



VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782893	PROJECT NAME: Centredale Manor, North Providence, RI		
BORING NUMBER: CMS-624	COORDINATES:		DATE:
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 10/1/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 10/1/99
DRILLING METHODS: Hand Auger			PAGE 1 OF 1

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER	RECOVERY 1/2	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
				Surface: Vegetation				Background Reading
								Fig: 0.0 ppm
								B. Zone: 0.0 ppm
	CMS- B24 A	-	6"	Moderate to dark brown, silty PEAT, Saturated	PT	-	-	FD: 0.0 ppm (6" hole) 0.0 ppm (sample) Sample Collected 0920
				End of Exploration at 0.5 foot, per Work scope.				
				Water level at 0.2' (2") above grade.				

pp 104 & 105



625

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782893	PROJECT NAME: Centerville Manor, North Providence, RI	
BORING NUMBER: CMS-625	COORDINATES:	DATE:
ELEVATION:	GWL: Depth Date/Time	DATE STARTED: 10/1/99
ENGINEER/GEOLOGIST: M. Reilly	Depth Date/Time	DATE COMPLETED: 10/1/99
DRILLING METHODS: Hand Auger	PAGE 1 OF 1	

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ()	RECOVERY ()	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	CM5- B25 A	1	6"	Surface: Vegetation Moderate brown silty PEAT with roots, trace fine sand, moist.	PT	1	1	Backlog reading PID: 12.5 ppm (B. Zone)
1				End of Exploration at 0.5 foot, per Work Scope.				
2				★ Standing groundwater in borehole at 3" (0.25'), above				PID: 26.0 ppm (6" Hole) 3.5 ppm (Sample) Sample collected 0925
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NOTES:

Drilling Contractor

Drilling Equipment

Driller:

Reference: Field Book: C.R., RI

Hand Auger Book 2

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 732893		PROJECT NAME: Centredale Manor, North Providence, RI	
BORING NUMBER: CMS- E26		COORDINATES:	DATE:
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 12/1/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 12/1/99
DRILLING METHODS: Hand Auger			PAGE 1 OF 1



DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER	RECOVERY	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
				Surface: Vegetation				N/A
	CMS-E26 A	-	6"	Moderate to grayish brown organic SILT and PEAT with wood fragments, roots, moist to wet.	OL/PT	-	-	PID: N/A Sample collected 0942
1				End of Exploration at 0.5 foot, per the workscope.				
2				* Water level at approximately 1.0 foot above grade.				

NOTES:

Drilling Contractor IT
 Drilling Equipment Hand Auger (3")
 Driller: _____

Reference: Field Book: C.R., RI
 Hand Auger Book 2
 pp 104 & 105



VISUAL CLASSIFICATION OF SOILS

A vertical scale with three marked points labeled 1, 2, and 3 from top to bottom.

Driller:

Hand Auger (3")

pp 114 & 115

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782893	PROJECT NAME: Centredale Manor, North Providence, RI		
BORING NUMBER: CMS-628	COORDINATES:		DATE:
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 9/29/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 9/29/99
DRILLING METHODS: Hand Auger			PAGE 1 OF 1

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER	RECOVERY IN	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
0.0'				Surface Vegetation				N/A
1	CMS-628-A	-	12"	Olive brown, silty PEAT, saturated.	PT	-	-	Air monitoring: N/A
				0.75'	OL/PT			Sample collected 1626
	CMS-628-B	-	12"	Same as above.	OL/PT			
2				1.5'				
				Olive brown to moderate brown sandy SILT and weathered GRAVEL, saturated.	GM	-	-	Sample collected 1632
				2.0'				
3	CMS-628-C	-	12"	Olive brown, silty Fine to coarse SAND and fine to medium GRAVEL (subangular to rounded), saturated.	GM	-	-	Sample collected 1637
	CMS-628-D	-	6"	Same as above	GM	-	-	Sample collected 1640
4				End of Exploration at 3.5 feet, due to refusal on Gravel/Cobbles.				
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NOTES:

