Lauridsen, Keld B - DNR

From: Lauridsen, Keld B - DNR
Sent: Wednesday, August 14, 2019 2:17 PM
To: 'Maletzke, Jeff'
Cc: Cole, Albert; Mrotek, Melissa (GBY); Romback-Bartels, Jean - DNR; Chronert, Roxanne N - DNR
Subject: GP Broadway Mill Expansion - BRRTS # pending

Jeff,

I have reviewed the available soil data for the above site and concur with your general approach collecting additional soil samples to further delineate the remaining PCB contamination in soil.

I discussed the proposed soil sampling locations with Melissa earlier today over the phone and I suggested to potentially move them counter clockwise in order to get a better handle on degree and extent prior to excavation of the contaminated soil. I also suggested to consider collecting additional soil samples (to be held by the lab) even further out in case PCBs are still present in any of the first set of soil samples. Hopefully, the proposed soil sampling will eliminate the need for post-excavation confirmation soil sampling.

Due to PCB contamination being confirmed at this site, a Responsible Party letter will be issued to Georgia Pacific shortly.

Let me know if we need to discuss anything further.

Thanks,

-Keld

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Keld B. Lauridsen
Phone: (920) 662-5420
Keld.Lauridsen@wisconsin.gov

From: Maletzke, Jeff <Jeff.Maletzke@aecom.com>
Sent: Friday, August 9, 2019 1:04 PM
To: Lauridsen, Keld B - DNR <Keld.Lauridsen@wisconsin.gov>
Cc: Cole, Albert <Albert.Cole@aecom.com>; Mrotek, Melissa (GBY) <MELISSA.MROTEK@GAPAC.com>
Subject: GP Project Pace work plan

Keld:

Welcome back. On behalf of Georgia Pacific please see attached a summary of our findings from the initial confirmation sampling as well as a work plan for proposed additional sampling. We look forward to discussing the findings and the proposed sampling with you soon. Thank you.

Jeff Maletzke, PG (WI)
Senior Hydrogeologist, Remediation

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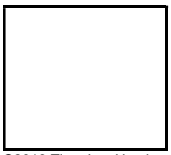


Georgia-Pacific

Georgia-Pacific
Consumer Operations LLC

1919 S. Broadway
P.O. Box 19130
Green Bay, WI 54307-9130
(920) 435-8821
www.gp.com

August 8, 2019

SUBMITTED VIA EMAIL

Mr. Keld Lauridsen
Hydrogeologist
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313-6727

Subject: **Confirmation Sampling Results and Continuing Investigation Sampling Plan for Georgia-Pacific Consumer Operations LLC – Green Bay Broadway Mill**

Dear Mr. Lauridsen:

Georgia-Pacific Consumer Operations LLC (GP) is providing the Wisconsin Department of Natural Resources (WDNR) with this Work Plan for additional Subsurface Environmental Investigation Services at the GP Broadway Mill, located at 1919 South Broadway Street, in the City of Green Bay, Wisconsin. This letter includes a summary of findings based on confirmation sampling completed on June 17, 2019, as well as a brief work plan for a continuing site investigation to further delineate the horizontal extent of PCB impacts near B-101. Data obtained as part of this proposed continuing site investigation will be used in support of a request for No Further Action (NFA).

Confirmation Sampling

As proposed in the Work Plan submitted to the Department on May 9, 2019, a Direct Push Technology (DPT) rig was used to collect two soil samples directly adjacent to four previously completed geotechnical borings, as well as six additional samples at three different points around each original Geotech boring. Boring logs for the previously completed geotechnical borings are included as Attachment A. These logs correspond with the "D" sample locations shown on Figure 1. More detailed descriptions of sample collection at each location are provided below.

- **B-101**: Unsaturated soil samples were collected directly adjacent to the original geotechnical boring location ("D") at 3 to 4 feet below ground surface (ft. bgs), and then in native clay at a depth of 8.5 to 9.5 ft. bgs. A duplicate sample was also collected at location 101D at the 3- to 4-foot interval. Two additional samples were collected at the same depths from each of three locations ("A", "B", and "C") 15 feet from boring 101D. All samples were submitted for laboratory analysis of PCBs.
- **B-103**: Unsaturated soil (non-coal) samples were collected directly adjacent to the original geotechnical boring ("D") at 5.5 to 6.5 ft. bgs and 7.0 to 8.0 ft. bgs within fill and submitted for laboratory analysis of Benzene. A duplicate sample was also collected at location 103D at the 5.5- to 6.5-foot interval. Two additional samples were collected at the same depths from each of three locations ("A", "B", and "C") 15 feet from boring 103D and held for later analysis of Benzene. Based

on the results of samples collected at 103D, these six additional held samples were not analyzed for benzene.

- **B-104A**: A saturated soil (non-coal) sample was collected directly adjacent to the original geotechnical boring ("D") at 4.8 to 5.8 ft. bgs within fill and submitted for laboratory analysis of Benzene. Additional samples were collected from each of three locations ("A", "B", and "C") as described above for B-103. Based on the results of samples collected at 104D, these three additional held samples were not analyzed for benzene.

- **B-105**: A saturated soil (non-coal) sample was collected directly adjacent to the original geotechnical boring ("D) at 5 to 6 ft. bgs within fill and submitted for laboratory analysis of benzene and cadmium. Additional samples were collected from each of three locations ("A", "B", and "C") as described above for B-103. A duplicate sample for benzene was collected at location 105A and a duplicate sample for cadmium was collected at location 105D. Based on the results of samples collected at 105D, the three additional held samples were not analyzed for benzene. However, each of these three samples were analyzed for cadmium.

All laboratory samples were collected in sample containers provided by Northern Lakes Services located in Crandon, Wisconsin. The samples were placed immediately on ice after collection. The samples were kept and shipped on ice and trip blanks were used.

Sampling Results

Table 1 provides a summary of the analytical data and the regulatory standards. A summary of detected compounds is also shown on Figure 1. The analytical reports are enclosed as Attachment B.

Benzene and Cadmium

The results of the confirmation sampling indicate no detections of benzene and very low levels of cadmium. The detected concentrations of cadmium are below the NR720 RCLs. These results indicate no need for further investigation with regard to benzene and cadmium.

PCBs

Total PCBs were detected in soil samples from 3 to 4 ft bgs at B-101B, C, and D at concentrations ranging between 55 and 270 ug/Kg. Each of the detected concentrations are below the Industrial Direct Contact RCL of 967 ug/Kg, however all exceed the Groundwater Pathway RCL of 9.4 ug/Kg. The occurrence of PCBs near B-101 is limited to surficial fill above coal and/or native clay as no PCBs were detected in deeper samples (8.5 to 9.5 ft bgs) collected within the native clay. Thus, the vertical extent of PCBs has been defined in this area. In addition, the lack of PCBs in B-101A has established the lateral extent to the north.

Continuing Investigation Sampling Plan

There is no known source for the low-level PCB detections, and they are attributed to an anomaly contained in the surficial urban fill. As discussed above, the occurrence of PCBs near B-101 is limited to the surficial fill above coal and/or native clay. An examination of several additional geotechnical borings completed in this area (i.e. B-102, B-201, B-204, B-208A, and B-233) indicates that this surficial fill ranges in thickness between approximately 4 and 7 feet. These boring logs are included as Attachment C.

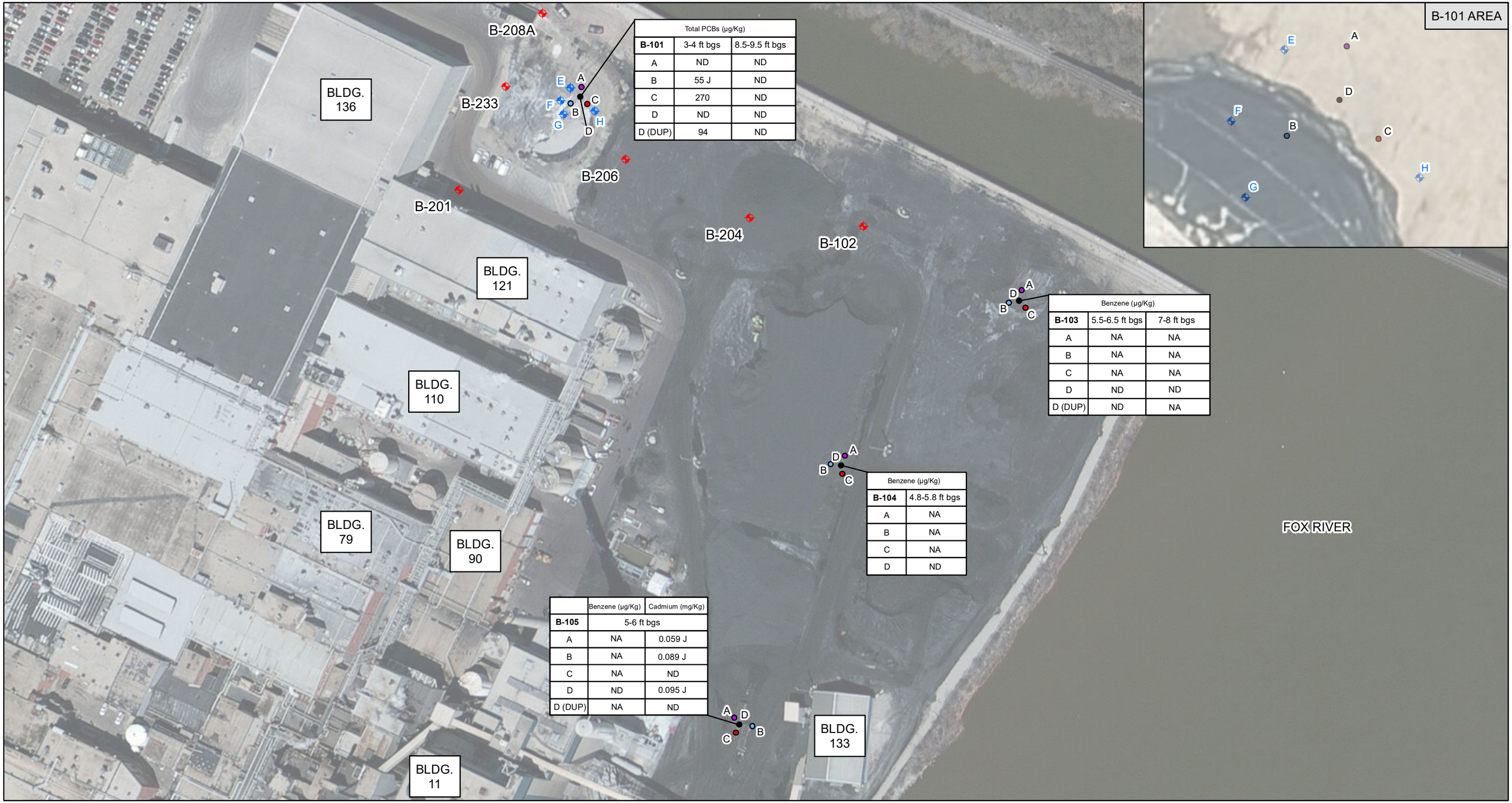
Therefore, acknowledging the distribution of the surficial fill in the vicinity of B-101, and based on the detections of PCBs in the initial confirmation sampling, additional soil samples will be collected to further delineate the extent of PCBs (relative to the Groundwater Pathway RCL). Ultimately the delineated extent will be used to define the potential limits of excavation/soil removal and disposal in support of an NFA request. Direct push technology will be utilized to collect a soil (non-coal) sample at locations "E through H" at a depth of 3 to 4 ft bgs. Sample B-101E will be located approximately 20 feet from B-101D; B-101G will be located approximately 20 feet from B-101B; B-101F will be located on the arc between B-101E and B-101G; and B-101H will be located approximately 15 feet from B-101C. Samples will be collected at each location and submitted for laboratory analysis of total PCBs and PCB isomers consistent with the initial confirmation sampling completed on June 17, 2019.

