

October 18, 2019

WDNR-Remediation and Redevelopment Program
223 E. Steinfest Road
Antigo, WI 54409

Attn: Aaron Zielsdorf
Project Manager
Aaron.Zielsdorf@Wisconsin.gov

Re: NR 716 Site Investigation Work Plan
BMO HARRIS BANK BRANCH
900 E. Main Street
Merrill, Wisconsin
WDNR BRRTS No. 02-35-584409
PSI Project No.: 00541993

Dear Mr. Zielsdorf:

PSI has completed a Site Investigation Work Plan for the BMO Harris Bank Branch parcel located at 900 E. Main Street, Watertown Wisconsin. The plan has been prepared in general accordance with NR 716. One hard copy of the final report is enclosed, and an electronic copy has also been submitted to the WDNR.

Please contact PSI at (262) 521-2125 with any questions or comments you may have.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.



Patrick J. Patterson, P.E., P.G.
Senior Engineer
Environmental Services



Larry Raether, P.E.
Department Manager
Environmental Services

Enclosures

NR 716 SITE INVESTIGATION WORK PLAN

FOR:

**BMO HARRIS BANK BRANCH
900 E. Main Street, Merrill
Lincoln County, Wisconsin
WDNR BRRTS No. 02-35-584409**

PREPARED FOR:

**BMO Harris Bank N.A.
Jones Lang LaSalle Americas, Inc.
508 North Washington
Naperville, IL 60563**

PREPARED BY:

**PROFESSIONAL SERVICE INDUSTRIES, INC.
821 Corporate Court
Waukesha, WI 53189
Telephone (262) 521-2125**

PSI PROJECT NO. 00541993

October 18, 2019



A handwritten signature in black ink, appearing to read "Patrick J. Patterson".

Patrick J. Patterson
Senior Engineer

A handwritten signature in black ink, appearing to read "Larry Raether".

Larry Raether, P.E.
Department Manager

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1.0 INTRODUCTION

Professional Service Industries, Inc. (PSI) has prepared this NR 716 Site Investigation Work Plan for the BMO Harris Bank Branch parcel located in Merrill, Wisconsin, referred to herein as the "Subject Property." Site information is included under this section.

Site Name: BMO Harris Bank Branch

Site Address: 900 E. Main Street
Merrill, Wisconsin 54452

The Subject Property is geographically located in the Southwest 1/4 of Section 12, in Township 31 North, Range 6 East, in the City of Merrill, Lincoln County, State of Wisconsin. The location of BMO Harris Bank Branch parcel is depicted on the attached Site Location Map. The general location of the Subject Property is shown on the Site Features Diagram, included herein.

WDNR BRRTS No: 02-35-584409

WDNR FID No: NA

Property Owner: BMO Harris Bank N.A.

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Vice President, Senior Manager CRE US Facility Management
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Chicago Illinois 60603
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Consultant: Patrick J. Patterson
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1.1 PROJECT BACKGROUND

The Subject Property consists of an approximate 0.8-acre commercial property located at 900 E. Main Street in Merrill, Wisconsin. The Subject Property consists of two parcels separated by an alleyway. A commercial structure with a full basement is situated on the southern parcel. A drive through teller structure is situated on the northern parcel. Asphalt parking areas are generally located within the northern portion of the parcel. Landscaped areas are present in the southwest and northwest property corners. The Subject Property is currently used as a BMO Harris Bank.

The Subject Property is located to the north of E. Main Street, south of N. 1st Street, east of S. Mill Street,



and west of several commercial properties and S. Poplar Street. The surrounding properties are generally occupied by commercial and residential properties and municipal facilities. The general location of the Subject Property is shown on the Site Location Map in the Appendix. A diagram showing the general site features is also included in the Appendix.

A Phase I Environmental Site Assessment (Phase I ESA) was performed by PSI in February 2019 for BMO Harris Bank, NA. Based upon the review of PSI's Phase I ESA Report (PSI Report No. 00541766), dated February 22, 2019, a dry cleaning facility with a gasoline underground storage tank (UST) was indicated to be present in the north central portion of the Subject Property on the 1926 Sanborn Fire Insurance Map (Sanborn Map). In the 1948 and 1954 Sanborn Maps, an automotive repair facility is present in the southern portion of the eastern parking lot area. The status of the indicated tank is unknown. The property usage and the UST were identified in PSI's Phase I ESA report as being Recognized Environmental Conditions (RECs) in connection to the Subject Property. Due to the potential for contamination to be present, BMO Harris Bank retained PSI to perform Phase II ESA services.

On July 1, 2019, four soil probes (SP-1 through SP-4) were placed on the Subject Property in the general area of the former dry cleaners and the auto repair facility and were extended a depth of 15 feet below grade. Soil borings are attached. Collected soil and grab water samples were tested for the presence of Volatile Organic Compounds (VOCs) and/or Polynuclear Aromatic Hydrocarbons (PAHs) and RCRA Metals. A detected Cadmium level of 1.12 mg/kg and a detected dissolved Lead level of 2.73J ug/L, which are slightly above current WDNR soil and groundwater quality standards, respectively, were detected in the soil sample and grab water sample collected from SP-1. PAHs Benzo(a)pyrene (0.71 mg/kg), Benzo(b)fluoranthene (1.08 mg/kg), Chrysene (0.84 mg/kg), and Dibenz(a,h)anthracene (0.131 mg/kg), which are above current WDNR soil quality standards, were also encountered in the soil sample collected from SP-1. Tetrachloroethene (PCE) levels of 0.07J mg/kg and 0.065J mg/kg were encountered in soil samples collected from soil probes SP-2 and SP-3, respectively, and a Benzene level of 0.062J mg/kg was encountered in the soil sample collected from soil probe SP-4. These concentrations are above current WDNR soil standards but are also indicated as estimated laboratory values. A PCE level of 0.51J ug/L was also detected in the grab water sample collected from SP-1, which is above groundwater quality standards but is indicated as an estimated laboratory value. Several PAHs were detected in the water sample from SP-1 but were below groundwater quality standards and were also laboratory estimated values. These results are included on the attached soil and groundwater analytical results tables. Because of the encountered contamination, it was recommended that additional Phase II ESA activities be performed to further evaluate the presence of soil and groundwater contamination prior to potentially requesting a No Action Required (NAR) determination from the WDNR.

On August 28, 2019, seven (8) soil probes (SP-5 through SP-12) were placed on the Subject Property and were extended to depths of 10 to 15 feet below grade. Probes SP-7, SP-8, SP-10, SP-11, and SP-12 were completed to further evaluate the presence of petroleum and chlorinated contamination and attempt to define the extent and degree of soil contamination encountered on the Subject Property during the Phase II ESA activities. SP-5, SP-6 and SP-9 were placed around SP-1 to evaluate the presence of PAHs and Cadmium in the shallow soils. Soil borings are attached. Collected soil samples were tested for the presence of VOCs or PAHs and Cadmium. No VOC contamination was encountered in the selected soil samples. The exception was the sample collected from SP-12 at the sampling interval of 2 to 4 feet. However, the only VOC detected above WDNR soil quality standards was a Benzene level of 0.072J mg/kg, which was also indicated to be a laboratory estimated value. PAHs Benzo(a)pyrene (0.61 and 2.15



mg/kg), Benzo(b)fluoranthene (1.05 and 3.2 mg/kg), and Chrysene (0.75 and 2.33 mg/kg) were detected in the shallow soil samples collected from SP-5 and SP-9, respectively. Benzo(a)anthracene (2.22 mg/kg) and Dibenz(a,h)anthracene (0.276 mg/kg) were also detected in the sample collected from SP-9. These levels are above current WDNR soil quality standards. Cadmium levels were detected in the collected samples but were below soil quality standards for Cadmium. These results are included on the attached soil analytical results table.