Drilling Contractor IT
 Drilling Equipment Hand Auger (4" 3")
 Driller: _____

Reference: Field Book: C.R., RI

Hand Auger Book 2

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VISUAL CLASSIFICATION OF SOILS

+1.7'



NOTES:

Drilling Contractor DT

Drilling Equipment Hand Auger (3")

Driller: _____

Reference: Field Book: C.R., RI-

Hand Auger Book 2

pp 106 + 107



PROJECT NUMBER: 782893	PROJECT NAME: Centredale Manor, North Providence, RI		
BORING NUMBER: CMS-630	COORDINATES:		DATE:
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 10/1/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 10/1/99
DRILLING METHODS: Hand Auger			PAGE 1 OF 1



DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ()	RECOVERY IN	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
	CMC- 630 A	-	6"	Surface: Vegetation Moderate to grayish brown organic SILT and PEAT with roots and plastic fragments, saturated.	OL PT	-	-	FID: N/A
1				End of Exploration at 0.5 foot, per the work scope.				
2				* Water level at approximately 1.2 feet above grade.				
3								

pp 104 + 105

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782833	PROJECT NAME: Centredale Manor, North Providence, RI		
BORING NUMBER: CMS-631	COORDINATES:		DATE:
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 10/5/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 10/5/99
DRILLING METHODS: Hand Auger			PAGE 1 OF 1

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (ft)	RECOVERY IN	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
				Surface: leaves and sand				PID: N/A
	CMS-631	-	6"	Olive gray, silty SAND with plant debris	SM	-	-	Air monitoring: NA
	A			Olive gray to olive brown silty, clayey PEAT (mudflat or swamp soil) saturated. 0.4'	PT			Sample collected 1105
				Grayish black organic CLAY with plant debris (swamp soil), saturated				
				End of Exploration at 0.5 foot per the work scope.				
				★ Water level is 3.0 feet above grade				
				- Sample point located in main stream channel.				

NOTES:

Drilling Contractor IT
Drilling Equipment Hand Auger (3")
Driller: _____

Reference: Field Book: C.R., RI

Hand Auger Book 2

pp 114 + 115

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782893	PROJECT NAME: Cantecdale Manor, North Providence, RI		
BORING NUMBER: CMS-632	COORDINATES:		DATE:
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 10/5/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 10/5/99
DRILLING METHODS: Hand Auger			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER	RECOVERY	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
0.0				SURFACE: 11701.				PID: N/A
0.5	CMS-632 A	-	0.5"	Olive gray to olive brown, silty, clayey PEAT, saturated. Same as above, with layers of grayish black organic CLAY (swamp soil), saturated.	PT	-	-	Air monitoring: N/A Sample collected 10/7
1.0				End of Exploration at 0.5 feet, per the work scope.				
2.0								
3.0				* Water level is 2.0 feet above grade.				

NOTES:

Drilling Contractor IT
 Drilling Equipment Hand Auger (3")
 Driller: _____

Reference: Field Book: C.R., RI

Hand Auger Book 1

pp 114 & 115



VISUAL CLASSIFICATION OF SOILS

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Drilling Contractor IL
Drilling Equipment Hand Auger (3")
Driller: _____

243B-3-86



VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782893	PROJECT NAME: Centerville Manor, North Providence, RI		
BORING NUMBER: CMS-634	COORDINATES:		DATE:
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 10/5/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 10/5/99
DRILLING METHODS: Hand Auger			PAGE 1 OF 1

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER FOOT	RECOVERY %	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
0.0				Surface: Vegetation and Silt				PID: N/A
0.4	CMS 634 A	-	6"	Moderate brown, silty PEAT (plant fragments plentiful), occasional debris (plastic sheeting), saturated.	PT	-	-	Air monitoring: N/A Sample collected 0854
1				Same as above except increasing SILT and fine to medium rounded GRAVEL (silt in pockets).				
2				End of Exploration at 0.5 foot, per Work Scope.				
				* Water at surface (0.0 foot above grade)				

NOTES:

Drilling Contractor IT Corp
Drilling Equipment Hand Auger (4")
Driller: _____

Reference: Field Book: C.R., RI
Hand Auger Book 2

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782893	PROJECT NAME: Centerville Manor, North Providence, RI		
BORING NUMBER: CMS-700	COORDINATES:		DATE: 11/5/99
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 11/5/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 11/5/99
DRILLING METHODS: Hand Auger			PAGE 1 OF 1

DEPTH (Ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ()	RECOVERY IN	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
				Surface: Moss, roots, brown silty sand				Rel: 10-12 mr/hr PID: 0.0 ppm
	CMS-700 A	-	12"	(Fill) Moderate brown, silty SAND and roots, some debris (styrofoam), moist. 0.66'	N/A			Rel 10-12 mr/hr (samples) PID 0.0 ppm Sample collected 1035
1	CMS-700 B	-	6"	(Fill) moderate to olive brown, silty, fine to coarse SAND, moist to wet. 1.0'	N/A			Rel 10-12 mr/hr (samples) PID 0.0 ppm Sample collected 1040
2				End of Exploration at 1.5 feet, due to water table, scope of work.				Standing Water in borehole at 1.0 ft. depth below grade.
3								
4								Rinsate blank collected 1045
5								

NOTES:

Drilling Contractor IT
Drilling Equipment Hand Auger (4" x 5")
Driller: _____

Reference: Field Book: Residential Samples
(Hand Auger)
Vol. 1 PP 24 & 25

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782893	PROJECT NAME: Centredale Manor, North Providence, RI		
BORING NUMBER: CMS-701	COORDINATES:		DATE: 11/5/91
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 11/5/91
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 11/5/91
DRILLING METHODS: Hand Auger			PAGE OF

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ↓	RECOVERY ↑	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
				Surface: Silty Sand + roots				Rad: 10-12 mr/hr PID: 0.1 ppm
1	CMS-701 A	-	12"	(Fill): Light to moderate brown, Fine to medium SAND, some coarse sand and fine gravel, roots, moist. (Fill): Same as above, with occasional coarse gravel, 1.0'	N/A			Rad: 10-12 mr/hr PID: 0.1 ppm Sample collected 1100 *
2	CMS-701 B	-	12"	(Fill): Same as above, with trace roots and increased amount of coarse gravel. Same as above 2.0'	N/A			Rad: 10-12 mr/hr PID: 0-0.1 ppm Sample collected 1102
3	CMS-701 C	-	6"	(Fill): Moderate to dark brown, Fine to medium SAND, some silt, some fine gravel, debris (slag and coal) and cobbles, moist.	N/A			Rad: 10-12 mr/hr PID: 0-0.1 ppm Sample collected 1110
4				End of Exploration at 2.5 Feet due to auger refusal on cobbles. Groundwater table not encountered.				
5								* MS/MSD, and FD collected with 701A.

NOTES:

Drilling Contractor IT
 Drilling Equipment Hand Auger (4" x 3")
 Driller: _____

Reference: Field Book: Residential Samples
 (Hand Auger)

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: <u>752893</u>	PROJECT NAME: <u>Centradale Manor, North Providence, RI</u>		
BORING NUMBER: <u>CMS - 702</u>	COORDINATES:		DATE: <u>11/5/99</u>
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: <u>11/5/99</u>
ENGINEER/GEOLOGIST: <u>M. Reilly</u>	Depth	Date/Time	DATE COMPLETED: <u>11/5/99</u>
DRILLING METHODS: <u>Hand Auger</u>			PAGE <u>1</u> OF <u>1</u>

