State of Wisconsin Department of Natural Resources PO Box 7921, Madison WI 53707-7921 dnr.wi.gov

Site Investigation Sample Results Notification

Form 4400-249 (R 03/14)

Page 1 of 2

Notice: This form may be used to comply with the requirements of s. NR 716.14 (2), Wis. Adm. Code; however, use of this form is not required. An alternate format may be used. The rule requires that notification be provided to 1) property owners when someone else is conducting the sampling, 2) to occupants of property belonging to the responsible person, and 3) to owners and occupants of property that does not belong to the responsible person but has been affected by contamination arising on his or her property. Notification is required within 10 business days of receiving the sample results. Personal information collected will be used for program administration and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.].

NOTE: Under s. NR 716.14, Wis. Adm. Code, the responsible party must also submit sample results and other required information to the DNR. We recommend that copies of the sample results notifications be included with that submittal, along with all attachments. Using the same format used for data presentation for a closure request may be helpful to all parties. See s. NR 716.14, Wis. Adm. Code for the full list of information to be submitted to the DNR.

Notification of Property Owners and Occupants:

This notification form has been provided to you in order to provide the results of environmental sampling that has been conducted on property that you own or occupy. Samples were collected in accordance with the methods identified in the site investigation work plan, in accordance with s. NR. 716.09 and 716.13, Wis. Adm. Code. This sampling was conducted as a result of contamination originating at the following location.

Site Information								
Site Name						DNR I	D # (BRRTS #)	
Enbridge Line 13 Black		02-28-586199						
Address				City		State	State ZIP Code	
Blackhawk Island Road					tinson	WI	53538	
Responsible Party								
The person(s) responsible	for completing	this envi	ironmental inve	estigation is:				
Property Owner								
Enbridge Energy, Limi	ted Partnership	(Resp	onsible Party		Tri-State Holdin		C (property owner	
Address				City		State	State ZIP Code	
11 East Superior Street - Suite 125				Duluth		MN	55802	
Contact Person					Phone N		(include area code)	
Karl Beaster, P.G.						(715)	718-1040	
Person or company that of	collected sample	S						
WSP USA Inc.								
Sample Results (Result	ts Attached)							
Reason for Sampling:	Routine	(•) (Other (define)	Work Plan fo	or Groundwater Sampling	and Mo	onitoring Well Ing	
. •			` '=					
The contaminants that ha			s time on prope	erty that you o	own or occupy include:			
0	In S		In Groun					
<u>Contaminant</u> Gasoline	Yes	No	Yes	No				
Diesel or Fuel Oil		\bigcirc		Ξ.	This sampling event incl drinking water well.	luded sa	mpling of a	
Solvents		\bigcirc		\circ	_	(a) No		
		0		0	If yes, the sampled drink	No No	or well had	
Heavy Metals	\circ	\bigcirc	0	0	detectable contaminants		er weii nad	
Pesticides		\bigcirc	_	\bigcirc	() Yes	○ No		
Other: diluent liquid		\bigcirc	•	\circ	<u> </u>			
		Contar	ninants in Vap	or				
		_	Yes No					
Indoor Air			0 0					
Sub-slab			\bigcirc					
Exterior Soil Gas			\cup					

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Attached are:

- A map that shows the locations from which samples were collected. (The map needs to meet the requirements of s. NR 716.15 (4), Wis. Adm. Code.)
- A data table with specific contaminant levels at each sample location and whether or not the sample results exceed state standards.
- A copy of the laboratory results.

Contact Information

caroline.rice@wisconsin.gov

You are not identified as the person that is responsible for this contamination. However, your cooperation is important. Property owners may become legally responsible for contamination if they do not allow access to the person that is responsible so that person may complete the environmental investigation and clean up activities.

Option for written exemption: You have the option of requesting a written liability exemption from the DNR for contamination that originated on another property, or on property that you lease. To do this, you must present an adequate environmental assessment of your property and pay a \$700 fee for review of this information. If you are interested in this option, please see DNR publication # RR 589, "When Contamination Crosses a Property Line - Rights and Responsibilities of Property Owners", available at: dnr.wi.gov/files/PDF/pubs/rr/rr589.pdf.