Please contact me at (920) 438-2233 or melissa.mrotek@gapac.com if you have any questions.

Sincerely,

Melissa Mrotek
Environmental Program Manager
Georgia-Pacific Consumer Operations LLC
Broadway Mill

Enclosures: Figure 1 – Confirmation Sampling Locations
Table 1 - Summary of Analytical Results
Attachment A - Boring Logs B-101, B-103, B-104A, B-105
Attachment B - Analytical Report from Northern Lake Service, Inc.
Attachment C – Boring Logs B-102, B-201, B-204, B-208A, and B-233



Total PCBs (µg/Kg)		
B-101	3-4 ft bgs	8.5-9.5 ft bgs
A	ND	ND
B	55 J	ND
C	270	ND
D	ND	ND
D (DUP)	94	ND

Benzene (µg/Kg)		
B-103	5.5-6.5 ft bgs	7-8 ft bgs
A	NA	NA
B	NA	NA
C	NA	NA
D	ND	ND
D (DUP)	ND	NA

Benzene (µg/Kg)	
B-104	4.8-5.8 ft bgs
A	NA
B	NA
C	NA
D	ND

	Benzene (µg/Kg)	Cadmium (mg/Kg)
B-105	5-6 ft bgs	
A	NA	0.059 J
B	NA	0.089 J
C	NA	ND
D	ND	0.095 J
D (DUP)	NA	ND

Confirmation Sampling Locations
- A (Approximately 15 feet from initial Geotechnical Boring)
- B (Approximately 15 feet from initial Geotechnical Boring)
- C (Approximately 15 feet from initial Geotechnical Boring)
- D (Confirmation sample location coincident with geotechnical boring completed January 2019)
- Location of Geotechnical Soil Borings
- Proposed additional confirmation sampling location at 3-4 ft bgs

ND = Not Detected
J = Result is between Limit of Dectection and Limit of Quantification
NA = Not Analyzed per Release Confirmation Sampling Plan submitted to WDNR May 9, 2019 and WDNR recommendation via email May 10, 2019.

0 200 400
Feet

N

AECOM
AECOM GREEN BAY
2985 SOUTH RIDGE ROAD, SUITE B
GREEN BAY, WI 54304
920.468.1978 tel 920.468.3312 fax
www.aecom.com

NO.	DATE	BY	REVISION
A	07/22/19	MTP	ISSUED FOR WORK PLAN

Georgia-Pacific
Consumer Products
GREEN BAY BROADWAY

PROJECT:	Pace PM02		
MACH NAME:	Balance of Plant		
DET NAME:	CONFIRMATION SAMPLE LOCATIONS		
DR. MTP	CH. JM	DATE: 7/2/19	- - - -
- -	AECOM #: 2.01	JOB #: 0022976	
- -	- -		REV A
CONFIRMATION SAMPLE LOCATIONS	DWG #: FIGURE 1		

Soil Analytical Data Summary - June 2019

Project Pace Mill Expansion
Georgia Pacific Broadway Mill - Green Bay, Wisconsin
Project No. 60594990

Parameter	Unit	Sample Depth (ft/bgs)	B-101A 3-4	B-101A 8.5-9.5	B-101B 3-4	B-101B 8.5-9.5	B-101C 3-4	B-101C 8.5-9.5	B-101D 3-4	B-101D DUP 3-4	B-101D 8.5-9.5	B-103A 5.5-6.5	B-103A 7-8	B-103B 5.5-6.5	B-103B 7-8	B-103C 5.5-6.5	B-103C 7-8
Cadmium, Total	mg/kg																
PCB-1016	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND						
PCB-1221	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND						
PCB-1232	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND						
PCB-1242	ug/Kg		ND	ND	[55]J	ND	250	ND	ND	94	ND						
PCB-1248	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND						
PCB-1254	ug/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND						
PCB-1260	ug/Kg		ND	ND	ND	ND	[19]J	ND	ND	ND	ND						
Total PCBs	ug/Kg		ND	ND	[55]J	ND	270	ND	ND	94	ND						
Benzene	ug/Kg																

Notes:

1. Values in brackets represent results greater than or equal to the Limit of Detection (LOD), but less than the Limit of Quantitation (LOQ), and are within a region of "less certain quantitation."

2. Only parameters with detections are shown.

3. DF = Dilution Factor

= Not Analyzed per Release Confirmation Sampling Plan submitted to WDNR May 9, 2019 and WDNR recommendation in e-mail correspondence dated May 10, 2019.

ND = Not Detected

J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.

-- = No RCL listed

Soil Analytical Data Summary - June 2019
Project Pace Mill Expansion
Georgia Pacific Broadway Mill - Green Bay, Wisconsin
Project No. 60594990

Parameter	Unit	Sample	B-103D	B-103D DUP	B-103D	B-104A	B-104B	B-104C	B-104D	B-105A	B-105B	B-105C	B-105D	B-105D DUP
		Depth (ft/bgs)	5.5-6.5	5.5-6.5	7-8	4.8-5.8	4.8-5.8	4.8-5.8	4.8-5.8	5-6	5-6	5-6	5-6	5-6
Cadmium, Total	mg/kg									[0.059]	[0.089]	ND	[0.095]	ND
PCB-1016	ug/Kg													
PCB-1221	ug/Kg													
PCB-1232	ug/Kg													
PCB-1242	ug/Kg													
PCB-1248	ug/Kg													
PCB-1254	ug/Kg													
PCB-1260	ug/Kg													
Total PCBs	ug/Kg													
Benzene	ug/Kg		ND	ND	ND				ND				ND	

Soil Analytical Data Summary - June 2019

Project Pace Mill Expansion
Georgia Pacific Broadway Mill - Green Bay, Wisconsin
Project No. 60594990

			Residual Soil Contaminant Levels (ch NR 720 Wis. Adm Code)		
Parameter	Unit	Sample Depth (ft/bgs)	Industrial Direct Contact	Non-Industrial Direct Contact	Protection of Groundwater Quality (DF = 2)
Cadmium, Total	mg/kg		985	71.1	0.752
PCB-1016	ug/Kg		28,000	4,110	--
PCB-1221	ug/Kg		883	213	--
PCB-1232	ug/Kg		792	190	--
PCB-1242	ug/Kg		972	235	--
PCB-1248	ug/Kg		975	236	--
PCB-1254	ug/Kg		988	239	--
PCB-1260	ug/Kg		1,000	243	--
Total PCBs	ug/Kg		967	234	9.4
Benzene	ug/Kg		7,070	1,600	5.1

Attachment A

Boring Logs B-101, B-103, B-104A, B-105

AECOM

OWNER: **Georgia-Pacific**

LOG OF BORING NUMBER: **B-101**

PROJECT NAME: **P-2 GP Broadway Mill**

ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

SURFACE ELEVATION +592.14 NAVD88

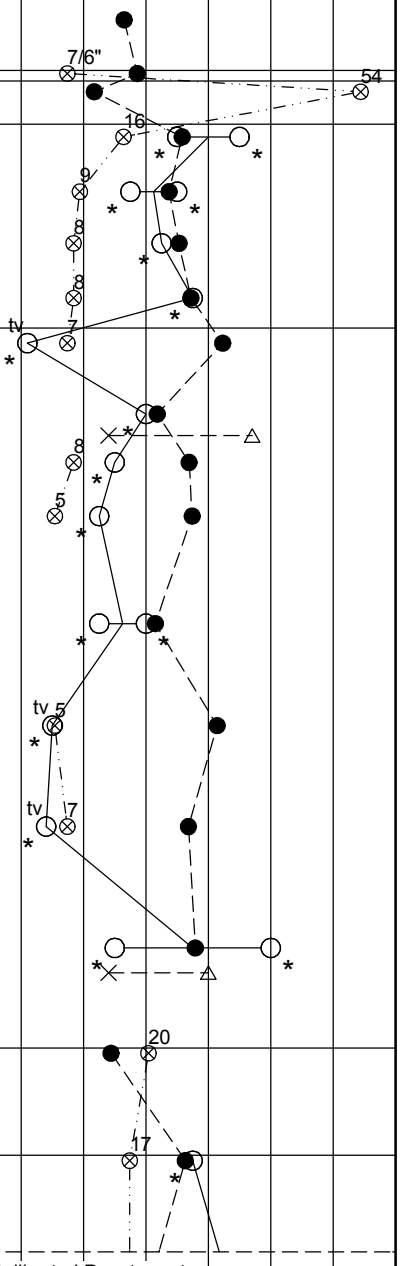
DEPTH(FT) / ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE RECOVERY	DESCRIPTION OF MATERIAL
		HA		Fill: Clay with gravel, sand, and coal cinders - reddish brown (CL)
	1	HA		
5.0		HA		
	2	SS		5.0
	2A	SS		Fill: Sand - trace gravel - brown - medium dense -moist (SP) 5.5
		PA		7.5
	3	SS		Fill: Coal
10.0		PA		Clay - trace sand and gravel - light reddish brown to brown - medium to very stiff (CL)
	4	SS		
		RB		
	5	SS		
15.0		RB		
	6	SS		
		RB		17.0
	7	SS		Clay - trace silt - brown - soft to very stiff (CL)
20.0		RB		Sample 7 - low recovery
	8	ST		
		RB		
	9	SS		
25.0		RB		
	10	SS		
		RB		
30.0				
	11	ST		
		RB		
35.0				
	12	SS		
		RB		
40.0				
	13	SS		Sample 13 - low recovery
		RB		
45.0				
	14	ST		
		RB		
50.0				
	15	SS		50.5
	15	SS		Sandy silt - little to trace gravel - brown - medium dense - wet (ML)
		RB		
55.0				55.5
	16	SS		Clay - intermittent silt seams - brown - very stiff (CL)
		RB		
60.0				