On August 28, 2019, three groundwater monitoring wells (MW-1 through MW-3) were installed to evaluate the groundwater for the presence of contamination and attempt to determine the groundwater flow direction. Because of the previous water analytical test results, the collected groundwater samples were tested for the presence of VOCs, while the sample collected from MW-1 was also tested for dissolved Lead. PCE was detected in the groundwater samples but the only level above groundwater quality standard was detected in the sample collected from MW-2 at a concentration of 0.58J ug/L. Dissolved Lead was not detected within the collected sample from MW-1. The results are included on the attached groundwater analytical results table. The depth of groundwater is generally between about 12 to 14 feet below grade and the groundwater flow is towards the west/southwest. A groundwater flow direction diagram is attached herein. Because of the encountered contamination in the August 2019 samples, which indicated higher PAH concentrations detected in SP-9, it was recommended that the WDNR be notified of the encountered contamination and additional investigative activities be performed to further evaluate the degree and extent of the encountered PAH soil contamination around SP-5 and SP-9. In addition, it was recommended that the groundwater be tested for the presence of PAHs and VOCs. Further, the sample collected from MW-1 will be tested for the presence of Cadmium.

2.0 PHYSIOGRAPHICAL AND GEOLOGICAL SETTING

2.1 LOCATION OF THE SUBJECT PROPERTY

PSI reviewed the United States Geological Survey (USGS) USGS Merrill Quadrangle Map, dated 1966, showing the area of the Subject Property. According to the contour lines on the topographic map, it is located at approximately 1265 feet above mean sea level (MSL). The contour lines around the Subject Property indicate the area slopes to the south/southwest. The nearest water body is the Wisconsin River to the south and the Prairie River to the west and north. The site location is shown on Figure 1.

2.2 PHYSICAL CHARACTERISTICS OF THE SUBJECT PROPERTY

Quaternary Deposits & Geomorphology

Based on PSI's review of the "Soil Survey of Lincoln County, Wisconsin" publication published by the United States Department of Agriculture (USDA) Soil Conservation Service (issued November 1996), the "General Soil Map" of the area around the Subject Property is indicated to be within the Pence-Padus Sandy Loam. This soil series consists of deep, well-drained and moderately permeable soils that have a subsoil of sandy loam over loamy sand to gravelly sand. These soils are above igneous bedrock, which is approximately 50 to 100 feet below grade.



Hydrogeology

The estimated hydraulic gradient within the glacial deposits within this area of north-central Wisconsin range from high permeable material to moderate permeable material. This is consistent with the subsurface soils encountered within the completed soil probes placed in the Subject Property, which were varying layers of native shallow sandy loam soils and deeper sand soils to the maximum depths explored.

Surface Drainage

Surface drainage is to the south to west towards the Wisconsin and Prairie Rivers. The surface water drainage at the Subject Property lies within the Mississippi River Watershed.

Potential Migration Pathways

Low levels of groundwater contamination were detected in the groundwater samples collected from the wells placed on the Subject Property. It is anticipated that no potential migration pathways are present in the area of the encountered PAH contamination on the Subject Property. Further, PAH contaminants are generally immobile compounds and are unlikely to migrate into the underlying groundwater.

Soil Conditions

The surface material at the recent probe locations consisted of about 3 inches of asphalt pavement. The exception was grass present at soil probe SP-11. The underlying fill to possible fill material consisting of brown, dark brown, yellowish brown to black silty sand, sandy silt to silt with gravel, wood and cinders extended to depths of about 4 to 6.5 feet below grade. The underlying natural soils encountered beneath the fill material consisted of brown to dark brown sandy silt, silty sand to sand with variable amounts of gravel to depths of about 10 to 15 feet below grade. No obvious evidence of contamination was present within the collected soil samples.

Shallow Groundwater Conditions

Saturated soils were encountered at depths of about 11 to 12 feet below grade during probing activities. The groundwater levels were measured within the monitoring wells on August 28, 2019 at depths ranging from 11.07 to 13.81 feet below top of casing (EL. 1252.18± to EL. 1252.61±). No obvious evidence of contamination was observed within the collected water samples.

3.0 SAMPLING AND ANALYSIS STRATEGY

3.1 SCOPE OF WORK

The general proposed scope of work will consist of the following activities: the placement of five soil probes; the collection of soil samples; laboratory analysis of selected soil samples for the presence of PAH contaminants; the collection of water samples from the existing wells; laboratory analysis of water samples for the presence of PAH and chlorinated VOC contaminants; and data analysis and interpretation. Following data evaluation and if favorable test results are received, a Site Investigation Report will be prepared.



1. Three of the five soil probes will be extended to a depth of about 5 feet below grade around the previous soil probe SP-9 to evaluate the degree and extent of PAH contamination. The remaining two soil probes will be extended to a depth of about 5 feet below grade to evaluate the extent of PAH soil contamination to the east of soil probe SP-5.
2. The collected soil samples will be field screened with a PID to monitor for the presence of volatile organic vapors.
3. It is anticipated that little, if any, soil cuttings will not be generated during probing activities.
4. One selected soil sample will be collected from each probe and will be submitted to a laboratory to test for the presence of PAHs (EPA 8270).
5. The existing wells will be tested for the presence of PAHs (EPA 8270) and VOCs (EPA 8260). The sample from MW-1 will also be tested for the presence of dissolved Cadmium (EPA 6010).
6. If contaminants are detected within the submitted soil and/or groundwater samples above WDNR quality standards, additional sampling activities may be required to be completed.

3.2 QUALITY ASSURANCE/QUALITY CONTROL MEASURES

All equipment decontamination, sample collection, sample custody records, and analysis will be performed in general accordance with methods prescribed by the United States EPA and the WDNR.

The soil sampling device and tools will be cleaned with an Alconox and potable water wash and rinsed with potable water between each sample interval. Disposable plastic sleeves will be used to collect the samples. Groundwater samples will be collected with disposal bailers. The soil and groundwater samples from the probes and wells will be handled with disposable Nitrile gloves during initial collection, and when placed into laboratory jars. These procedures will be performed to reduce the potential for cross-contamination between sample locations.

Because of previous analytical test results, the selected soil samples will be submitted to an analytical laboratory to test for the presence of PAHs. Water samples will be tested for the presence of PAHs and VOCs and the water sample collected from MW-1 will be tested for dissolved Cadmium. The selected soil and groundwater samples will be placed within clean laboratory provided jars that are appropriately preserved. The samples will be placed on ice, chain of custody procedures initiated, and they will be submitted to a WDNR-licensed laboratory.

4.0 GENERAL

4.1 SCHEDULE

It is anticipated that the field activities will be performed in October 2019. Assuming that there are no significant delays in the project and the analytical test results are favorable, work of this nature can usually be completed within one to two months.

