

APPENDIX D

BORING LOGS

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-1

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620241.78 E 728685.22 SURFACE EL: 1586.9	USCS SYMBOL	REMARKS	
						DESCRIPTION			
1583.9	0					Gravel and SAND orangeish gray. Road base.		Not sampled 6" sampler Not cored boulders	
		S-1		100%		COBBLES with SAND, Rock fragments are Porphyritic rhyolite, angular to subangular, dark brown, The fragment shapes and colors are similar in all intervals except where stated	GP-GM		
1576.9	10					COBBLES and GRAVEL with sand/fines, Rock fragments are Dark Reddish Brown and sand/fines are moderate yellowish brown.	GP-GM	Drilled with 4" core barrel . Poor recovery	
		S-2		84%					
1566.9	20					COBBLES and GRAVEL some sand, dark reddish brown	GW		
	30	S-3		30%				6" sampler. Rapid drilling rate, poor recovery, no water 800 lbs pressure, 800 PSI pressure.	
1546.9	40						GP		
		S-4		30%					
1536.9	50						GP	Rapid drilling rate	
		S-5		10%				Rapid drilling rate	
1526.9	60						GP		
		S-6		40%					
	70								
DATE STARTED: 1/16/2006					GWL: DEPTH: N/A DATE/TIME:			NOTES: All samples sent to Geotechnics laboratory for additional analysis	
DATE COMPLETED: 1/16/2006					GWL: DEPTH: DATE/TIME:				
FIELD GEOLOGIST: HWG					DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'				
CHECKED BY: EGZ									
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			RIG: VERSASONIC Rig	

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-1

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620241.78 E 728685.22 SURFACE EL: 1586.9	USCS SYMBOL	REMARKS	
						DESCRIPTION			
1516.9						70'	GP	Rapid drilling rate	
		S-7		60%		COBBLES and GRAVEL with trace fines			
1506.9	80					80'	GP		Rapid drilling rate
		S-8		60%		COBBLES and GRAVEL, trace fines			
1496.9	90					90'	GP		
		S-10		82%		COBBLES and GRAVEL some sand/fines			
1486.9	100					100'	GP	See TS-1R for rock coring log	
1483.9		S-11		100%		COBBLES and GRAVEL trace fines; also present is soil with roots. Soil is Silty, bluish gray and moderate yellowish brown.	GP-		
1481.2		S-12		50%		103'	GM		
						Rhyolite porphyry, Reddish brown, fractured			
						BOTTOM OF BORING 105.7'			
	110								
	120								
	130								
	140								
DATE STARTED: 1/16/2006					GWL: DEPTH: N/A DATE/TIME:			NOTES: All samples sent to Geotechnics laboratory for additional analysis	
DATE COMPLETED: 1/16/2006					GWL: DEPTH: DATE/TIME:				
FIELD GEOLOGIST: HWG					DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'				
CHECKED BY: EGZ									
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			RIG: VERSASONIC Rig	

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-2

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620883.19 E 728417.47 SURFACE EL: 1587.45	USCS SYMBOL	REMARKS
						DESCRIPTION		
1584.5	0					Poorly graded GRAVEL; parking lot - road aggregate	GP	Not sampled
						3' COBBLES with GRAVEL, some sand, some clay, Rock fragments are angular to subangular, brownish gray. Sand is moderate yellowish brown. The fragment shapes and colors are similar in all intervals except where stated	GP-GC	6" sampler. Not cored boulders
1577.5	10	S-1		70%		10' COBBLES and GRAVEL some sand. Brownish gray	GP	Rapid drilling rate
		S-2		45%				
1569.5						18' COBBLES and GRAVEL some sand; trace fines. Rock fragments are reddish gray	GP	Moist from drilling
1568.0	20					18.5'	GP	Rapid drilling rate
1567.5						20'	GP	
		S-3		45%				
1557.5	30					30' COBBLES and GRAVEL some sand, trace fines. Rock fragments are reddish gray	GP	Rapid drilling rate
1553.5		S-4		50%		34' Boulder @ 34'-37.5'	GP	Slow drilling rate
1547.5	40					40'	GP	Fast drilling rate.
		S-5		50%				
1537.5	50					50' GRAVEL with sand, some silt	GP-GM	Rapid drilling rate except for 54-56' where moderate
		S-6		50%				
1527.5	60					60'	GP-GM	Slow drilling rate; drilled 10'/0.5 hr
		S-7		50%				
	70							
DATE STARTED: 1-19-06 DATE COMPLETED: 1-20-06 FIELD GEOLOGIST: HWG CHECKED BY: EGZ					GWL: DEPTH: dry DATE/TIME: 3-13-06/ 08:00 GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-2