UNIT DRY WT. LBS./FT.^{3}

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)



. . . continued

* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

AECOM JOB NO. **60594990**

SHEET NO. **1** OF **2**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-101**
	PROJECT NAME: **P-2 GP Broadway Mill**	ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT) / ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
					SURFACE ELEVATION +592.14 NAVD88 (Continued)	
	17	SS			Clay - intermittent silt seams - brown - very stiff (CL)	
		RB			63.5	
65.0	18	SS			Silty sandy clay - trace gravel - brown - very stiff (CL-ML)	
		RB			68.5	
70.0	19	SS			Clay - brown - very stiff to hard (CL)	
		RB				
75.0	20	SS				
		RB			78.5	
80.0	21	SS			Clay - trace gravel - reddish brown - stiff (CL-CH)	
		RB				
85.0	22	SS				
		RB				
90.0	23	SS				
		RB			92.4	
95.0	24	SS			Silty sand and gravel - gray - very dense - wet (SM-GM)	
		RB			97.6	
100.0	25	SS			Clay - trace silt - light gray - stiff (CL-ML)	
		RB			103.4	
105.0	26	SS			104.9 Gravel while drilling	
106.5		RB			106.5 Weathered bedrock - extremely dense	

End of Boring
Boring advanced from to 5 feet by hand auger
Boring advanced from 5 to 10 feet by power auger
Boring advanced from 10 to 106.5 feet by rock bit and drilling fluid
Temporary HW casing driven to 12.5 feet
Standard Penetration Test performed with automatic hammer
Boring backfilled with bentonite chips to 20 feet and bentonite grout from 20 to 106.5 feet

* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING: **247522.418**	BORING STARTED: **1/17/19**	AECOM OFFICE: **Oshkosh**	
EASTING: **2482234.003**	BORING COMPLETED: **1/18/19**	ENTERED BY: **MLB**	SHEET NO.: **2** OF **2**
WL: **9.0 WD**	RIG/FOREMAN: **D-50/JD (SES)**	APP'D BY: **JMT**	AECOM JOB NO.: **60594990**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-103**
	PROJECT NAME: **P-2 GP Broadway Mill**	ARCHITECT-ENGINEER: **AECOM**

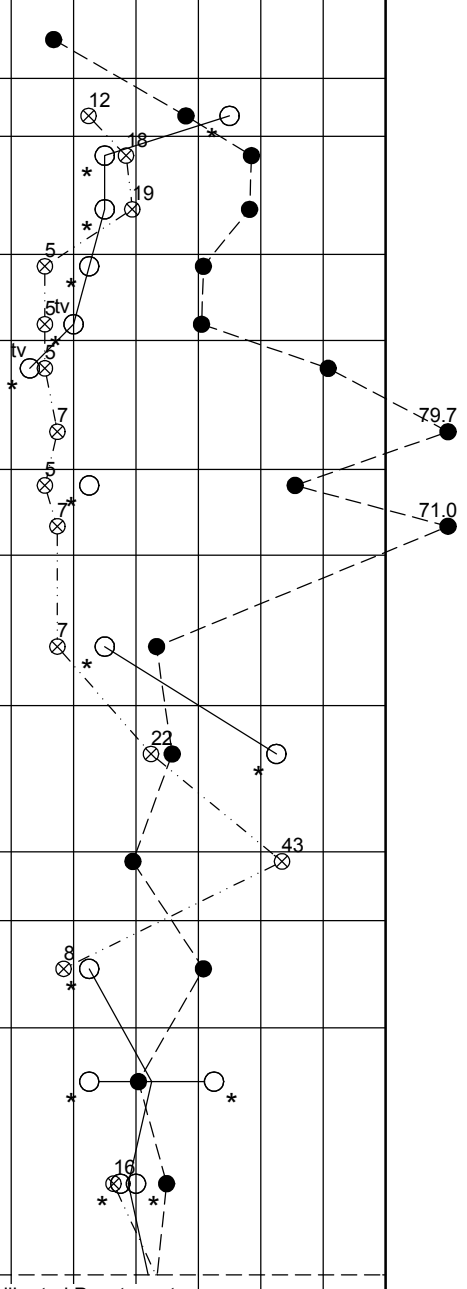
SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT) / ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
				SURFACE ELEVATION +586.75 NAVD88	
		HA		Coal	
	1	HA			
		HA		4.3	
5.0					
	2	SS		Fill: Silty clay - trace coal - light brown to reddish brown - very stiff (CL-ML)	
		PA		7.0	
	3	SS		Fill: Clay with gravel and wood - brown - stiff (CL)	
10.0		PA			
	4	SS		Wood in sample 4	
		PA		12.5	
	5	SS		Fill: Clay with wood - brown - stiff to medium (CH-CL)	
15.0		PA			
	6	SS		16.5	
		RB		Organic sandy silt - trace shells and gravel - brown to black - soft (ML-OL)	
	7	SS			
20.0		RB			
	8	SS			
		RB		22.5	
	9	SS		Slightly organic clay - gray to browinsh gray - stiff (CL-OL)	
25.0		RB			
	10	SS		26.5	
		RB		Sandy silty clay - grayish brown to brown - stiff (CL)	
30.0					
	11	SS			
		RB		33.5	
35.0				Clay - reddish brown - hard (CL)	
	12	SS			
		RB			
40.0				40.3	
	13	SS		sandy silt - brown - dense - wet (ML)	
		RB		43.5	
45.0				Clay - trace sand - dark reddish brown - stiff (CL)	
	14	SS			
		RB		48.5	
50.0				Clay - grayish brown to reddish brown - stiff to very stiff (CL)	
	15	ST			
		RB			
55.0					
	16	SS			
		RB			
60.0					
				. . . continued	



* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

AECOM JOB NO. **60594990** | SHEET NO. **1** OF **2**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-103**
	PROJECT NAME: **P-2 GP Broadway Mill**	ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

DEPTH(FT) / ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}	UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5) / PLASTIC LIMIT % / WATER CONTENT % / LIQUID LIMIT % (10 20 30 40 50) / STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)
					SURFACE ELEVATION +586.75 NAVD88 (Continued)		
	17	SS			Clay - grayish brown to reddish brown - stiff to very stiff (CL)		24
		RB			63.5		
65.0	18	SS			Clay - trace sand and gravel - trace silt seams - brown to reddish brown - stiff to very stiff (CL-CH)		tv 6
		RB					
70.0	19	ST					
		RB					
75.0	20	SS					WOH
		RB					
80.0	21	ST					
		RB					
85.0	22	SS					5
		RB					
90.0	23	ST					
		RB			94.0		
95.0	24	SS			Silty sand with gravel - gray - very dense - wet (SM)		58
		RB					
100.0	25	SS					79
		RB			104.8		
105.0					105.8 Possible Bedrock		

Drillers note: Rock bit refusal at 104.8, drilled to 105.8

End of Boring

Boring advanced from to 5.5 feet by hand auger
Boring advanced from 5.5 to 15 feet by power auger
Boring advanced from 15 to 105.8 feet by rock bit and drilling fluid
Temporary HW casing driven to 25 feet
Standard Penetration Test performed with automatic hammer
Boring backfilled with bentonite chips to 15 feet and bentonite grout from 15 to 105.8 feet

* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING: **247242.367**	BORING STARTED: **1/22/19**	AECOM OFFICE: **Oshkosh**	
EASTING: **2482881.499**	BORING COMPLETED: **1/24/19**	ENTERED BY: **MLB**	SHEET NO.: **2** OF **2**
WL: **13.3 WS**	RIG/FOREMAN: **D-50/JD (SES)**	APP'D BY: **JMT**	AECOM JOB NO.: **60594990**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