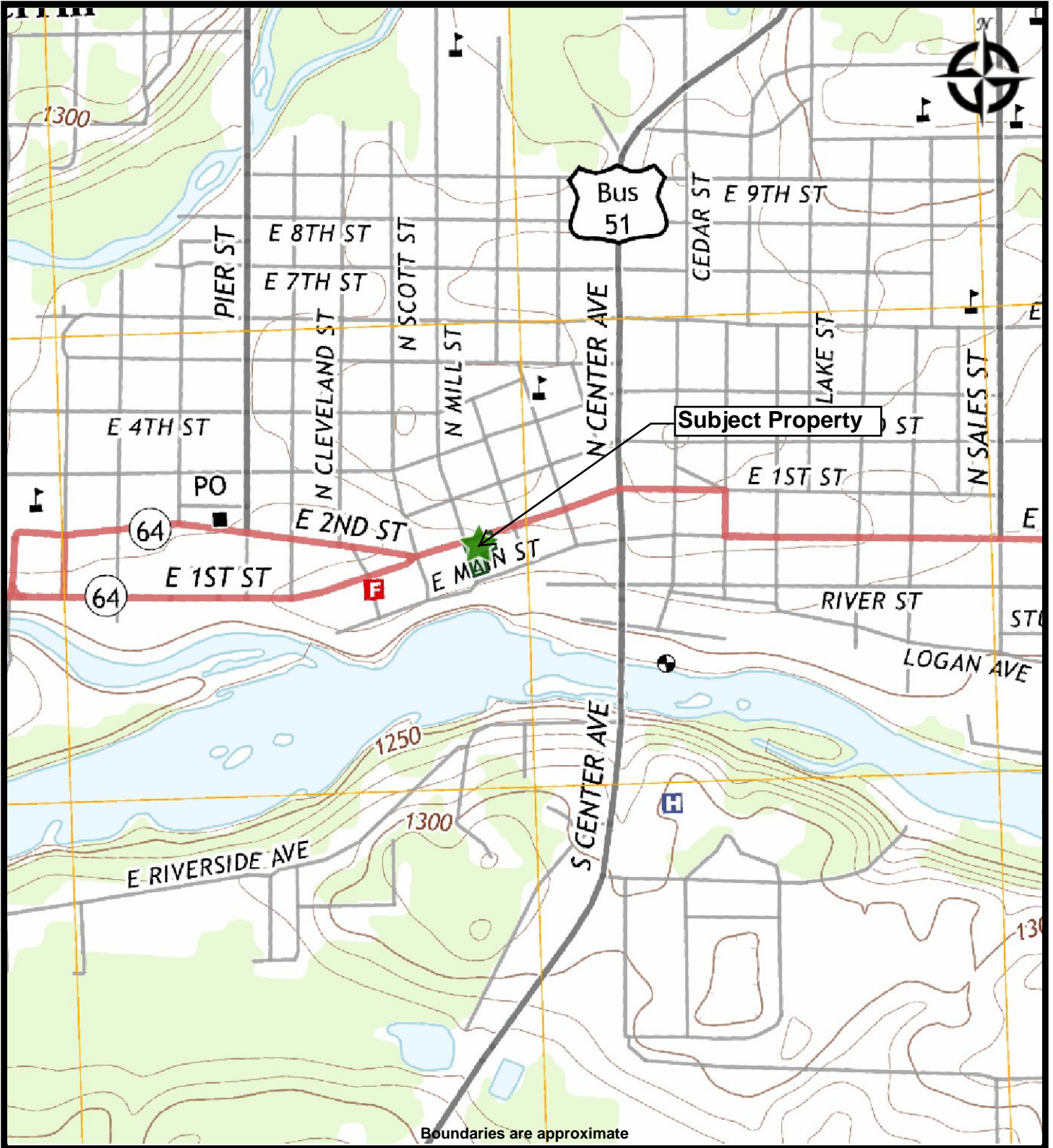


4.2 UTILITIES

The subcontractor will contact Diggers Hotline for public utility clearance prior to the start of probing activities. This service does not mark the locations of privately-owned utilities, including lateral water and sewer lines; therefore, PSI will also subcontract a locating firm for marking private utilities.

4.3 RESPONSIBILITIES & PROJECT COORDINATION

The client is responsible for obtaining access to the Subject Property for PSI and their subcontractors to perform the work.



SITE LOCATION MAP
BMO HARRIS BANK BRANCH
900 East Main Street
Merrill, Wisconsin 54452

Project Number: 00541937

SITE FEATURES DIAGRAM

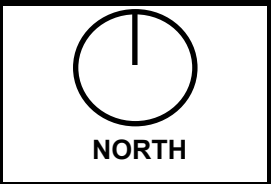


Environmental Services
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BMO Bank Branch
 900 East Main Street
 Merrill, Wisconsin 54452

PSI Project Number:
 00541937

Scale:
 Not to Scale



PROBE AND WELL LOCATION DIAGRAM
PSI PROJECT No. 00541937



Environmental Services
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BMO Bank Branch
900 East Main Street
Merrill, Wisconsin 54452

Scale:
Not to Scale

Date:
2/7/2019





SOIL PROBE: SP-5/MW-1

Project: BMO Harris Bank

Project No.: 00541937

Location: 900 E. Main Street
Merrill, Wisconsin

Drill Date: August 28, 2019

Depth Below Surface/Elev. (ft)		VISUAL SOIL CLASSIFICATION	Sample No.	N (bpf)	Qp (tsf)	Qu (tsf)	MC (%)	PID (i.u.)	Remarks
		Ground Surface Elevation: 0.0							
		Asphalt - 3"							
1	-1.0	FILL - Brown/Dark Brown Silty Sand/Silt/Sandy Silt with gravel and wood, moist	1	---	---	---	---	0	Lab Sample @ 2'-4'
2	-2.0		2	---	---	---	---	0	
3	-3.0		3	---	---	---	---	0	
4	-4.0	Brown SILTY SAND, moist	4	---	---	---	---	0	
5	-5.0		5	---	---	---	---	0	
6	-6.0		6	---	---	---	---	0	
7	-7.0	Brown SILTY SAND with gravel, wet	7	---	---	---	---	0	V
8	-8.0		8	---	---	---	---	0	
9	-9.0		9	---	---	---	---	0	
10	-10.0		10	---	---	---	---	0	
11	-11.0		11	---	---	---	---	0	
12	-12.0		12	---	---	---	---	0	
13	-13.0		13	---	---	---	---	0	
14	-14.0		14	---	---	---	---	0	
15	-15.0		15	---	---	---	---	0	

End of Probe: 15'

Notes:

Installed NR141 Well (MW-1)
4' north and 15' east of SP-1

Water Level / Caving Observations:

Water Level During Drilling: 11 ± ft (El. -11±) V
Water Level Upon Completion: none

Additional Comments:

Boring Location Offset:
Reason for Offset:

Lines of demarcation represent **approximate** boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.



SOIL PROBE: SP-6

Project: BMO Harris Bank

Project No.: 00541937

Location: 900 E. Main Street
Merrill, Wisconsin

Drill Date: August 28, 2019

Depth Below Surface/Elev. (ft)		VISUAL SOIL CLASSIFICATION		Sample No.	N (bpf)	Qp (tsf)	Qu (tsf)	MC (%)	PID (i.u.)	Remarks
		Ground Surface Elevation: 0.0								
		Asphalt - 3"								
1	-1.0	FILL - Brown/Dark Brown Silty Sand/Silt/Sandy Silt with gravel and wood, moist		1	---	---	---	---	0	Lab Sample @ 2'-4'
2	-2.0			2	---	---	---	---	0	
3	-3.0			3	---	---	---	---	0	
4	-4.0			4	---	---	---	---	0	
5	-5.0	Brown SILTY SAND, moist								
6	-6.0									
7	-7.0									
8	-8.0									
9	-9.0									
10	-10.0									
End of Probe: 10'										
Notes: 8' due south of SP-1										
Water Level / Caving Observations: Water Level _{During Drilling} : none Water Level _{Upon Completion} : none					Additional Comments: Boring Location Offset: Reason for Offset:					

Lines of demarcation represent **approximate** boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.



