



FIELD BOREHOLE LOG

BOREHOLE NO.: MW-197A

TOTAL DEPTH: 186 ft.

PROJECT INFORMATION

PROJECT: DDMT - Main Installation Remedial Action

PROJECT NO.: 3202-016

SITE LOCATION: MI

PROJECT MANAGER: T. Holmes

FIELD STAFF: E. Van Schaik

BOREHOLE STARTED: 8/3/2006 8:00:00 AM

BOREHOLE FINISHED: 8/4/2006 8:00:00 AM

DRILLING INFORMATION

DRILLING CO.: Prosonic

DRILLER: A. Marshall

DRILLING METHOD/RIG: Sonic

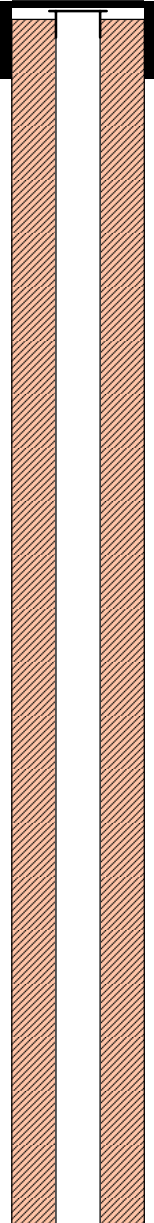
BOREHOLE DIAMETER: 6-in.

GROUND SURFACE ELEVATION: 291.54 (ft, msl)

WATER DEPTH/ DATE: 92.96 ft.toc - 8/14/06

BOREHOLE USE: Monitoring Well

NOTES: Measured well depth was 177.4 feet beet below top of casing (177.7 bgs) on 12/12/06. Field notes state well set at 176 feet bgs.

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
10		CL Clay - reddish brown (5YR 4/4) low plasticity, crumbly, dry		Grouted Annulus
20		CL Clay - reddish brown (5YR 4/4) low to medium plasticity, very fine grained sand, dry		
		CL Clay - yellowish red (5YR 5/6) low plasticity with gray and brown mottling, dry		
30				

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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		CL Clay - yellowish red (5YR 5/6) low plasticity, fine to medium gravel, sub rounded, dry		
		SC Clayey sand - reddish yellow (7.5YR 6/8) very fine grained, trace of fine gravel, dry		
		SW Clayey gravelly sand - strong brown (7.5YR 5/6) very fine to fine grained, fine to medium gravel, sub angular to sub rounded, dry		
40		SW Gravelly sand - reddish yellow (7.5YR 6/8) fine to medium gravel A/A, dry		
		SP Sand - reddish yellow (7.5YR 6/8) fine grained, dry		
50		SW Gravelly sand - reddish yellow (7.5YR 7/6) fine grained, fine to medium gravel, sub angular, dry		
		SW Sand - reddish yellow (7.5YR 7/6) medium grained sand, dry		
		SP Sand - reddish yellow (7.5YR 7/8) medium grained sand, dry		
60				

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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SW Sand - strong brown (7.5YR 7/8) fine to medium gravel, dry		
		SW Gravelly sand - strong brown (10YR 5/8) medium grained, fine to medium gravel, sub angular to sub rounded, dry		
70				
		SP Sand - yellow (10YR 7/8) very fine to fine grained, dry		
		SP Sand - reddish yellow (7.5YR 7/8) very fine grained, dry		
		SP Sand - reddish yellow (7.5YR 6/8) A/A, dry		
80				
		SP Sand - pink (7.5YR 8/4) very fine grained, dry		
		SP Sand - brownish yellow (10YR 6/6) very fine grained, dry		
90				

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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
130		SW Gravelly sand - yellow (10YR 7/6) medium grained, fine to coarse gravel (up to cobble size), moist		
		SW Gravelly sand - yellow (10YR 7/6) fine to medium grained, fine to medium gravel, moist		
		SW Gravelly sand - yellow (10YR 7/6) very fine to fine grained, fine gravel, moist		
		SW Gravelly sand - yellow (10YR 7/6) very fine to fine grained, fine to medium gravel, A/A, moist		
140		SW Gravelly sand - yellow (10YR 7/6) very fine to fine grained, fine gravel, sub angular to sub rounded, moist		
150		SP Sand - yellow (10YR 7/6) very fine grained, moist		
		SP Gravel - yellow (10YR 7/6) fine grained to very fine grained sand, moist		

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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		GW Gravel - yellow (10YR 7/6) fine grained to very fine grained sand, moist		Bentonite Plug
		SW Gravelly sand - yellow (10YR 7/6) medium grained, fine gravel 153 - 156-ft., moist		
		SW Gravelly sand - yellow (10YR 7/6) very fine grained, fine to medium gravel, sub angular to sub rounded, moist		
160		SP Gravel - very pale brown (10YR 7/4) very fine grained, moist		
		SP Sand - very pale brown (10YR 7/4) very fine grained, moist		
170		GW Sand - yellow (10YR 7/6) fine to medium grained, very fine to fine grained sand, moist		
		SW Gravelly sand - yellow (10YR 7/6) fine grained, fine gravel, A/A, moist		Screened Interval
		SC Gravelly sand - gray (10YR 6/8) moist		
		CL Clay - brownish yellow (10YR 6/8) medium plasticity, trace of very fine sand, dry		
180				
				Bentonite Backfill

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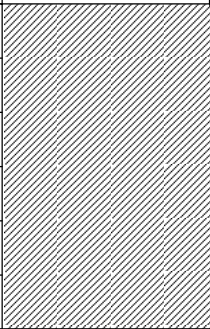
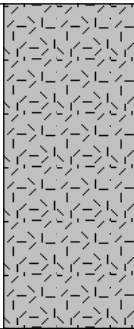
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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		CL Sandy clay - gray (10YR 5/1) very fine grained sand, medium plasticity, dry CL Clay - reddish brown (10YR 5/1) low plasticity (stiff),		
190		End of Log		
200				
210				

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