Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
211426	**HB-AUB-101/4D**	**GEOTECHNICAL (DISTURBED)**	**10/1/2008**	**10/17/2008**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: **25+56** Offset, ft: **40.2** **RT** Dbfg, ft: **14.0-16.0**

PIN: **016637.00** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 88)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	**100.0**
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	**99.8**
[0.0220 mm]	**98.4**
[0.0144 mm]	**94.8**
[0.0090 mm]	**84.3**
[0.0066 mm]	**79.0**
[0.0050 mm]	**68.5**
[0.0026 mm]	**52.7**
[0.0012 mm]	**36.9**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
37
Plastic Limit (T 90), %
21
Plasticity Index (T 90), %
16
Specific Gravity, Corrected to 20°C (T 100)
2.84
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
36.9

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

An assumed temperature of 21 °C was used for the hydrometer analysis and soil specific gravity tests. Thermometers are away for mandatory calibration at this time.

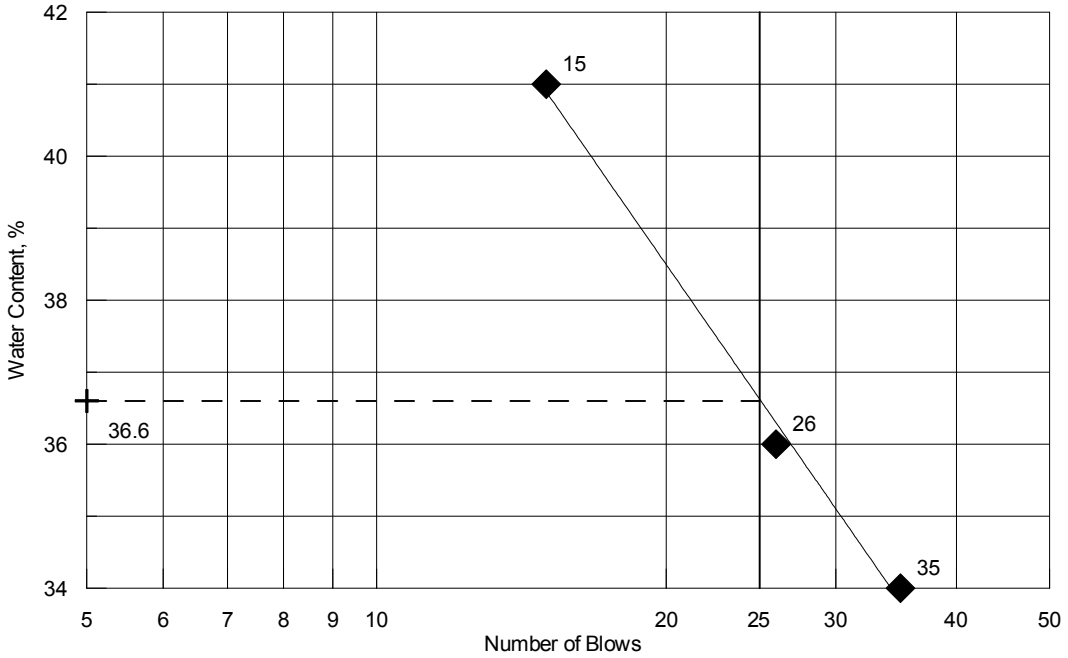
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/21/2008**

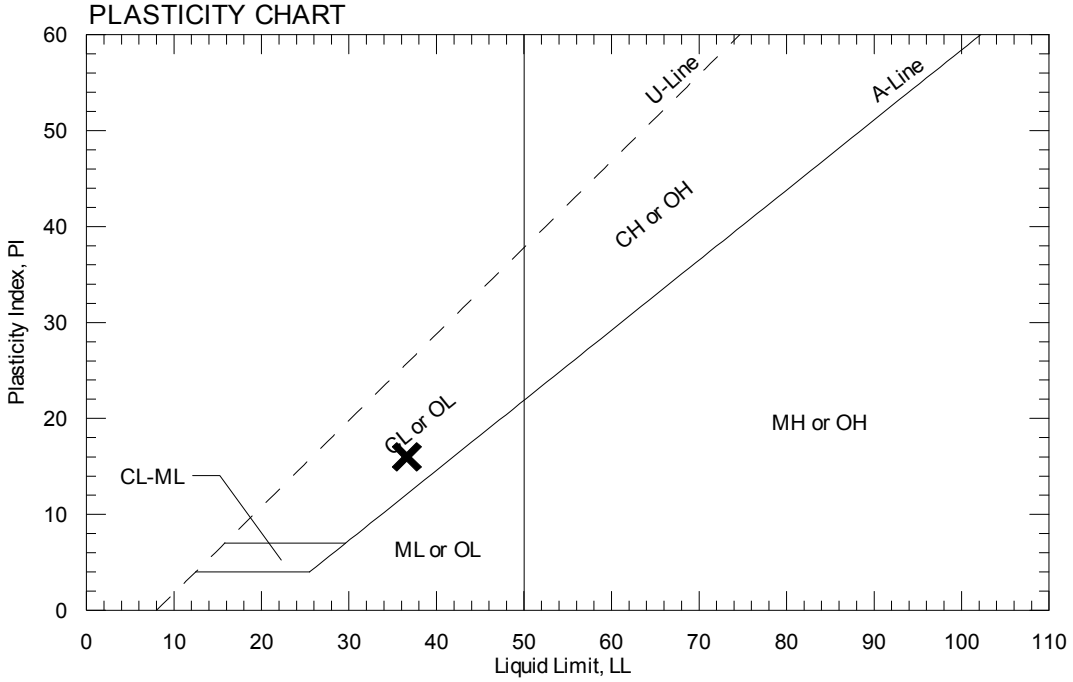
Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	211426
PIN	016637.00	Water Content, %	36.9
Sampled	10/1/2008	Plastic Limit	21
Boring No./Sample No.	HB-AUB-101/4D	Liquid Limit	37
Station	25+56	Plasticity Index	16
Depth	14.0-16.0	Tested By	BBURR

FLOW CURVE



PLASTICITY CHART



Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
211427	**HB-AUB-101/5D**	**GEOTECHNICAL (DISTURBED)**	**10/1/2008**	**10/17/2008**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: **25+56** Offset, ft: **40.2 RT** Dbfg, ft: **19.0-21.0**

PIN: **016637.00** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 88)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	**100.0**
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	**99.9**
[0.0255 mm]	**71.6**
[0.0167 mm]	**66.8**
[0.0101 mm]	**59.6**
[0.0075 mm]	**52.5**
[0.0055 mm]	**45.3**
[0.0029 mm]	**31.0**
[0.0013 mm]	**19.1**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
27
Plastic Limit (T 90), %
22
Plasticity Index (T 90), %
5
Specific Gravity, Corrected to 20°C (T 100)
2.77
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
34.1

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

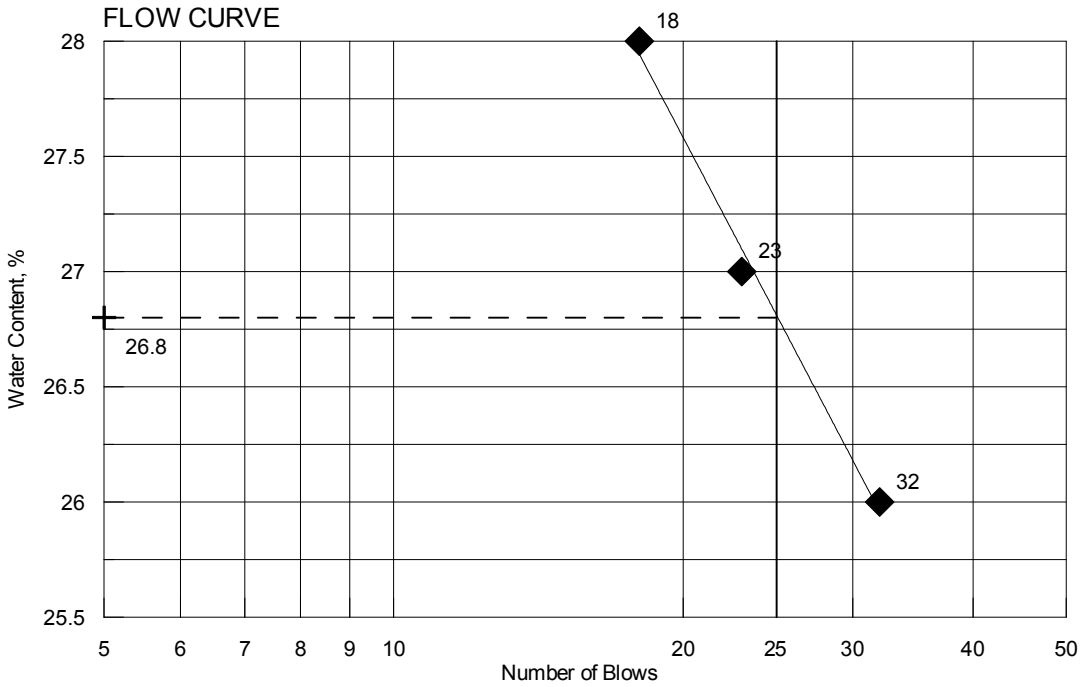
An assumed temperature of 21 °C was used for the hydrometer analysis and soil specific gravity tests. Thermometers are away for mandatory calibration at this time.

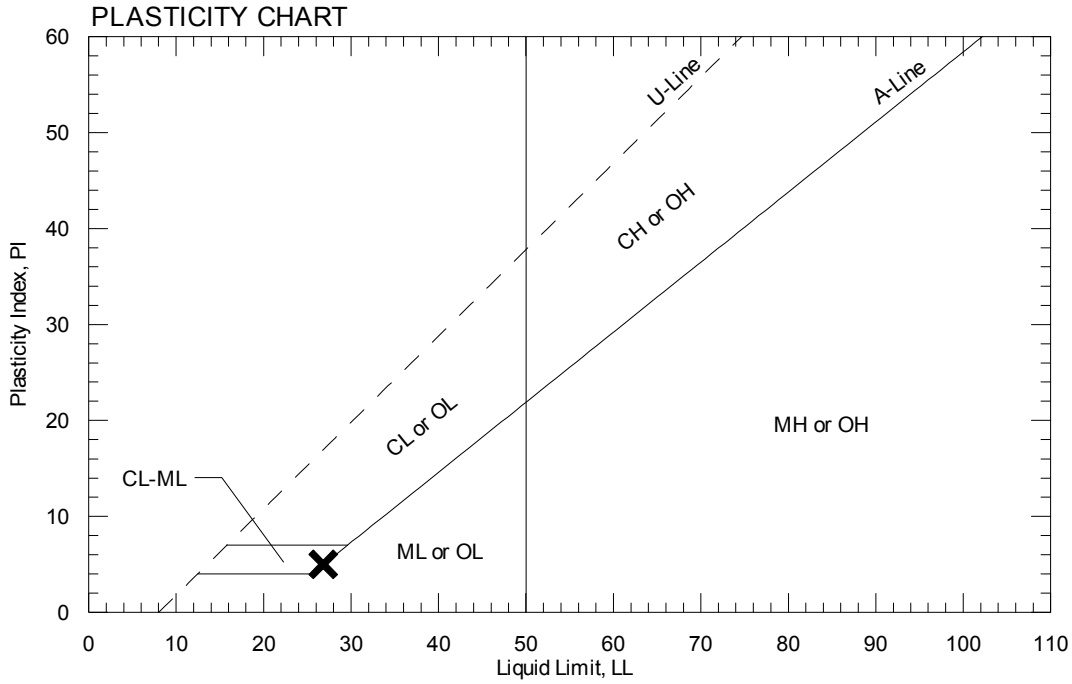
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/21/2008**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	211427
PIN	016637.00	Water Content, %	34.1
Sampled	10/1/2008	Plastic Limit	22
Boring No./Sample No.	HB-AUB-101/5D	Liquid Limit	27
Station	25+56	Plasticity Index	5
Depth	19.0-21.0	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
211428	**HB-AUB-101/6D**	**GEOTECHNICAL (DISTURBED)**	**10/1/2008**	**10/17/2008**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: **25+56** Offset, ft: **40.2 RT** Dbfg, ft: **24.0-26.0**

PIN: **016637.00** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 88)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	**100.0**
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	**99.9**
[0.0224 mm]	**91.6**
[0.0156 mm]	**79.2**
[0.0097 mm]	**69.3**
[0.0072 mm]	**59.4**
[0.0053 mm]	**54.5**
[0.0027 mm]	**42.1**
[0.0012 mm]	**29.7**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
27
Plastic Limit (T 90), %
22
Plasticity Index (T 90), %
5
Specific Gravity, Corrected to 20°C (T 100)
2.78
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
30.8

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

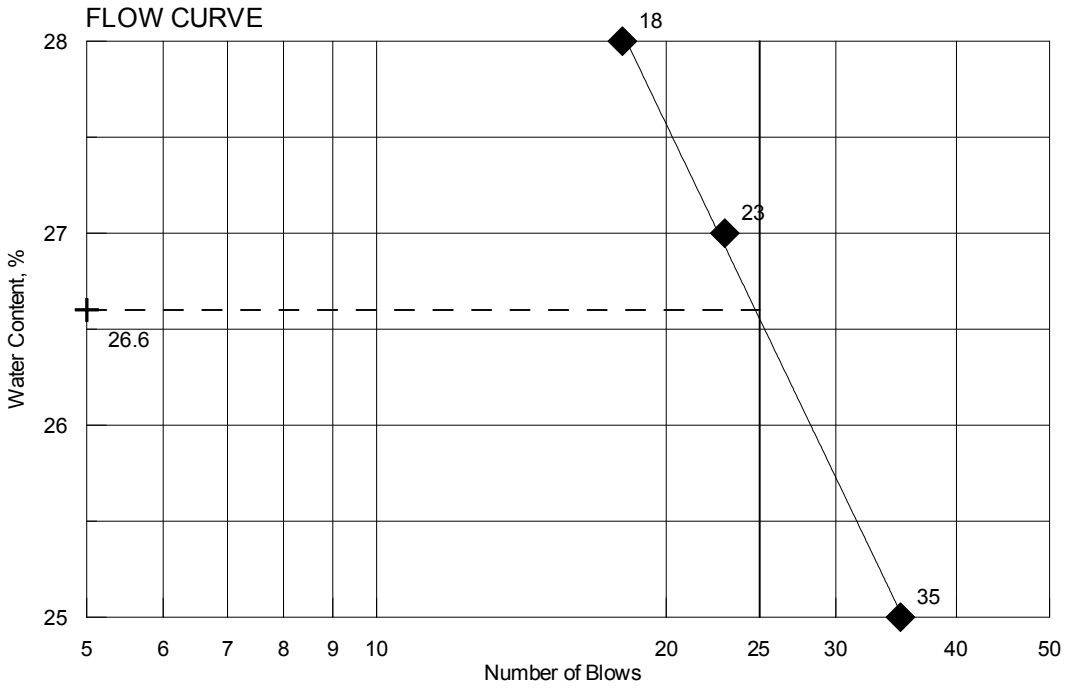
An assumed temperature of 21 °C was used for the hydrometer analysis and soil specific gravity tests. Thermometers are away for mandatory calibration at this time.

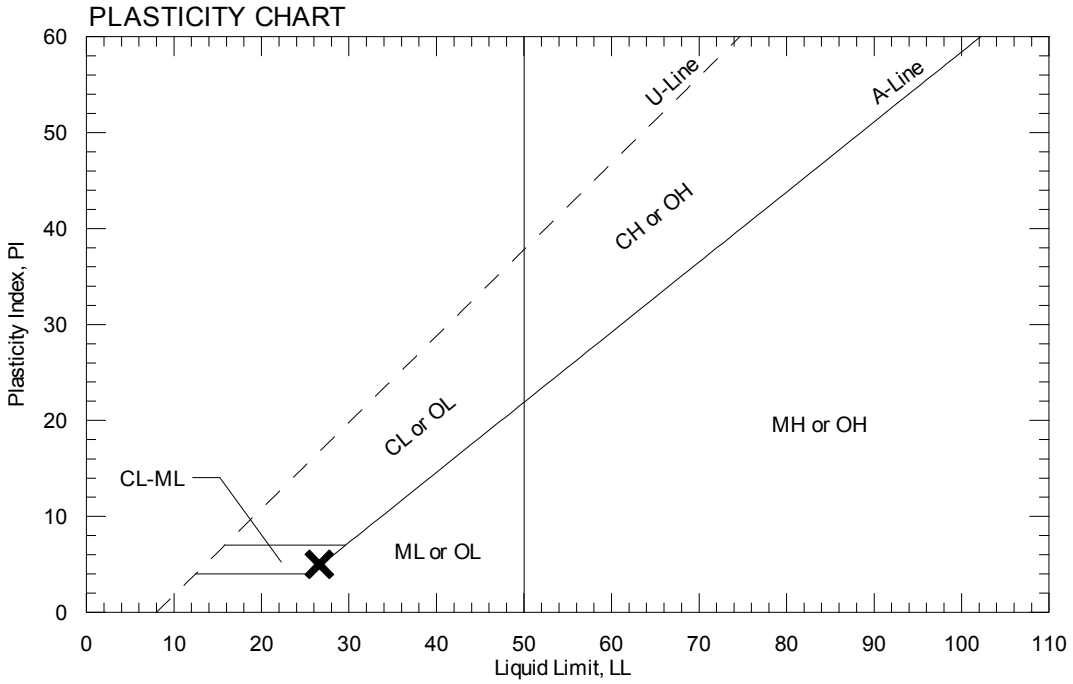
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/21/2008**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	211428
PIN	016637.00	Water Content, %	30.8
Sampled	10/1/2008	Plastic Limit	22
Boring No./Sample No.	HB-AUB-101/6D	Liquid Limit	27
Station	25+56	Plasticity Index	5
Depth	24.0-26.0	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
211429	**HB-AUB-101/7D**	**GEOTECHNICAL (DISTURBED)**	**10/1/2008**	**10/17/2008**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: **25+56** Offset, ft: **40.2** **RT** Dbfg, ft: **29.0-31.0**

PIN: **016637.00** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 88)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	**100.0**
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	**99.9**
[0.0220 mm]	**90.6**
[0.0153 mm]	**78.7**
[0.0097 mm]	**66.8**
[0.0068 mm]	**66.8**
[0.0053 mm]	**52.5**
[0.0028 mm]	**38.2**
[0.0012 mm]	**28.6**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
34
Plastic Limit (T 90), %
23
Plasticity Index (T 90), %
11
Specific Gravity, Corrected to 20°C (T 100)
2.82
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
31.3

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

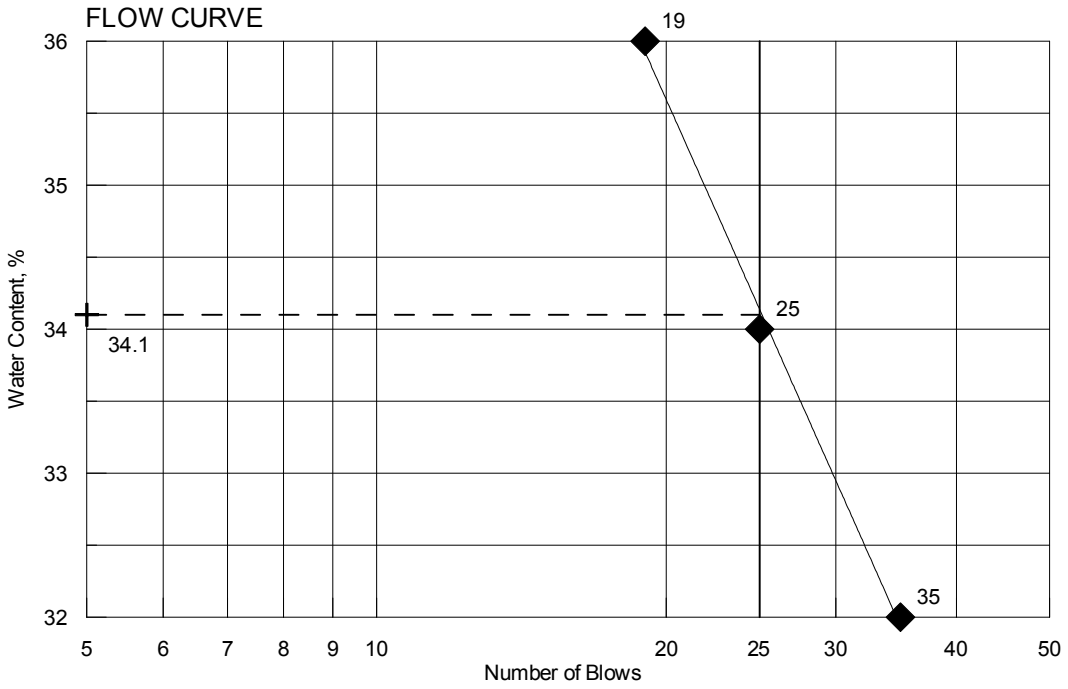
An assumed temperature of 21 °C was used for the hydrometer analysis and soil specific gravity tests. Thermometers are away for mandatory calibration at this time.

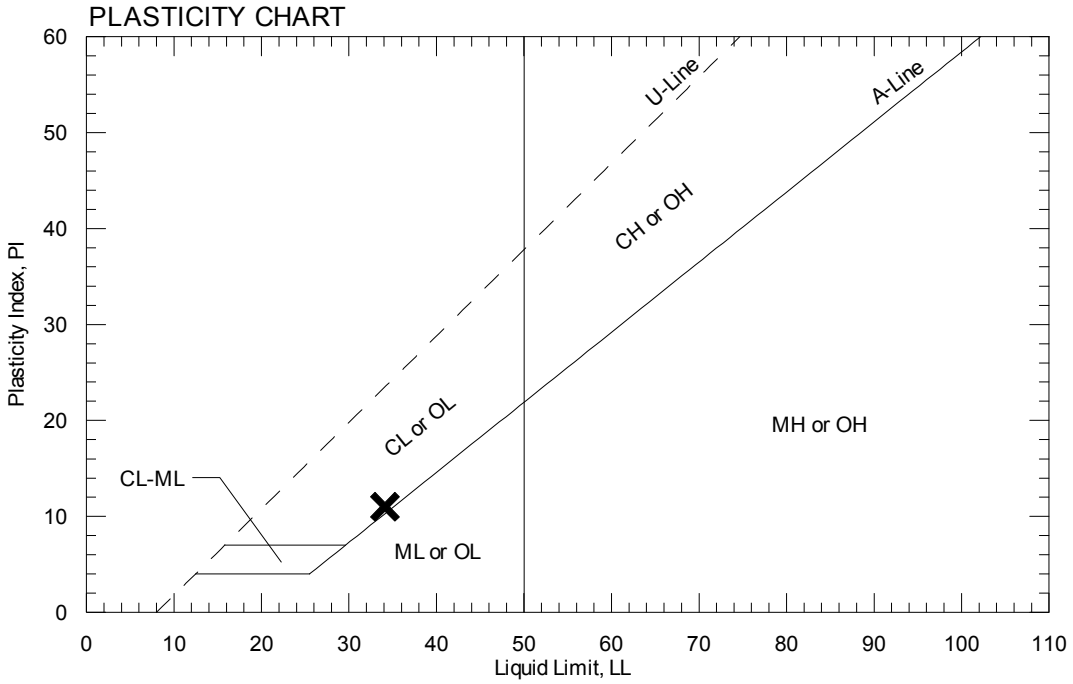
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/21/2008**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	211429
PIN	016637.00	Water Content, %	31.3
Sampled	10/1/2008	Plastic Limit	23
Boring No./Sample No.	HB-AUB-101/7D	Liquid Limit	34
Station	25+56	Plasticity Index	11
Depth	29.0-31.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
211430	**HB-AUB-101/9D**	**GEOTECHNICAL (DISTURBED)**	**10/1/2008**	**10/17/2008**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: **25+56** Offset, ft: **40.2 RT** Dbfg, ft: **39.0-41.0**

PIN: **016637.00** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 88)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	**100.0**
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	**99.9**
[0.0242 mm]	**79.0**
[0.0161 mm]	**71.9**
[0.0099 mm]	**62.3**
[0.0072 mm]	**57.5**
[0.0053 mm]	**50.3**
[0.0028 mm]	**35.9**
[0.0012 mm]	**24.0**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
32
Plastic Limit (T 90), %
22
Plasticity Index (T 90), %
10
Specific Gravity, Corrected to 20°C (T 100)
2.80
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
36.3

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

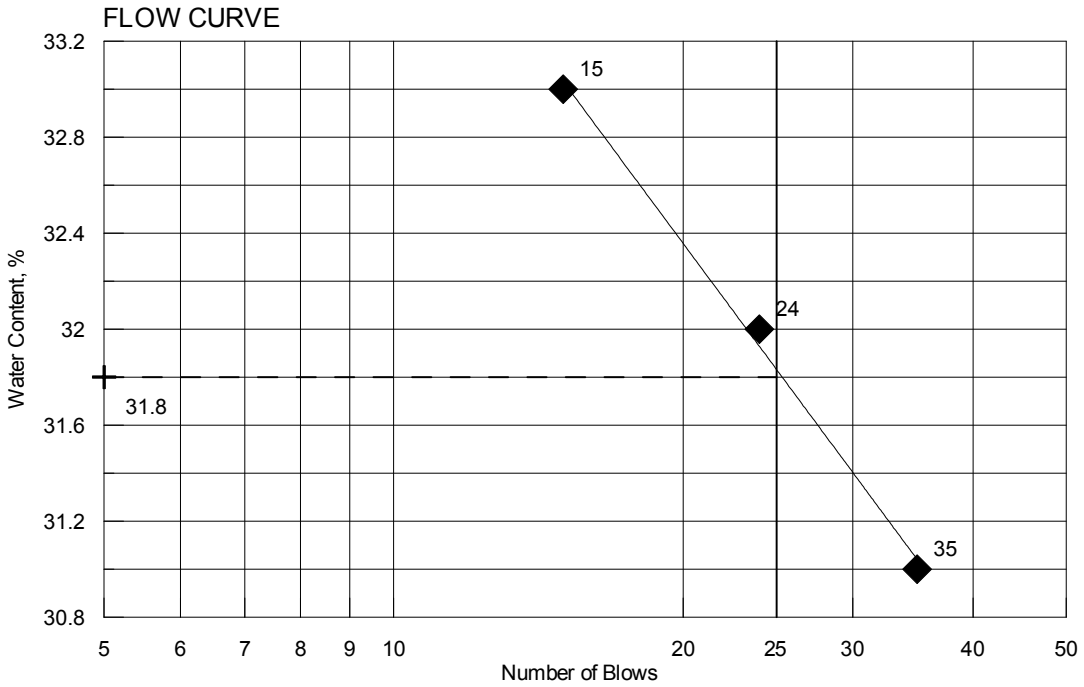
An assumed temperature of 21 °C was used for the hydrometer analysis and soil specific gravity tests. Thermometers are away for mandatory calibration at this time.