SOIL PROBE: SP-7

Project: BMO Harris Bank

Project No.: 00541937

Location: 900 E. Main Street
Merrill, Wisconsin

Drill Date: August 28, 2019

Depth Below Surface/Elev. (ft)		VISUAL SOIL CLASSIFICATION	Sample No.	N (bpf)	Qp (tsf)	Qu (tsf)	MC (%)	PID (i.u.)	Remarks
		Ground Surface Elevation: 0.0							
		Asphalt - 3"							
1	-1.0	FILL - Brown/Dark Brown Silty Sand/Silt/Sandy Silt with gravel and wood, moist	1	---	---	---	---	0	Lab Sample @ 2'-4'
2	-2.0		2	---	---	---	---	0	
3	-3.0								
4	-4.0								
5	-5.0	Brown SILTY SAND, moist							
6	-6.0		3	---	---	---	---	0	
7	-7.0								
8	-8.0								
9	-9.0								
10	-10.0								
End of Probe: 10'									
Notes: 10' north and 17' east of SP-2									
Water Level / Caving Observations: Water Level <small>During Drilling</small> : none Water Level <small>Upon Completion</small> : none					Additional Comments: Boring Location Offset: Reason for Offset:				

Lines of demarcation represent **approximate** boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.



SOIL PROBE: SP-8/MW-2

Project: BMO Harris Bank

Project No.: 00541937

Location: 900 E. Main Street
Merrill, Wisconsin

Drill Date: August 28, 2019

Depth Below Surface/Elev. (ft)		VISUAL SOIL CLASSIFICATION	Sample No.	N (bpf)	Qp (tsf)	Qu (tsf)	MC (%)	PID (i.u.)	Remarks
		Ground Surface Elevation: 0.0							
		Asphalt - 3"							
1	-1.0	FILL - Light Brown/Brown/Dark Brown Silty Sand with gravel, moist	1	---	---	---	---	0	Lab Sample @ 6'-8'
2	-2.0		2	---	---	---	---	0	
3	-3.0	Brown SAND with gravel, moist	3	---	---	---	---	0	
4	-4.0		4	---	---	---	---	0	
5	-5.0	Brown SANDY SILT, moist to very moist	5	---	---	---	---	0	
6	-6.0		6	---	---	---	---	0	
7	-7.0	Brown SILTY SAND with gravel, very moist to wet	7	---	---	---	---	0	
8	-8.0		8	---	---	---	---	0	
9	-9.0		9	---	---	---	---	0	
10	-10.0	Brown SILTY SAND with gravel, very moist to wet	10	---	---	---	---	0	V
11	-11.0		11	---	---	---	---	0	
12	-12.0		12	---	---	---	---	0	
13	-13.0		13	---	---	---	---	0	
14	-14.0		14	---	---	---	---	0	
15	-15.0	End of Probe: 15'							
Notes: Installed NR141 Well (MW-2) 4' due south of SP-3									
Water Level / Caving Observations: Water Level <small>During Drilling</small> : 12 ± ft (El. -12±) V Water Level <small>Upon Completion</small> : none					Additional Comments: Boring Location Offset: Reason for Offset:				

Lines of demarcation represent **approximate** boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.



SOIL PROBE: SP-9

Project: BMO Harris Bank

Project No.: 00541937

Location: 900 E. Main Street
Merrill, Wisconsin

Drill Date: August 28, 2019

Depth Below Surface/Elev. (ft)		VISUAL SOIL CLASSIFICATION	Sample No.	N (bpf)	Qp (tsf)	Qu (tsf)	MC (%)	PID (i.u.)	Remarks
		Ground Surface Elevation: 0.0							
		Asphalt - 3"							
1	-1.0	FILL - Yellow/Black/Brown/Dark Brown Silty Sand with gravel, moist	1	---	---	---	---	0	Lab Sample @ 2'-4'
2	-2.0		2	---	---	---	---	0	
3	-3.0	Dark Brown SILTY SAND, moist	3	---	---	---	---	0	Lab Sample @ 6'-8'
4	-4.0								
5	-5.0	Brown SILTY SAND with gravel, moist	4	---	---	---	---	0	
6	-6.0								
7	-7.0								
8	-8.0								
9	-9.0								
10	-10.0								
End of Probe: 10'									
Notes: 3' south and 22' east of SP-3									
Water Level / Caving Observations: Water Level <small>During Drilling</small> : none Water Level <small>Upon Completion</small> : none					Additional Comments: Boring Location Offset: Reason for Offset:				

Lines of demarcation represent **approximate** boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.



SOIL PROBE: SP-10

Project: BMO Harris Bank

Project No.: 00541937

Location: 900 E. Main Street
Merrill, Wisconsin

Drill Date: August 28, 2019

Depth Below Surface/Elev. (ft)		VISUAL SOIL CLASSIFICATION	Sample No.	N (bpf)	Qp (tsf)	Qu (tsf)	MC (%)	PID (i.u.)	Remarks
		Ground Surface Elevation: 0.0							
		Asphalt - 3"							
1	-1.0	FILL - Yellow/Black/Brown/Dark Brown Silty Sand with gravel and cinders, moist	1	---	---	---	---	0	Lab Sample @ 2'-4'
2	-2.0		2	---	---	---	---	0	
3	-3.0	Dark Brown SILTY SAND, moist							
4	-4.0								
5	-5.0	Brown SILTY SAND with gravel, moist	3	---	---	---	---	0	
6	-6.0								
7	-7.0								
8	-8.0								
9	-9.0		4	---	---	---	---	0	
10	-10.0								
End of Probe: 10'									

Notes:

9' north and 17' east of SP-4

Water Level / Caving Observations:

Water Level _{During Drilling}: none
 Water Level _{Upon Completion}: none

Additional Comments:

Boring Location Offset:
Reason for Offset:

Lines of demarcation represent **approximate** boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.



SOIL PROBE: SP-11

Project: BMO Harris Bank

Project No.: 00541937

Location: 900 E. Main Street
Merrill, Wisconsin

Drill Date: August 28, 2019

Depth Below Surface/Elev. (ft)		VISUAL SOIL CLASSIFICATION	Sample No.	N (bpf)	Qp (tsf)	Qu (tsf)	MC (%)	PID (i.u.)	Remarks
		Ground Surface Elevation: 0.0							
		Asphalt - 3"							
1	-1.0	FILL to possible FILL- Brown/Dark Brown Sandy Silt/Silty Sand, moist	1	---	---	---	---	0	Lab Sample @ 2'-4'
2	-2.0		2	---	---	---	---	0	
3	-3.0	Brown SILTY SAND with gravel, moist	3	---	---	---	---	0	
4	-4.0		4	---	---	---	---	0	
5	-5.0								
6	-6.0								
7	-7.0								
8	-8.0								
9	-9.0								
10	-10.0								
End of Probe: 10'									
Notes: 21' north and 29' west of SP-4									
Water Level / Caving Observations: Water Level During Drilling: none Water Level Upon Completion: none					Additional Comments: Boring Location Offset: Reason for Offset:				

Lines of demarcation represent **approximate** boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.



SOIL PROBE: SP-12/MW-3

Project: BMO Harris Bank

Project No.: 00541937

Location: 900 E. Main Street
Merrill, Wisconsin

Drill Date: August 28, 2019

Depth Below Surface/Elev. (ft)		VISUAL SOIL CLASSIFICATION	Sample No.	N (bpf)	Qp (tsf)	Qu (tsf)	MC (%)	PID (i.u.)	Remarks
		Ground Surface Elevation: 0.0							
		Asphalt - 3"							
1	-1.0	FILL - Brown Silty Sand/Sandy Silt with gravel and cinders, moist	1	---	---	---	---	0	Lab Sample @ 6'-8'
2	-2.0		2	---	---	---	---	0	
3	-3.0	Brown SILTY SAND with gravel, moist	3	---	---	---	---	0	
4	-4.0		4	---	---	---	---	0	
5	-5.0	Dark Brown SANDY SILT, moist	5	---	---	---	---	0	
6	-6.0		6	---	---	---	---	0	
7	-7.0	Brown SILTY SAND with gravel, very moist to wet	7	---	---	---	---	0	
8	-8.0		8	---	---	---	---	0	
9	-9.0		9	---	---	---	---	0	
10	-10.0		10	---	---	---	---	0	
11	-11.0	Brown SILTY SAND with gravel, very moist to wet	11	---	---	---	---	0	
12	-12.0		12	---	---	---	---	0	
13	-13.0		13	---	---	---	---	0	
14	-14.0		14	---	---	---	---	0	
15	-15.0	End of Probe: 15'							

