

## **APPENDIX J**



# HTW DRILLING LOG

**HOLE NO. 600D**

PROJECT <b>Guterl Steel</b>	10. HOLE LOCATION <b>A05B</b>	SHEET <b>1</b> OF SHEETS <b>2</b>
1. LOCATION <b>Lockport, NY</b>	11. NO. OF OVERBURDEN GEOTECH SAMPLES <b>N/A</b>	DISTURBED <b>N/A</b>   UNDISTURBED <b>N/A</b>
2. COMPANY <b>Earth Tech</b>	12. SAMPLES FOR RADIOLOGICAL ANALYSIS <b>See Tables 3.7.5-1 to 3.7.5-4</b>	13. Total Number of Core Boxes <b>2</b>
3. DRILLING COMPANY <b>SJB</b>	14. SURFACE ELEVATION AT HOLE <b>610.54 ft</b>	15. ELEVATION DATUM <b>NAVD 1988</b>
4. MANUFACTURER'S DESIGNATION OF DRILL <b>CME - 75</b>	17. DATE HOLE STARTED <b>7/12/2007</b>	18. DATE HOLE COMPLETED <b>7/23/2007</b>
5. SIZE AND TYPE OF EQUIPMENT <b>2-inch splitspoon ; 6 1/4 inch ID HSA</b>	16. DEPTH OF GROUNDWATER ENCOUNTERED <b>7.0 ft (in overburden)</b>	
6. NAME OF DRILLER <b>[REDACTED]</b>	19. WEATHER <b>Overcast; 70-85 F; moderate wind and humidity</b>	
7. THICKNESS OF OVERBURDEN <b>7.9 ft to weathered bedrock</b>	20. DISPOSITION OF HOLE <b>Completed as bedrock monitoring well</b>	
8. DEPTH DRILLED INTO ROCK <b>0.5 ft</b>	21. NAME OF INSPECTOR <b>[REDACTED]</b>	
9. TOTAL DEPTH OF HOLE <b>23.4 ft</b>	22. SIGNATURE OF INSPECTOR <b>[REDACTED]</b>	

ELEVATION	DEPTH (FEET)	LEGEND	CLASSIFICATION OF MATERIAL	REC. (ft)	SAMPLE No. (TIME)	PID (ppm)	Ludlum 2221/44-10 Nal (cpm)	Nal 2221 2X2 - 1 min. (counts)	BLOW COUNT	REMARKS
	1		(Native) Grayish brown clayey silt, trace organics, fine sand, trace mottling. At tip gravel pieces, dry	1.4	N/A	0.1 ppm @ background	45 cpm	N/A	3 6 7 7	Background PID: 0.1 ppm  Background Nal: 45 cpm
	2		Same as above to 0.3							
	3		0.3-1.8 brown fine sandy silt, trace medium to coarse sand and fine gravel, moist	1.8	N/A	@ background		N/A	6 9 9 10	
	4		Same as above w/ tan silt pods							
	5		Top 0.5 slough from above	2.0	N/A	@ background		N/A	5 7 9 12	
	6		Same as above grading to silt							
	7		(water at 7.0)	1.9	N/A	@ background		N/A	9 11 21 50/0.4	
	8									
	8.4		Auger to 8.4' and set 4-inch steel casing							
	9		7/16/07 (Run 1 and Run 2) Gray dolostone (Goat Island Member of the Lockport Group), vertical fractures at 1.3-1.45, few calcite filled vugs	3.1	N/A	0.0 ppm @ background	cpm	N/A	N/A	Corebox 1 RUN 1 RQD 61%
	10									water loss: 10 gal