Please address questions regarding this notification, or requests for additional information to the contact person listed above, or to one

of the following contacts:	rung uns nouncation	, or reques	is for additional line	illiation to ti	ic contact pers	ori iist	cu above, or t	.0 0110
Environmental Consultant								
Company Name		Contact P	erson Last Name		First Name			
WSP USA Inc.	Huff			Tim				
Address		City				State ZIP Code		
5957 McKee Road, Suite 7		Madison				WI	53719)
Phone # (inc. area code) (314) 206-4212	Email tim.huff@wsp.cor	n	•					
Select which agency: Natur	al Resources	O Agricul	Iture, Trade and Cor	nsumer Prot	ection			
State of Wisconsin Departme	ent of Natural Res	ources						
Contact Person Last Name Rice	First Name Caroline				Phone # (inc. area code) (608) 219-2182			
Address	City				State ZIP Code			
3911 Fish Hatchery Rd		Fitchburg			WI	53711		
Email								



VIA ELECTRONIC MAIL

July 8, 2022

Karl Beaster, PG Sr. Environmental Advisor Enbridge Energy, Limited Partnership 11 East Superior Street, Suite 125 Duluth, MN 55802 karl.beaster@enbridge.com

Subject: Work Plan for Groundwater Sampling and Monitoring Well Installation

Enbridge Line13 MP312 Blackhawk Island Rd Valve site, Fort Atkinson, Wisconsin

WDNR BRRTS #02-28-586199

Dear Mr. Beaster:

WSP USA Inc. (WSP) is pleased to submit the following Work Plan for monitoring well sampling, potable well sampling, and monitoring well installation at the Line 13 Milepost (MP) 312 Valve site located at the intersection of Blackhawk Island Road and Westphal Lane, Fort Atkinson, Wisconsin (Site). A brief description of the Site background, proposed activities, and the anticipated schedule are provided below.

BACKGROUND

In 2021, WSP completed a Supplemental Site Investigation (SSI) at the Site. The SSI included an investigation to define the extent of impacts to soil and groundwater related to a release from a leaking component on the valve for Line 13, which transports diluent. The results of the SSI were submitted to the Wisconsin Department of Natural Resources (WDNR) in the Supplemental Site Investigation Report, dated March 16, 2022. In a letter dated May 25, 2022, the WDNR provided comments on the SSI Report and requested additional investigation in two areas and requested continued quarterly monitoring well sampling and annual potable well sampling at select locations. Regarding the investigation, the WDNR letter stated:

- "Additional groundwater investigation is needed to evaluate the vertical extent of trichloroethene (TCE) near monitoring well MW-6. The Department recommends you install and sample a deeper piezometer near monitoring well MW-6. Collect soil samples during the associated drilling.
- 2. Additional investigation is needed to evaluate the extent of non-aqueous phase liquid (NAPL) around soil boring IS-36. The Department recommends a shallow monitoring well be installed and sampled to evaluate if there is recoverable NAPL."

The WDNR request for annual potable well sampling included the following 12 locations: Ness, Pundsack, Hachtel, Wilson, Berndt, Lubbert A, Lubbert B, Lubbert C, Lubbert D, Gehrke, Krause (formerly Maasz), and MacLeod. **Figure 1** includes the potable well locations.

WSP USA Suite 250 701 Emerson Road Creve Coeur, MO 63141



WSP completed potable well sampling in March 2022 at 17 locations, including the 12 locations requested by the WDNR for annual sampling. The results were provided to the WDNR in a letter dated April 25, 2022. This sampling fulfilled the WDNR request for 2022 annual potable well sampling. Several property owners have subsequently requested that Enbridge continue potable well sampling. WSP in consultation with Enbridge will work directly with the individual landowners to determine sampling frequency.

WSP completed monitoring well sampling in January and April 2022, and the results were provided to the WDNR in letters dated February 15 and May 24, 2022.