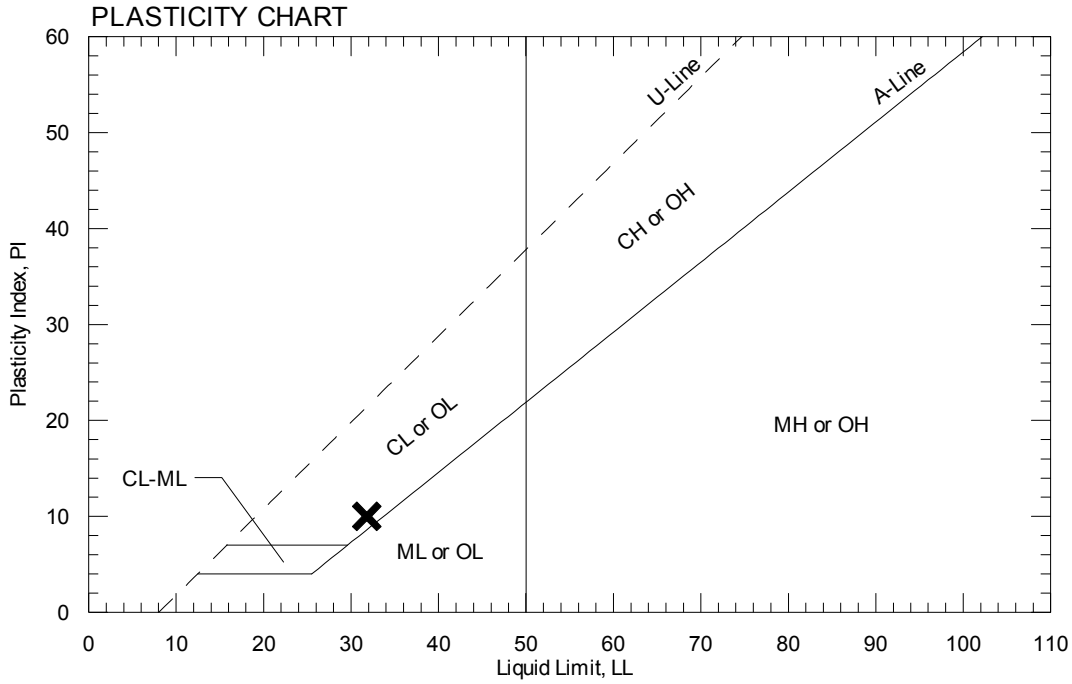
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/21/2008**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	211430
PIN	016637.00	Water Content, %	36.3
Sampled	10/1/2008	Plastic Limit	22
Boring No./Sample No.	HB-AUB-101/9D	Liquid Limit	32
Station	25+56	Plasticity Index	10
Depth	39.0-41.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
211431	**HB-AUB-102/6D**	**GEOTECHNICAL (DISTURBED)**	**10/1/2008**	**10/17/2008**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: **24+15.4** Offset, ft: **32.9** **RT** Dbfg, ft: **30.0-32.0**

PIN: **016637.00** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 88)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	**100.0**
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	**99.9**
[0.0238 mm]	**93.1**
[0.0161 mm]	**82.2**
[0.0102 mm]	**65.7**
[0.0075 mm]	**57.5**
[0.0055 mm]	**49.3**
[0.0028 mm]	**38.3**
[0.0012 mm]	**30.1**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
27
Plastic Limit (T 90), %
22
Plasticity Index (T 90), %
5
Specific Gravity, Corrected to 20°C (T 100)
2.79
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
22.3

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

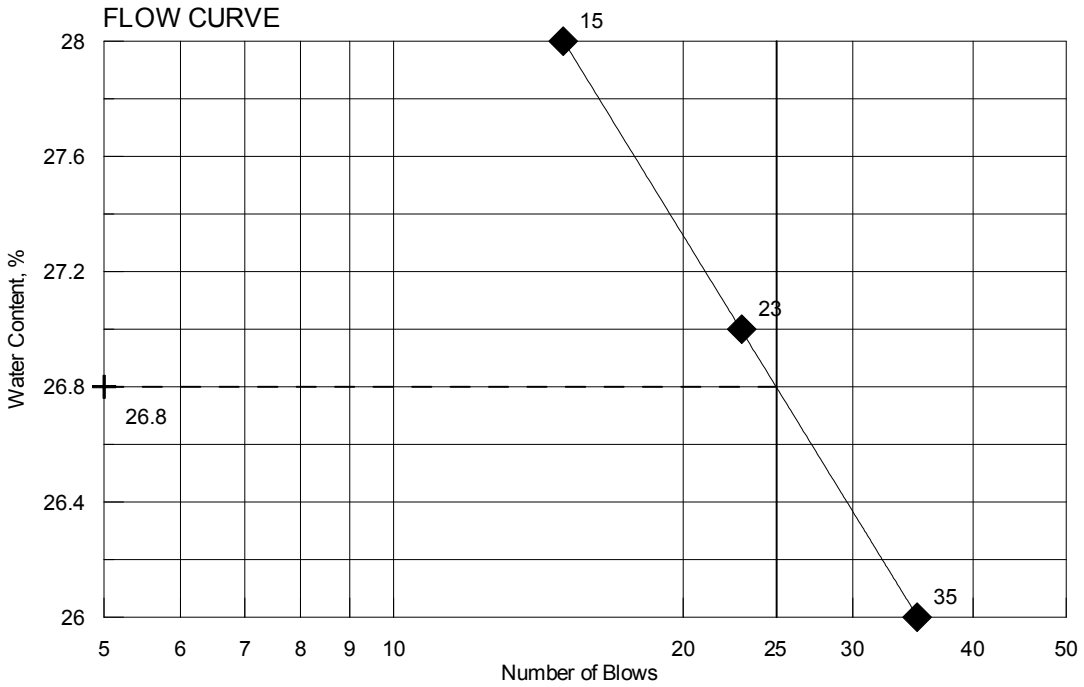
An assumed temperature of 21 °C was used for the hydrometer analysis and soil specific gravity tests. Thermometers are away for mandatory calibration at this time.

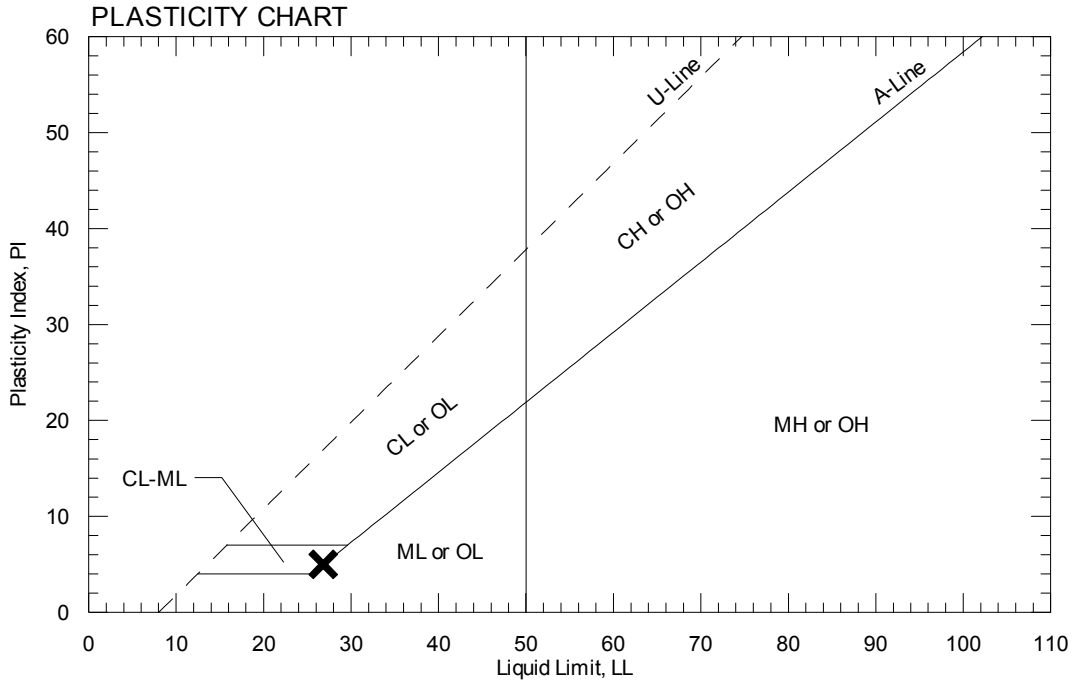
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/21/2008**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	211431
PIN	016637.00	Water Content, %	22.3
Sampled	10/1/2008	Plastic Limit	22
Boring No./Sample No.	HB-AUB-102/6D	Liquid Limit	27
Station	24+15.4	Plasticity Index	5
Depth	30.0-32.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
211432	**HB-AUB-102/8D**	**GEOTECHNICAL (DISTURBED)**	**10/1/2008**	**10/17/2008**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: **24+15.4** Offset, ft: **32.9** **RT** Dbfg, ft: **40.0-42.0**

PIN: **016637.00** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 88)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	**100.0**
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	**99.8**
[0.0230 mm]	**98.7**
[0.0153 mm]	**93.2**
[0.0093 mm]	**85.0**
[0.0069 mm]	**76.7**
[0.0051 mm]	**68.5**
[0.0027 mm]	**54.8**
[0.0012 mm]	**43.9**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
30
Plastic Limit (T 90), %
21
Plasticity Index (T 90), %
9
Specific Gravity, Corrected to 20°C (T 100)
2.75
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
35.5

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

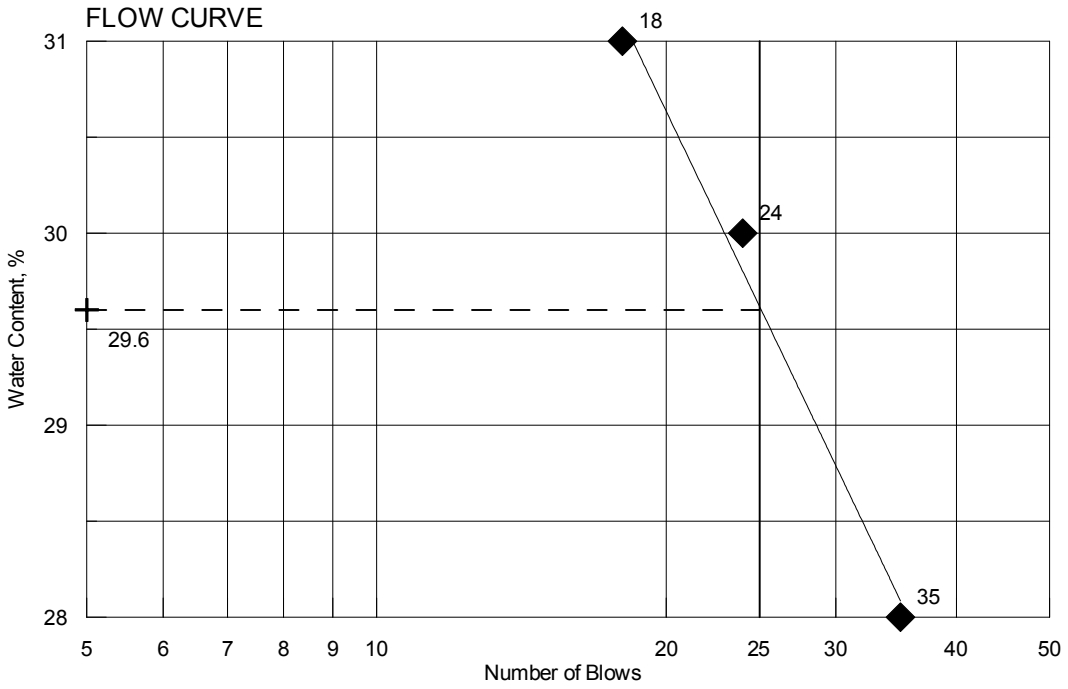
An assumed temperature of 21 °C was used for the hydrometer analysis and soil specific gravity tests. Thermometers are away for mandatory calibration at this time.

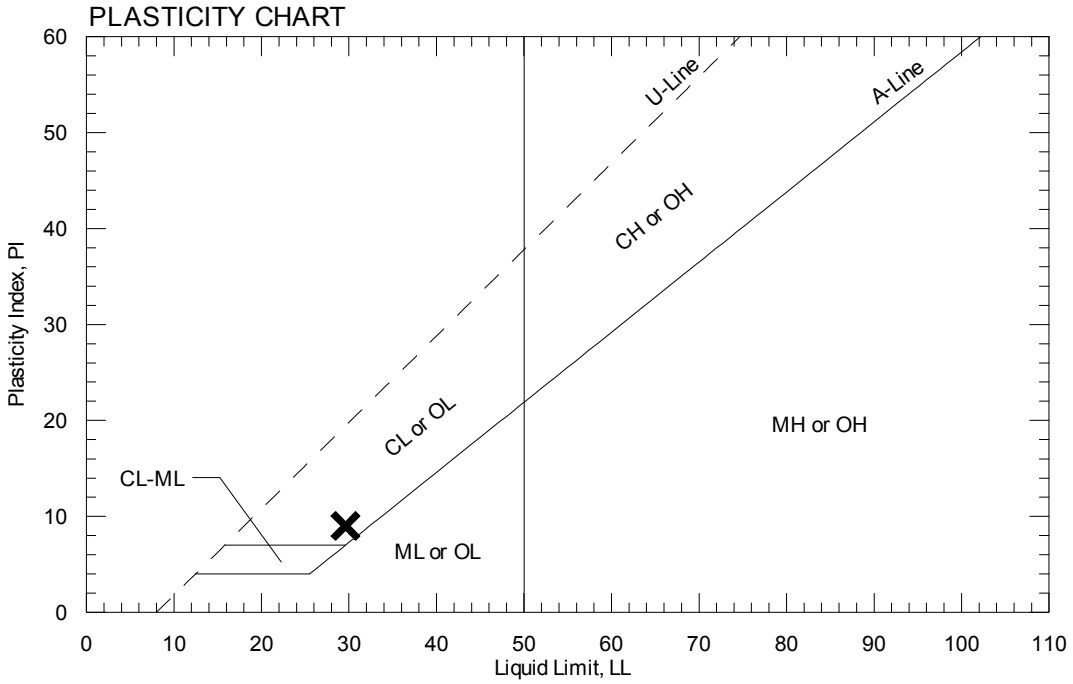
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/21/2008**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	211432
PIN	016637.00	Water Content, %	35.5
Sampled	10/1/2008	Plastic Limit	21
Boring No./Sample No.	HB-AUB-102/8D	Liquid Limit	30
Station	24+15.4	Plasticity Index	9
Depth	40.0-42.0	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
205822	**HB-AUB-301/10D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **49.5-51.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
26
Plastic Limit (T 90), %
20
Plasticity Index (T 90), %
6
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
32.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

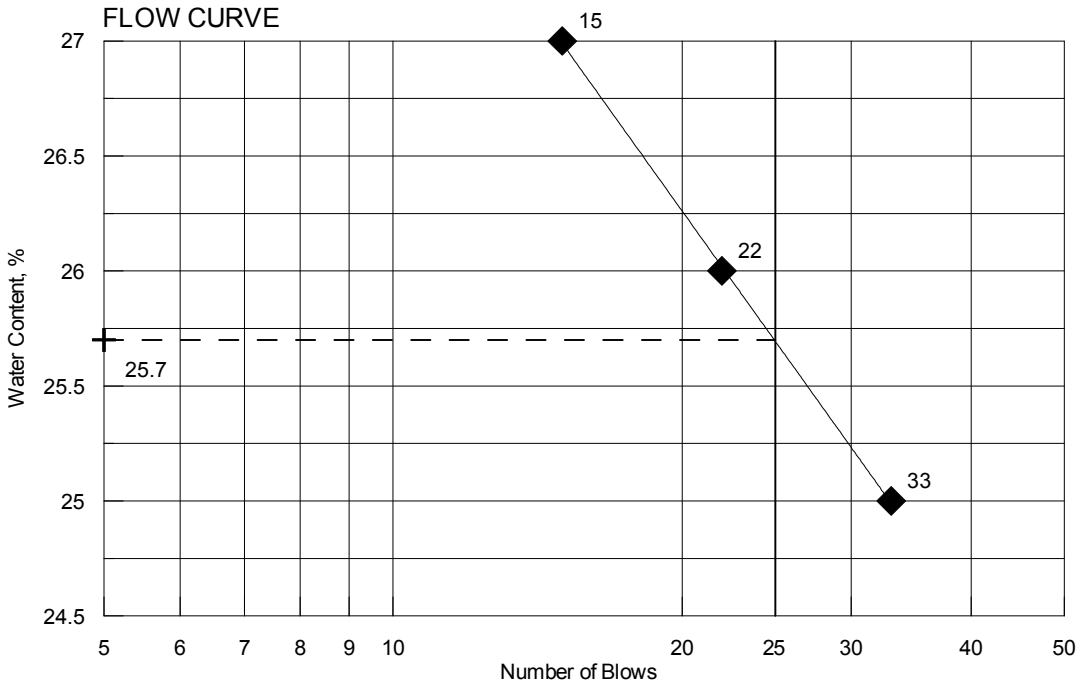
Comments:

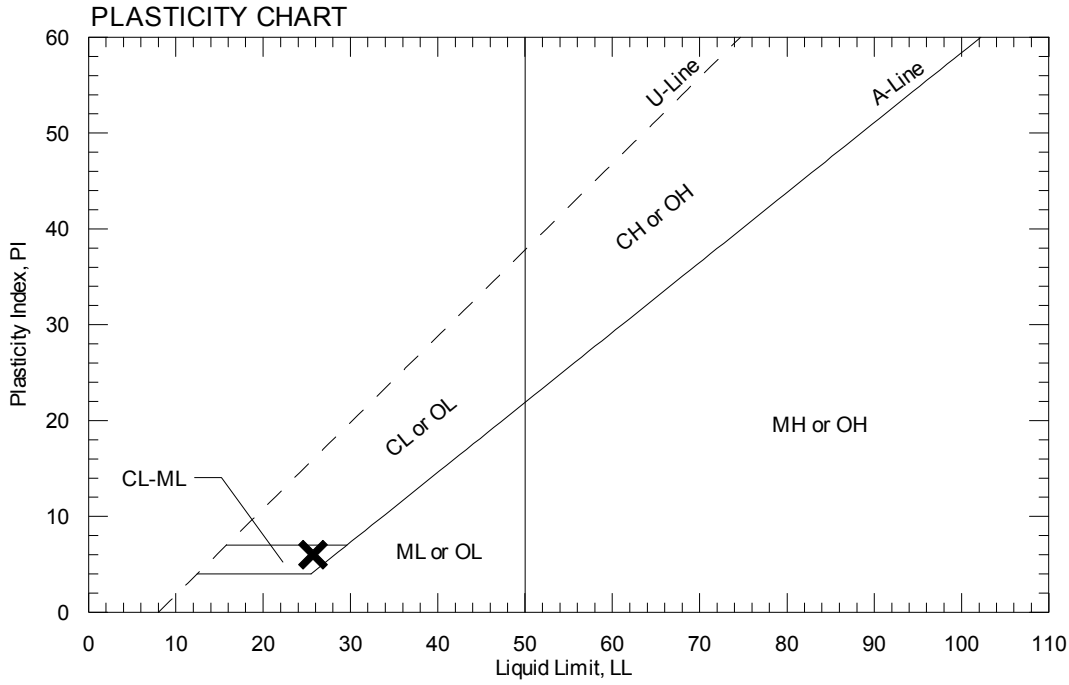
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	205822
PIN	016637.20	Water Content, %	32.4
Sampled	9/8/2010	Plastic Limit	20
Boring No./Sample No.	HB-AUB-301/10D	Liquid Limit	26
Station		Plasticity Index	6
Depth	49.5-51.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
205820	**HB-AUB-301/11D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **54.5-56.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
36
Plastic Limit (T 90), %
24
Plasticity Index (T 90), %
12
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
31.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

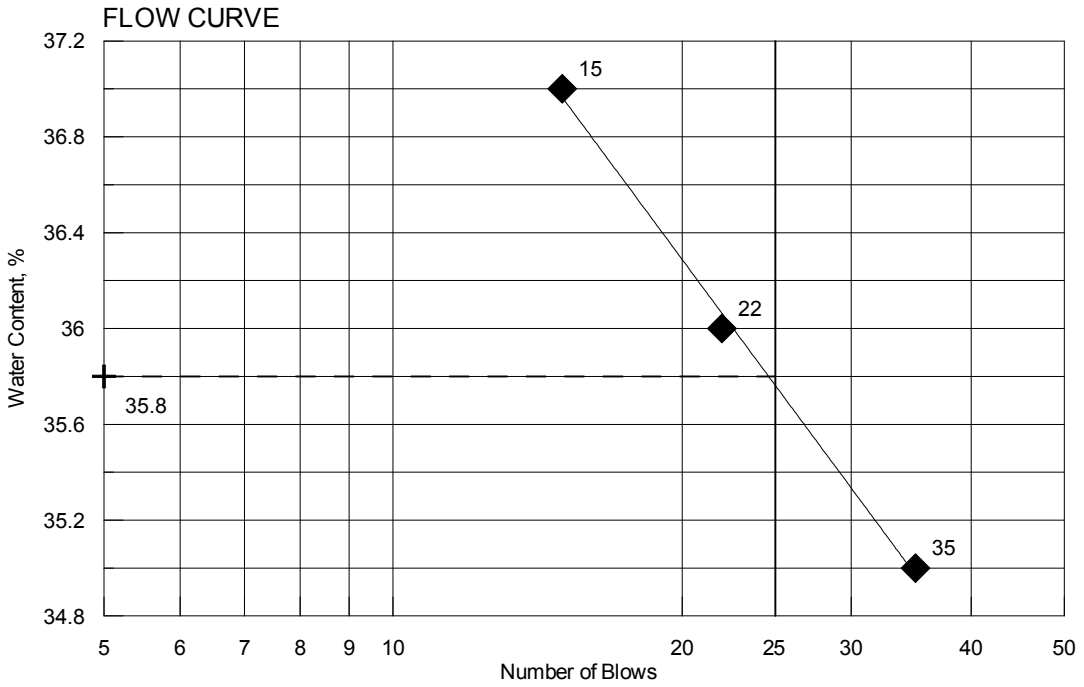
Comments:

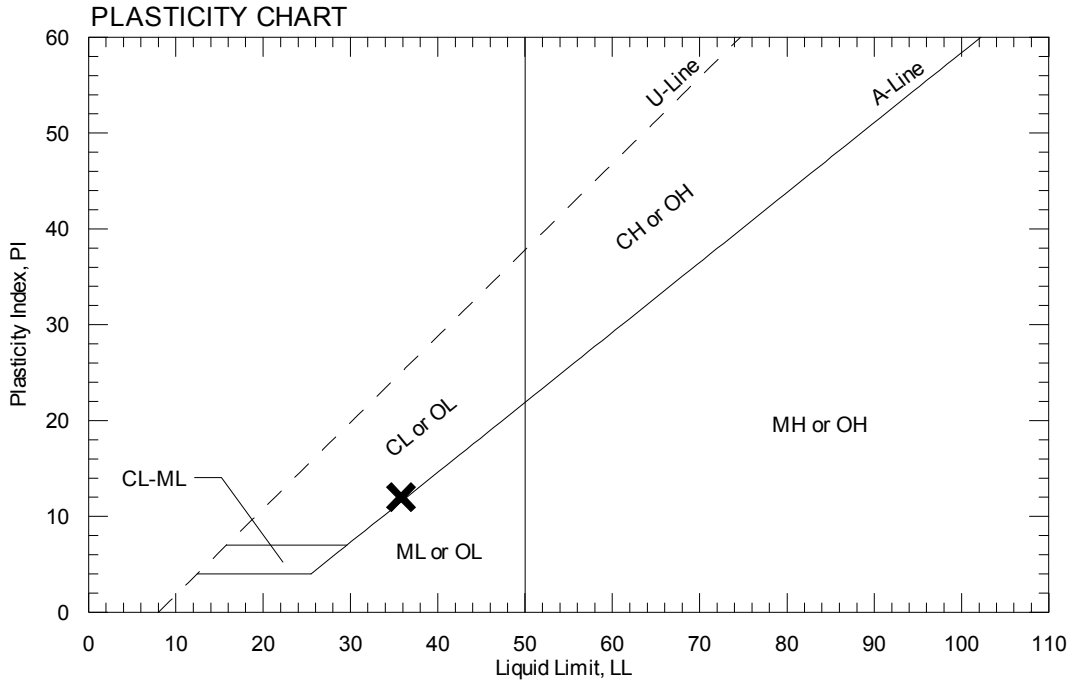
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	205820
PIN	016637.20	Water Content, %	31.4
Sampled	9/8/2010	Plastic Limit	24
Boring No./Sample No.	HB-AUB-301/11D	Liquid Limit	36
Station		Plasticity Index	12
Depth	54.5-56.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
239850	**HB-AUB-301/12D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **64.5-66.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
35
Plastic Limit (T 90), %
21
Plasticity Index (T 90), %
14
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
19.2

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

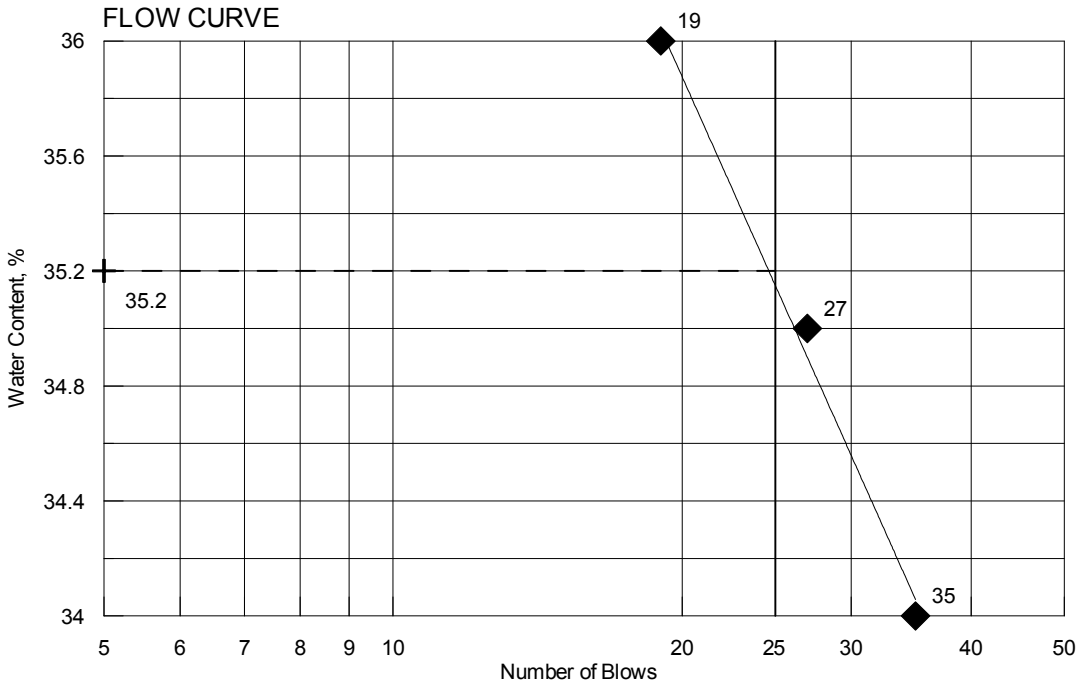
Comments:

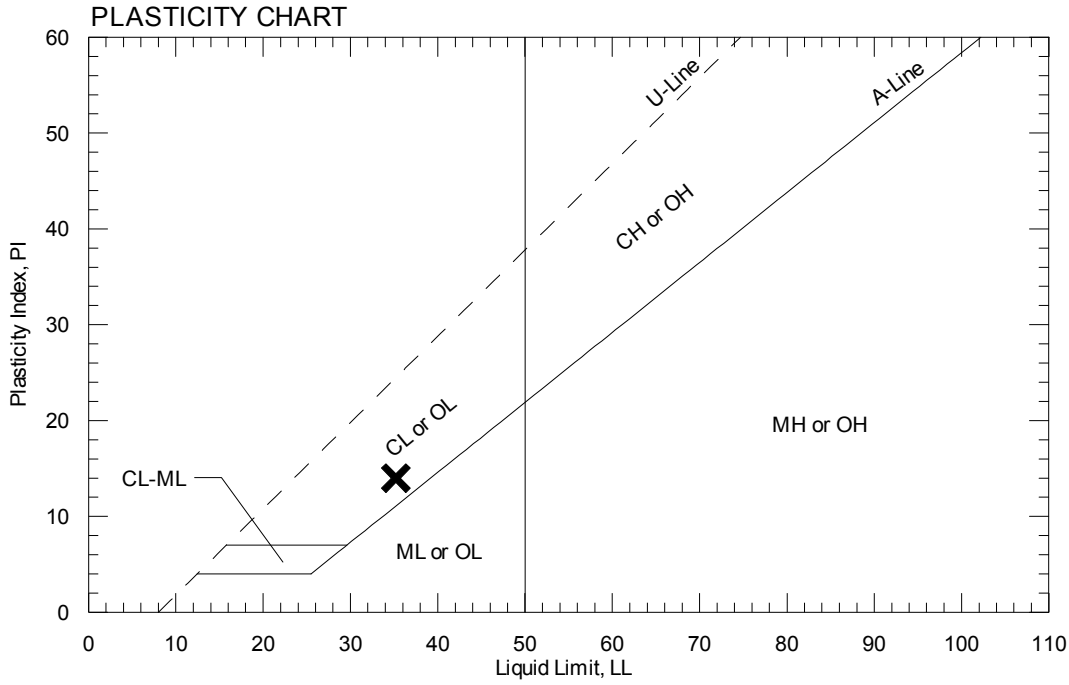
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	239850
PIN	016637.20	Water Content, %	19.2
Sampled	9/8/2010	Plastic Limit	21
Boring No./Sample No.	HB-AUB-301/12D	Liquid Limit	35
Station		Plasticity Index	14
Depth	64.5-66.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
212172	**HB-AUB-301/13D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **64.5-66.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
32
Plastic Limit (T 90), %
20
Plasticity Index (T 90), %
12
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
23.8

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

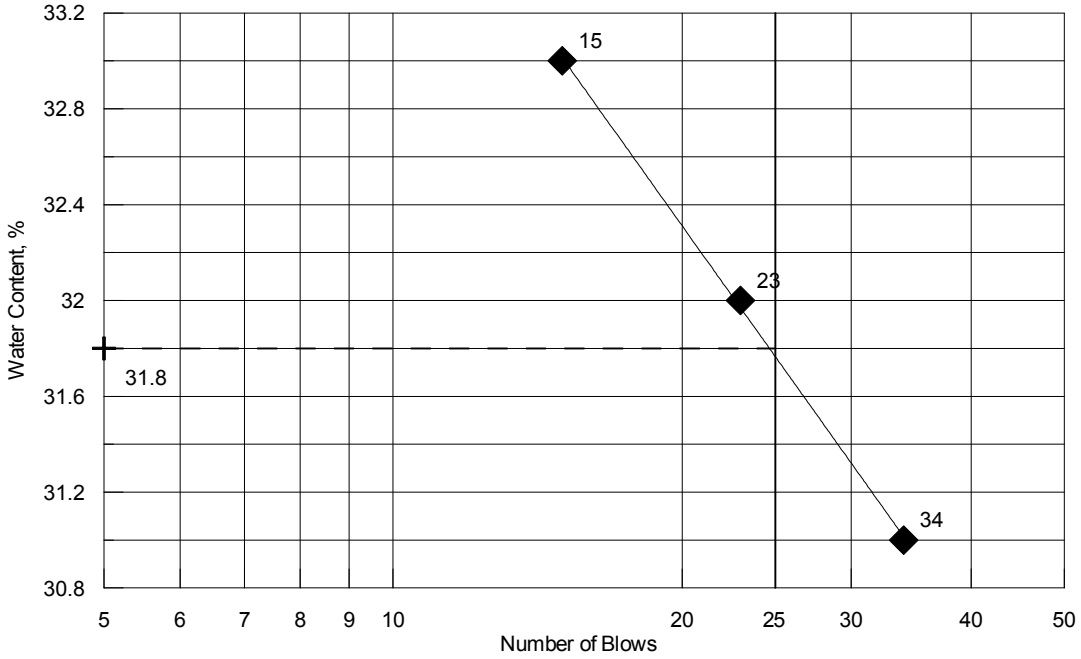
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

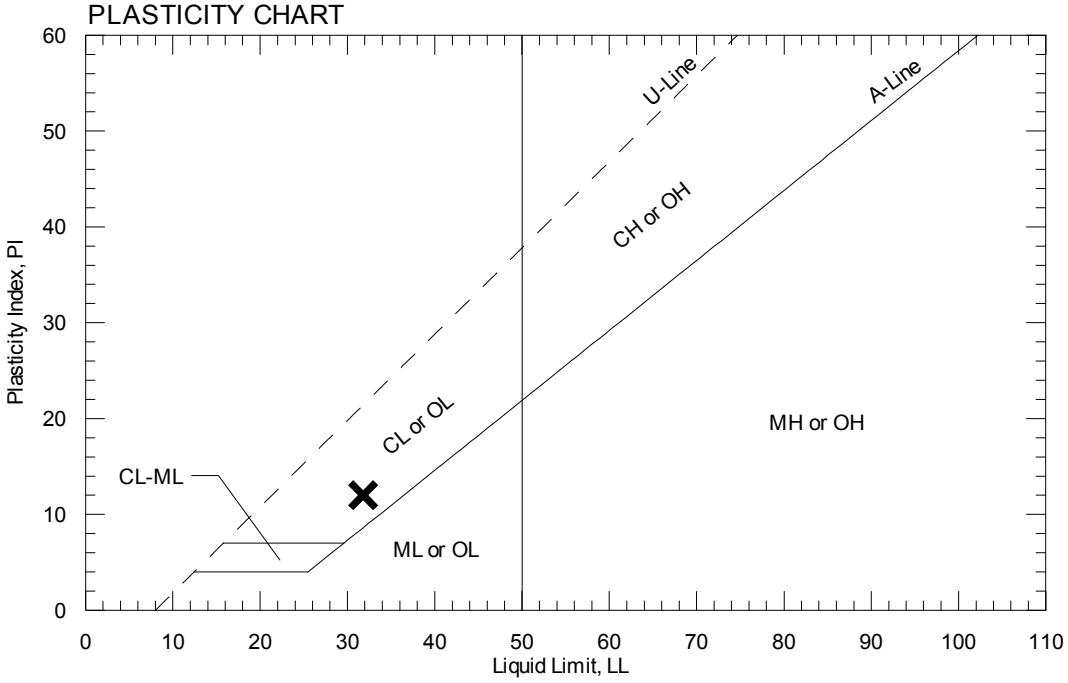
Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	212172
PIN	016637.20	Water Content, %	23.8
Sampled	9/8/2010	Plastic Limit	20
Boring No./Sample No.	HB-AUB-301/13D	Liquid Limit	32
Station		Plasticity Index	12
Depth	64.5-66.5	Tested By	BBURR

FLOW CURVE



PLASTICITY CHART



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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
236944	**HB-AUB-301/14D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **69.5-71.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
29
Plastic Limit (T 90), %
19
Plasticity Index (T 90), %
10
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
31.8

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

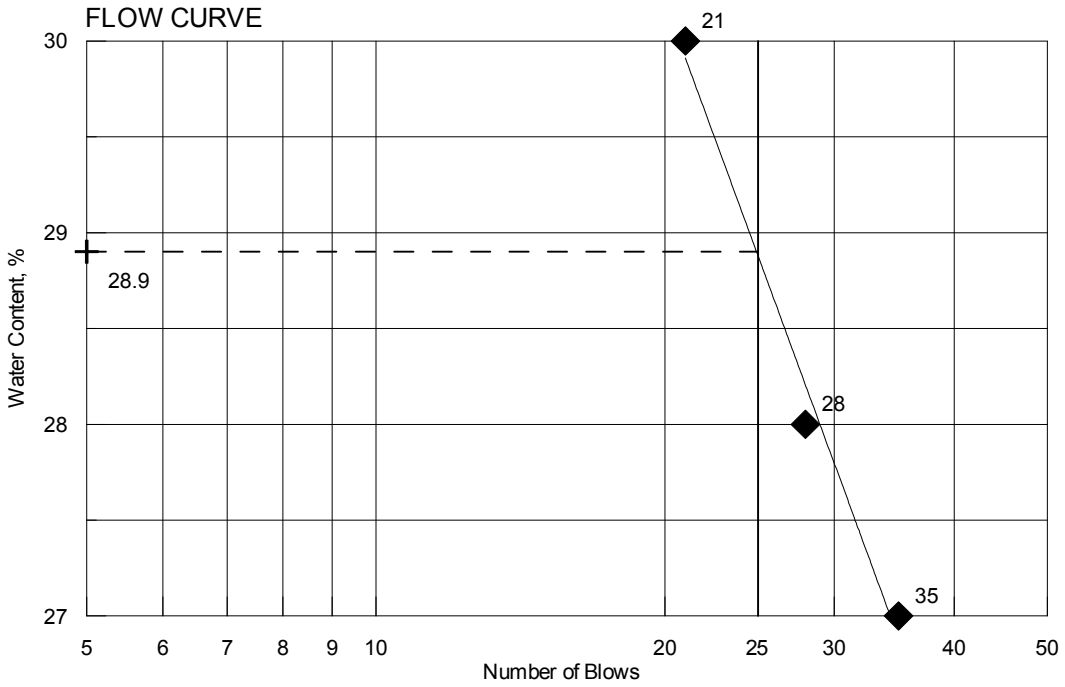
Comments:

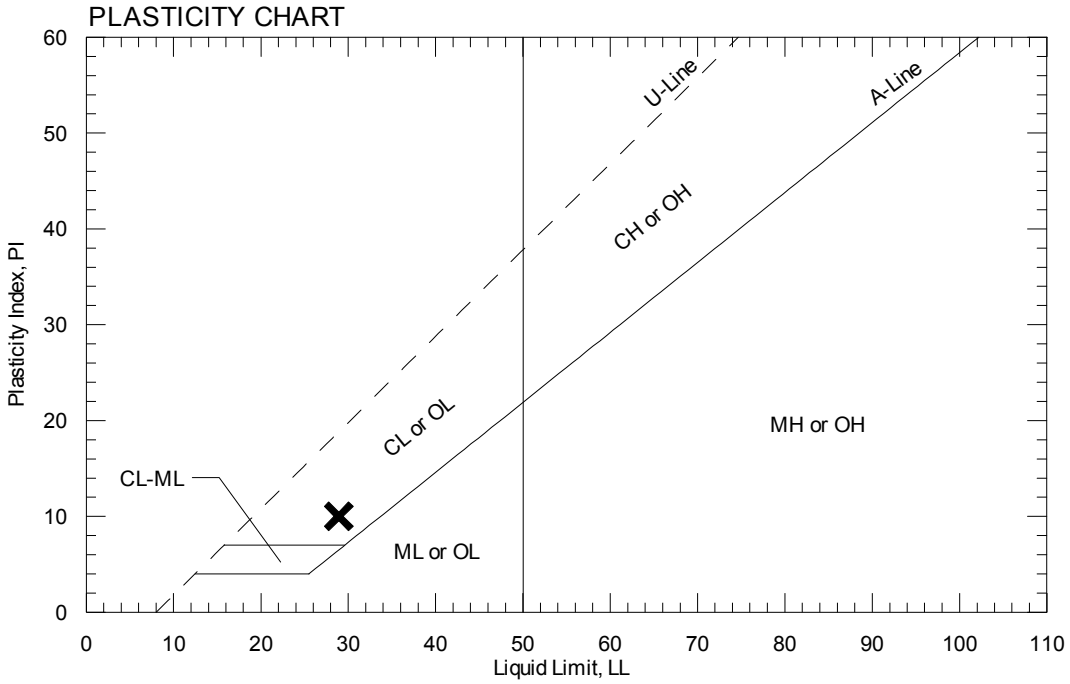
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	236944
PIN	016637.20	Water Content, %	31.8
Sampled	9/8/2010	Plastic Limit	19
Boring No./Sample No.	HB-AUB-301/14D	Liquid Limit	29
Station		Plasticity Index	10
Depth	69.5-71.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240127	**HB-AUB-301/16D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **79.5-81.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
Plastic Limit (T 90), %
Plasticity Index (T 90), %
NP
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
24.2

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
236947	**HB-AUB-301/2D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **10.0-12.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
26
Plastic Limit (T 90), %
21
Plasticity Index (T 90), %
5
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
26.9

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

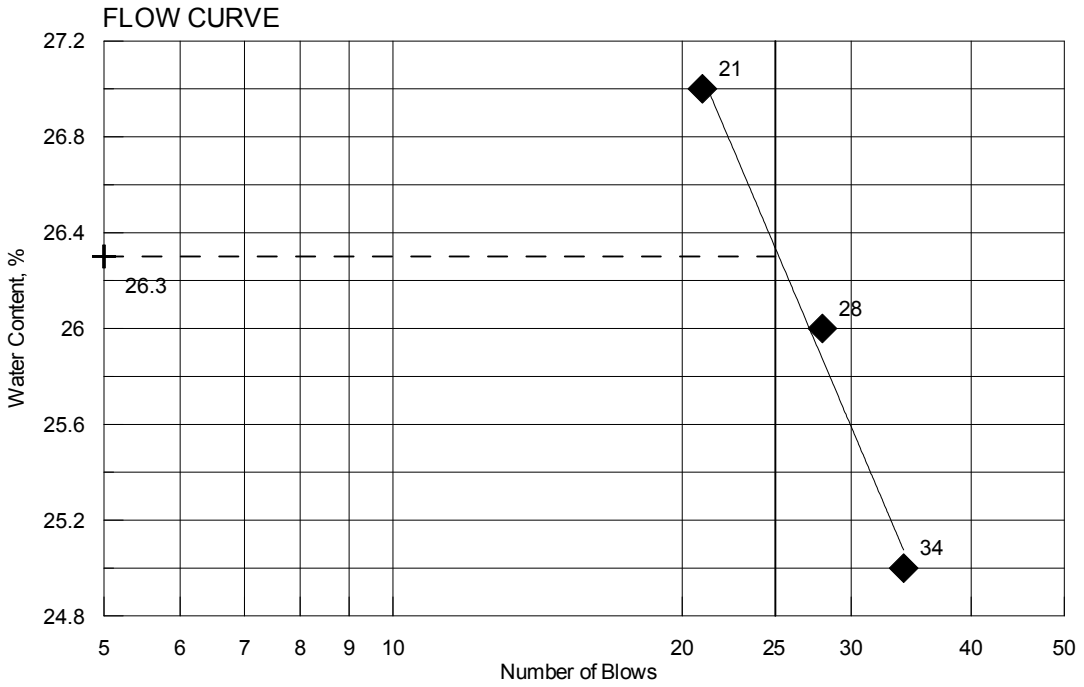
Comments:

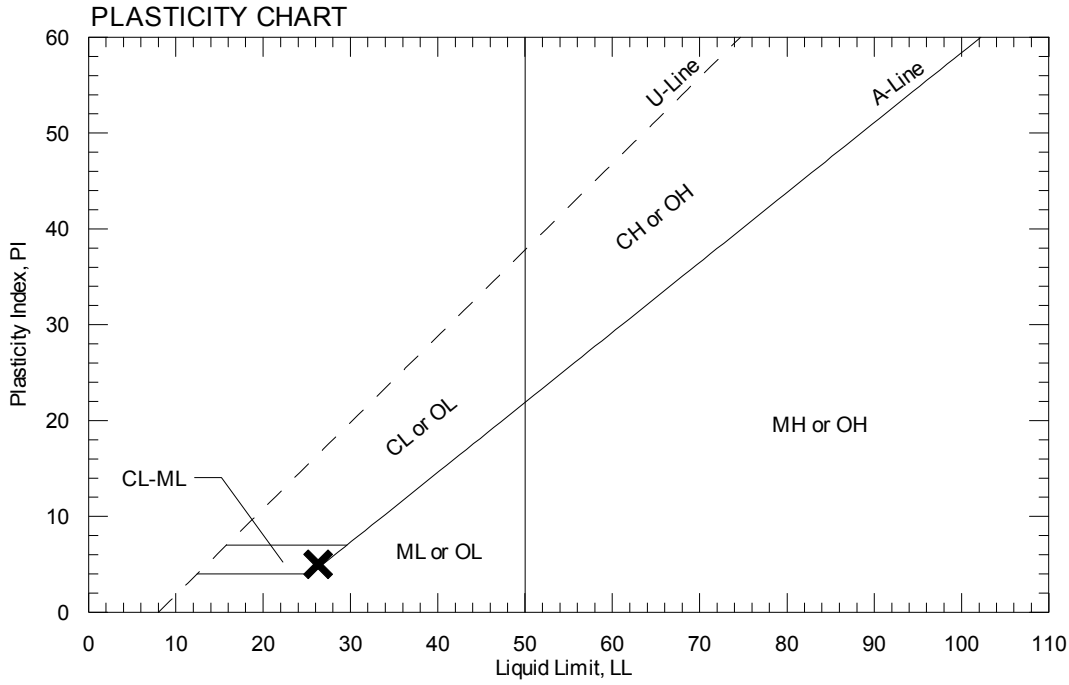
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	236947
PIN	016637.20	Water Content, %	26.9
Sampled	9/8/2010	Plastic Limit	21
Boring No./Sample No.	HB-AUB-301/2D	Liquid Limit	26
Station		Plasticity Index	5
Depth	10.0-12.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
236949	**HB-AUB-301/3D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **15.0-17.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
31
Plastic Limit (T 90), %
22
Plasticity Index (T 90), %
9
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
24.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

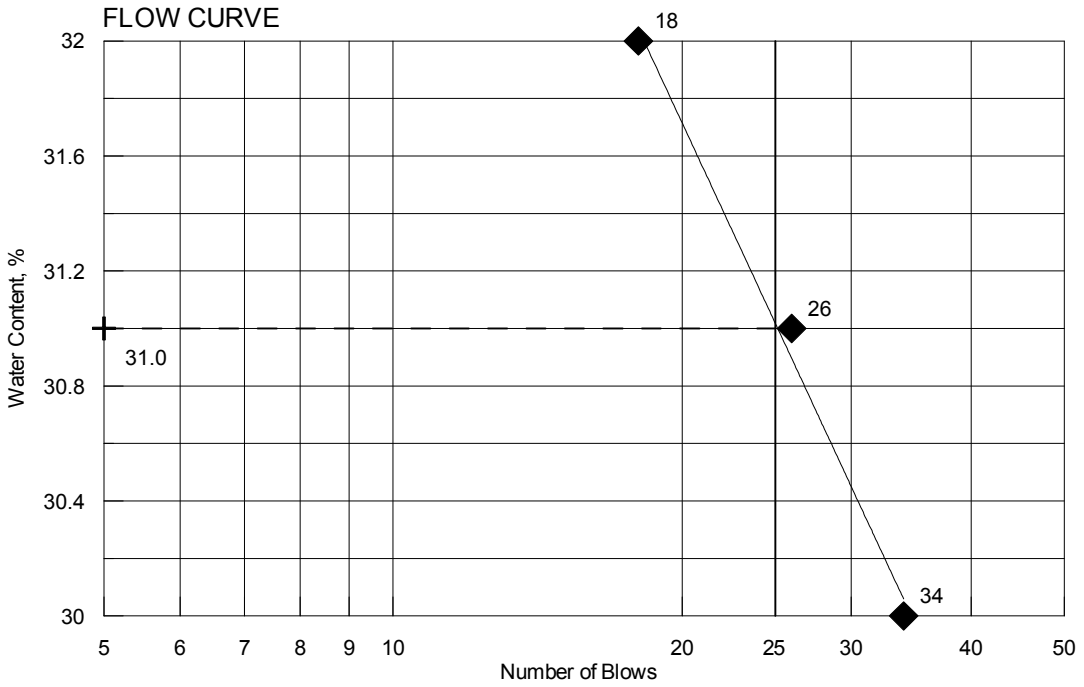
Comments:

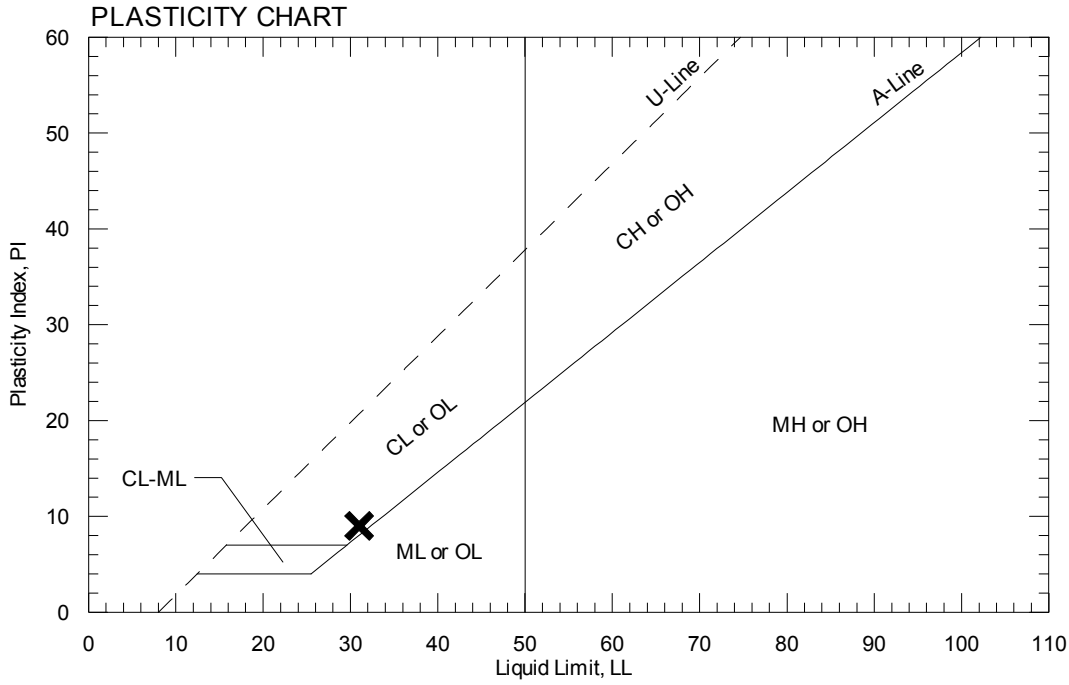
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	236949
PIN	016637.20	Water Content, %	24.4
Sampled	9/8/2010	Plastic Limit	22
Boring No./Sample No.	HB-AUB-301/3D	Liquid Limit	31
Station		Plasticity Index	9
Depth	15.0-17.0	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240177	**HB-AUB-301/5D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **24.5-26.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
31
Plastic Limit (T 90), %
19
Plasticity Index (T 90), %
12
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
33.5

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

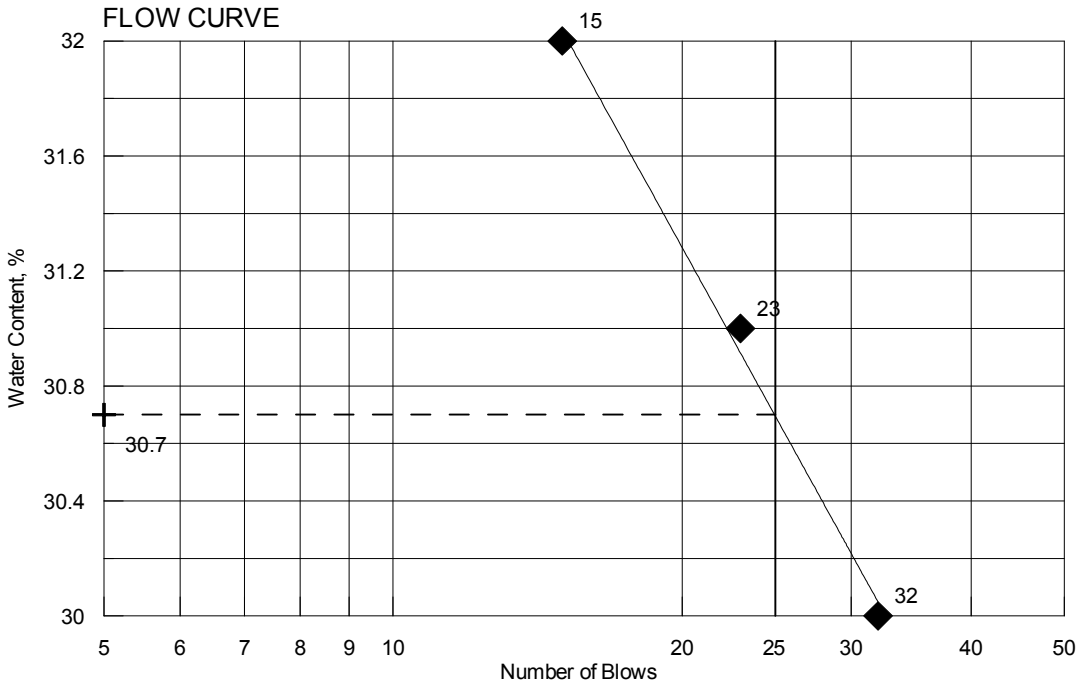
Comments:

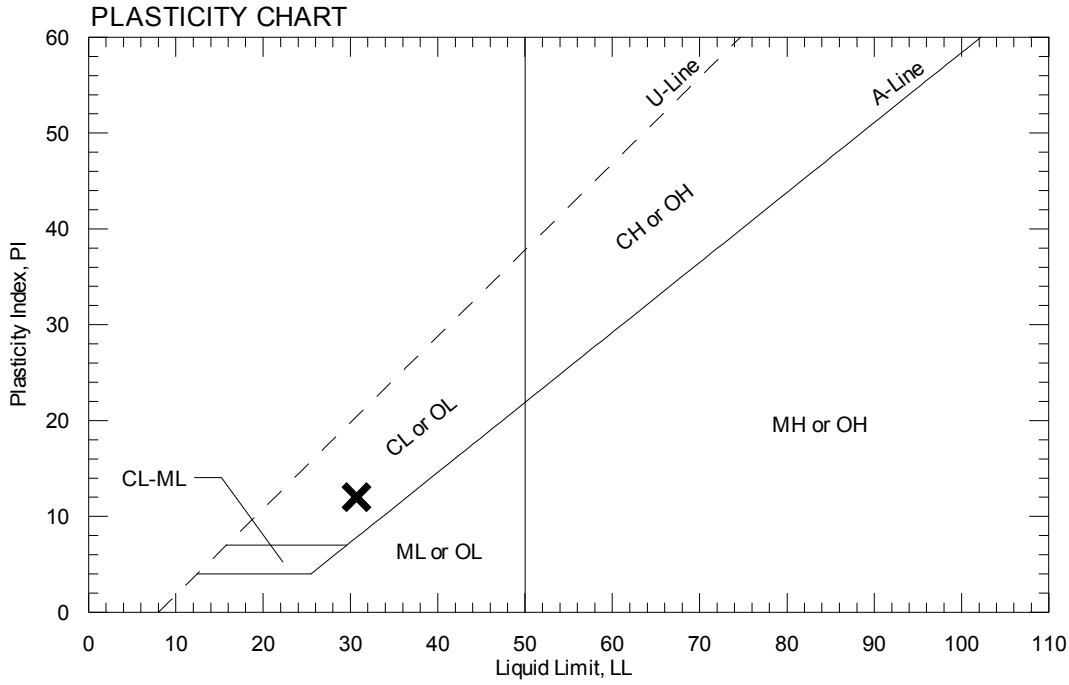
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240177
PIN	016637.20	Water Content, %	33.5
Sampled	9/8/2010	Plastic Limit	19
Boring No./Sample No.	HB-AUB-301/5D	Liquid Limit	31
Station		Plasticity Index	12
Depth	24.5-26.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
236950	**HB-AUB-301/6D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **29.5-31.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
30
Plastic Limit (T 90), %
19
Plasticity Index (T 90), %
11
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
30.9

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

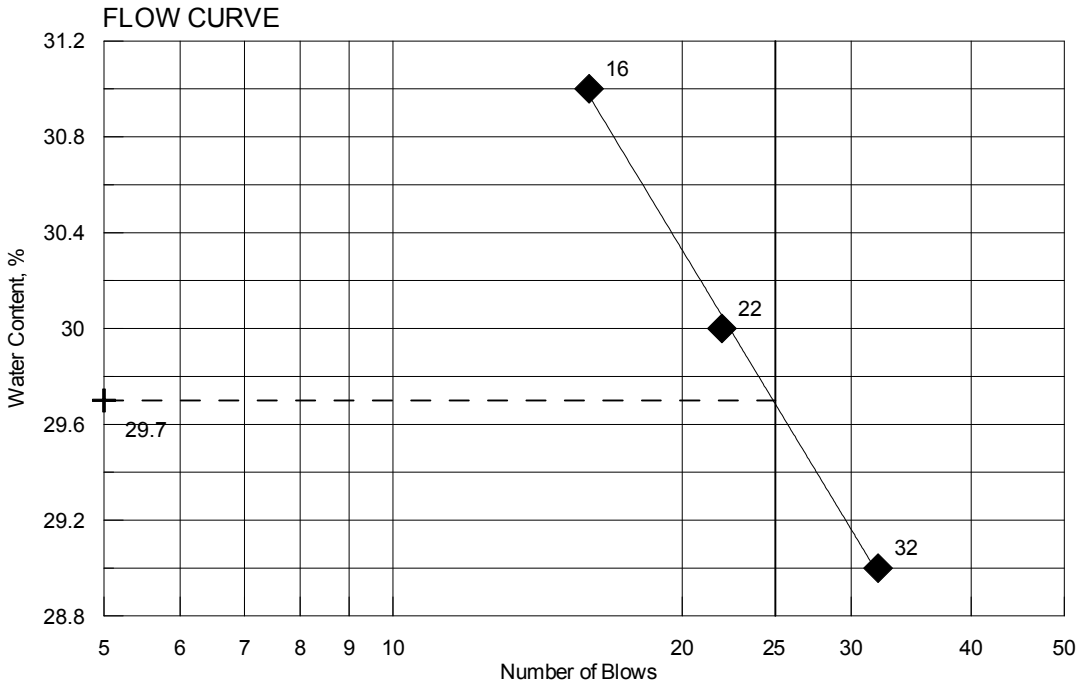
Comments:

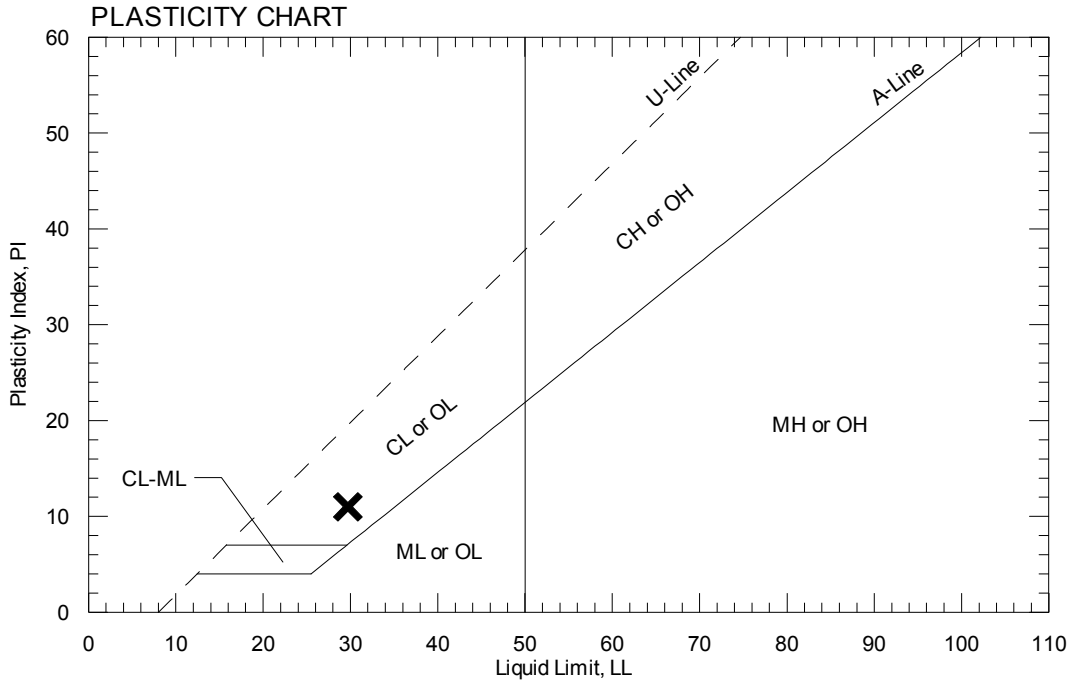
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	236950
PIN	016637.20	Water Content, %	30.9
Sampled	9/8/2010	Plastic Limit	19
Boring No./Sample No.	HB-AUB-301/6D	Liquid Limit	30
Station		Plasticity Index	11
Depth	29.5-31.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
236945	**HB-AUB-301/7D**	**GEOTECHNICAL (DISTURBED)**	**9/8/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **34.5-36.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
29
Plastic Limit (T 90), %
20
Plasticity Index (T 90), %
9
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
23.8

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

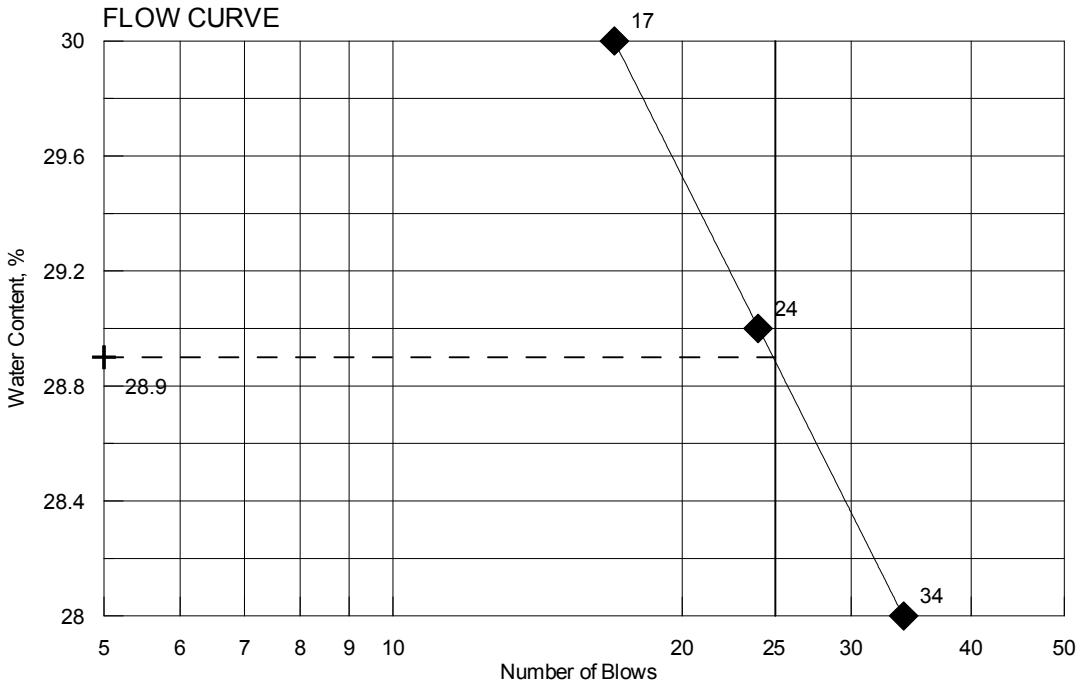
Comments:

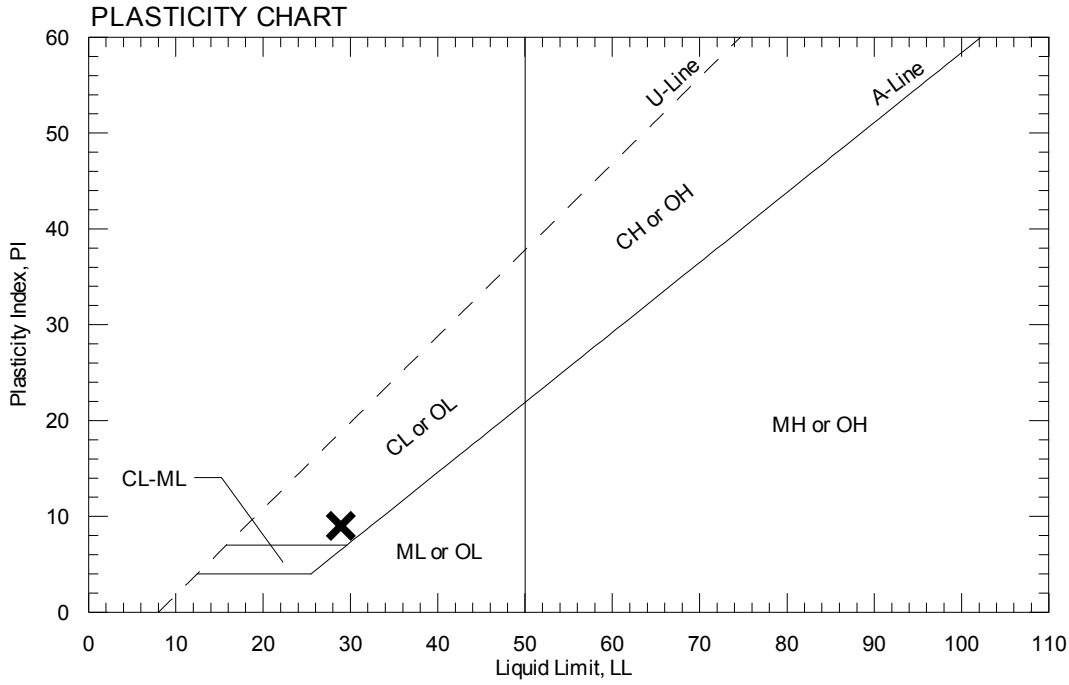
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/4/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	236945
PIN	016637.20	Water Content, %	23.8
Sampled	9/8/2010	Plastic Limit	20
Boring No./Sample No.	HB-AUB-301/7D	Liquid Limit	29
Station		Plasticity Index	9
Depth	34.5-36.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240128	**HB-AUB-301/8D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **39.5-41.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
25
Plastic Limit (T 90), %
19
Plasticity Index (T 90), %
6
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
30.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

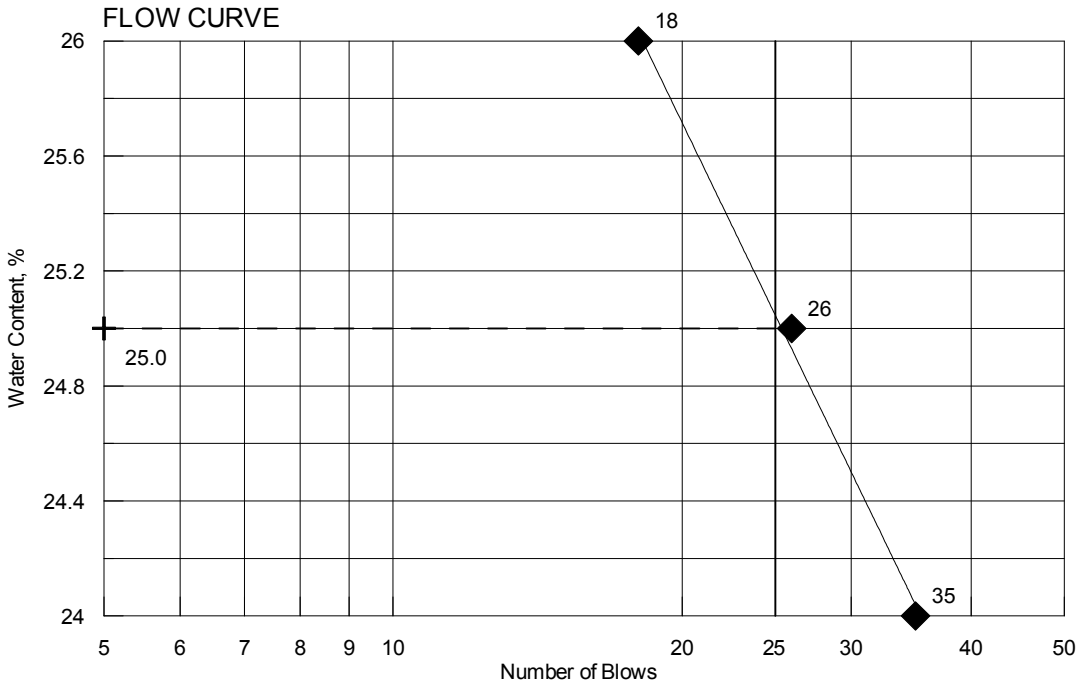
Comments:

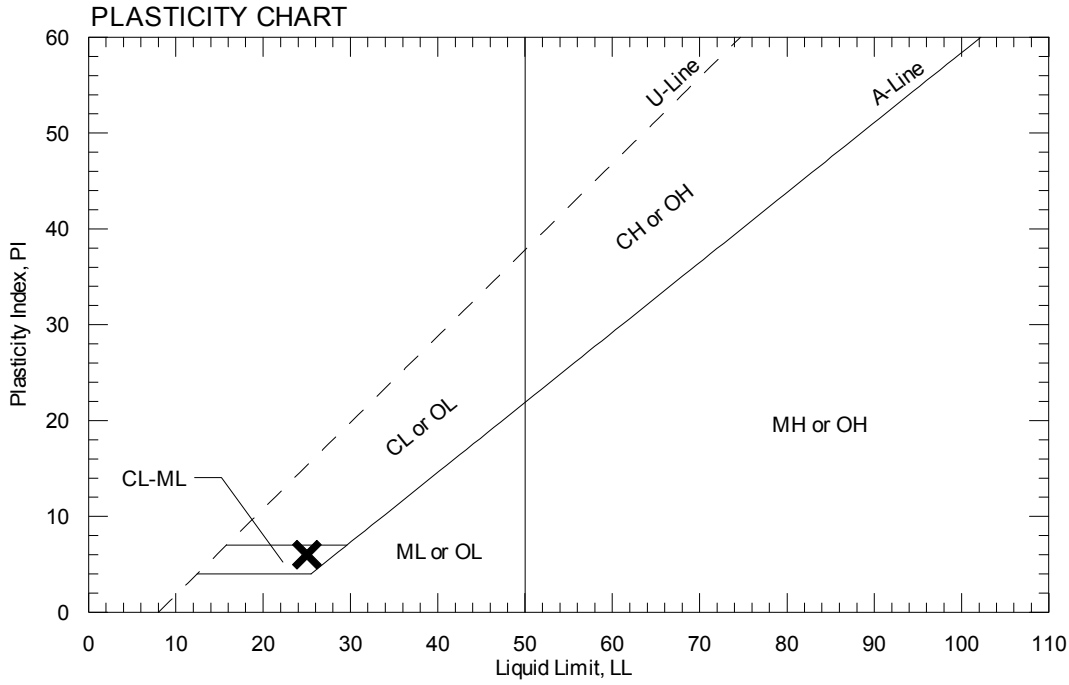
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240128
PIN	016637.20	Water Content, %	30.4
Sampled	9/9/2010	Plastic Limit	19
Boring No./Sample No.	HB-AUB-301/8D	Liquid Limit	25
Station		Plasticity Index	6
Depth	39.5-41.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240178	**HB-AUB-301/9D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **44.5-46.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
23
Plastic Limit (T 90), %
18
Plasticity Index (T 90), %
5
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
30.6

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

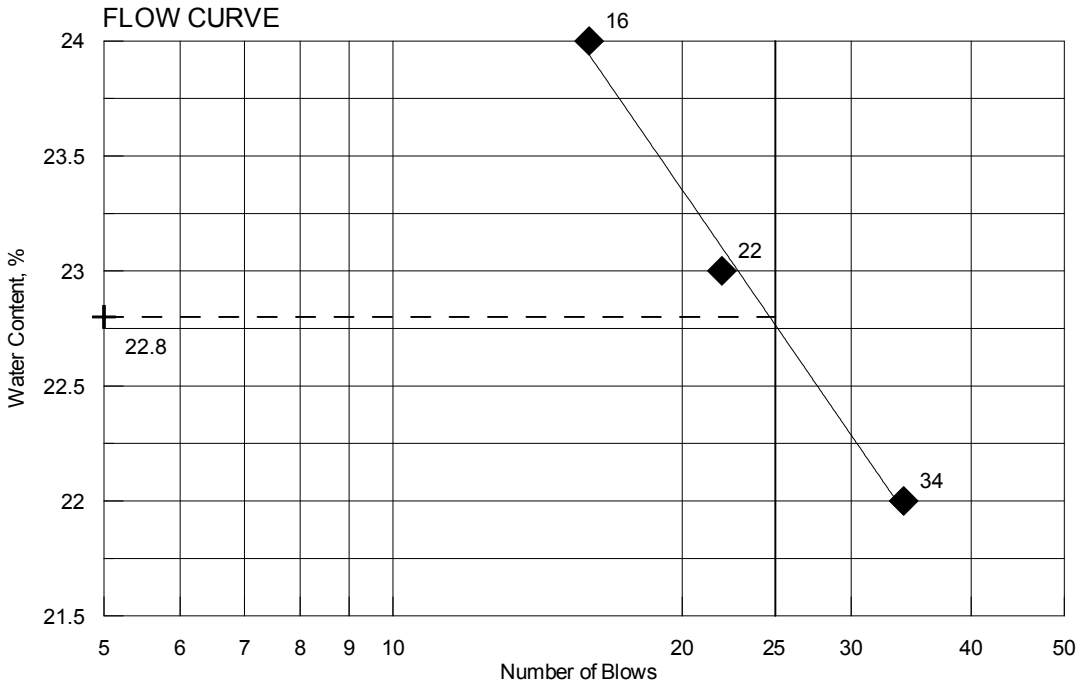
Comments:

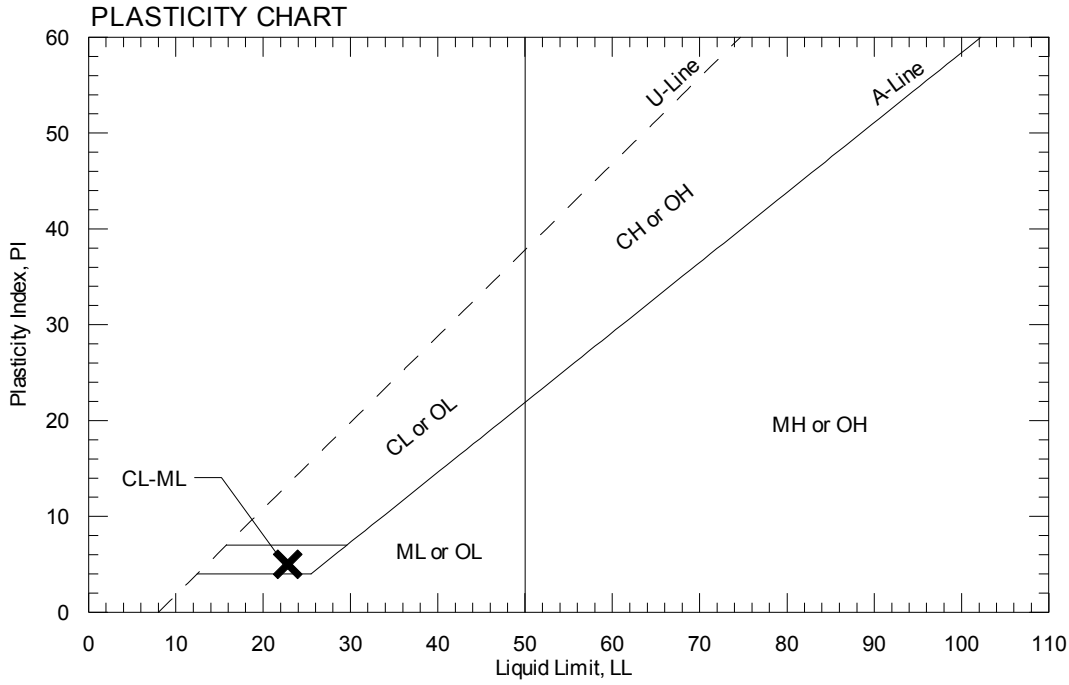
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240178
PIN	016637.20	Water Content, %	30.6
Sampled	9/9/2010	Plastic Limit	18
Boring No./Sample No.	HB-AUB-301/9D	Liquid Limit	23
Station		Plasticity Index	5
Depth	44.5-46.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240176	**HB-AUB-302/10D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **49.5-51.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
34
Plastic Limit (T 90), %
23
Plasticity Index (T 90), %
11
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
37.7

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

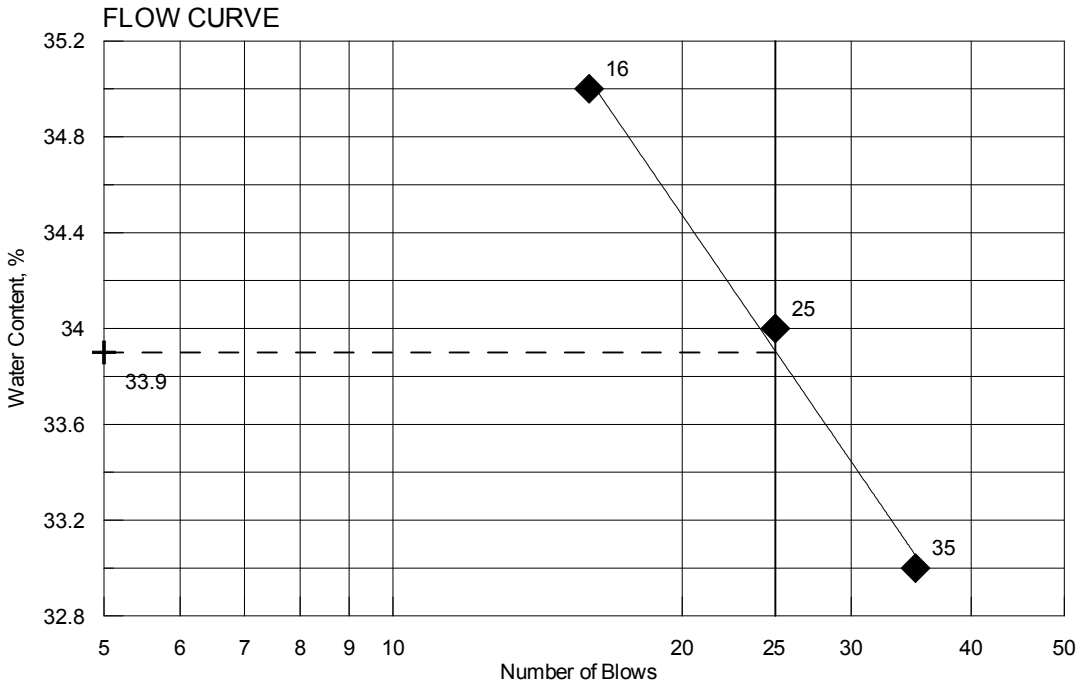
Comments:

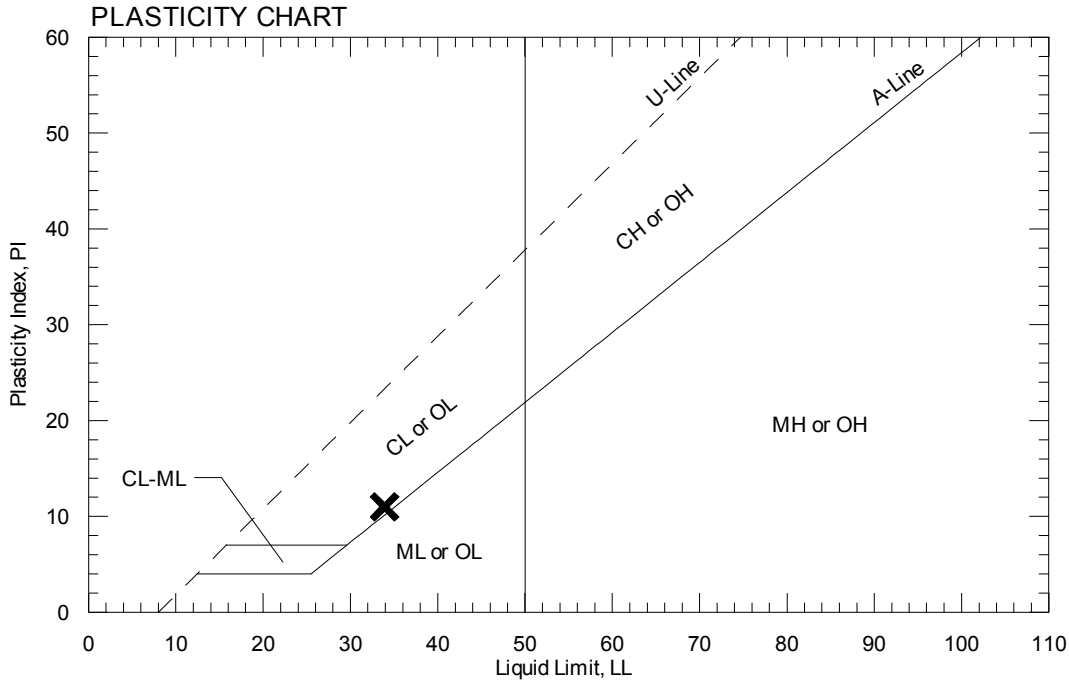
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240176
PIN	016637.20	Water Content, %	37.7
Sampled	9/9/2010	Plastic Limit	23
Boring No./Sample No.	HB-AUB-302/10D	Liquid Limit	34
Station		Plasticity Index	11
Depth	49.5-51.5	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
205825	**HB-AUB-302/11D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **54.5-56.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
31
Plastic Limit (T 90), %
19
Plasticity Index (T 90), %
12
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
31.9

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

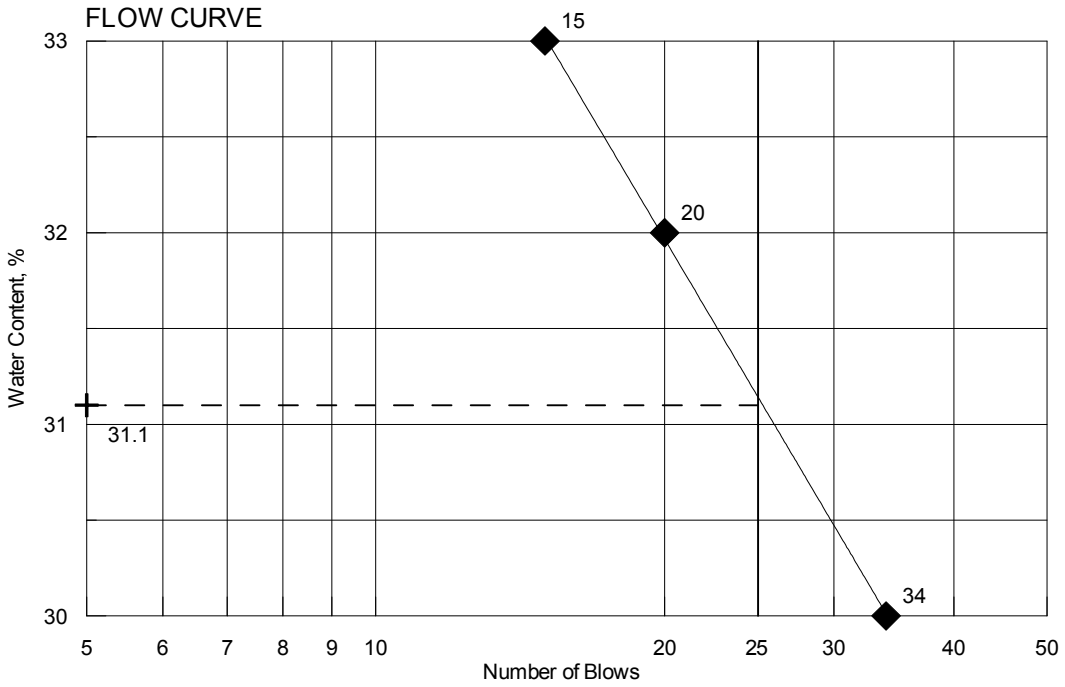
Comments:

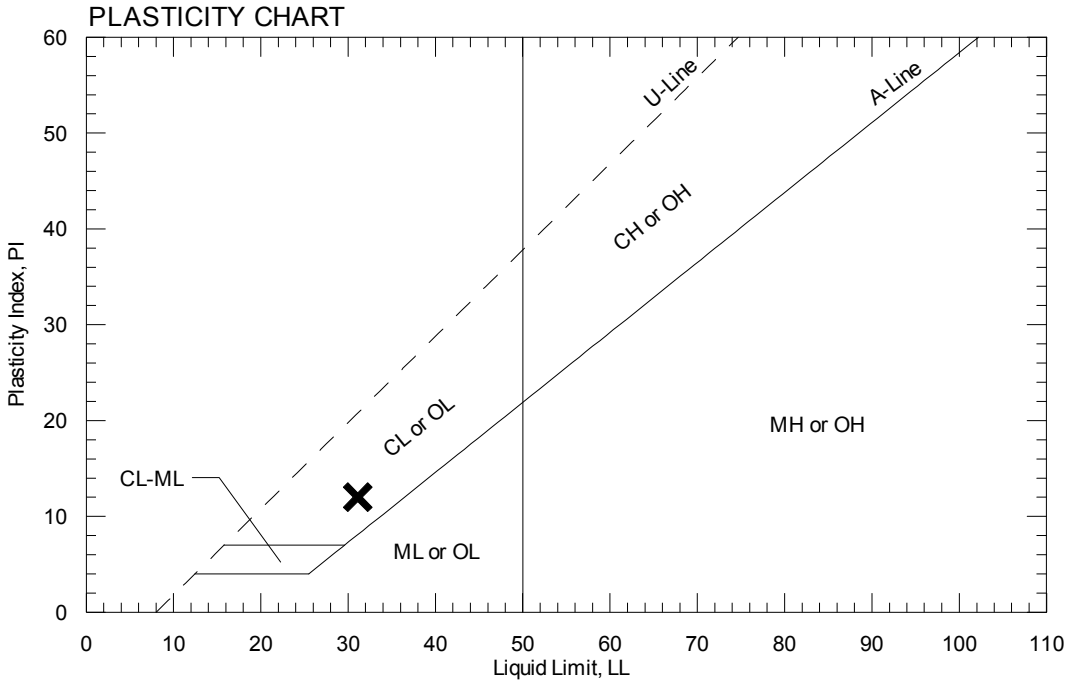
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/5/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	205825
PIN	016637.20	Water Content, %	31.9
Sampled	9/9/2010	Plastic Limit	19
Boring No./Sample No.	HB-AUB-302/11D	Liquid Limit	31
Station		Plasticity Index	12
Depth	54.5-56.5	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
236946	**HB-AUB-302/12D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **59.5-61.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
26
Plastic Limit (T 90), %
18
Plasticity Index (T 90), %
8
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
30.9

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

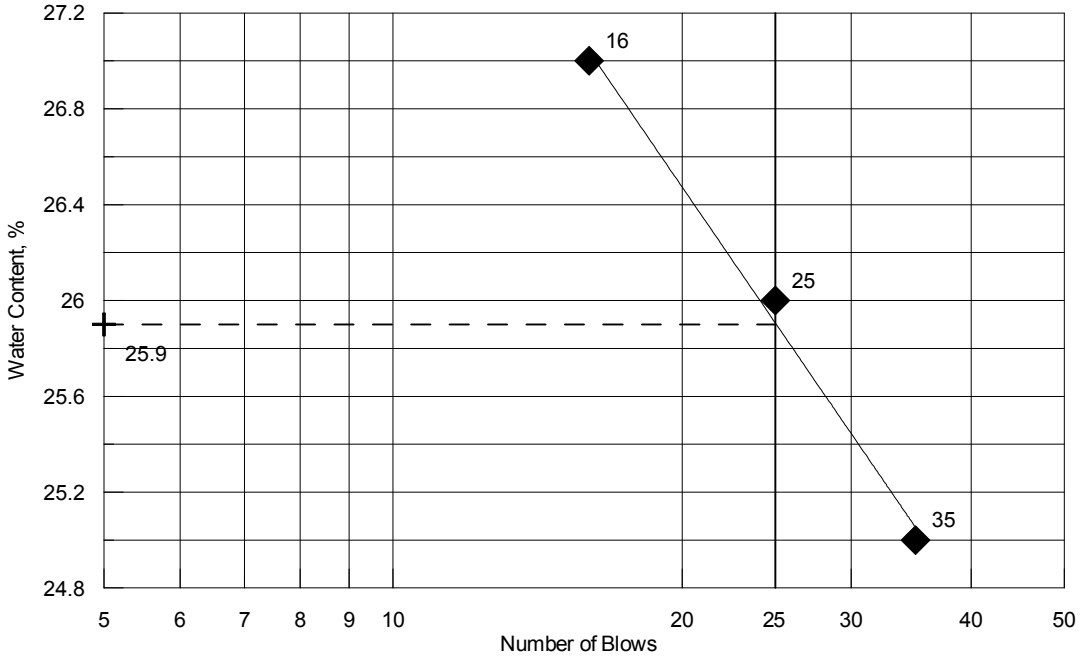
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/4/2010**

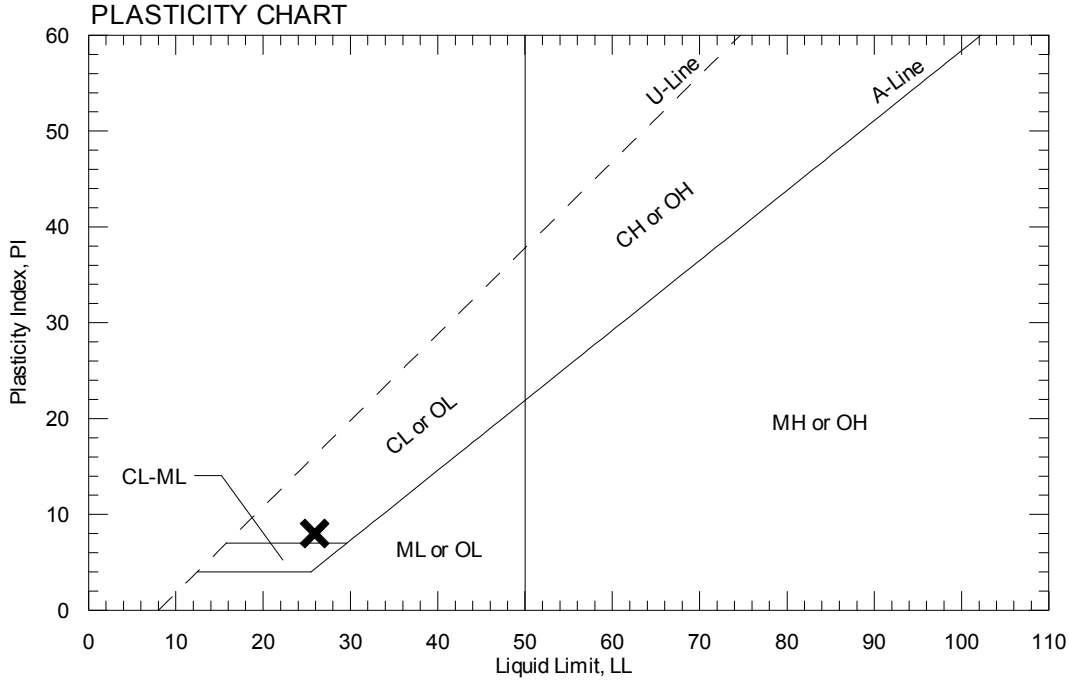
Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	236946
PIN	016637.20	Water Content, %	30.9
Sampled	9/9/2010	Plastic Limit	18
Boring No./Sample No.	HB-AUB-302/12D	Liquid Limit	26
Station		Plasticity Index	8
Depth	59.5-61.5	Tested By	BBURR

FLOW CURVE



PLASTICITY CHART



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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
212175	**HB-AUB-302/13D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **64.5-66.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
Plastic Limit (T 90), %
Plasticity Index (T 90), %
NP
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
24.2

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240141	**HB-AUB-302/14D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **69.5-71.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
Plastic Limit (T 90), %
Plasticity Index (T 90), %
NP
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
23.5

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
205824	**HB-AUB-302/1D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **5.0-7.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	**100.0**
¾ in. [19.0 mm]	**90.3**
½ in. [12.5 mm]	**84.2**
⅜ in. [9.5 mm]	**80.3**
¼ in. [6.3 mm]	**75.3**
No. 4 [4.75 mm]	**72.2**
No. 10 [2.00 mm]	**56.0**
No. 20 [0.850 mm]	**38.7**
No. 40 [0.425 mm]	**20.9**
No. 60 [0.250 mm]	**13.0**
No. 100 [0.150 mm]	**8.4**
No. 200 [0.075 mm]	**5.0**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %

Plastic Limit (T 90), %

Plasticity Index (T 90), %

Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

2.5

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/25/2010**

Paper Copy: Lab File; Project File; Geotech File

Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
205821	**HB-AUB-302/2D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **10.0-12.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
41
Plastic Limit (T 90), %
22
Plasticity Index (T 90), %
19
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
38.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

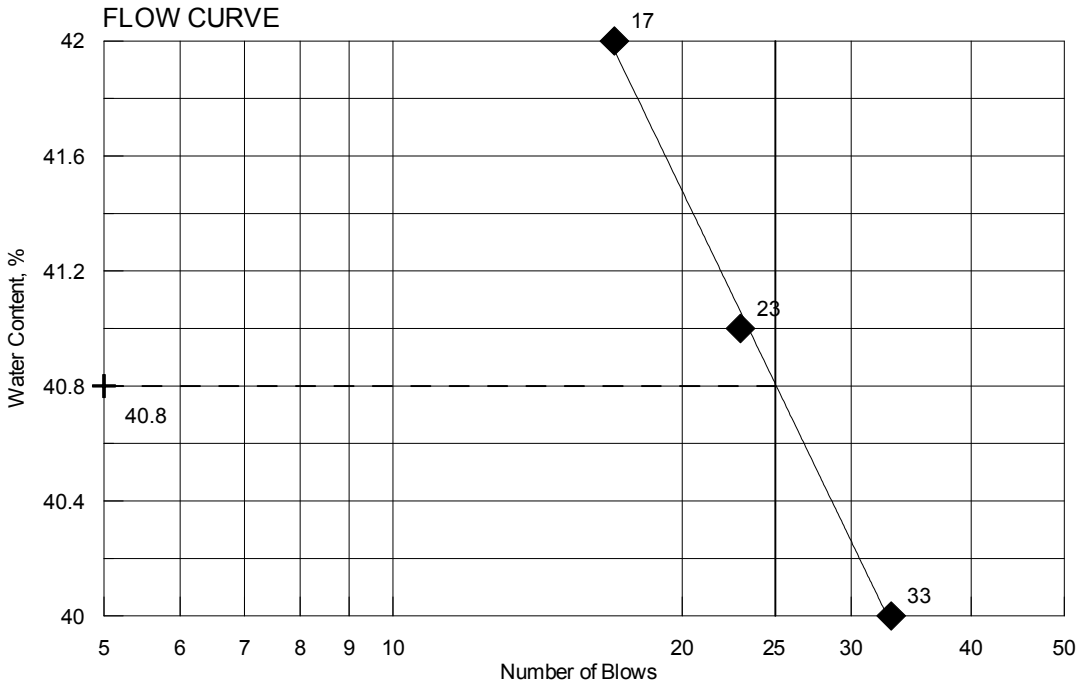
Comments:

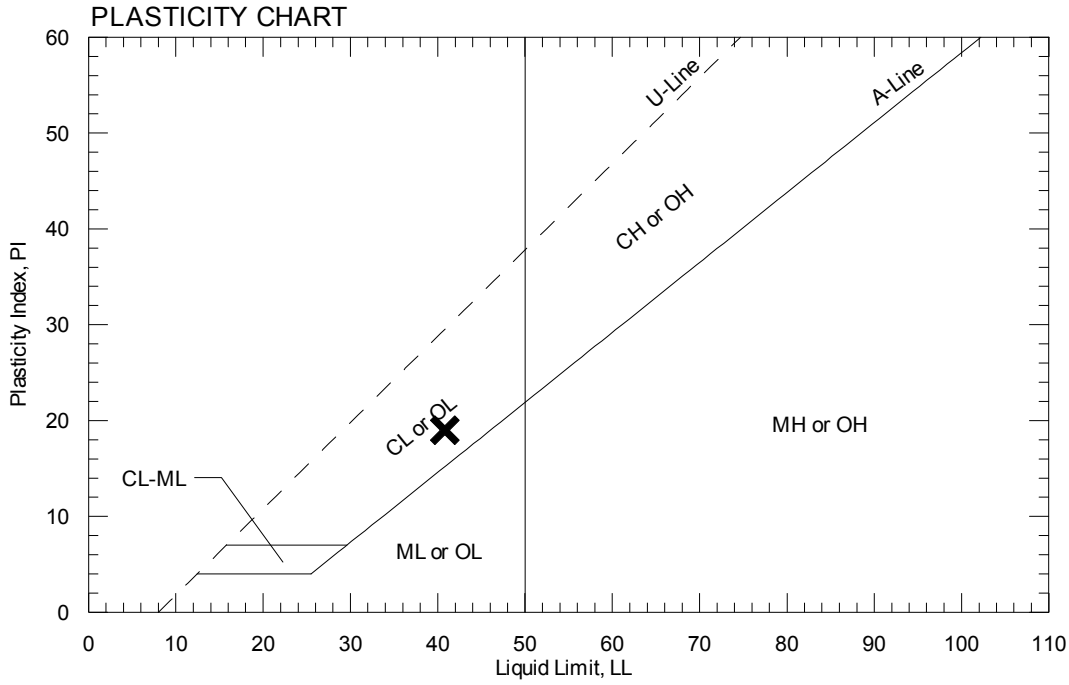
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	205821
PIN	016637.20	Water Content, %	38.4
Sampled	9/9/2010	Plastic Limit	22
Boring No./Sample No.	HB-AUB-302/2D	Liquid Limit	41
Station		Plasticity Index	19
Depth	10.0-12.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
212171	**HB-AUB-302/3D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **14.5-16.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
33
Plastic Limit (T 90), %
22
Plasticity Index (T 90), %
11
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
55.6