Notes:

Installed NR141 Well (MW-3)
53' north and 6' west of SP-4

Water Level / Caving Observations:

Water Level During Drilling: 11.5 ± ft (El. -11.5±) v
 Water Level Upon Completion: none

Additional Comments:

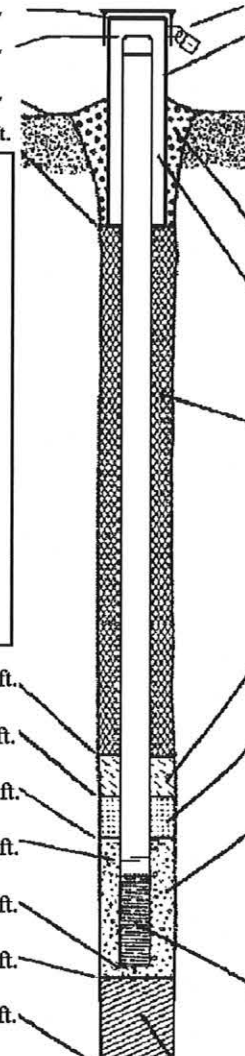
Boring Location Offset:
Reason for Offset:

Lines of demarcation represent **approximate** boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name BMO Harris Bank	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name MW-1
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ "Long. _____ or _____	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed 08 / 28 / 2019 m m d d y y y y
Type of Well Well Code _____ / _____	Section Location of Waste/Source 1/4 of SW 1/4 of Sec. 12, T. 31 N, R. 6 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm Geiss
Distance from Waste/Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____
Enf. Stds. Apply <input type="checkbox"/>		

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation 1263.68 ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in.
C. Land surface elevation 1264.03 ft. MSL	b. Length: 1.0 ft.
D. Surface seal, bottom 0.2 ft. MSL or _____ ft.	c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input checked="" type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
14. Drilling method used: Rotary <input checked="" type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Other <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
17. Source of water (attach analysis, if required): _____	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input checked="" type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. 65# Other <input type="checkbox"/>
E. Bentonite seal, top _____ ft. MSL or 1.5 ft.	7. Fine sand material: Manufacturer, product name & mesh size a. Red Flint #15
F. Fine sand, top _____ ft. MSL or 4.5 ft.	b. Volume added 20# ft ³
G. Filter pack, top _____ ft. MSL or 5 ft.	8. Filter pack material: Manufacturer, product name & mesh size a. Red Flint #40
H. Screen joint, top _____ ft. MSL or 6 ft.	b. Volume added 275# ft ³
I. Well bottom _____ ft. MSL or 16 ft.	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
J. Filter pack, bottom _____ ft. MSL or 16 ft.	10. Screen material: PVC SCH 40
K. Borehole, bottom _____ ft. MSL or 16 ft.	a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
L. Borehole, diameter 8 in.	b. Manufacturer Johnson
M. O.D. well casing 2.35 in.	c. Slot size: 0.010 in.
N. I.D. well casing 2 in.	d. Slotted length: 10 ft.
	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>



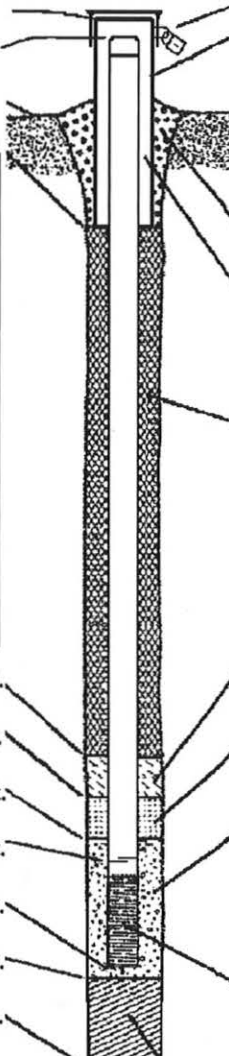
I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature: *[Handwritten Signature]* Firm: PSI, Inc.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name BMO Harris Bank	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. ft. <input type="checkbox"/> S. <input type="checkbox"/> W.	Well Name MW-2
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ "Long. _____ or _____	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed 08 / 28 / 2019 m m d d y y y y
Type of Well Well Code _____ / _____	Section Location of Waste/Source 1/4 of SW 1/4 of Sec. 12, T. 31 N, R. 6 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm Geiss
Distance from Waste/ Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation 1264.36 ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in.
C. Land surface elevation 1264.91 ft. MSL	b. Length: 1.0 ft.
D. Surface seal, bottom 0.2 ft. MSL or _____ ft.	c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input checked="" type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
14. Drilling method used: Rotary <input checked="" type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Other <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight . . . Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
Describe _____	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input checked="" type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. 65# Other <input type="checkbox"/>
17. Source of water (attach analysis, if required): _____	7. Fine sand material: Manufacturer, product name & mesh size a. Red Flint #15
E. Bentonite seal, top _____ ft. MSL or 1.5 ft.	b. Volume added 20# ft ³
F. Fine sand, top _____ ft. MSL or 4.5 ft.	8. Filter pack material: Manufacturer, product name & mesh size a. Red Flint #40
G. Filter pack, top _____ ft. MSL or 5 ft.	b. Volume added 275# ft ³
H. Screen joint, top _____ ft. MSL or 6 ft.	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
I. Well bottom _____ ft. MSL or 16 ft.	10. Screen material: PVC SCH 40 a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
J. Filter pack, bottom _____ ft. MSL or 16 ft.	b. Manufacturer Johnson
K. Borehole, bottom _____ ft. MSL or 16 ft.	c. Slot size: 0.010 in.
L. Borehole, diameter 8 in.	d. Slotted length: 10 ft.
M. O.D. well casing 2.35 in.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
N. I.D. well casing 2 in.	



I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature Kruphuyel Firm PSI, Inc.

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Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name BMO Harris Bank	County Name Lincoln	Well Name MW-2	
Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number

1. Can this well be purged dry? Yes No

2. Well development method

surged with bailer and bailed	<input checked="" type="checkbox"/> 41
surged with bailer and pumped	<input type="checkbox"/> 61
surged with block and bailed	<input type="checkbox"/> 42
surged with block and pumped	<input type="checkbox"/> 62
surged with block, bailed and pumped	<input type="checkbox"/> 70
compressed air	<input type="checkbox"/> 20
bailed only	<input type="checkbox"/> 10
pumped only	<input type="checkbox"/> 51
pumped slowly	<input type="checkbox"/> 50
Other _____	<input type="checkbox"/> _____

3. Time spent developing well _____ 30 _____ min.

4. Depth of well (from top of well casing) _____ 15.7 _____ ft.

5. Inside diameter of well _____ 2 _____ in.

6. Volume of water in filter pack and well casing _____ gal.

7. Volume of water removed from well _____ 10 _____ gal.

8. Volume of water added (if any) _____ 0 _____ gal.

9. Source of water added _____

10. Analysis performed on water added? Yes No
(If yes, attach results)

	<u>Before Development</u>	<u>After Development</u>
--	---------------------------	--------------------------

11. Depth to Water (from top of well casing) a. _____ 12.18 _____ ft. _____ 15.6 _____ ft.

Date b. 08/28/2019 08/28/2019
m m d d y y y y m m d d y y y y

Time c. 1:30 a.m. 2:00 p.m. a.m. p.m.