# HTW DRILLING LOG

**HOLE NO. 601D**

PROJECT <b>Guterl Steel</b>	SHEET <b>2</b> OF SHEETS <b>2</b>
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1. LOCATION <b>Lockport, NY</b>	21. NAME OF INSPECTOR <div style="background-color: black; width: 100%; height: 1.2em;"></div>
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2. COMPANY <b>Earth Tech</b>	22. SIGNATURE <div style="background-color: black; width: 100%; height: 1.2em;"></div>
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ELEV- ATION	DEPTH (FEET)	LEGEND	CLASSIFICATION OF MATERIAL	REC. (ft)	SAMPLE No. (TIME)	PID (ppm)	Ludlum 2221/44-10 Nal (cpm)	Nal 2221 2X2 - 1 min. (counts)	BLOW COUNT	REMARKS
10	11		Brownish gray dolostone (Goat Island Member of the Lockport Group). Shale partings, calcite filled vugs	5.0	N/A	0.0 ppm @ background	32 cpm	N/A	N/A	Corebox 1 RUN 2 RQD 32%  water loss: 50 gal
12	13									
14	15									
16	17									
18	19									
20			Gray dolostone (Goat Island Member of the Lockport Group).	5.0	N/A	0.0 ppm @ background	32 cpm	N/A	N/A	Corebox 2 RUN 3 RQD 58% water loss: 10 gal 100% water loss
17	18									
19	20									
20										
21										











# HTW DRILLING LOG

**HOLE NO. 604D**

PROJECT <b>Guterl Steel</b>	10. HOLE LOCATION <b>A04D</b>	SHEET <b>1</b>	OF	SHEETS <b>2</b>
1. LOCATION <b>Lockport, NY</b>	11. NO. OF OVERBURDEN GEOTECH SAMPLES <b>N/A</b>	DISTURBED <b>N/A</b>		UNDISTURBED <b>N/A</b>
2. COMPANY <b>Earth Tech</b>	12. SAMPLES FOR RADIOLOGICAL ANALYSIS <b>See Tables 3.7.5-1 to 3.7.5-4</b>	13. Total Number of Core Boxes <b>2</b>		
3. DRILLING COMPANY <b>SJB</b>	14. SURFACE ELEVATION AT HOLE <b>596.25 ft</b>	15. ELEVATION DATUM <b>NAVD 1988</b>		
4. MANUFACTURER'S DESIGNATION OF DRILL <b>CME - 75</b>	17. DATE HOLE STARTED <b>7/10/2007</b>	18. DATE HOLE COMPLETED <b>7/12/2007 (coring); 7/18/07 (pad)</b>		
5. SIZE AND TYPE OF EQUIPMENT <b>2-inch splitspoon ; 6 1/4 inch ID HSA</b>	16. DEPTH OF GROUNDWATER ENCOUNTERED <b>Not encountered in overburden.</b>			
6. NAME OF DRILLER <b>[REDACTED]</b>	19. WEATHER <b>Rain; 70-85 F; moderate wind and humidity</b>			
7. THICKNESS OF OVERBURDEN <b>2.4 ft</b>	20. DISPOSITION OF HOLE <b>Completed as bedrock monitoring well</b>			
8. DEPTH DRILLED INTO ROCK <b>1.8 ft (for socket) 19.2 cored</b>	21. NAME OF INSPECTOR <b>[REDACTED]</b>			
9. TOTAL DEPTH OF HOLE <b>19.2 ft</b>	22. SIGNATURE <b>[REDACTED]</b>			

ELEVATION	DEPTH (FEET)	LEGEND	CLASSIFICATION OF MATERIAL	REC. (ft)	SAMPLE No. (TIME)	PID (ppm)	Ludlum 2221/44-10 Nal (cpm)	Nal 2221 2X2 - 1 min. (counts)	BLOW COUNT	REMARKS
	1		Brown fine sandy silt, dry to 0.6. 0.6-1.5 orangish brown fine gravel and fine sandy silt, dry	1.5	N/A	0.1 ppm	69 cpm	N/A	6 16 27 29	Background PID: 0.1 ppm  Background Nal: 69 cpm
	2					No readings above background				
	3		Same as above, dry Driller grinds down to 4' bgs - weathered rock?	0.5	N/A	No readings above background		N/A	50/0.4	
	4.2		No recovery; In shoe - weathered bedrock - ground	N/A	N/A	No readings above background		N/A	50/0.4	recovery in shoe only Grind to 4.2' bgs - auger to refusal
	5.7		core 7/12/07 Brownish gray dolostone (Goat Island Member of the Lockport Group), very Vertical fracture 0.35-1.2, clay present	1.5	N/A	0.0 ppm	60 cpm	N/A	N/A	Corebox 1 RUN 1 RQD 0%  no water loss
	7					No readings above background				
	8		Brownish gray grading to gray dolostone (Goat Island Member of the Lockport Group), very fractured, few shale partings, few calcite filled vugs, clay infilling observed in some fractures.	4.9	N/A	0.0 ppm	60 cpm	N/A	N/A	Corebox 1 RUN 2 RQD 0%  water loss: 10 gal
	9					No readings above background				
	10					No readings above background				



