COMPACTION TEST REPORT

Curve No.: S7165

Project No.: 12600

Date: 08/21/02

Project: MUSCOY PIPELINE

Location: STA 13+00

Elev./Depth:

Remarks:

MATERIAL DESCRIPTION

Description: SILTY SAND W/ ROCKS DYBISM

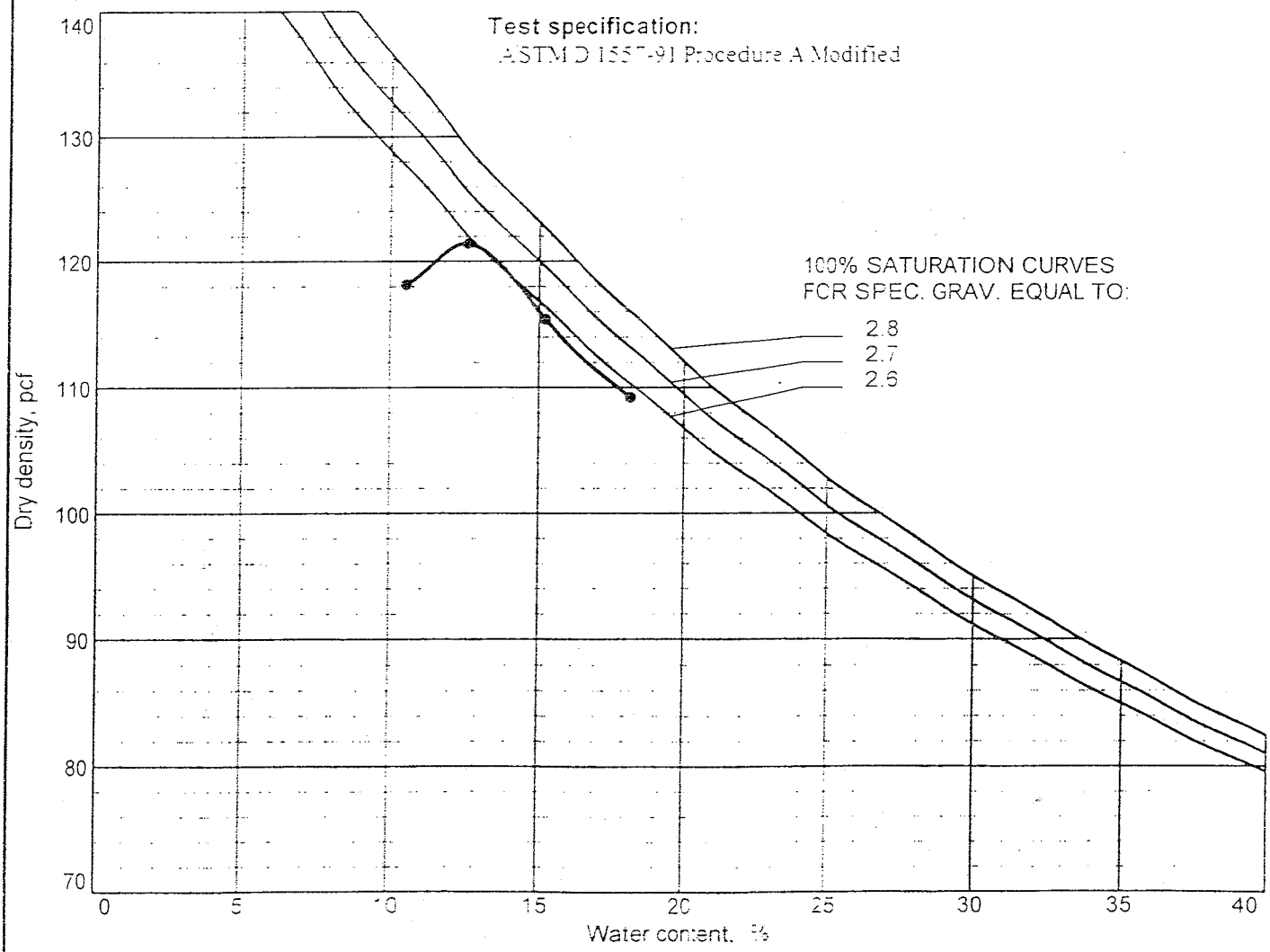
Classifications - USCS: AASHTO:

