	05/15/06	
JG2PV	021	B-320 38.5ft	05/15/06	
JG2PW	022	B-325	06/09/06	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-201 6 ft

General Chemistry

Lot-Sample #...: F6J220106-001 Work Order #...: JG2N6 Matrix.....: SOLID
Date Sampled...: 05/11/06 Date Received..: 10/21/06
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.4	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	4.1	2.4	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 10:22		
Percent Moisture	16.3	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	5.1 B	6.0	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 10:22		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-201 23.5ft

General Chemistry

Lot-Sample #...: F6J220106-002 **Work Order #...:** JG2N7 **Matrix.....:** SOLID
Date Sampled...: 05/11/06 **Date Received..:** 10/21/06
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.6	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	3.9	2.5	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 10:41		
Percent Moisture	18.6	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	6.0 B	6.1	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 10:41		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-201 33.5ft

General Chemistry

Lot-Sample #...: F6J220106-003 Work Order #...: JG2N8 Matrix.....: SOLID
Date Sampled...: 05/11/06 Date Received..: 10/21/06
% Moisture.....: 10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	6.0	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	1.9 B	2.2	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 10:59		
Percent Moisture	10.1	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	7.5	5.6	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 10:59		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-205 (6 FT)

General Chemistry

Lot-Sample #...: F6J220106-004 **Work Order #...:** JG2N9 **Matrix.....:** SOLID
Date Sampled...: 05/01/06 **Date Received..:** 10/21/06
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.3	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	4.5	2.5	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 09:45		
Percent Moisture	20.8	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	5.6 B	6.3	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 09:45		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-206 (18.5 FT)

General Chemistry

Lot-Sample #...: F6J220106-005 **Work Order #...:** JG2PA **Matrix.....:** SOLID
Date Sampled...: 06/10/06 **Date Received..:** 10/21/06
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.2	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	4.2	2.3	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 03:01		
Percent Moisture	12.9	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	6.2	5.7	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 03:01		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-207 (8.5FT)

General Chemistry

Lot-Sample #...: F6J220106-006 **Work Order #...:** JG2PC **Matrix.....:** SOLID
Date Sampled...: 06/10/06 **Date Received..:** 10/21/06
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.4	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	5.8	2.5	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 03:19		
Percent Moisture	20.8	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	15.4	6.3	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 03:19		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-211 (23.5 FT)

General Chemistry

Lot-Sample #...: F6J220106-007 **Work Order #...:** JG2PD **Matrix.....:** SOLID
Date Sampled...: 06/25/06 **Date Received..:** 10/21/06
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.7	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	3.3 J	2.5	mg/kg	MCAWW 300.0A	11/08/06	6317430
		Dilution Factor: 1		Analysis Time..: 05:47		
Percent Moisture	19.2	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	3.5 B	6.2	mg/kg	MCAWW 300.0A	11/08/06	6317431
		Dilution Factor: 1		Analysis Time..: 05:47		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-215 (33.5 FT)

General Chemistry

Lot-Sample #...: F6J220106-008 **Work Order #...:** JG2PE **Matrix.....:** SOLID
Date Sampled...: 06/24/06 **Date Received..:** 10/21/06
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.6	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	1.9 B,J	2.5	mg/kg	MCAWW 300.0A	11/08/06	6317430
		Dilution Factor: 1		Analysis Time..: 04:52		
Percent Moisture	18.7	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	3.0 B	6.2	mg/kg	MCAWW 300.0A	11/08/06	6317431
		Dilution Factor: 1		Analysis Time..: 04:52		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-216 (23.5 FT)

General Chemistry

Lot-Sample #...: F6J220106-009 Work Order #...: JG2PF Matrix.....: SOLID
Date Sampled...: 06/13/06 Date Received..: 10/21/06
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	6.0	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	1.8 B	2.5	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 04:15		
Percent Moisture	19.0	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	4.6 B	6.2	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 04:15		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-217 (10.5 FT)

General Chemistry

Lot-Sample #...: F6J220106-010 Work Order #...: JG2PG Matrix.....: SOLID
Date Sampled...: 06/20/06 Date Received..: 10/21/06
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.4	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	5.9	2.4	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 04:33		
Percent Moisture	18.0	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	3.3 B	6.1	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 04:33		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-220 (5.5 FT)

General Chemistry

Lot-Sample #...: F6J220106-011 Work Order #...: JG2PH Matrix.....: SOLID
Date Sampled...: 05/10/06 Date Received..: 10/21/06
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.5	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	3.4	2.4	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 10:04		
Percent Moisture	18.0	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	3.7 B	6.1	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 10:04		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-301 6ft

General Chemistry

Lot-Sample #...: F6J220106-012 **Work Order #...:** JG2PJ **Matrix.....:** SOLID
Date Sampled...: 05/26/06 **Date Received..:** 10/21/06
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.7	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	4.7	2.4	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 01:28		
Percent Moisture	16.6	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	12.0	6.0	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 01:28		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-301 18.5ft

General Chemistry

Lot-Sample #...: F6J220106-013 Work Order #...: JG2PK Matrix.....: SOLID
Date Sampled...: 05/26/06 Date Received..: 10/21/06
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.3	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	3.2	2.3	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 01:46		
Percent Moisture	13.3	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	4.0 B	5.8	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 01:46		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-305 (8.5'-)

General Chemistry

Lot-Sample #...: F6J220106-014 Work Order #...: JG2PL Matrix.....: SOLID
Date Sampled...: 04/28/06 Date Received..: 10/21/06
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.2	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	8.5	2.8	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 08:50		
Percent Moisture	27.4	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	4.0 B	6.9	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 08:50		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-306 (11 Fm)

General Chemistry

Lot-Sample #...: F6J220106-015 Work Order #...: JG2PM Matrix.....: SOLID
Date Sampled...: 05/29/06 Date Received..: 10/21/06
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.2	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	7.0	2.6	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 02:05		
Percent Moisture	21.8	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	5.4 B	6.4	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 02:05		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-307 (6 FT)

General Chemistry

Lot-Sample #...: F6J220106-016 Work Order #...: JG2PN Matrix.....: SOLID
Date Sampled...: 06/08/06 Date Received..: 10/21/06
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.2	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	8.4	2.5	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 02:23		
Percent Moisture	21.1	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	6.7	6.3	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 02:23		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-311 13.5ft

General Chemistry

Lot-Sample #...: F6J220106-017 **Work Order #...:** JG2PP **Matrix.....:** SOLID
Date Sampled...: 05/11/06 **Date Received..:** 10/21/06
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.3	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	4.5	2.4	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 11:18		
Percent Moisture	15.8	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	6.0	5.9	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 11:18		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-311 53.5ft

General Chemistry

Lot-Sample #...: F6J220106-018 Work Order #...: JG2PQ Matrix.....: SOLID
Date Sampled...: 05/11/06 Date Received..: 10/21/06
% Moisture.....: 11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.9	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	2.9	2.3	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 11:36		
Percent Moisture	11.1	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	7.3	5.6	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 11:36		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-317 (8.5 Ft)

General Chemistry

Lot-Sample #...: F6J220106-019 **Work Order #...:** JG2PR **Matrix.....:** SOLID
Date Sampled...: 05/25/06 **Date Received..:** 10/21/06
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.0	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	6.5	2.6	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 01:09		
Percent Moisture	22.0	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	14.5	6.4	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 01:09		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-320 8.5ft

General Chemistry

Lot-Sample #...: F6J220106-020 **Work Order #...:** JG2PT **Matrix.....:** SOLID
Date Sampled...: 05/15/06 **Date Received..:** 10/21/06
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	4.9	0.10	No Units	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	6.4	2.6	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 12:32		
Percent Moisture	21.9	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296032
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	6.1 B	6.4	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 12:32		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-320 38.5ft

General Chemistry

Lot-Sample #...: F6J220106-021 **Work Order #...:** JG2PV **Matrix.....:** SOLID
Date Sampled...: 05/15/06 **Date Received..:** 10/21/06
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	6.0	0.10	No Units	SW846 9045C	11/01/06	6305181
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	7.3	2.4	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 12:51		
Percent Moisture	17.3	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296034
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	16.6	6.0	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 12:51		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

MACTEC Engineering and Consulting Inc

Client Sample ID: B-325 (21 F1)

General Chemistry

Lot-Sample #...: F6J220106-022 Work Order #...: JG2PW Matrix.....: SOLID
Date Sampled...: 06/09/06 Date Received..: 10/21/06
% Moisture.....: 11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	5.6	0.10	No Units	SW846 9045C	11/01/06	6305181
		Dilution Factor: 1		Analysis Time..: 00:00		
Chloride	3.4	2.3	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1		Analysis Time..: 02:42		
Percent Moisture	11.5	0.10	%	MCAWW 160.3 MOD	10/23-10/24/06	6296034
		Dilution Factor: 1		Analysis Time..: 00:00		
Sulfate	10.3	5.6	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1		Analysis Time..: 02:42		

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F6J220106 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: JJLCL1AA		MB Lot-Sample #:	F6K130000-343	
	ND	2.0	mg/kg	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1				
		Analysis Time..: 08:11				
Chloride		Work Order #: JJLC51AA		MB Lot-Sample #:	F6K130000-430	
	0.49 B	**2.0**	**mg/kg**	**MCAWW 300.0A**	**11/08/06**	**6317430**
		Dilution Factor: 1				
		Analysis Time..: 07:39				
Sulfate		Work Order #: JJLCN1AA		MB Lot-Sample #:	F6K130000-344	
	ND	5.0	mg/kg	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1				
		Analysis Time..: 08:11				
Sulfate		Work Order #: JJLC91AA		MB Lot-Sample #:	F6K130000-431	
	ND	5.0	mg/kg	MCAWW 300.0A	11/08/06	6317431
		Dilution Factor: 1				
		Analysis Time..: 07:39				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F6J220106 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)		Work Order #: JHN201AA	LCS Lot-Sample#: F6K010000-179		
	100	(99 - 101)	SW846 9045C	11/01/06	6305179
		Dilution Factor: 1	Analysis Time..: 00:00		
pH (solid)		Work Order #: JHN261AA	LCS Lot-Sample#: F6K010000-181		
	100	(99 - 101)	SW846 9045C	11/01/06	6305181
		Dilution Factor: 1	Analysis Time..: 00:00		
Chloride		Work Order #: JJLCL1AC	LCS Lot-Sample#: F6K130000-343		
	95	(90 - 110)	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1	Analysis Time..: 07:52		
Chloride		Work Order #: JJLC51AC	LCS Lot-Sample#: F6K130000-430		
	94	(90 - 110)	MCAWW 300.0A	11/08/06	6317430
		Dilution Factor: 1	Analysis Time..: 07:20		
Sulfate		Work Order #: JJLCN1AC	LCS Lot-Sample#: F6K130000-344		
	93	(90 - 110)	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1	Analysis Time..: 07:52		
Sulfate		Work Order #: JJLC91AC	LCS Lot-Sample#: F6K130000-431		
	93	(90 - 110)	MCAWW 300.0A	11/08/06	6317431
		Dilution Factor: 1	Analysis Time..: 07:20		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F6J220106 **Matrix.....:** SOLID
Date Sampled...: 06/24/06 **Date Received..:** 10/21/06

Percnt Moisture: 24

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #...: JG2PE1AF		MS Lot-Sample #: F6J220106-008	
	91	(90 - 110)	MCAWW 300.0A	11/08/06	6317430
		Dilution Factor: 1	Analysis Time..: 04:52		
Chloride		Work Order #...: JG2PL1AF		MS Lot-Sample #: F6J220106-014	
	90	(90 - 110)	MCAWW 300.0A	11/08/06	6317343
		Dilution Factor: 1	Analysis Time..: 08:50		
Sulfate		Work Order #...: JG2PE1AH		MS Lot-Sample #: F6J220106-008	
	86 N	(90 - 110)	MCAWW 300.0A	11/08/06	6317431
		Dilution Factor: 1	Analysis Time..: 04:52		
Sulfate		Work Order #...: JG2PL1AH		MS Lot-Sample #: F6J220106-014	
	85 N	(90 - 110)	MCAWW 300.0A	11/08/06	6317344
		Dilution Factor: 1	Analysis Time..: 08:50		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F6J220106 **Work Order #...:** JG2PT-SMP JG2PT-DUP **Matrix.....:** SOLID

Date Sampled...: 05/15/06 **Date Received..:** 10/21/06

% Moisture.....: 22

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #: F6J220106-020		
	21.9	21.6	%	1.2	(0-30)	MCAWW 160.3 MOD	10/23-10/24/06	6296032