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER FOOT	RECOVERY IN	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings: REMARKS
				SURFACE: Grass, roots.				Rad: 10-12 m/hr PID: 0.1 ppm
				Root mass, brown silt & sand				
				(Fill): Light brown, medium to coarse SAND with fine gravel and some roots, moist.				
				(Fill): Light brown coarse SAND and fine GRAVEL, some roots, silt, moist.				
1	CMS- 702 A	1	12"					Rad: 10-12 m/hr PID: 0.1 ppm Sample collected 11/8
				(Fill): Light brown FINE SAND, moist.				
				Dark brown, medium to coarse SAND, with gravel, moist.				
				Brownish gray to Olive gray FINE GRAVEL and silty FINE to coarse SAND, moist.				
2	CMS- 702 B	1	12"					Rad: N/A PID: 0.3 - 2.1 ppm Sample collected 11/25
				End of Exploration at 2 feet, due to Auger refusal on cobbles.				
3				Groundwater table not encountered.				
4								
5								

NOTES:

Drilling Contractor IT
Drilling Equipment Hand Auger (4" & 3")
Driller: _____

Reference: Field Book Residential Samples
(Hand Auger)

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 782893	PROJECT NAME: Centredale Manor, North Providence, RI		
BORING NUMBER: CMS-703	COORDINATES:	DATE: 11/5/99	
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 11/5/99
ENGINEER/GEOLOGIST: M. Reilly	Depth	Date/Time	DATE COMPLETED: 11/5/99
DRILLING METHODS: Hand Auger	PAGE		OF

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER FOOT	RECOVERY IN	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	Background Readings REMARKS
				Surface: Brown silt & roots				Rad: N/A FID: 0-0.3 ppm
1	CMS-703 A	—	12"	(Fill): Dark brownish gray to brown, sandy SILT with roots, debris (orange, crystalline mat'l, fractures conchoidally, surface weathering: yellow-orange) 0.5' (Fill): Same as above, with fewer roots. 1.0'	N/A			Rad: 10.5 nR/hr FID: 0.0 ppm Sample collected 1145
2	CMS-703 B	—	12"	(Fill): Light to moderate brown, silty fine to coarse SAND and fine GRAVEL, occasional roots, moist 1.66' (Fill): Light brown, fine SAND, occasional coarse sand, moist.	N/A			Rad: N/A FID: 0-0.3 ppm Sample collected 1215
3				End of Exploration at 2 Feet, due to Gravel and cobbles.				
4								
5								

NOTES:

Drilling Contractor: IT
Drilling Equipment: Hand Auger (4" x 3")
Driller: _____

Reference: Field Book: Residential Samples
(Hand Auger)

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: <u>782893</u>	PROJECT NAME: <u>Centredale Mine, North Providence, RI</u>		
BORING NUMBER: <u>CMS-400</u>	COORDINATES:		DATE:
ELEVATION:	GWL: Depth <u>5 ft</u>	Date/Time <u>6/21/99</u>	DATE STARTED: <u>6/21/99</u>
ENGINEER/GEOLOGIST: <u>B. Bowen</u>	Depth	Date/Time	DATE COMPLETED: <u>6/21/99</u>
DRILLING METHODS: <u>Geoprobe</u>			PAGE <u>1</u> OF <u>1</u>

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ()	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
1	CMS 400-A	NA	12	Asphalt 2" Fill, Gravel sand and silt, coarse to fine gravel and sand, brown, moist.	GM			FID 0.0ppm
2	CMS 400-B	NA	12	Fill, 4" Gravel sand and silt, coarse to fine gravel and sand, brown, moist. 8" Silt, gray to dark gray dry.	GM ML			FID 0.0ppm
3	CMS 400-C	NA	10	Fill, Silt, gray with dark gray mottling, moist.	ML			FID 0.0ppm
4	CMS 400-D	NA	12	Fill, Gravel sand and silt, fine gravel, coarse to fine sand, white to gray, moist.	GM			FID 0.0ppm
5	CMS 400-E	NA	10	Sand and silt, coarse to fine sand, brown to gray, moist but wet at 5' bgs	SM			FID 0.0ppm
	CMS 400-F	NA	12	8" Same as above, 4" Gravel, sand and silt, dark brown, wet.	SM GM			FID 0.0ppm EOB GFT

NOTES:

Drilling Contractor Zebra

Drilling Equipment Geoprobe

Driller: _____

Reference: Geoprobe Logbook
pg 2-3