SCOPE OF WORK

MONITORING WELL SAMPLING

WSP will continue quarterly sampling at all Site monitoring wells (**Figure 2**). Monitoring well groundwater sampling will be conducted using low-flow purging and sampling techniques in accordance with WSP Standard Operating Procedures (SOPs). Before the sampling activities are initiated, each well will be uncapped and allowed to stand for a minimum of 15 minutes while the water level in the well equilibrates with the atmospheric pressure. The depth to groundwater (to the nearest 0.01 foot) will be measured from the reference point on the north side of the well casing using an electronic oil-water interface meter. A Site-wide round of fluid level measurements from all monitoring wells and accessible remediation wells will be collected prior to beginning each sampling event.

Well purging will be conducted using a peristaltic or bladder pump. During purging, temperature, pH, specific conductance, dissolved oxygen (DO), turbidity, and oxidation-reduction potential (ORP) will be monitored using a multiparameter water quality meter equipped with a flow-through cell, and drawdown will be monitored using the electronic water level meter. Field parameters, including the water level in the well, will be recorded every 3 to 5 minutes until the parameters have stabilized with the two preceding measurements (± 10 percent for turbidity and DO, ± 10 mV for ORP; ± 0.1 unit for pH; and ± 3 percent for specific conductance and temperature). Final turbidity readings should be less than 10 nephelometric turbidity units (NTU). If the turbidity criterion of less than 10 NTU cannot be met, then the turbidity must be within ± 5 NTU or 10 percent, whichever is greater, for three consecutive measurements before sample collection.

After water quality parameters have stabilized, samples will be collected from each location for laboratory analysis of a reduced list of VOCs that focuses on the primary diluent constituents detected in site groundwater and chlorinated ethenes. The VOCs analyte list will include:

Benzene; ethylbenzene; toluene; xylenes; cyclohexane; n-hexane; methylcyclohexane; 1,2,4-trimethylbenzene;
 1,3,5-trimethylbenzene; tetrachloroethene (PCE); trichloroethene (TCE); cis-1,2-dichloroethene (cis-1,2-DCE); and vinyl chloride using EPA Method 8260.

As described in the Remedial Action Options Report (RAOR), dated May 19, 2022, samples will also be collected for monitored natural attenuation (MNA) parameters at six locations (MW-02-25, MW-17-20, MW-01-32, MW-14-31, MW-10-32, and MW-06-32):

- Nitrate-nitrite as nitrogen using EPA Method 353.2,
- Total alkalinity as CaCO3 using EPA Method 310.2,
- Sulfate using EPA Method 300.0,
- Total and dissolved iron and manganese using EPA Method 6020, and
- Dissolved carbon dioxide, methane, ethane, and ethene using EPA Method RSK-175

The samples will be placed in laboratory-supplied sample containers with the appropriate preservatives, placed in a cooler with ice, and delivered to the laboratory with the appropriate chain-of-custody documentation. Quality assurance / quality control (QA/QC) samples will include duplicates (1 per 10 primary samples), equipment blanks (1 per 20 primary samples collected using non-dedicated equipment), matrix spike / matrix spike duplicate (MS/MSD) samples (1 per 20 primary samples), and trip blanks (1 per sample cooler).



POTABLE WELL SAMPLING

WSP will continue annual sampling at the 12 potable well locations requested by the WDNR: Ness, Pundsack, Hachtel, Wilson, Berndt, Lubbert A, Lubbert B, Lubbert C, Lubbert D, Gehrke, Krause (formerly Maasz), and MacLeod. The next annual potable well sampling event is tentatively scheduled for April 2023.

Groundwater samples will be collected in accordance with WSP's SOP for private water well purge and sampling. The samples will be collected from an outdoor spigot or from indoor spigot adjacent to the pressure tank. At each potable well location, water will be purged for a minimum of 15 minutes while field-measuring selected water quality parameters, including pH, specific conductance, temperature, dissolved oxygen (DO), turbidity, and oxidation reduction potential (ORP). After water quality parameters have stabilized, samples will be collected for laboratory analysis for:

Benzene; ethylbenzene; toluene; xylenes; cyclohexane; n-hexane; methylcyclohexane; 1,2,4-trimethylbenzene;
 1,3,5-trimethybenzene; PCE; TCE; cis-1,2-DCE; and vinyl chloride using EPA Method 8260.