AECOM

OWNER: **Georgia-Pacific**

LOG OF BORING NUMBER: **B-104A**

PROJECT NAME: **P-2 GP Broadway Mill**

ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

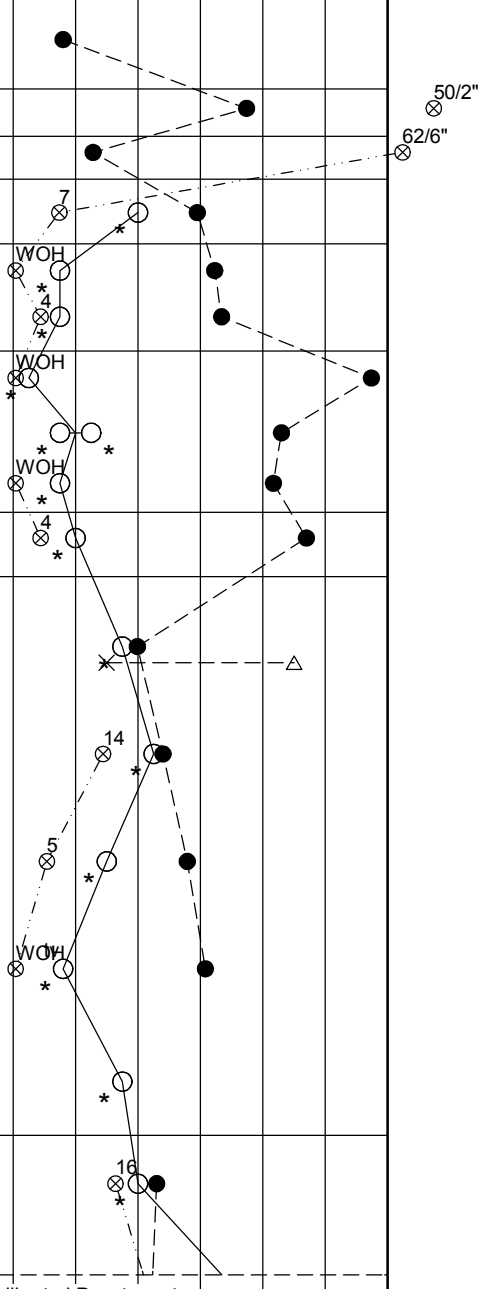
SURFACE ELEVATION +587.10 NAVD88

DEPTH(FT) / ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
		HA			Coal	
	1	HA				
5.0		HA			4.8	
	2	SS			Fill: Silty sand with coal - brown to brownish green - extremely dense - moist to wet (SM)	
		PA			7.0	
	3	SS			Fill: Silty sand and gravel - gray - extremely dense - wet (GM-SM)	
		PA			9.0	
10.0	4	SS			Fill: Silty clay - trace coal - very stiff (CL-ML)	
		RB			12.0	
	5	SS			Fill: Silty sandy clay - trace plant roots - brown - medium (CL-ML)	
15.0		RB				
	6	SS			17.0	
		RB				
	7	SS			Organic sandy clay - trace shells and plant roots - greenish gray - soft to stiff (CH-OH)	
20.0		RB				
	8	ST				
		RB				
	9	SS			24.5	
25.0		RB				
	10	SS			Organic silty clay - trace sand and shells - gray to dark brown - stiff (CL-OL)	
		RB			27.5	
30.0					Clay - trace gravel - reddish brown to brown - very stiff to medium (CL-CH)	
	11	ST				
		RB				
35.0						
	12	SS				
		RB				
40.0						
	13	SS				
		RB				
45.0						
	14	SS				
		RB				
50.0						
	15	ST				
		RB			53.5	
55.0					Clay - trace gravel - brown - very stiff (CL)	
	16	SS				
		RB				
60.0						

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)



. . . continued

* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

AECOM JOB NO. **60594990**

SHEET NO. **1** OF **2**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-104A**
	PROJECT NAME: **P-2 GP Broadway Mill**	ARCHITECT-ENGINEER: **AECOM**

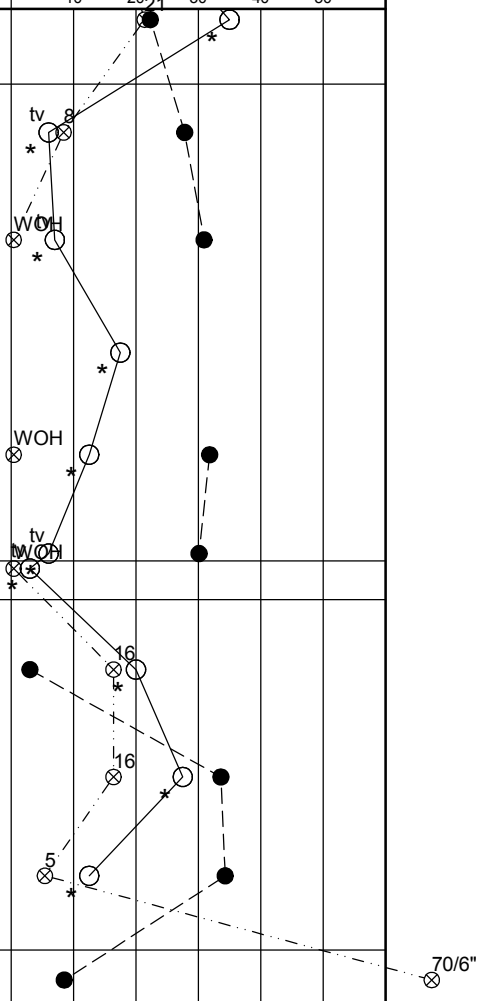
SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % | WATER CONTENT % | LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
						SURFACE ELEVATION +587.10 NAVD88 (Continued)	
		17	SS			Clay - trace gravel - brown - very stiff (CL)	
			RB				
						63.5	
65.0		18	SS			Clay - brown - medium to stiff (CL-CH)	
			RB				
70.0		19	SS				
			RB				
75.0		20	ST				
			RB				
80.0		21	SS				
			RB				
85.0		22	SS			85.7	
		22	SS			Clay - reddish brown - soft (CL)	
			RB			87.5	
90.0		23	SS			Clay - trace sand - reddish brown to gray - very stiff to stiff (CL)	
			RB				
95.0		24	SS				
			RB				
100.0		25	SS				
			RB			103.8	
105.0		26	SS			Silty sand and gravel - gray - extremely dense - wet (SM-GM)	
106.4			RB			106.4 Drillers note: Rock bit refusal at 106.2 feet due to boulder or bedrock	
						End of Boring	
						Boring advanced from to 5.5 feet by hand auger	
						Boring advanced from 5.5 to 10 feet by power auger	
						Boring advanced from 10 to 106.2 feet by rock bit and drilling fluid	
						Temporary HW casing driven to 15 feet	
						Standard Penetration Test performed with automatic hammer	
						Boring backfilled with bentonite chips to 15 feet and bentonite grout from 15 to 106.4 feet	



* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING **247000.699**	BORING STARTED **1/24/19**	AECOM OFFICE **Oshkosh**	
EASTING **2482628.539**	BORING COMPLETED **2/5/19**	ENTERED BY **MLB**	SHEET NO. **2** OF **2**
WL **5.0 WS / 4.5 BCI**	RIG/FOREMAN **D-50/JD (SES)**	APP'D BY **JMT**	AECOM JOB NO. **60594990**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-105** — **Boring offset 2 ft. south**
	PROJECT NAME: **P-2 GP Broadway Mill**	ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT) / ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
					SURFACE ELEVATION +588.49 NAVD88	
		HA			Coal	
5.0					5.2	
	1	SS			Fill: Clay - light brown to brown - very stiff (CL)	
		PA				
	2	SS				
10.0		PA			9.5	
	3	SS			Slightly orgranic clay - trace shells - gray - stiff (CL-OL)	
		RB			12.0	
	4	SS			Clay - trace sand - reddish brown to brown - stiff (CL)	
15.0		RB			14.5	
	5	SS			Clay - trace gravel - reddish brown to brown - very stiff to hard (CL)	
		RB				
	6	SS				
20.0		RB				
	7	SS				
		RB				
	8	SS				
25.0		RB				
	9	SS				
		RB			28.5	
30.0					Clay - reddish brown - very stiff (CL)	
	10	SS				
		RB			33.5	
35.0					Clay - reddish brown to brown -stiff to medium (CL)	
	11	SS				
		RB				
40.0	12	SS				
		RB				
45.0	13	ST				
		RB			48.5	
50.0					Clay - brown to grayish brown - medium to very stiff (CL)	
	14	SS				
		RB				
55.0	15	SS				
		RB				
60.0						

. . . continued

* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

AECOM JOB NO. **60594990** | SHEET NO. **1** OF **2**

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-105** — **Boring offset 2 ft. south**
	PROJECT NAME: **P-2 GP Broadway Mill**	ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
						SURFACE ELEVATION +588.49 NAVD88 (Continued)	
		16	ST			Clay - brown to grayish brown - medium to very stiff (CL)	
			RB				
65.0		17	SS				
			RB				
70.0		18	ST				
			RB				
75.0		19	SS				
			RB				
80.0		20	ST				
			RB				
85.0		21	SS				
			RB			87.5	
90.0		22	SS			Clay - brown to reddish brown - stiff (CL)	
			RB				
95.0		23	SS			Trace sand and gravel in sample 23	
			RB			98.5	
100.0		24	SS			Clay - reddish brown - stiff (CL)	
			RB			104.5	
105.0		25	SS			Silty sand and gravel - gray - extremely dense - wet	
106.7			RB			106.7 (SM-GM)	

Drillers note: Hard drilling at 105.7 feet. Rock bit refusal at 106.7 feet

End of Boring

Boring advanced from to 5.2 feet by hand auger
Boring advanced from 5.2 to 10 feet by power auger
Boring advanced from 10 to 106.7 feet by rock bit and drilling fluid
Temporary HW casing driven to 12.5 feet
Standard Penetration Test performed with automatic hammer
Boring backfilled with bentonite chips to 15 feet and bentonite grout from 15 to 106.7 feet

WOH
WOH
WOH
20
50
7
60/2"

* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING **246560.782**	BORING STARTED **2/5/19**	AECOM OFFICE **Oshkosh**	
EASTING **2482440.815**	BORING COMPLETED **2/7/19**	ENTERED BY **MLB**	SHEET NO. **2** OF **2**
WL **5.0 WS**	RIG/FOREMAN **D-50/JD (SES)**	APP'D BY **JMT**	AECOM JOB NO. **60594990**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

Attachment B

Analytical Report from Northern Lake Service, Inc.

ANALYTICAL RESULTS: PVOC (soil) by WI (95) GRO

Customer: AECOM (GB) **NLS Project: 324080**

Project Description: Soil

Project Title: **Template: PVOCS Printed: 07/17/2019 08:26**

Sample: 1129034 B-103D 5.5-6.5 Collected: 06/17/19 Analyzed: 06/27/19 - 82.5%Solids Analytes: 1

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
Benzene	ND	ug/Kg	1	24	80	
1,2,3-Trichlorobenzene (SURR)	105%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1129035 B-103D 5.5-6.5 Dup Collected: 06/17/19 Analyzed: 06/27/19 - 81.2%Solids Analytes: 1

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
Benzene	ND	ug/Kg	1	24	80	
1,2,3-Trichlorobenzene (SURR)	102%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1129036 B-103D 7-8 Collected: 06/17/19 Analyzed: 06/27/19 - 74.4%Solids Analytes: 1

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
Benzene	ND	ug/Kg	1	24	80	
1,2,3-Trichlorobenzene (SURR)	110%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1129037 B-104D 4.8-5.8 Collected: 06/17/19 Analyzed: 06/27/19 - 66.7%Solids Analytes: 1

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
Benzene	ND	ug/Kg	1	24	80	
1,2,3-Trichlorobenzene (SURR)	100%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1129038 B-105D 5-6 Collected: 06/17/19 Analyzed: 06/27/19 - 81.3%Solids Analytes: 1

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
Benzene	ND	ug/Kg	1	24	80	
1,2,3-Trichlorobenzene (SURR)	96%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 1129040 Trip Blank Collected: 06/17/19 Analyzed: 06/27/19 - Analytes: 1

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	Note
Benzene	ND	ug/Kg	1	24	80	
1,2,3-Trichlorobenzene (SURR)	96%		1			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: PCBs by GC

Customer: AECOM (GB) **NLS Project: 324080**

Project Description: Soil

Project Title: **Template: PCBS Printed: 07/17/2019 08:26**

Sample: 1129031 B-101D 3'-4' Dupe Collected: 06/17/19 Analyzed: 07/08/19 - 83%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	94	ug/Kg	5	19	63	
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	ND	ug/Kg	5	19	63	
Total PCBs	94	ug/Kg	5	20	67	
TCMX (SURR)	76%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.01 grams.