Nat. Moist. = Sp.G. =

Liquid Limit = Plasticity Index =

% > No.4 = % % < No.200 =

TEST RESULTS
Maximum dry density = 121 pcf
Optimum moisture = 13 %



Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

Date: 08/28/02

Project No.: 12600
Project: MUSCOY PIPELINE

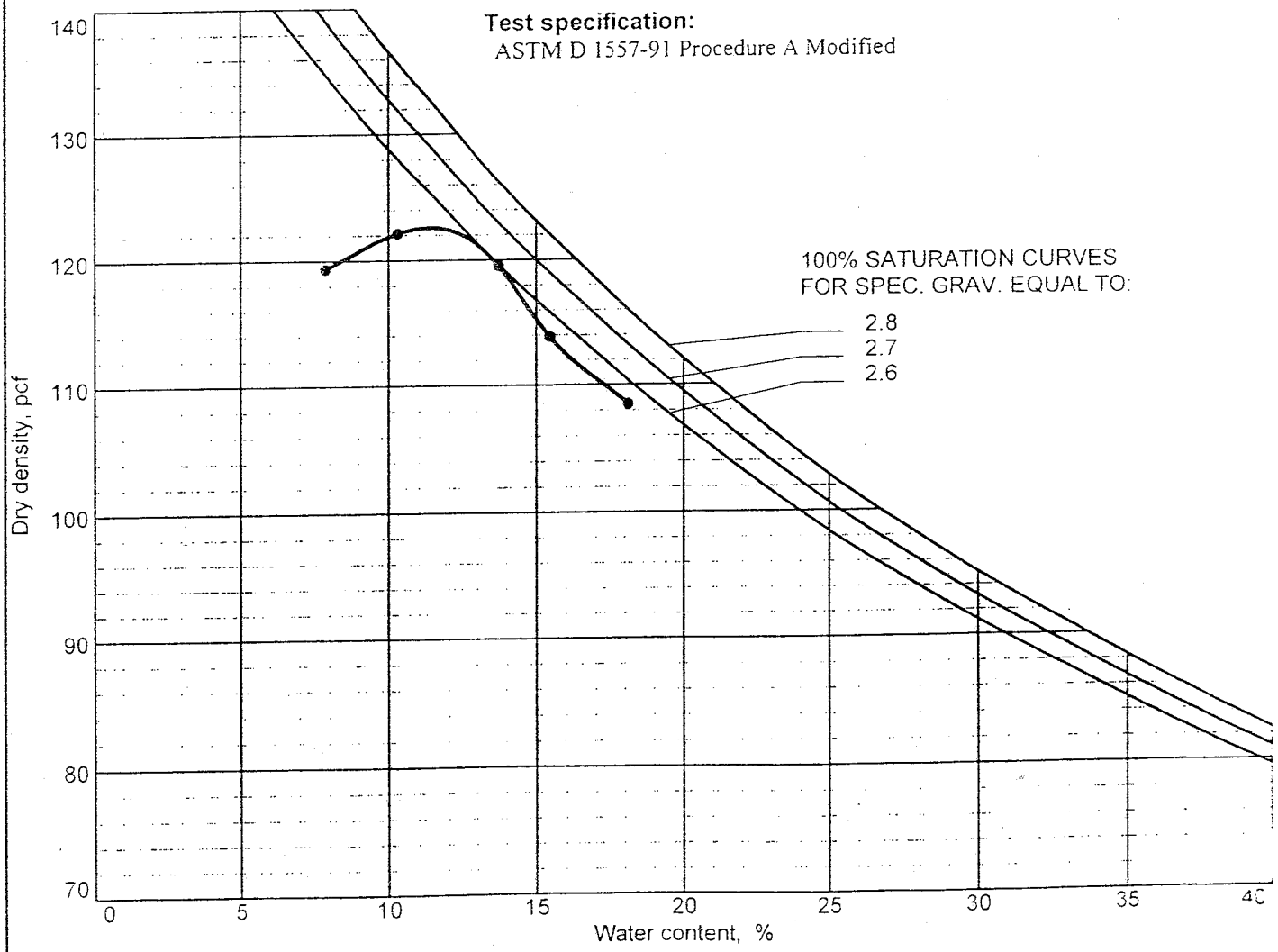
Location: V-POINT
Elev./Depth:
Remarks:

MATERIAL DESCRIPTION

Description: SANDY SILT

Classifications - USCS: AASHTO:
Nat. Moist. = Sp.G. =
Liquid Limit = Plasticity Index =
% > No.4 = % % < No.200 =

TEST RESULTS
Maximum dry density = 123 pcf
Optimum moisture = 11 %



Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

Project No.: 12600
Project: MUSCOY PIPELINE

Date:

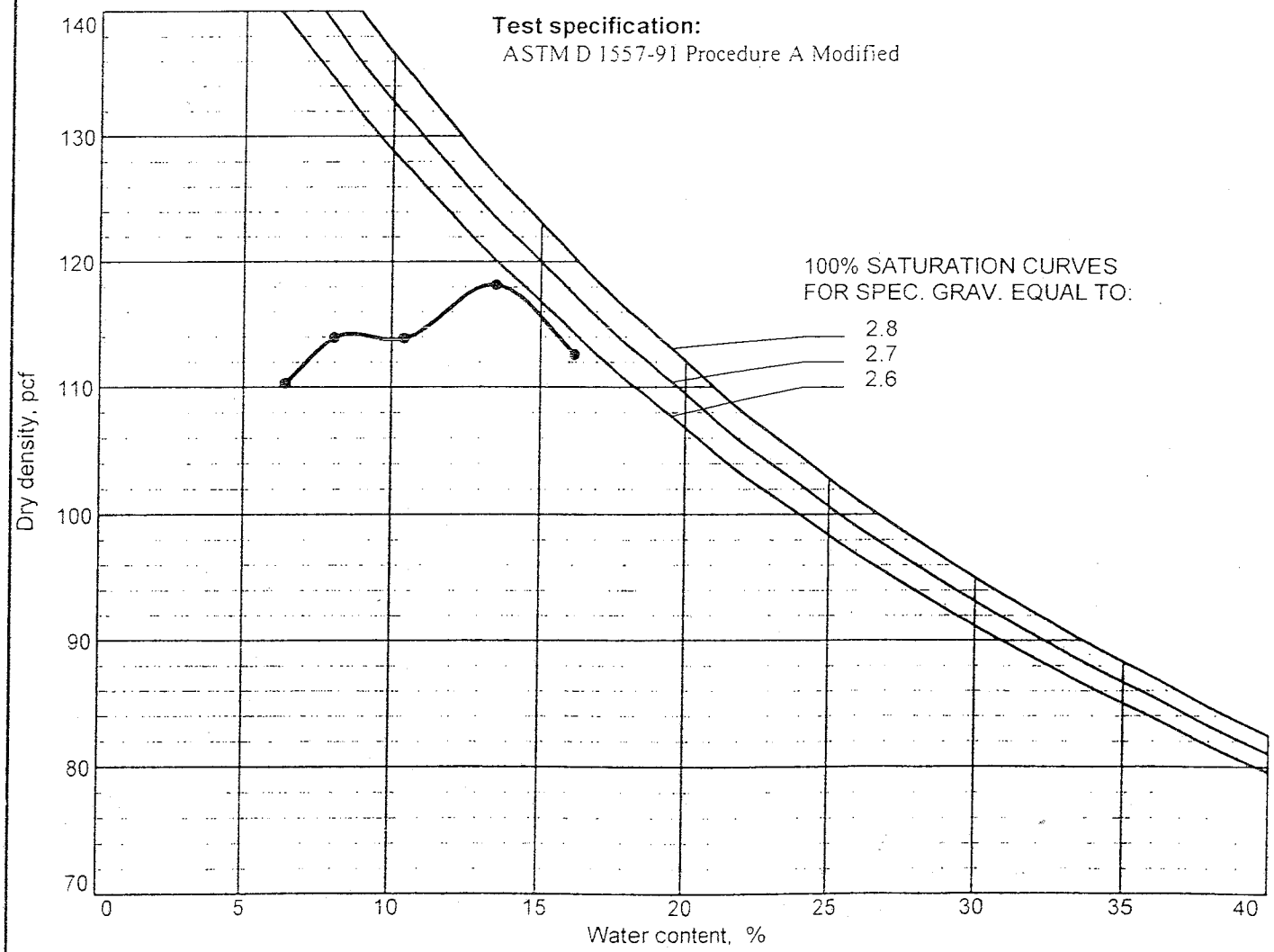
Location: 14TH&DAVIDSON
Elev./Depth:
Remarks:

MATERIAL DESCRIPTION

Description: SANDY SILT

Classifications - USCS: AASHTO:
Nat. Moist. = Sp.G. =
Liquid Limit = Plasticity Index =
% > No.4 = % % < No.200 =

TEST RESULTS
Maximum dry density = 118 pcf
Optimum moisture = 13 %



Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

Curve No.: S7183

Project No.: 12600 Date: 09/12/02

Project: MUSCOY PIPELINE

Location: 14TH ST @STA 89+00

Elev./Depth:

Remarks:

MATERIAL DESCRIPTION

Description: SANDY SILT

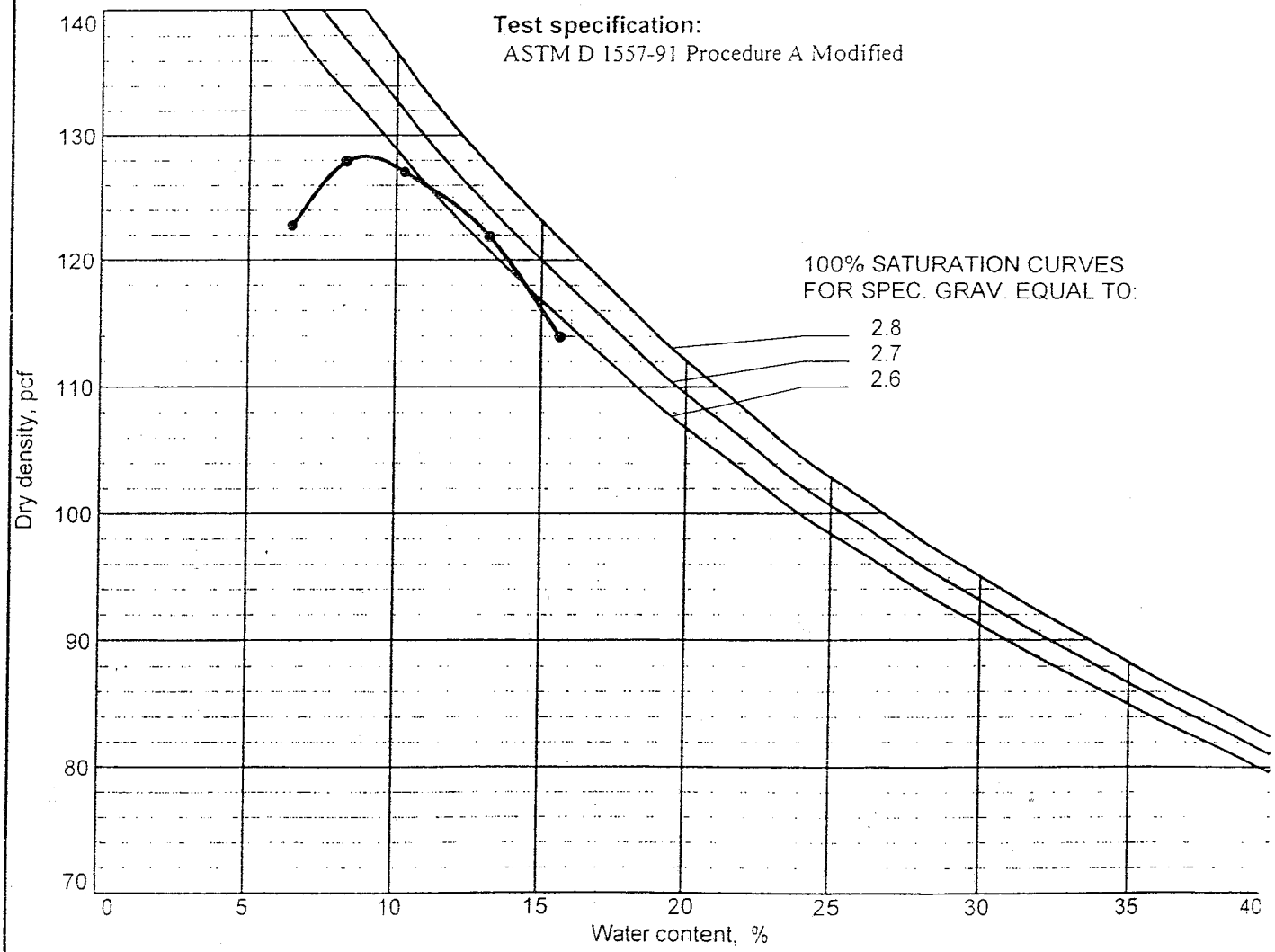
Classifications - USCS: AASHTO:

Nat. Moist. = Sp.G. =

Liquid Limit = Plasticity Index =

% > No.4 = % % < No.200 =

TEST RESULTS
Maximum dry density = 128 pcf
Optimum moisture = 9 %



Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

Curve No.: S7196

Project No.: 12600 Date: 10-3-02

Project: MUSCOY PIPELINE

Location: CALMAT

Elev./Depth:

Remarks:

MATERIAL DESCRIPTION

Description: CLASS 2 CMB

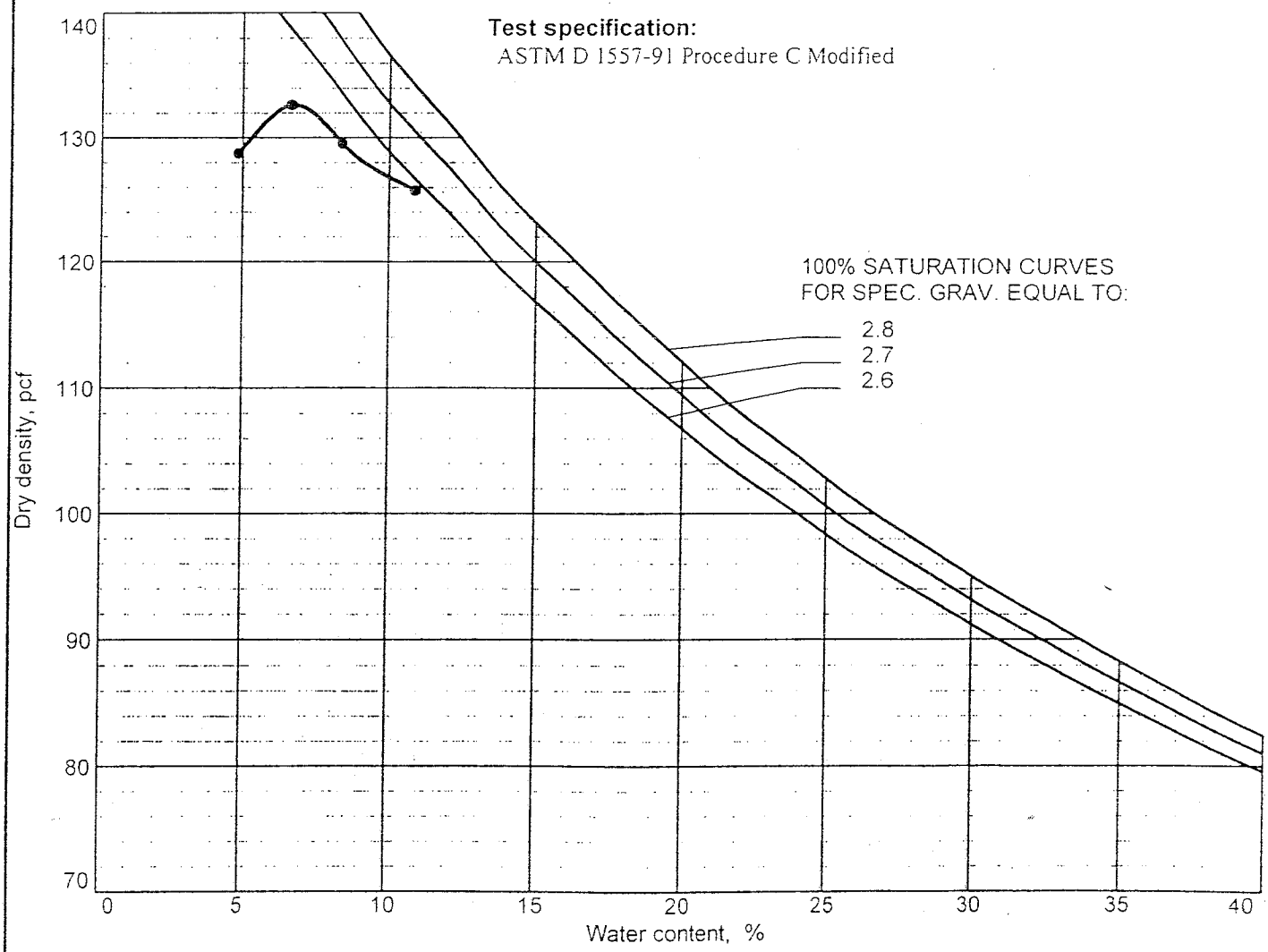
Classifications - USCS: AASHTO:

Nat. Moist. = Sp.G. =

Liquid Limit = Plasticity Index =

% > 3/4 in. = % % < No.200 =

TEST RESULTS
Maximum dry density = 133 pcf
Optimum moisture = 7 %

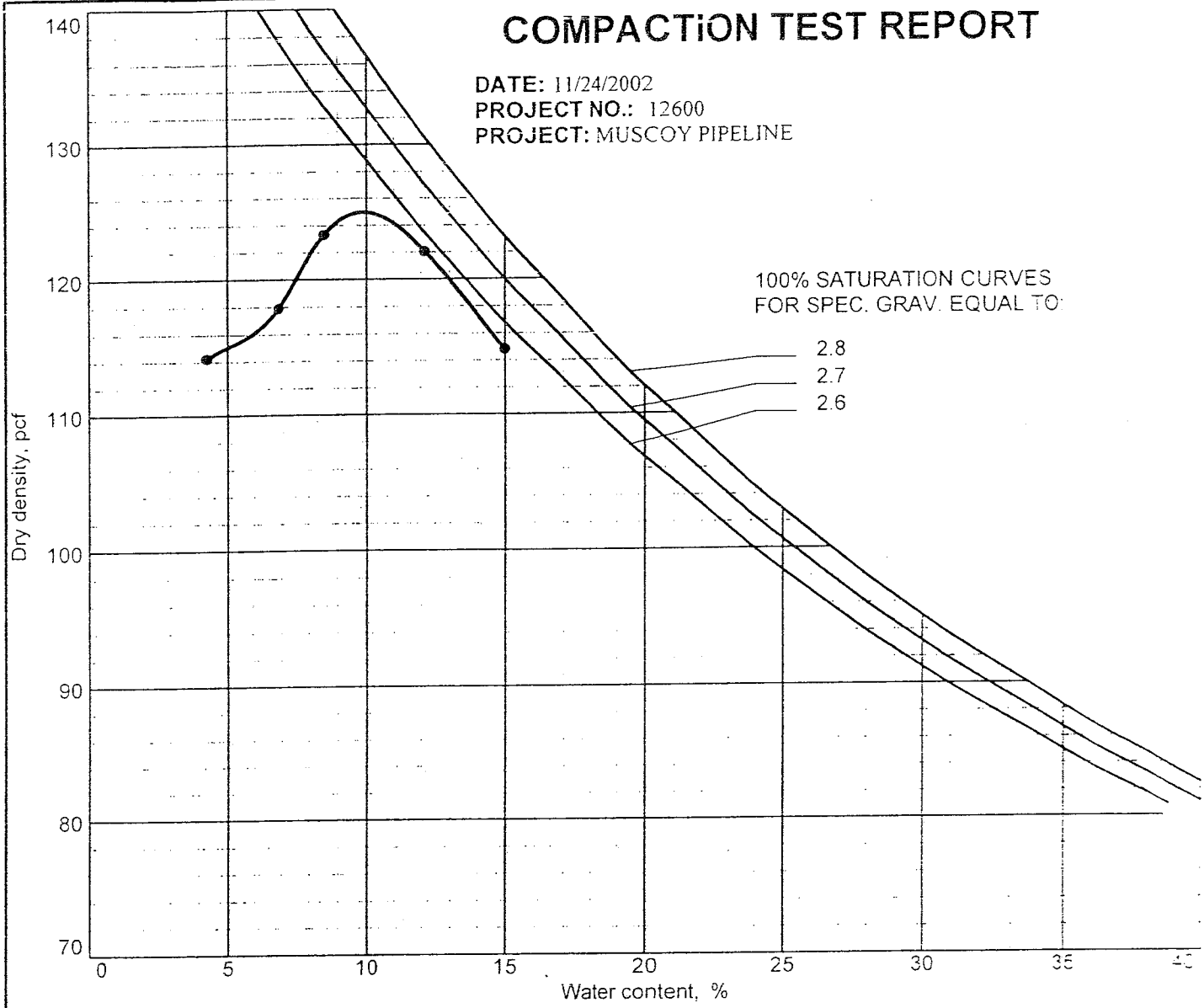


Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

DATE: 11/24/2002
PROJECT NO.: 12600
PROJECT: MUSCOY PIPELINE



	No.	LOCATION AND DESCRIPTION	TEST SPECIFICATION
●	S7224	**Location:** STA 31+00 LIGHT BROWN SAND W/SILT	ASTM D 1557-78 Method A Modified

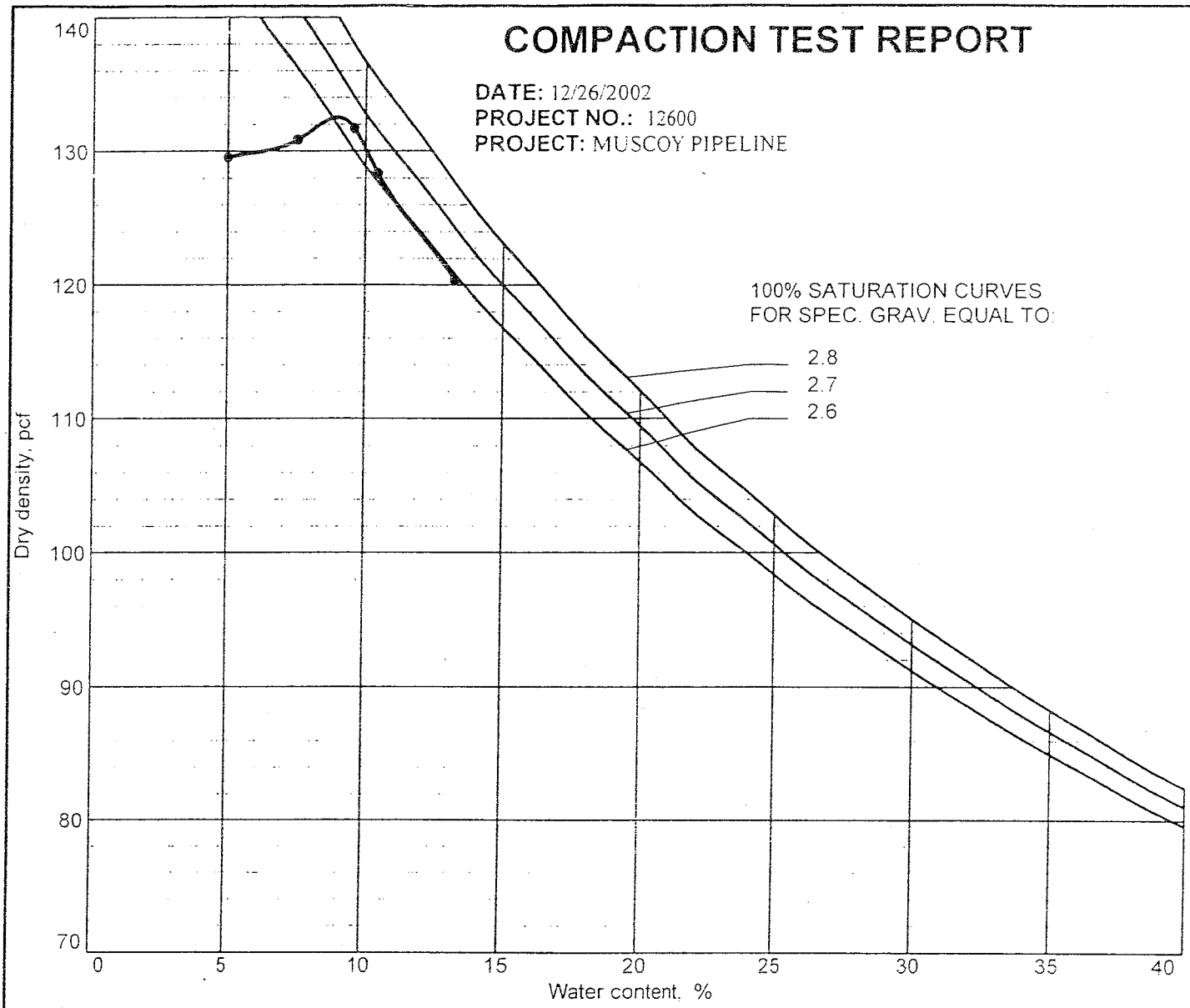
	No.	USCS	LL	PI	NAT. MOIST.	%> No.4	%< No.200	MAX. DRY DEN.	OPT. MOIST.
●	S7224							125 pcf	[illegible] %

Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

DATE: 12/26/2002
PROJECT NO.: 12600
PROJECT: MUSCOY PIPELINE



	No.	LOCATION AND DESCRIPTION	TEST SPECIFICATION
●	S7260	**Location:** STOCKPILE CLASS II BASE	ASTM D 1557-78 Method C Modified