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

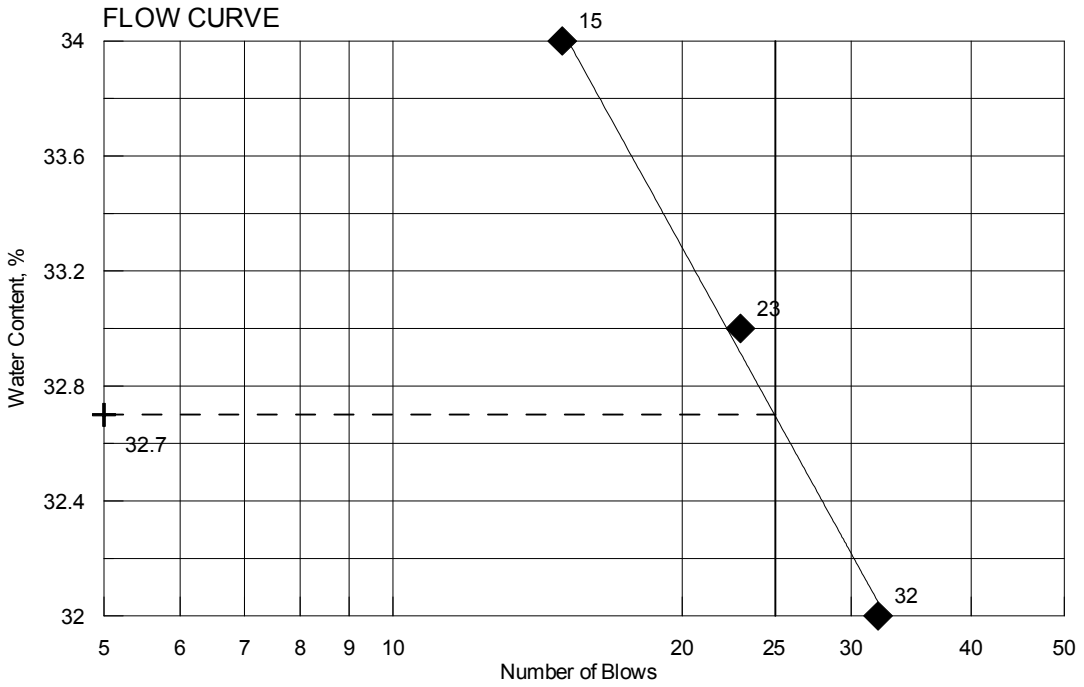
Comments:

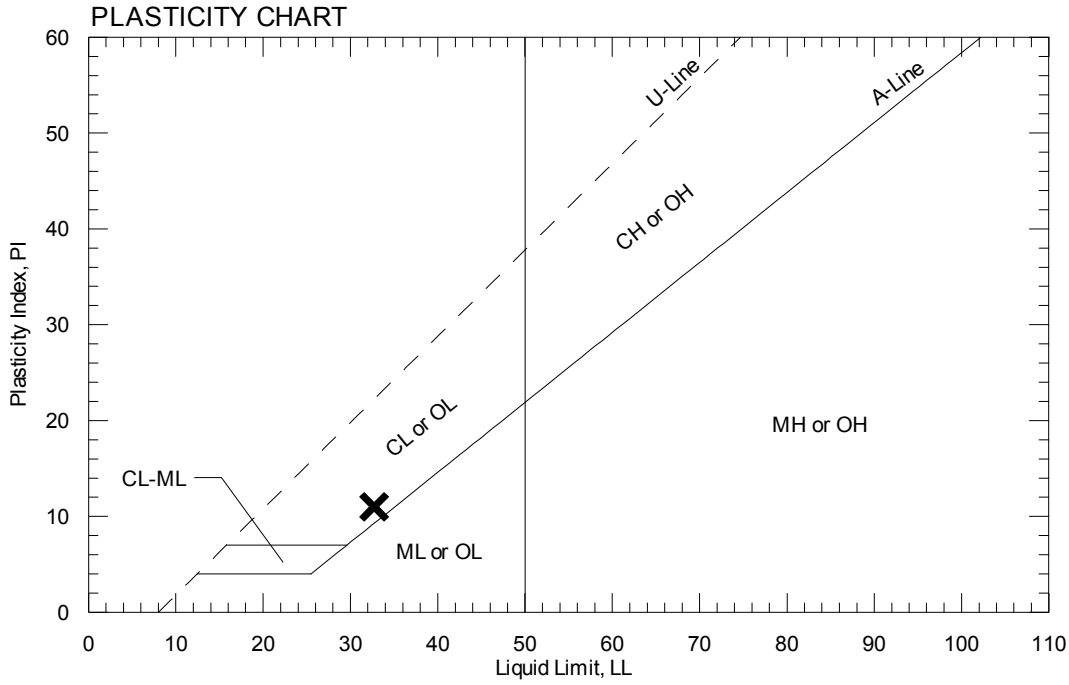
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	212171
PIN	016637.20	Water Content, %	55.6
Sampled	9/9/2010	Plastic Limit	22
Boring No./Sample No.	HB-AUB-302/3D	Liquid Limit	33
Station		Plasticity Index	11
Depth	14.5-16.5	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
205823	**HB-AUB-302/4D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **19.5-21.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
34
Plastic Limit (T 90), %
20
Plasticity Index (T 90), %
14
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

44.7

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

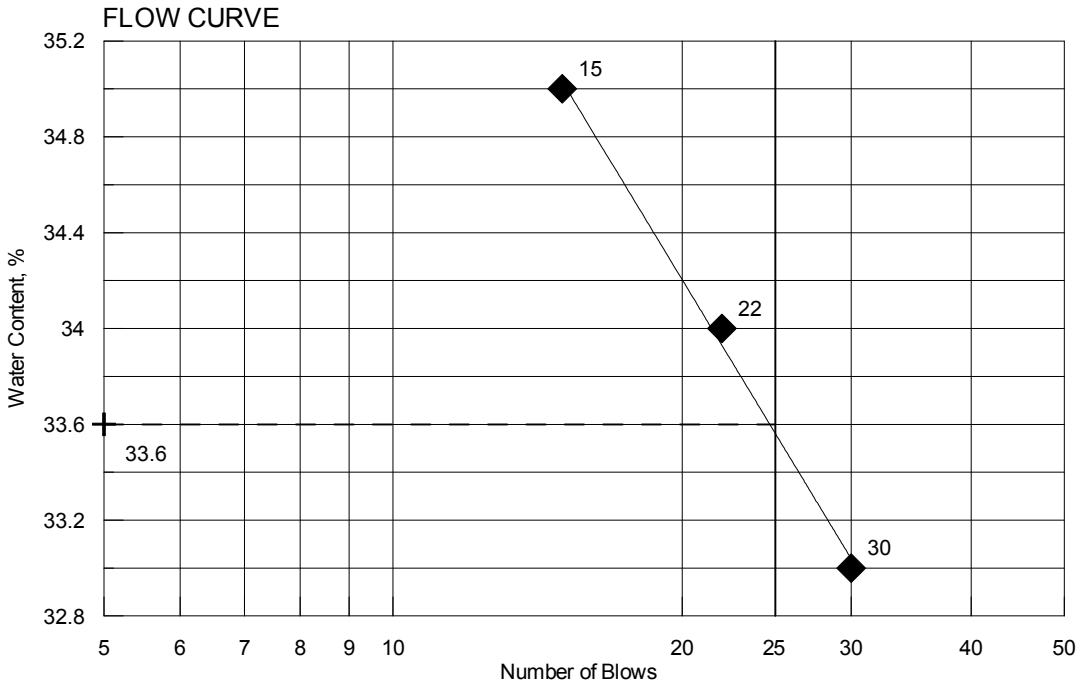
Comments:

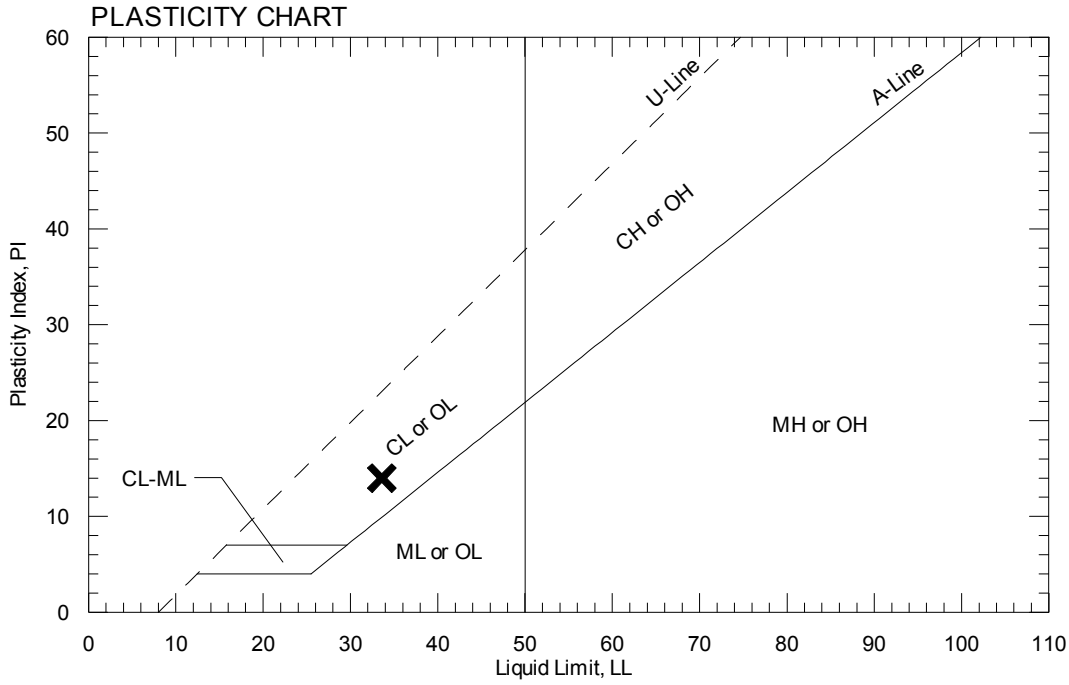
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/4/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	205823
PIN	016637.20	Water Content, %	44.7
Sampled	9/9/2010	Plastic Limit	20
Boring No./Sample No.	HB-AUB-302/4D	Liquid Limit	34
Station		Plasticity Index	14
Depth	19.5-21.5	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
212174	**HB-AUB-302/5D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **24.5-26.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
32
Plastic Limit (T 90), %
21
Plasticity Index (T 90), %
11
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
28.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

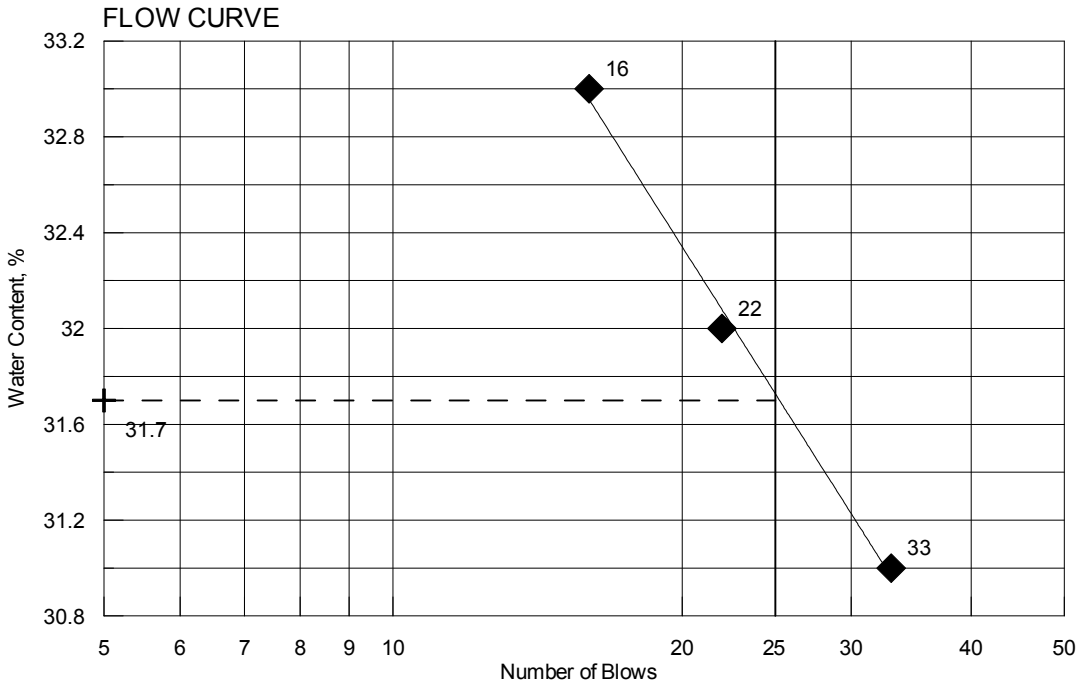
Comments:

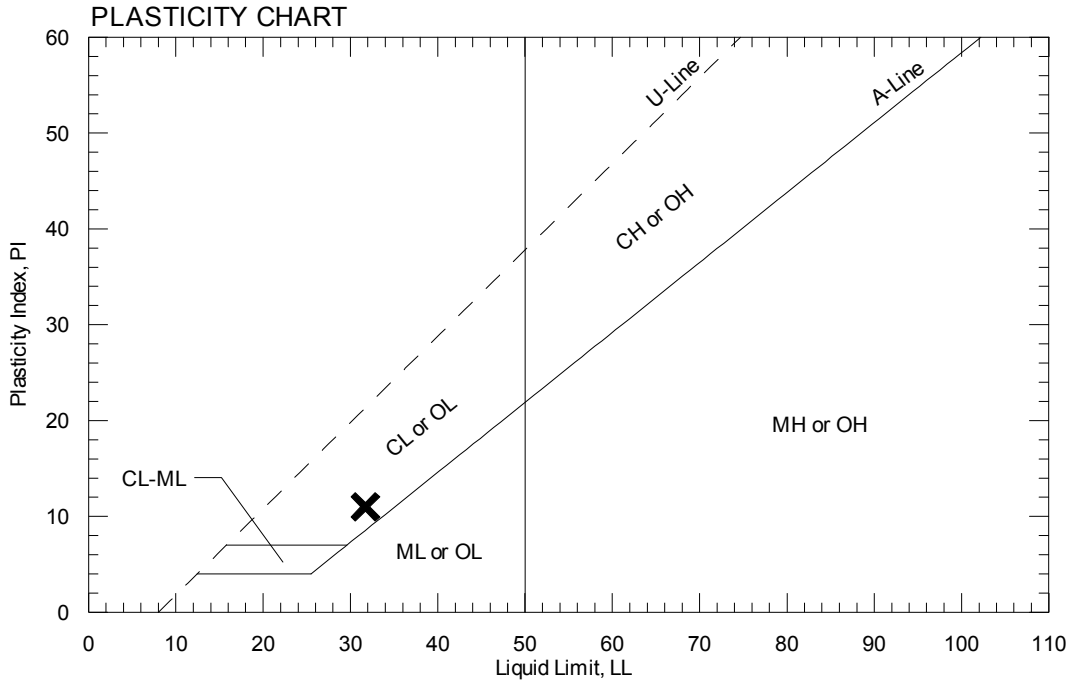
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	212174
PIN	016637.20	Water Content, %	28.4
Sampled	9/9/2010	Plastic Limit	21
Boring No./Sample No.	HB-AUB-302/5D	Liquid Limit	32
Station		Plasticity Index	11
Depth	24.5-26.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
212173	**HB-AUB-302/6D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **29.5-31.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
27
Plastic Limit (T 90), %
19
Plasticity Index (T 90), %
8
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
30.1

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

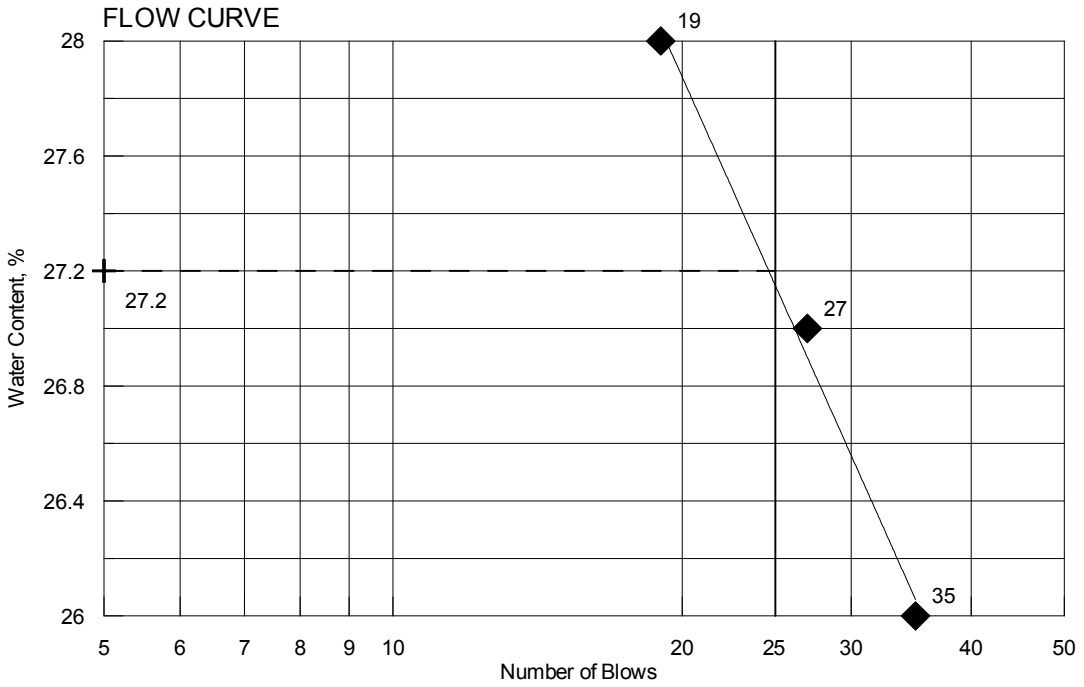
Comments:

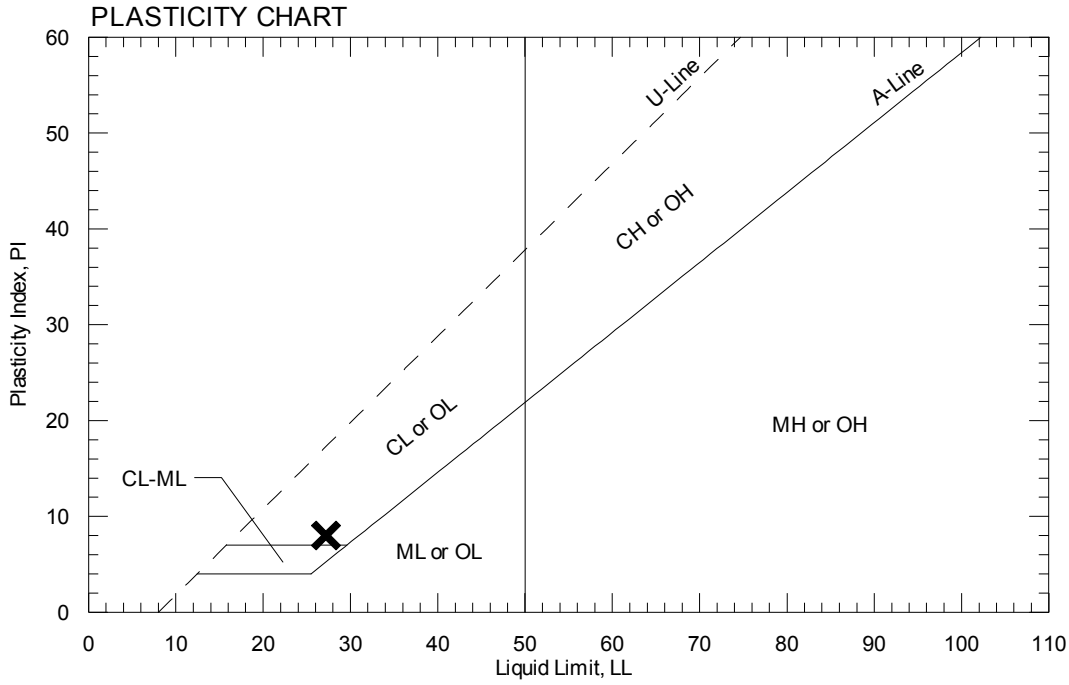
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	212173
PIN	016637.20	Water Content, %	30.1
Sampled	9/9/2010	Plastic Limit	19
Boring No./Sample No.	HB-AUB-302/6D	Liquid Limit	27
Station		Plasticity Index	8
Depth	29.5-31.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
239849	**HB-AUB-302/7D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **34.5-36.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
27
Plastic Limit (T 90), %
19
Plasticity Index (T 90), %
8
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
27.7

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

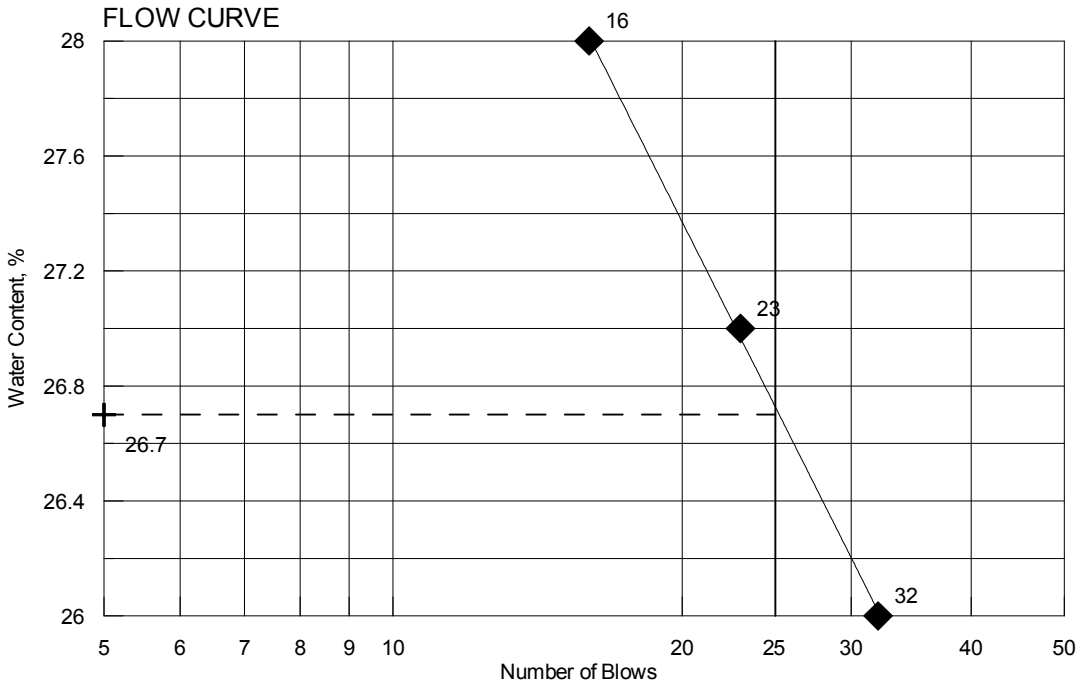
Comments:

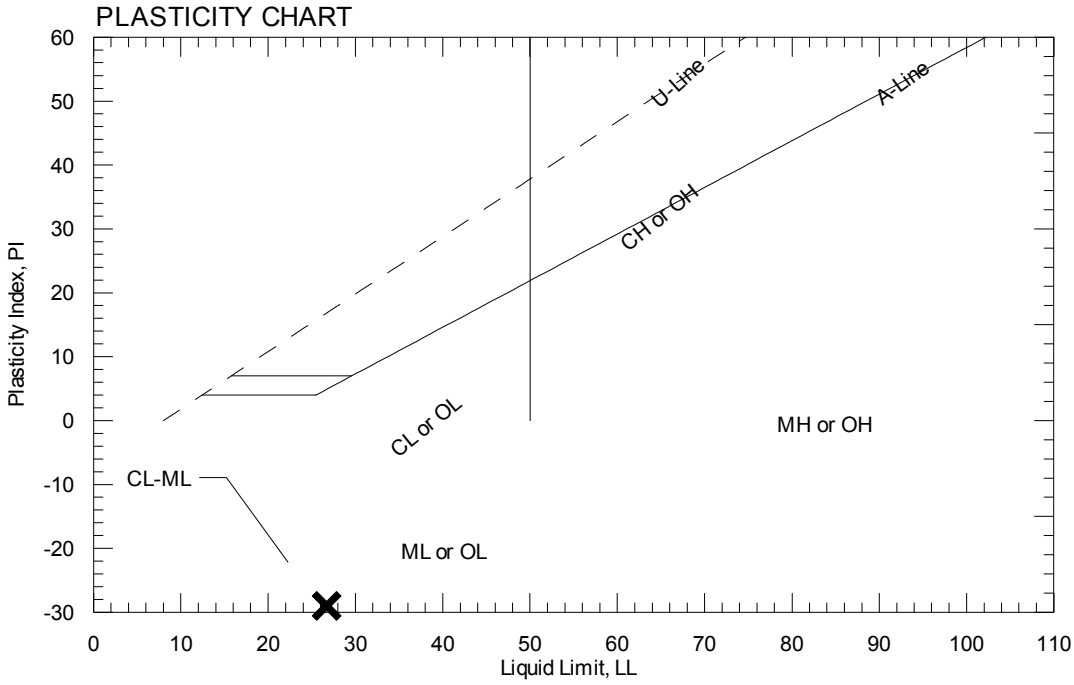
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/5/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	239849
PIN	016637.20	Water Content, %	27.7
Sampled	9/9/2010	Plastic Limit	19
Boring No./Sample No.	HB-AUB-302/7D	Liquid Limit	27
Station		Plasticity Index	8
Depth	34.5-36.5	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240126	**HB-AUB-302/8D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **39.5-41.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
24
Plastic Limit (T 90), %
12
Plasticity Index (T 90), %
12
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
31.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