The samples will be placed in laboratory-supplied sample containers with the appropriate preservatives, placed in a cooler with ice, and delivered to the laboratory with the appropriate chain-of-custody documentation. QA/QC samples will include duplicates (1 per 10 primary samples), MS/MSD samples (1 per 20 primary samples), and trip blanks (1 per sample cooler).

MONITORING WELL INSTALLATION AND SAMPLING

WSP will oversee the installation of two monitoring wells (MW-06-Deep and MW-18) at the locations shown on Figure 2.

UTILITY LOCATING PROCEDURES

Prior to beginning any intrusive work and in accordance with Enbridge Ground Disturbance protocols, the selected drilling contractor will submit a Wisconsin Diggers Hotline 811 ticket request for underground utilities to be marked in the vicinity of the proposed monitoring well locations. A four-way sweep private utility locating contractor will also identify and mark the locations of privately-owned utilities, including but not limited to pipeline infrastructure, underground electrical or communication utilities, and water or sewer utilities within 100 feet of the proposed monitoring well locations prior to drilling activities. All utility markings will be confirmed through a verification locate and compared to available facility documentation on infrastructure layout.

BOREHOLE DRILLING AND GROUNDWATER PROFILING PROCEDURES

In accordance with Enbridge Ground Disturbance protocols, each monitoring well borehole will be advanced from ground surface to a depth of 10 feet bgs using vacuum excavation (with air knife or hydrovac assistance as needed) unless all identified underground utilities within 5 meters (16 feet) of the proposed boring location are exposed and positively identified or there are no identified underground utilities within 5 meters of the proposed boring location. If underground utilities can be positively identified or do not occur within 5 meters of the proposed boring location, the monitoring well boreholes may be advanced from ground surface using drilling methods. Based on information gained during the 2021 SSI, there are no known underground utilities within 5 meters of the proposed boring locations.

Monitoring well boreholes will be advanced using rotosonic drilling methods and nominal 6-inch diameter drill tooling with continuous sampling in 5-foot or 10-foot intervals to the target depth at each location. Based on the depth of existing monitoring well MW-01-32, which is approximately 45 feet away from the MW-18 location, the proposed target depth for the monitoring well MW-18 borehole is 35 feet bgs. The proposed target depth for the MW-06-Deep borehole is 95 feet bgs. Soil cores will be visually examined and logged using the Unified Soil Classification System (USCS), and field screened in 2.5-foot intervals for volatile organic compounds (VOCs) by headspace analysis using a photoionization detector (PID). All pertinent soil observations, such as lithology, moisture content, odors, staining, and PID readings will be recorded in the field logbook and soil boring logs.



Specific details of the drilling procedures (e.g. diameter of drill casing used for sampling, installation of temporary surface casing to case off zones of elevated PID readings and prevent vertical cross-contamination) may be modified based on consultation with the selected drilling contractor or based on conditions encountered during drilling.

Groundwater profiling will be conducted at the MW-06-Deep location to determine the appropriate screened interval of the well so that it provides vertical delineation of TCE detected in the samples collected at MW-06-60. Groundwater profiling will be conducted by collecting groundwater samples during advancement of the boring at 10-foot intervals. The anticipated sample intervals for groundwater profiling are 70, 80, and 90 feet bgs. Groundwater profiling samples will be collected using a "push-ahead" sampler, which is advanced into the formation below the drill casing. Groundwater will be purged and sampled from the sampler at each interval using polyethylene tubing fitted with a stainless-steel check-ball valve or peristaltic pump or by using an electric submersible pump. A minimum of three rod volumes of groundwater (calculated by measuring the height of the water column in the sampler rods after the screen is exposed to the formation) will be removed before the sample is collected. Measurements of pH, conductivity, temperature, and turbidity will be collected while the sampling using a multi parameter water quality meter. Samples will be collected for laboratory analysis with expedited turnaround time for:

Benzene; ethylbenzene; toluene; xylenes; cyclohexane; n-hexane; methylcyclohexane; 1,2,4-trimethylbenzene;
 1,3,5-trimethybenzene; PCE; TCE; cis-1,2-DCE; and vinyl chloride using EPA Method 8260.