# HTW DRILLING LOG

**HOLE NO. 605D**

PROJECT <b>Guterl Steel</b>	10. HOLE LOCATION <b>A04B</b>	SHEET <b>1</b> OF <b>2</b> SHEETS
1. LOCATION <b>Lockport, NY</b>	11. NO. OF OVERBURDEN GEOTECH SAMPLES <b>N/A</b>	DISTURBED <b>N/A</b> UNDISTURBED <b>N/A</b>
2. COMPANY <b>Earth Tech</b>	12. SAMPLES FOR RADIOLOGICAL ANALYSIS <b>See Tables 3.7.5-1 to 3.7.5-4</b>	13. Total Number of Core Boxes <b>2</b>
3. DRILLING COMPANY <b>SJB</b>	14. SURFACE ELEVATION AT HOLE <b>598.50 ft</b>	15. ELEVATION DATUM <b>NAVD 1988</b>
4. MANUFACTURER'S DESIGNATION OF DRILL <b>CME - 75</b>	17. DATE HOLE STARTED <b>7/10/2007</b>	18. DATE HOLE COMPLETED <b>7/17/2007 (coring)</b>
5. SIZE AND TYPE OF EQUIPMENT <b>2-inch splitspoon ; 6 1/4 inch ID HSA</b>	16. DEPTH OF GROUNDWATER ENCOUNTERED <b>Not encountered in overburden.</b>	
6. NAME OF DRILLER <b>[REDACTED]</b>	19. WEATHER <b>Rain; 70-85 F; moderate wind and humidity</b>	
7. THICKNESS OF OVERBURDEN <b>2.6 ft</b>	20. DISPOSITION OF HOLE <b>Completed as bedrock monitoring well</b>	
8. DEPTH DRILLED INTO ROCK <b>0.9 ft (for socket)</b>	21. NAME OF INSPECTOR <b>[REDACTED]</b>	
9. TOTAL DEPTH OF HOLE <b>18.5 ft</b>	22. SIGNATURE OF <b>[REDACTED]</b>	

ELEVATION	DEPTH (FEET)	LEGEND	CLASSIFICATION OF MATERIAL	REC. (ft)	SAMPLE No. (TIME)	PID (ppm)	Ludlum 2221/44-10 NaI (cpm)	NaI 2221 2X2 - 1 min. (counts)	BLOW COUNT	REMARKS
	1		Gravel top 0.2; 0.2-1.35 Brown clayey silt, trace dark orange mottling, dry to moist	1.35	N/A	0.7 ppm	52 cpm	N/A	9 9 11 13	Background PID: 0.0 ppm  Background NaI: 52 cpm
	2		Orangish brown fine sandy silt, moist. Gray bedrock in tip of spoon	0.6	N/A	Nothing above background		N/A	2 50/0.1	Auger to refusal auger to 3.5 ft to set 4-inch casing
	4		coring 7/17/07  Brownish gray dolostone, filled vugs (calcite)	2.0	N/A	0.0 ppm @ background	36 cpm	N/A	N/A	Corebox 1 RUN 1 RQD 0%
	5		0.2-1.5 - gravel size zone 1.8-2.0 - vertical fracture							water loss: 10 gal
	6									
	7		Brownish gray dolostone (Goat Island Member of the Lockport Group), very fractured, few calcite and empty vugs	3.5	N/A	0.0 ppm @ background	36 cpm	N/A	N/A	Corebox 1 RUN 2 RQD 0%
	8		core block							water loss: 70 gal
	9									
	10		Browish gray dolostone (Goat Island Member of the Lockport Group), few calcite filled vugs	1.0	N/A	0.0 ppm @ background	36 cpm	N/A	N/A	Corebox 1 RUN 3 RQD 0%