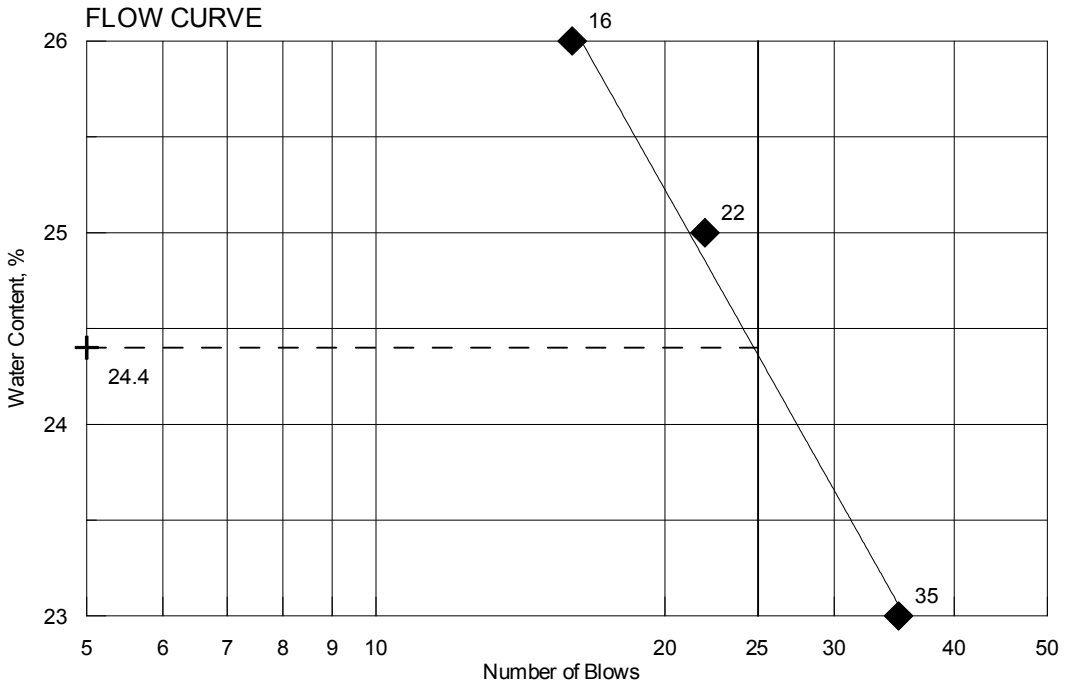
Comments:

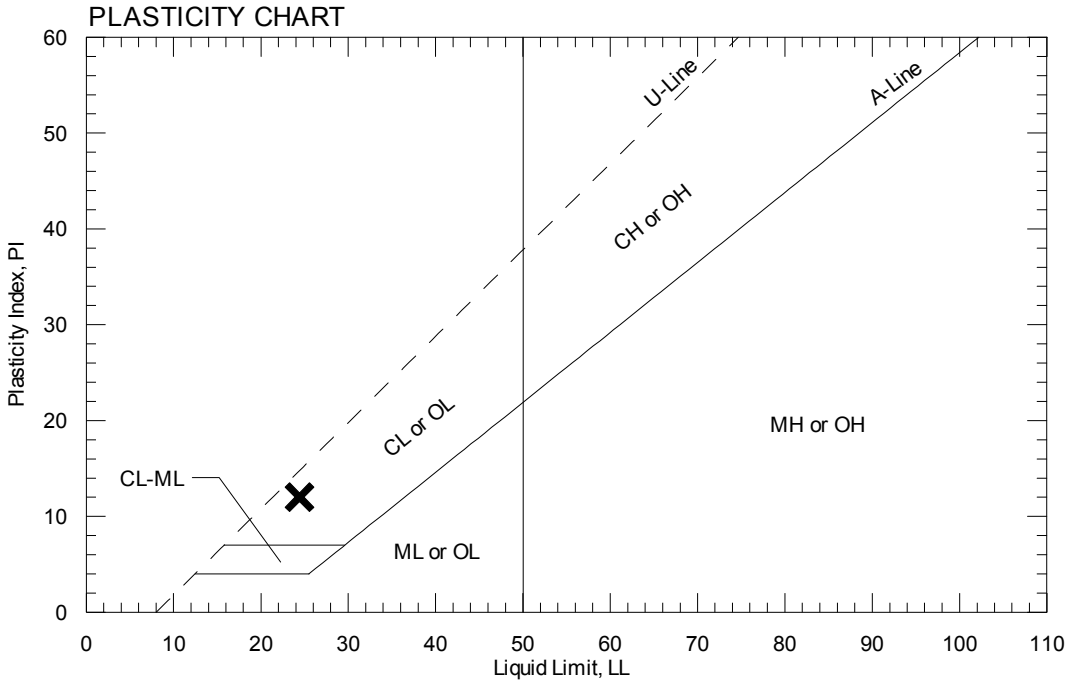
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240126
PIN	016637.20	Water Content, %	31.4
Sampled	9/9/2010	Plastic Limit	12
Boring No./Sample No.	HB-AUB-302/8D	Liquid Limit	24
Station		Plasticity Index	12
Depth	39.5-41.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240129	**HB-AUB-302/9D**	**GEOTECHNICAL (DISTURBED)**	**9/9/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **44.5-46.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
33
Plastic Limit (T 90), %
24
Plasticity Index (T 90), %
9
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
30.6

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

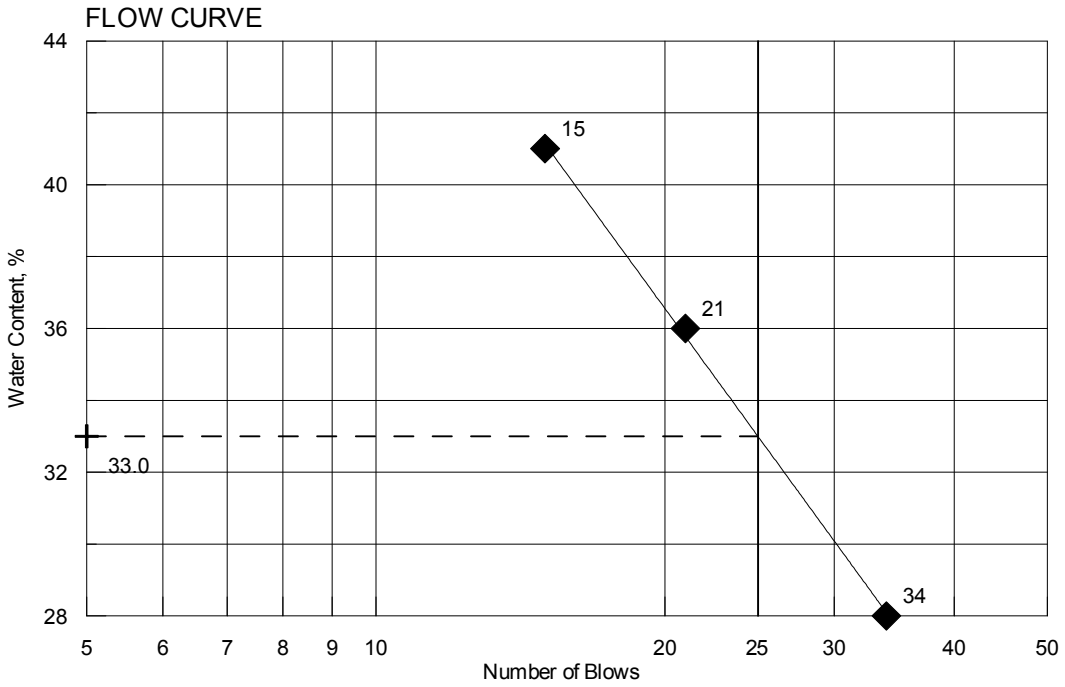
Comments:

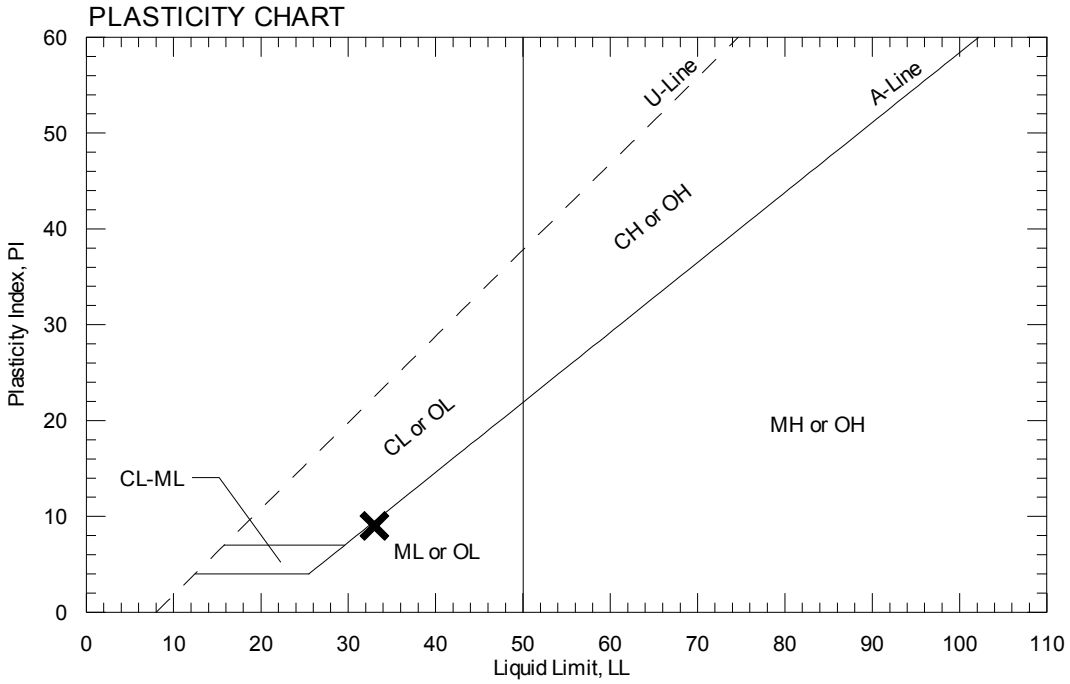
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240129
PIN	016637.20	Water Content, %	30.6
Sampled	9/9/2010	Plastic Limit	24
Boring No./Sample No.	HB-AUB-302/9D	Liquid Limit	33
Station		Plasticity Index	9
Depth	44.5-46.5	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240145	**HB-AUB-303/13D**	**GEOTECHNICAL (DISTURBED)**	**9/15/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **63.0-65.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	**100.0**
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	**99.9**
No. 40 [0.425 mm]	**99.3**
No. 60 [0.250 mm]	**90.0**
No. 100 [0.150 mm]	**59.6**
No. 200 [0.075 mm]	**19.9**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %

Plastic Limit (T 90), %

Plasticity Index (T 90), %

Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

20.9

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/27/2010**

Paper Copy: Lab File; Project File; Geotech File

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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240132	**HB-AUB-303/16D**	**GEOTECHNICAL (DISTURBED)**	**9/15/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **78.0-80.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	**100.0**
¾ in. [19.0 mm]	**97.7**
½ in. [12.5 mm]	**97.1**
⅜ in. [9.5 mm]	**96.1**
¼ in. [6.3 mm]	**94.6**
No. 4 [4.75 mm]	**93.6**
No. 10 [2.00 mm]	**90.2**
No. 20 [0.850 mm]	**85.1**
No. 40 [0.425 mm]	**71.7**
No. 60 [0.250 mm]	**42.2**
No. 100 [0.150 mm]	**18.4**
No. 200 [0.075 mm]	**8.7**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
Plastic Limit (T 90), %
Plasticity Index (T 90), %
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
16.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/29/2010**

Paper Copy: Lab File; Project File; Geotech File

Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240131	**HB-AUB-303/18D**	**GEOTECHNICAL (DISTURBED)**	**9/16/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **98.0-98.1**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	**100.0**
No. 10 [2.00 mm]	**99.9**
No. 20 [0.850 mm]	**98.9**
No. 40 [0.425 mm]	**88.7**
No. 60 [0.250 mm]	**58.7**
No. 100 [0.150 mm]	**27.5**
No. 200 [0.075 mm]	**8.0**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %

Plastic Limit (T 90), %

Plasticity Index (T 90), %

Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

20.8

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/25/2010**

Paper Copy: Lab File; Project File; Geotech File

Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240148	**HB-AUB-303/1D**	**GEOTECHNICAL (DISTURBED)**	**9/14/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **0.0-2.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	**100.0**
¼ in. [6.3 mm]	**99.7**
No. 4 [4.75 mm]	**98.3**
No. 10 [2.00 mm]	**94.1**
No. 20 [0.850 mm]	**89.9**
No. 40 [0.425 mm]	**83.9**
No. 60 [0.250 mm]	**75.4**
No. 100 [0.150 mm]	**60.9**
No. 200 [0.075 mm]	**30.4**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %

Plastic Limit (T 90), %

Plasticity Index (T 90), %

Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

56.2

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/25/2010**

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Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240143	**HB-AUB-303/3D**	**GEOTECHNICAL (DISTURBED)**	**9/14/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **13.0-15.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
25
Plastic Limit (T 90), %
19
Plasticity Index (T 90), %
6
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
34.1

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

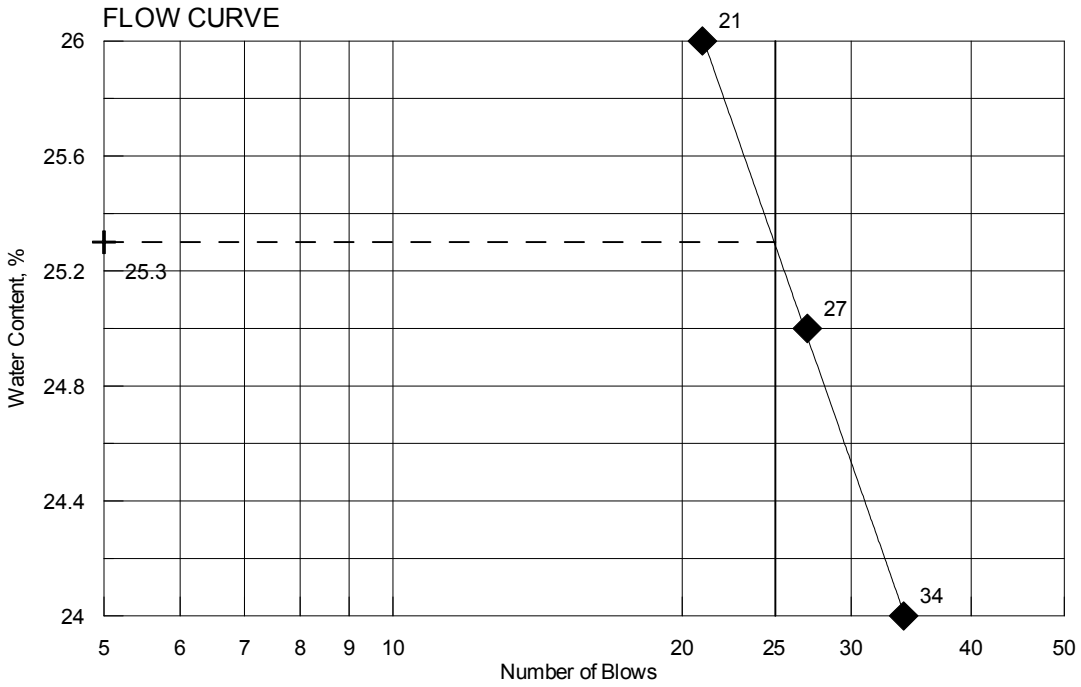
Comments:

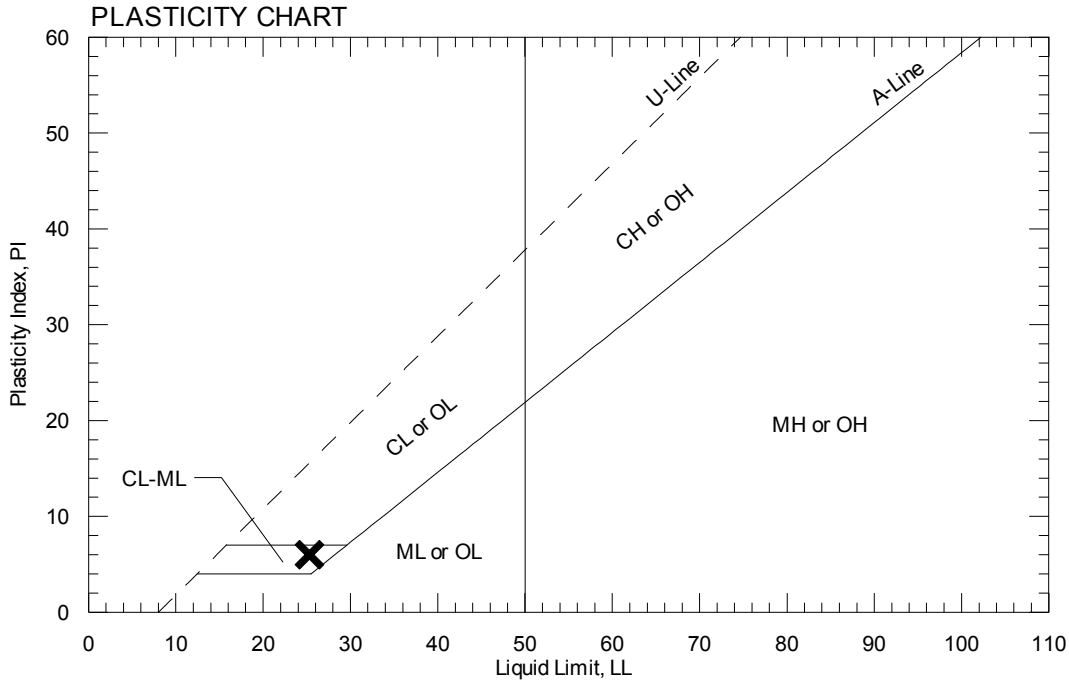
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240143
PIN	016637.20	Water Content, %	34.1
Sampled	9/14/2010	Plastic Limit	19
Boring No./Sample No.	HB-AUB-303/3D	Liquid Limit	25
Station		Plasticity Index	6
Depth	13.0-15.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240147	**HB-AUB-303/6D**	**GEOTECHNICAL (DISTURBED)**	**9/14/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **28.0-30.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
33
Plastic Limit (T 90), %
20
Plasticity Index (T 90), %
13
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
37.7

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

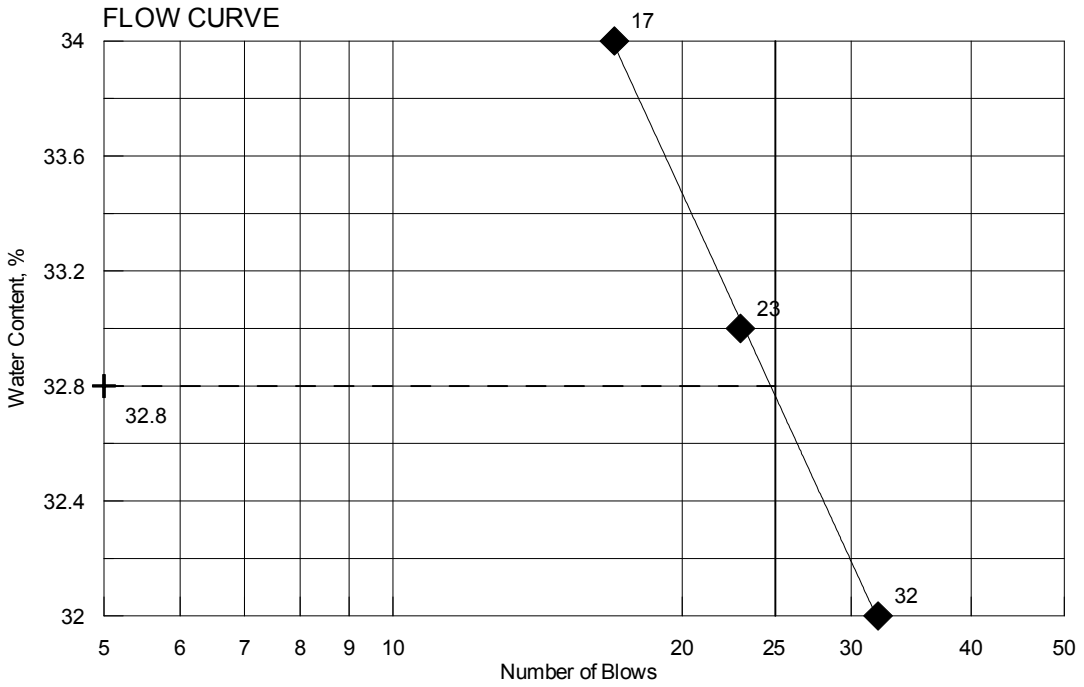
Comments:

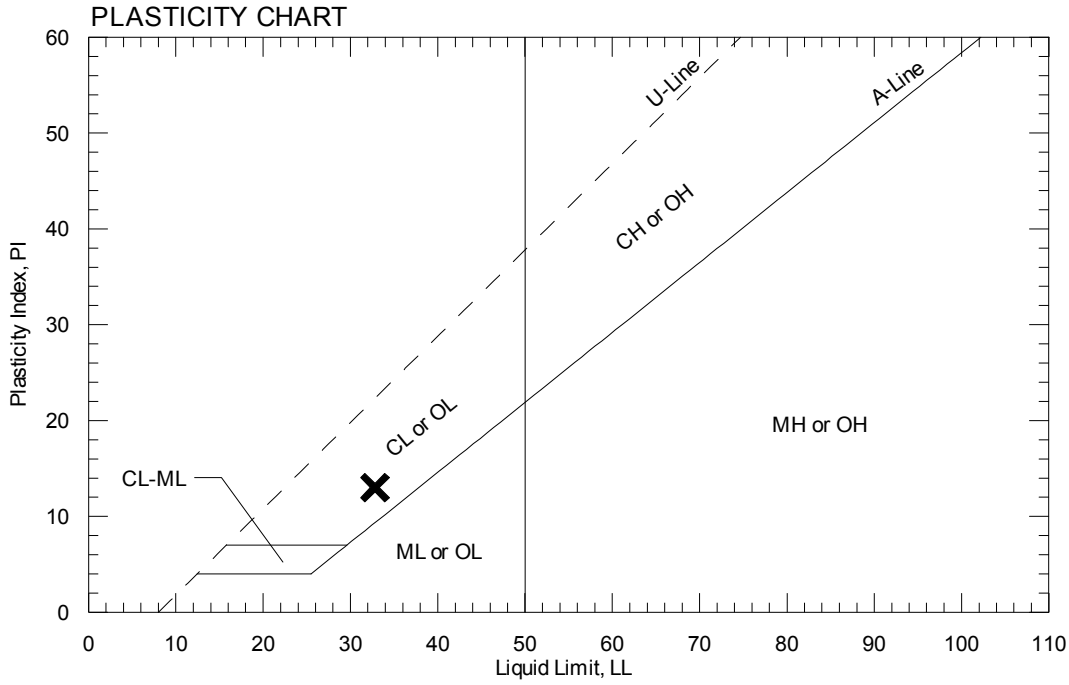
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240147
PIN	016637.20	Water Content, %	37.7
Sampled	9/14/2010	Plastic Limit	20
Boring No./Sample No.	HB-AUB-303/6D	Liquid Limit	33
Station		Plasticity Index	13
Depth	28.0-30.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240149	**HB-AUB-303/7D**	**GEOTECHNICAL (DISTURBED)**	**9/14/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **33.0-35.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
30
Plastic Limit (T 90), %
18
Plasticity Index (T 90), %
12
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
33.8