Sample: 1129032 B-101D 3'-4' Collected: 06/17/19 Analyzed: 07/08/19 - 80.6%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	ND	ug/Kg	5	19	63	
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	ND	ug/Kg	5	19	63	
Total PCBs	ND	ug/Kg	5	20	67	
TCMX (SURR)	88%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.08 grams.

Sample: 1129033 B-101D 8.5-9.5 Collected: 06/17/19 Analyzed: 07/08/19 - 82.7%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	ND	ug/Kg	5	19	63	
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	ND	ug/Kg	5	19	63	
Total PCBs	ND	ug/Kg	5	20	67	
TCMX (SURR)	77%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.06 grams.

ANALYTICAL RESULTS: PCBs by GC
Customer: AECOM (GB) NLS Project: 324080
Project Description: Soil
Project Title: Template: PCBS Printed: 07/17/2019 08:26

Sample: 1129050 B-101A 3-4 Collected: 06/17/19 Analyzed: 07/08/19 - 81.4%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	ND	ug/Kg	5	19	63	
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	ND	ug/Kg	5	19	63	
Total PCBs	ND	ug/Kg	5	20	67	
TCMX (SURR)	85%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.1 grams.

Sample: 1129051 B-101A 8.5-9.5 Collected: 06/17/19 Analyzed: 07/08/19 - 82.1%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	ND	ug/Kg	5	19	63	
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	ND	ug/Kg	5	19	63	
Total PCBs	ND	ug/Kg	5	20	67	
TCMX (SURR)	83%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.12 grams.

ANALYTICAL RESULTS: PCBs by GC
Customer: AECOM (GB) **NLS Project: 324080**
Project Description: Soil
Project Title: **Template: PCBS Printed: 07/17/2019 08:26**

Sample: 1129052 B-101B 3'-4' Collected: 06/17/19 Analyzed: 07/08/19 - 79.8%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	[55]	ug/Kg	5	19	63	J
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	ND	ug/Kg	5	19	63	
Total PCBs	[55]	ug/Kg	5	20	67	J
TCMX (SURR)	77%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:
J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.06 grams.

Sample: 1129053 B-101B 8.5-9.5 Collected: 06/17/19 Analyzed: 07/08/19 - 82.7%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	ND	ug/Kg	5	19	63	
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	ND	ug/Kg	5	19	63	
Total PCBs	ND	ug/Kg	5	20	67	
TCMX (SURR)	85%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.1 grams.

ANALYTICAL RESULTS: PCBs by GC
Customer: AECOM (GB) NLS Project: 324080
Project Description: Soil
Project Title: Template: PCBS Printed: 07/17/2019 08:26

Sample: 1129054 B-101C 3'-4' Collected: 06/17/19 Analyzed: 07/08/19 - 82.3%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	250	ug/Kg	5	19	63	
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	[19]	ug/Kg	5	19	63	J
Total PCBs	270	ug/Kg	5	20	67	
TCMX (SURR)	75%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:
J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.
S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.06 grams.

Sample: 1129055 B-101C 8.5-9.5 Collected: 06/17/19 Analyzed: 07/08/19 - 77.9%Solids Analytes: 8 | Notes: HX

ANALYTE NAME	RESULT	UNITS DWB	DIL	LOD	LOQ	Note
PCB-1016	ND	ug/Kg	5	20	67	
PCB-1221	ND	ug/Kg	5	42	140	
PCB-1232	ND	ug/Kg	5	21	69	
PCB-1242	ND	ug/Kg	5	19	63	
PCB-1248	ND	ug/Kg	5	9.5	32	
PCB-1254	ND	ug/Kg	5	15	49	
PCB-1260	ND	ug/Kg	5	19	63	
Total PCBs	ND	ug/Kg	5	20	67	
TCMX (SURR)	72%		5			S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.
HX = A dilution was required due to complex sample matrix.
CL = The extract was subjected to florisil cleanup by SW846 Method 3620 before analysis.
IV = Initial extract is 2.13 grams.

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: **AECOM (GB)**
Attn: Jeffrey Maletzke, PG
2985 South Ridge Road, Suite B
Green Bay, WI 54304

NLS Project: 324080
NLS Customer: 50040
Fax: 920 468 3312 Phone: 800 949 1978

Project: Soil

B-101D 3'-4' Dupe NLS ID: 1129031
COC: 211172:1 Matrix: SO
Collected: 06/17/19 09:40 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	83.0	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

B-101D 3'-4' NLS ID: 1129032
COC: 211172:2 Matrix: SO
Collected: 06/17/19 09:40 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	80.6	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

B-101D 8.5-9.5 NLS ID: 1129033
COC: 211172:3 Matrix: SO
Collected: 06/17/19 10:00 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	82.7	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

B-103D 5.5-6.5 NLS ID: 1129034
COC: 211172:4 Matrix: SO
Collected: 06/17/19 13:00 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	82.5	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PVOCs (soil) by WI(95)GRO Sept 95 (MeOH)	see attached					06/27/19	WI(95)GRO Sept 95	721026460

B-103D 5.5-6.5 Dup NLS ID: 1129035
COC: 211172:5 Matrix: SO
Collected: 06/17/19 13:00 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	81.2	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PVOCs (soil) by WI(95)GRO Sept 95 (MeOH)	see attached					06/27/19	WI(95)GRO Sept 95	721026460

B-103D 7-8 NLS ID: 1129036
COC: 211172:6 Matrix: SO
Collected: 06/17/19 13:10 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	74.4	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PVOCs (soil) by WI(95)GRO Sept 95 (MeOH)	see attached					06/27/19	WI(95)GRO Sept 95	721026460

B-104D 4.8-5.8 NLS ID: 1129037
COC: 211172:7 Matrix: SO
Collected: 06/17/19 15:00 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	66.7	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PVOCs (soil) by WI(95)GRO Sept 95 (MeOH)	see attached					06/27/19	WI(95)GRO Sept 95	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: **AECOM (GB)**
Attn: Jeffrey Maletzke, PG
2985 South Ridge Road, Suite B
Green Bay, WI 54304

NLS Project: 324080
NLS Customer: 50040

Fax: 920 468 3312 Phone: 800 949 1978

Project: Soil

B-105D 5-6 NLS ID: 1129038
COC: 211172:8 Matrix: SO
Collected: 06/17/19 16:00 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Cadmium, tot. recoverable as Cd by ICP	[0.095]	mg/Kg DWB	5	0.048	0.15	06/26/19	SW846 6010	721026460
Solids, total on solids	81.3	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
Metals digestion - tot. recov (solid) ICP	yes					06/25/19	SW846 3050M	721026460
PVOCs (soil) by WI(95)GRO Sept 95 (MeOH)	see attached					06/27/19	WI(95)GRO Sept 95	721026460

B-105D 5-6 Dup NLS ID: 1129039
COC: 211172:9 Matrix: SO
Collected: 06/17/19 16:00 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Cadmium, tot. recoverable as Cd by ICP	ND	mg/Kg DWB	5	0.054	0.17	06/26/19	SW846 6010	721026460
Solids, total on solids	83.1	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
Metals digestion - tot. recov (solid) ICP	yes					06/25/19	SW846 3050M	721026460

Trip Blank NLS ID: 1129040
COC: 211172:10 Matrix: TB
Collected: 06/17/19 00:00 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
PVOCs (soil) by WI(95)GRO Sept 95 (MeOH)	see attached					06/27/19	WI(95)GRO Sept 95	721026460

B-105A 5-6 Dup NLS ID: 1129041
COC: 211173:3 Matrix: SO
Collected: 06/17/19 16:45 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	81.9	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

B-103A 5.5-6.5 NLS ID: 1129042
COC: 211173:4 Matrix: SO
Collected: 06/17/19 14:35 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	79.1	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

B-103A 7-8 NLS ID: 1129043
COC: 211173:5 Matrix: SO
Collected: 06/17/19 14:45 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	77.1	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

B-104C 4.8-5.8 NLS ID: 1129044
COC: 211173:6 Matrix: SO
Collected: 06/17/19 15:10 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	78.8	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

B-104B 4.8-5.8 NLS ID: 1129045
COC: 211173:7 Matrix: SO
Collected: 06/17/19 15:20 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	65.5	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

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ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: **AECOM (GB)**
Attn: Jeffrey Maletzke, PG
2985 South Ridge Road, Suite B
Green Bay, WI 54304

NLS Project: 324080
NLS Customer: 50040
Fax: 920 468 3312 Phone: 800 949 1978

Project: Soil

B-104A 4.8-5.8 NLS ID: 1129046
COC: 211173:8 Matrix: SO
Collected: 06/17/19 15:40 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	59.3	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

B-105C 5-6 NLS ID: 1129047
COC: 211173:9 Matrix: SO
Collected: 06/17/19 16:15 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Cadmium, tot. recoverable as Cd by ICP	ND	mg/Kg DWB	5	0.043	0.14	06/26/19	SW846 6010	721026460
Solids, total on solids	80.9	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
Metals digestion - tot. recov (solid) ICP	yes					06/25/19	SW846 3050M	721026460

B-105B 5-6 NLS ID: 1129048
COC: 211173:10 Matrix: SO
Collected: 06/17/19 16:30 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Cadmium, tot. recoverable as Cd by ICP	[0.089]	mg/Kg DWB	5	0.030	0.097	06/26/19	SW846 6010	721026460
Solids, total on solids	82.8	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
Metals digestion - tot. recov (solid) ICP	yes					06/25/19	SW846 3050M	721026460

B-105A 5-6 NLS ID: 1129049
COC: 211173:11 Matrix: SO
Collected: 06/17/19 16:45 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Cadmium, tot. recoverable as Cd by ICP	[0.059]	mg/Kg DWB	5	0.049	0.16	06/26/19	SW846 6010	721026460
Solids, total on solids	80.6	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
Metals digestion - tot. recov (solid) ICP	yes					06/25/19	SW846 3050M	721026460