The samples will be placed in laboratory-supplied sample containers with the appropriate preservatives, placed in a cooler with ice, and delivered to the laboratory with the appropriate chain-of-custody documentation. QA/QC samples will include duplicates (1 per 10 primary samples), equipment blanks (1 per 20 primary samples collected using non-dedicated equipment), MS/MSD samples (1 per 20 primary samples), and trip blanks (1 per sample cooler).

MONITORING WELL INSTALLATION AND DEVELOPMENT PROCEDURES

Monitoring wells will be installed in accordance with the monitoring well construction requirements of Wisconsin Administrative Code, Chapter NR 141. Monitoring wells will be constructed using Schedule 40 flush-threaded, two-inch inner diameter (ID) polyvinyl chloride (PVC) casing fitted with a 5-foot or 10-foot long, 0.010-inch horizontal slotted PVC screen. Proposed monitoring well MW-18 will be screened at the water table and constructed with a 10-foot screen length. The target screened interval is 22 to 32 feet bgs. MW-06-Deep will be constructed with a 5-foot screen length. If either borehole is advanced by more than approximately five feet below the screened interval of the well, the bottom of the borehole will be plugged with bentonite to prevent vertical hydraulic communication with deeper intervals within the aquifer. The annular space around the screened interval will be backfilled with a clean sand filter pack to approximately two feet above the top of the screen, followed by a 2-foot-thick fine sand seal above the filter pack, and a minimum 5-foot-thick bentonite chip or pellet seal. The remaining annular space will be sealed with bentonite chips or pellets or a bentonite-cement grout from the top of the bentonite seal to approximately three feet bgs. The monitoring wells will be completed with aboveground protective covers set in a concrete pad.

After the bentonite or grout seal has fully hydrated, the newly installed monitoring wells will be developed in accordance with well development requirements of Wisconsin Administrative Code, Chapter NR 141.21. Well development will be conducted by surging and purging the well with a submersible pump for a minimum of 30 minutes and until the development water is relatively free of suspended sediment and the pH, temperature, conductivity, and turbidity have stabilized. Field measurements will be considered stable when two successive readings vary by less than 10 percent. If the water remains turbid or the geochemical parameters do not stabilize but the well does not purge dry, the completion of well development will be determined by the onsite WSP geologist after at least 10 well volumes have been removed. The pump will be decontaminated before and after use.

MONITORING WELL SAMPLING PROCEDURES

The new monitoring wells will be sampled a minimum of one week after installation and development using the low-flow purging and sampling techniques and QA/QC procedures described above for the quarterly monitoring program. Samples will be collected for laboratory analysis for:



— Benzene; ethylbenzene; toluene; xylenes; cyclohexane; n-hexane; methylcyclohexane; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; PCE; TCE; cis-1,2-DCE; and vinyl chloride using EPA Method 8260.

The new monitoring wells will be incorporated into the routine quarterly monitoring well sampling program after the initial sampling event.

SURVEYING

The location and elevation of the new monitoring wells will be surveyed by a Wisconsin-licensed professional surveyor. For each monitoring well, the top of PVC casing and ground surface will be surveyed relative to the Wisconsin State Plane Coordinate System (NAD83) and the North American Vertical Datum of 1988 (NAVD88). Horizontal locations will be surveyed to an accuracy of 0.1 feet, and elevations surveyed to an accuracy of 0.01 feet.