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620883.19 E 728417.47 SURFACE EL: 1587.45	USCS SYMBOL	REMARKS
						DESCRIPTION		
1517.5		S-8		28%		COBBLES and GRAVEL; trace fines - mostly derived from coring	GP	Rapid drilling rate 10'/1 min Moisture from drilling
1507.5	80						GC	Very rapid drilling rate; Moderate from 95' to 100'. Boulder 98'-100'. Changed to 4" sampler
	90	S-9		5%				
1487.5	100	S-10				Silty SAND, light yellowish gray Rhyolite (boulder and cobble)	GC	Changed back to 6" sampler
1482.0						BOTTOM OF BORING 104.5'		See TS2-R for rock coring log
	110							
	120							
	130							
	140							
DATE STARTED: 1-19-06 DATE COMPLETED: 1-20-06 FIELD GEOLOGIST: HWG CHECKED BY: EGZ					GWL: DEPTH: dry DATE/TIME: 3-13-06/ 08:00 GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			
					RIG: VERSASONIC Rig			

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-3

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620744.30 E 728478.45 SURFACE EL: 1587.4	USCS SYMBOL	REMARKS	
						DESCRIPTION			
1585.4	0					SILT, SAND and GRAVEL, Grayish orange; road access cover 2'	GW-GM	Not sampled	
		S-1		70%		Sandy GRAVEL with silt and cobble; grayish brown. Moist			
1577.4	10					Rhyolitic GRAVEL fragments with sandy silt 10'	GP-GC	Rapid drilling rate	
		S-2		50%					
1567.4	20					COBBLES, GRAVEL, with sand; little fines. Rock fragments are reddish gray 20'	GP-GC	Moist from drilling Rapid drilling rate	
		S-3		45%					
1557.4	30					COBBLES, GRAVEL, with sand; little fines. Rock fragments are reddish gray 30'	GW	Rapid drilling rate	
		S-4		37%					
1547.4	40						GP	Fast drilling rate.	
		S-5		25%					
1537.4	50					Rhyolitic COBBLES, GRAVEL some sand and silt. 50'	GP-GM	Slow drilling rate	
		S-6		50%					
1527.4	60					Boulders of Porphyritic Rhyolite 60'	GP-GM	Slow drilling rate Boulders	
		S-7		50%					
	70								
DATE STARTED: 1-19-06 DATE COMPLETED: 1-20-06 FIELD GEOLOGIST: HWG CHECKED BY: EGZ					GWL: DEPTH: 97.15 DATE/TIME: 3/13/06 08:00 GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis	
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			RIG: VERSASONIC Rig	

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-3

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620744.30 E 728478.45 SURFACE EL: 1587.4	USCS SYMBOL	REMARKS
						DESCRIPTION		
1517.4		S-8		28%		Several boulders of Porphyritic Rhyolite	GP	Slow drilling rate Boulders
1507.4	80	S-9		25%			GP	Moderate drilling rate 80'- 87'; rapid from 87' to 90'
1497.4	90	S-10		50		Silty SAND, olive gray (soil). Wet	GC	PP = 1.5 TSF
1491.5						BOTTOM OF BORING 95.9'		See TS-3R for rock coring log
	100							
	110							
	120							
	130							
	140							
DATE STARTED: 1-19-06 DATE COMPLETED: 1-20-06 FIELD GEOLOGIST: HWG CHECKED BY: EGZ					GWL: DEPTH: 97.15 DATE/TIME: 3/13/06 08:00 GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			RIG: VERSASONIC Rig

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-4

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620602.03 E 728540.85 SURFACE EL: 1587.03'	USCS SYMBOL	REMARKS
						DESCRIPTION		
	0	S-1		40%		GRAVEL and Sand, with fines (silt) from drilling and upper road access. Rock fragments are angular to subangular, dark reddish brown. Sand/fines are moderate yellowish brown. The fragment shapes and colors are similar in all intervals except where stated	GP-GM	Boulders at 2-3' and 7-9'.
1577.0	10					GRAVEL some sand, some fines (silt) - fines are existing and due to drilling.	GP-GM	Boulder at 15-16' Rapid drilling rate 19-20' Moderate drilling rate 10-18'
		S-2		80%				
1567.0	20					GRAVEL some sand and fines (silt). Rock fragments are Dark Reddish Brown and sand and fines are moderate yellowish brown.	GP-GM	Rapid drilling rate Moist from drilling and rain
		S-3		50%				
1557.0	30					GRAVEL, some sand	GP	Boulder at 34-36' Rapid drilling rate 30-34', 39-40'. Moderate drilling rate 36-39'
		S-4		35%				
1551.0						GRAVEL, Washed sample with no sand/fines preserved. Rapid drilling rate 30-34'	GP	Boulder at 15-16'
		S-4		50%				
1547.0	40					COBBLES and GRAVEL trace sand/fines	GP	Rapid drilling rate 45-50'
		S-5		20%				
1537.0	50					GRAVEL, some sand and fines (silt)	GP-GM	Rapid drilling rate except for 55-57' where it was moderate
		S-6		20%				
1527.0	60					GRAVEL trace sand/fines	GP	Rapid drilling rate 60-65', and moderate 65 70'
		S-7		20%				
	70							
DATE STARTED: 1-20-2006 DATE COMPLETED: 1-21-2006 FIELD GEOLOGIST: RJB CHECKED BY: EGZ					GWL: DEPTH: 96.8 GWL: DEPTH: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'		DATE/TIME: 3-13-06/ 08:30 DATE/TIME: NOTES: All samples sent to Geotechnics laboratory for additional analysis	
DRILLING CO.: Miller Co					DRILLER: Tracy		HELPER: Chris, Christian and Jeremy	
							RIG: VERSASONIC Rig	



Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-4

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620602.03 E 728540.85 SURFACE EL: 1587.03'	USCS SYMBOL	REMARKS
						DESCRIPTION		
1517.0		S-8		20%		GRAVEL some cobbles, trace sand/fines	GP	Rapid drilling rate except for boulder 72-74'
1507.0	80	S-9		20%		GRAVEL some cobbles trace sand/fines	GP	Rapid drilling rate except for 84-88' where moderate. Boulder at 88-90'
1497.0	90	S-10		40%		COBBLES some and fines (silt) from soil layer and rock dust from drilling. The soil layer (about 4" thick) is light greenish gray with the presence of roots. Top of bedrock at 97.25'.	GP-GM	Moderate to slow drilling rate Boulder at 92-93'
1488.8	100					BOTTOM OF BORING 98.25'		See TS-4R for rock coring log
	110							
	120							
	130							
	140							
DATE STARTED: 1-20-2006 DATE COMPLETED: 1-21-2006 FIELD GEOLOGIST: RJB CHECKED BY: EGZ					GWL: DEPTH: 96.8 DATE/TIME: 3-13-06/ 08:30 GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			
								RIG: VERSASONIC Rig

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-5

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620433.73 E 728614.27 SURFACE EL: 1587.13	USCS SYMBOL	REMARKS
						DESCRIPTION		
1585.1	0					Not Sampled 0 to 2 feet		
		S-1		60%		GRAVEL and COBBLES with Sand and Silt, dark to moderate reddish brown.	GW	
1577.1	10	S-2		40%			GP-GM	
1572.1		S-3		80%		COBBLES, GRAVEL and trace Sand	GP	Slow drilling
1567.1	20	S-4		40%		COBBLES, CORED BOULDERS (>12") and trace Sand	GP-GC	Fast drilling 24 to 30'
1557.1	30	S-5		40%		GRAVEL, COBBLES AND Trace Sand And Silt, moist	GP-GC	Fast drilling 30 to 50'
1547.1	40	S-6		20%			GP-GC	
1537.1	50	S-7		20%		COBBLES and GRAVEL some Sand, moist Boulder 50'-56'	GP	50 to 60" Slow drilling 56 to 60' fast drilling
1527.1	60	S-8		20%		COBBLES and GRAVEL some Sand, trace Silt	GW	Easy drilling 60 to 65'
	70					Boulder		Extremely Slow 65-67 (boulder) Not Sampled - switched to solid bit.
DATE STARTED: 1-21-06 DATE COMPLETED: 1-22-06 FIELD GEOLOGIST: RJB CHECKED BY: EGZ					GWL: DEPTH: DATE/TIME: GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis
DRILLING CO.: Miller Drilling					DRILLER: Tracy HELPER: Chris, Chris, and Jeremy			RIG: Versa Sonic

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-5

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620433.73 E 728614.27 SURFACE EL: 1587.13	USCS SYMBOL	REMARKS
						DESCRIPTION		
1507.1	80					Solid bit broke in hole (borehole abandoned).		71.5 to 80" very fast drilling
						BOTTOM OF BORING 80' Borehole backfilled with bentonite.		See TS-5R for rock coring log
	90							
	100							
	110							
	120							
	130							
	140							
DATE STARTED: 1-21-06 DATE COMPLETED: 1-22-06 FIELD GEOLOGIST: RJB CHECKED BY: EGZ					GWL: DEPTH: DATE/TIME: GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis
DRILLING CO.: Miller Drilling					DRILLER: Tracy HELPER: Chris, Chris, and Jeremy			RIG: Versa Sonic