Dilution Factor: 1 Analysis Time..: 00:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F6J220106 **Work Order #...:** JGX7K-SMP JGX7K-DUP **Matrix.....:** SOLID

Date Sampled...: 10/19/06 **Date Received..:** 10/20/06

% Moisture.....: 12

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #: F6J200359-016		
	12.2	12.6	%	2.8	(0-30)	MCAWW 160.3 MOD	10/23-10/24/06	6296034

Dilution Factor: 1 Analysis Time..: 00:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F6J220106 **Work Order #...:** JG2N6-SMP JG2N6-DUP **Matrix.....:** SOLID

Date Sampled...: 05/11/06 **Date Received..:** 10/21/06

% Moisture.....: 16

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)						SD Lot-Sample #: F6J220106-001		
	5.4	5.2	No Units	2.5	(0-20)	SW846 9045C	11/01/06	6305179

Dilution Factor: 1 Analysis Time..: 00:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F6J220106 **Work Order #...:** JHFNE-SMP JHFNE-DUP **Matrix.....:** SOLID

Date Sampled...: 10/25/06 **Date Received..:** 10/27/06

% Moisture.....: 24

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)						SD Lot-Sample #: F6J270353-001		
	5.4	5.4	No Units	1.1	(0-20)	SW846 9045C	11/01/06	6305181

Dilution Factor: 1 Analysis Time..: 00:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F6J220106 **Work Order #...:** JG2PL-SMP JG2PL-DUP **Matrix.....:** SOLID

Date Sampled...: 04/28/06 **Date Received..:** 10/21/06

% Moisture.....: 27

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride						SD Lot-Sample #: F6J220106-014		
	8.5	9.0	mg/kg	5.7	(0-20)	MCAWW 300.0A	11/08/06	6317343
			Dilution Factor: 1			Analysis Time..: 08:50		
Sulfate						SD Lot-Sample #: F6J220106-014		
	4.0 B	4.3 B	mg/kg	8.6	(0-20)	MCAWW 300.0A	11/08/06	6317344
			Dilution Factor: 1			Analysis Time..: 08:50		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F6J220106 **Work Order #...:** JG2PE-SMP JG2PE-DUP **Matrix.....:** SOLID

Date Sampled...: 06/24/06 **Date Received..:** 10/21/06

% Moisture.....: 19

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride						SD Lot-Sample #: F6J220106-008		
	1.9 B,J	2.0 B	mg/kg	0.62	(0-20)	MCAWW 300.0A	11/08/06	6317430
			Dilution Factor: 1			Analysis Time..: 04:52		
Sulfate						SD Lot-Sample #: F6J220106-008		
	3.0 B	2.8 B	mg/kg	5.2	(0-20)	MCAWW 300.0A	11/08/06	6317431
			Dilution Factor: 1			Analysis Time..: 04:52		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

LOT# F6J220106

STL ST. LOUIS

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
phone 314-298-8566 fax 314-298-8757

Chain of Custody Record

SEVERN TRENT STL

Severn Trent Laboratories, Inc.

Client Contact	Project Manager: Mike Sufnarski	Site Contact: Brian Reinicker	Date: Oct. 20, 2006	COC No:
MACTEC	Tel/Fax: 704-301-8624/704-357-8638	Lab Contact: Terry Romanko	Carriers: FedEx	1 of 1 COCs
2801 Yorkmont Road, Ste 100	Analysis Turnaround Time			Job No.
Charlotte, NC 28206	Calendar (C) or Work Days (W)			
(704) 357-8600 Phone	TAT if different from Below			SDG No.
(704) 357-8638 FAX	☒ 2 weeks			
Project Name: SCERA CCL Project	☐ 1 week			
Site:	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	pH - EPA Method 9040	Chlorides - EPA Method 300.0	Sulfates - EPA Method 300.0	Sample Specific Notes:
See MACTEC Chain of Custody Form (Attached)									22 Sample Jars

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other None

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Contact Brian Reinicker @ 704-357-5514 with any questions

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Brian Reinicker	MACTEC	10/20/06 5:30pm	Jill Clark	STL	10-21-06 1015
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Chain of Custody Form MACTEC

Project Name: SCE&G COL PROJECT
Project No. 5234-06-3534
Shipped by: MACTEC Charlotte
Shipped to: STL St. Louis

Date: 10/20/06
Sheet 1 of 1
Attention of: TERRY ROMANKO

Borehole No	Depth	Material	Field ID No	Date Sampled	Sample Type	Sampled By	Analysis/Test Required	Lab ID (optional)
B-201	8 ft	Soil	4	5/11/06	Jar	J. Hamm	See Attached	
B-201	23.5 ft	Soil	9	5/11/06	Jar	J. Hamm	STL Chain of	
B-201	33.5 ft	Soil	11	5/11/06	Jar	J. Hamm	Custody	
B-205	8 ft	Soil	4	5/11/06	Jar	J. Hamm		
B-206	18.5 ft	Soil	8	6/10/06	Jar	K. Miller		
B-207	8.5 ft	Soil	5	6/10/06	Jar	M. Harvey		
B-211	23.5 ft	Soil	9	6/15/06	Jar	C. Gandy		
B-215	33.5 ft	Soil	8	6/24/06	Jar	B. Sharp		
B-216	28.5 ft	Soil	7	6/13/06	Jar	B. Sharp		
B-217	10.5 ft	Soil	5	6/20/06	Jar	B. Sharp		
B-220	8.5 ft	Soil	5	5/10/06	Jar	M. Harvey		
B-301	6 ft	Soil	4	5/26/06	Jar	J. Hamm		
B-301	18.5 ft	Soil	8	5/26/06	Jar	J. Hamm		
B-305	8.5 ft	Soil	5	4/28/06	Jar	J. Liles		
B-306	11 ft	Soil	6	5/29/06	Jar	K. Miller		
B-307	6 ft	Soil	4	6/18/06	Jar	J. Liles		
B-311	13.5 ft	Soil	7	5/11/06	Jar	J. Liles		
B-311	53.5 ft	Soil	15	5/11/06	Jar	J. Liles		
B-317	6.5 ft	Soil	5	5/25/06	Jar	B. Sharp		
B-320	8.5 ft	Soil	5	5/16/06	Jar	B. Sharp		
B-320	38.5 ft	Soil	12	5/15/06	Jar	B. Sharp		
B-325	21 ft	Soil	6	6/9/06	Jar	B. Sharp		

Relinquished By (MACTEC-Laboratory): BRIAN REINICKER / Brian Reinicker (Print/Sign) Date/time: 10/20/06 5:30 pm

Received By (Transporter): FEDEX Trk # 7985 2549 4776 (Print/Sign) Date/time:

Received By (STL Laboratory): J. Clark / Jill Clark (Print/Sign) Date/time: 10.21.06 1015

STL St. Louis

Lot#(s): F6J220106

- 4754 -

Condition Upon Receipt Form

Client: Mactec COC/RFA No: N/A Date 10.21.06

Quote No: _____ Initiated By: _____ Time: 1015

Shipping Information

Shipper Name: Fed Ex

Shipping # (s):*

1. 7985 2549 4776
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Multiple Packages Y (N) N/A

Sample Temperature (s):**

1. Ambient
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C– If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Was sample received broken?	8.	(Y) N	Sample received with Chain of Custody?
2.	Y N (N/A)	Was sample received with proper pH[1] ? (If not, make note below)	9.	(Y) N	Chain of Custody matches sample ID's on container(s)?
3.	Y N	If N/A-Was pH taken by original STL Lab?	10.	Y (N)	Are there custody seals present on cooler?
4.	(Y) N	Sample received in proper containers?	11.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?
5.	(Y) N	Sample volume sufficient for analysis?	12.	Y (N)	Are there custody seals present on bottles?
6.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
7.	(Y) N	Were contents of the cooler frisked after opening	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: Sample # B-205 COC has a depth of 10ft. Sample label has a depth "from 11. to 12.5" logged in per COC

Corrective Action:

☐ Client Contact Name: _____ Informed by: _____

☐ Sample(s) processed "as is"

☐ Sample(s) on hold until: _____ If released, notify: _____

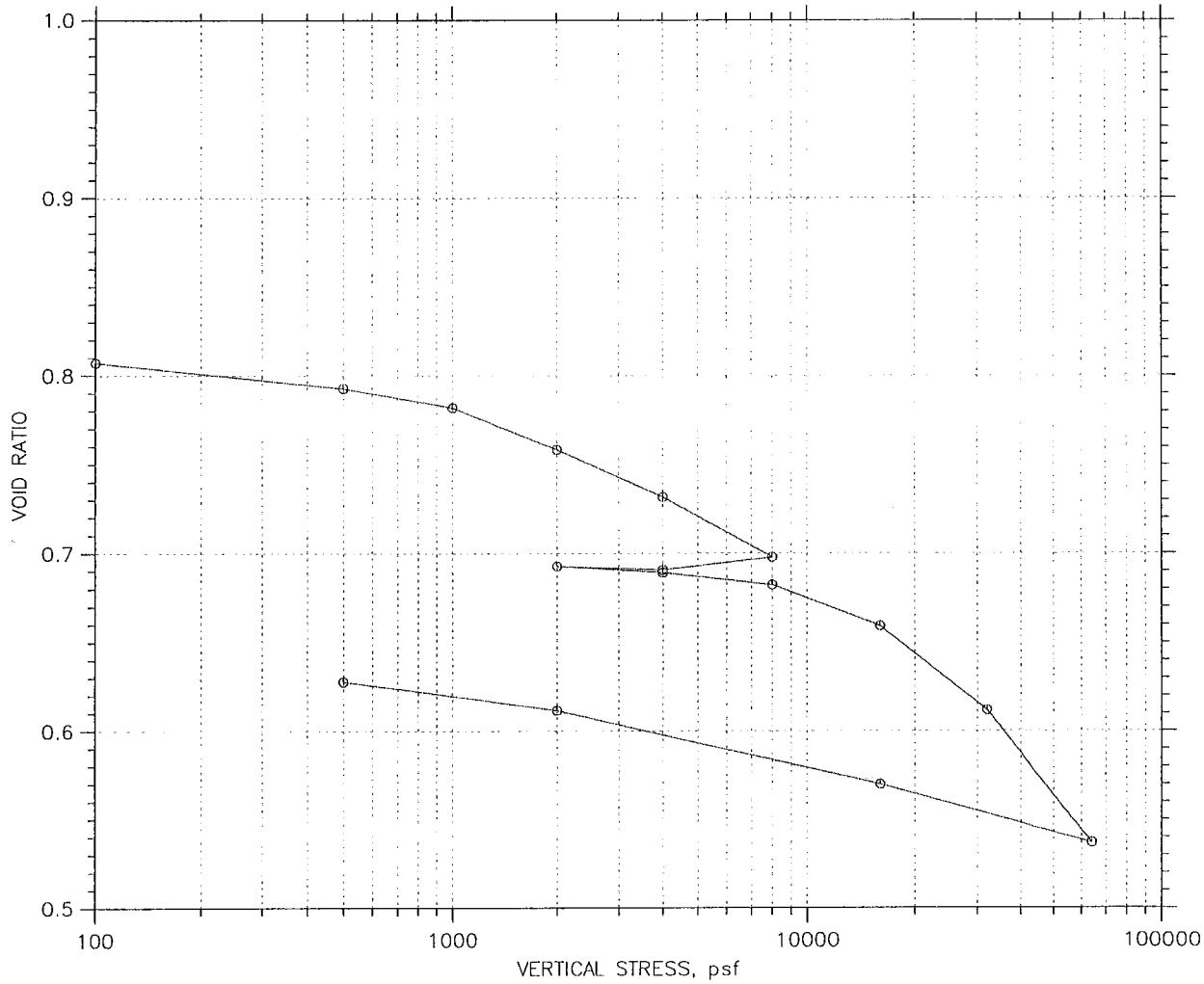
Project Management Review: _____ Date: 10/24/06

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

ADMIN-0004, REVISED 03/01/06\\Slsvr01\QA\FORMS\ST-LOUIS\ADMIN\Admin004030106.doc

CONSOLIDATION TEST DATA

SUMMARY REPORT



					Before Test	After Test
Overburden Pressure: 0 psf				Water Content, %	18.18	18.83
Preconsolidation Pressure: 9500 psf				Dry Unit Weight, pcf	98.99	110.1
Compression Index: 0.249				Saturation, %	64.42	86.09
Diameter: 2.5 in		Height: 1 in		Void Ratio	0.81	0.63
LL: NP	PL: NP	PI: NP	GS: 2.87			