# HTW DRILLING LOG

**HOLE NO. 606D**

PROJECT <b>Guterl Steel</b>	10. HOLE LOCATION <b>A03</b>	SHEET <b>1</b>	OF	SHEETS <b>2</b>
1. LOCATION <b>Lockport, NY</b>	11. NO. OF OVERBURDEN GEOTECH SAMPLES <b>N/A</b>	DISTURBED <b>N/A</b>		UNDISTURBED <b>N/A</b>
2. COMPANY <b>Earth Tech</b>	12. SAMPLES FOR RADIOLOGICAL ANALYSIS <b>See Tables 3.7.5-1 to 3.7.5-4</b>	13. Total Number of Core Boxes <b>2</b>		
3. DRILLING COMPANY <b>SJB</b>	14. SURFACE ELEVATION AT HOLE <b>598.91 ft</b>	15. ELEVATION DATUM <b>NAVD 1988</b>		
4. MANUFACTURER'S DESIGNATION OF DRILL <b>CME - 75</b>	17. DATE HOLE STARTED <b>7/10/2007</b>	18. DATE HOLE COMPLETED <b>7/18/2007 (grout); 7/20/07 (pad)</b>		
5. SIZE AND TYPE OF EQUIPMENT <b>2-inch splitspoon ; 6 1/4 inch ID HSA</b>	16. DEPTH OF GROUNDWATER ENCOUNTERED <b>Not encountered in overburden.</b>			
6. NAME OF DRILLER <b>[REDACTED]</b>	19. WEATHER <b>Overcast; 70-85 F; moderate wind and humidity</b>			
7. THICKNESS OF OVERBURDEN <b>2.7 ft</b>	20. DISPOSITION OF HOLE <b>Completed as bedrock monitoring well</b>			
8. DEPTH DRILLED INTO ROCK <b>0.8 ft (for socket)</b>	21. NAME OF INSPECTOR <b>[REDACTED]</b>			
9. TOTAL DEPTH OF HOLE <b>20.5 ft</b>	22. SIGNATURE <b>[REDACTED]</b>			

ELEVATION	DEPTH (FEET)	LEGEND	CLASSIFICATION OF MATERIAL	REC. (ft)	SAMPLE No. (TIME)	PID (ppm)	Ludlum 2221/44-10 NaI (cpm)	NaI 2221 2X2 - 1 min. (counts)	BLOW COUNT	REMARKS
	1		Brown fine sandy silt & organics to 0.4; 0.4-1.0 Gray fine sandy silt, some coarse sand, dry wood in tip	1.0	N/A	0.7 ppm	40 cpm @ background	N/A	3 15 25 8	Background PID: 0.4 ppm  Background NaI: 40 cpm
	2		Gray and dark gray rock fragments to 0.4; 0.4-0.7 Tan fine sandy silt, trace clay, moist; 0.7-0.8 Dolostone fragments	0.8	N/A	0.6 ppm	cpm @ background	N/A	22 20 25 33	
	3		Weathered bedrock	0.2	N/A	0.3 ppm	cpm @ background	N/A	31 50/0.2	auger to 5.5' and set 4-inch steel casing
	4		Weathered bedrock	0.2	N/A	0.3 ppm	cpm @ background	N/A	31 50/0.2	auger to 5.5' and set 4-inch steel casing
	5		Weathered bedrock	0.2	N/A	0.3 ppm	cpm @ background	N/A	31 50/0.2	auger to 5.5' and set 4-inch steel casing
	6		Weathered bedrock	0.2	N/A	0.3 ppm	cpm @ background	N/A	31 50/0.2	auger to 5.5' and set 4-inch steel casing
	7		Gray dolostone (Goat Island Member of the Lockport Group), few shale partings, few calcite filled vugs	5.0	N/A	0.2 ppm	29 cpm @ background	N/A	NA	Corebox 1 RUN 1 RQD 17%  water loss: 10 gal
	8		Gray dolostone (Goat Island Member of the Lockport Group), few shale partings, few calcite filled vugs	5.0	N/A	0.2 ppm	29 cpm @ background	N/A	NA	Corebox 1 RUN 1 RQD 17%  water loss: 10 gal
	9		Gray dolostone (Goat Island Member of the Lockport Group), few shale partings, few calcite filled vugs	5.0	N/A	0.2 ppm	29 cpm @ background	N/A	NA	Corebox 1 RUN 1 RQD 17%  water loss: 10 gal
	10		Gray dolostone (Goat Island Member of the Lockport Group), few shale partings, few calcite filled vugs	5.0	N/A	0.2 ppm	29 cpm @ background	N/A	NA	Corebox 1 RUN 1 RQD 17%  water loss: 10 gal





