

BOREHOLE NO.: MW-210A TOTAL DEPTH: 216 ft.

#### **PROJECT INFORMATION**

PROJECT: Phase 2 Wells and April LTM Report

PROJECT NO.: 3202-019
SITE LOCATION: MI

**PROJECT MANAGER: T. Holmes** 

FIELD STAFF: J. Anstaett

BOREHOLE STARTED: 4/17/2007 14:00 BOREHOLE FINISHED: 4/18/2007 15:25

#### **DRILLING INFORMATION**

**DRILLING CO.: Prosonic** 

DRILLER: J. Asua

DRILLING METHOD/RIG: Sonic BOREHOLE DIAMETER: 6-in.

GROUND SURFACE ELEVATION: 289.78 (ft, msl)

WATER DEPTH/ DATE: 98.31-ft. toc -5/4/07

**BOREHOLE USE: Monitoring Well** 

#### NOTES:

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
_	THE	Grass and roots		
- - - -		CL Silty clay - dark yellowish brown 10YR (3/6), low plasticity, moist.		
-				
10-		<b>CL</b> Silty clay - dark yellowish brown 10YR (5/4), low plasticity, moist.		Grouted Annulus
-				
-				
-				
-		CH Silty clay - dark yellowish brown 10YR (5/4), medium plasticity, moist.		
20-				
-				
-				
-				
-		<b>CL</b> Sandy clay - yellowish red 5YR (4/6), gray mottling, low plasticity, fine grained sand, moist.		
30-				

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PAGE: 1 of 8



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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SP Clayey sand - yellowish red 5YR (5/8), fine grained sand, poorly graded, moist.		
40-		SW Silty sand - brown 10YR (4/3) fine to course grained sand, well graded, wet.		
- 1		SP Silty sand - yellow 10YR (7/8), fine grained sand with trace course grained sand, poorly graded, moist.		
50-		SP Sand - strong brown 7.5YR (5/8), trace gravel, fine to course grained sand, subrounded gravel, poorly graded, moist.		
60-		SW Gravely sand - yellowish red 5YR (5/8), fine to course grained sand, sub-rounded to sub-angular gravel, well graded, moist.		

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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SW Gravely sand - brownish yellow 10YR (6/6), fine to course grained sand, sub-rounded to sub-angular gravel, well graded, wet.		
70-		SP Silty sand - yellow 10YR (7/8), fine grained sand, poorly graded, moist.		
		SP Clayey sand - reddish brown 5YR (5/4), fine grained sand, poorly graded, moist.  SP Silty sand - yellow 2.5Y (7/6), fine grained sand, poorly graded, moist.		
80 -		SP Silty sand - pale yellow 2.5Y (8/4), with some gravel, fine grained sand, sub-rounded to sub-angular gravel, poorly graded, moist.  SW Gravely sand - brownish yellow 10YR (6/8), fine to coarse grained sand, sub-rounded to		
90-		sub-angular gravel, well graded, wet.		

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PAGE: 3 of 8



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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SP Sand - yellowish red 5YR (5/6), fine to medium grained sand, poorly graded, wet.	98.31- ft.	
100		SW Gravely sand - pale brown 10YR (6/3), fine to coarse grained sand, sub-rounded to subangular gravel, well graded, wet.		
110-		SW Gravely sand - pale brown 10YR (6/3), fine to coarse grained sand, sub-rounded to subangular gravel, well graded, wet.		
- 1:		SW Sand - yellowish red 5YR (4/6), with some gravel, fine to coarse grained sand, subrounded gravel, well graded, wet.		
120-		SW Gravely sand - yellowish red 5YR (5/6), fine to coarse grained sand, sub-rounded to subangular gravel, well graded, wet.		

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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
130		SP Silty sand - strong brown 7.5YR (5/8), fine grained sand, poorly graded, wet.  GW Sandy gravel, light brown 7.5YR (6/4), subrounded to sub-angular gravel, coarse grained sand, well graded, wet.  SW Gravely sand - reddish yellow 7.5YR (6/8), fine to coarse grained sand, sub-rounded gravel, trace cobbles, sub-rounded cobbles, well graded, wet.		
140-		SW Silty sand with gravel - light gray 2.5Y (7/2), trace cobbles, fine to medium grained sand, sub-rounded to sub-angular gravel, sub-rounded to sub-angular cobbles, well graded, wet.  CL Silty clay - light gray 2.5Y (7/1), low plasticity, brown mottling, moist.		
150		CH Clay - light brownish gray 2.5Y (6/2), high plasticity, moist.  CL Silty clay - dark gray 2.5Y (4/1), medium plasticity, moist.		

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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
- - -		CH Silty clay - light gray 2.5Y (7/1), with brown mottling, medium plasticity, moist.		
160-		CH Clay - light gray 2.5Y (7/1), high plasticity, moist.		
- - - -		MH Sandy silt - pale yellow 2.5Y (7/3), fine grained sand, poorly graded, moist.		
-		SP Silty sand - pale yellow 2.5Y (7/3), fine grained sand, poorly graded, moist.		Bentonite Plug
170- - -		SW Gravely sand - light brown 7.5YR (6/4), fine to coarse grained sand, sub-rounded gravel, well graded, wet.		Sand Pack
- - -		SW Gravely sand - strong brown 7.5YR (5/6), fine to coarse grained sand, sub-rounded to subangular gravel, well graded, wet.		Screened Interv

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PAGE: 6 of 8



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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
-				
190-		SP Silty sand - light gray 7.5YR (7/1), with some clay, fine grained sand, poorly graded, moist.		
_ _ _		CH Silty clay - light gray 7.5YR (7/1), high plasticity, moist.		
		SW Gravely sand - light brownish yellow 2.5Y (6/3), fine to coarse grained sand, sub-rounded gravel, well graded, moist.		
200-		CL Silty clay - pale yellow 2.5Y (7/3), medium plasticity, moist.		
_		<b>ML</b> Clayey silt - very pale brown 10YR (7/3), moist.		
- -		<b>CL</b> Silty clay - light gray 2.5Y (7/2), medium plasticity, moist.		
210-			27-7-27-7-27 7-21-7-21-7-21-7 17-21-7-21-	

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Depth	Soil Symbol	Soil Description	Well Completion	Well Description
- - -		SP Silty sand - yellow 2.5Y (8/6), fine grained sand, poorly graded, moist.		
		End of Log	10/5/07/5/5/5/	
- 220 - - - - -				
230-				
240-				

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PAGE: 8 of 8