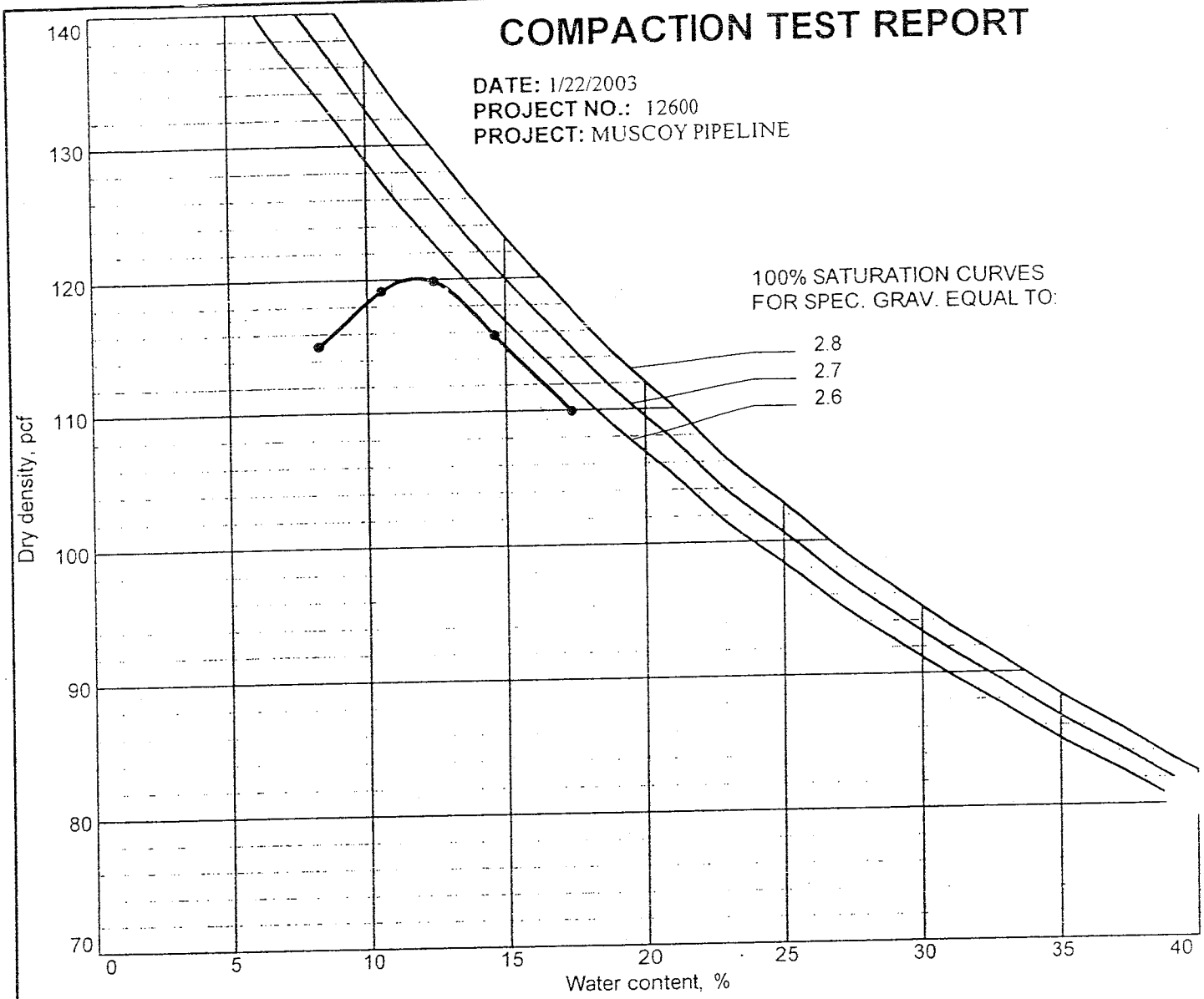
	No.	USCS	LL	PI	NAT. MOIST.	%> 3/4 in.	%< No.200	MAX. DRY DEN.	OPT. MOIST.
●	S7260							133 pcf	9 %

Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

DATE: 1/22/2003
PROJECT NO.: 12600
PROJECT: MUSCOY PIPELINE



	No.	LOCATION AND DESCRIPTION	TEST SPECIFICATION
●		**Location:** H Street Sta. 158+00 Brown Silt W/ Sand and Coarse Gravel	ASTM D 1557-91 Procedure A Modified

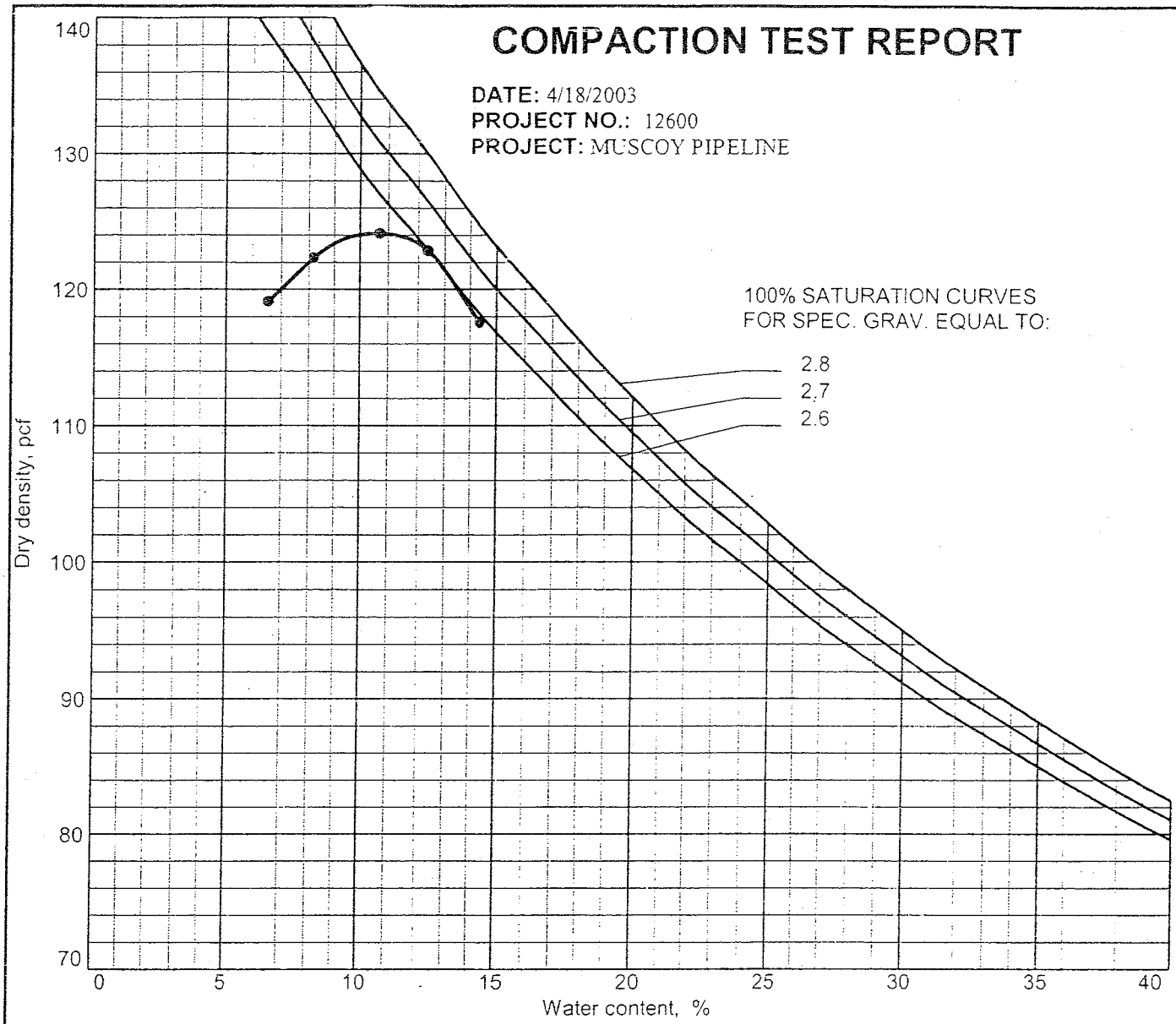
	No.	USCS	LL	PI	NAT. MOIST.	%> No.4	%< No.200	MAX. DRY DEN.	OPT. MOIST.
●								120 pcf	12 %

Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

DATE: 4/18/2003
PROJECT NO.: 12600
PROJECT: MUSCOY PIPELINE



	No.	LOCATION AND DESCRIPTION	TEST SPECIFICATION
●	S7346	**Location:** STATION 13+00 BROWN SILTY SAND	ASTM D 1557-91 Procedure A Modified

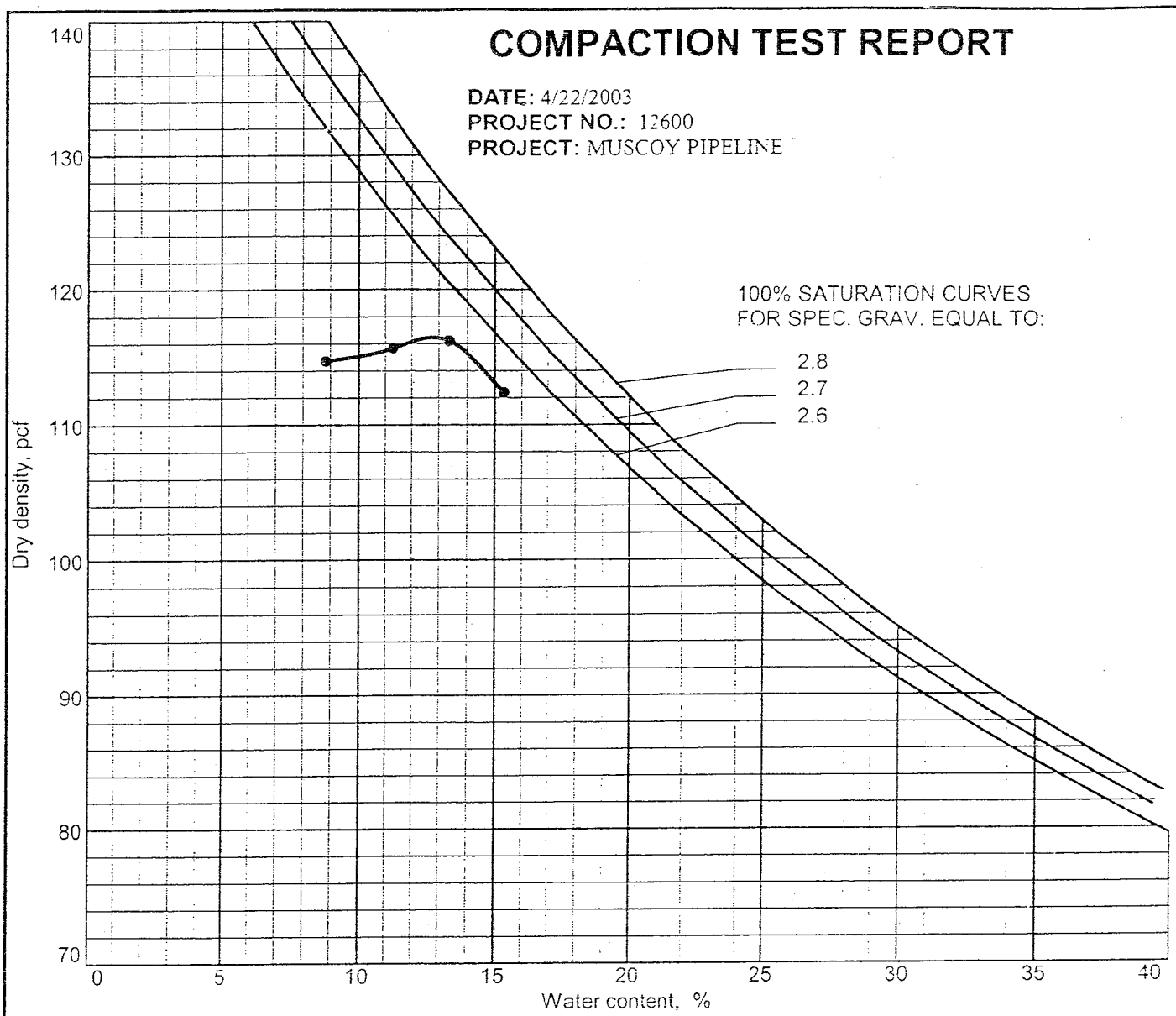
	No.	USCS	LL	PI	NAT. MOIST.	%> No.4	%< No.200	MAX. DRY DEN.	OPT. MOIST.
●	S7346							124 pcf	11 %

Plate

SIGNET TESTING LABS, INC.