# HTW DRILLING LOG

**HOLE NO. 606DR**

PROJECT <b>Guterl Steel</b>	10. HOLE LOCATION <b>A03</b>	SHEET <b>1</b>	OF	SHEETS <b>2</b>
1. LOCATION <b>Lockport, NY</b>	11. NO. OF OVERBURDEN GEOTECH SAMPLES <b>N/A</b>	DISTURBED <b>N/A</b>		UNDISTURBED <b>N/A</b>
2. COMPANY <b>Earth Tech</b>	12. SAMPLES FOR RADIOLOGICAL ANALYSIS <b>See Tables 3.7.5-1 to 3.7.5-4</b>	13. Total Number of Core Boxes <b>2</b>		
3. DRILLING COMPANY <b>SJB</b>	14. SURFACE ELEVATION AT HOLE <b>599.49 ft</b>	15. ELEVATION DATUM <b>NAVD 1988</b>		
4. MANUFACTURER'S DESIGNATION OF DRILL <b>CME - 75</b>	17. DATE HOLE STARTED <b>10/8/2007</b>	18. DATE HOLE COMPLETED <b>10/8/2007</b>		
5. SIZE AND TYPE OF EQUIPMENT <b>2-inch splitspoon ; 6 1/4 inch ID HSA</b>	16. DEPTH OF GROUNDWATER ENCOUNTERED <b>Not encountered in overburden.</b>			
6. NAME OF DRILLER <b>[REDACTED]</b>	19. WEATHER <b>Overcast; &gt;85 F; moderate wind; high humidity</b>			
7. THICKNESS OF OVERBURDEN <b>5 ft</b>	20. DISPOSITION OF HOLE <b>Completed as bedrock monitoring well</b>			
8. DEPTH DRILLED INTO ROCK <b>6 ft set casing</b>	21. NAME OF DRILLER <b>[REDACTED]</b>			
9. TOTAL DEPTH OF HOLE <b>21 ft</b>	22. SIGNATURE <b>[REDACTED]</b>			

ELEVATION	DEPTH (FEET)	LEGEND	CLASSIFICATION OF MATERIAL	REC. (ft)	SAMPLE No. (TIME)	PID (ppm)	Ludlum 2221/44-10 NaI (cpm)	NaI 2221 2X2 - 1 min. (counts)	BLOW COUNT	REMARKS
	1		Dark brown silty fine sand, trace medium to coarse sand, fine gravel, and wood pieces, dry	0.5	N/A	0.0 ppm	65 cpm	N/A	1 1 2 3	Background PID: 0.0 ppm  Background NaI: 65 cpm
	2									
	3		Same as above to 0.3 0.3-0.6 tan silty clay and gravel, moist	0.6	N/A	@ background		N/A	2 3 3 5	
	4									
	5		Sample is slough from above	0.2	N/A	@ background		N/A	50/0.3 at 5'	Auger to 5' and take split spoon - dolostone chips
	6								50/0.5	Auger to 6' bgs
	7		Brown gray grading to gray dolostone (Goat Island Member of the Lockport Group), very fractured, shale partings	2.5	N/A	@ background		N/A	N/A	Corebox 1 RUN 1 RQD 0%
	8									water loss: 5 gal
	9		Gray dolostone (Goat Island Member of the Lockport Group), few shale partings	5	N/A	@ background		N/A	N/A	Corebox 1 RUN 2 RQD 24%
	10									water loss: 10 gal