12. Sediment in well bottom _____ inches _____ inches

13. Water clarity

Clear <input type="checkbox"/> 10	Clear <input checked="" type="checkbox"/> 20
Turbid <input type="checkbox"/> 15	Turbid <input type="checkbox"/> 25
(Describe) Light Brown	(Describe) clear
slightly turbid	clear

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids _____ mg/l _____ mg/l

15. COD _____ mg/l _____ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Kuy Last Name: Herpel

Firm: PSI, Inc.

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party

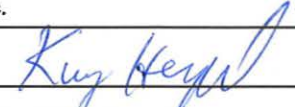
First Name: _____ Last Name: _____

Facility/Firm: BMO Harris Bank

Street: 900 E. Main St

City/State/Zip: Merrill, WI

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

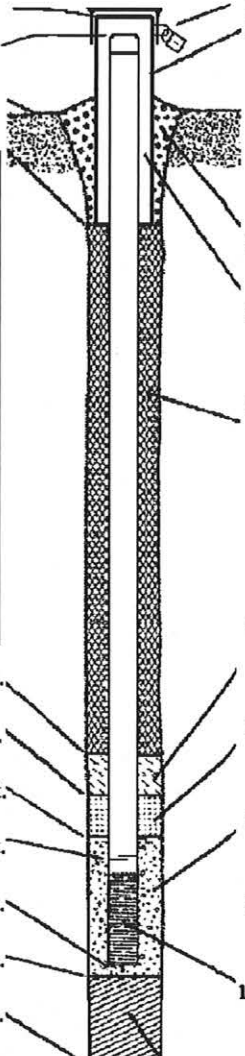
Print Name: Kuy Herpel

Firm: PSI, Inc.

NOTE: See instructions for more information including a list of county codes and well type codes.

Facility/Project Name BMO Harris Bank	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. ft. <input type="checkbox"/> S. <input type="checkbox"/> W.	Well Name MW-3
Facility License, Permit or Monitoring No.	Local Grid Origin (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ "Long. _____ or _____	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed 08 / 28 / 2019 m m d d y y y y
Type of Well Well Code _____ / _____	Section Location of Waste/Source 1/4 of SW 1/4 of Sec. 12, T. 31 N, R. 6 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm Geiss
Distance from Waste/Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known
		Gov. Lot Number _____

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation 1264.36 ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in.
C. Land surface elevation 1264.91 ft. MSL	b. Length: 1.0 ft.
D. Surface seal, bottom 0.2 ft. MSL or _____ ft.	c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input checked="" type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
14. Drilling method used: Rotary <input checked="" type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Other <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight . . . Bentonite grout <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input checked="" type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. 65# Other <input type="checkbox"/>
17. Source of water (attach analysis, if required): _____	7. Fine sand material: Manufacturer, product name & mesh size a. Red Flint #15 b. Volume added 20# ft ³
E. Bentonite seal, top _____ ft. MSL or 1.5 ft.	8. Filter pack material: Manufacturer, product name & mesh size a. Red Flint #40 b. Volume added 275# ft ³
F. Fine sand, top _____ ft. MSL or 4.5 ft.	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
G. Filter pack, top _____ ft. MSL or 5 ft.	10. Screen material: PVC SCH 40 a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
H. Screen joint, top _____ ft. MSL or 6 ft.	b. Manufacturer Johnson c. Slot size: 0.010 in. d. Slotted length: 10 ft.
I. Well bottom _____ ft. MSL or 16 ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
J. Filter pack, bottom _____ ft. MSL or 16 ft.	
K. Borehole, bottom _____ ft. MSL or 16 ft.	
L. Borehole, diameter 8 in.	
M. O.D. well casing 2.35 in.	
N. I.D. well casing 2 in.	



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Signature: *King* Firm: PSI, Inc.

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Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name BMO Harris Bank	County Name Lincoln	Well Name MW-3	
Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number

1. Can this well be purged dry? Yes No

2. Well development method

surged with bailer and bailed	<input checked="" type="checkbox"/> 41
surged with bailer and pumped	<input type="checkbox"/> 61
surged with block and bailed	<input type="checkbox"/> 42
surged with block and pumped	<input type="checkbox"/> 62
surged with block, bailed and pumped	<input type="checkbox"/> 70
compressed air	<input type="checkbox"/> 20
bailed only	<input type="checkbox"/> 10
pumped only	<input type="checkbox"/> 51
pumped slowly	<input type="checkbox"/> 50
Other _____	<input type="checkbox"/>

3. Time spent developing well _____ 30 _____ min.

4. Depth of well (from top of well casing) _____ 15.2 _____ ft.

5. Inside diameter of well _____ 2 _____ in.

6. Volume of water in filter pack and well casing _____ gal.

7. Volume of water removed from well _____ 10 _____ gal.

8. Volume of water added (if any) _____ 0 _____ gal.

9. Source of water added _____

10. Analysis performed on water added? Yes No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. _____ 13 . 81 _____ ft.	_____ 15 . 1 _____ ft.
Date	b. <u>08</u> / <u>28</u> / <u>2019</u>	<u>08</u> / <u>28</u> / <u>2019</u>
Time	c. <u>2</u> : <u>00</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>2</u> : <u>30</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	_____ inches	_____ inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input type="checkbox"/> 15 (Describe) Light Brown slightly turbid	Clear <input checked="" type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) clear
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Kuy Last Name: Herpel

Firm: PSI, Inc.

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party

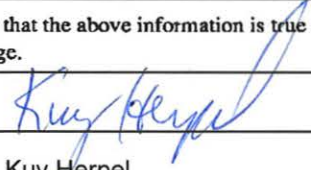
First Name: _____ Last Name: _____

Facility/Firm: BMO Harris Bank

Street: 900 E. Main St

City/State/Zip: Merrill, WI

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

Print Name: Kuy Herpel

Firm: PSI, Inc.

NOTE: See instructions for more information including a list of county codes and well type codes.

Soil Analytical Results Table

BMO Harris Bank Property
900 E. Main Street
Merrill, Wisconsin
PSI Project No. 00541937