COMPACTION TEST REPORT

DATE: 4/22/2003
PROJECT NO.: 12600
PROJECT: MUSCOY PIPELINE



	No.	LOCATION AND DESCRIPTION	TEST SPECIFICATION
●	S7319	**Location:** WEST 10TH STREET DARK BROWN SILT WITH SAND	ASTM D 1557-91 Procedure A Modified

	No.	USCS	LL	PI	NAT. MOIST.	%> No.4	%< No.200	MAX. DRY DEN.	OPT. MOIST.
●	S7319							116 pcf	13 %

Plate

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	8/20/2002
Lab No.:	S7171	Date Tested:	8/26/2002
Source:	Sta. 13+00	Tested By:	A. Perlas
Material Description:	Native Soil	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	1.7	10.1	17	
2	1.7	10.9	16	
3	1.7	11.0	16	
Average			16	

Remarks: _____

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SIGNET TESTING LABORATORIES, INC.

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Vice President

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	8/27/2002
Lab No.:	S7173	Date Tested:	8/28/2002
Source:	V Point	Tested By:	A. Perlas
Material Description:	Sandy Silt	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	1.2	12.1	10	
2	1.1	11.9	10	
3	1.1	12.1	9	
Average			10	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	9/3/2002
Lab No.:	S7179	Date Tested:	9/4/2002
Source:	14th & Davidson	Tested By:	B. Morris
Material Description:	Sandy Silt	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	1.9	8.5	23	
2	1.9	8.6	22	
3	2.0	8.5	24	
Average			23	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	9/11/2002
Lab No.:	S7183	Date Tested:	9/12/2002
Source:	14th Street @ Sta 89+00	Tested By:	B. Morris
Material Description:	Sandy Silt	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	2.6	12.0	22	
2	2.6	12.1	22	
3	2.5	11.5	22	
Average			22	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	9/19/2002
Lab No.:	S7189	Date Tested:	9/20/2002
Source:	14th Street w/side of Pico Street	Tested By:	B. Morris
Material Description:	Sandy Silt	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	12.0	2.4	20	
2	12.3	2.3	19	
3	12.1	2.4	20	
Average			20	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	9/30/2002
Lab No.:	S7197	Date Tested:	10/4/2002
Source:	STA 64+00	Tested By:	A. Perlas
Material Description:	Brown Silty Sand	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	1.7	11.4	15	
2	1.7	11.6	15	
3	1.7	11.6	15	
Average			15	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	11/18/2002
Lab No.:	S7224	Date Tested:	11/22/2002
Source:	STA 31+00	Tested By:	A. Spalla
Material Description:	Light Brown Sand w/ Silt	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	1.6	5.2	31	
2	1.5	4.9	31	
3	1.6	5.0	31	
Average			31	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	12/3/2002
Lab No.:	S7234	Date Tested:	12/6/2002
Source:	STA 17+00	Tested By:	A. Spalla
Material Description:	Light Brown Sand w/ Silt	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	3.3	5.5	60	
2	3.2	5.6	58	
3	3.3	5.7	58	
Average			59	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	12/24/2002
Lab No.:	S7260	Date Tested:	12/27/2002
Source:	Stockpile	Tested By:	A. Perlas
Material Description:	Class II Aggregate Base	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	2.4	6.7	36	
2	2.7	6.5	42	
3	2.7	6.8	40	
Average			39	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Sampled:	1/14/2003
Lab No.:	S7282	Date Tested:	1/15/2003
Source:	H Street Sta. 158+00	Tested By:	A. Spalla
Material Description:	Brown Silty W/ Sand & Gravel	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	0.6	12.8	5	
2	0.6	12.5	5	
3	0.7	12.5	6	
Average			5	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Received:	2/19/2003
Lab No.:	S7319	Date Tested:	2/21/2003
Source:	West 10th Street	Tested By:	A. Spalla
Material Description:	Daerk Brown Silt w/ Sand	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	1.4	8.8	16	
2	1.6	8.6	19	
3	1.3	8.7	15	
Average			17	

Remarks: _____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Received:	3/3/2003
Lab No.:	S7323	Date Tested:	3/4/2003
Source:	N. Perris, Sta. 116+50	Tested By:	B. Morris
Material Description:	Brown Silty Sand	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	0.8	13.8	6	
2	0.9	13.7	7	
3	0.8	13.5	6	
Average			7	

Remarks: _____

_____

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SAND EQUIVALENT
(CT 217) / (ASTM D2419)

Client	URS	Project No.:	12600
Poject:	Muscoy Pipeline	Date Received:	4/16/2003
Lab No.:	S7346	Date Tested:	4/17/2003
Source:	Sta. 13+00	Tested By:	A. Perlas
Material Description:	Brown Silty Sand	Reviewed By:	P. DeSilva

Specimen No.	Sand Reading (A)	Clay Reading (B)	Sand Equivalence (A)/(B)x100	Specification
1	2.1	11.1	19	
2	2.0	11.1	18	
3	2.2	11.1	20	
Average			19	

Remarks: _____

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SIEVE ANALYSIS

(ASTM C136)(CT 202)

Client:	URS	Project No.:	12600
Project:	Muscoy Pipeline	Date Sampled:	12/24/2002
Lab No.:	S7260	Date Tested:	12/27/2002
Sample ID:	Stockpile	Tested By:	A. Perlas
Material Description:	Class II Aggregate Base	Reviewed By:	P. DeSilva

Wet Weight: Dry Weight: 27.60 g

Sieve Size	Weight Retained Gramms	Percent Retained %	Percent Passing %	Specification
3" (75mm)	0.00	0.0	100	
1 1/2" (37.5mm)	0.00	0.0	100	
1" (25mm)	0.00	0.0	100	
3/4" (19mm)	0.22	0.8	99	
1/2" (12.5mm)	3.68	13.3	87	
3/8" (9.5mm)	6.96	25.2	75	
#4 (4.75mm)	13.60	49.3	51	

Wet Weight: Dry Weight: 469.7 g

Sieve Size	Weight Retained Gramms	Percent Retained %	Percent Passing %	Specification
#8 (2.36mm)	97.3	20.7	40	
#16 (1.18mm)	157.1	33.4	34	
#30 (600um)	208.6	44.4	28	
#50 (300um)	264.6	56.3	22	
#100 (150um)	330.1	70.3	15	
#200 (75um)	380.8	81.1	10	

Remarks:

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