B-101A 3-4 NLS ID: 1129050
COC: 211174:1 Matrix: SO
Collected: 06/17/19 11:30 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	81.4	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

B-101A 8.5-9.5 NLS ID: 1129051
COC: 211174:2 Matrix: SO
Collected: 06/17/19 11:40 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	82.1	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

B-101B 3'-4' NLS ID: 1129052
COC: 211174:3 Matrix: SO
Collected: 06/17/19 11:00 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	79.8	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

NORTHERN LAKE SERVICE, INC.
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ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: **AECOM (GB)**
Attn: Jeffrey Maletzke, PG
2985 South Ridge Road, Suite B
Green Bay, WI 54304

NLS Project: 324080
NLS Customer: 50040
Fax: 920 468 3312 Phone: 800 949 1978

Project: Soil

B-101B 8.5-9.5 NLS ID: 1129053
COC: 211174:4 Matrix: SO
Collected: 06/17/19 11:10 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	82.7	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

B-101C 3'-4' NLS ID: 1129054
COC: 211174:5 Matrix: SO
Collected: 06/17/19 10:25 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	82.3	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

B-101C 8.5-9.5 NLS ID: 1129055
COC: 211174:6 Matrix: SO
Collected: 06/17/19 10:35 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	77.9	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460
PCBs (solid) by SW846 8082	see attached					07/08/19	SW846 8082	721026460
Organics Extraction (Soil) for PCBs	yes					06/26/19	SW846 3550C	721026460

B-103C 5.5-6.5 NLS ID: 1129056
COC: 211174:7 Matrix: SO
Collected: 06/17/19 13:45 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	85.0	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

B-103C 7-8 NLS ID: 1129057
COC: 211174:8 Matrix: SO
Collected: 06/17/19 13:55 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	78.4	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

B-103B 5.5-6.5 NLS ID: 1129058
COC: 211174:9 Matrix: SO
Collected: 06/17/19 14:10 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	78.8	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

B-103B 7-8 NLS ID: 1129059
COC: 211174:10 Matrix: SO
Collected: 06/17/19 14:20 Received: 06/19/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Solids, total on solids	76.6	%	1	0.10*		06/19/19	SM 2540-G 20ed	721026460

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ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

NLS Project: 324080
NLS Customer: 50040

Fax: 920 468 3312 Phone: 800 949 1978

Client: **AECOM (GB)**
Attn: Jeffrey Maletzke, PG
2985 South Ridge Road, Suite B
Green Bay, WI 54304

Project: Soil

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.
ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable
DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L
MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:

Authorized by:
R. T. Krueger
President

Attachment C

Boring Logs B-102, B-201, B-204, B-208A, and B-233

AECOM

OWNER: **Georgia-Pacific**

LOG OF BORING NUMBER: **B-102**

PROJECT NAME: **P-2 GP Broadway Mill**

ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT) / ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
					SURFACE ELEVATION +587.04 NAVD88	
		HA			Fill: Coal and cinders	
	1	HA			3.0	
5.0		HA			Fill: Silty clay - trace wood - light brown (CL-ML)	
	2	HA				
		PA				
	3	SS			9.5	
10.0		PA			Clay - trace gravel - light brown to light reddish brown - very stiff to hard (CL)	
	4	SS				
		PA				
	5	SS			14.5	
15.0		PA			Clay - trace gravel - brown - very stiff (CL)	
	6	SS				
		RB				
	7	SS				
20.0		RB				
	8	SS			22.0	
		RB				
	9	SS			Clay - trace sand and gravel - brown - medium to stiff (CL-CH)	
25.0		RB				
	10	ST				
		RB				
30.0						
	11	SS				
		RB				
35.0						
	12	SS				
		RB				
40.0						
	13	SS				
		RB				
45.0						
	14	ST				
		RB				
50.0						
	15	SS				
		RB				
55.0						
	16	ST				
		RB				
60.0						

. . . continued

* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

AECOM JOB NO. **60594990**

SHEET NO. **1** OF **2**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-102**
	PROJECT NAME: **P-2 GP Broadway Mill**	ARCHITECT-ENGINEER: **AECOM**

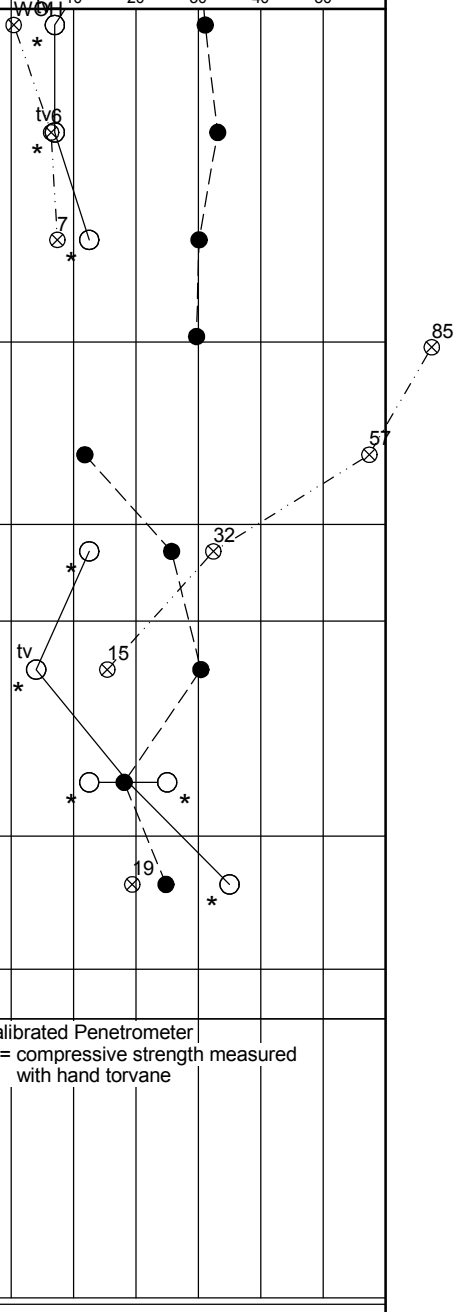
SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % | WATER CONTENT % | LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
						SURFACE ELEVATION +587.04 NAVD88 (Continued)	
		17	SS			Clay - trace sand and gravel - brown - medium to stiff (CL-CH)	
			RB				
65.0		18	SS				
			RB				
70.0		19	SS				
			RB				
75.0		20	SS				
		20	SS			75.5 Silty sand with gravel - brown - extremely to very dense - wet (SM)	
			RB				
80.0		21	SS				
			RB			84.0	
85.0		22	SS			Silty sandy clay with gravel - brown - stiff (CL-ML)	
			RB			88.5	
90.0		23	SS			Clay - reddish brown to grayish brown - medium to very stiff (CL-CH)	
			RB				
95.0		24	ST				
			RB			98.5	
100.0		25	SS			Clay - trace sand and silt seams - reddish brown to gray - stiff (CL)	
			RB			104.7	
105.0							
107.0						107.0 Drillers note: Hard drilling from 104.7 to 105.5 Drillers note: Rock bit refusal at 107 feet End of Boring Boring advanced from to 5.5 feet by hand auger Boring advanced from 5.5 to 15 feet by power auger Boring advanced from 15 to 107 feet by rock bit and drilling fluid Temporary HW casing driven to 15 feet Standard Penetration Test performed with automatic hammer Boring backfilled with bentonite chips to 15 feet and bentonite grout from 15 to 107 feet	



* Calibrated Penetrometer
tv = compressive strength measured with hand torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING **247355.184**	BORING STARTED **1/21/19**	AECOM OFFICE **Oshkosh**	
EASTING **2482663.693**	BORING COMPLETED **1/22/19**	ENTERED BY **MLB**	SHEET NO. **2** OF **2**
WL **13.0 WS / 14.3 BCI**	RIG/FOREMAN **D-50/JD (SES)**	APP'D BY **JMT**	AECOM JOB NO. **60594990**

AECOM LOG 60594990_P-2 GP BROADWAY MILL.GPJ FS_DATATEMPLATE.GDT 2/27/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-201** — **Offset 5.0 feet east**
	PROJECT NAME: **Project Pace P3**	ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

SURFACE ELEVATION +586.9 NAVD88

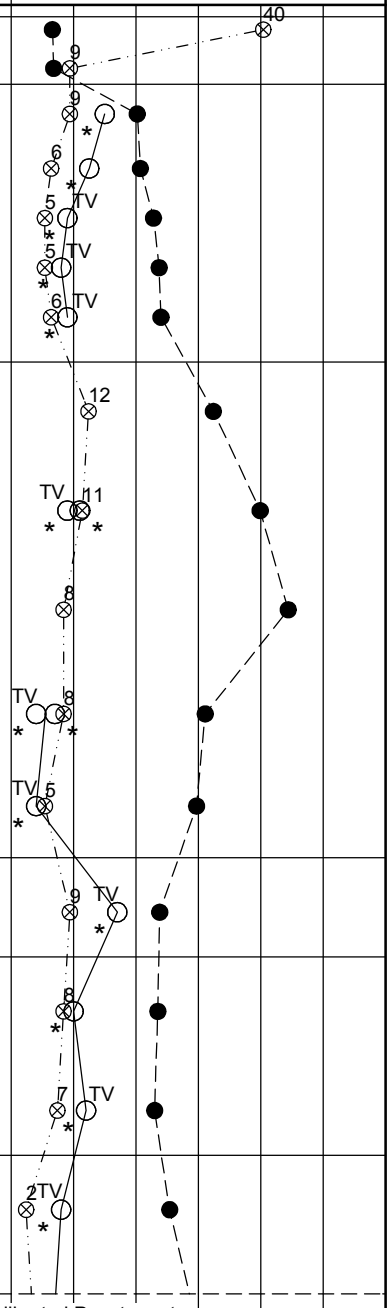
DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
			PA			0.6 Asphalt-7 inches
		1	SS			FILL - sand with gravel - trace silt - brownish gray - dense - moist (SP)
			PA			4.0
5.0		2	SS			Clay - trace silt and sand - reddish brown to brown - stiff to medium (CL)
			RB			
		3	SS			
			PA			
		4	SS			
10.0			RB			
		5	SS			
			RB			
		6	SS			
15.0			RB			
		7	SS			
			RB			18.0
20.0						Clay - brown - medium to soft (CL)
		8	SS			Sample 8 - disturbed sample
			RB			
25.0		9	SS			Sample 9 - disturbed sample
			RB			
30.0		10	SS			Sample 10 - disturbed sample
			RB			
35.0		11	SS			
			RB			
40.0		12	SS			
			RB			43.0
45.0		13	SS			Clay - little silt - brownish gray to reddish brown - stiff (CL)
			RB			48.0
50.0		14	SS			Clay - trace silt - grayish brown - stiff (CL)
			RB			
55.0		15	SS			
			RB			58.0
60.0		16	SS			Clay - brown - medium to soft (CL)
			RB			
65.0						