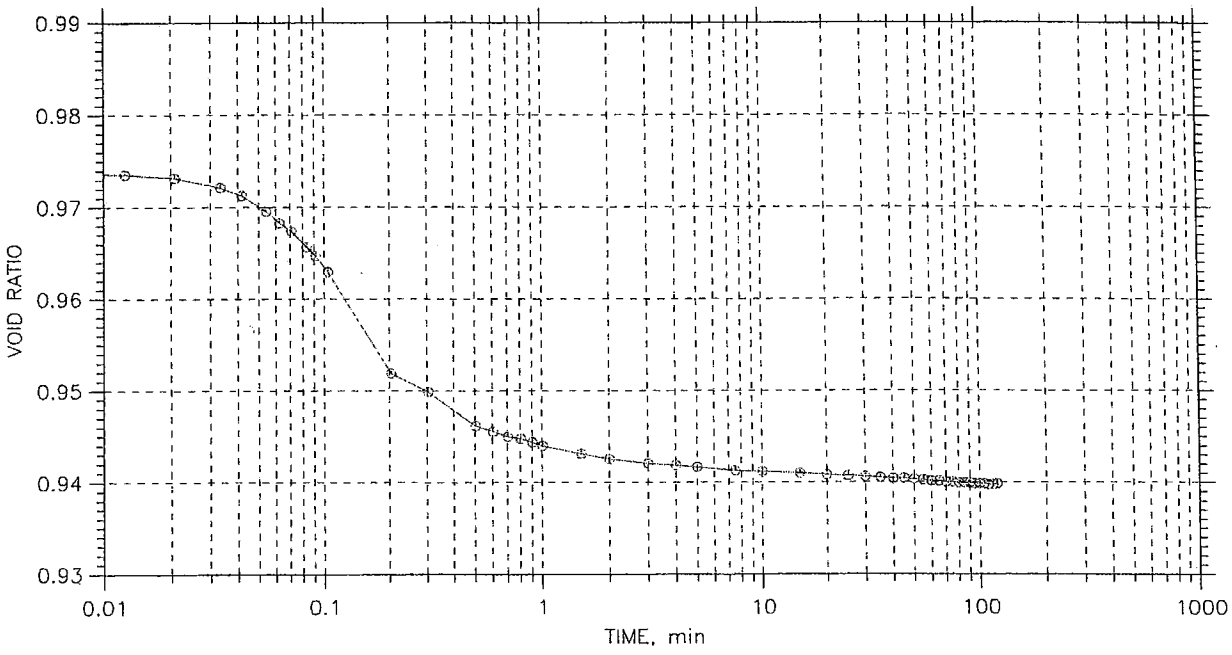
MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-204	Tested By: HJ	Checked By: JL JW 10/8/07
	Sample No.: UD-2	Test Date: 8/25/06	Depth: 18.5 Ft.
	Test No.: 5359	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr= 0.03	Preconsolidation Pressure added on 10/08/07	

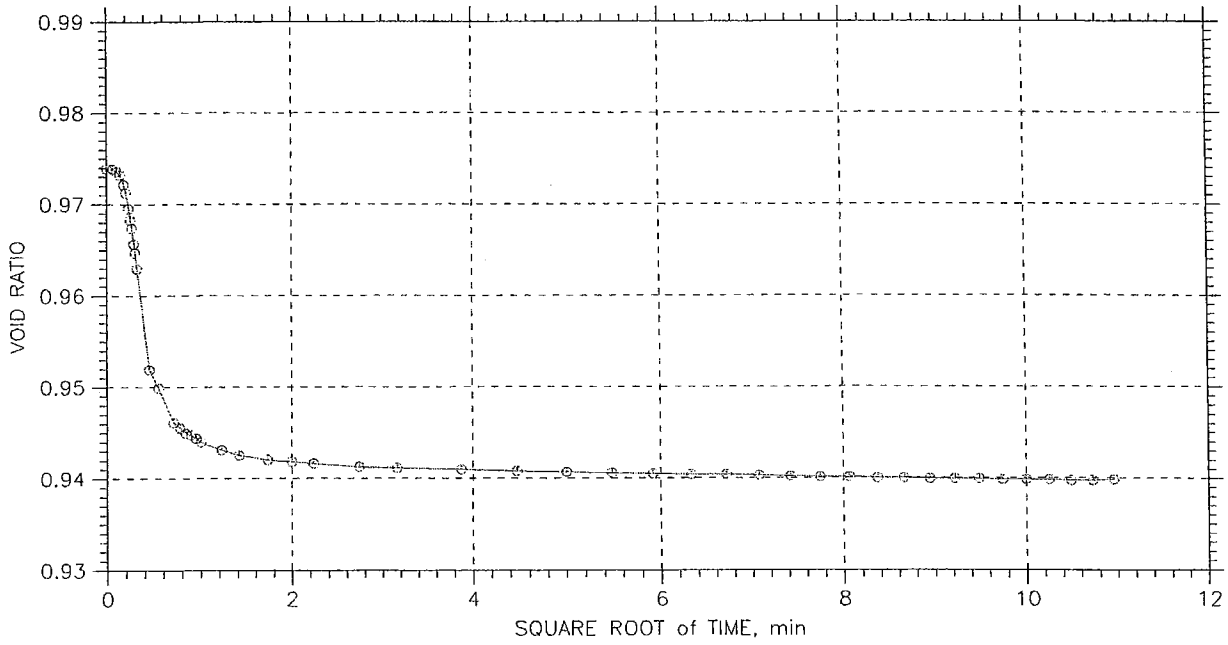
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 16

Stress: 1000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

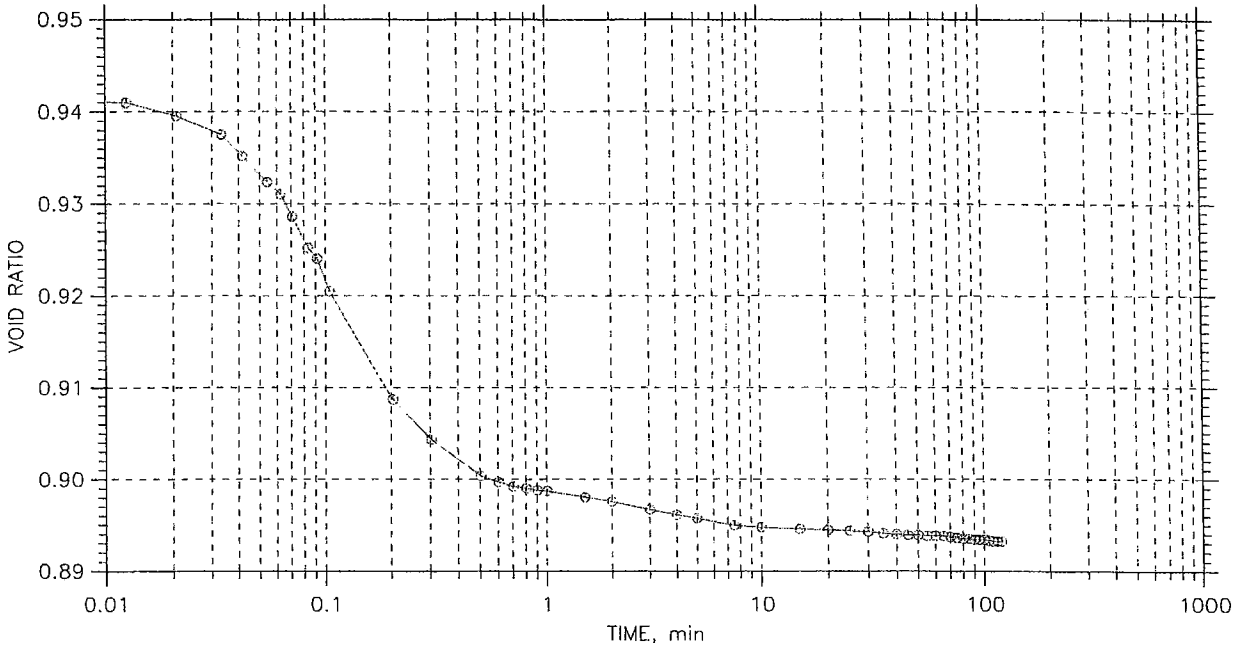
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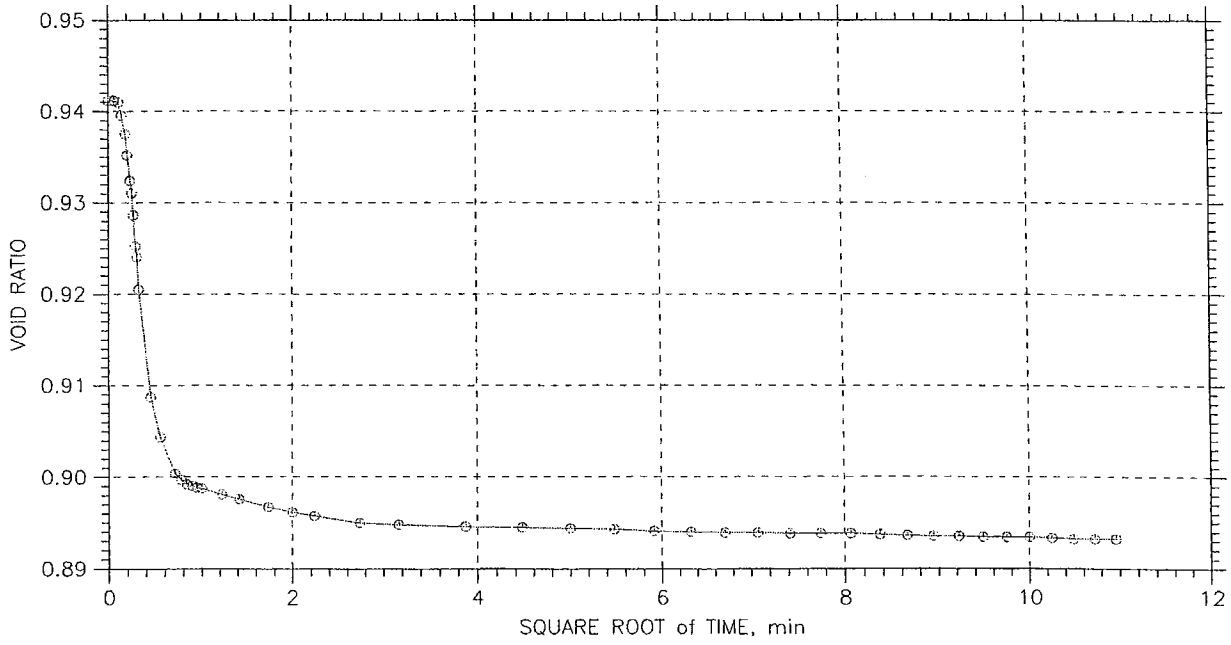
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 16