INVESTIGATION DERIVED WASTES AND EQUIPMENT DECONTAMINATION

Materials generated during implementation of this Work Plan not submitted for laboratory analysis will be managed as investigation derived waste (IDW) in accordance with WSP SOPs. Based on previous soil borings in the vicinity of the two proposed monitoring wells, which indicated no shallow soil impacts above 10 feet bgs, vacuum excavation wastes generated during utility locating or advancement of the monitoring well boreholes will be thin spread on ground surface in the vicinity of the monitoring well locations.

Soil cuttings, groundwater profiling purge water, decontamination water, and well development water will be containerized in Department of Transportation (DOT)-compliant 55-gallon drums for waste characterization and off-Site disposal. If waste characterization sampling results indicate that drums containing liquid IDW do not contain detectable VOCs, the water will be discharged to the ground surface.

All non-disposable sampling and drilling equipment will be decontaminated in the field between each location in accordance with WSP SOPs. All decontamination wash and rinse water generated during the field activities will be managed as IDW.

REPORTING

In accordance with Wisconsin Administrative Code, Chapter NR 716.14, potable well sampling results will be reported to the well owners, occupants, and WDNR within 10 business days of receipt of laboratory data. Monitoring well sampling results will be reported to the WDNR within 10 business days of receipt of laboratory data. All groundwater sample results will be compared to the WDNR Public Health Groundwater Enforcement Standards and Preventive Action Limits (Wisconsin Administrative Code, Chapter NR 140.10, Table 1).

Following completion of the monitoring well installation and sampling, WSP will prepare a Monitoring Well Installation Report for WDNR submittal documenting the procedures and results of the investigation.

During implementation of the monitoring and investigation activities, Enbridge may periodically submit data and information to the WDNR for the purpose of obtaining consensus on open-ended issues and apprising the agency of unanticipated conditions that may require variations in the planned activities. Proposed modifications to the approved Work Plan will be submitted to WDNR for review.

PROJECT SCHEDULE

Field activities will be scheduled upon receiving approval of this Work Plan by the WDNR. WSP will provide at least one week's notice to WDNR prior to mobilization for field activities. The monitoring well and potable well sampling in 3rd Quarter 2022 are tentatively scheduled for late July and early August 2022, and the 4th Quarter 2022 sampling is tentatively scheduled for October 2022. Each quarterly sampling event will take approximately one week to complete.

The 4-way sweep, groundwater profiling, monitoring well installation and development, initial groundwater sampling, and monitoring well surveying are anticipated to occur in August 2022, pending WDNR approval of the Work Plan and schedule coordination with



Enbridge and the selected subcontractors. The 4-way sweep, groundwater profiling, and monitoring well installation and development will take a total of approximately five days to complete. The initial monitoring well samples will be collected approximately one to two weeks following well development, and the monitoring wells will be included in future quarterly monitoring events. Monitoring well surveying will take approximately one day to complete and will be scheduled to coordinate with other Site activities. The Monitoring Well Installation Report will be submitted to the WDNR within 60 days of completion of field activities and receipt of final laboratory results.

