

Appendix 4

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-1-06

Sheet: 1 of 4

Project: Aggregate Industries

ELEVATION: 1078'

Location: Chelsea, MI

Date Completed: 3/27/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: 41.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @:
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	5'		1.0	Topsoil - dark brown fine sand w/organics	-	-
				Sand - brown fine, trace clay	-	-
					-	-
			4.0		-	-
			5	Sand - brown medium to fine, some fine to medium gravels and occasional cobbles	-	-
4" core	10'		10		-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			15		-	-
					-	-
4" core	15'		20		-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			25		-	-
					-	-
4" core	15'				-	-
					-	-
					-	-
					-	-
			30		-	-

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

LOG OF TEST BORING NO. R-1-06

Project: Aggregate Industries

Date Completed: 3/27/06

Crew Chief:	Grysa
Drill Rig:	Sonic 11
Boring Method:	4" & 6"

Hole Plugged With: Natural soils

Encountered @	none	ft.
After completion		ft.
After hrs.		ft.
Seepage:		ft.
Boring caved at:	41.00	ft.

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

LEGEND:
Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet		SOIL DESCRIPTION	T W
				-	Sand - brown medium to fine, some fine to medium gravels and occasional cobbles	-
				-		-
				-		-
				-		-
				-		-
				-		-
			35	-		-
				-		-
				-		-
				-		-
				-		-
				-		-
			40	-		-
				-		-
				-		-
				-		-
				-		-
				-		-
			45	-		-
				-		-
				-		-
				-		-
				-		-
			50	-		-
				-	-	
				-	-	
				-	-	
				-	-	
				-	-	
			55	-	-	
				-	-	
				-	-	
				-	-	
				-	-	
				-	-	
			60	-	-	
				-	-	
				-	-	

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

LOG OF TEST BORING NO. R-1-06

Project: Aggregate Industries

Date Completed: 03/27/06

Hole Plugged With: Natural soils

Encountered @	none	ft.
After completion		ft.
After hrs.		ft.
Seepage:		ft.
Boring caved at:	41.00	ft.

Pipe/Type:
Length:
Above Ground:
Cap:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

LEGEND:
Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet		SOIL DESCRIPTION	T W
4" core	10'		-		Sand - brown medium to fine, some fine to medium gravels and occasional cobbles	-
			-			-
			-			-
			-			-
			-			-
			-			-
			65			-
			-			-
			-			-
			-			-
4" core	10'		-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			70			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			75			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			80			-
			-			-
			-			-
			-			-
			-		Sand - light brown fine	-
			-			-
			-			-
			-			-
			-			-
			-			-
			85			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			-			-
			90			-
			-			-
			-			-
			-			-

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-1-06

Sheet: 4 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 3/27/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: 41.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T W
				Sand - light brown fine	
			95		
				E. O. B. @ 98.0'	
			100		
			105		
			110		
			115		
			120		

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-2-06

Sheet: 1 of 4

Project: Aggregate Industries

ELEVATION: 1080'

Location: Chelsea, MI

Date Completed: 3/28/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: 49.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	3'			Sand - brown fine clayey		
			5			
4" core	2'			Gravel - fine to coarse, some sands		
			8.0			
4" core	2'					
			10			
4" core	2'					
			15			
4" core	2'					
			20			
4" core	2'					
			25			
			30			

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-2-06

Sheet: 2 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 3/28/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring caved at: 49.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	3'			Gravel - fine to coarse, some sands	-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			35		-	-
					-	-
			37.0		-	-
4" core	8'			Sand - brown coarse to medium, some fine to medium gravels, occasional cobbles	-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			40		-	-
					-	-
					-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			45		-	-
					-	-
					-	-
4" core					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			50		-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			55		-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			60		-	-
					-	-
					-	-

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-2-06

Sheet: 3 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 03/28/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring caved at: 49.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @:
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	6'			Sand - brown coarse to medium, some fine to medium gravels, occasional cobbles		
			65			
4" core	8'					
			70			
4" core	10'					
			75			
4" core	10'					
			80			
4" core	4'					
			85			
4" core	4'					
			88.0			
4" core	4'			Clay - gray sandy w/ gravels		
			89.0			
4" core	4'			Sand - light brown fine		
			90			

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-2-06

Sheet: 4 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 3/28/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: 49.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T W
			93.0	Sand - light brown fine	-
			95	E. O. B. @ 93.0'	-
			100		-
			105		-
			110		-
			115		-
			120		-

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-3-06

Sheet: 1 of 4

Project: Aggregate Industries

ELEVATION: 1090'

Location: Chelsea, MI

Date Completed: 3/28/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: 75.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap

Screen/Type:
Size:
Slot:
Set @:
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	6'		1.0	Topsoil - dark brown fine sand w/ organics	-	-
				Sand - brown fine, trace clay; moist	-	-
					-	-
					-	-
			5		-	-
4" core	9'		7.0		-	-
				Sand - light brown fine, trace fine to medium gravels	-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			10		-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			15		-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			20		-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			25		-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
			30		-	-

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

[illegible]

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-3-06

Sheet: 3 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 03/28/06

Crew Chief: Gyska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring caved at: 75.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	10'			Sand - brown medium, some coarse sand and fine to medium gravels, occasional cobbles		
			65			
4" core	10'					
			70			
4" core	8'					
			80			
4" core	8'					
			85			
4" core	8'					
			90			