Stress: 2000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

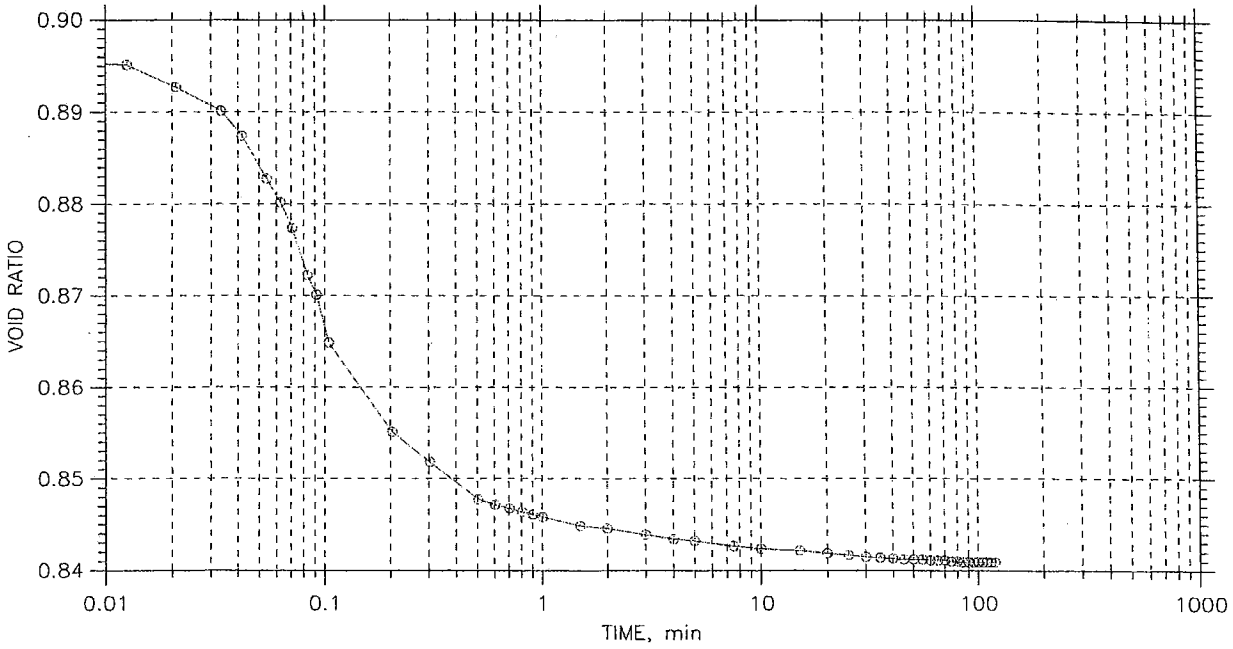
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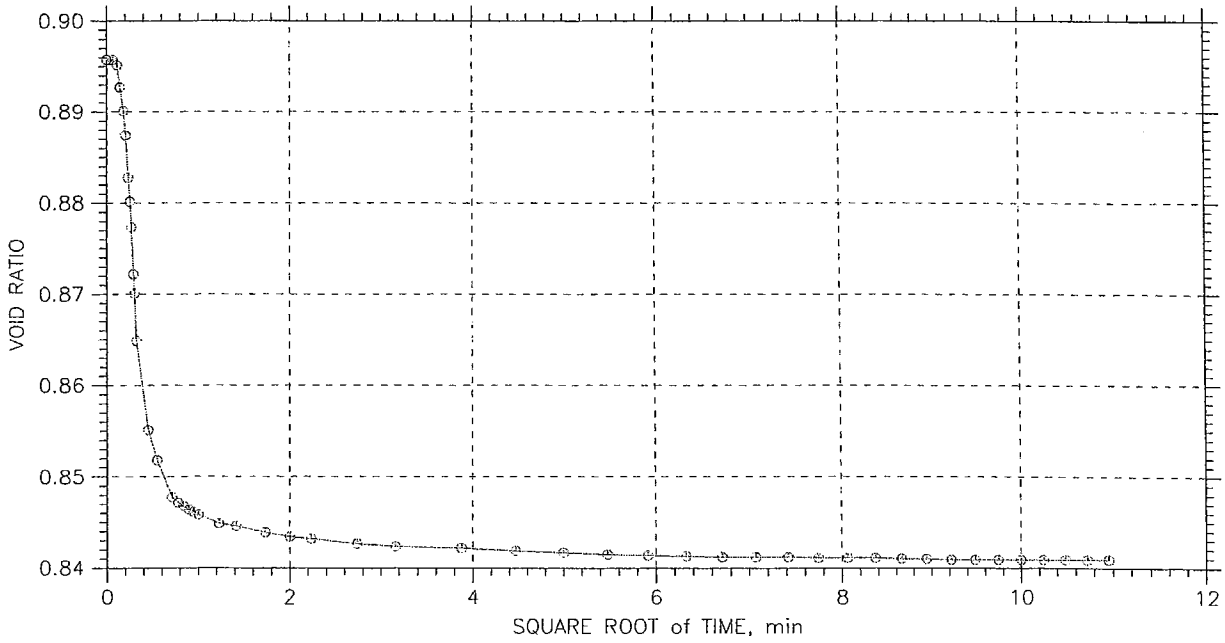
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 16

Stress: 4000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

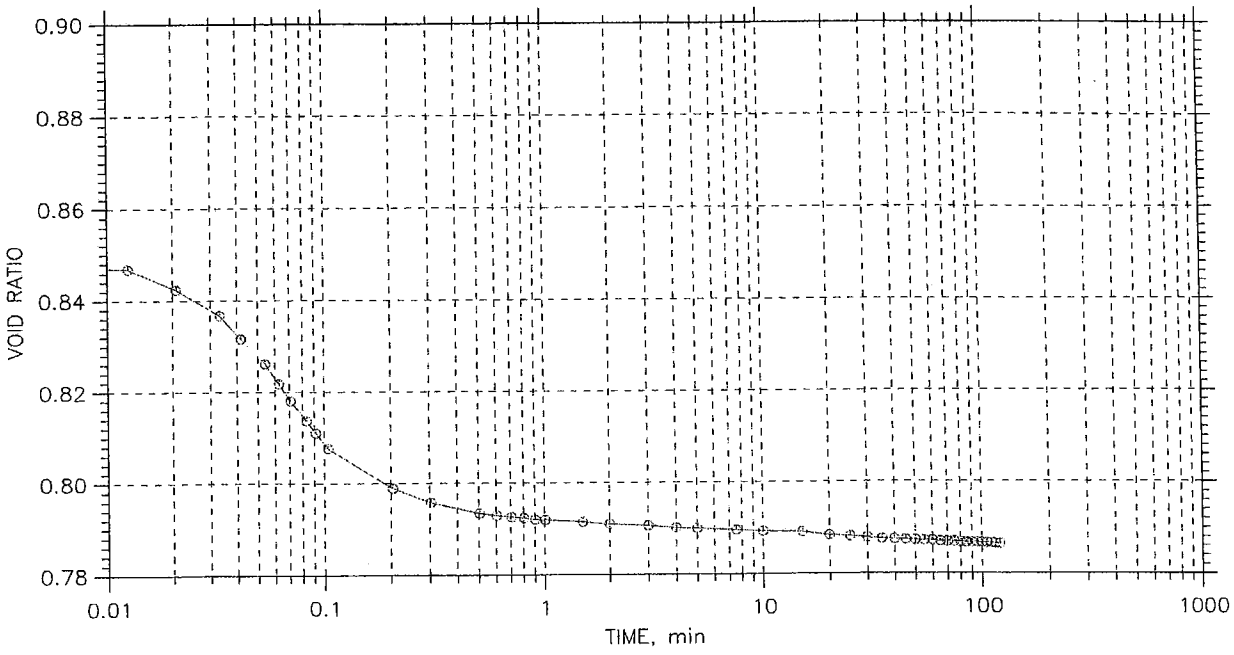
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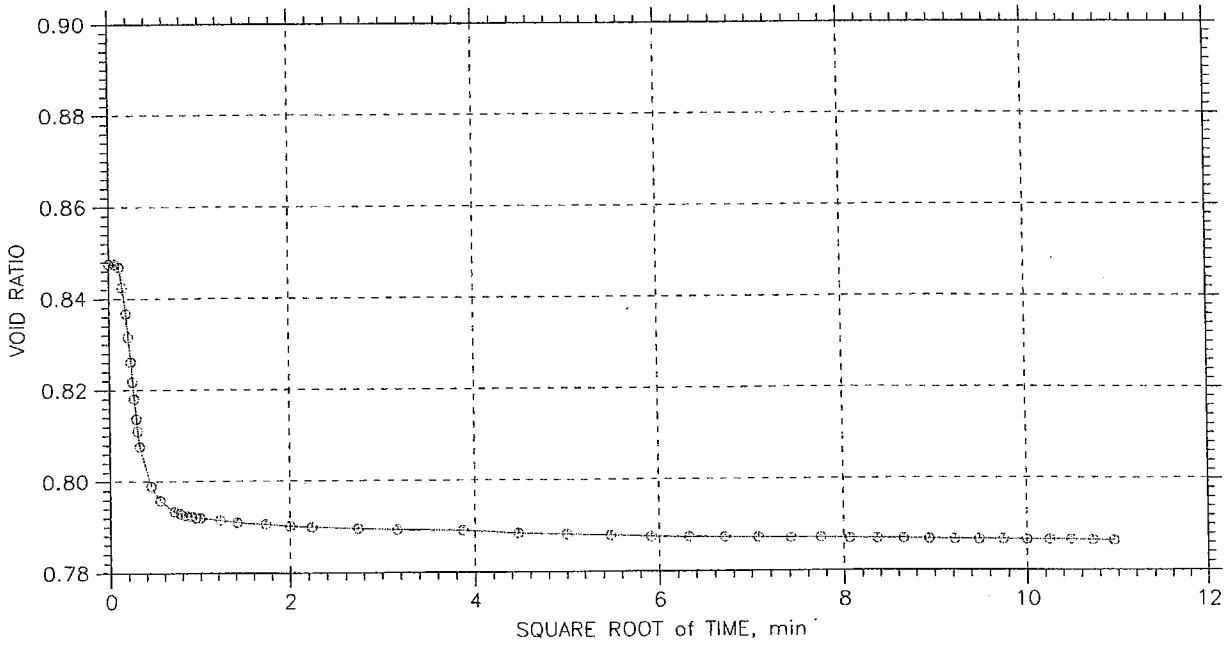
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 16

Stress: 8000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

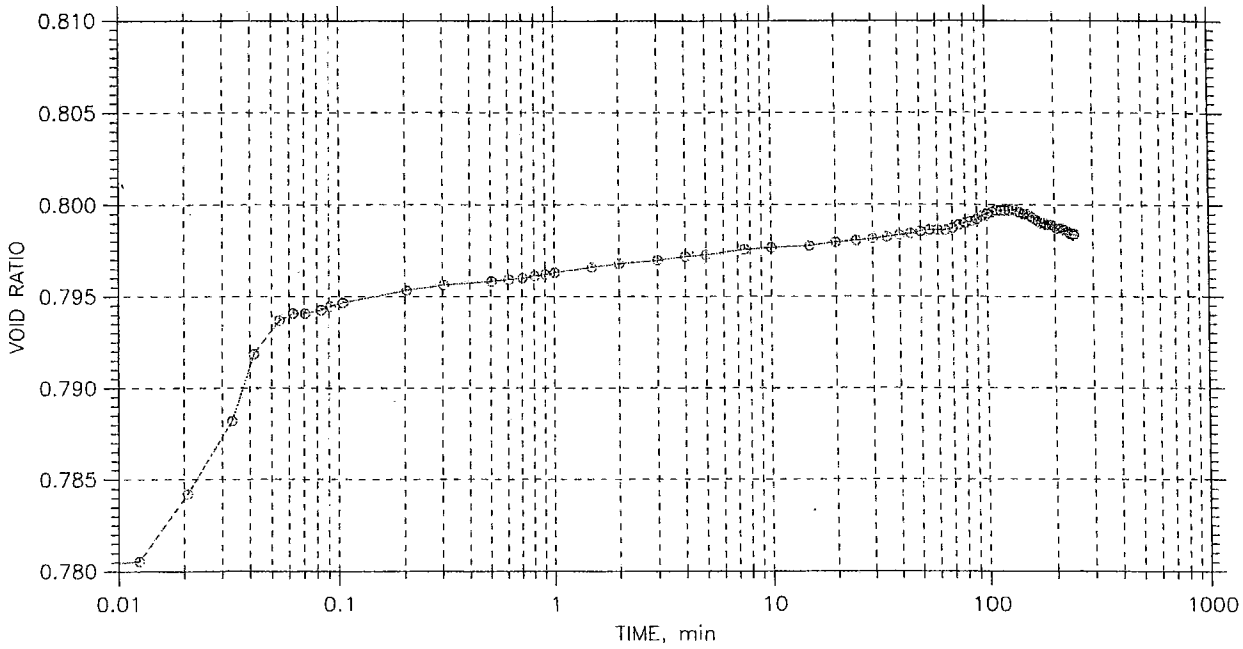
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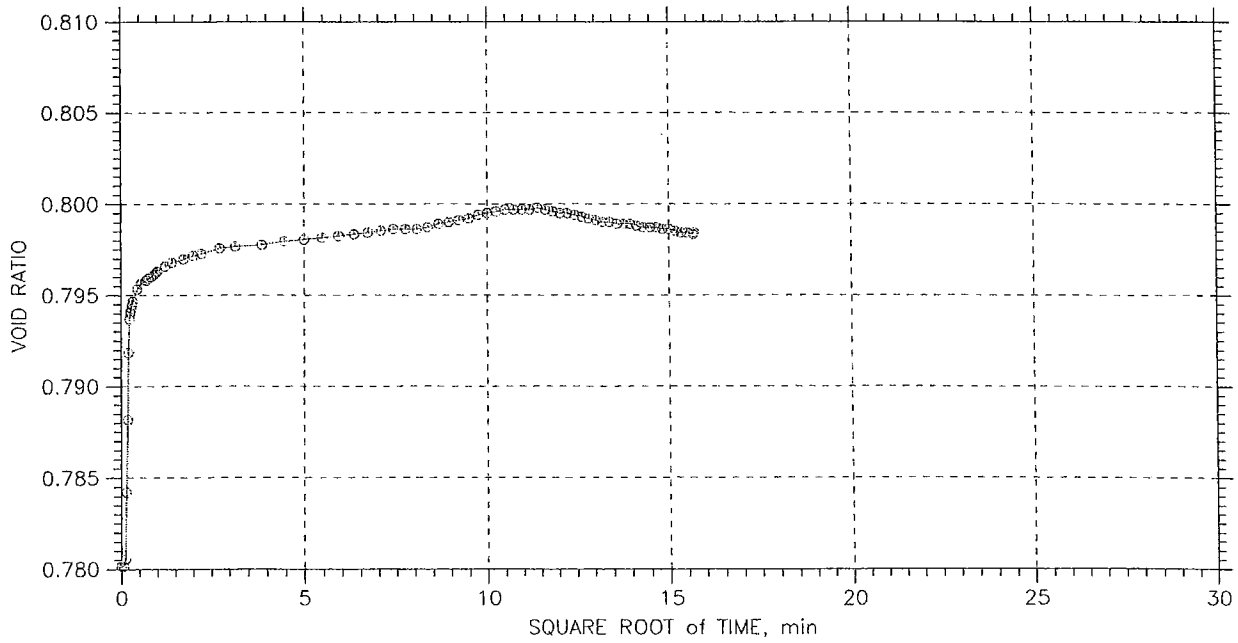
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 16