UNIT DRY WT. LBS./FT.^{3}

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2}: 1 2 3 4 5

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT %: 10 20 30 40 50

STANDARD PENETRATION BLOWS/(FT): 10 20 30 40 50



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* Calibrated Penetrometer
TV = torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

AECOM JOB NO. **60594990** | SHEET NO. **1** OF **2**

AECOM_LOG_WSAMPLENOTES 60601464_GP P3 PROJECT PACE.GPJ DATATEMPLATE_CURRENT.GDT 5/30/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-201** — **Offset 5.0 feet east**
	PROJECT NAME: **Project Pace P3**	ARCHITECT-ENGINEER: **AECOM**

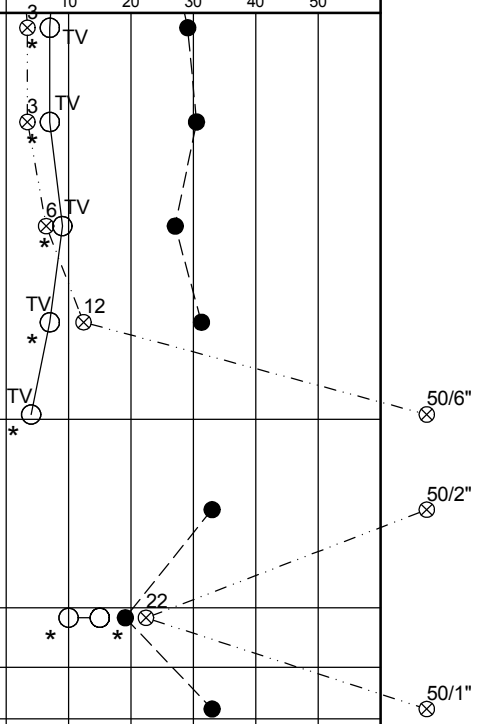
SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
						SURFACE ELEVATION +586.9 NAVD88 (Continued)	
		17	SS			Clay - brown - medium to soft (CL)	
			RB				
70.0		18	SS				
			RB				
75.0		19	SS				
			RB				
80.0		20	SS				
			RB				
85.0		21	SS			85.5	
			RB			Silty gravel - extremely dense (GM)	
90.0		22	SS			Drillers Note: Gravel while drilling from 86.4 to 95.0 feet	
			RB			Drillers Note: Large cobble while drilling from 92.5 to 93.0 feet	
95.0		23	SS			95.0 Silty clay - brown - stiff (CL-ML)	
			RB			98.0	
100.0		24	SS			Silty gravel (GM)	
101.6			RB			100.6 Drillers Note: Gravel while drilling from 98.0 to 100.6 feet	
						101.6 Boulder or bedrock	
						Split spoon refusal at 100.6 feet	
						End of Boring	
						Boring advanced to 5.0 feet with power auger	
						Boring advanced from 5.0 to 101.6 feet with rotary bit and drilling fluid	
						Temporary HW casing driven to 9.5 feet	
						Standard Penetration Test performed with automatic hammer	
						Boring backfilled to 6.0 feet with bentonite chips and from 6.0 to 101.6 with bentonite grout	



* Calibrated Penetrometer
TV = torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING: **247371.873**	BORING STARTED: **4/9/19**	AECOM OFFICE: **Oshkosh, Wisconsin**	
EASTING: **2482078.006**	BORING COMPLETED: **4/10/19**	ENTERED BY: **KMC**	SHEET NO.: **2** OF **2**
WL: **Dry BCI**	RIG/FOREMAN: **B-61/JW**	APP'D BY: **JMT**	AECOM JOB NO.: **60594990**

AECOM_LOG_WSAMPLENOTES 60601464_GP P3 PROJECT PACE.GPJ DATATEMPLATE_CURRENT.GDT 5/30/19

AECOM

OWNER
Georgia-Pacific

LOG OF BORING NUMBER **B-204**

PROJECT NAME
Project Pace P3

ARCHITECT-ENGINEER
AECOM

SITE LOCATION
GP Broadway Mill, Green Bay, Wisconsin

SURFACE ELEVATION +588.0 NAVD88

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
			PA			FILL - coal - black - medium dense	
		1	SS				
			SS			3.5	
5.0			PA			FILL - clay - reddish brown - very stiff to stiff (CL)	
		2	SS				
			PA				
		3	SS			9.5	
10.0			PA			Clay - little to trace sand and silt - brown to light reddish brown - medium to stiff (CL)	
		4	SS				
			RB				
		5	SS				
15.0			RB				
		6	SS				
			RB				
20.0		7	SS			Sample 7 - disturbed sample	
			RB				
25.0		8	SSS				
			RB				
30.0		9	SS				
			RB				
35.0		10	SS				
			RB				
40.0		11	SS				
			RB				
45.0		12	SS				
			RB				
50.0		13	SS				
			RB			53.0	
55.0		14	SS			Clay - trace silt - brown - very soft (CL)	
			RB			Sample 14 - low recovery	
60.0		15	SS				
			RB			Sample 15 - low recovery	
65.0							

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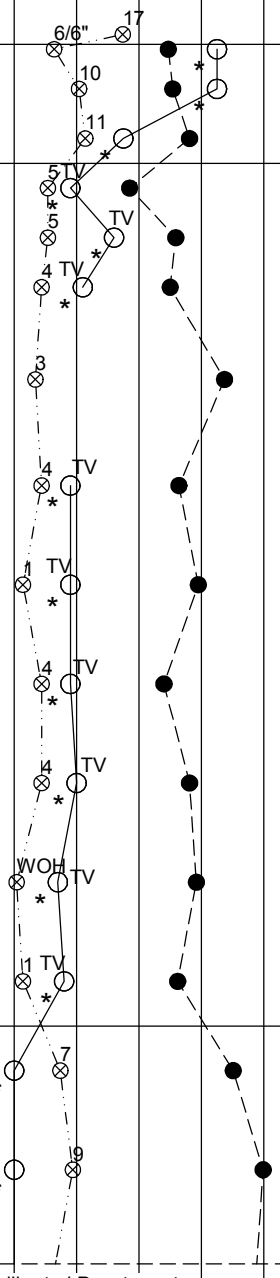
UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % / WATER CONTENT % / LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)



* Calibrated Penetrometer
TV = torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

AECOM JOB NO. **60594990**

SHEET NO. **1** OF **2**

AECOM_LOG_WSAMPLENOTES 60601464_GP P3 PROJECT PACE.GPJ DATATEMPLATE_CURRENT.GDT 5/30/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-204**
	PROJECT NAME: **Project Pace P3**	ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
						SURFACE ELEVATION +588.0 NAVD88 (Continued)	
		16	SS			Clay - trace silt - brown - very soft (CL)	
			RB			68.0 Clay - trace silt and gravel - brown - medium (CL)	
70.0		17	SS				
			RB				
75.0		18	SS				
			RB			Sample 18 - low recovery	
80.0		19	SS				
			RB			Drillers Note: Trace gravel while drilling from 82..0 to 84.5 feet	
85.0		20	SS			84.5 86.0 Silty gravel - little clay - brown - medium dense - wet (GM)	
		20A	SS				
			RB			Clay - reddish brown - stiff (CL)	
90.0		21	SS			89.5 91.0 Silty gravel - little clay - brown - dense (GM)	
		21A	SS			Drillers Note: Gravel while drilling from 89.5 to 91.0 feet	
			RB			Clay - trace silt and gravel - grayish brown - stiff (CL)	
95.0		22	SS			Drillers Note: Gravel while drilling from 94.0 to 95.0 feet	
			RB			Spilt spoon refusal at 100.4 feet	
100.0		23	SS			100.4 Sand and gravel - little clay - brown - wet (GM)	
			RB			Drillers Note: Cobble while drilling from 100.4 to 101.1 feet	
105.0						104.8 105.8 Rotary bit refusal at 104.8 feet due to boulder or bedrock	

End of Boring
Boring advanced to 10.0 feet with power auger
Boring advanced from 10.0 to 105.8 feet with rotary bit and drilling fluid
Temporary HW casing driven to 8.0 feet
Standard Penetration Test performed with automatic hammer
Boring backfilled to 5.0 feet with bentonite chips and from 5.0 to 105.8 with bentonite grout

* Calibrated Penetrometer
TV = torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING **247357.098**	BORING STARTED **3/25/19**	AECOM OFFICE **Oshkosh, Wisconsin**	
EASTING **2482479.041**	BORING COMPLETED **3/25/19**	ENTERED BY **KMC**	SHEET NO. **2** OF **2**
WL **Dry BCI**	RIG/FOREMAN **B-61/JW**	APP'D BY **JMT**	AECOM JOB NO. **60594990**

AECOM_LOG_WSAMPLENOTES 60601464_GP P3 PROJECT PACE.GPJ DATATEMPLATE_CURRENT.GDT 5/30/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-208**
	PROJECT NAME: **Project Pace P3**	ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}	UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5) / PLASTIC LIMIT % / WATER CONTENT % / LIQUID LIMIT % (10 20 30 40 50) / STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)
						SURFACE ELEVATION +588.3 NAVD88		
		1	SS			FILL - coal - black - loose		9
			HA			2.4		7
4.0		2	SS			FILL - sand - brown - loose - moist (SP) 4.0		
						End of Boring Boring davnaced to 4.0 feet with hand auger Standard Penetration Test performed with automatic hammer Boring terminated at 4.0 feet due to possible abandoned utility Boring backfilled with bentonite chips Offset boring B-208A performed 3.0 feet southeast of location		

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING **247662.857**	BORING STARTED **4/8/19**	AECOM OFFICE **Oshkosh, Wisconsin**	
EASTING **2482177**	BORING COMPLETED **4/8/19**	ENTERED BY **KMC**	SHEET NO. **1** OF **1**
WL	RIG/FOREMAN **D-120/JD**	APP'D BY **JMT**	AECOM JOB NO. **60594990**