Analytical Parameter	Location	SP-1	SP-2	SP-3	SP-4	NR 720			NR720
	Depth	2-4'	2-4'	6-8'	2-4'	RCL			
	Date	7/1/2019	7/1/2019	7/1/2019	7/1/2019				
	Units								
saturated/unsaturated		u	u	u	u	Direct Contact	Direct Contact	Groundwater	BTV
PID	i.u.	0	0	0	0	Non-Industrial	Industrial	Pathway	
Detected VOCs									
Benzene	mg/kg	<0.03	<0.03	<0.03	<i>0.062J</i>	1.6	7.07	<i>0.0051</i>	---
Tetrachloroethene	mg/kg	<0.032	<i>0.07J</i>	<i>0.065J</i>	<0.032	33	145	<i>0.0045</i>	---
Toluene	mg/kg	<0.032	<0.032	<0.032	<i>0.038J</i>	818	818	<i>1,107.2</i>	---
Detected PAHs									
Acenaphthene	mg/kg	<i>0.048J</i>	<0.0163	---	---	3,590	45,200	---	---
Acenaphthylene	mg/kg	<i>0.0213J</i>	<i>0.0094J</i>	---	---	---	---	---	---
Anthracene	mg/kg	<i>0.199</i>	<i>0.0113J</i>	---	---	17,900	100,000	<i>196.9492</i>	---
Benzo(a)anthracene	mg/kg	<i>0.75</i>	<i>0.07</i>	---	---	1.14	20.8	---	---
Benzo(a)pyrene	mg/kg	<i>0.71</i>	<i>0.071</i>	---	---	0.115	2.11	<i>0.470</i>	---
Benzo(b)fluoranthene	mg/kg	<i>1.08</i>	<i>0.101</i>	---	---	1.15	21.1	<i>0.4781</i>	---
Benzo(g,h,i)perylene	mg/kg	<i>0.69</i>	<i>0.068</i>	---	---	---	---	---	---
Benzo(k)fluoranthene	mg/kg	<i>0.39</i>	<i>0.043</i>	---	---	11.5	211	---	---
Chrysene	mg/kg	<i>0.84</i>	<i>0.085</i>	---	---	1,150	2,110	<i>0.1442</i>	---
Dibenz(a,h)anthracene	mg/kg	<i>0.131</i>	<i>0.0157J</i>	---	---	0.115	2.11	---	---
Fluoranthene	mg/kg	<i>2.45</i>	<i>0.145</i>	---	---	2,390	30,100	<i>888.7778</i>	---
Fluorene	mg/kg	<i>0.057</i>	<0.0086	---	---	2,390	30,100	<i>14.8299</i>	---
Indeno(1,2,3-cd)pyrene	mg/kg	<i>0.57</i>	<i>0.056</i>	---	---	1.15	21.1	---	---
Phenanthrene	mg/kg	<i>1.11</i>	<i>0.053</i>	---	---	---	---	---	---
Pyrene	mg/kg	<i>1.95</i>	<i>0.154</i>	---	---	1,790	22,600	<i>54.5455</i>	---
Detected RCRA Metals									
Arsenic	mg/kg	<i>2.06</i>	<i>1.37J</i>	---	---	0.677	3	<i>0.584</i>	(8)
Barium	mg/kg	<i>84.1</i>	<i>79.8</i>	---	---	15,300	100,000	<i>164.8</i>	(364)
Cadmium	mg/kg	<i>(1.12)</i>	<i>0.081J</i>	---	---	71.1	985	<i>0.752</i>	(1)
Chromium (a)	mg/kg	<i>16.7</i>	<i>9.21</i>	---	---	(b)	(b)	<i>360,000 (c)</i>	(44) (d)
Lead	mg/kg	<i>37.4</i>	<i>25.1</i>	---	---	400	800	<i>27</i>	(52)
Mercury	mg/kg	<i>0.113</i>	<i>0.144</i>	---	---	3.13	3.13	<i>0.208</i>	---

Notes:

Bold concentrations exceed NR 720 non-industrial direct contact RCLs
 Boxed concentrations exceed NR 720 industrial direct contact RCLs
 Italicized concentrations exceed NR 720 groundwater pathway RCLs
 Concentrations in parentheses exceed NR 720 BTV
 --- Not analyzed/Not Established
 RCL - residual contaminant level
 BTV = Background Threshold Value

PID = Photoionization Detector
 S/U = Sample Saturated/Unsaturated
 i.u. - instrument units
 PAH - polynuclear aromatic hydrocarbons
 VOC - volatile organic compounds
 mg/kg -milligrams per kilogram

J - concentration detected between the laboratory Limit of Detection and the Limit of Quantitation
 a: Total Chromium laboratory analytical results may be comprised of trivalent chromium (Cr III) and/or hexavalent chromium (Cr VI)
 b: DC RCLs for Chromium VI are 0.301 (NI) and 6.36 mg/kg (I) and DC RCL for Chromium III is 100,000 mg/kg
 c: use 360,000 mg/kg for GW RCL, if no CR-VI is present
 d: BTV applies to Total Chromium = CR-III and CR-VI

Soil Analytical Results Table

BMO Harris Bank Property
900 E. Main Street
Merrill, Wisconsin
PSI Project No. 00541937

Analytical Parameter	Location	SP-5	SP-6	SP-7	SP-8	NR 720			NR720
	Depth	2-4'	2-4'	2-4'	6-8'	RCL			
	Date	8/28/2019	8/28/2019	8/28/2019	8/28/2019	Direct Contact Non-Industrial	Direct Contact Industrial	Groundwater Pathway	
Units	u	u	u	u	BTV				
saturated/unsaturated		u	u	u	u				
PID	i.u.	0	0	0	0				
Detected VOCs									
Benzene	mg/kg	<0.03	<0.03	<0.03	<0.03	1.6	7.07	0.0051	---
Tetrachloroethene	mg/kg	<0.032	<0.032	<0.032	<0.032	33	145	0.0045	---
Toluene	mg/kg	<0.032	<0.032	<0.032	<0.032	818	818	1,107.2	---
Detected PAHs									
Acenaphthene	mg/kg	<0.0163	<0.0163	---	---	3,590	45,200	---	---
Acenaphthylene	mg/kg	0.047	<0.0086	---	---	---	---	---	---
Anthracene	mg/kg	0.1	<0.0043	---	---	17,900	100,000	196.9492	---
Benzo(a)anthracene	mg/kg	0.51	<0.016	---	---	1.14	20.8	---	---
Benzo(a)pyrene	mg/kg	0.61	<0.0124	---	---	0.115	2.11	0.470	---
Benzo(b)fluoranthene	mg/kg	1.05	<0.0109	---	---	1.15	21.1	0.4781	---
Benzo(g,h,i)perylene	mg/kg	0.43	<0.0084	---	---	---	---	---	---
Benzo(k)fluoranthene	mg/kg	0.309	<0.0091	---	---	11.5	211	---	---
Chrysene	mg/kg	0.75	<0.006	---	---	1,150	2,110	0.1442	---
Dibenz(a,h)anthracene	mg/kg	0.091	<0.0101	---	---	0.115	2.11	---	---
Fluoranthene	mg/kg	1.74	0.0067J	---	---	2,390	30,100	888.7778	---
Fluorene	mg/kg	0.0244J	<0.0086	---	---	2,390	30,100	14.8299	---
Indeno(1,2,3-cd)pyrene	mg/kg	0.36	<0.0082	---	---	1.15	21.1	---	---
1-Methyl naphthalene	mg/kg	0.0105J	<0.0086	---	---	17.6	72.7	---	---
Phenanthrene	mg/kg	0.63	<0.0071	---	---	---	---	---	---
Pyrene	mg/kg	1.41	0.0095J	---	---	1,790	22,600	54.5455	---
Detected RCRA Metals									
Arsenic	mg/kg	---	---	---	---	0.677	3	0.584	(8)
Barium	mg/kg	---	---	---	---	15,300	100,000	164.8	(364)
Cadmium	mg/kg	0.807	0.124J	---	---	71.1	985	0.752	(1)
Chromium (a)	mg/kg	---	---	---	---	(b)	(b)	360,000 (c)	(44) (d)
Lead	mg/kg	---	---	---	---	400	800	27	(52)
Mercury	mg/kg	---	---	---	---	3.13	3.13	0.208	---

Notes:

Bold concentrations exceed NR 720 non-industrial direct contact RCLs

Boxed concentrations exceed NR 720 industrial direct contact RCLs

Italicized concentrations exceed NR 720 groundwater pathway RCLs

Concentrations in parentheses exceed NR 720 BTV

--- Not analyzed/Not Established

RCL - residual contaminant level

BTV = Background Threshold Value

J - concentration detected between the laboratory Limit of Detection and the Limit of Quantitation

a: Total Chromium laboratory analytical results may be comprised of trivalent chromium (Cr III) and/or hexavalent chromium (Cr VI)

b: DC RCLs for Chromium VI are 0.301 (NI) and 6.36 mg/kg (I) and DC RCL for Chromium III is 100,000 mg/kg

c: use 360,000 mg/kg for GW RCL, if no CR-VI is present

d: BTV applies to Total Chromium = CR-III and CR-VI

PID = Photoionization Detector

S/U = Sample Saturated/Unsaturated

i.u. - instrument units

PAH - polynuclear aromatic hydrocarbons

VOC - volatile organic compounds

mg/kg -milligrams per kilogram

Soil Analytical Results Table

BMO Harris Bank Property
900 E. Main Street
Merrill, Wisconsin
PSI Project No. 00541937