Stress: 4000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

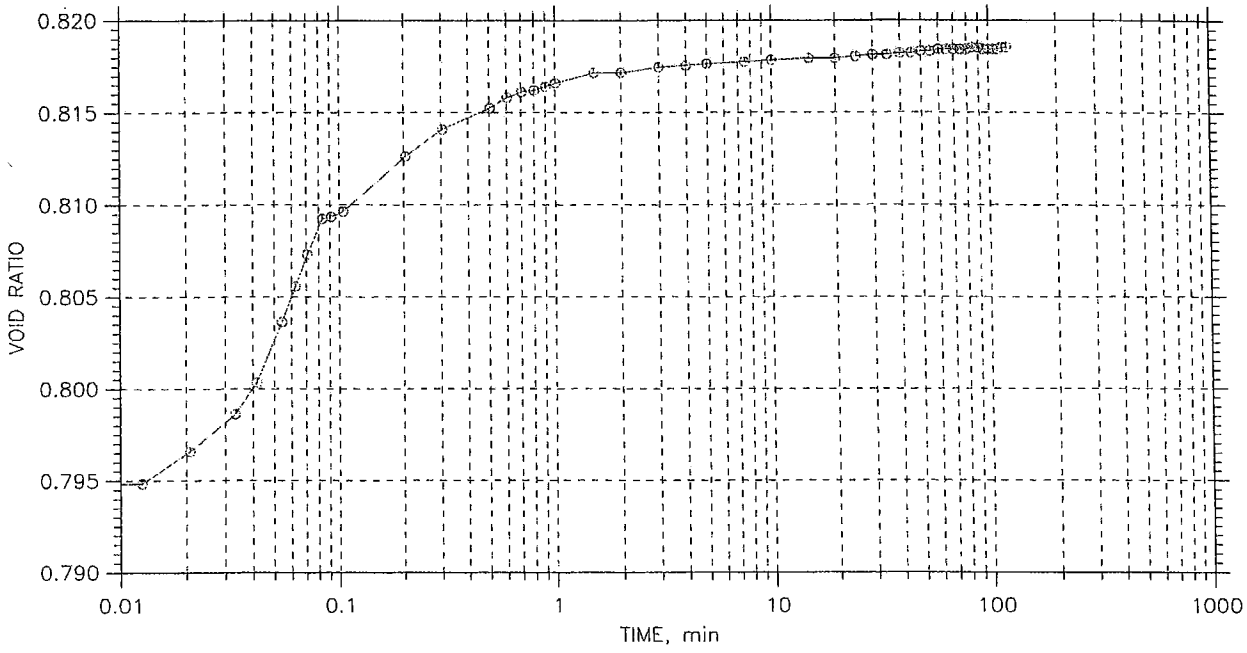
Tue, 21-NOV-2006 17:12:37

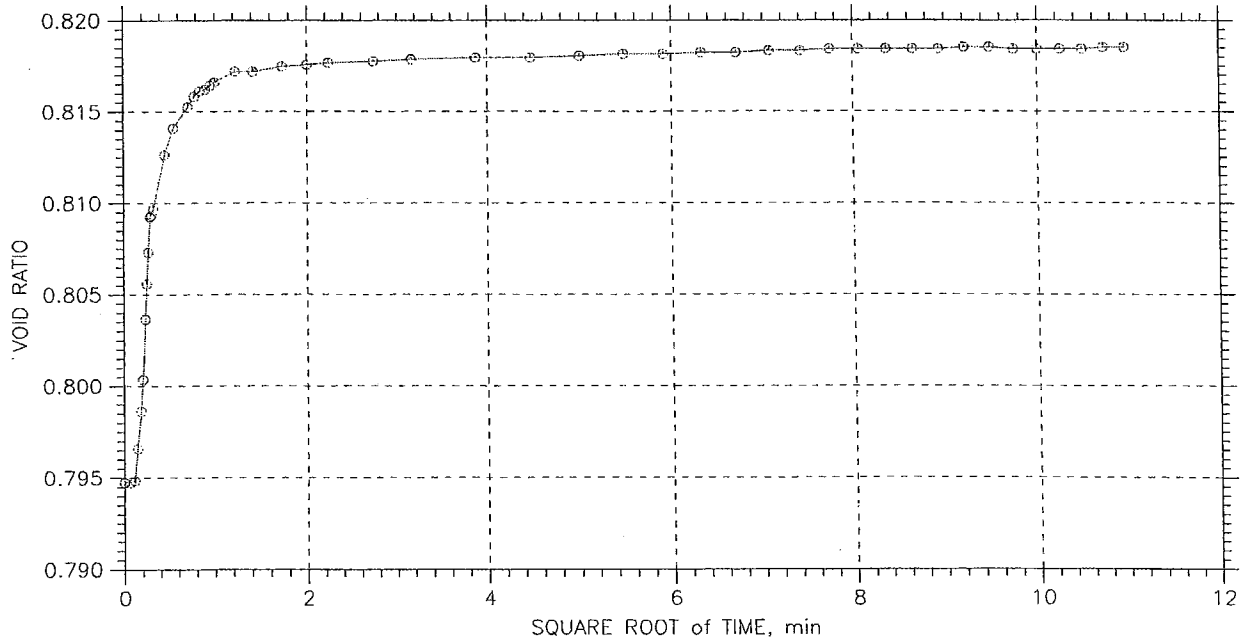
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 16

Stress: 2000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

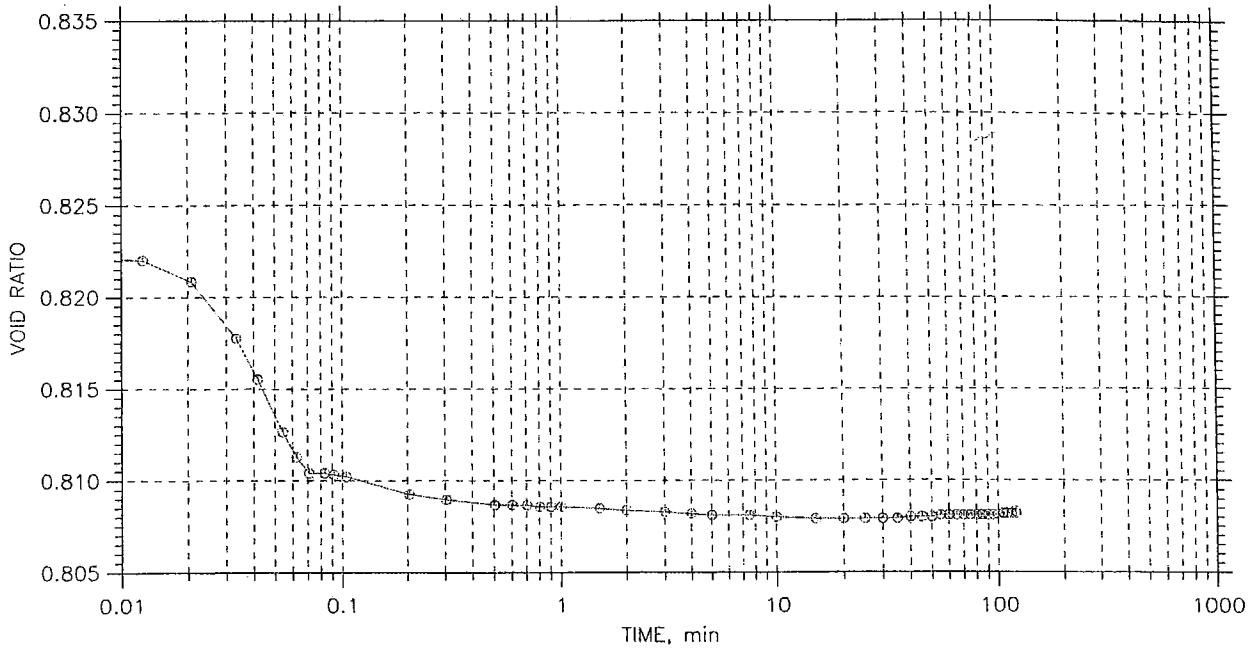
Tue, 21-NOV-2006 17:12:37

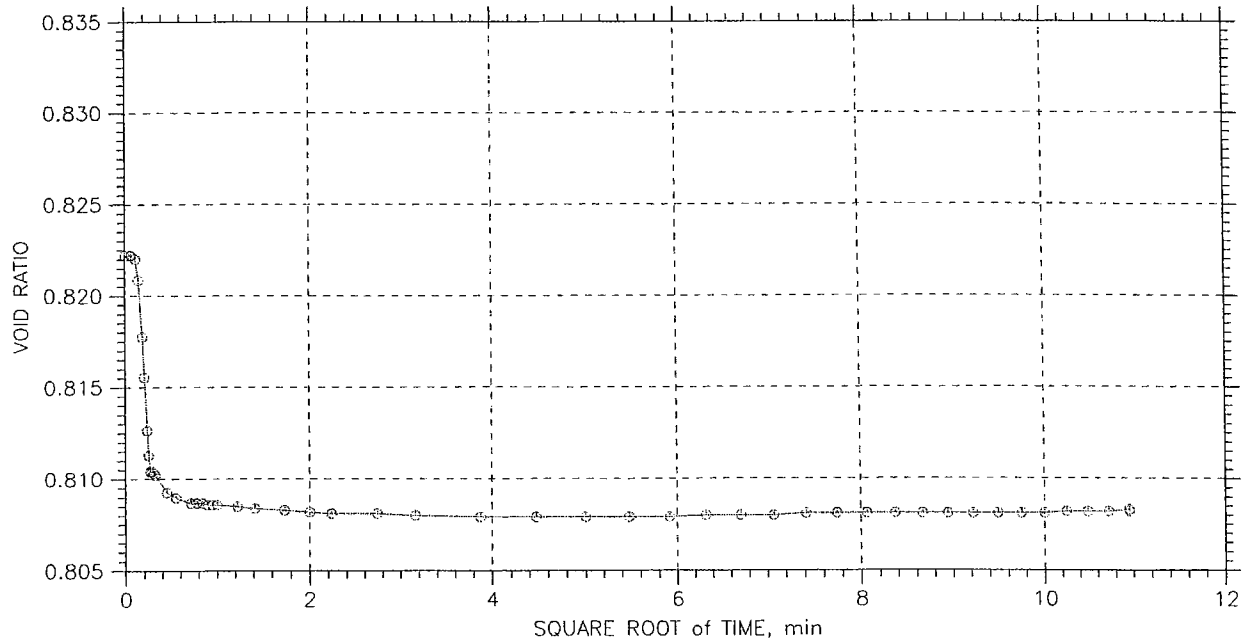
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 16