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-3-06

Sheet: 4 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 3/28/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: 75.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
				Sand - brown medium, some coarse sand and fine to medium gravels, occasional cobbles	-	-
			95		-	-
			96.5		-	-
				E. O. B. @ 96.5'	-	-
			100		-	-
			105		-	-
			110		-	-
			115		-	-
			120		-	-

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-4-06

Sheet: 1 of 4

Project: Aggregate Industries

ELEVATION: 1078'

Location: Chelsea, MI

Date Completed: 3/29/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ 95.00± ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blew Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	6'		1.0	Topsoil - brown silty sand w/ organics	-	-
				Sand - brown fine silty	-	-
					-	-
					-	-
			5		-	-
4" core	10'			Sand - brown medium to fine, some fine to medium gravels, occasional cobbles	-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			10		-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			15		-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			20		-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			25		-	-
					-	-
					-	-
					-	-
					-	-
			30		-	-

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-4-06

Sheet: 2 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 3/29/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ 95.00± ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring caved at: ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blew Count	Depth Feet	SOIL DESCRIPTION	T W
				Sand - brown medium to fine, some fine to medium gravels, occasional cobbles	
			35		
			40		
			45		
			50		
			55		
			60		

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-4-06

Sheet: 3 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 03/29/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ 95.00± ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring caved at: ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	10'			Sand - brown medium to fine, some fine to medium gravels, occasional cobbles		
			65			
4" core	10'					
			70			
4" core	12'					
			75			
4" core	12'					
			80			
4" core	12'					
			85			
4" core	12'					
			90			

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO: R-4-06

Sheet: 4 of 4

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 3/29/06

Crew Chief: Gyska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ 95.00± ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
			91.0	Clay - gray sandy; moist	-	-
				Sand - brown fine clayey	-	-
			95		-	-
				Sand - brown fine clayey; wet	-	-
			99.0		-	-
			100	E. O. B. @ 99.0'	-	-
			105		-	-
			110		-	-
			115		-	-
			120		-	-

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-5-06

Sheet: 1 of 3

Project: Aggregate Industries

ELEVATION: 1065'

Location: Chelsea, MI

Date Completed: 3/29/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring Caved at: 60.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	9'			Topsoil - dark brown silty fine sand w/ organics	-	-
			1.5		-	-
				Sand - dark brown fine; trace clay; trace gravel	-	-
					-	-
			5		-	-
4" core	10'			Sand - brown fine to medium, trace coarse sand; fine gravels, occasional medium to coarse gravel	-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			10		-	-
					-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			15		-	-
					-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			20		-	-
					-	-
4" core	10'				-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
					-	-
			25		-	-
					-	-
					-	-
					-	-
					-	-
			30		-	-

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

LOG OF TEST BORING NO. R-5-06

Project: Aggregate Industries

Date Completed: 3/29/06

Hole Plugged With: Natural soils

Encountered @	none	ft.
After completion		ft.
After hrs.		ft.
Seepage:		ft.
Boring caved at:	60.00	ft.

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet		SOIL DESCRIPTION	T W
4" core	10'		35	-	Sand - brown fine to medium, trace coarse sand; fine gravels, occasional medium to coarse gravel	-
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
4" core	10'		40	-		-
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
4" core	10'		45	-		-
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
4" core	10'		50	-		-
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
4" core	10'		55	-		-
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
			60	-		-
				-		
				-		
				-		
				-		
				-		

STEARNS DRILLING COMPANY

6974 Hammond SE
Dutton, Michigan 49316-9116
616/698-7770
FAX 616/698-9886

Job No. 06-11146-3

LOG OF TEST BORING NO. R-5-06

Sheet: 3 of 3

Project: Aggregate Industries

Location: Chelsea, MI

Date Completed: 03/29/06

Crew Chief: Gryska
Drill Rig: Sonic 11
Boring Method: 4" & 6"

Hole Plugged With: Natural soils

GROUNDWATER:

Encountered @ none ft.
After completion ft.
After hrs. ft.
Seepage: ft.
Boring caved at: 60.00 ft.

MONITOR WELL DATA:

Pipe/Type:
Length:
Above Ground:
Cap:

Screen/Type:
Size:
Slot:
Set @
Backfilled:

Bentonite Seal:
Grout/Type:
Depth:
Protective Casing:
Materials Cleaned:
Development:

REMARKS:

LEGEND:

Blow Count/Blows per 6"
w/140# hammer x 30" drop
SS-2" Split Spoon Sampler
LS-Brass Liner Sample
ST-Shelby Tube Sample
SNR-Sample not recovered
LB-Large Bore

Sample Type	REC	Blow Count	Depth Feet	SOIL DESCRIPTION	T	W
4" core	10'			Sand - brown fine to medium, trace coarse sand; fine gravels, occasional medium to coarse gravel		
			65			
4" core	10'			Clay - gray sandy; moist		
			70			
4" core	10'			Sand - brown fine; dry		
			73.5			
4" core	2'			E. O. B. @ 89.0'		
			75			
4" core	2'			E. O. B. @ 89.0'		
			78.0			
4" core	2'			E. O. B. @ 89.0'		
			80			
4" core	2'			E. O. B. @ 89.0'		
			85			
4" core	2'			E. O. B. @ 89.0'		
			89.0			
4" core	2'			E. O. B. @ 89.0'		
			90			