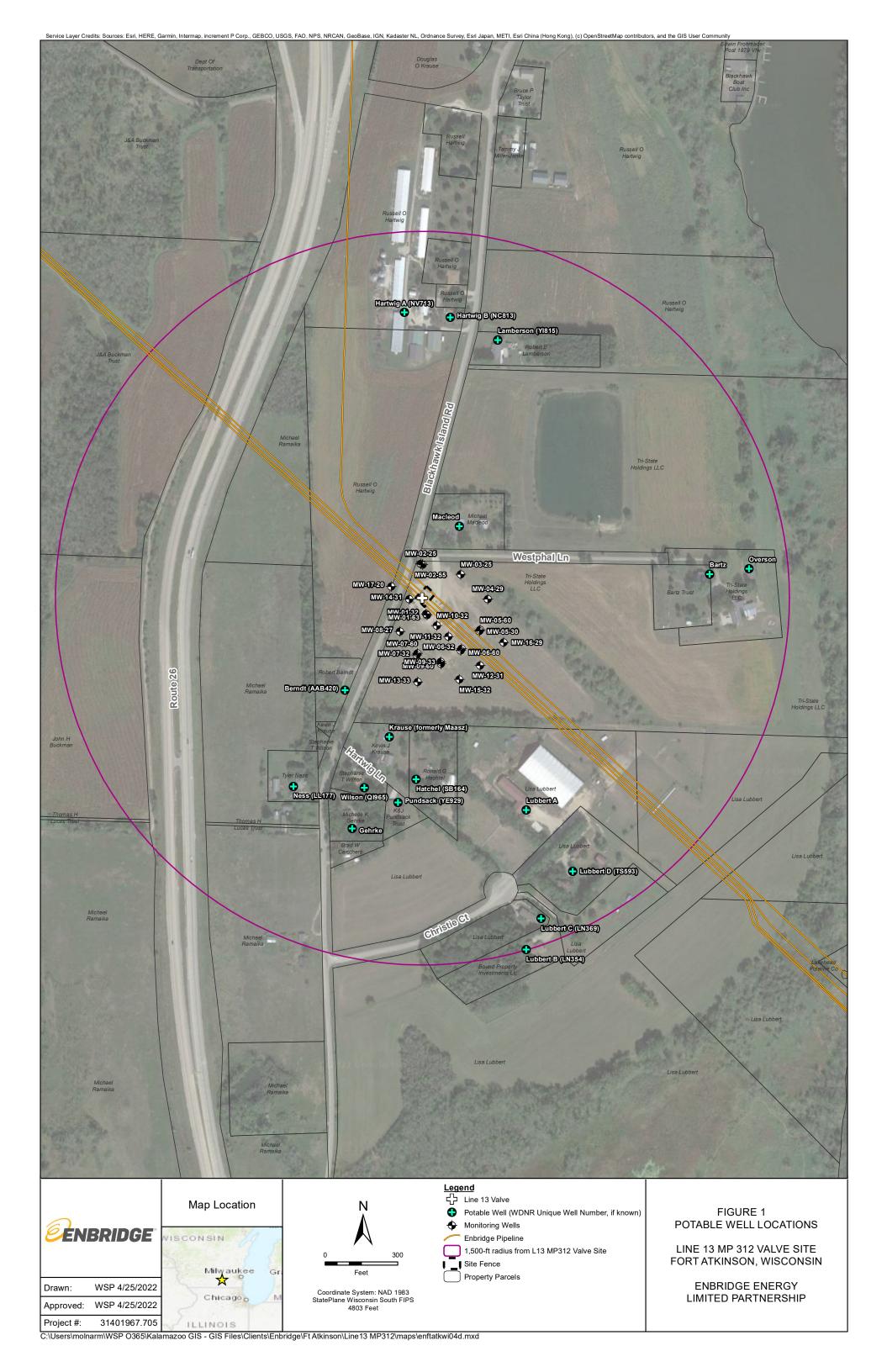
In accordance with NR 712, Wis. Adm. Code., the certification of hydrogeologist for this Work Plan for Groundwater Sampling and Monitoring Well Installation is included in Enclosure A.