Stress: 4000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

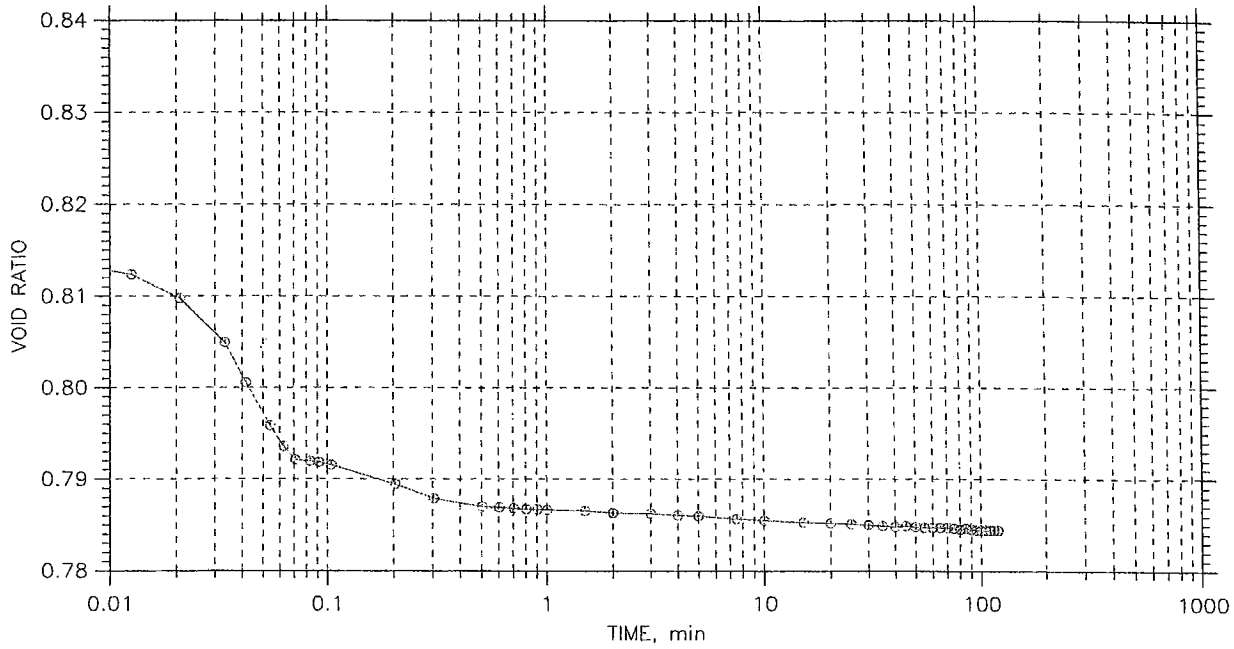
Tue, 21-NOV-2006 17:12:37

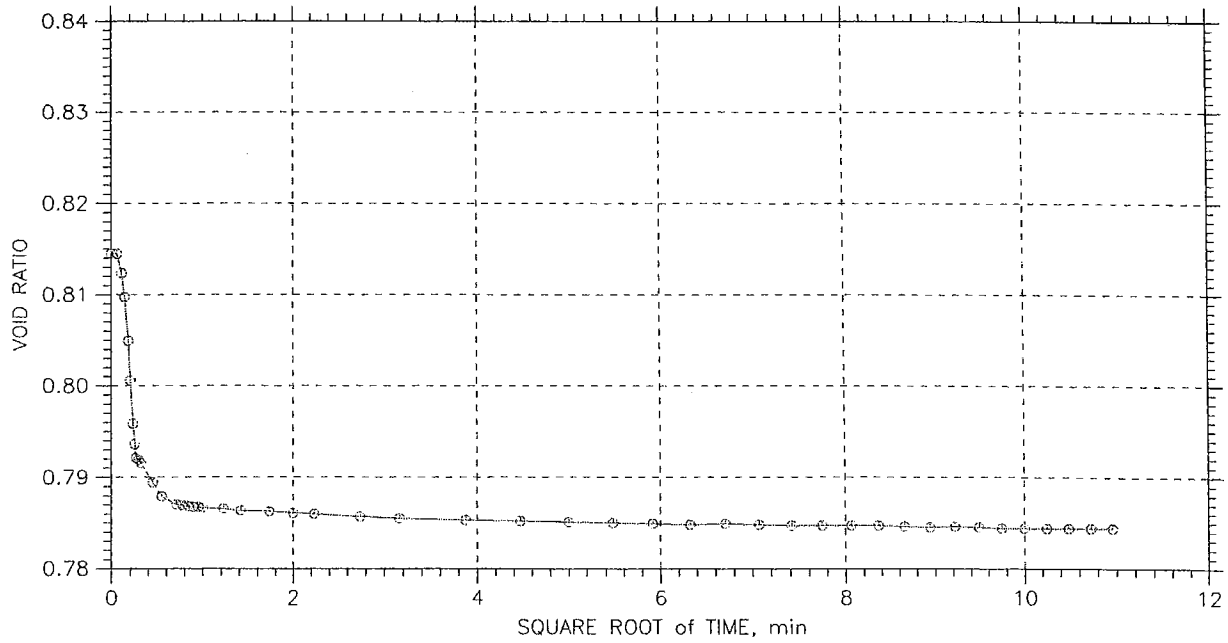
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 16

Stress: 8000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

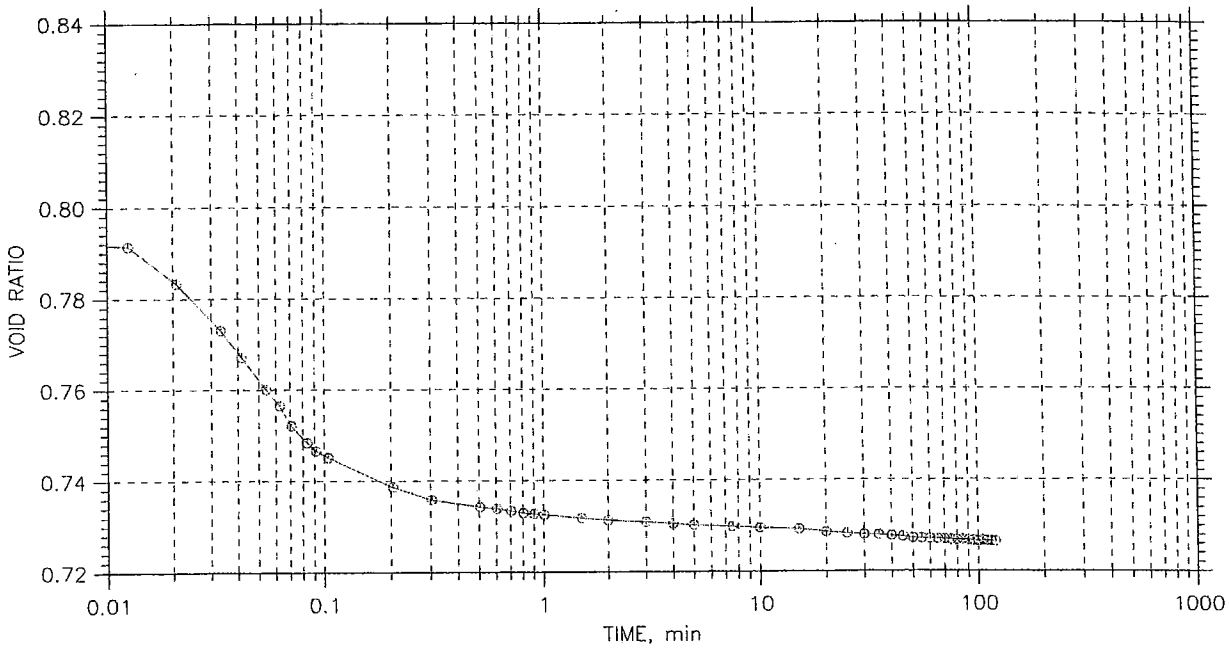
Tue, 21-NOV-2006 17:12:37

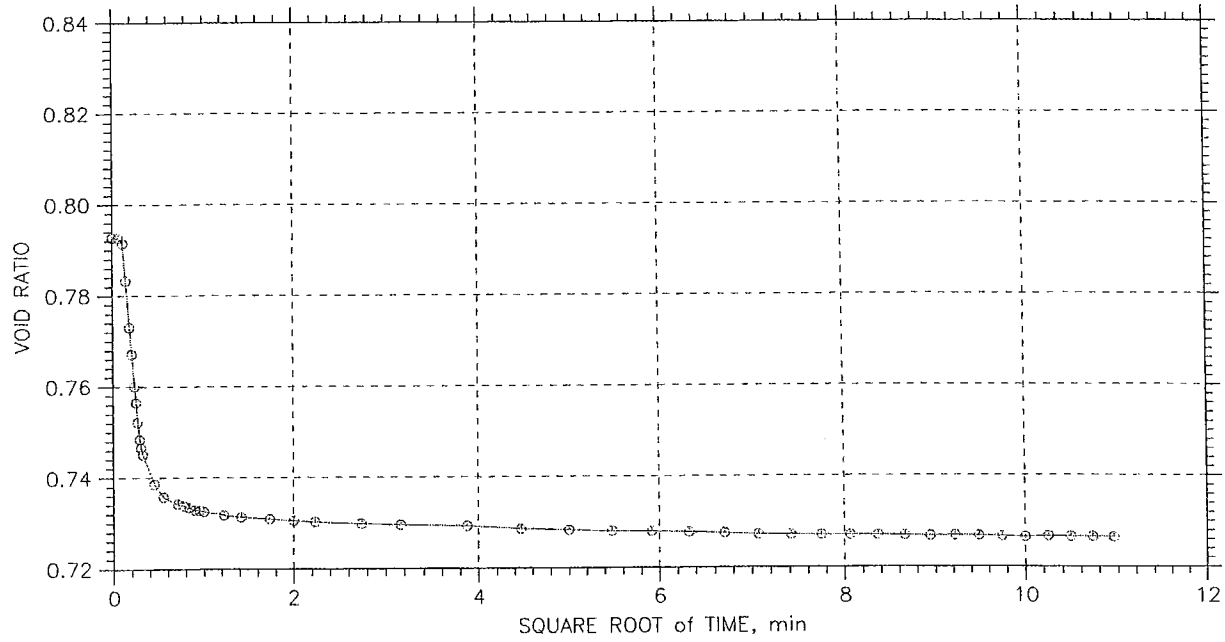
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 16