Analytical Parameter	Location	SP-9	SP-9	SP-10	SP-11	SP-12	NR 720			NR720
	Depth	2-4'	6-8'	2-4'	2-4'	2-4'	RCL			
	Date	8/28/2019	8/28/2019	8/28/2019	8/28/2019	8/28/2019	Direct Contact Non-Industrial	Direct Contact Industrial	Groundwater Pathway	
Units	u	u	u	u	u					
saturated/unsaturated		u	u	u	u	u				BTV
PID	i.u.	0	0	0	0	0				
Detected VOCs										
Benzene	mg/kg	---	<0.03	<0.03	<0.03	<i>0.072J</i>	1.6	7.07	<i>0.0051</i>	---
Ethylbenzene	mg/kg	---	<0.035	<0.035	<0.035	0.125	8.02	35.4	<i>1.57</i>	---
Naphthalene	mg/kg	---	<0.094	<0.094	<0.094	0.52	5.52	24.1	<i>0.6582</i>	---
n-Propylbenzene	mg/kg	---	<0.033	<0.033	<0.033	0.041J	264	264	---	---
Tetrachloroethene	mg/kg	---	<0.032	<0.032	<0.032	<0.032	33	145	<i>0.0045</i>	---
Toluene	mg/kg	---	<0.032	<0.032	<0.032	0.6	818	818	<i>1,107.2</i>	---
1,2,4-TMB	mg/kg	---	<0.025	<0.025	<0.025	0.223	219	219	<i>1.3821</i>	---
1,3,5-TMB	mg/kg	---	<0.032	<0.032	<0.032	0.045J	182	182		---
Total Xylenes	mg/kg	---	<0.116	<0.116	<0.116	0.87	260	260	3.96	---
Detected PAHs										
Acenaphthene	mg/kg	0.144	---	---	---	---	3,590	45,200	---	---
Acenaphthylene	mg/kg	0.0182J	---	---	---	---	---	---	---	---
Anthracene	mg/kg	0.7	---	---	---	---	17,900	100,000	<i>196.9492</i>	---
Benzo(a)anthracene	mg/kg	2.22	---	---	---	---	1.14	20.8	---	---
Benzo(a)pyrene	mg/kg	2.15	---	---	---	---	0.115	2.11	<i>0.470</i>	---
Benzo(b)fluoranthene	mg/kg	3.2	---	---	---	---	1.15	21.1	<i>0.4781</i>	---
Benzo(g,h,i)perylene	mg/kg	1.21	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	mg/kg	1.07	---	---	---	---	11.5	211	---	---
Chrysene	mg/kg	2.33	---	---	---	---	1,150	2,110	<i>0.1442</i>	---
Dibenz(a,h)anthracene	mg/kg	0.276	---	---	---	---	0.115	2.11	---	---
Fluoranthene	mg/kg	6.5	---	---	---	---	2,390	30,100	<i>888.7778</i>	---
Fluorene	mg/kg	0.214	---	---	---	---	2,390	30,100	<i>14.8299</i>	---
Indeno(1,2,3-cd)pyrene	mg/kg	1.08	---	---	---	---	1.15	21.1	---	---
1-Methyl naphthalene	mg/kg	0.009J	---	---	---	---	17.6	72.7	---	---
Phenanthrene	mg/kg	3.4	---	---	---	---	---	---	---	---
Pyrene	mg/kg	5.2	---	---	---	---	1,790	22,600	<i>54.5455</i>	---
Detected RCRA Metals										
Arsenic	mg/kg	---	---	---	---	---	0.677	3	<i>0.584</i>	(8)
Barium	mg/kg	---	---	---	---	---	15,300	100,000	<i>164.8</i>	(364)
Cadmium	mg/kg	0.122J	---	---	---	---	71.1	985	<i>0.752</i>	(1)
Chromium (a)	mg/kg	---	---	---	---	---	(b)	(b)	<i>360,000 (c)</i>	(44) (d)
Lead	mg/kg	---	---	---	---	---	400	800	27	(52)
Mercury	mg/kg	---	---	---	---	---	3.13	3.13	<i>0.208</i>	---

Notes:

Bold concentrations exceed NR 720 non-industrial direct contact RCLs
 Boxed concentrations exceed NR 720 industrial direct contact RCLs
 Italicized concentrations exceed NR 720 groundwater pathway RCLs
 Concentrations in parentheses exceed NR 720 BTV
 --- Not analyzed/Not Established
 RCL - residual contaminant level
 BTV = Background Threshold Value
 J - concentration detected between the laboratory Limit of Detection and the Limit of Quantitation
 a: Total Chromium laboratory analytical results may be comprised of trivalent chromium (Cr III) and/or hexavalent chromium (Cr VI)
 b: DC RCLs for Chromium VI are 0.301 (NI) and 6.36 mg/kg (I) and DC RCL for Chromium III is 100,000 mg/kg
 c: use 360,000 mg/kg for GW RCL, if no CR-VI is present
 d: BTV applies to Total Chromium = CR-III and CR-VI

PID = Photoionization Detector
 S/U = Sample Saturated/Unsaturated
 i.u. - instrument units
 PAH - polynuclear aromatic hydrocarbons
 VOC - volatile organic compounds
 mg/kg - milligrams per kilogram

Groundwater Analytical Results Table

BMO Harris Bank Property

900 E. Main Street

Merrill, Wisconsin

PSI Project No. 00541937

	Sample ID	MW-1	MW-2	MW-3	NR 140 ES	NR 140 PAL
Analytical Parameter	Date	8/29/2019	8/29/2019	8/29/2019		
Units						
Detected VOCs						
Tetrachloroethene	ug/l	0.42J	<i>0.58J</i>	0.38J	5	<i>0.5</i>
Lead	ug/l	<2	---	---	15	<i>1.5</i>

Notes:

Bold concentrations exceed NR 140 ES

Italicized concentrations exceed NR 140 PAL

ES - NR 140 Enforcement Standard

PAL - NR 140 Preventive Action Limit

J - concentration detected between the laboratory limit of detection and the limit of quantitation

ug/l - micrograms per liter

--- - not analyzed/no standard established

VOC - volatile organic compounds

Groundwater Elevations Table

BMO Harris Bank Parcel
900 E. Main Street
Merrill, Wisconsin
PSI Project No. 00541937

ELEVATIONS	MW-1	MW-2	MW-3
Surface	1264.03	1264.91	1266.65
Top of Casing	1263.68	1264.36	1266.11
Top of Screen	1258.5	1259.4	1261.1
Bottom of Screen	1248.5	1249.4	1251.1
Groundwater Elevations			
8/28/2019	1252.61	1252.18	1252.30

Notes:

Benchmark - fire hydrant on NW corner of First St and Mill St
(EL. 1265.3)

**GROUNDWATER FLOW DIRECTION DIAGRAM
PSI PROJECT No. 00541937**



Legend:
 ● : Soil Probe Location - 7/1/2019
 ● : Soil Probe Location - 8/28/2019
 ● : Probe/NR-141 Well Location- 8/28/2019



Environmental Services
 821 Corporate Court
 Waukesha, Wisconsin 53189
 (262) 521-2125 Fax (262) 521-2471

BMO Bank Branch
 900 East Main Street
 Merrill, Wisconsin 54452

Scale:
 Not to Scale



**PROPOSED PROBE LOCATION DIAGRAM
PSI PROJECT No. 00541937**



Environmental Services
821 Corporate Court
Waukesha, Wisconsin 53189
(262) 521-2125 Fax (262) 521-2471

BMO Bank Branch
900 East Main Street
Merrill, Wisconsin 54452

Scale:
Not to Scale

Date:
2/7/2019