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

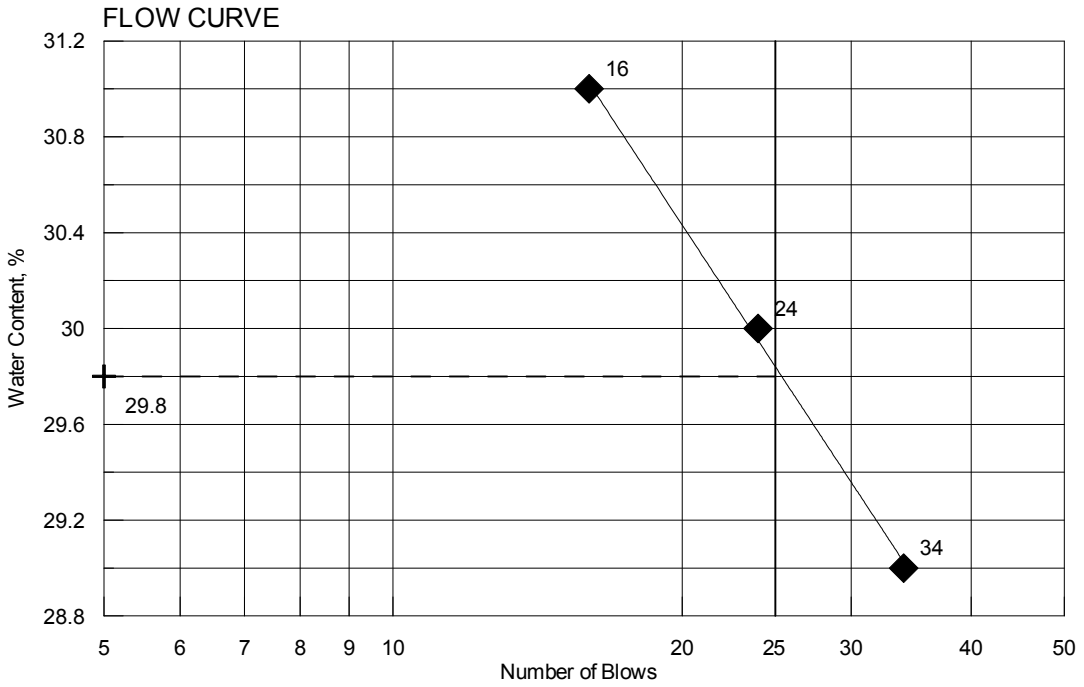
Comments:

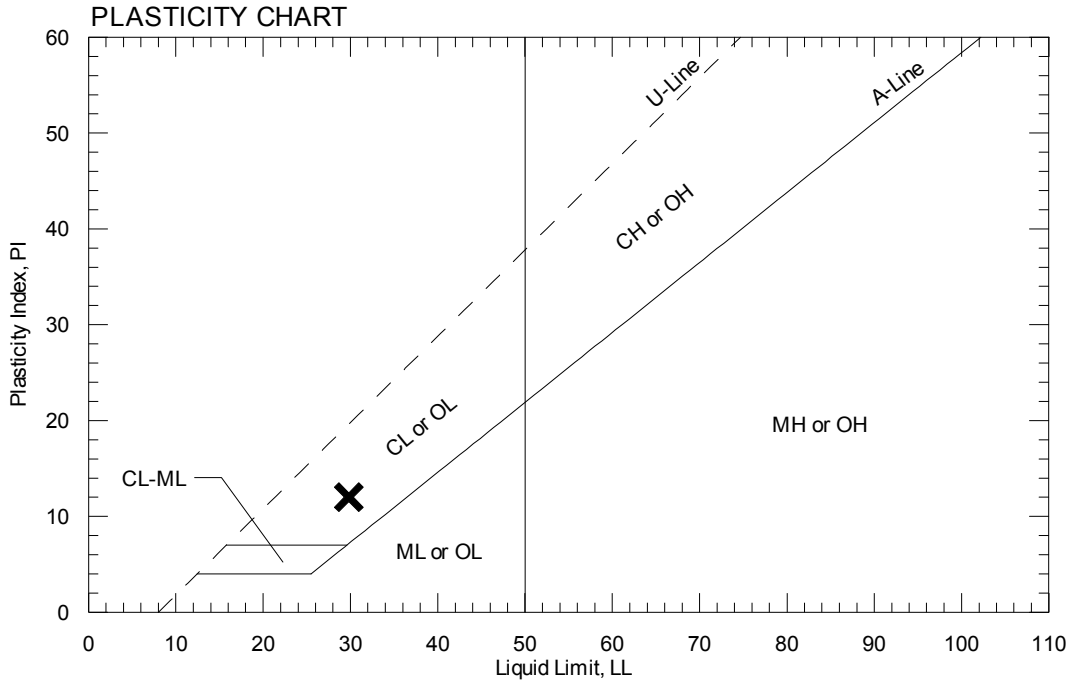
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240149
PIN	016637.20	Water Content, %	33.8
Sampled	9/14/2010	Plastic Limit	18
Boring No./Sample No.	HB-AUB-303/7D	Liquid Limit	30
Station		Plasticity Index	12
Depth	33.0-35.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240144	**HB-AUB-303/9D**	**GEOTECHNICAL (DISTURBED)**	**9/14/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **43.0-45.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	**99.9**
No. 40 [0.425 mm]	**99.8**
No. 60 [0.250 mm]	**99.7**
No. 100 [0.150 mm]	**99.0**
No. 200 [0.075 mm]	**82.8**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %

Plastic Limit (T 90), %

Plasticity Index (T 90), %

NP

Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

22.4

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

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Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240135	**HB-AUB-304/11D**	**GEOTECHNICAL (DISTURBED)**	**9/17/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **61.0-62.5**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	**100.0**
¼ in. [6.3 mm]	**99.9**
No. 4 [4.75 mm]	**99.7**
No. 10 [2.00 mm]	**97.3**
No. 20 [0.850 mm]	**88.1**
No. 40 [0.425 mm]	**62.0**
No. 60 [0.250 mm]	**29.8**
No. 100 [0.150 mm]	**9.5**
No. 200 [0.075 mm]	**2.8**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %

Plastic Limit (T 90), %

Plasticity Index (T 90), %

Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

20.5

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/27/2010**

Paper Copy: Lab File; Project File; Geotech File

Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240133	**HB-AUB-304/2D**	**GEOTECHNICAL (DISTURBED)**	**9/16/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **6.0-8.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
35
Plastic Limit (T 90), %
27
Plasticity Index (T 90), %
8
Specific Gravity, Corrected to 20°C (T 100)
Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
27.9

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

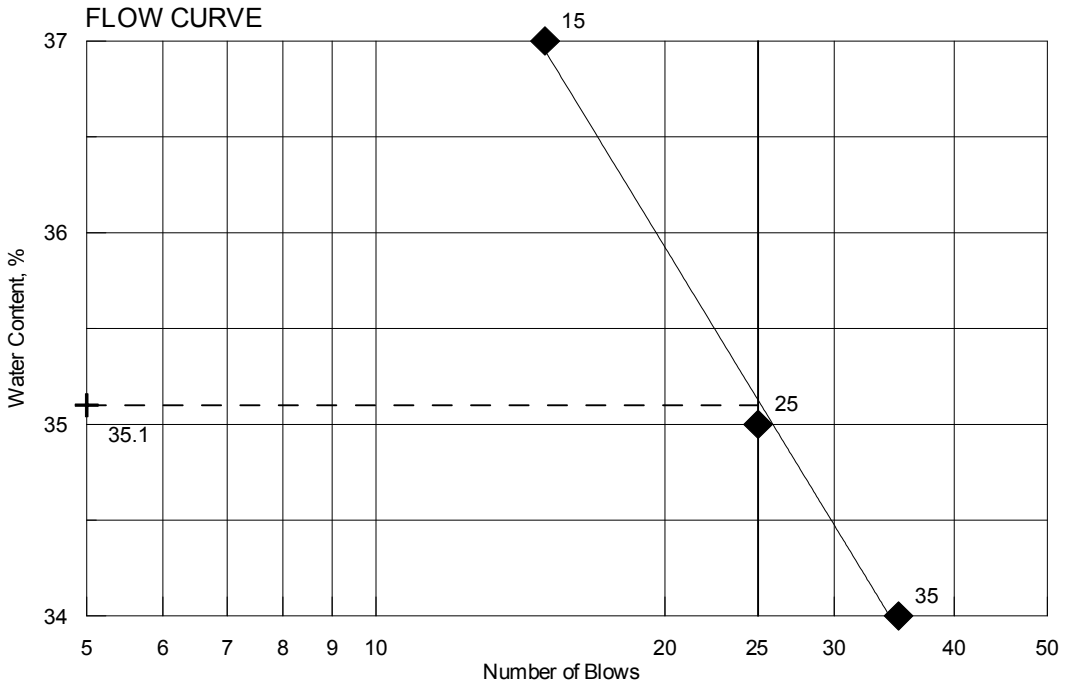
Comments:

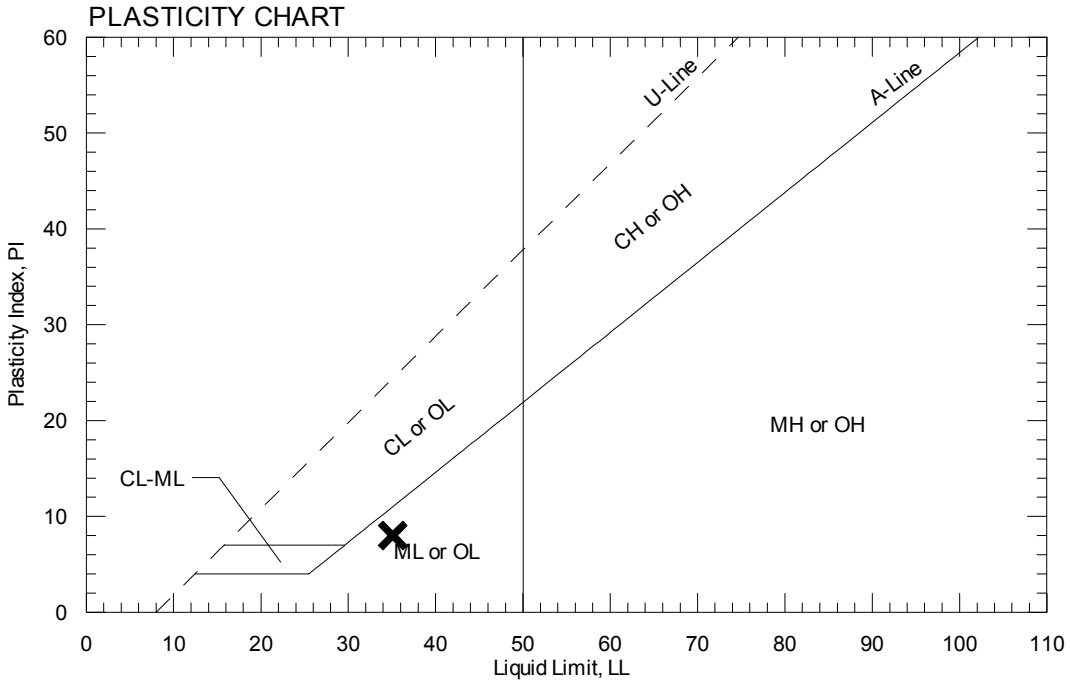
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240133
PIN	016637.20	Water Content, %	27.9
Sampled	9/16/2010	Plastic Limit	27
Boring No./Sample No.	HB-AUB-304/2D	Liquid Limit	35
Station		Plasticity Index	8
Depth	6.0-8.0	Tested By	BBURR





Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240134	**HB-AUB-304/3D**	**GEOTECHNICAL (DISTURBED)**	**9/16/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **11.0-13.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
39
Plastic Limit (T 90), %
21
Plasticity Index (T 90), %
18
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
28.3

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

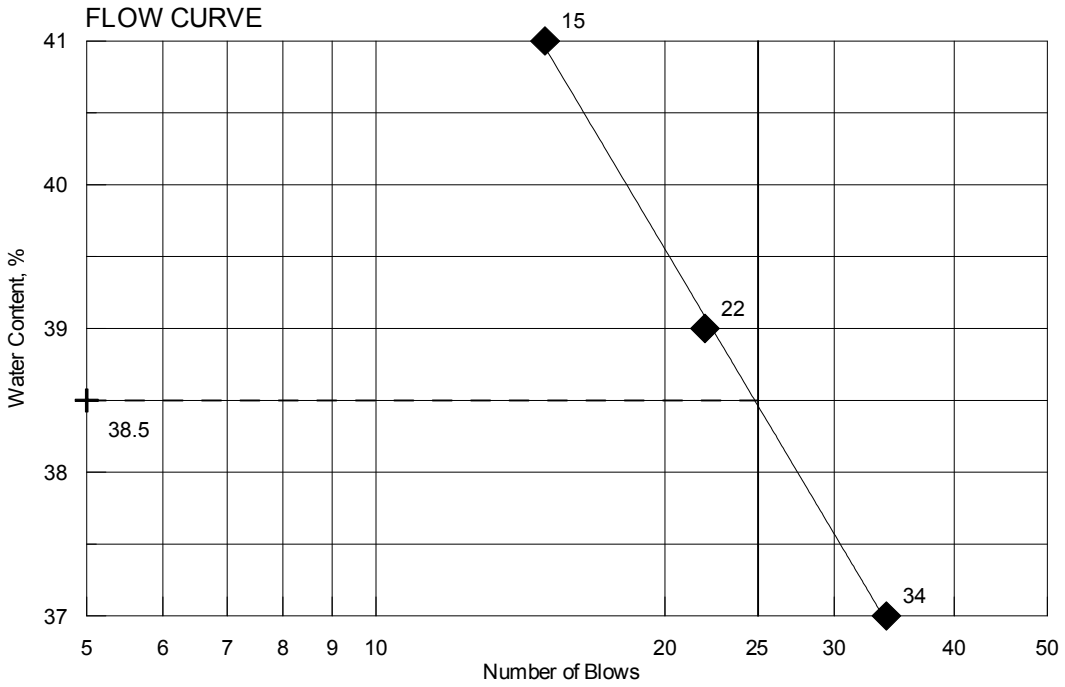
Comments:

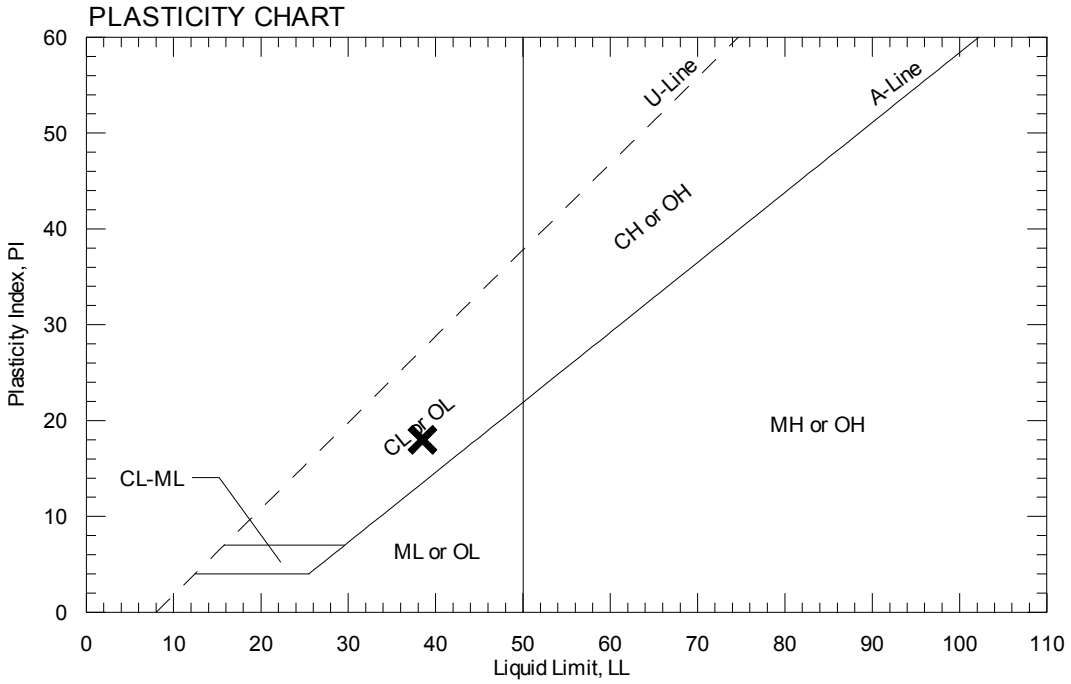
AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **9/30/2010**

Paper Copy: Lab File; Project File; Geotech File

TOWN	Auburn	Reference No.	240134
PIN	016637.20	Water Content, %	28.3
Sampled	9/16/2010	Plastic Limit	21
Boring No./Sample No.	HB-AUB-304/3D	Liquid Limit	39
Station		Plasticity Index	18
Depth	11.0-13.0	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240150	**HB-AUB-304/5D**	**GEOTECHNICAL (DISTURBED)**	**9/16/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **21.0-23.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27)

Wash Method

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	
No. 20 [0.850 mm]	
No. 40 [0.425 mm]	
No. 60 [0.250 mm]	
No. 100 [0.150 mm]	
No. 200 [0.075 mm]	

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %
28
Plastic Limit (T 90), %
18
Plasticity Index (T 90), %
10
Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %
28.5

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/5/2010**

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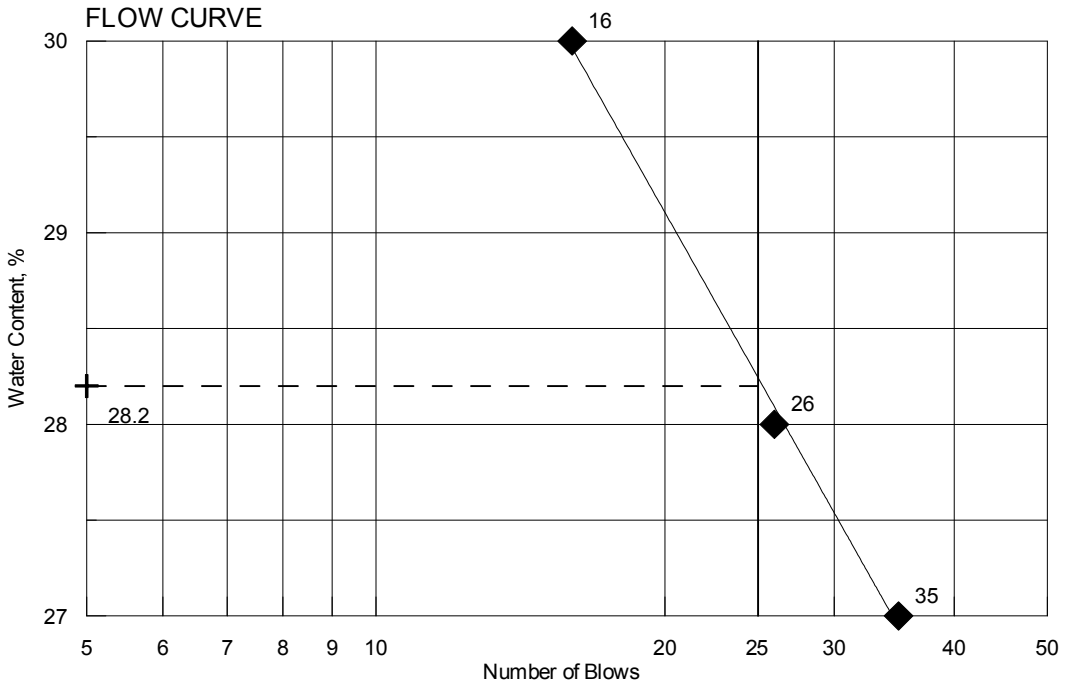
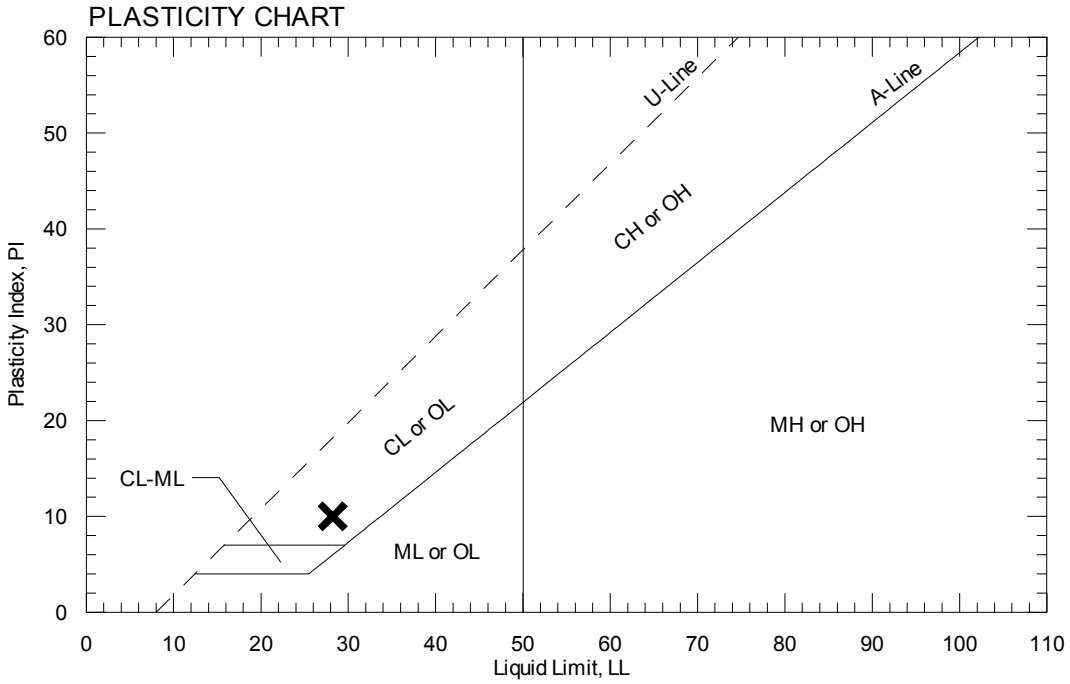
TOWN	Auburn	Reference No.	240150
PIN	016637.20	Water Content, %	28.5
Sampled	9/16/2010	Plastic Limit	18
Boring No./Sample No.	HB-AUB-304/5D	Liquid Limit	28
Station		Plasticity Index	10
Depth	21.0-23.0	Tested By	BBURR





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GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240136	**HB-AUB-304/6D**	**GEOTECHNICAL (DISTURBED)**	**9/16/2010**	**9/20/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **26.0-28.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	**100.0**
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	**99.8**
No. 40 [0.425 mm]	**99.7**
No. 60 [0.250 mm]	**99.6**
No. 100 [0.150 mm]	**94.1**
No. 200 [0.075 mm]	**58.8**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %

Plastic Limit (T 90), %

Plasticity Index (T 90), %

NP

Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

25.2

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/1/2010**

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Maine DOT, Materials Testing & Exploration, 219 Hogan Road, Bangor, Maine 04401

GEOTECHNICAL TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
240185	**HB-AUB-305/7D**	**GEOTECHNICAL (DISTURBED)**	**9/20/2010**	**9/24/2010**

Sample Type: **GEOTECHNICAL** Location: **OTHER** Station: Offset, ft: Dbfg, ft: **33.0-35.0**

PIN: **016637.20** Town: **Auburn** Sampler: **WILDER, BRUCE H**

TEST RESULTS

Sieve Analysis (T 27, T 11)

Wash Method

Procedure A

SIEVE SIZE U.S. [SI]	% Passing
3 in. [75.0 mm]	
1 in. [25.0 mm]	
¾ in. [19.0 mm]	
½ in. [12.5 mm]	
⅜ in. [9.5 mm]	
¼ in. [6.3 mm]	
No. 4 [4.75 mm]	
No. 10 [2.00 mm]	**100.0**
No. 20 [0.850 mm]	**100.0**
No. 40 [0.425 mm]	**99.8**
No. 60 [0.250 mm]	**97.0**
No. 100 [0.150 mm]	**67.3**
No. 200 [0.075 mm]	**9.3**

Direct Shear (T 236)

Shear Angle, °			
Initial Water Content, %			
Normal Stress, psi			
Wet Density, lbs/ft³			
Dry Density, lbs/ft³			
Specimen Thickness, in			

Consolidation (T 216)

Trimmings, Water Content, %

	Initial	Final		Void Ratio	% Strain
Water Content, %			Pmin		
Dry Density, lbs/ft³			Pp		
Void Ratio			Pmax		
Saturation, %			Cc/C'c		

Miscellaneous Tests

Liquid Limit @ 25 blows (T 89), %

Plastic Limit (T 90), %

Plasticity Index (T 90), %

Specific Gravity, Corrected to 20°C (T 100)

Loss on Ignition (T 267)

Loss, %	H2O, %

Water Content (T 265), %

25.2

Vane Shear Test on Shelby Tubes (Maine DOT)

Depth taken in tube, ft	3 In.		6 In.		Water Content, %	Description of Material Sampled at the Various Tube Depths
	U. Shear tons/ft²	Remold tons/ft²	U. Shear tons/ft²	Remold tons/ft²		

Comments:

AUTHORIZATION AND DISTRIBUTION

Reported by: **FOGG, BRIAN** Date Reported: **10/4/2010**

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