Stress: 16000 psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

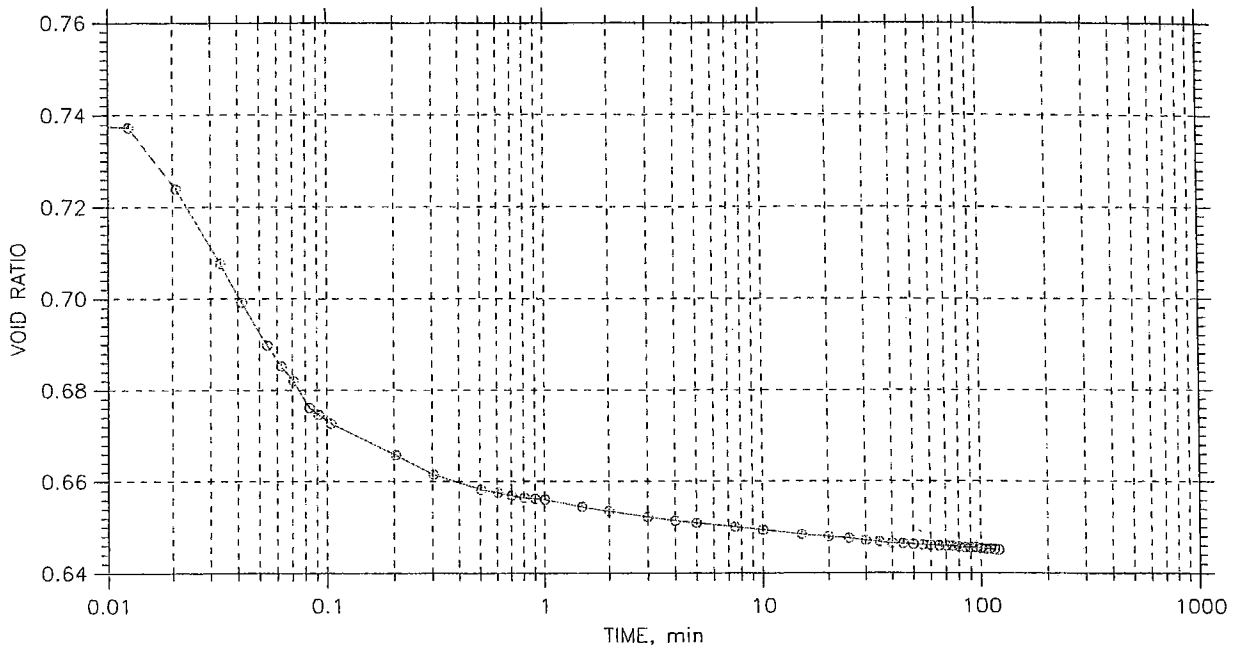
Tue, 21-NOV-2006 17:12:37

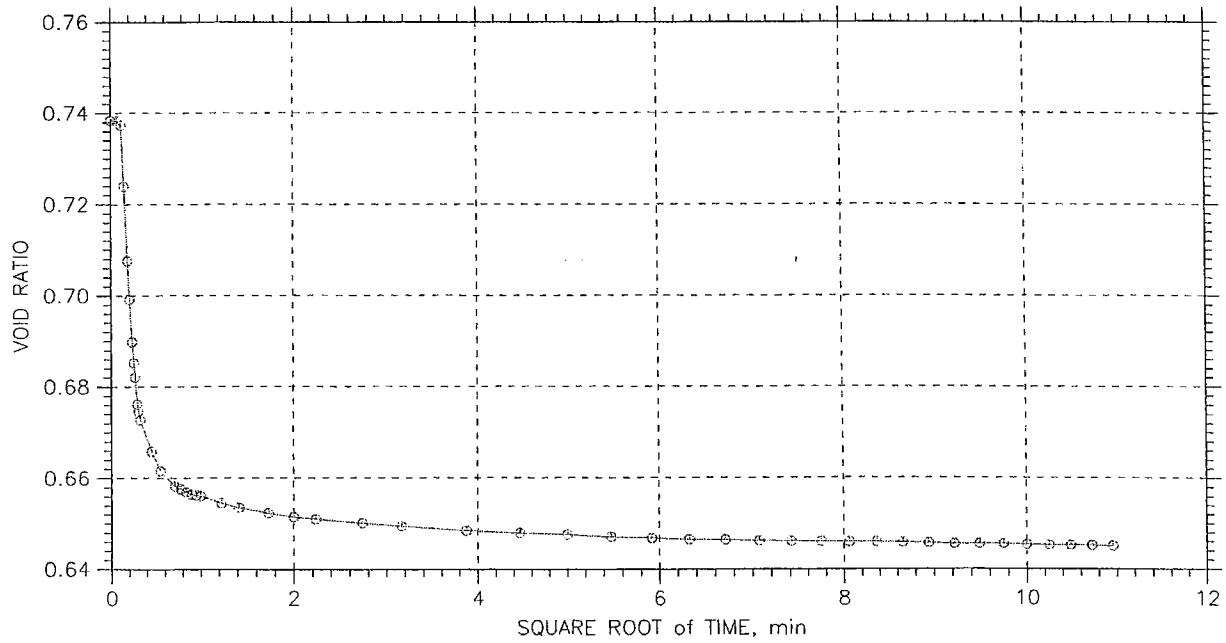
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 16

Stress: 32000 psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

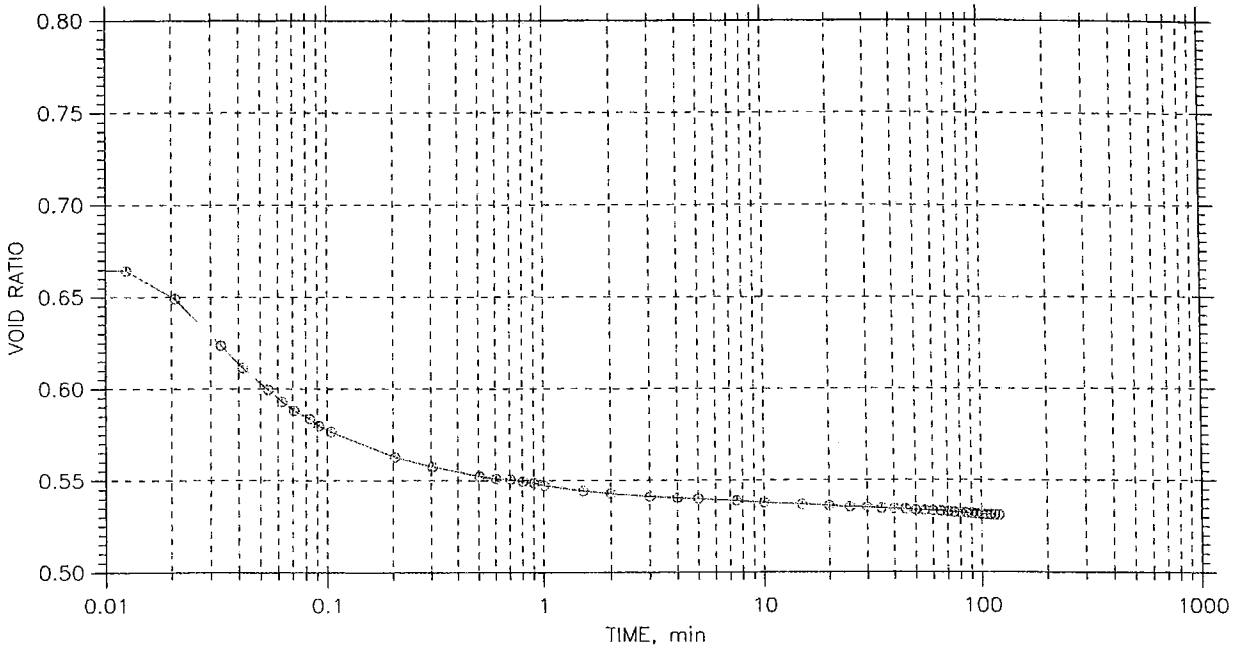
Tue, 21-NOV-2006 17:12:37

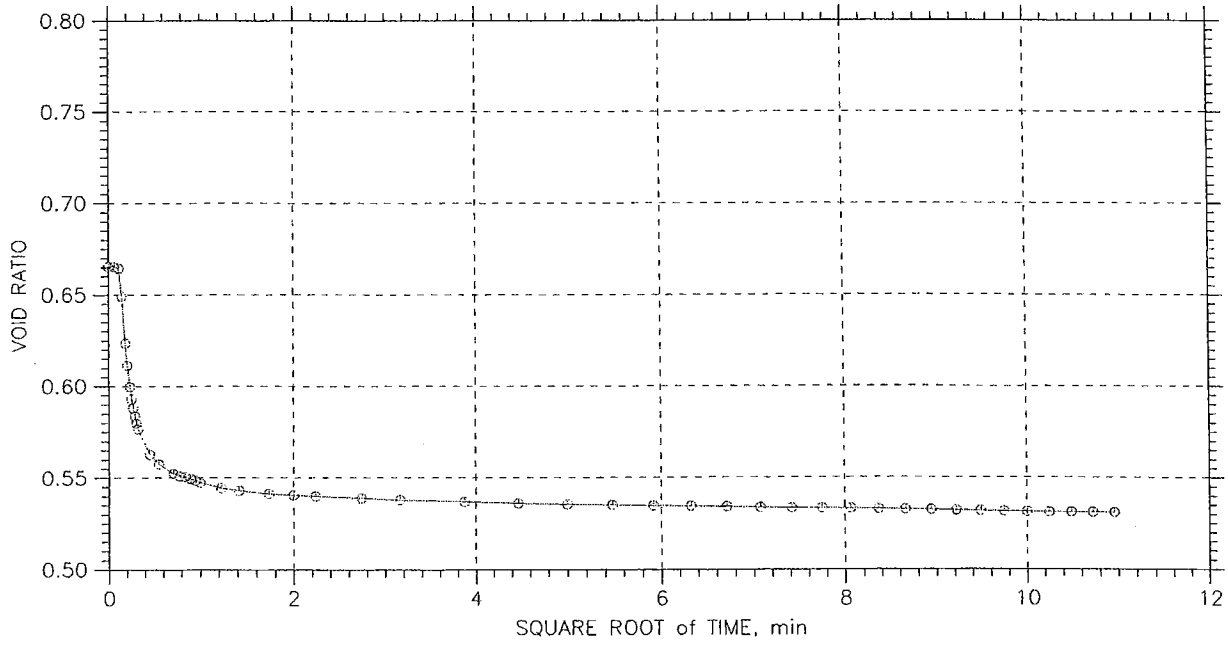
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 13 of 16

Stress: 64000 psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

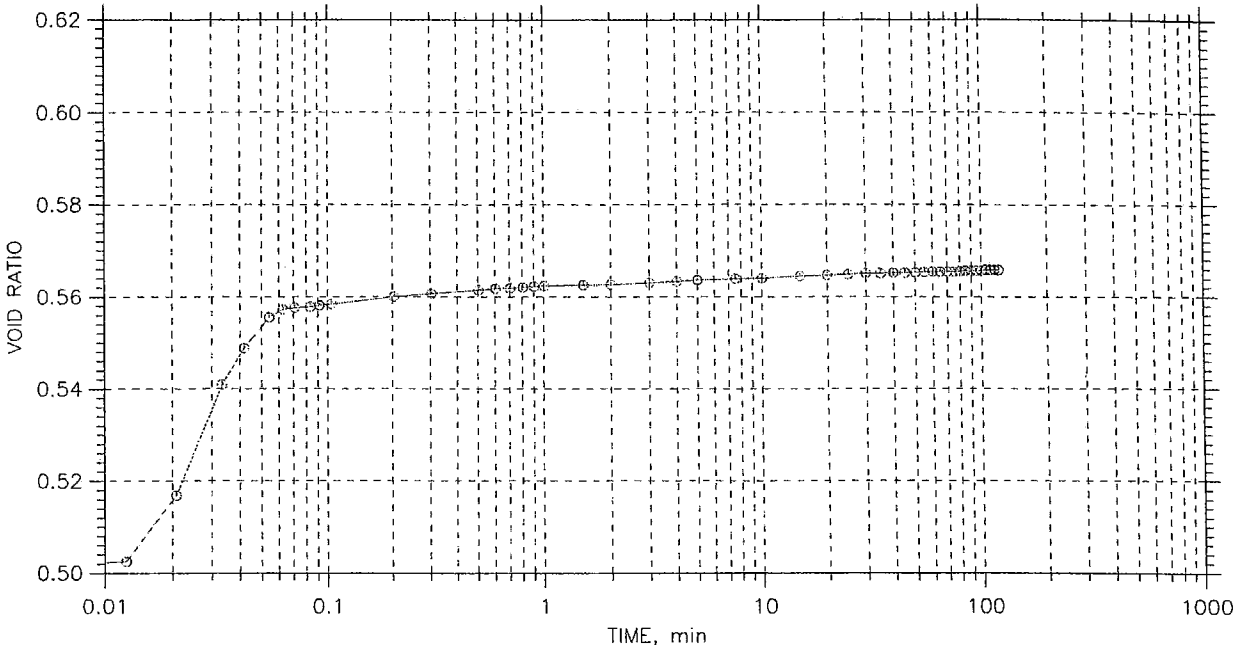
Tue, 21-NOV-2006 17:12:38

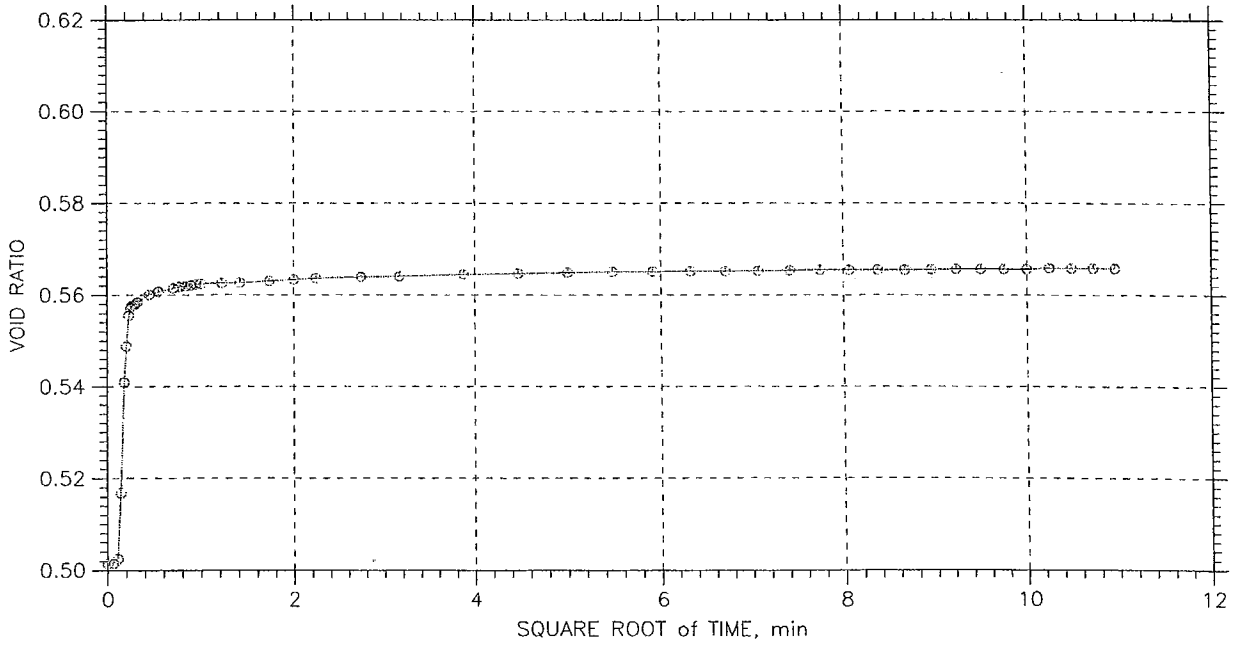
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 14 of 16