AECOM_LOG_WSAMPLENOTES 60601464_GP P3 PROJECT PACE.GPJ DATATEMPLATE_CURRENT.GDT 5/30/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-208A** — **Offset 3.0 feet southeast from B-208**
	PROJECT NAME: **Project Pace P3**	ARCHITECT-ENGINEER: **AECOM**

SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

SURFACE ELEVATION +588.3 NAVD88

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
			PA			Blind Drill - see B-208 for soil description
		2A	SS			FILL - clay with gravel and coal - brown to black - stiff
5.0			PA			
		3	SS			FILL - clay - reddish brown - very stiff (CL)
			PA			
		4	SS			Clay - little to trace sand - reddish brown - medium (CL)
10.0			PA			
		5	SS			
			RB			
		6	SS			
15.0			RB			Clay - trace sand and gravel - brown - stiff to medium (CL)
		7	SS			
			RB			
20.0		8	SS			
			RB			
25.0		9	SS			
			RB			
30.0		10	SS			
			RB			
35.0		11	SS			
			RB			
40.0		12	SS			
			RB			
45.0		13	SS			Clayey sand - brown - medium dense - moist (SC)
			RB			
50.0		14	SS			Clay - brown - hard to very stiff (CL)
			RB			
55.0		15	SS			
			RB			
60.0		16	SS			
			RB			
65.0						Silt - trace fine sand - brown - extremely dense (ML)

2.5 — 4.5 — 7.0 — 13.0 — 43.0 — 48.0 — 63.0

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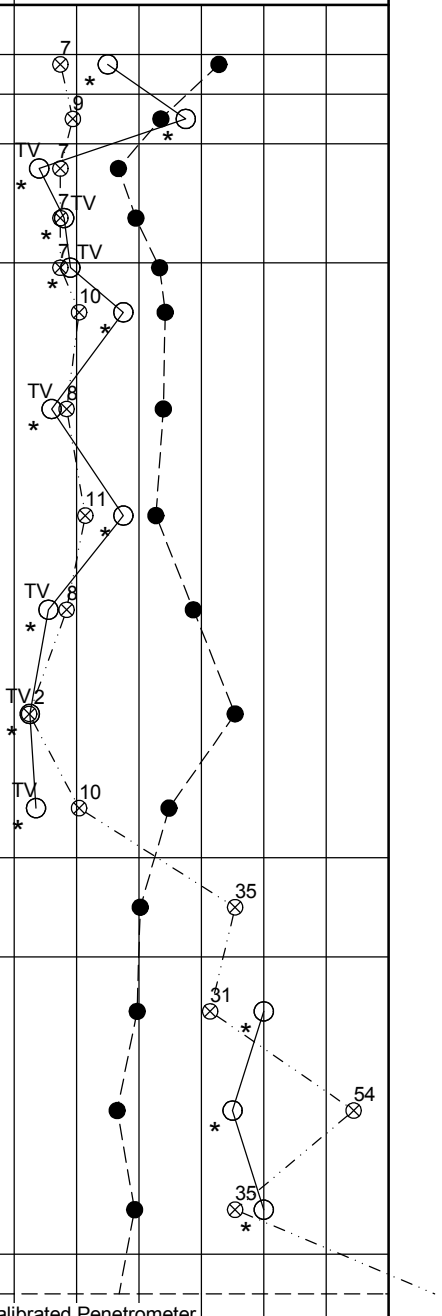
UNIT DRY WT. LBS./FT.^{3}

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)



* Calibrated Penetrometer
TV = torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

AECOM JOB NO. **60594990** | SHEET NO. **1** OF **2**

AECOM_LOG_WSAMPLENOTES 60601464_GP P3 PROJECT PACE.GPJ DATATEMPLATE_CURRENT.GDT 5/30/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-208A** — **Offset 3.0 feet southeast from B-208**
	PROJECT NAME: **Project Pace P3**	ARCHITECT-ENGINEER: **AECOM**

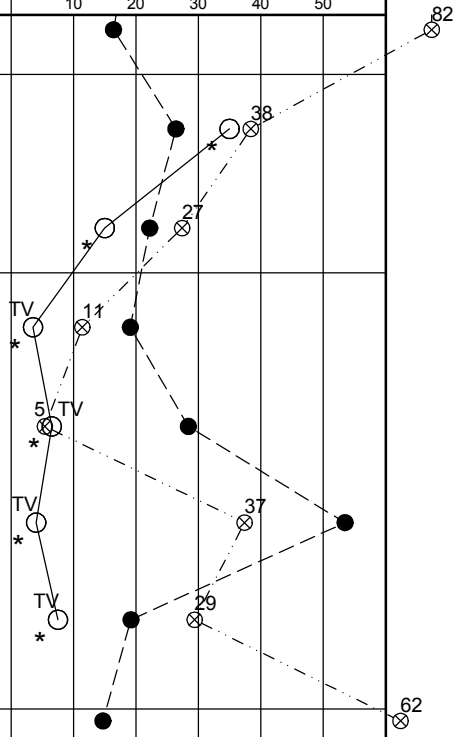
SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)

DEPTH(FT) / ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
					SURFACE ELEVATION +588.3 NAVD88 (Continued)	
	17	SS			Silt - trace fine sand - brown - extremely dense (ML)	
		RB			68.0	
70.0	18	SS			Clay - little to trace sand - brown - very stiff to stiff (CL)	
		RB				
75.0	19	SS				
		RB			78.0	
80.0	20	SS			Clay - brown to grayish brown - medium (CL)	
		RB				
85.0	21	SS				
		RB				
90.0	22	SS			Sample 22 - gravel in sample	
		RB				
95.0	23	SS				
		RB				
100.0	24	SS			100.0 Silt - trace sand - gray - very dense - moist (ML)	
103.7		RB			103.7	



End of Boring
Boring advanced to 10.0 feet with power auger
Boring advanced from 10.0 to 103.7 feet with rotary bit and drilling fluid
Temporary HW casing driven to 8.0 feet
Standard Penetration Test performed with automatic hammer
Boring backfilled to 15.0 feet with bentonite chips and from 15.0 to 103.7 with bentonite grout

* Calibrated Penetrometer
TV = torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING: **247662.857**	BORING STARTED: **4/8/19**	AECOM OFFICE: **Oshkosh, Wisconsin**	
EASTING: **2482177**	BORING COMPLETED: **4/8/19**	ENTERED BY: **KMC**	SHEET NO.: **2** OF **2**
WL: **Dry BCI**	RIG/FOREMAN: **D-120/JD**	APP'D BY: **JMT**	AECOM JOB NO.: **60594990**

AECOM_LOG_WSAMPLENOTES 60601464_GP P3 PROJECT PACE.GPJ DATATEMPLATE_CURRENT.GDT 5/30/19

AECOM	OWNER: **Georgia-Pacific**	LOG OF BORING NUMBER: **B-233**
	PROJECT NAME: **Project Pace P3**	ARCHITECT-ENGINEER: **AECOM**

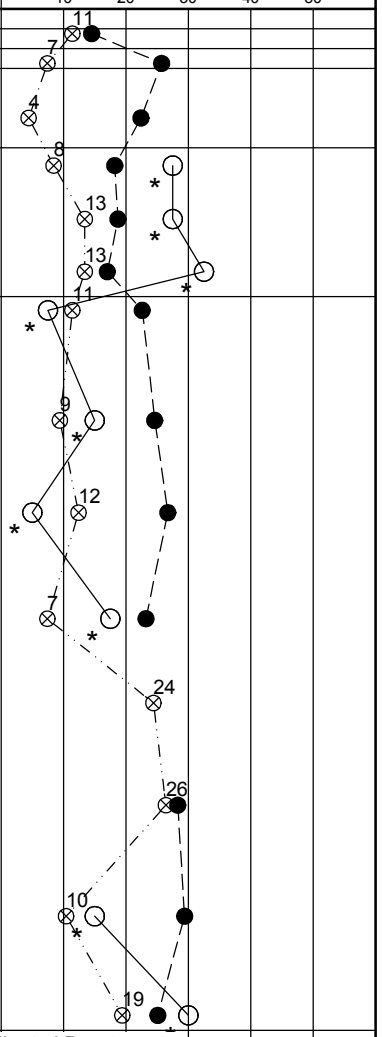
SITE LOCATION: **GP Broadway Mill, Green Bay, Wisconsin**

DEPTH(FT)	ELEVATION(FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
						SURFACE ELEVATION +591.5 NAVD88	
			PA			1.0 Concrete	
		1	SS			2.0 FILL - silty sand - trace gravel - brown - medium dense (SM)	
		2	SS			3.0	
5.0			HA			FILL - sandy, silty clay - trace gravel - brown (CL-ML)	
		3	SS			FILL - sand - trace gravel - brown - loose - wet (SP)	
			RB			7.0	
		4	SS			Clay - little silt - reddish brown - very stiff (CL)	
10.0			RB				
		5	SS				
			RB				
		6	SS			14.5	
15.0			RB				
		7	SS			Clay - little silt - brown - medium to very stiff (CL)	
			RB			Sample 7 - low recovery	
20.0		8	SS				
			RB				
25.0		9	SS				
			RB				
30.0		10	SS				
			RB				
35.0		11	SS			Sample 11 - no recovery	
			RB				
40.0		12	SS			Sample 12 - low recovery	
			RB				
45.0		13	SS				
			RB				
50.0							
51.5		14	SS			51.5	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/(FT) (10 20 30 40 50)



End of Boring
Boring advanced to 1.0 feet with power auger
Boring advanced from 1.0 to 5.0 feet with hand auger
Boring advanced from 5.0 to 51.5 feet with rotary bit and drilling fluid
Temporary HW casing driven to 7.5 feet
Standard Penetration Test performed with automatic hammer
Boring backfilled to 8.0 feet with bentonite chips and from 8.0 to 51.5 feet with bentonite grout

* Calibrated Penetrometer
TV = torvane

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

NORTHING: **247534.285**	BORING STARTED: **4/16/19**	AECOM OFFICE: **Oshkosh, Wisconsin**	
EASTING: **2482123.45**	BORING COMPLETED: **4/16/19**	ENTERED BY: **KMC**	SHEET NO.: **1** OF **1**
WL: **1.1 BCI**	RIG/FOREMAN: **D-120/JD**	APP'D BY: **JMT**	AECOM JOB NO.: **60594990**

AECOM_LOG_WSAMPLENOTES 60601464_GP P3 PROJECT PACE.GPJ DATATEMPLATE_CURRENT.GDT 5/30/19