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-6

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 620778.58 E 728552.28 SURFACE EL: 1537.29	USCS SYMBOL	REMARKS
						DESCRIPTION		
1535.3	0	S-1		50%		Asphalt and gravel - no sample 2'	gp	easy drilling 4' to 5.5' boulders 5.5' to 7.5' 9' easy drilling
1532.3		S-2		75%		COBBLES, GRAVEL, and rock dust, dry, dark reddish brown, fines and sand are moderate yellowish brown 5'	GP	
1527.3	10	S-3		50%		COBBLES, GRAVEL, with sand, moist, some dry clay 10'	GM	
1517.3	20	S-4		40%		Similar to 10' to 20' but gravel is more abundant, more moist 20'	GP-GC	17' easy drilling
1507.3	30	S-5		25%		GRAVEL, SAND, and some fines, moist, moderate yellowish brown 30'	GM-GC	easy drilling
1497.3	40	S-6		25%		COBBLES, GRAVEL, trace fines 40'	gp	easy drilling 49.5'
1487.3	50	S-7		5%		Similar to 40'-50', dry 50'	GP-GM	most of sample lost in fishing broken 4" drilling pipe See TS-6R for coring log
1483.3						BOTTOM OF BORING 54'		
	60							
	70							
DATE STARTED: 1-24-06 DATE COMPLETED: 1-24-06 FIELD GEOLOGIST: RJB CHECKED BY: EGZ					GWL: DEPTH: dry DATE/TIME: 3-11-06 GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis
DRILLING CO.: Miller Drilling					DRILLER: Tracy HELPER: Chris, Chris, and Jeremy			
					RIG: Versa Sonic			

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-7

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 621176.86 E 727799.66 SURFACE EL: 1551.04	USCS SYMBOL	REMARKS				
						DESCRIPTION						
	0	S-1		20%				GRAVEL and COBBLES with very little fines/sand. Rock fragments are angular to subangular, dark reddish brown. Sand/fines are moderate yellowish brown. The fragment shapes and colors are similar in all intervals except where stated	gm	Not representative for gradation. Drilled first with 4" displacement bit to overcome boulder. Rapid drilling 6'-11'		
1541.0	10						10'	gw-gm	Boulder at 15-16' Rapid drilling rate 15-20' Moderate drilling rate 10-18'			
		S-2		40%						COBBLES, fine GRAVEL, and sand/fines. Rock fragments are Dark Reddish Brown and sand/fines are moderate yellowish brown.		
1531.0	20						20'	gw-gm	Rapid drilling rate except 20-23' and 28-29' where moderate			
		S-3		40%						COBBLES, GRAVEL, and sand/fines		
1521.0	30						30'	GP	Rapid drilling rate			
		S-4		20%						COBBLES, GRAVEL with trace sand/fines.		
1511.0	40					40'	GW	Rapid drilling rate except for 43-45' where moderate				
		S-5		30%					GRAVEL, some SAND			
1501.0	50					50'	GW	Rapid drilling rate except for 54-56' where moderate				
		S-6		30%					GRAVEL, some sand			
1491.0	60					60'	GW	Rapid drilling rate				
		S-7		20%					COBBLES and GRAVEL with trace fines			
	70											
DATE STARTED: 1-24-2006					GWL: DEPTH: 106.5 DATE/TIME: 3-13-06/07:00			NOTES: All samples sent to Geotechnics laboratory for additional analysis				
DATE COMPLETED: 1-24-2006					GWL: DEPTH: DATE/TIME:							
FIELD GEOLOGIST: RJB CHECKED BY: EGZ					DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'							
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			RIG: VERSASONIC Rig				

Taum Sauk Plant, Upper Reservoir Dike. Foley & Lardner LLP

PROJECT NO. 06-3551

LOG OF BORING NO. TS-7

ELEVATION (FEET MSL)	DEPTH (FEET)	SAMPLE NO. OR RUN NO.	BLOW/6" & (N) OR % REC. & (RQD)	RECOVERY (ft.)	PROFILE	COORDINATES N 621176.86 E 727799.66 SURFACE EL: 1551.04	USCS SYMBOL	REMARKS
						DESCRIPTION		
1481.0		S-8		22%		COBBLES and GRAVEL some sand	GP	Rapid drilling rate except for 75-77' where moderate
1471.0	80	S-9		30%		Mostly GRAVEL and COBBLES and trace sand/fines Top of bedrock at 86'.	GP	Rapid drilling rate except for 84-87' where slow. Boulder at 88-90'
1464.0	90					BOTTOM OF BORING 87'		See TS-7R for rock coring log
	100							
	110							
	120							
	130							
	140							
DATE STARTED: 1-24-2006 DATE COMPLETED: 1-24-2006 FIELD GEOLOGIST: RJB CHECKED BY: EGZ					GWL: DEPTH: 106.5 DATE/TIME: 3-13-06/07:00 GWL: DEPTH: DATE/TIME: DRILLING METHOD: Sonic drilling with 6" diameter core. Sample typically taken every 10'			NOTES: All samples sent to Geotechnics laboratory for additional analysis
DRILLING CO.: Miller Co					DRILLER: Tracy HELPER: Chris, Christian and Jeremy			
					RIG: VERSASONIC Rig			