Stress: 16000 psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

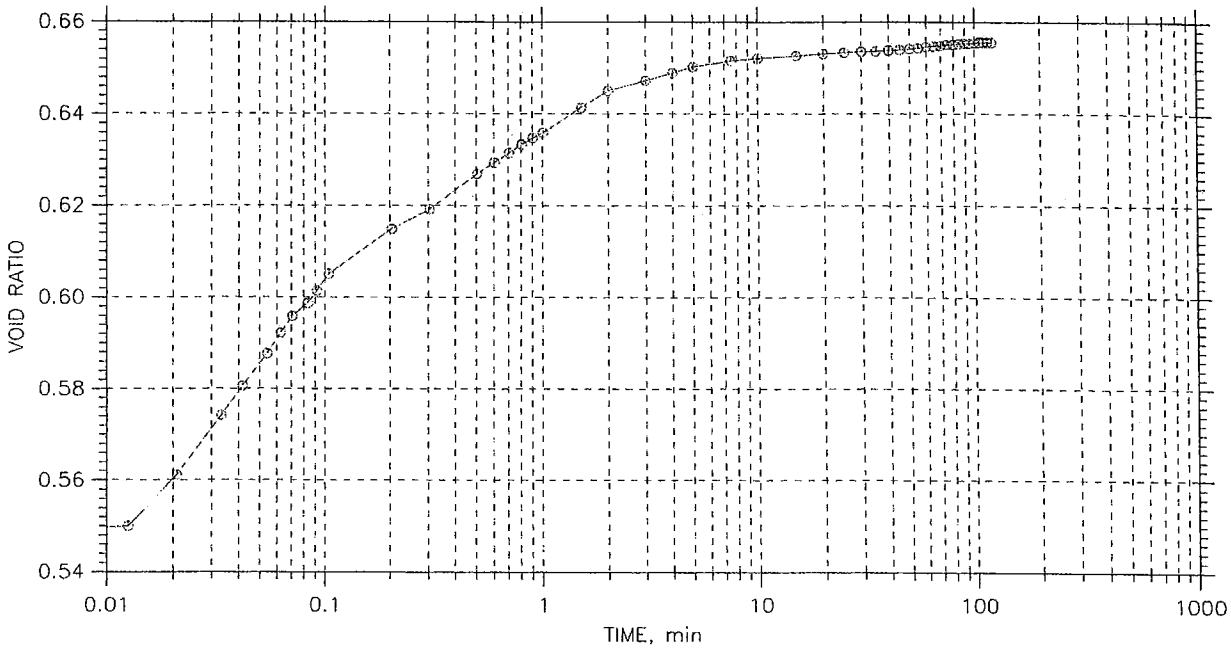
Tue, 21-NOV-2006 17:12:38

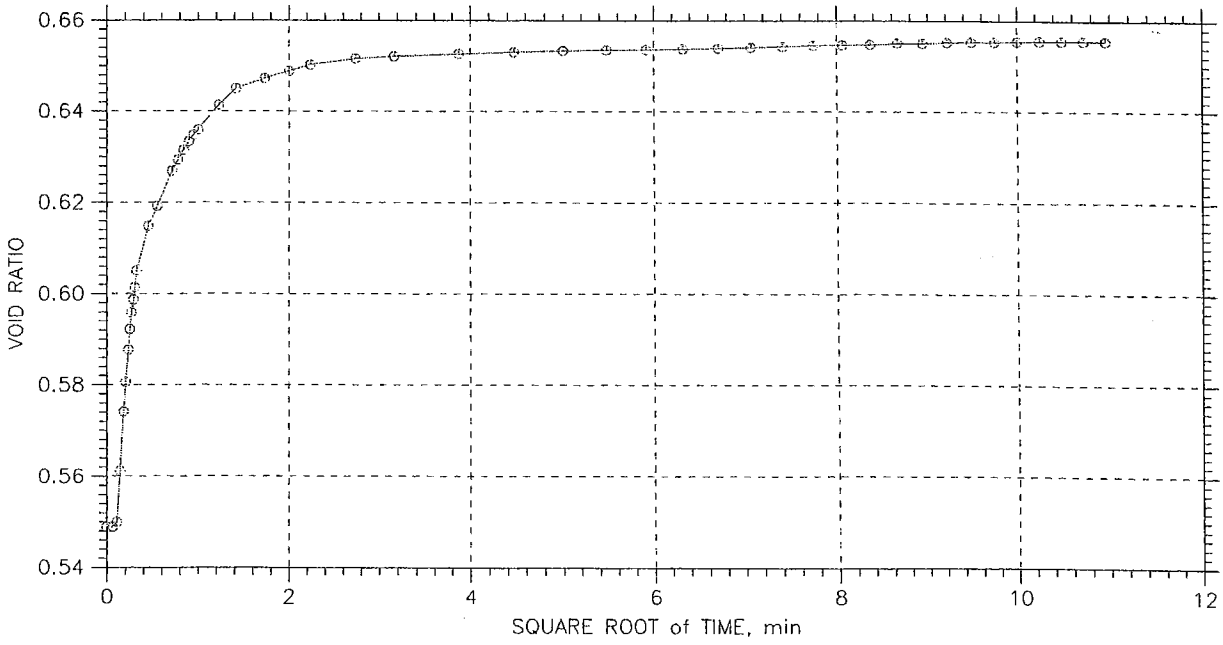
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 15 of 16

Stress: 2000. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

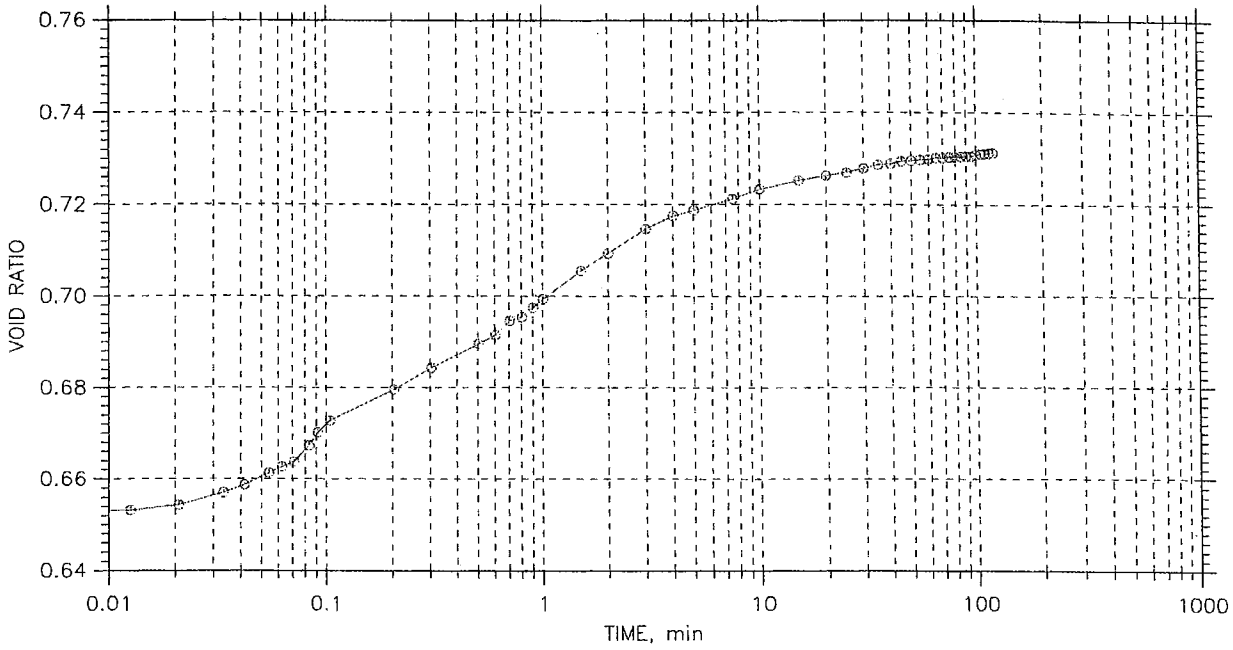
Tue, 21-NOV-2006 17:12:38

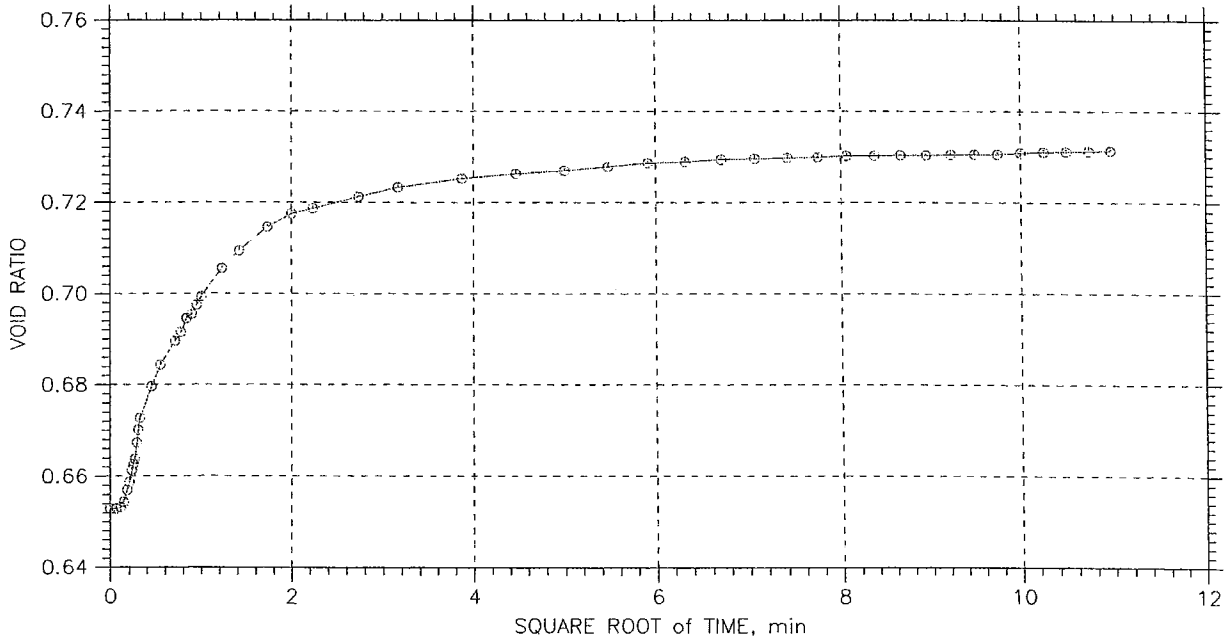
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 16 of 16

Stress: 500. psf





MACTEC	Project: SCE&G COL	Location:	Project No.: 6234063534S
	Boring No.: B-209	Tested By: HJ	Checked By: JL
	Sample No.: UD-4	Test Date: 8/29/06	Depth: 38.5 Ft.
	Test No.: 5368	Sample Type: Shelby Tube	Elevation: N/A
	Description: Silty Sand		
	Remarks: Cr = 0.07		

Tue, 21-NOV-2006 17:12:38