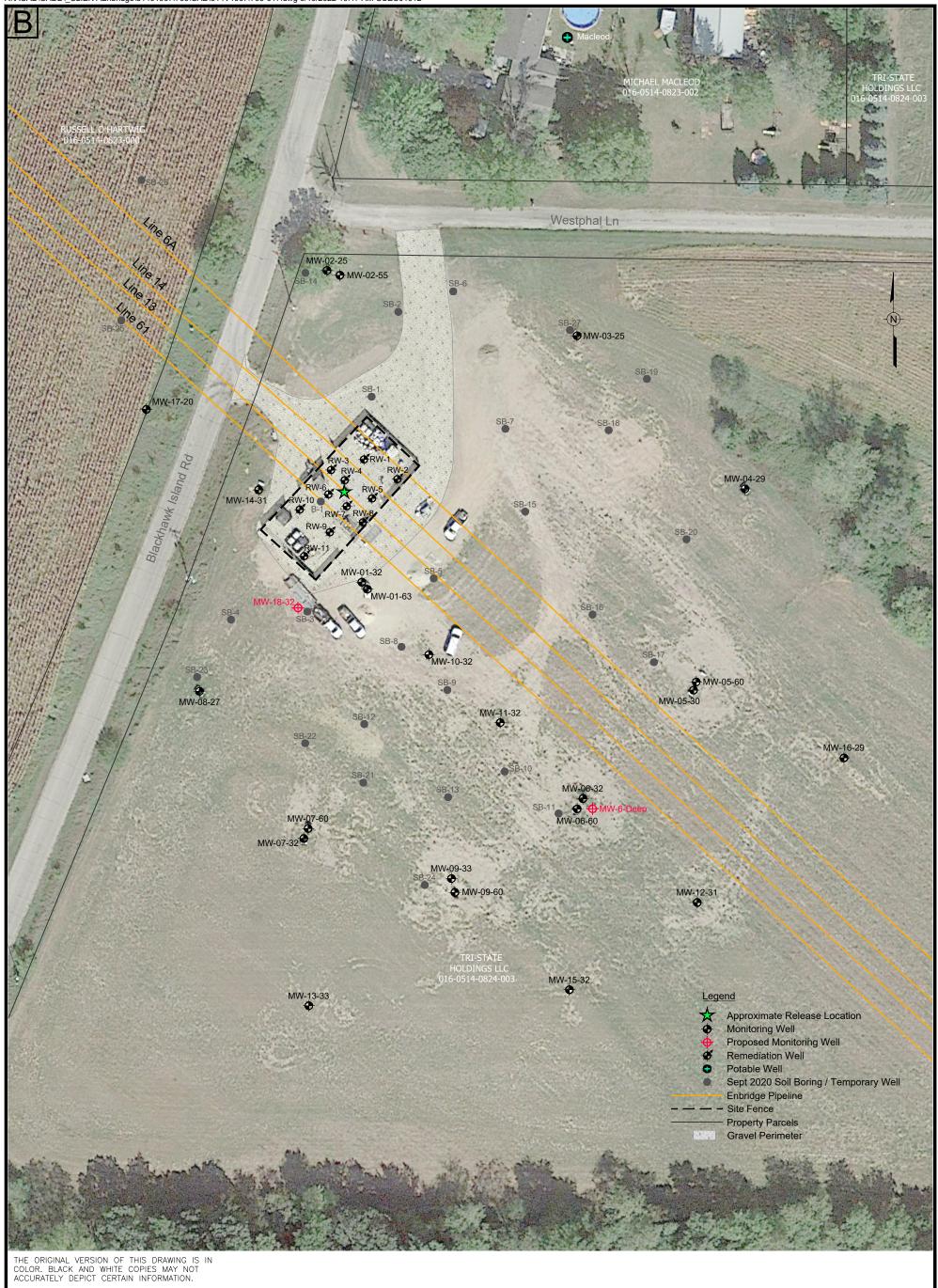
Please do not hesitate to contact me if you have questions.

Kind regards,

Timothy A. Huff Senior Lead Geologist

FIGURES





NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.





FIGURE 2

MONITORING WELL AND REMEDIATION WELL LOCATIONS

LINE 13 MP 312 VALVE SITE FORT ATKINSON, WISCONSIN

PREPARED FOR
ENBRIDGE ENERGY LIMITED PARTNERSHIP

Drawn By: *EGC*Checked: *TMG 6/10/2022*Approved: *TAH*DWG Name: 314V1967.705-005

ENCLOSURE A – HYDROGEOLOGIST CERTIFICATION

Work Plan for Groundwater Sampling and Monitoring Well Installation Enbridge Line 13 MP 312 Valve Site Blackhawk Island Road Fort Atkinson, Wisconsin

BRRTS Number: 02-28-586199

I, Brian C. Kimpel, certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

07/08/2022

Brian C. Kimpel,

Date

Supervisory Hydrogeologist, Wisconsin P.G. #1140

L.C. Light